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STATE OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES
DIVISION OF RESOURCES PLANNING

STATE WATER RESOURCES BOARD
BULLETIN NO. 18

SAN LUIS OBISPO COUNTY INVESTIGATION

Volume II
Appendixes

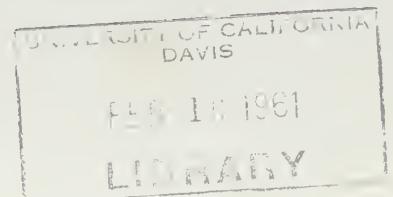
GOODWIN J. KNIGHT
Governor



HARVEY O. BANKS
Director of Water Resources

May, 1958

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APPENDIX A

**AGREEMENT, AND ITS SUPPLEMENTS, BETWEEN THE STATE WATER RESOURCES BOARD,
THE COUNTY OF SAN LUIS OBISPO, AND THE DEPARTMENT OF PUBLIC WORKS**

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APPENDIX A

AGREEMENT BETWEEN THE STATE WATER RESOURCES BOARD,
THE COUNTY OF SAN LUIS OBISPO,
AND THE DEPARTMENT OF PUBLIC WORKS

THIS AGREEMENT, executed in quintuplicate, entered into as of the 1st day of July, 1953, by and between the State Water Resources Board, hereinafter referred to as the "Board", the County of San Luis Obispo, hereinafter referred to as the "County", and the Department of Public Works, State of California, acting through the agency of the State Engineer, hereinafter referred to as the "State Engineer":

W I T N E S S E T H:

WHEREAS, the Budget Act of 1952 (Chapter 3, Statutes of 1952) by Item 268.5(b) appropriated the sum of \$20,000 for the initiation of a comprehensive survey of the water resources of San Luis Obispo County; and

WHEREAS, said survey has been initiated under a three-year program of investigation and the foregoing sum of \$20,000 has been expended during the fiscal year 1952-53; and

WHEREAS, by the State Water Resources Act of 1945, as amended, the Board is authorized to make investigations, studies, surveys, hold hearings, prepare plans and estimates, and make recommendations to the Legislature in regard to water development projects, including flood control plans and projects; and

WHEREAS, by said act, the State Engineer is authorized to cooperate with any county, city, state agency, or public district on flood control and other water problems and when requested by any thereof may enter into a

cooperative agreement to expend money on behalf of any thereof to accomplish the purposes of said act; and

WHEREAS, the County has requested the Board to enter into a cooperative agreement to conduct a comprehensive investigation of the water resources of San Luis Obispo County; and

WHEREAS, the Board has requested the State Engineer to cooperate in conducting a comprehensive investigation of the water resources of San Luis Obispo County and to formulate a report thereon;

NOW, THEREFORE, in consideration of the premises and of the several promises to be performed by each as hereinafter set forth, the Board, the County, and the State Engineer do hereby mutually agree as follows:

ARTICLE I - WORK TO BE PERFORMED:

The work to be performed under this agreement shall consist of (1) a complete review of reports of prior investigations concerning the water resources of San Luis Obispo County, (2) field investigations and office studies to determine (a) the location, occurrence, and condition of water resources of the County, both surface and underground, (b) present water utilization including its nature, extent, and a survey of water service areas, (c) land classification survey to determine probable ultimate areas of irrigated land, (d) ultimate water requirements, (e) preliminary general plans and estimates of cost for development and utilization of local water resources of the County, (f) required supplemental water supply from outside sources, (g) possible outside sources for required supplemental supply, and (3) formulation of a report thereon.

The Board by this agreement authorizes and directs the State Engineer to cooperate by conducting said investigation and formulating said

report and by otherwise advising and assisting in formulating solutions to the water problems in San Luis Obispo County.

During the progress of said investigation, all maps, plans, information, data, and records pertaining thereto which are in the possession of any party hereto, shall be made fully available to any other party hereto for the due and proper accomplishments of the objectives hereof.

The work to be done under this agreement shall be diligently prosecuted with the objective of completing the investigation and report by June 30, 1955, or as nearly thereafter as possible.

ARTICLE II - FUNDS:

On execution of this agreement, the County shall transmit the sum of Fifteen Thousand Dollars (\$15,000) to the State Engineer for deposit, subject to the approval of the Director of Finance, into the Water Resources Revolving Fund in the State Treasury, for expenditure by the State Engineer in performance of the work provided for in this agreement. Also upon execution of this agreement, the Board shall request the Director of Finance to approve the transfer of the sum of Fifteen Thousand Dollars (\$15,000) from funds appropriated to the Board by Item 262 of the Budget Act of 1953, to the said Water Resources Revolving Fund for expenditure by the State Engineer in performance of work provided for in this agreement during the fiscal year 1953-54.

It is understood by and between the parties hereto that the sum of Thirty Thousand Dollars (\$30,000) to be made available as hereinbefore provided, is adequate to perform the above specified work during the fiscal year 1953-54, and it is the understanding that the County will make a further sum of Thirteen Thousand Dollars (\$13,000) available at the commencement of the fiscal year 1954-55 which will be subject to a matching contribution in an equal sum by the

Board for the completion of said investigation and report, contingent upon the availability of County and Board fund for such purposes.

Notwithstanding anything contained in this agreement contrary hereto or in conflict herewith, this agreement is made contingent upon the funds being deposited in or transferred to the Water Resources Revolving Fund as provided herein for expenditure by the State Engineer in performance of the work provided for in this agreement. In the event any of the funds are not transferred to the Water Resources Revolving Fund by the Director of Finance as provided for herein within 30 days after the Board request such transfer, this agreement shall terminate and the unexpended balance of any funds deposited by the County shall be returned, provided that neither the Board nor the State Engineer shall be obligated to the County for any portion of the funds already expended.

The Board and the State Engineer shall under no circumstances be obligated to expend for or on account of the work provided for under this agreement any amount in excess of the funds made available hereunder.

Upon completion and final payment for the work provided for in this agreement, the State Engineer shall furnish to the Board and to the County a statement of all expenditures made under this agreement. One-half of the total amount of all said expenditures shall be deducted from the sum advanced from funds appropriated to the Board and one-half of the total amount of all said expenditures shall be deducted from the sum advanced by the County and any balance which may remain shall be returned to the Board and to the County in equal amounts.

Notwithstanding anything herein contained to the contrary, this agreement may be terminated and the provisions of this agreement may be altered, changed, or amended, by mutual consent of the parties hereto.

IN WITNESS WHEREOF, the parties hereunto have executed this agreement
as of the date first herein written.

Approved as to Form
and Procedure

COUNTY OF SAN LUIS OBISPO

/s/ H. C. Grundell
District Attorney
County of San Luis Obispo

By /s/ John Ruskovich
Chairman, Board of Supervisors

Approved as to Form
and Procedure

/s/ A. E. Mallagh (Seal)
Clerk, Board of Supervisors

/s/ Henry Holsinger
Attorney for Division
of Water Resources

STATE WATER RESOURCES BOARD

Approved as to Form
and Procedure

By /s/ C. A. Griffith
Chairman

Attorney, Department
of Public Works

STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

FRANK B. DURKEE
Director of Public Works

APPROVED:

Deputy Director of Finance

By /s/ Russell S. Munro (Seal)
Russell S. Munro
Deputy Director of Public Works

:D.H.: J.W.A. : :
: Form : Budget : Value : Descript.:
: DEPARTMENT OF FINANCE :
: APPROVED :
: Aug. 4 1953 :
: JAMES S. DEAN, Director :
:
: By /s/ A. Earl Washburn :
: Deputy Director of Finance :
:

A. D. Edmonston
State Engineer

By /s/ T. R. Merryweather
Administrative Officer

SUPPLEMENTAL AGREEMENT
BETWEEN
THE STATE WATER RESOURCES BOARD,
THE COUNTY OF SAN LUIS OBISPO, AND THE
DEPARTMENT OF PUBLIC WORKS

THIS AGREEMENT, executed in quintuplicate, entered into as of the 1st day of July, 1954, by and between the State Water Resources Board, hereinafter referred to as the "Board", the County of San Luis Obispo, hereinafter referred to as the "County", and the Department of Public Works, State of California, acting through the agency of the State Engineer, hereinafter referred to as the "State Engineer":

W I T N E S S E T H

WHEREAS, the Budget Act of 1952 (Chapter 3, Statutes of 1952) by Item 268.5(b) appropriated the sum of \$20,000 for the initiation of a comprehensive survey of the water resources of San Luis Obispo County; and

WHEREAS, by agreement heretofore entered into as of July 1, 1953, by and between the Board, the County, and the State Engineer, it was provided that the work to be performed thereunder shall consist of (1) a complete review of reports of prior investigations concerning the water resources of San Luis Obispo County, (2) field investigations and office studies to determine (a) the location, occurrence, and condition of water resources of the County, both surface and underground, (b) present water utilization including its nature, extent, and a survey of water service areas, (c) land classification survey to determine probable ultimate areas of irrigated land, (d) ultimate water requirements, (e) preliminary general plans and estimates of cost for development and utilization of local water resources of the County, (f) required supplemental water supply from outside sources, (g) possible outside sources for required supplemental supply, and (3) formulation of a report

thereon; and

WHEREAS, under said agreement the County made available the sum of Fifteen Thousand Dollars (\$15,000) which was matched in an equal amount by the Board for expenditure by the State Engineer in the performance of the work provided for in said agreement; and

WHEREAS, it was the expressed intention in said agreement that at the commencement of the fiscal year 1954-55 the County would make available a further sum of Thirteen Thousand Dollars (\$13,000) subject to a matching or contribution in an equal sum by the Board for the completion of said investigation and report; and

WHEREAS, the funds provided for under said prior agreement, to which this agreement is supplemental, have been exhausted and additional funds are now required to complete said investigation and report, and it is the desire of the parties hereto that an additional sum of Twenty-Six Thousand Dollars (\$26,000) shall be provided, Thirteen Thousand Dollars (\$13,000) by the County and Thirteen Thousand Dollars (\$13,000) by the Board;

NOW THEREFORE, in consideration of the premises and of the several promises to be faithfully performed by each as hereinafter set forth, the Board, the County, and the State Engineer do hereby mutually agree as follows:

1. The County, upon execution by it of this agreement, shall transmit to the State Engineer the sum of Thirteen Thousand Dollars (\$13,000) for deposit, subject to the approval of the Director of Finance, into the Water Resources Revolving Fund in the State Treasury for expenditure by the State Engineer in continuing performance of the work provided for in said prior agreement to which this agreement is supplemental.

2. Upon execution of this agreement by the Board, the Director of Finance will be requested to approve the transfer of the sum of Thirteen

Thousand Dollars (\$13,000) from funds appropriated to the Board by Item 260 of the Budget Act of 1954 for expenditure by the State Engineer in continuing performance of the work provided for in said prior agreement to which this agreement is supplemental and the State Controller will be requested to make such transfer.

3. The Board and the State Engineer shall under no circumstances be obligated to expend for or on account of the work provided for under this agreement any amount in excess of the funds made available hereunder and if funds are exhausted before completion of said work, the Board and the State Engineer may discontinue said work and shall not be liable nor responsible for the completion thereof.

4. Insofar as consistent herewith and to the extent adaptable hereto, all the terms and provisions of said prior agreement to which this agreement is supplemental are hereby made applicable to this agreement and are hereby confirmed, ratified, and continued in effect.

IN WITNESS WHEREOF, the parties hereto have executed this agreement
to be effective as of the date hereinbefore first written.

Approved as to Form
and Procedure

/s/ H. C. Grundell

District Attorney
County of San Luis Obispo

COUNTY OF SAN LUIS OBISPO

By /s/ John Ruskovich

Chairman, Board of Supervisors

Approved as to Form
and Procedure

/s/ A. E. Mallagh (Seal)

Clerk, Board of Supervisors

/s/ Henry Holsinger
Attorney for Division
of Water Resources

STATE WATER RESOURCES BOARD

Approved as to Form and Procedure

By /s/ B. A. Etcheverry

B.A. Etcheverry, Vice Chairman

Attorney, Department
of Public Works

STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

FRANK B. DURKEE
Director of Public Works

APPROVED:

By /s/ Russell S. Munro (Seal)
Russell S. Munro
Deputy Director of Public Works

Director of Finance

/s/ A. D. Edmonston

A. D. Edmonston
State Engineer

:S.H.Y.: L.F.H.: :
: Form : Budget : Value:Descript. :
: DEPARTMENT OF FINANCE :
: A P P R O V E D :
: July 30 1954. :
:
: JOHN M. PEIRCE, Director :
:
: By /s/ Louis J. Heinzer :
: Administrative Adviser :
:

SUPPLEMENTAL AGREEMENT
BETWEEN
THE STATE WATER RESOURCES BOARD,
THE COUNTY OF SAN LUIS OBISPO, AND THE
DEPARTMENT OF PUBLIC WORKS

THIS AGREEMENT, executed in quintuplicate, entered into as of the 1st day of May, 1956, by and between the State Water Resources Board, herein-after referred to as the "Board", the County of San Luis Obispo, hereinafter referred to as the "County", and the Department of Public Works, State of California acting through the agency of the State Engineer, hereinafter referred to as the "State Engineer":

W I T N E S S E T H

WHEREAS, the budget Act of 1952 (Chapter 3, Statutes of 1952) by Item 268.5(b) appropriated the sum of \$20,000 for the initiation of a comprehensive survey of the water resources of San Luis Obispo County; and

WHEREAS, by agreement heretofore entered into as of July 1, 1953, supplemented by a further agreement entered into as of July 1, 1954, by and between the Board, the County, and the State Engineer, it was provided that the work to be performed thereunder shall consist of (1) a complete review of reports of prior investigations concerning the water resources of San Luis Obispo County, (2) field investigations and office studies to determine (a) the location, occurrence, and condition of water resources of the County, both surface and underground, (b) present water utilization including its nature, extent, and a survey of water service areas, (c) land classification survey to determine probable ultimate areas of irrigated land, (d) ultimate water requirements, (e) preliminary general plans and estimates of cost for development and utilization of local water resources of the County, (f) required

supplemental water supply from outside sources, (g) possible outside sources for required supplemental supply, and (3) formulation of a report thereon; and

WHEREAS, under said agreement and supplemental agreement, the County made available the total sum of \$28,000 which was matched in an equal amount by the Board for expenditure by the State Engineer in the performance of the work provided for in said agreement; and

WHEREAS, the funds provided for under said prior agreements, to which this agreement is supplemental, have been exhausted and additional funds are now required to complete said investigation and report, and it is the desire of the parties hereto that an additional sum of Five Thousand Dollars (\$5,000) shall be provided, Two Thousand Five Hundred Dollars (\$2,500) by the County and Two Thousand Five Hundred Dollars (\$2,500) by the Board;

NOW THEREFORE, in consideration of the premises and of the several promises to be faithfully performed by each as hereinafter set forth, the Board, the County, and the State Engineer do hereby mutually agree as follows:

1. The County, upon execution by it of this agreement, shall transmit to the State Engineer the sum of Two Thousand Five Hundred Dollars (\$2,500) for deposit, subject to the approval of the Director of Finance, into the Water Resources Revolving Fund in the State Treasury for expenditure by the State Engineer in continuing performance of the work provided for in said prior agreements to which this agreement is supplemental.

2. Upon execution of this agreement by the Board, the Director of Finance will be requested to approve the transfer of the sum of Two Thousand Five Hundred Dollars (\$2,500) from funds appropriated to the Board by Item 212 of the Budget Act of 1955 for expenditure by the State Engineer in continuing performance of the work provided for in said prior agreements to which this agreement is supplemental and the State Controller will be requested to make

such transfer.

3. The Board and the State Engineer shall under no circumstances be obligated to expend for or on account of the work provided for under this agreement any amount in excess of the funds made available hereunder and if funds are exhausted before completion of said work, the Board and the State Engineer may discontinue said work and shall not be liable nor responsible for the completion thereof.

4. Insofar as consistent herewith and to the extent adaptable hereto, all the terms and provisions of said prior agreements to which this agreement is supplemental are hereby made applicable to this agreement and are hereby confirmed, ratified, and continued in effect.

IN WITNESS WHEREOF, the parties hereto have executed this agreement to be effective as of the date hereinbefore first written.

Approved as to Form
and Procedure

COUNTY OF SAN LUIS OBISPO

/s/ H. C. Grundell
District Attorney
County of San Luis Obispo

By /s/ John Ruskovich
Chairman, Board of Supervisors

Approved as to Form
and Procedure

/s/ A. E. Mallagh (Seal)
Clerk, Board of Supervisors

/s/ Henry Holsinger
Attorney for Division
of Water Resources

STATE WATER RESOURCES BOARD

Approved as to Form
and Procedure

By /s/ Clair A. Hill
Clair A. Hill, Chairman

Attorney, Department
of Public Works

STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

FRANK B. DURKEE
Director of Public Works

Director of Finance

By /s/ A. H. Henderson (Seal)

A. H. Henderson
Deputy Director
May 28, 1956

:S.H.Y.: A.W. : :
: Form : Budget : Value : Descript.
: DEPARTMENT OF FINANCE :
: APPROVED :
: Jun 4, 1956 :
:
: JOHN M. PEIRCE, Director :
:
:By /s/ Louis J. Heinzer :
: Administrative Adviser :
:

Harvey O. Banks
State Engineer

APPENDIX B

GEOLOGY AND GROUND WATER OF
SAN LUIS OBISPO COUNTY, CALIFORNIA

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ACKNOWLEDGMENT

Many of the data presented in this report were contributed by public and private agencies, which materially assisted the geologic and hydrologic studies of San Luis Obispo County.

The following agencies contributed materially to this report:

California Department of Natural Resources, Division of Mines

California Department of Natural Resources, Division of Oil and Gas

San Luis Obispo County Surveyor and Road Commissioner

Shell Oil Company

The Texas Company

Tidewater Associated Oil Company

The voluntary and valuable cooperation received from these and other organizations, geologists, well drillers, and individuals is gratefully acknowledged.

CHAPTER B-I. INTRODUCTION

San Luis Obispo County includes an area of approximately 3,326 square miles, enclosed by surveyed lines chosen irrespective of watershed boundaries on the north and east sides. The western boundary is the Pacific Ocean, and the southern boundary is defined by the Santa Maria and Cuyama Rivers.

This appendix includes a description of the geology of San Luis Obispo County and adjacent areas with particular emphasis placed upon those geologic features which influence the occurrence and movement of ground water. Its purpose is threefold, namely:

1. To describe the geology and water-bearing properties of the various geologic formations.

2. To discuss the effects of geologic structure upon the movement of ground water and upon sea-water intrusion, and to describe briefly the history of events leading to the evolution of the principal geologic structures.

3. To describe the geologic conditions involved and the procedures followed in estimating the changes in ground water storage and estimating underflow that occurred into or out of the principal basins during selected periods of study.

The older less permeable formations which yield little water are treated briefly. They are the parent source of sediments which fill the ground water basins and delimit the ground water basins. In certain localities they affect the mineral content of the ground water and their position, in part, controls the movement and occurrence of ground water.

The permeable water-bearing formations are described in greater

detail. These deposits comprise the alluvial fill of the ground water basins, the principal sources of ground water supply in the County.

Subsurface ground water geology was interpreted largely from the logs of about 300 water wells, most of which were obtained from field canvass. Drillers' logs, 93 electric logs, and descriptions of cores from oil wells were obtained from the State Division of Oil and Gas. An additional 60 logs of shot holes were provided by The Texas Company. Ground water level data and water quality analyses were collected, and in certain areas, the transmissibility and specific yield of sediments were estimated by pump testing of wells. All of these data were drawn upon freely in interpreting geologic features.

A perusal of geologic literature revealed a number of maps and reports prepared by earlier investigators covering various parts of the County. These existing data were often referred to in the preparation of this appendix and are listed in the accompanying bibliography.

During this investigation, a geologic map, shown on Plates 7A, B, and C, was prepared. It represents a compilation of portions of existing geologic maps, studies of aerial photographs, and field mapping by the Division of Water Resources in areas where previous mapping was insufficient or incomplete. There were many cases of disagreement between the various sources. The most detailed source available was used where nonwater-bearing materials were involved. Where such disagreement concerned important water-bearing materials, the conflict of data was resolved by field mapping.

CHAPTER B-II PHYSIOGRAPHY

San Luis Obispo County is located in the South Coast Range geomorphic province (Jenkins, 1943) and consists of essentially northwest-southeast trending mountains and valleys, with a few areas approaching an east-west trend. San Luis Obispo County may be divided into mountainous areas, the Salinas structural basin, the Carrizo Plain, Coastal valleys and terraces, offshore areas, and miscellaneous areas. The County is drained by the Salinas River system in the north, coastal streams in the west, and the Santa Maria River and tributaries in the south.

Mountain Areas

The Santa Lucia Range is the major mountain range in San Luis Obispo County. It is an area of uplift which covers the western half of San Luis Obispo County. For descriptive purposes the Santa Lucia Range includes the San Luis Range and the La Panza Range, and extends southwestward across the Cuyama River into Santa Barbara County where it is known as the San Rafael and Sierra Madre Mountains. This entire mountain range is topographically rugged, reasonably consistent in geologic structure, and is in approximately the same stage of geomorphic development throughout. The mountains range from 2,000 to 4,000 feet in elevation, the highest point being McChesney Mountain at 4,054 feet in La Panza Range. In the Santa Lucia Range adjacent to the coast, the highest point is Pine Mountain at an elevation of 3,594 feet above sea level. The highest point in the San Luis Range is 1,792 feet above sea level.

Folding and faulting control the general northwest-southeast trend of mountain ranges. The Santa Lucia Range is in a mature stage of development.

Some of the ridges appear to be remnants of an old erosion surface which has been dissected by streams cutting valleys up to 2,500 feet deep. Most of the valleys in the mountains are in a youthful to early mature stage of development. A few valleys high in the mountains have been widened by erosion and contain alluvial fill deposited when streams reached a temporary base level of harder rock. Old perched stream gravels, remnants of a previous erosion cycle, are found near the San Luis Obispo-Monterey County line and in parts of the Salinas River drainage. Wider stream valleys such as the Huasna Valley system are generally developed in zones of softer rock.

The Caliente Mountains, in the southeast part of San Luis Obispo County, are generally considered as separate from the Santa Lucia Range. The Caliente Mountains have a maximum elevation of 5,104 feet above sea level, the highest point in San Luis Obispo County. The topography of the Caliente Mountains is rugged and the range has reached a mature stage of erosion. The mountains are drained by steep canyons to the Cuyama Valley on the south, to the Carrizo Plain on the north and east and to San Juan Creek on the northwest.

Coastal Valleys, Terraces, and Sand Dunes

The Santa Lucia Mountains are drained toward the ocean by several streams which have eroded deep canyons. The history of the coastal streams has been complex and is summarized in Chapter B-V. Coastal valleys with less than two square miles of drainage area generally have little or no alluvial fill. Larger streams, however, usually flow on alluvial beds formed by deposition of sands and gravels as sea level rose after the last glacial period. Marine terraces are found along most of the coast. These terraces were cut prior to the last glacial period when sea level was from 50 to 100 feet higher than at present. The terraces have been backfilled with stream

gravels and alluvial fans. Recent wave erosion has removed the seaward extension of most terraces, exposing the underlying bedrock.

Sand dunes of two ages are found along the coast. The older, reddish, brush covered sand dunes are overlain by active, white sand dunes in the Nipomo Mesa and Morro Bay areas. Morro Bay itself is a tidal lagoon enclosed on the seaward side by a barrier sand bar. The lagoon is shallow and is being filled by stream deposited silt and sand, and by wind blown sand. Although complete evidence is lacking, it appears that the original area of Los Osos Valley and Morro Bay may have been eroded by a stream which drained the upper portions of the present Pismo and San Luis Obispo Creek drainage areas. Another small tidal lagoon occurs at the mouth of San Luis Obispo Creek. Marshland which is the final remnant of a tidal lagoon is found behind the active sand dunes in the area south of Pismo Beach to Black Lake, at the mouth of Arroyo Grande Valley. Parts of the marshland have been drained and used for agricultural purposes.

Salinas Structural Basin

The Salinas structural basin will be referred to in this appendix as the Salinas Basin in contrast to the term Salinas drainage basin, which refers to the area drained by the Salinas River. The Salinas Basin in San Luis Obispo County is the southern extension of a similar geologic structure in Monterey County which extends northwestward to the ocean. In San Luis Obispo County the Salinas Basin is approximately outlined by the Paso Robles formation in the Salinas River drainage area as shown on the geologic map, Plate 7A, and on the geologic cross-sections, Plate 8A.

Elevation in the Salinas Basin varies from about 500 to over 2,200 feet above sea level. Prominent geographic features included in this basin are

the Cholame Hills, and parts of the Salinas River and Estrella and San Juan Creek Valleys. Topography varies from fairly flat terrace land to steep hills with up to 600 feet of relief. Generally, however, relief is less than 200 feet. The area was eroded from a relatively featureless depositional plain, and is now in a youthful to mature stage of erosion. Estrella Creek is cutting downward into the underlying sediments in a meandering valley, but does not itself meander within the valley. Most smaller streams have very thin deposits of alluvium and appear to be eroding downward at the present time. The Salinas River is underlain by about 30 feet of gravel and appears to be in a relatively stable condition, although some recent downcutting has occurred. Older eroded stream terraces and thin terrace deposits are found adjacent to larger streams indicating recurrent stages of downcutting.

The ridge tops of the Salinas Basin present a fairly flat profile which slopes very gently upward from the area near Bradley toward the Cholame Hills and the Carrizo Plain.

Carrizo Plain

The Carrizo Plain is a narrow elongated basin of interior drainage surrounded by northwest trending mountain ranges. The Temblor Range on its east side and the Caliente Range on the west drain toward Soda Lake, the center of the basin. Elevations within the plain area vary from 1,950 to 2,500 feet above sea level. The Carrizo Plain includes a hill area underlain by older eroded sediments along its northeast margin, terminal alluvial fans surrounding the flat portion of the Plain, and the central area underlain by lake deposits. The San Andreas fault extends along the entire northeast side of the Plain. This active fault has formed fault scarps, ridges, trenches, and closed depressions in the Recent alluvial fill and has offset many small streams.

Submarine Features

The only known offshore topographic mapping and bottom sample data in the San Luis Obispo County area appears on charts 5302 and 5387 prepared by the United States Coast and Geodetic Survey. These charts indicate offshore topography to be fairly smooth for some 20 miles offshore from Ragged Point in San Luis Obispo County to south of Point Sal in Santa Barbara County. Seaward extensions of present stream valleys are not evident near the shore. A former submerged valley system probably existed, but succeeding deposition of stream sediments, transported by long shore currents, and other erosional debris have now filled the earlier depressions. Most of the larger coastal valleys contain alluvial fill up to 200 feet in thickness and at depths as great as 200 feet below present sea level near their mouths; an indication of the filling of the landward portions of old stream-eroded canyons. Fill probably extends seaward until it meets the sand, silt and clay now covering the ocean floor. Other evidence of the filling of the valleys is the lack of rock outcrops at the mouths of all the larger valleys. Small submarine valleys are present about six miles west of Ragged Point, but no large submarine canyons are immediately offshore in the San Luis Obispo County area. Submarine canyons are present north and south of San Luis Obispo County. Arguello submarine canyon is located off the Santa Barbara County coast and Lucia and Sur canyons off the Monterey County coast.

Other Areas

Other physiographic features in and near San Luis Obispo County include Cholame Valley, the Temblor Range, the southern tip of the Diablo Range, Cuyama Valley, and Santa Maria Valley.

Cholame Valley is an area which has been eroded into rocks weakened by the San Andreas fault system and possibly also by depression of fault block slivers. The Cholame Valley floor is very flat near its outlet and is underlain by clays; suggesting the presence of a lake at various times in the lower part of this valley resulting from movement of the San Andreas fault near the village of Cholame. In the upper portion of Cholame Valley terrace gravels are found from 100 to 150 feet above the valley floor.

The Diablo Range extends into a small portion of San Luis Obispo County. It is generally similar to other mountain ranges in San Luis Obispo County. The Temblor Range separates the San Luis Obispo County region from San Joaquin Valley, and is moderately rugged with a maximum elevation of 3,931 feet.

Parts of Cuyama and Santa Maria Valleys are in San Luis Obispo County and have been described by Upson and Worts (1951), and Worts and Thomasson (1951).

CHAPTER B-III. GEOLOGIC FORMATIONS

General descriptions of all geologic formations and a short discussion of their role in the hydrology of San Luis Obispo County are included in this section.

The detailed geologic maps of San Luis Obispo County shown on Plates 7A, B, and C, illustrate the areal extent and distribution of formations based principally on lithology. Table B-1 presents generalized stratigraphy in San Luis Obispo County with brief descriptions of the various formations in different areas.

Basement Complex

The basement complex in San Luis Obispo County consists of pre-Franciscan plutonic and metamorphic rocks. The metamorphic rocks are exposed in limited areas along the San Andreas fault, in San Juan Creek, and in the La Panza Mountains. They are probably the equivalent of the Sur series in the Santa Lucia Range in Monterey County (Reiche, 1937; Trask, 1926). The metamorphic rocks consist of schist, marble, gneiss, and quartzite, which have been derived from sedimentary and igneous rocks.

TABLE B-1
GENERALIZED STRATIGRAPHY OF SAN LUIS OBISPO COUNTY

Eocene Coast Stages		Sediment Basin - Carrizo Plain Region	Coastal Region
Resort	Alluvium and terrace deposits. Sandy, gravel, salt, and clay 0-30 feet thick. Yields water to irrigation wells near Salinas River. Contains poor quality water in Carrizo Plain.	Beach sand and Recent sand dunes 0-100 feet thick. Ground water not utilized due to limited artesian extent. Alluvium = 0 to 200 feet of sand, gravel, and some clay. Main aquifer of Coastal Basin.	
Upper Pleistocene	Terrace deposits. Continental gravel, sand, and clay 0-50 feet thick. Yields water to a few domestic wells.	Mesane terrace deposits overlain by nonmarine alluvium. Gravel, sand, and clay 0 to 50 feet thick. Utilized by few windmills due to poor drainage of ground water to 660 feet. Older sand dunes 0 to 300 feet thick utilized by domestic wells.	Unconformity
Quaternary			Unconformity
Lower Pleistocene	Pase Robles formation. Nonmarine sand, gravel, clay, and calcerous beds 0 to 2,000 feet thick. Yields water to many irrigation wells in Pase Robles Basin.	Pase Robles formation. Nonmarine sand, gravel, clay, and calcerous beds 0 to 600 feet thick. Yields adequate water supplies to a few irrigation and domestic wells.	Unconformity
Tertiary	Ephemeral jellies, Pancake Rice, and other formations. Marine and nonmarine gravel, sand, and clay 0 to 2,500 feet thick. Generally nonwater-bearing except in local areas near outcrop of permeable beds. Contains poor quality water at depth.	Carpoza sand beneath Nipomo Mesa, but not exposed in San Luis Obispo County. Water-bearing.	Unconformity
Pliocene			Unconformity
		Firme (or "Santa Margarita") formation. Marine conglomerate, sandstone, and siliceous sand and clay, up to 3,200 feet thick. Generally nonwater-bearing, but permeable lenses yield water to domestic wells.	Unconformity

GENERALIZED STRATIGRAPHY OF SAN LUIS OBISPO COUNTY

(continued)

Pacific Coast Stages	: Salinas Basin - Carrizo Plain Region	: Coastal Region
Mesocene	Santa Margarita, Monterey, Sandholdt, and Vaqueros formations, continental sediments and some interbedded volcanic rocks 0 to 7,000 feet thick. Mostly marine and non-marine conglomerate, sandstone, and shale. Generally nonwater-bearing but wells obtain water from fractures and permeable sandstone lenses.	Monterey and Vaqueros formations. Marine shale and sandstone up to about 9,000 feet thick. Up to 2,000 feet of volcanic flows interbedded with sediments in Arroyo Grande Region. Generally nonwater-bearing but yields some water to windmills and domestic wells.
Paleocene	Berry, Simmler, and other formations. Non-marine conglomerate, sandstone, and shale up to 2,000 feet thick. Nonwater-bearing.	Missing or not reported.
Oligocene	Eocene and Paleocene	Missing or not reported.
Cretaceous	Knoxville and Franciscan formations. Marine sandstone, conglomerate, and shale up to 14,000 feet thick. Nonwater-bearing.	Marine sandstone, shale, and conglomerate up to 14,000 feet thick. Nonwater-bearing.
Jurassic (?)	Not in contact.	Not exposed.
Pre-Franciscan or Pre-Cretaceous	Basement complex. Granitic and metamorphic rocks. Fractures and weathered rock yield some water to windmills; otherwise nonwater-bearing.	

The largest area of plutonic rock within San Luis Obispo County is located in the La Panza Range, a smaller area is exposed northwest of Paso Robles, and several very small exposures are located along the San Andreas fault and in the faulted area along San Juan Creek. Granite is the most common of the plutonic rocks which also include granodiorite and quartz diorite (Anderson and Martin, 1914). The texture of the rocks varies from equigranular to porphyritic. They are intensively faulted, and contain numerous aplite and pegmatite dikes, as well as secondary quartz and calcite veins.

Weathered granitics supply water to domestic and stock wells in the La Panza Range and in the area northwest of Paso Robles. The weathered rock in some places yields as much as 50 gallons per minute to wells, but specific capacity of wells is usually less than one gallon per minute per foot of draw-down. Fractures within unweathered granitics often concealed beneath the weathered zone probably supply water to some wells. Wet weather springs in the weathered granitics are common in the La Panza Mountains.

Jurassic System

The Franciscan and Knoxville formations or probable Jurassic age (Taliaferro, 1943a, Easton and Inlay, 1955) underlie a considerable portion of the Santa Lucia Mountains. The formations weather deeply and form more or less rounded hills and mountains with scattered knobs of hard rock. Landslides and slumps are common in areas of Franciscan rock.

The Franciscan and Knoxville formations in San Luis Obispo County are generally similar and consist of more than 10,000 feet of highly folded and faulted sandstone, shale, and minor conglomerate and chert lenses. Sandstones are typically highly fractured and contain both calcite and quartz veins.

Small bodies of glaucophane schist are found in the Franciscan formation. The

Franciscan and Knoxville sediments contain partially altered interbedded basalts and agglomerates as well as intrusive diabase and gabbro. These igneous rocks have not been shown separately on the geologic map. Pillow structure, flow structure, and vesicles have been observed in the flows. During or soon after deposition, the Franciscan and Knoxville formations were intruded by peridotite or pyroxenite in the form of sheets, dikes, and sills, which subsequently were altered to serpentine. During later folding and faulting some serpentine bodies have been squeezed into the Knoxville and possibly into the Lower Cretaceous rocks. All of these rocks have been intruded by Miocene volcanics as plugs and dikes.

A few windmill wells have been drilled into the Franciscan formation, but have yielded only small quantities of water. Ground water occurs in the weathered portion of the formation and in joints and fractures of unweathered rock. Springs are quite common, especially in the high rainfall areas near the coast. Some springs have flows as great as one or two second-feet, but many dry up during the summer.

Cretaceous System

Rocks of the Cretaceous system are found in the Santa Lucia Range, the Diablo Range (Taliaferro, 1944), the Temblor Range, and a small part of the Caliente Range. In the Santa Lucia Range the rocks have been called the Marmolejo, Jack Creek, and Asuncion formations by Taliaferro (1944).

Cretaceous formations consist of up to 14,000 feet of marine sandstone, shale, siltstone, limestone, and conglomerate. The conglomerate beds contain pebbles and cobbles of pre-Franciscan quartz, porphyry, and feldspar porphyry, quartzite, chert, recrystallized rhyolite, schist, apile, pegmatite, and granodiorite, as well as chert, basalt, diabase, gabbro, serpentine,

sandstone, limestone, and shale from Franciscan and Knoxville formations.

The Cretaceous sediments seldom contain quartz veins but calcite veins are fairly common. They do not contain contemporaneous intrusive or extrusive volcanic rocks, but have been affected by cold reintrusions of serpentine and Miocene igneous intrusives.

Faulting of Cretaceous sandstone has created fractures forming conduits for the many flowing springs. These fractures and also the more permeable sandstone yield a small amount of water to a few domestic and stock wells.

Paleocene-Eocene Series

Rocks of Paleocene and Eocene age are found in limited areas in the Santa Lucia Range, in the southern tip of the Caliente Mountains, and in the Mount Diablo and Temblor ranges. These rocks consist of marine sandstone, siltstone, conglomerate, and shale.

It is not known whether any wells obtain water from Eocene or Paleocene rocks, or whether any springs are found in them in San Luis Obispo County.

Oligocene Series

Rocks of Oligocene age have been poorly delimited and may include sediments of Eocene or Miocene age. Taliaferro (1944) reports that the Paleocene-Eocene rocks west of San Miguel are overlain by a thin red sandstone of pre-Vaqueros age. Sediments of probable Oligocene age are reported northeast of Stanley Mountain near the Santa Barbara County line (Taliaferro 1943b). In the Caliente Range the Simmler formation of probable continental origin consists of about 3,000 feet of dark red sandstone with basal conglomerate (Dibblee, 1952). Hudson and White (1941) report a 1,000 foot

section of chocolate brown siltstone containing Oligocene vertebrate remains in the Temblor Range.

Around the edge of and beneath the Salinas Basin there are continental conglomerates and sandstone, here called the Berry formation, up to about 2,000 feet thick, which lie upon granitic and Cretaceous rocks and are overlain in turn by marine Miocene sediments. The age of these rocks is in doubt due to lack of fossil evidence, but they are included with the Oligocene in this report.

A few stock and domestic wells and springs were noted to be obtaining water from Oligocene sediments in San Luis Obispo County. Ground water probably occurs in fractures and in more permeable lenses in the sandstone and conglomerate.

Miocene Series

Rocks of Miocene age have probably covered most of San Luis Obispo County in the geologic past. Conditions of deposition during this period were complex, resulting in a rather confusing and still poorly known series of formations.

Formations of Miocene age include the Vaqueros formation, Sandholdt shale, Monterey and Temblor formations, the Soda Lake shale, Painted Rock sandstone, and the Santa Margarita formation. These formations consist of marine white and gray sandstone, siltstone, conglomerate, clay shale, siliceous and diatomaceous shale, and chert. Unnamed formations of Miocene age are also found on the east side of San Luis Obispo County and consist of white, red, and green nonmarine sandstone, siltstone, conglomerate and shale.

Up to 2,000 feet of volcanic material consisting of basalt and andesite flows, agglomerate and rhyolite are interbedded with the Vaqueros and

Monterey formations in the Huasna Creek-Arroyo Grande area and in the Caliente Range. Sills of analcrite diabase and plugs of rhyolite porphyry and andesite porphyry, which are probably of middle or lower Miocene age, are found in the Santa Lucia Range and to a minor extent in the Caliente Range (Taliaferro, 1943b). Volcanic rocks of similar age are described from the west side of the Salinas Basin at Pinnacles National Monument, but are unknown in the Salinas Basin in San Luis Obispo County. Plugs and sills of porphyry form a series of prominent steep hills extending from Morro Rock at Morro Bay to San Luis Obispo.

The formations of Miocene age are generally nonwater-bearing, but a well was observed which obtains about 500 gallons per minute from Santa Margarita sandstone near San Juan Creek. Other wells in the area east of Paso Robles obtain up to 300 gallons per minute from fractured Monterey shale. Stock or domestic wells obtain limited amounts of water from all other Miocene formations. Springs associated with faults, weathered rock and permeable zones are common in areas of high precipitation. Most of the Miocene formations contain water of poor quality at depth where they have been penetrated by oil wells.

Lower Pliocene Series

Formations of lower Pliocene age include the Etchegoin and Pismo formations. The Pismo formation has also been called the Santa Margarita formation but is apparently mostly of Pliocene age. It consists of marine conglomerate, sandstone, and clayey and siliceous shale. The Pismo formation is about 3,200 feet thick and contains large amounts of bituminous material. Domestic wells obtain up to 50 gallons per minute from the sandstones. The water is generally of good quality in shallow wells but may be poor at depths

greater than 300 feet.

The Etchegoin formation described in this report includes the Pancho Rico and Jacalitos formations reported by other authors. It is up to 2,000 feet thick and is found only in and around the Salinas Basin and in the Temblor Range. The formation varies considerably from marine shale and sand to gravel, sand, and clay probably laid down in brackish water and includes some non-marine beds. Calcareous lenses and beds occur at different horizons. The gravels generally consist of chert, granitic, volcanic, sandstone and siliceous shale pebbles up to two inches in diameter. Most of the Etchegoin underlies the Paso Robles formation in the Salinas Basin. Electric logs of oil wells indicate that most of the Etchegoin formation contains water of poor quality, but in some areas, especially near outcrops, part of the Etchegoin contains fresh water. A few domestic and stock wells and one or two small irrigation wells obtain limited amounts of water from the Etchegoin formation in and around Salinas Basin.

Nonmarine Pliocene sand, gravel, and clay are found along the San Andreas fault near the Carrizo Plain. These appear to be water-bearing but quality of the water is unknown and may be poor.

Pliocene-Pleistocene Series

The most important water-bearing formation in San Luis Obispo County is the Paso Robles formation of upper Pliocene and Pleistocene age. The Paso Robles formation is represented east of the San Andreas fault in part by the Tulare formation which is essentially the same age and has been affected by the same geologic events. The Careaga sand, also deposited during this period, is encountered by oil wells in Nipomo Mesa, but is not exposed on the surface in San Luis Obispo County. In Santa Barbara County the Careaga sand is penetrated by some water wells.

A general description of the Paso Robles formation is hereinafter presented, but will be discussed in more detail under the descriptions of the ground water basins where the formation occurs. The Paso Robles formation occurs in the Salinas Basin, in the San Luis Obispo-Ecna area and in the Arroyo Grande-Nipomo Mesa area. The formation consists of sand, gravel, clay, minor calcareous beds, and at least one tuff bed. The Paso Robles formation is composed of alluvial fan deposits, lake deposits, and probably flood plain deposits. Individual beds are generally highly lenticular due to scour and fill and lateral gradation. The degree of sorting of individual beds varies from good to poor. Debris in the gravels consists of siliceous shale, sandstone, volcanic rocks, chert, and in some areas granitic rock. Where siliceous shale predominates, the gravels are usually poorly sorted and generally have poor water-bearing characteristics, compared to areas where gravels contain mostly harder rocks.

The Paso Robles formation has been divided into upper and lower units in the Salinas Basin as shown on Plate 7A. These units are only approximately delineated on the geologic map. The two units are separated in areas of outcrop by an erosional unconformity but cannot be differentiated in well logs. In general, the lower Paso Robles formation contains fewer siliceous shale pebbles than the upper and is locally highly folded, whereas the upper has been only gently warped. Part of the lower Paso Robles formation probably is equivalent to the San Joaquin formation of the San Joaquin Valley. The lower and upper Paso Robles formations contain some marine fossils which have been eroded from older formations, principally the Santa Margarita formation. Other workers have reported marine fossils in the Paso Robles formation, but very little, if any, of the Paso Robles, as shown on the geologic map and in the cross sections, is actually marine. Wood fragments are rarely

found in the Paso Robles formation, but fresh water fossils of the type found in modern streams have been found in many places in the formation.

The lower Paso Robles formation in the Salinas Basin may have been deposited by streams which drained the Santa Lucia Range and flowed east and north across the present San Andreas fault. Fairly thick bentonitic clays interbedded with coarse gravels near the San Andreas fault may indicate that the drainage was interrupted by movement of the fault during deposition. The lower Paso Robles formation is thickest west of the San Andreas fault near the Carrizo Plain and Cholame Valley, indicating that this area was either downfaulted during deposition or that the formation now appears thicker because of folding.

The Paso Robles formation in the San Luis Obispo-Arroyo Grande area is represented by about 200 feet of nonmarine sand, gravel, and clay. In the Carrizo Plain most of the nonmarine sediments are probably correlative with the Paso Robles and Tulare formations.

Upper Pleistocene Series

Formations of upper Pleistocene age include the Orcutt formation of the Santa Maria Valley area, terrace deposits, and old sand dunes. The Orcutt formation and older sand dunes are essentially the same for water-bearing purposes. The sand dunes are simply the wind deposited equivalent of parts of the stream-deposited Orcutt formation. The sand dunes generally overlie the Orcutt and generally represent the last phase of deposition of that formation.

Older sand dunes are also found in the Morro Bay area where water well logs indicate that they are underlain by clay and gravel. This clay and gravel may be either the Orcutt or the Paso Robles formation. The Orcutt formation is included with the older sand dunes on the geologic map on Plate 7B.

Marine and stream terrace deposits are of upper Pleistocene age. Many stream terraces are simply erosion surfaces or have such thin deposits that they are considered insignificant, and have not been shown on the geologic map. The marine cut coastal terrace varies from 20 to 100 feet above sea level upon which 10 to 50 feet of sediments have been deposited. The terrace deposits are primarily alluvial fan deposits of sand, gravel, and clay, but some thin basal lenses are of marine origin.

Recent Series

Alluvium of Recent age is limited to valley floors and consists of sand, gravel, and clay. In the Salinas Basin, alluvium averages about 30 feet in thickness in the Salinas River, but in most smaller valleys it appears to be only 5 or 10 feet thick.

In the coastal area the alluvium has filled old valleys which were eroded when sea level was about 300 feet lower than at present during the last glacial age. Similar events have occurred along most of the California coast. Thickness of alluvium in the coastal valleys varies from zero to nearly 200 feet. In very recent times streams have cut into the alluvial fill and five or ten feet of sand and gravel has been deposited in these cuts.

Recent sand dunes found along the coast are white in color and though generally bare, have a light brush cover in some areas. They are easily differentiated from the older sand dunes which have a heavy grass or brush cover, a fairly well developed soil, and are red or brown colored at the surface and to depths of 50 feet or more.

CHAPTER B-IV. STRUCTURAL GEOLOGY

Faulting and folding in San Luis Obispo County generally trend in a northwest-southeast direction. The Salinas Basin and the Carrizo Plain are essentially downfaulted or folded areas between the anticlinal Santa Lucia Range and the San Andreas fault. Cuyama and Santa Maria Valleys are synclinal in nature. The Temblor and Mount Diablo Ranges are essentially anticlinal.

The principal fault system in San Luis Obispo County is the San Andreas. Another major system is a series of more or less parallel faults in the Santa Lucia Range, one zone of which has been called the Nacimiento fault. Most faults of this system cannot be traced for great distances, as they either disappear or are replaced by another fault. The only other known major fault system is a discontinuous series of thrust and normal faults separating the Caliente Range and the Carrizo Plain from the La Panza Range. Faults and folds of hydrologic significance are included in the description of ground water basins.

CHAPTER B-V. GEOLOGIC HISTORY

The geologic history of San Luis Obispo County has been very complex. During late Mesozoic and Tertiary times, portions of the area have been repeatedly covered by the sea and then uplifted, while other portions have been below sea level a much greater part of the time. A few areas have been generally uplifted so that sediments were not deposited on them. The Tertiary history of San Luis Obispo County is closely related to the history of a larger region which includes most of Santa Barbara and Monterey Counties and parts of the other adjacent counties.

Marine sediments of Jurassic, Cretaceous, Eocene, Miocene, and Pliocene age were deposited in portions of the Santa Lucia, Temblor and Mount Diablo Ranges. Nonmarine Oligocene beds may be found in these areas also. Nonmarine Oligocene, Miocene, and Pliocene as well as marine Miocene and Pliocene sediments were deposited in the Salinas Basin, the Carrizo Plain, and the Caliente Range. Nonmarine Pleistocene and Recent sediments have been deposited in most areas in the county. The absence of Jurassic, Cretaceous or Eocene sediments in the Salinas Basin is of interest as it indicates that this area was above sea level for some time before the beginning of deposition of the nonmarine sediments of probable Oligocene age.

As deposition of Pliocene marine sediments began, the Santa Lucia, Diablo, and Temblor Ranges began rising until the marine embayments of the Santa Maria Valley and the Salinas Basin regions were filled and finally lifted above sea level. The Paso Robles formation was deposited in late Pliocene and early Pleistocene time over the older sediments in these areas as alluvial fan and flood plain deposits. Folding of all sediments continued and reached maximum intensity in mid-Pleistocene time. It is possible that the older

portions of the Paso Robles sediments in the Salinas basin were deposited by streams draining northeastward across the San Andreas fault toward the San Joaquin Valley. Thick clay beds near the San Andreas fault may indicate swamp or lake conditions caused by movement of the fault. The Paso Robles formation was folded, faulted, and eroded. In the Salinas Basin an unconformity has been noted within the Paso Robles formation which conveniently divides it into upper and lower units. It is possible that this unconformity represents the mid-Pleistocene orogeny, but lack of fossil evidence makes it possible that the unconformity may have occurred in lower Pleistocene or even in Pliocene time. In the Salinas Basin the upper Paso Robles formation filled in the area which had been eroded into the lower Paso Robles formation and eventually formed a broad flat alluvial plain which probably drained northwest toward the ocean.

In the San Luis Obispo, Arroyo Grande, and Nipomo Mesa areas, the Paso Robles formation was folded and partially removed. In the Morro Bay and Arroyo Grande areas remnants of upper Pleistocene stream deposits and sand dunes are found.

Erosion of the Paso Robles formation in the Salinas basin has continued to the present time, but large terraces testify to relatively stable periods.

In the coastal area marine terraces up to 300 feet above sea level, and possibly up to 900 feet, indicate that the area has been uplifted considerably during upper Pleistocene time. The lowest upper Pleistocene marine terraces and older formations were eroded to depths of up to 200 feet below sea level as a result of lowering of sea level during the last glacial period. Similar events have occurred on the coast of Santa Barbara County and have been described by Upson (1949). After the last glacial period, sea level rose and the coastal valleys were backfilled with stream deposits and with some lagoonal

deposits near the ocean. More recent events along the coast include erosion of headlands and transport of sand to protected areas where beach sands have been deposited.

A fairly recent downcutting of most streams in San Luis Obispo County has occurred. The reason for this is uncertain, but probably includes both climatic and cultural factors. Earthquakes in the Santa Lucia Mountains and along the San Andreas fault testify to present activity of faults in the San Luis Obispo County area.

CHAPTER B-VI. DESCRIPTION OF GROUND WATER BASINS

Discussed in the following paragraphs are nineteen ground water basins in San Luis Obispo County, identified during the course of this investigation. The boundaries of these basins are shown on Plates 9A, B, and C. The Cuyama and Santa Maria ground water basins are not described in this bulletin since they are mostly in Santa Barbara County, and are described in considerable detail by Upson and Worts (1951), and by Worts and Thomasson (1951).

The boundaries of ground water basins in most instances conform with geologic features, such as contacts between permeable and impermeable formations, fault zones of low permeability or changes in subsurface lithology which affect movement or mode of occurrence of ground water. These boundaries were established from available data including well logs, areal geology, and hydrologic observations.

Most ground water basins in the County consist of unconsolidated sediments or alluvium and are of two types. These are: (1) The simple basin in which ground water occurs in a single unconfined body, and (2) the complex basin in which ground water occurs in more than one aquifer. Most of the smaller ground water basins along the coast and in the higher mountains are essentially simple types consisting simply of alluvial fill. The larger ground water basins in San Luis Obispo County are complex, having more than one aquifer, and are affected, at least in part, by folding and faulting.

Ground Water Storage and Subsurface Flow

The purpose of these paragraphs is to explain the procedures used to determine quantitative estimates of ground water storage and subsurface flow. Results of the study are summarized in Tables B-4 through B-8 and are discussed

in Chapter II of the foregoing report.

Ground Water Storage

Ground water is stored within the interstices of sediments and in cracks or fractures of solid rocks. The changes in ground water storage occurring over selected periods of study were generally not estimated due to lack of historical data on ground water level fluctuations. A certain portion of the total storage can be considered usable storage capacity, but this amount is uncertain in most basins due to lack of data. In general, the estimating procedures required: (1) A determination of total volume of saturated sediments and, (2) an estimate of the percentage of this volume that contained extractable ground water. The first item was obtained by computing the volume of sediments that lay between the water table and the bottom of the basin. The second item was obtained by evaluating the average weighted specific yield of the sediments by analysis of available well logs.

The specific yield of a sedimentary deposit is the ratio between the volume of water which a saturated sample of that material will yield by gravity and the volume of that sample, customarily expressed in per cent. During the South Coastal Basin Investigation, the Division of Water Resources conducted extensive field and laboratory investigations for the purposes of assigning specific yield values to various types of material appearing in well logs. These procedures are described in Bulletin No. 45 "Geology and Ground Water Storage Capacity of Valley Fill" (Division of Water Resources, 1934). With slight variations, the values determined in this earlier work were adopted for computing the change of storage estimates presented here.

The task of assigning specific yield values to the sediments appearing in logs was simplified by dividing all basin sediments into eight general

categories. These included soil, clay, clay and sand, clay and gravel, tight sand, sand, tight gravel, and gravel. Sand, gravel, and clay, which constitute the bulk of the basin sediments, were generally found to be well differentiated on the drillers' logs. Combinations of these materials, however, were frequently described by such unique terms as "ooze", "muck", "cement", etc. Materials so described were placed, based on the judgment of a geologist, into one of the above eight categories. Table B-2 indicates specific yield values assigned to the general categories of material encountered. The Paso Robles formation is generally more compacted and weathered than the alluvium and some specific yield values were lowered accordingly.

TABLE B-2
SPECIFIC YIELDS OF SEDIMENTS

Material	: Specific yield (per cent)	
	: Paso Robles	
	: Alluvium	: formation
Soil, including silty clay	5	5
Clay, including adobe and hard pan	3	3
Clay and sand, including sandy silt	5	5
Clay and gravel	7	7
Sand	25	20
Tight sand, including cemented sand	18	15
Gravel, including gravel and sand	21	18
Tight gravel, including cemented gravel	14	13

Subsurface Flow

Subsurface flow was estimated in all cases by the slope-area method. The slope-area method is based on the commonly used form of Darcy's law, $Q=PAI$, where Q equals subsurface flow in gallons per day passing through the cross-sectional area A in square feet; P is permeability in gallons per day per square foot of cross-sectional area; and I is slope of water table at the

cross-section in feet per foot. In order to determine the permeability used in subsurface flow estimates, well pump operation tests were conducted. Data from these well pump operation tests also served as a check of the specific yield values used in the storage calculations. Table B-3 presents results of permeability well pump tests conducted during the investigation. Analyses of the well pump tests were based on non-steady flow equations described by Jacob and Cooper (1946), and Wenzel (1942). Both time-drawdown and recovery methods were used as field conditions permitted. Storage coefficient is defined as the volume of water which can be obtained from a unit volume of saturated sediments by lowering the water level one foot. In an unconfined aquifer storage coefficient is approximately equal to specific yield. In a confined aquifer storage coefficient is very small since it is related to elasticity of the aquifer.

TABLE B-3

RESULTS OF PERMEABILITY WELL TESTS

Well	Formation	Method of test	Transmissibility G.P.d./ft. ²	Thickness feet (perforated)	Permeability G.P.d./ft. ²	Storage Coefficient
<u>Paso Robles Basin</u>						
28S/12E-31K2 (Van Horn)	Alluvium Drawdown	145,000	35	4,150	.038	
26S/12E-33Q5 (City Paso Robles)	Alluvium Drawdown	77,500	19	4,050	over .10	
27S/15E-11C1 (Sinton)	Paso Robles Drawdown	1,020,000	250	4,100	1.3×10^{-3}	
27S/15E-23N1 (Sinton)	Paso Robles Drawdown	70,000	295	240	3.2×10^{-5}	
24S/11E-34P1 (Camp Roberts)	Paso Robles Recovery	12,900	114	113	—	
24S/11E-35E1 (Camp Roberts)	Paso Robles Recovery	14,707	93	1,580	—	
24S/11E-25N1 (Camp Roberts)	Paso Robles Recovery	6,365	43	148	—	
<u>Arapaho Grande Basin</u>						
32S/13E-22Q2	Alluvium Recovery and Drawdown	100,000	50	2,000	.09	
32S/13E-2D24 (Oceano Water Co.)	Paso Robles Recovery and Drawdown	22,000	60	370	5.0×10^{-3}	
<u>Nipomo Mesa</u>						
31N/25E-7A1 (Stuffer Chemical Co.)	Paso Robles Drawdown	6,000	30	200	6.3×10^{-3}	

Ground Water Basins Within Upper Salinas Unit

The most important ground water basin in the Upper Salinas Unit is the Paso Robles Basin. The only other ground water basin given detailed consideration in this bulletin has been designated as Pozo Basin. Principal features of the two ground water basins in this unit are summarized in Table B-4.

TABLE B-4
SUMMARY OF GROUND WATER BASIN CHARACTERISTICS
UPPER SALINAS UNIT

	Paso Robles Basin	Pozo Basin
Total surface area, in acres	580,700	3,600
Surface area of Paso Robles formation, in acres	562,100	0
Surface area of alluvium, in acres	30,300	3,600
Depth and thickness of Paso Robles formation, in feet	0-3000	---
Depth and thickness of alluvium, in feet	0- 130	0-30
Depth of irrigation wells, in feet		
Maximum	1,200	230
Estimated average	400	50
Depth to water in wells, in feet		
Maximum	290	110
Minimum	0	5
Yield of irrigation wells, in gpm		
Maximum	3,300	230
Estimated average	500	100
Specific capacity, in gpm/foot of drawdown		
Maximum	111	---
Estimated average	15	---
Number of irrigation wells, 1954	220	17
Estimated average specific yield, in per cent	8	15
Estimated average basin depth, in feet	900	20
Estimated saturated storage capacity, in acre-feet	Several million	2,000
Occurrence of ground water	Unconfined and confined	Unconfined

Paso Robles Basin

The Paso Robles Basin, shown on Plate 9A, is limited by the extent of the Paso Robles formation and alluvium except where the drainage divide separates it from the Lower Salinas Valley and Carrizo Plain Hydrologic Units. Extent of the formations is shown on Plate 7A. Outlying areas of water-bearing formations which are thin or limited in areal extent are not included in the Paso Robles Basin. Well log sections of the Paso Robles Basin are shown on Plate 8A.

Description of Formations. For purposes of this report all formations older than the Paso Robles formation are considered to be essentially nonwater-bearing. These formations range in age from Pliocene to pre-Cretaceous and include marine and nonmarine sediments, as well as granitic and metamorphic rocks. These nonwater-bearing formations underlie and flank the water-bearing Paso Robles formation and alluvium.

Water-bearing formations consist of Recent and upper Pleistocene alluvial deposits and the Paso Robles formation of Plio-Pleistocene age. The alluvium consists of gravel, sand and clay and is found in most stream valleys in the Upper Salinas Unit. It is generally very thin (less than 30 feet) in the minor tributaries. The deepest alluvial deposits are found in places along the Salinas River where depths as great as 130 feet have been found, although alluvium averages only about 30 feet along most of the Salinas River. Characteristics of alluvium in Cholame Valley are relatively unknown because of the lack of well logs. Alluvium there is roughly estimated to be 100 feet thick and consists of sand, gravel, and clay.

The Paso Robles formation consists of up to 2,000 feet of sand, gravel, silt, clay, calcium carbonate and gypsum cemented beds, occasional fresh water limestones, and volcanic ash beds. The clays are yellow, red, brown, blue, green, and gray in color. Some of the blue and green clays in the eastern portion of the Paso Robles Basin are highly bentonitic suggesting that some volcanic ash may have been deposited with the clay. Disseminated gypsum is fairly common in silt and sand beds on the east side of the basin. The sand and gravel beds are commonly torrentially bedded, and scour and fill features are observed in nearly every outcrop. Individual beds cannot be traced for more than about a mile on the surface or in closely spaced wells. Some gravels and clays up to 10 or 15 feet thick have been observed on the outcrop to pinch out in a distance of 300 feet. All of these features may be attributed to deposition by meandering streams and rivers on a flood plain or on alluvial fans. Many of the clays, silts, and limestones appear to have been deposited in small lakes, but many clays and silts are simply flood plain deposits. Many of the calcium carbonate cemented beds resemble fossil hardpans.

Small fragments of plant remains and a few fresh water shells have been found in the Paso Robles formation. A few reworked marine shells and reworked microfossils were also noted. No plant remains are known to have been recorded by well drillers or geologists in the Paso Robles formation in the Paso Robles Basin.

The Paso Robles formation is underlain unconformably in most outcrop areas by the Etchegoin formation (also known as the Pancho Rico or Jacalitos formation) which consists of sand, gravel, clay, and silt deposited under marine conditions or in brackish water. The contact between the Paso Robles and the Etchegoin formations is often difficult to detect on the outcrop and in well logs. Electric logs of oil wells, however, indicate that the Etchegoin

formation in most areas contains brackish water while the Paso Robles formation contains fresh water. The upper portion of the Etchegoin formation, although often containing marine shells, is generally similar to the Paso Robles lithologically. The deeper Etchegoin is nearly all shale and is fairly distinctive in drillers' logs and in electric logs.

There is evidence of a major unconformity within the Paso Robles formation with the older, deeper, more folded portion generally yielding more water to wells than the younger, less folded portion. The older Paso Robles generally contains more pebbles from pre-Monterey formations (granite, chert, conglomerate, and green sandstone) and the younger portion generally contains mostly Monterey shale pebbles, indicating that, while the Paso Robles formation was being deposited, the surrounding hills were being uplifted and eroded. The unconformable relationship can be observed near the town of Cholame, east of Atascadero, north of San Miguel along the Salinas River, west of San Miguel along the Nacimiento River, and southeast of Shandon along San Juan Creek. Much of the Monterey formation must have been covered by post-Monterey formations or must have underlain lowland areas during deposition of the older Paso Robles formation. It is possible that the older Paso Robles formation was deposited by streams flowing toward the north and east, that is, toward the San Joaquin Valley, and that present drainage down the Salinas Valley was not initiated until some time during deposition of the younger Paso Robles formation.

The older Paso Robles formation is generally exposed in anticlinal areas, and the two members are easily differentiated where the unconformity with the younger Paso Robles is exposed. It is usually difficult to trace this unconformable contact in the field over long distances, and it is only approximately shown on the geologic map.

The older Paso Robles formation is locally steeply folded and faulted,

and overturned beds have been observed. Where older and younger Paso Robles both have gentle dips it is impossible to differentiate them by structure alone. Clays of the older Paso Robles formation are generally blue or green, but may also be yellow or reddish. The older Paso Robles formation is up to about 2,300 feet in thickness. It contains at least one volcanic ash bed but many clays are highly bentonitic, especially near the San Andreas fault, indicating that they may also contain volcanic ash.

The younger Paso Robles is generally more silty, more yellowish or reddish in color, and less regularly bedded than the older. The younger Paso Robles generally dips only one or two degrees, but 10 degree dips are found near some folds. Large areas underlain by the younger Paso Robles consist of practically flat beds which overlap older Paso Robles and nonwater-bearing formations on the edges of the basins. The younger Paso Robles is approximately 500 to 700 feet thick, but in many areas only 100 to 300 feet of this formation is below the water table. The younger Paso Robles formation shown on the geologic map also includes some terrace deposits and older alluvium which are too thin or discontinuous to be of significance to ground water and which are very difficult to differentiate from the Paso Robles formation itself.

Structure of Water-Bearing Formations.— The alluvium does not appear to have been faulted or folded. The Paso Robles formation, in general, is fairly flat lying but is well folded and faulted in some areas. Folding can be observed in outcrops of the Paso Robles formation, but faulting is difficult to detect due to the lack of consolidation of the formation. Faulting has been detected in some outcrops and in oil wells and may be inferred in a few areas from the presence of sulphur springs and from physiographic evidence.

The known faults cutting the Paso Robles formation and possibly acting as barriers to movement of ground water are the San Andreas, San Juan, and Paso Robles faults. Several smaller faults also cutting the Paso Robles formation are shown on the geologic map. In the case of the major faults, the uplifted nonwater-bearing rocks appear to be more important as barriers to the movement of ground water than the fault itself.

Folding of the Paso Robles formation has considerable effect on the occurrence and movement of ground water. In some areas the Paso Robles formation has been raised by folding and has been eroded so that the beds are suitably exposed to receive direct replenishment by percolation of stream flow and rainfall. Anticlinal areas of some importance include the Bradley and Huerhuero anticlines, the Cholame Hills anticlinal area, and the Paso Robles fault and San Juan fault anticlinal areas. The area in the south central part of the Paso Robles Basin is essentially a northward-dipping homocline which has been called the Highland homocline (from Highland School District). After percolation the water moves toward pumping areas where the Paso Robles sediments are buried, such areas including the Bradley, San Miguel and Huerhuero synclines and the broad, flat-bedded area in the region near Shandon. The folds of the Paso Robles formation beneath areas of alluvium probably result in interchange of water between the two formations when ground water gradients are favorable to such interchange.

Occurrence and Movement of Ground Water. Ground water occurs in the alluvium and in the Paso Robles formation in the Paso Robles Basin. Ground water in alluvium of the Salinas River is unconfined. In Cholame Valley the northern portion appears to be unconfined but the southern portion is probably confined.

Within the Paso Robles formation, occurrence of ground water is rather complex due to lenticularity of aquifers, folding of the formation, and the presence of older and younger members of the formation.

Water levels in various aquifers in any area are generally at different elevations. As far as can be determined, the shallower aquifers generally have higher water level elevations than deeper aquifers, indicating a slow downward movement of ground water. In the few areas where water level in wells is above the ground surface (areas of flowing wells), the shallow aquifers generally have a lower water level elevation than the deeper wells, indicating slow upward movement of ground water. Areas of upward movement of ground water include portions of Cholame, Estrella, and Huerhuero Creek valleys. Hence, one may visualize movement as generally downward in topographically high areas and upward in topographically low areas which have been incised by stream erosion. The higher topographic areas, which comprise most of the Paso Robles Basin, may then be considered essentially free ground water areas. Through the period of this investigation the low areas have acted as pressure areas, as evidenced by flowing wells, but if the ground water level of the entire basin should be lowered below the topographic lows, then the vertical movement in these areas would most likely be downward. Under such conditions the areas could be considered as an area of free ground water. In the area of the Huerhuero and San Miguel synclines a few deep wells have higher water levels than the shallow wells even though located in topographically high areas. In this case, it is believed that deeper wells tap aquifers which rise higher on the flanks of adjacent anticlines, and as a result, have a greater head and a higher water level elevation.

Most good irrigation wells in Cholame Valley are located in the northern portion of the valley and obtain water from the Paso Robles formation.

It is most probable that the sands and gravels of the overlying alluvium are in hydrologic continuity with the Paso Robles formation. The alluvium in the Salinas River is also in hydrologic continuity with the underlying Paso Robles, especially where the latter has been folded. As shown in Plate 9A, ground water in the Paso Robles Basin moves from the hill areas toward the larger streams, that is, toward Estrella Creek and the Salinas River and thence to the north and out of the Paso Robles Basin into the lower Salinas Valley.

Ground water in the Salinas River alluvium is apparently completely replenished nearly every year by percolation of river flow. Additional recharge includes percolation of precipitation and excess irrigation water, and an unknown quantity of subsurface inflow from the older nonwater-bearing formations and from the underlying and flanking Paso Robles formation. Similarly, alluvium in Cholame Valley is replenished by stream percolation, percolation of rainfall, and excess irrigation water, as well as a minor amount of subsurface flow from adjacent nonwater-bearing rocks.

Recharge of the Paso Robles formation is rather complex. Percolation of rainfall and stream flow may occur directly on outcropping aquifers in areas of folding. In certain places in areas of folding where water levels are high, the aquifers discharge water to the surface. In some cases influent and effluent flow may occur on the same anticlinal structure within a hundred yards. Effluent flow occurs on the Huerhuero anticline in Huerhuero Creek; northeast of Bradley anticline in Vineyard Canyon and Indian Valley; and near the Paso Robles fault east of the Salinas River. Water percolates on the flanks of most folds. In the areas of flat lying sediments, vertical percolation is complex and devious as discussed above, and probably constitutes a major source of replenishment during wet periods. In the area north of Estrella Creek, northwest of Shandon, ephemeral springs caused by trapping of downward percolating

waters by clays are common; however, successful irrigation wells are not known in this area. There are probably many areas of effluent flow not observed during this investigation which occur when water levels are high.

Ground water is withdrawn from the alluvium of the Salinas River by pumping, effluent flow, evapo-transpiration, subsurface flow into the lower Salinas Valley and possibly by a limited amount of subsurface flow into the Paso Robles formation. The location of areas of effluent flow in the Salinas River alluvium depend on the water level conditions. When the alluvium is full and the river stage is falling the entire length of the alluvium may be considered as having effluent flow. The areas of rising water during lowest water levels in September, 1953, were observed in the following locations: (1) between San Miguel and Wunpost, (2) between Eureka Bridge at Atascadero and a point some 300 yards upstream from the bridge, and (3) about half way between Templeton and Atascadero. The remainder of the river was dry at this time. Some of the rising water upstream from Wunpost probably comes from subsurface inflow from the Paso Robles formation. Alluvium in Cholame Valley is depleted by pumping, possibly by evapo-transpiration, and by subsurface outflow through alluvium and possibly through the San Andreas fault into the Paso Robles formation near Cholame.

Depletion of the Paso Robles formation occurs by pumping, evapo-transpiration, effluent flow, and subsurface outflow.

Ground Water Storage Capacity and Specific Yield. Ground water storage capacity below the water table of 1954 to the base of the Paso Robles formation is estimated to be extremely large; probably several millions of acre-feet. The average saturated depth is about 900 feet. Estimated ground water storage for the 100 feet of material below present water level is about 3,000,000 acre-feet. This value is estimated to be in the correct order of

magnitude for usable storage capacity, since pumping lifts would probably have to be 200 feet greater than present to utilize this amount of storage and still be within economical limits. Historical data on ground water levels are not available to determine actual historical changes in ground water storage, but they are believed to be small. Estimated weighted mean specific yield of the Paso Robles formation and alluvium is eight per cent. Storage capacity of the alluvium of the Salinas River is estimated to be only about 40,000 acre-feet, and specific yield is estimated to average 15 per cent.

Permeability, Subsurface Flow, and Yield of Wells. Permeability of the alluvium in the Salinas River near Atascadero and Paso Robles was found to be about 4,000 gallons per day per square foot from permeability pump tests. Permeability of the Paso Robles formation was found to vary from about 100 to 4,100 gallons per day per square foot, with an average value of about 200 gallons per day per square foot.

Subsurface flow from the Paso Robles Basin to the lower Salinas Valley has been estimated by the slope-area method. Subsurface outflow through the Paso Robles formation occurs east of the Salinas River and is estimated to be about 7,000 acre-feet per year. Water level control in this area is poor, however, and this estimate should not be considered to be too reliable. Subsurface outflow to the lower Salinas Valley also occurs through the alluvium and is estimated to be only about 150 acre-feet per year.

The Paso Robles formation yields up to 3,300 gpm to wells and the alluvium in the Salinas River yields up to 2,000 gpm to wells. Wells generally obtain water from unconsolidated sand and gravel, but one driller reports that the cemented beds of the Paso Robles formation also yield considerable water to wells.

Pozo Basin

The Pozo ground water basin is located upstream from Salinas Dam and includes a narrow strip of alluvium on the valley floor of the Salinas River and Pozo Creek. The alluvium ranges up to 30 feet in depth. It is replenished by percolation of stream flow, and by penetration of rainfall and return irrigation water. It is depleted by pumping, evapo-transpiration, and effluent flow. Total ground water storage capacity is estimated to be about 2,000 acre-feet. There were 17 irrigation wells in Pozo Basin in 1954. A maximum yield of 230 gallons per minute has been reported and the average yield for all wells is about 100 gallons per minute.

Ground Water Basins Within Coastal Unit

The Coastal Unit has been divided for descriptive purposes into three subunits, each of which includes several drainage areas. The three are the Cambria Subunit in the northern portion, the San Luis Obispo Subunit in the central portion, and the Arroyo Grande Subunit in the southern portion of the coast. The boundaries of the subunits and basins are shown on Plate 9B.

All coastal ground water basins in San Luis Obispo County have a similar late geologic history which is of considerable importance to occurrence of ground water. During the time prior to the last glacial period sea level was higher than at present and the coastal valleys were incised in essentially their present position, while the low terraces now found at 20 to 100 feet above sea level were being formed by wave erosion and deposition. During the last glacial period, sea level dropped to about 300 feet below its present level, and as the lowering occurred, the coastal valleys were incised. In some instances only narrow V-shaped canyons were formed, and in others, where conditions were favorable, wider valleys were eroded. At the time of maximum

lowering of sea level the shore line was from two to eight miles from its present position and streams had this greater distance to flow to reach sea level. The stream valleys were incised in most places into nonwater-bearing rock, but in the Morro Bay and Arroyo Grande areas the streams cut into the older sand dunes and the Paso Robles formation. There is some evidence that harder rock has resisted erosion in some places, resulting in widening of the ancient valley upstream from the hard rock and steepening of the stream gradient below.

As the last glacial period declined and sea level rose, the streams dropped their material and backfilled the valleys. This alluvial backfill is the Recent and upper Pleistocene alluvium which is the principal aquifer of most of the coastal ground water basins.

Cambria Subunit

Principal ground water basins in the Cambria Subunit include San Carpoforo, Arroyo de la Cruz, San Simeon, Santa Rosa, Villa, Cayucos, Old, and Toro Basins. Pertinent geologic and hydrologic characteristics of these ground water basins, which correspond to the creeks of the same name, are included in Table B-5.

TABLE B-5

SUMMARY OF GROUND WATER BASIN CHARACTERISTICS
GAMBRIA SUBUNIT, COASTAL UNIT

	San Carpoforo: Arroyo de la: San Silvestre: Santa Rosa: Cayucos: Old: Toro Basin: Basin: Basin: Basin: Basin: Basin: Basin	Basin: Basin: Basin: Basin: Basin: Basin: Basin						
Total surface area, in acres	200	750	620	2,360	980	980	750	490
Thickness of alluvium, in feet	0-60+	0-130+	0-100(?)	0-130+	0-130(?)	0-120(?)	0-135	0-80(?)
Depth of wells, in feet								
Maximum known	127	80	130	135	80	135	162	100
Estimated average	100	50	80	80	70	80	70	80
Depth of water, in feet								
Maximum	23	30	30	90	5	28	34	80
Minimum	0	5	6	5	4	8	8	8
Yield of irrigation wells, in gpm								
Maximum known	—	170	708	—	—	166	335	500
Estimated average	—	100	400	—	—	100	200	100
Specific capacity, in gpm/foot of drawdown								
Maximum known	—	—	50	—	—	14	24	80
Estimated average	—	—	15	—	—	10	15	80
Number of irrigation wells, 1954	0	5	6	9	3	2	3	1
Estimated average specific yield, in per cent	18	18	18	17	15	15	15	15
Estimated saturated storage capacity, in acre-feet	1,800	6,600	4,000	24,700	6,600	4,000	4,600	2,900
Estimated usable capacity, in acre-feet	600	2,200	1,300	6,000	2,200	1,300	1,500	1,000
Occurrence of ground water	Unconfined	Unconfined	Unconfined	Unconfined	Unconfined	Unconfined	Unconfined	Unconfined
Estimated maximum possible extent of sea-water intrusion, in miles from ocean		2	3	2	3	2	1.2	1

B-43

Estimated maximum possible extent
of sea-water intrusion, in miles
from ocean

Geology. All of these ground water basins consist of alluvium of Recent and upper Pleistocene age which has been deposited as described above. In the Cambria Subunit the alluvium overlies nonwater-bearing rocks of Tertiary, Cretaceous and Jurassic age. Thickness of alluvium varies from 0 to over 130 feet in the ground water basins of the Cambria Subunit. As far as can be determined the alluvium is not disturbed by faulting or folding, and it apparently continues offshore and is in contact with sea water.

The base of the alluvial deposits on the terraces along the coast of this subunit is above sea level and therefore the alluvium contains little ground water, as it drains directly toward the ocean.

Ground Water. Ground water occurs in the alluvium and to a minor extent in fractures and slightly permeable zones in the older nonwater-bearing rocks. Ground water in alluvium is unconfined as far as is now known, although small clay caps may exist near the mouths of some of these ground water basins. Ground water moves downstream and essentially follows the slope of the ground surface. Ground water is replenished in these basins by percolation of stream flow and by deep penetration of precipitation and excess irrigation water. It appears that stream flow entering the ground water basins of the Cambria Subunit has been sufficient to essentially replenish the basins in nearly every year. Ground water is depleted by pumping, effluent flow, evapo-transpiration and subsurface flow into the ocean. The water table in most of these ground water basins is fairly close to the surface, and most of the trees and heavy brush in the basins probably obtain water from the water table. Rising water occurs for at least part of the year after the ground water basins are filled during the wet season. During the later part of the year when rising water occurs, the streams in many cases do not directly reach the ocean but are dammed by barrier beaches and sand dunes and water percolates to the ocean

through the barriers. If the ground water basins were dewatered by pumping, sea-water intrusion would probably occur. However, intrusion cannot extend inland beyond the point where the base of the alluvium is at sea level elevation. This point of maximum intrusion is estimated for each basin in Table B-5.

Wells in the ground water basins of the Cambria Unit average about 80 feet in depth. Many of them completely penetrate the alluvium and have been drilled into nonwater-bearing rocks. Wells yield up to about 700 gallons per minute but average yield is probably on the order of 200 gallons per minute. Specific capacity of wells probably averages about 15 gallons per minute per foot of drawdown. As shown on Table B-5 the number of irrigation wells in each of these ground water basins is small.

San Luis Obispo Subunit

Ground water basins in the San Luis Obispo Subunit include Morro, Chorro, Los Osos, San Luis Obispo, and Pismo Basins corresponding to the name of the streams which traverse the ground water basins. The San Luis Obispo and Pismo ground water basins may be conveniently divided into upper and lower areas for descriptive purposes, the upper areas being located in the northwest-southeast trending San Luis Valley and the lower areas in the narrow north-south trending canyons. Pertinent geologic and hydrologic characteristics of these ground water basins are summarized in Table B-6.

TABLE B-6

**SUMMARY OF GROUND WATER BASIN CHARACTERISTICS
SAN LUIS OBISPO SUBUNIT, COASTAL UNIT**

	% Mexico Basin	% Chorro Basin	% Los Osos Basin	% San Luis Basin	Obs'd :- Basin
Total surface area, in acres	1,270	1,750	7,920	9,680	21,240
Thickness of alluvium, in feet	0-130	0-80	0-100 (?)	0-100 (?)	0-100 (?)
Thickness of old sand dunes, in feet	0-00	0-00	0-150	0-00	0-00
Thickness of Paso Robles formation, in feet	0-00	0-00	0-2	0-160	0-160
Depth of wells, in feet					
Maximum known	90	150	212	210	210
Estimated average	80	70	60	90	60
Depth to water, in feet					
Maximum	52	23	83	20	42
Minimum	4	2	2	2	0
Yield of irrigation wells, in GPM					
Maximum known	442	700	396	600	200
Estimated average	300	200	200	300	0-00
Specific capacity, in GPM/foot of drawdown					
Maximum known	73	23	55	20	0-00
Estimated average	30	15	15	15	0-00
Number of irrigation wells, 1954					
Estimated average specific yield of all sediments, in per cent	12	4	13	25	15
Estimated saturated storage capacity, in acre-feet	7,500	9,600	95,000+	67,000	30,000
Estimated usable capacity, in acre-feet	2,000	2,500	9,000	22,000	10,000
Occurrence of ground water	Unconfined	Unconfined	Unconfined	Unconfined and confined	Confined and unconfined
Estimated maximum possible extent of sea-water intrusion, in miles from ocean	1.5	1.5	0-00	1	1

Geology. The Morro and Chorro ground water basins are similar to those described in the Cambria Subunit in that they consist of Recent and upper Pleistocene alluvium overlying nonwater-bearing rock. The marine terrace deposits extending from Morro Creek north to one-third mile south of Toro Creek lie partly below sea level. They are at least 60 feet deep as the drillers log of one well indicates.

Geology of the Los Osos, San Luis Obispo, and Pismo basins is more complicated than the basins to the north in that water-bearing sediments consist of Recent and upper Pleistocene alluvium, sand dunes and terrace deposits of upper Pleistocene age, as well as the Paso Robles formation of Plio-Pleistocene age. The Paso Robles formation consists of lenticular sand, gravel, and clay, with very poor bedding. The Paso Robles was deposited in the northwest-southeast trending San Luis Valley, and probably in Los Osos Valley and Morro Bay. The presence of materials which may be of the Paso Robles formation is indicated by drillers logs of wells near Morro Bay, but no outcrops were identified there during the field investigation. The Paso Robles formation does outcrop in the upper main portion of both the San Luis Obispo and Pismo Creek Basins where it has been gently folded into a syncline (see Geologic Map, Plate 7B), and has a maximum known thickness of 160 feet. The Pismo and San Luis Obispo Basins are arbitrarily separated in the area of outcrop of the Paso Robles formation at the drainage divide, although the ground water divide does not appear to correspond with the drainage divide (see Plate 9B).

In the San Luis Obispo Subunit older sand dunes are found only in the Los Osos Basin and at the town of Morro Bay as shown on Geologic Cross Sections E-E' and F-F', Plate 8B, and on the Geologic Map, Plate 7B. The older sand dunes are up to 150 feet thick and extend to and slightly below sea level.

The older sand dunes are weathered to a brown or reddish color and are fine grained as is usually the case with wind blown sand deposits. Water well logs indicate that occasional clay lenses are found in the sand dunes. Some terrace deposits up to about 100 feet thick in the San Luis Obispo Basin near Laguna Lake are probably the age equivalent of the older sand dunes.

Alluvium, which reaches a maximum thickness of about 100 feet, occupies the valley floor of all the ground water basins and is the principal aquifer. Large areas in the San Luis Obispo and Pismo Basins where the alluvium has a thickness of less than 10 feet and exposures of bedrock are common are not included on the geologic map since the alluvium does not yield much water to wells or is above the water table. The younger sand dunes in the Morro Bay area contain ground water but are not extensive enough to be of hydrologic significance.

Ground Water. Ground water occurs in alluvium, older sand dunes, and in the Paso Robles formation and is unconfined in most portions of the basins. The only flowing wells noted in this sub-unit were in the alluvium of the broad upper part of San Luis Obispo and Pismo Basins just upstream from the narrow canyons mentioned above, indicating that conditions of at least partial confinement exist in those areas. Bedrock is exposed in a part of the narrow canyon of Pismo Creek and is a natural dividing area between the large upper portion and the small lower portion of the Pismo Ground Water Basin.

Ground water generally moves in the direction of surface slope except in Los Osos Basin, where it moves in a northerly direction in the older sand dunes as shown by water level contours on Plate 9B. Ground water is replenished by percolation of stream flow, precipitation and return irrigation water, as well as by minor amounts of subsurface inflow from older rocks.

Ground water is depleted by pumping, evapo-transpiration, effluent flow, and

subsurface flow to the ocean. In general the best wells are located in the alluvium. The yield of wells in the dune sand is limited by sand coming into wells. The older sand dunes, however, yield soft water of excellent quality. The yield of wells in the Paso Robles formation is fair but generally less than wells in alluvium. Many stock and domestic wells obtain limited supplies from fractured older rocks.

Since alluvium is in contact with sea water it is reasonable to expect that sea-water intrusion could occur if landward gradients are established by heavy pumping in the future. As far as is known, however, no landward gradient has existed except in cones of depression near pumping wells for a short period of time, and sea-water intrusion has probably not occurred up to 1955.

Arroyo Grande Subunit

Ground water basins in the Arroyo Grande Subunit include the Arroyo Grande Basin and Nipomo Mesa. Pertinent geologic and hydrologic characteristics are summarized in Table B-7.

TABLE B-7

SUMMARY OF GROUND WATER BASIN CHARACTERISTICS
ARROYO GRANDE SUBUNIT, COASTAL UNIT

	Arroyo Grande	Nipomo Mesa
Total surface area, in acres	12,460	16,020
Thickness of alluvium, in feet	0-200†	---
Thickness of old sand dunes, in feet	0-100	0-300
Thickness of Paso Robles formation, in feet	0-200	0-900
Depth of wells, in feet		
Maximum known	252	810
Estimated average	100	400
Depth of water, in feet		
Maximum	93	237
Minimum	0	5
Yield of irrigation wells, in gpm		
Maximum known	1,200	1,500
Estimated average	360	100
Specific capacity, in gpm/foot of drawdown		
Maximum known	500	29
Estimated average	40	5
Number of irrigation wells, 1954	123	6
Estimated average specific yield, in per cent	15	18
Estimated saturated storage capacity, in acre-feet	226,000	770,000+
Estimated usable capacity, in acre-feet	40,000	?
Occurrence of ground water	Confined and unconfined	Unconfined

Geology. Areal geology of the Arroyo Grande Basin and Nipomo Mesa is shown on the geologic map (Plate 7B) and on geologic cross-sections G-G', H-H', and J-J' on Plate 8B. Water-bearing formations include alluvium, older sand dunes, and the Paso Robles formation. In addition, the Careaga sand is found beneath the Paso Robles formation in the Nipomo Mesa area, but does not outcrop in San Luis Obispo County. The Careaga sand is a marine, medium-grained sand of Plio-Pleistocene age. It attains a thickness of 650 feet in the Santa Maria basin, but thins to a feather edge under the Nipomo Mesa as shown on cross-sections H-H' and J-J'.

The Paso Robles formation consists of sand, gravel, and clay up to 900 feet thick in Nipomo Mesa, up to 200 feet thick in the lower part of the Arroyo Grande basin, and up to 2,000 feet thick in the Santa Maria Valley in Santa Barbara County. The Paso Robles formation thins to the north and west from the vicinity of Oso Flaco Lake. Both the Careaga sand and Paso Robles formation in San Luis Obispo County form the north flank of a syncline whose axis is located along the south edge of the Santa Maria Valley (Worts and Thomasson, 1951, and Woodring and Bramlette, 1950). At the mouth of the valley of Los Berros Creek the Paso Robles formation has been folded and has a dip of 15 degrees to the southeast, but in most places the Paso Robles has a dip of less than five degrees.

After deposition of the Paso Robles formation, sand dunes up to 300 feet thick were deposited on Nipomo Mesa and up to 100 feet of sand dunes were deposited in the area north and east of Oceano. These dune sands have since been tilted, partially eroded away, and weathered, and they are called the older sand dunes in this report. Worts and Thomasson (1951) mapped a stream deposited gravel bed in the southeast part of the Nipomo Mesa and called it the Orcutt formation, but it is included with the older sand dunes in this

report since the mapped bed is thin on the outcrop and cannot be identified in logs of wells drilled in Nipomo Mesa.

All of these older formations were eroded by Arroyo Grande Creek and the Santa Maria River during the last glacial stage when sea level was about 300 feet lower than at present. As the glacial period waned and sea level rose, the sediment loads of Arroyo Grande Creek and the Santa Maria River were deposited, forming the alluvium of Recent and upper Pleistocene age. Alluvium in Arroyo Grande Creek is about 100 feet thick in the valley upstream from the town of Arroyo Grande, and possibly 200 feet thick near the present shore line. Available well logs confirm the presence of a fine-grained upper member of the alluvium in Arroyo Grande Basin near the coast. This upper member acts as a confining bed to ground water and wells flow when the piezometric surface is above the ground surface.

The sand dunes of Recent age along the coast are generally less than 50 feet thick but reach a maximum thickness of 100 feet. They overlie alluvium and older sand dunes. The alluvium of Arroyo Grande Valley has probably not been folded or faulted. The older sand dunes have apparently been tilted to the southwest to some extent so that the base of the sand dunes is now below sea level (see cross-section J-J', Plate 8B). The Paso Robles formation is concealed by sand dunes in most areas, but oil well logs and available outcrops indicate that it dips to the southwest and toward the Santa Maria Valley.

Ground Water. Ground water occurs in alluvium, older sand dunes, the Paso Robles formation, and the Careaga sand. The principal aquifer of the Arroyo Grande Basin is alluvium, but many wells obtain water from the Paso Robles formation underlying the older sand dunes in the area between Oceano and Arroyo Grande, and a few wells obtain water from the Paso Robles formation in the Los Berros Creek area. Nonwater-bearing rocks underlie the water-bearing

sediments, but some wells obtain limited quantities from these rocks and one well, drilled into Miocene rocks, yields about 500 gallons per minute.

Ground water in the older sand dunes is generally low in total dissolved solids and hardness since it is derived mostly from percolation of precipitation. Ground water in older formations is generally higher in total dissolved solids and hardness.

Ground water movement is indicated by contours on Plate 9B. Of considerable interest is the fact that ground water moves from Nipomo Mesa toward Los Berros Creek, Arroyo Grande Valley, the ocean, and toward Santa Maria Valley. It is probable that movement in the reverse direction will occur if future increased pumping on Nipomo Mesa exceeds natural recharge. Ground water in Arroyo Grande Basin generally moves downstream except where temporary cones of depression are formed near pumping wells. In the area north of Oceano, pumping has formed a large depression in the water table, the deepest part having been below sea level most of the time during the 1945 to 1955 period. Oceanward of this large depression, however, water levels are above sea level, indicating that sea-water intrusion probably is not occurring. The large depression is apparently caused by the reduced permeability of the Paso Robles formation and fairly heavy draft requiring a steeper hydraulic gradient to transmit the water to the wells in the area. The sediments underlying the older sand dunes in the area of the depression contain fairly extensive clay lenses which cause local pressure effects. Near the ocean west of the depression the clays apparently are not very extensive, and ground water in the older sand dunes probably percolates downward into the Paso Robles formation and maintains a seaward hydraulic gradient. Just north of Nipomo Mesa ground water in the alluvium moves in a northwesterly direction and is confined by a clay cap.

Ground water in Arroyo Grande Basin is replenished by percolation of stream flow, rainfall, and excess irrigation water as well as by subsurface flow from Nipomo Mesa. Most of the area of Nipomo Mesa is internally drained. The old sand dunes underlying the mesa have large closed depressions and the sand has a sufficiently high percolation rate to absorb all rainfall not consumptively used or evaporated. Flow from springs in Black Lake Canyon drains to the Recent sand dunes, but there the water percolates into the sand dunes and moves underground to the ocean. No streams drain into, out of, or across Nipomo Mesa, and therefore the major source of replenishment of ground water is percolation of precipitation. That this replenishment has occurred in the past is evidenced by the fact that the basin is so full that ground water now moves out of the area toward the adjacent ground basins and the ocean. An additional source of supply may consist of a small amount of subsurface inflow which has percolated from the alluvium of Nipomo Creek on the east. Under conditions of heavy draft sea-water intrusion may occur.

Ground water is depleted in Arroyo Grande Basin and Nipomo Mesa by pumping, subsurface outflow, and evapo-transpiration. Ground water is exported from the Oceano area of Arroyo Grande Basin to Pismo Beach.

The effluent water which reaches a maximum amount of flow at the U. S. Geological Survey gage at Arroyo Grande is probably caused by the decrease of cross-sectional area of alluvium. When water levels are further drawn down by pumping, the effluent flow at the gage will stop. Most of the effluent water percolates below Arroyo Grande during the irrigation season. Water which does not percolate flows to and over the clay cap and is wasted to the ocean.

Wells in Arroyo Grande Basin generally obtain most yield where

drilled into alluvium. The Paso Robles formation north and east of Oceano and in the Los Berros Creek area generally yields less water to wells. Wells in the sand dunes do not yield much water because of inflow of sand during high pumping rates. Yields of wells, specific capacities, storage capacities and other hydrologic factors are summarized in Table B-7.

Carrizo Plain Unit

The Carrizo Plain Unit consists primarily of the Carrizo Plain, but Elkhorn Plain and a few other internally drained areas in the extreme southeast portion of San Luis Obispo County and in adjacent Kern County are also included. Carrizo Plain is the largest area of internal drainage in the Coast Ranges. The internal drainage has been preserved primarily because of low rainfall and relatively small tributary mountain areas, resulting in limited runoff. Excess runoff evaporates in Soda Lake in the central portion of the plain. A review of historical records indicates that standing water in Soda Lake has been noted only during the wet months and in summers following very heavy spring rains. Pertinent physical features of the Carrizo Plain Basin are summarized in Table B-8.

TABLE B-8

SUMMARY OF GROUND WATER BASIN CHARACTERISTICS
CARRIZO PLAIN UNIT

Total surface area, in acres	172,000
Thickness of alluvium, in feet	0 - 100'
Thickness of Paso Robles formation, in feet	0 - 1,000'
Depth of wells, in feet	
Maximum known	600
Estimated average	200
Depth to water, in feet	
Maximum	58
Minimum	12
Yield of irrigation wells, in gpm	
Maximum known	1,100
Estimated average	500
Specific capacity, in gpm/foot of drawdown	
Maximum known	15
Estimated average	5
Number of irrigation wells, 1954	8
Occurrence of ground water	Unconfined and confined

Geology

Geologic features of the Carrizo Plain Unit are shown on Plate 7C. Water-bearing materials include alluvium and the Paso Robles formation. The Paso Robles formation (also called the Tulare formation in this area by some workers) consists of more than 1,000 feet of clay, sand, and gravel. Drillers logs and electric logs of oil wells indicate that the Paso Robles formation underlying the alluvium is moderately high in clay content in the north part of the unit and very high in clay and silt near and south of Soda Lake. Surface outcrops indicate the same general gradation of sediments in a southerly direction although outcrops are poor. In general the thickest portion of the Paso Robles formation is found on the north and west sides of the Carrizo Plain Unit. This probably has been the result of down folding or faulting of the area near the San Andreas fault and up folding or faulting of the western side of the Carrizo Plain and the Caliente Mountains.

Alluvium is probably only 100 feet or less in thickness, although well log data are scant. Alluvium on the surface consists of relatively coarse alluvial fan sediments around the periphery of the Carrizo Plain and Elkhorn Plain and fine-grained lake deposits near the central parts of those areas. During a previous wet cycle, possible during the last glacial age, Soda Lake was considerably more extensive than at present as shown by poorly preserved, eroded terraces and by extensive salt deposits in the soil. Aerial photographs show this ancient shore line reasonably well by changes in vegetation and in soil color. The shore line coincides only poorly with the present surface contours, probably indicating that the shore line has been altered by recent tectonic activity. Deposition of alluvium is affected by the San Andreas fault and some streams have been offset by faulting. The Paso Robles formation has been both faulted and folded.

Ground Water

Ground water basins in the Carrizo Plain Unit include the Carrizo Plain Basin, the Elkhorn Plain Basin, and other small areas of internal drainage. These are shown as one ground water basin on Plate 8C. Since most available data concern the Carrizo Plain Basin itself, the following discussion will concern this basin unless other areas are specially mentioned. Ground water conditions in the Carrizo Plain Unit are not well known. The area of most extensive use of ground water is in the north end of the Carrizo Plain where wells obtain water from both the alluvium and the Paso Robles formation. In this area, near Simmler, relatively good quality irrigation water is obtained from deeper wells in the Paso Robles formation and relatively poor quality water from shallow wells in the alluvium. Ground water in this area moves toward Soda Lake.

Three domestic wells obtain water of reportedly good quality from areas near the apex of alluvial fans west of Soda Lake. Nearly all other domestic and stock wells elsewhere in the Carrizo Plain obtain water of very poor quality from alluvium.

Recharge to ground water occurs only through percolation of precipitation, stream, flow, and return irrigation water. The basin is depleted by pumping, evapo-transpiration, by evaporation of water in Soda Lake, and by a minor amount of spring flow into San Juan Creek. The San Andreas and other faults shown on Plate 7C are almost certainly barriers to movement of ground water, but no wells are present to determine their effects directly. In summary, low rainfall, poor quality water, and relatively tight alluvial material in most of the Carrizo Plain and Elkhorn Plain ground water basins

indicate that a substantial increase in utilization of ground water will probably not be feasible.

Ground Water Basins Within Other Units

Miscellaneous hydrologic units comprising San Luis Obispo County include San Joaquin, Cuyama, and Santa Maria Units. Ground water basins in the San Luis Obispo County portion of the San Joaquin Unit are limited in area, depth, and water supply and are not further discussed in this appendix. The most important ground water basins of the Cuyama and Santa Maria Units are described in some detail by Upson and Worts (1951), and by Worts and Thomasson (1951).

BIBLIOGRAPHY

Asterisks Indicate Source Materials For
Compilation of Geologic Map (Plates 7A, B, and C)

- Anderson, F. M. "Knoxville Series in the California Mesozoic". Bulletin Geological Society America. Vol. 56, pp. 909-1014. 1945.
- *Anderson, F. M. and Martin, B. "Teblo" Basin and San Juan District". California Academy Science Proceedings. Vol. 4, pp. 15-112. 1914.
- *Arnold, R. and Anderson, R. "Geology and Oil Resources of the Coalinga District, California". United States Geological Survey. Bulletin 398. 1910.
- *Arnold, R. and Johnson, H. R. "McKittrick-Sunset Oil Region". United States Geological Survey. Bulletin 406. 1910.
- *Bailey, E. H. "Quicksilver Deposits of the Parkfield District, California". United States Geological Survey. Bulletin 936-F. 1942.
- Beck, R. S. "Correlation Chart of Oligocene, Miocene, Pliocene and Pleistocene in San Joaquin Valley and Cuyama Valley Areas. Correlation Chart of Paleocene and Eocene on the Pacific Coast". American Association Petroleum Geologists Guidebook of March, 1952. 1952
- *Bramlette, M. N. and Daviess, S. N. "Geology and Oil Possibilities of the Salinas Valley, California". United States Geological Survey. Oil and Gas Investigation Preliminary Map 24. 1944.
- California Department of Public Works, Division of Water Resources. "Bulletin No. 45, South Coastal Basin Investigation - Geology and Ground Water Storage Capacity of Valley Fill". 1934.
- Carlson, Stanley A. "Stratigraphy of the Cuyama Valley Area, California". Paper given at American Association Petroleum Geologists meeting, Los Angeles, October 31, 1952.
- Clark, B. L. "Tectonics of the Mt. Diablo and Coalinga Areas, Middle Coast Ranges of California". Bulletin Geological Society America. Vol. 46, pp. 1025-1079. 1935.
- Clark, B. L. "Notes on California Tertiary Correlation". California Department of Natural Resources, Division of Mines. Bulletin 118, pp. 187-192. 1941.
- Corey, W. H. "Tertiary Basins of Southern California". California Department of Natural Resources, Division of Mines. Bulletin 170, Chapter III, pp. 73-83. 1954.

*Dibblee, T. W., Jr. "Cuyama Valley and Vicinity". American Association Petroleum Geologists Guidebook, pp. 82-84. March, 1952.

Dill, R. F. "Environmental Analysis of Sediment From the Sea Floor off Point Arguello, California". Unpublished M.S. Thesis, University of Southern California. 1952.

*Drouillard, E. K. "Geology of the Packwood Quadrangle, California". Unpublished M.S. Thesis, University of California, Berkeley.

Durham, J. W. "The Marine Cenozoic of Southern California". California Department of Natural Resources, Division of Mines. Bulletin 170, Chapter III, pp. 23-31. "Marine-Nonmarine Relationships in the Cenozoic Section of California". California Department of Natural Resources, Division of Mines. Bulletin 170, Chapter III, pp. 59-71. 1954.

Eaton, J. C. "Geology and Oil Possibilities of Caliente Range, Cuyama Valley and Carrizo Plain, California". California Department of Natural Resources, Division of Mines. State Mineralogists Report 35, pp. 255-274. 1939.

*Eaton, J. E. "Caliente Range, Cuyama Valley and Carrizo Plain". California Department of Natural Resources, Division of Mines. Bulletin 118, pp. 453-455. 1943.

*Eaton, J. C., Grant, U. S. and Allen, H. B. "Miocene of Caliente Range and Environs, California". Bulletin American Association Petroleum Geologists. Volume 25, pp. 193-262. 1941.

Easton, W. H. and Imlay, R. W. "Upper Jurassic Fossil Localities in Franciscan and Knoxville Formations in Southern California". Bulletin American Association Petroleum Geologists. Volume 39, No. 11, pp. 2336-2340. 1955.

*Eckel, E. B., Yates, R. G. and Granger, A. E. "Quicksilver Deposits in San Luis Obispo County and Southwestern Monterey County, California". United States Geological Survey. Bulletin 922-R. 1941.

*English, W. A. "Geology and Oil Prospects of Cuyama Valley, California". United States Geological Survey. Bulletin 621, pp. 191-215. 1916.

*English, W. A. "Geology and Oil Prospects of the Salinas Valley - Parkfield Area, California". United States Geological Survey. Bulletin 691, pp. 219-250. 1919.

*English, W. A. "Geology and Petroleum Resources of Northwestern Kern County, California". United States Geological Survey. Bulletin 721. 1921.

*Fairbanks, H. W. "Description of the San Luis Quadrangle, California". United States Geological Survey. Geologic Atlas. San Luis Folio No. 101. 1904.

*Graham, D. H. "Geology and Petroleum Possibilities of a Part of the Huasna District". Unpublished M. S. Thesis, University of California, Los Angeles. 1950.

Hannibal, H. A. "A Pliocene Fauna From the Coast Range of California". Torrey Botanical Club. Bulletin 38, No. 329-342. 1911.

*Heikkila, H. H. and MacLeod, G. M. "Geology of Bitterwater Creek Area, Kern County, California". California Department of Natural Resources, Division of Mines Special Report 6. 1951.

*Herron, R. G. "Geology of the Highland - San Juan Creek Region, San Luis Obispo County". Unpublished report. 1948.

Hill, M. L. and Dibblee, T. W. "San Andreas, Garlock and Big Pine Faults, California". Bulletin Geologists Society of America. Vol. 64, No. 4, pp. 443-458. 1953.

Hoots, H. W., Bean, F. L. and Kleinpel, W. D. "Geological Summary of the San Joaquin Valley, California". California Department of Natural Resources, Division of Mines. Bulletin 170, Chapter II, pp. 113-129. 1954.

*Hudson, F. S. and White, G. H. "Thrust Faulting and Coarse Clastics in Temblor Range, California". Bulletin American Association Petroleum Geologists. Volume 25, pp. 1327-1342. 1941.

*Isaacs, K. N. "Geology of the Northern Portion of the Commatti Canyon and the Grant Lake Quadrangles". Unpublished M.S. Thesis, University of California, Berkeley. 1951.

Jacobs, C. E. and Cooper, H. H. "A Generalized Graphical Method for Evaluating Formation Constants and Summarizing Well Field History". American Geophysical Union Transcription. Volume 27, No. 4, pp. 526-534. 1946.

*Jenkins, O. P. "Geologic Map of California". California Department of Natural Resources, Division of Mines. 1938.

*Jenkins, O. P. "Geologic Map of California. Preliminary Sheets (San Luis Obispo, Bakersfield, Santa Maria, and Los Angeles)". California Department of Natural Resources, Division of Mines. 1955.

Jenkins, O. P. "Geomorphic Provinces of California". California Department of Natural Resources, Division of Mines. Bulletin 118, pp. 83-88. 1943.

Kilkenny, J. E. et al. "Cenozoic Correlation Section, Salinas Valley". American Association Petroleum Geologists, Pacific Section. 1952.

*Pack, R. W. "Sunset-Midway Oil Field, California". United States Geological Survey Professional Paper 116. 1920.

- *Page, B. M., Williams, M. D. and Henrickson, E. L., et al. "Bituminous Sandstone Deposits Near Edna, San Luis Obispo County, California". United States Geological Survey. Oil and Gas Investigation Preliminary Map 16. 1944.
- Reed, R. D. "Geology of California". American Association Petroleum Geologists. 1933.
- Reed, R. D. and Hollister, J. S. "Structural Evolution of Southern California". Bulletin American Association Petroleum Geologists. Volume 20, No. 12, pp. 153-170. 1936.
- Reiche, Perry. "Geology of the Lucia Quadrangle, California". University of California, Department of Geology. Science Bulletin, Vol. 24, pp. 115-168. 1937.
- *Stanford Geological Survey. "Geology of Portions of the Pozo and Adelaida Quadrangles, California". Unpublished. 1925.
- *Stanford Geological Survey. "Geologic Map of Northwest Part of Hunter Liggett Military Reservation". Unpublished. 1953.
- *Stanton, W. L. "Geology of the Adelaida Quadrangle, California". Unpublished Ph. D. Thesis. California Institute of Technology. 1931.
- *Stewart, Ralph. "Geology of Reef Ridge - Coalinga District, California". United States Geological Survey Professional Paper 205-C. 1946.
- *Taliaferro, N. L. "Franciscan-Knoxville Problem". Bulletin American Association Petroleum Geologists. Volume 27, pp. 109-219. 1943a.
- Taliaferro, N. L. "Geologic History and Structure of the Central Coast Ranges of California". California Department of Natural Resources, Division of Mines. Bulletin 118, pp. 119-163. 1943b.
- *Taliaferro, N. L. "Geology of Huasna Area". California Department of Natural Resources, Division of Mines. Bulletin 118, pp. 443-447. 1943c.
- *Taliaferro, N. L. "Bradley-San Miguel District". California Department of Natural Resources, Division of Mines. Bulletin 118, pp. 456-462. 1943d.
- *Taliaferro, N. L. "Cretaceous and Paleocene of Santa Lucia Range, California". Bulletin American Association Petroleum Geologist. Volume 28, pp. 445-521. 1944.
- Trask, Parker D. "Geology of the Point Sur Quadrangle, California". University of California, Department of Geology. Science Bulletin 16, pp. 119-186. 1926.
- Upson, J. E. "Late Pleistocene and Recent Changes of Sea Level Along the Coast of Santa Barbara County, California". American Journal of Science. Volume 247, pp. 94-115. 1949.

*Upson, J. E. and Worts, G. F., Jr. "Ground Water in the Cuyama Valley, California". United States Geological Survey Water Supply Paper 1110-B. 1951.

Weaver, C. E., et al. "Correlation of the Marine Cenozoic Formations of Western North America". Bulletin Geological Society America. Volume 55, pp. 585-586. 1944.

*Weideman, R. "Geology of the King City Quadrangle". Unpublished Ph.D. Thesis, University of California, Berkeley. In progress.

Wenzel, L. K. "Methods for Determining Permeability of Water-Bearing Materials". United States Geological Survey Water Supply Paper 887. 1942.

Woodring, W. P. and Bramlette, M. N. "Geology and Paleontology of the Santa Maria District". United States Geological Survey Professional Paper 222. 1950.

*Worts, G. F., Jr. and Thomasson, H. G., Jr. "Geology and Ground Water Resources of the Santa Maria Valley Area, California". United States Geological Survey Water Supply Paper 1000. 1951.

APPENDIX C

RECORDS OF PRECIPITATION IN SAN LUIS OBISPO COUNTY
AND VICINITY NOT PREVIOUSLY PUBLISHED

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TABLE C-1

MEAN, MAXIMUM AND MINIMUM SEASONAL PRECIPITATION AT STATIONS IN AND ADJACENT TO SAN LUIS OBISPO COUNTY

Map reference number	Station	Location		Elevation in feet	Period in record:	Estimated: Maximum and minimum seasonal precipitation:		Source of record
		Approximate latitude and longitude	County			(Inches) : (Inches of depth)		
3-008	Bradley	35° 52' N. Lat. 120° 48' W. Long.	Monterey	540	1946-47 1953-54	11.8	1951-52 1950-51	U.S.W.B.
3-009	Bryson	35° 48' N. Lat. 121° 05' W. Long.	Monterey	870	1947-48 1953-54	24.4	1951-52 1948-49	U.S.W.B.
M-2	Jackson and Reinhardt Camp No. 5	35° 49' N. Lat. 120° 34' W. Long.	Monterey	1,375	1939-40 1953-54	13.2	1940-41 1946-47	SLO FA
3-147	Jolon	35° 58' N. Lat. 121° 10' W. Long.	Monterey	1,180	1882-83 1924-25	16.5	1889-90 1897-98	U.S.C.E.
C-1	King City	36° 13' N. Lat. 121° 08' W. Long.	Monterey	320	1886-87 1953-54	10.4	1940-41 1897-98	U.S.W.B.
M-5	Kirk Creek Camp No. 29	36° 00' N. Lat. 121° 30' W. Long.	Monterey	150	1932-33 1953-56	24.5	-----*	U.S.C.E.
3-018	Lockwood	35° 58' N. Lat. 121° 05' W. Long.	Monterey	1,104	1948-49 1953-54	15.7	-----*	U.S.W.P.
3-46	Los Burros Mine	35° 52' N. Lat. 121° 23' W. Long.	Monterey	2,645	1895-96 1939-40	44.8	1900-01 1940-41	U.S.W.B.
3-022	Lucia Willow Springs	35° 53' N. Lat. 121° 27' W. Long.	Monterey	375	1937-38 1948-49	1940-41 1953-54	30.6	1929-40 1928-39
3-48	Parkfield	35° 54' N. Lat. 120° 26' W. Long.	Monterey	1,525	1907-08 1953-54	16.8	1940-41 1923-24	28.19 6.05
3-025	Parkfield 6-N	35° 59' N. Lat. 120° 27' W. Long.	Monterey	3,600	1942-43 1950-51	---	-----*	U.S.W.B.
M-6	Parkfield	35° 55' N. Lat. 120° 26' W. Long.	Monterey	1,590	1950-51 1953-54	17.0	-----*	Private (Thompson)

TABLE C-1 (continued)

MEAN, MAXIMUM AND MINIMUM SEASONAL PRECIPITATION AT STATIONS IN AND ADJACENT TO SAN LUIS OBISPO COUNTY

Map reference number	Station	Elevation in feet	Period of record	Estimated maximum and minimum seasonal precipitation:	Source of record	
		U.S.G.S. datum	From To	(Inches of depth) : (Inches of depth)		
3-024	Patriquin Mine No. 2	35° 57' N. Lat. 120° 25' W. Long.	Monterey 2,900	1939-40 1942-43	-----*	U.S.B.R.
3-41	Priest Valley	36° 10' N. Lat. 120° 41' W. Long.	Monterey 2,391	1898-99 1953 1954	1946-47 19.6 1912-13	U.S.W.B.
3-43	Rancho San Lucas	36° 03' N. Lat. 121° 00' W. Long.	Monterey 700	1882-83 1946-47	12.8 1940-41 1893-94	Private
M-1	Salmon Creek Camp No. 15	35° 48' N. Lat. 121° 22' W. Long.	Monterey 330	1928-29 1932-33	28.6 -----*	U.S.E.D.
3-45	San Ade	36° 01' N. Lat. 120° 54' W. Long.	Monterey 452	1886-87 1901-02	9.8 1889-90 1893-94	U.S.W.B.
3-42	San Lucas	36° 07' N. Lat. 121° 00' W. Long.	Monterey 407	1922-23 1946-47	9.7 1940-41 1923-24	Private
M-2	The Indians	36° 06' N. Lat. 121° 26' W. Long.	Monterey 1,850	1939-40 1941-42	38.4 -----*	U.S.C.E.
3-66	Arroyo Grande Canyon (Musick)	35° 12' N. Lat. 120° 24' W. Long.	San Luis Obispo	1883-84 1918-19	23.4 1889-90 1897-98	U.S.B.R.
C-2	Arroyo Grande No. 1	35° 07' N. Lat. 120° 35' W. Long.	San Luis Obispo	1904-05 1908-09 1910-11	15.4 1940-41 1933-34	U.S.B.R.
SL0-2	Arroyo Grande No. 2	35° 07' N. Lat. 120° 34' W. Long.	San Luis Obispo	1953-54 1939-40	15.8 1940-41 1945-46	SLO RD No. 4

TABLE C-1 (continued)

MEAN, MAXIMUM AND MINIMUM SEASONAL PRECIPITATION AT
STATIONS IN AND ADJACENT TO SAN LUIS OBISPO COUNTY

Map reference number	Station	Location			Period of record	Estimated:			Source of record
		Approximate latitude and longitude	County	Elevation in feet		mean seasonal precipitation	maximum minimum	minimum	
		U.S.G.S. datum	From : To	: inches	: inches	: inches	: inches	: inches	
			: of depth	: of depth	: of depth	: of depth	: of depth	: of depth	
SL0-3	Arroyo Grande No. 3	35° 09' N. Lat. 120° 36' W. Long.	San Luis Obispo	150	1948-49	1953-54	18.1	---*	SL0 FA (E. Noyes)
SL0-45	Atascadero Pump Station	35° 31' N. Lat. 120° 34' W. Long.	San Luis Obispo	1,200	1951-52	1953-54	---	---	SO Co.
3-048	Atascadero No. 1	35° 30' N. Lat. 120° 40' W. Long.	San Luis Obispo	835	1915-16 1931-32 1946-47	1928-29 1944-45 1953-54	22.3	1940-41 1952-53	35.91 11.24 U.S.W.M.
3-049	Atascadero No. 2	35° 28' N. Lat. 120° 40' W. Long.	San Luis Obispo	860	1934-35	1938-39	---	---	PG&E
3-050	Avila	35° 11' N. Lat. 120° 44' W. Long.	San Luis Obispo	115	1930-31 1941-42	1939-40 1953-54	17.2	1951-52 1933-34	25.06 9.20 U.S.B.R. and UOC
3-55	Ayars Ranch	35° 39' N. Lat. 120° 48' W. Long.	San Luis Obispo	1,940	1919-20	1944-45	23.3	1940-41 1923-24	47.52 11.88 Private
SL0-5	Branch Mountain Lookout	35° 11' N. Lat. 120° 05' W. Long.	San Luis Obispo	3,770	1943-44	1943-44	---	---	U.S.B.R.
SL0-4	Bitterwater Pump Station	35° 33' N. Lat. 120° 05' W. Long.	San Luis Obispo	1,500	1935-36	1950-51	8.9	1940-41 1950-51	17.28 4.68 SO Co.
SL0-6	Cambria Coast Union High School	35° 34' N. Lat. 121° 04' W. Long.	San Luis Obispo	100	1938-39	1939-40	---	---	U.S.B.R.
SL0-7	Cambria Highway Maintenance Station	35° 34' N. Lat. 121° 07' W. Long.	San Luis Obispo	60	1937-38	1953-54	20.7	1940-41 1938-39	38.38 9.53 SDH
SL0-41	Cambria	35° 34' N. Lat. 121° 05' W. Long.	San Luis Obispo	150	1938-39 1943-44	1939-40 1953-54	20.5	1951-52 1938-39	38.07 12.70 Private (Steiner)
SL0-8	Camp San Luis Obispo	35° 20' N. Lat. 120° 41' W. Long.	San Luis Obispo	800	1949-49	1953-54	---	---	U.S.W.M.

TABLE C-1 (continued)

MEAN, MAXIMUM AND MINIMUM SEASONAL PRECIPITATION AT
STATIONS IN AND ADJACENT TO SAN LUIS OBISPO COUNTY

Map reference number	Station	Approximate latitude and longitude		Location	Elevation in feet	Period of record	Estimated: mean seasonal precipitation : maximum : minimum		Source of record
		Latitude	Longitude				U.S.G.S. datum	From : To	
SL0-42	Camp Talaki	35° 13' N. Lat. 120° 29' W. Long.	San Luis Obispo	460	1953-54	---	---	---	Private (Santa Maria Girl Scouts)
3-052	Camp No. 5	35° 28' N. Lat. 120° 41' W. Long.	San Luis Obispo	1,000	1914	1917	---	---	Private
SL0-9	Carrizo Plain No. 2	35° 21' N. Lat. 120° 03' W. Long.	San Luis Obispo	2,000	1938-39	1953-54	8.9	1940-41 1950-51	SLO FA (Cayennught)
SL0-10	Carrizo Plain No. 2	35° 21' N. Lat. 119° 59' W. Long.	San Luis Obispo	2,050	1939-40 1950-51	1943-44 1953-54	8.9	1940-41 1950-51	SLO FA (Beck)
SL0-13	Carrizo Plain No. 3	35° 24' N. Lat. 120° 06' W. Long.	San Luis Obispo	1,975	1939-40	1953-54	8.9	1940-41 1947-48	SLO FA (Cooper)
C-14	Cerro Alto Mountain Lookout	35° 25' N. Lat. 120° 44' W. Long.	San Luis Obispo	2,620	1943-44	---	---	---	U.S.B.R.
3-53	Cholame	35° 41' N. Lat. 120° 12' W. Long.	San Luis Obispo	2,000	1928-29	1940-41	10.4	1940-41 1933-34	SLO FA (K. Daires)
3-54	Cholame Hatch Ranch	35° 41' N. Lat. 120° 12' W. Long.	San Luis Obispo	1,975	1925-26	1953-54	11.0	1940-41 1932-34	5.35 U.S.W.B.
SL0-12	Cleasen Ranch	35° 34' N. Lat. 120° 47' W. Long.	San Luis Obispo	1,075	1930-31 1946-47	1944-45 1947-48	---	1940-41 1938-39	5.57 SLO FA & U.S.B.R.
3-59	Creston Pump Station	35° 32' N. Lat. 120° 31' W. Long.	San Luis Obispo	1,099	1924-25	1953-54	13.0	1940-41 1938-39	20.08 6.04 U.O. Co.
SL0-14	Dellaganna Ranch	35° 32' N. Lat. 120° 51' W. Long.	San Luis Obispo	1,280	1952-53	1953-54	---	---	Private
SL0-47	Dover Canyon	35° 35' N. Lat. 120° 51' W. Long.	San Luis Obispo	1,160	1945-46	1953-54	---	---	Private (Bergman)

TABLE C-1 (continued)

MEAN, MAXIMUM AND MINIMUM SEASONAL PRECIPITATION AT STATIONS IN AND ADJACENT TO SAN LUIS OBISPO COUNTY

Map reference number	Station	Location		Eleva- tion in feet	Period of record	Estimated:		Source of record
		Approximate latitude and longitude	U.S.G.S. County			mean seasonal: precipita- tion:	minimum seasonal: (Inches of depth):	
3-055	Eagleet	35° 28' N. 120° 38' W.	Lat. Long.	San Luis Obispo	880	1914	1916	-----*
SLO-38	Edna (Stornetta)	35° 13' N. 120° 34' W.	Lat. Long.	San Luis Obispo	425	1945-41	1953-54	20.2
SLO-56	Edna (Righetti No. 1)	35° 13' N. 120° 36' W.	Lat. Long.	San Luis Obispo	300	1929-30	1939-40	18.5
SLO-55	Edna (Righetti No. 2)	35° 14' N. 120° 35' W.	Lat. Long.	San Luis Obispo	400	1943-44	1953-54	---
3-58	Ernst Ranch	35° 28' N. 120° 35' W.	Lat. Long.	San Luis Obispo	900	1930-31 1940-41 1943-44	1938-39 1941-42 1953-54	12.7
3-058	Esterro	35° 25' N. 120° 52' W.	Lat. Long.	San Luis Obispo	20	1929-30	1953-54	16.8
3-059	Estrada	35° 37' N. 120° 40' W.	Lat. Long.	San Luis Obispo	900	1914	1916	---
SLO-24	Eureka Ranch	35° 30' N. 120° 39' W.	Lat. Long.	San Luis Obispo	850	1952-53	---	-----*
3-060	Garcias	35° 31' N. 120° 42' W.	Lat. Long.	San Luis Obispo	850	1914	1916	---
SLO-15	Gers Ranch	35° 40' N. 120° 52' W.	Lat. Long.	San Luis Obispo	1,500	1925-26	1953-54	24.3
SLO-16	Harris Bridge	35° 08' N. 120° 33' W.	Lat. Long.	San Luis Obispo	201	1933-34	1947-48	17.2

TABLE C-1 (continued)

MEAN, MAXIMUM AND MINIMUM SEASONAL PRECIPITATION AT STATIONS IN AND ADJACENT TO SAN LUIS OBISPO COUNTY

Map reference number	Station	Location		Elevation in feet	Period of record	Estimated: mean : seasonal : precipitation : tation : (Inches : Season : of depth):		Source of record
		Approximate latitude and longitude	County			U.S.G.S. datum	From : To	
SLO-17	Hearst Castle	35° 41' N. Lat. 121° 10' W. Long.	San Luis Obispo	1,800	1946-47	1953-54	33.4	Private
SLO-18	Hearst Ranch	35° 39' N. Lat. 121° 11' W. Long.	San Luis Obispo	150	1927-38	1953-54	25.2	1940-41 1938-39
3-061	Hepburn Well	35° 26' N. Lat. 120° 38' N. Long.	San Luis Obispo	1,025	1914	1916	---	Private
SLO-49	Hidden Valley Ranch	35° 33' N. Lat. 120° 46' W. Long.	San Luis Obispo	910	1952-53	1953-54	---	Private (Reinhert)
SLO-50	Hidden Valley Ranch	35° 33' N. Lat. 120° 46' W. Long.	San Luis Obispo	1,020	1952-53	1953-54	---	---
3-062	Hill Ranch	35° 44' N. Lat. 120° 39' W. Long.	San Luis Obispo	800	1897	1900	---	Private
SLO-19	Hi Mountain Lookout	35° 16' N. Lat. 120° 25' W. Long.	San Luis Obispo	3,180	1943-44	---	---	U.S.B.R.
3-063	Huesna	35° 07' N. Lat. 120° 23' W. Long.	San Luis Obispo	770	1929-30 1933-34	1931-32 1953-54	29.9	1940-41 1930-31 11.18
SLO-46	Jackson and Reinhert, Camp No. 6	35° 43' N. Lat. 120° 34' W. Long.	San Luis Obispo	1,000	1939-40	1952-54	---	1940-41 1950-51 7.44
SLO-20	Jackson and Reinhert, Camp No. 8	35° 33' N. Lat. 120° 29' W. Long.	San Luis Obispo	1,100	1939-40 1943-44 1949-50 1951-52	1941-42 1949-50 1953-54	---	1940-41 1952-53 7.66
SLO-48	Jackson and Reinhert, Camp No. 11	35° 42' N. Lat. 120° 30' W. Long.	San Luis Obispo	1,115	1939-40 1945-46	1943-44 1953-54	---	1940-41 1950-51 5.69
SLO-54	Jackson and Reinhert Plant	35° 38' N. Lat. 120° 41' W. Long.	San Luis Obispo	700	1939-40	1953-54	---	1940-41 1950-51 8.67

TABLE C-1 (continued)

MEAN, MAXIMUM AND MINIMUM SEASONAL PRECIPITATION AT
STATIONS IN AND ADJACENT TO SAN LUIS OBISPO COUNTY

Map reference number:	Station	Location		Elevation in feet	Period of record	Estimated: mean seasonal precipitation in inches:		Source of record
		Approximate latitude and longitude	County			From datum:	To datum:	
SL0-21	La Panza Ranch	35° 23' N. Lat. 120° 10' W. Long.	San Luis Obispo	1,560	1947-48	1953-54	---	U.S.W.B.
3-064	La Panza	35° 22' N. Lat. 120° 13' W. Long.	San Luis Obispo	1,900	1939-40	1944-45	---	U.S.E.R.
3-49	Linn Ranch	35° 41' N. Lat. 120° 43' W. Long.	San Luis Obispo	800	1925-26	1953-54	16.5	1940-41 1938-39 7.75 Private
SL0-40	McMillian Canyon	35° 43' N. Lat. 120° 22' W. Long.	San Luis Obispo	1,650	1940-41	1953-54	14.1	1940-41 1950-51 24.04 (Taylor Ranch)
SL0-22	Morro Bay Highway Maintenance Station	35° 22' N. Lat. 120° 50' W. Long.	San Luis Obispo	100	1947-48	1953-54	17.1	SDH
3-68	Nipomo	35° 04' N. Lat. 120° 30' W. Long.	San Luis Obispo	360	1920-21	1953-54	15.2	1940-41 1923-24 31.09 (A. Mohrستان)
3-066	Oceano	35° 06' N. Lat. 120° 37' W. Long.	San Luis Obispo	30	1897	1900	---	Private
3-57	Paso Robles No. 1	35° 28' N. Lat. 120° 41' W. Long.	San Luis Obispo	740	1886-87	1953-54	15.8	1937-38 1897-98 30.69 4.77
SL0-23	Paso Robles Airport	35° 41' N. Lat. 120° 38' W. Long.	San Luis Obispo	806	1943-44	1953-54	13.9	U.S.W.B.
3-067	Paso Robles 4NW	35° 40' N. Lat. 120° 43' W. Long.	San Luis Obispo	803	1938-39	1953-54	---	U.S.W.B.
3-068	Paso Robles (State Division Forestry)	35° 35' N. Lat. 120° 42' W. Long.	San Luis Obispo	700	1943-44	1954-55	---	S.D.F.
SL0-25	Perrozi Ranch	35° 16' N. Lat. 120° 37' W. Long.	San Luis Obispo	470	1951-52	1953-54	---	SLO FA

TABLE C-1 (continued)

MEAN, MAXIMUM AND MINIMUM SEASONAL PRECIPITATION AT
STATIONS IN AND ADJACENT TO SAN LUIS OBISPO COUNTY

Map reference number	Station	Location	Elevation in feet	Period of record	Estimated mean seasonal precipitation in inches	Maximum and minimum seasonal precipitation in inches	Source of record
SLO-26	Petersen Ranch	35° 36' N. Lat. 120° 34' W. Long. San Luis Obispo	900	1937-38 1944-45	---	---	U.S.B.R.
SLO-27	Pismo Beach	35° 08' N. Lat. 120° 38' W. Long. San Luis Obispo	26	1949-50 1951-52	17.7	---	U.S.W.B.
SLO-51	Pismo Beach No. 2	35° 07' N. Lat. 120° 34' W. Long. San Luis Obispo	70	1952-53 1953-54	---	---	U.S.W.B.
3-069	Pelit Piedras Blancas	35° 45' N. Lat. 121° 17' W. Long. San Luis Obispo	30	1905-06 1939-40 1952-54	1908-09 1940-41 1953-54	18.3 19.6 47 19.40-41 12.49 10.21	U.S.W.B.
3-070	Pozo Guard Station	35° 18' N. Lat. 120° 22' W. Long. San Luis Obispo	1,450	1942-44 1949-50 1953-54	1942-44 1949-50 1953-54	---	U.S.G.R.
C SLO-28	Pozo Highway Maintenance Station	35° 18' N. Lat. 120° 22' W. Long. San Luis Obispo	1,450	1943-44 1948-49	1943-44 1948-49	24.1	SDA
C SLO-29	Quenzer (Radleff) Ranch	35° 42' N. Lat. 120° 36' W. Long. San Luis Obispo	810	1930-31 1937-38 1950-51	1935-36 1946-47 1953-54	12.1 1950-51 1950-52	U.S.B.R. & S.O.P.A
SLO-30	Runitz Ranch (El Pomer)	35° 32' N. Lat. 120° 37' W. Long. San Luis Obispo	1,250	1944-45	1953-54	16.4 1940-41 1923-24	SLO FA
SLO-32	Sailmes Dam	35° 20' N. Lat. 120° 30' W. Long. San Luis Obispo	1,350	1942-43	1953-54	22.3 1951-52 1947-48	U.S.W.B.
SLO-31	San Luis Obispo Light-house	35° 10' N. Lat. 120° 46' W. Long. San Luis Obispo	50	1905-06 1908-09	---	---	U.S.H.B.
B-64	San Luis Obispo (Cal Poly)	35° 18' N. Lat. San Luis Obispo	300	1869-70	1953-54	21.7 1940-41 1397-98	U.S.W.B.

TABLE C-1 (continued)

MEAN, MAXIMUM AND MINIMUM SEASONAL PRECIPITATION AT
STATIONS IN AND ADJACENT TO SAN LUIS OBISPO COUNTY

Map reference number	Station	Location	Elevation in feet	Period of record	Estimated: mean : seasonal : precipitation : precipitation : inches : record			
		Approximate latitude and longitude	U.S.G.S. datum	From To	(Inches) : Season : of depth) : depth :			
3-085	San Luis Obispo Tank Farm	35° 15' N. Lat. 120° 40' W. Long.	San Luis Obispo	118	1930-31 1953-54	18.7 1940-41 1938-39	37.77 9.91	U.O.C.O.
3-071	Sandy	35° 30' N. Lat. 120° 40' W. Long.	San Luis Obispo	830	1913 1914	----	-----*	Private
3-073	San Luis Obispo	35° 18' N. Lat. 120° 41' W. Long.	San Luis Obispo	330	1942-43 1954-55	----	-----*	S.D.F.
3-074	San Luis Obispo Substation	35° 16' N. Lat. 120° 38' W. Long.	San Luis Obispo	260	1935 1938	----	-----*	Private
3-52	San Miguel (S. P. Milling Co.)	35° 45' N. Lat. 120° 42' W. Long.	San Luis Obispo	616	1886-87 1914-15	11.4	-----*	U.S.W.B.
3-50	San Miguel (S. P. Milling Co.)	35° 45' N. Lat. 120° 41' W. Long.	San Luis Obispo	615	1892-93 1947-48	11.9	1940-41 1953-54	26.08 3.15
SI-0-52	San Miguel (S. P. Milling Co.)	35° 45' N. Lat. 120° 41' W. Long.	San Luis Obispo	620	1949-50 1953-54	----	-----*	Private (H.E.Negley)
3-51	San Miguel (W. Sinclair)	35° 45' N. Lat. 120° 42' W. Long.	San Luis Obispo	616	1919-20 1944-45	11.2	-----*	Private (Sinclair)
SI-0-53	San Miguel (G. Parker)	35° 45' N. Lat. 120° 42' W. Long.	San Luis Obispo	625	1936-37 1953-54	----	1940-41 1928-39	25.17 6.45
3-63	Santa Margarita	35° 23' N. Lat. 120° 36' W. Long.	San Luis Obispo	995	1919-20 1936-37	25.9	1940-41 1933-34	42.12 7.97
3-076	Santa Margarita (Tank Farm)	35° 24' N. Lat. 120° 36' W. Long.	San Luis Obispo	974	1931-32 1953-54	24.6	1940-41 1928-39	43.30 10.38
3-62	Santa Margarita	35° 24' N. Lat. 120° 36' W. Long.	San Luis Obispo	996	1889-90 1915-16	27.4	-----*	U.S.W.B.

TABLE C-1 (continued)

MEAN, MAXIMUM AND MINIMUM SEASONAL PRECIPITATION AT
STATIONS IN AND ADJACENT TO SAN LUIS OBISPO COUNTY

Map reference number:	Station	Location	Elevation in feet	Period of record	Estimated mean seasonal precipitation in inches	Maximum and minimum seasonal precipitation in inches	Sources of record
		Approximate latitude and longitude	U.S.G.S. datum	From To	(Inches) : Season : (In depth)	(Inches) : Season : (In depth)	
SL0-33	Santa Margarita Booster Station	35° 23' N. Lat. 120° 38' W. Long. San Luis Obispo	1,153	1942-43 1953-54	39.9	----*	U.S.W.B.
SL0-57	Santa Margarita 2SW	35° 22' N. Lat. 120° 38' W. Long. San Luis Obispo	1,200	1939-40 1947-48	41.4	1940-41 1948-49	55.53 25.41 U.S.W.B. (Guest Grade)
SL0-25	Seven-X Ranch	35° 36' N. Lat. 120° 55' W. Long. San Luis Obispo	1,200	1930-31 1944-45 1951-52	41.8	1940-41 1938-39	79.63 20.10 Private (Doe Fitzhugh)
3-077	Shafter	35° 27' N. Lat. 120° 41' W. Long. San Luis Obispo	1,700	1914 1916	----	----*	Private
3-079	Shandon	35° 41' N. Lat. 120° 20' W. Long. San Luis Obispo	1,091	1930-31 1938-39	10.1	----*	Private (UO Ccc.)
SL0-36	Shandon Highway Maintenance Station	35° 39' N. Lat. 120° 23' W. Long. San Luis Obispo	1,090	1937-38 1953-54	11.6	1940-41 1947-48	22.89 6.23 U.S.B.R. SDH
3-78	Shandon Pump Station	35° 40' N. Lat. 120° 22' W. Long. San Luis Obispo	1,096	1935-36 1953-54	9.6	1940-41 1950-51	18.99 5.14 U.S.B.R. & Private (SO Co.)
SL0-37	Summer Highway Maintenance	35° 21' N. Lat. 119° 59' W. Long. San Luis Obispo	2,047	1937-38 1953-54	8.1	1940-41 1950-51	18.08 4.40 SDH
3-67	Soda Lake	35° 15' N. Lat. 119° 55' W. Long. San Luis Obispo	1,975	1925-26 1948-49	8.7	1940-41 1933-34	18.50 5.39 U.S.B.R. & SLO FA (D. Werling)
SL0-44	Soda Lake (East of)	35° 16' N. Lat. 119° 50' W. Long. San Luis Obispo	2,070	1953-54	----	----*	Private (D. Werling)
3-081	Squirrel	35° 28' N. Lat. 120° 42' W. Long. San Luis Obispo	990	1914 1916	----	----*	Private

TABLE C-1 (continued)

MEAN, MAXIMUM AND MINIMUM SEASONAL PRECIPITATION AT STATIONS IN AND ADJACENT TO SAN LUIS OBISPO COUNTY

Map reference number:	Station	Location	Elevation in feet	Period of record	Estimated mean seasonal precipitation : (Inches)	Maximum and minimum seasonal precipitation : (Inches)	Source of record
		Approximate latitude and longitude	U.S.G.S. datum	From : To	(Inches) : Season of depth)	(Inches) : depth	
SL0-39	Suey Ranch	35° 00' N. Lat. 120° 23' W. Long.	San Luis Obispo	500 960	1909-10 1914	1953-54 1916	1940-41 1912-13
3-084	Summer Flat	35° 26' N. Lat. 120° 37' W. Long.	San Luis Obispo	960	1914	1916	----- Private
3-56	Templeton	35° 33' N. Lat. 120° 42' W. Long.	San Luis Obispo	800	1925-26 1930-31	1928-29 1953-54	21.3 1938-39
3-60	Truesdale Ranch	35° 37' N. Lat. 120° 22' W. Long.	San Luis Obispo	1,130	1884-85 1904-05 1913-14 1946-47	1902-03 1908-09 1944-45 1951-52	11.3 1940-41 1893-94 3.87
C-111	Upper Morro Creek	35° 27' N. Lat. 120° 45' W. Long.	San Luis Obispo	1,050	1951-52	1953-54	----- Private (Mrs. E. Purser)
3-61	Von Schroeder	35° 28' N. Lat. 120° 39' W. Long.	San Luis Obispo	900	1885-86	1915-16	30.3 1889-90 1897-98
3-080	White Ranch	35° 43' N. Lat. 120° 23' W. Long.	San Luis Obispo	1,625	1931-32	1941-42	12.0 1940-41 1933-34
K-1	Annett®	35° 39' N. Lat. 120° 10' W. Long.	Kern	2,150	1951-52	1953-54	----- SLO FA (E. Stille)
5-272	Antelope Valley	35° 43' N. Lat. 120° 10' W. Long.	Kern	1,205	1911-12 1917-18	1916-17 1941-42	8.1 ----- U.S.W.B.
3-69	Betteravia	34° 55' N. Lat. 120° 31' W. Long.	Santa Barbara	155	1897-98	1953-54	13.6 1940-41 1897-98
SB-2	Guyama Ranch	34° 58' N. Lat. 119° 40' W. Long.	Santa Barbara	2,150	1947-48	1953-54	----- U.S.W.B.

TABLE C-1 (continued)

MEAN, MAXIMUM AND MINIMUM SEASONAL PRECIPITATION AT
STATIONS IN AND ADJACENT TO SAN LUIS OBISPO COUNTY

Map reference number	Station	Location	Elevation in feet	Period of record	Estimated mean seasonal precipitation:	Maximum and minimum seasonal precipitation:	Source of record
		Approximate latitude and longitude	U.S.G.S. datum	From To	(Inches) : Season of depth:	(Inches) : Season of depth:	
3-088	Cuyama Ranger Station	34° 52' N. Lat. 119° 29' W. Long. Santa Barbara.	2,794	1938-39	1953-54	9.1	-----*
SB-1	Guyana	34° 56' N. Lat. 119° 37' W. Long. Santa Barbara.	2,240	1944-45	1953-54	5.9	-----*
3-091	Guadalupe	34° 57' N. Lat. 120° 34' W. Long. Santa Barbara.	85	1920-21 1930-31	1925-26 1953-54	10.9	1940-41 1946-47 24.05 6.21 (Puritan Ice Co.)
SB-3	Permasse Ranch	35° 04' N. Lat. 120° 09' W. Long. Santa Barbara.	1,000	1921-22 1934-35	1932-33 1944-45	16.6	1940-41 1922-24 23.25 7.87 U.S.W.B.R.
3-098	Santa Maria Airport	34° 54' N. Lat. 120° 27' W. Long. Santa Barbara.	235	1943-44	1953-54	13.4	-----*
3-70	Santa Maria	34° 57' N. Lat. 120° 26' W. Long. Santa Barbara.	217	1875-76 1885-86	1884-85 1953-54	14.2	1940-41 1876-77 30.64 4.50 U.S.W.B.

* Broken records.

Abbreviation

Name
U.S.W.B.
SLO FA
U.S.C.E.
U.S.B.R.
SDH
SDF
SLO RD No. 4
PG&E
UU Co.
SO Co.
AMW Co.
Atascadero Mutual Water Company

APPENDIX C

TABLE C-2

RECORD OF MONTHLY PRECIPITATION AT JACKSON AND REINHERT CAMP NO. 5

County: Monterey
 Date established: 1939
 Elevation: 1,375 feet, U.S.G.S. datum

State number on Plate 3: M-3
 Latitude: 35°-49.2'
 Longitude: 120°-34.1'
 Record obtained from: San Luis Obispo County
 Farm Advisor

In Inches

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1939-40	0.0	0.0	0.0	0.0	0.0	1.87	6.15	4.42	1.68	0.60	0.0	0.0	14.72
41	0.0	0.0	0.0	0.50	0.26	7.28	3.89	8.30	5.95	2.72	0.0	0.0	28.90
42	0.0	0.0	0.0	1.01	1.00	5.05	2.13	0.78	1.58	0.70	0.0	0.0	12.25
43	0.0	0.0	0.0	0.24	0.72	2.25	4.34	0.0	3.87	0.42	0.0	0.0	11.84
44	0.0	0.0	0.0	0.0	0.0	3.31	2.33	5.94	0.12	0.12	0.0	0.0	11.82
1944-45	0.0	0.0	0.0	0.30	1.69	0.66	1.38	3.10	1.99	0.22	0.0	0.0	9.34
46	0.0	0.0	0.0	0.83	0.67	3.14	0.53	0.82	3.18	0.0	0.21	0.0	9.38
47	0.0	0.0	0.18	0.12	3.06	2.34	0.54	1.34	0.92	0.23	0.31	0.0	9.04
48	0.0	0.0	0.0	0.33	0.22	0.42	0.0	1.77	3.59	2.41	0.55	0.0	9.29
49	0.0	0.0	0.0	0.12	0.0	2.29	0.96	2.03	3.81	0.37	0.64	0.0	10.22
1949-50	0.0	0.0	0.0	0.0	0.94	2.50	2.01	1.74	1.57	1.26	0.0	0.0	10.02
51	0.0	0.0	0.0	0.74	0.82	0.68	1.96	0.88	0.65	1.16	0.0	0.0	6.89
52	0.0	0.0	0.0	0.23	2.74	3.58	5.28	0.20	4.05	1.42	0.0	0.0	17.50
53	0.0	0.0	0.15	0.0	1.89	4.83	1.18	0.0	0.93	1.58	0.11	0.0	10.67
54	0.0	0.0	0.0	0.0	2.32	0.14	2.41	2.18	3.84	0.61	0.10	0.09	11.69

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT PATRIQUIN MINE NO. 2

County: Monterey
 Date established: 1940
 Elevation: 2,800 feet, U.S.G.S. datum

Station number on Plate 3: 3-C24
 Latitude: $35^{\circ}57.5'$
 Longitude: $120^{\circ}25.5'$
 Record obtained from: United States Bureau
 of Reclamation

In Inches

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1939-40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.62	6.47	1.58	0.68	0.0	0.0
41	0.0	0.0	0.0	0.0	0.06	0.79	4.73	10.61	5.37	3.57	0.34	0.0	33.47
42	0.0	0.0	0.0	1.08	1.11	8.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT ARROYO GRANDE CANYON (MUSICICK)

County: San Luis Obispo
 Date established: January, 1883
 Elevation: 750 feet, U.S.G.S. datum

Station number on Plate 3: 3-66

Latitude: $35^{\circ} - 12.2'$ Longitude: $120^{\circ} - 24.0'$ Record obtained from: United States Bureau
of Reclamation

In Inches

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1882-83	0.0	0.0	0.0	0.0	0.95	0.14	1.82	7.18	10.24	9.69	3.18	0.70	2.00
1884-85	0.0	0.04	0.20	0.67	0.73	8.46	2.10	0.0	0.67	1.75	0.32	0.0	14.94
86	0.0	0.0	0.02	12.37	3.01	4.37	0.65	2.66	3.59	0.07	0.0	0.0	26.74
87	0.0	0.0	0.31	1.53	1.76	0.71	6.73	0.98	2.14	0.35	0.0	0.0	14.51
88	0.0	0.0	0.32	1.24	3.81	7.08	0.05	3.50	0.0	0.37	0.0	0.0	18.01
89	0.0	0.0	0.0	5.02	4.37	0.48	1.34	10.56	0.72	2.81	0.0	0.0	25.30
90	0.0	0.0	0.0	13.48	4.04	14.17	8.59	5.76	2.13	0.31	0.32	0.0	48.80
91	0.0	0.0	1.44	0.77	0.0	4.66	0.74	9.44	1.50	2.90	0.15	0.0	21.60
92	0.0	0.0	0.38	0.0	0.15	6.12	1.41	2.42	4.66	1.11	2.72	0.0	18.97
93	0.0	0.0	0.0	0.31	3.69	4.14	3.74	5.99	9.91	1.06	0.0	0.0	28.84
94	0.0	0.0	0.0	0.71	0.92	2.46	2.25	2.83	0.64	0.28	1.57	0.64	12.29
95	0.02	0.16	1.50	0.67	0.26	6.37	8.56	2.28	1.83	1.49	0.18	0.0	23.32
96	0.0	0.0	0.0	1.26	2.39	1.07	7.70	3.18	2.50	0.0	0.0	0.0	18.10
97	0.12	0.0	0.0	1.94	2.21	3.06	4.37	4.37	4.05	0.0	0.0	0.0	20.12
98	0.0	0.0	0.0	0.81	0.0	0.58	1.48	1.90	0.87	0.25	1.13	0.0	7.02
99	0.0	0.0	0.76	0.20	0.05	1.11	3.85	0.21	7.42	1.87	1.22	0.0	16.69
1899-1900	0.0	0.0	0.0	2.81	3.39	2.63	1.49	0.08	3.33	1.27	1.34	0.0	16.34
01	0.0	0.0	0.0	0.51	9.04	0.47	9.37	4.52	0.46	3.07	0.35	0.0	27.79
02	0.0	0.0	0.0	2.45	1.90	0.0	1.57	5.66	3.81	2.85	0.17	0.0	18.71
03	0.0	0.0	0.0	1.19	2.16	0.79	3.67	1.21	6.37	1.20	0.0	0.0	16.59
04	0.0	0.0	0.0	0.0	0.60	0.18	0.90	8.10	4.86	2.61	0.0	0.0	17.25

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT ARROYO GRANDE CANYON (MUSICK)

In Inches
(continued)

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1904-05	0.0	0.38	3.62	1.29	0.12	2.22	1.61	6.70	6.06	0.52	2.16	0.0	24.68
06	0.0	0.0	0.0	1.67	0.48	7.81	3.67	12.76	0.68	3.40	0.0	0.0	30.27
07	0.0	0.0	0.0	1.22	5.48	9.39	1.60	5.79	0.0	0.0	0.0	0.0	23.48
08	0.0	0.0	2.83	0.0	3.22	6.57	3.20	0.45	0.13	0.28	0.0	0.0	16.68
09	0.0	2.23	0.38	1.25	0.97	17.79	7.95	4.63	0.0	0.0	0.0	0.0	35.20
1909-10	0.0	0.0	0.02	1.02	2.49	8.74	2.88	0.58	3.54	0.27	0.0	0.0	19.54
11	0.0	0.0	0.76	0.0	0.0	0.96	12.03	6.16	11.61	1.92	0.0	0.0	33.44
12	0.0	0.0	0.0	0.0	0.73	2.78	1.99	0.0	5.75	2.88	1.89	0.0	16.02
13	0.0	0.0	0.0	0.0	0.51	0.19	3.36	1.72	1.28	0.42	0.23	0.25	8.06
14	0.0	0.86	0.0	0.0	3.06	6.26	14.59	3.98	0.91	0.93	0.18	0.0	30.72
1914-15	0.0	0.0	0.0	0.0	0.66	3.91	6.58	7.45	0.77	2.47	1.09	0.0	22.93
16	0.0	0.0	0.0	0.0	0.32	3.31	16.02	2.68	2.09	0.18	0.0	0.0	24.60
17	0.0	0.09	0.96	2.70	0.37	6.94	1.75	7.47	0.41	0.20	0.33	0.0	21.22
18	0.0	0.0	0.0	0.11	0.37	0.19	0.74	9.74	6.00	0.10	0.0	0.0	17.25
19	0.0	0.05	0.42	0.42	4.51	1.85	0.51	6.02	3.12	0.0	0.27	0.0	17.20

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT ARROYO GRANDE NO. 1

County: San Luis Obispo
 Date established: 1904
 Elevation: 155 feet, U.S.G.S. datum

Station number on Plate 3: SLO-1

Latitude: $35^{\circ}07.4'$ Longitude: $120^{\circ}34.6'$

Record obtained from: Herald Recorder 1904-1945
 Howard and Bates Hardware
 Store 1945-1955

In Inches

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1904-05	0.0	0.17	4.41	0.96	0.14	2.89	2.21	6.86	3.38	0.71	1.56	0.0	23.29
06	---	---	---	---	---	---	---	---	---	---	---	---	---
07	---	---	---	---	---	---	---	---	---	---	---	---	---
08	---	---	---	---	---	---	---	---	---	---	---	---	---
09	0.0	0.0	1.24	0.44	1.10	1.04	13.39	6.69	4.00	0.0	0.0	0.0	27.90
1909-10	---	---	---	0.51	0.0	0.0	0.39	10.89	2.52	11.37	1.41	0.0	0.0
11	0.0	0.0	0.0	0.0	0.11	0.38	2.52	2.57	0.0	4.86	1.07	0.0	27.09
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.51
13	---	---	---	---	---	---	---	---	---	---	---	---	---
14	0.0	0.0	0.0	0.0	0.0	4.20	3.89	15.18	2.26	1.25	0.0	0.0	26.78
1914-15	---	---	---	---	---	---	---	---	---	---	---	---	---
16	0.0	0.0	2.21	2.40	0.59	6.64	1.64	2.26	0.0	0.0	0.0	0.0	15.74
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.19	0.65	4.22	1.94	0.58	6.01	0.0	0.0	13.59
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1919-20	---	---	---	---	0.57	1.31	1.84	4.16	1.23	1.27	0.0	0.0	10.38
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.30	0.0	0.50	5.42	3.51	2.71	3.11	0.0	0.0	0.0	15.55
23	0.0	0.0	0.0	0.0	0.05	3.38	3.63	2.47	1.11	0.20	4.84	0.0	15.68
24	---	---	---	---	---	---	---	---	---	---	---	---	---

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT ARROYO GRANDE NO. 1

In Inches
(continued)

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total	
1924-25	0.0	0.0	0.0	1.00	0.75	1.80	3.03	3.02	2.28	2.54	0.76	0.0	15.18	
26	0.0	0.0	0.0	0.20	2.52	1.35	4.16	0.30	2.18	0.0	0.0	0.0	10.71	
27	0.0	0.0	0.0	0.65	5.31	1.05	2.04	5.72	1.75	0.50	0.0	0.23	17.25	
28	0.0	0.0	0.0	2.34	1.33	3.89	0.33	5.19	3.65	0.44	0.0	0.0	17.17	
29	0.0	0.0	0.0	0.0	2.82	3.89	2.02	3.14	1.50	0.56	0.0	0.0	13.94	
1929-30	0.0	0.0	0.0	0.0	0.0	0.0	0.16	4.19	1.66	2.93	0.50	0.40	0.17	10.01
31	0.0	0.0	0.0	0.0	1.36	0.0	4.97	1.34	0.29	0.46	1.23	0.0	9.65	
32	0.0	0.11	0.0	0.14	2.30	8.05	4.30	3.16	0.43	0.55	0.10	0.0	19.14	
33	0.0	0.03	0.01	0.02	0.15	1.53	7.71	0.30	1.09	0.10	0.47	0.26	11.67	
34	0.0	0.0	0.0	0.36	0.0	3.85	0.01	2.92	0.0	0.0	0.0	1.45	8.59	
1934-35	0.0	0.0	0.0	2.12	3.25	2.01	5.84	1.07	4.41	3.62	0.0	0.0	22.32	
36	0.0	0.95	0.0	0.69	1.64	1.70	2.32	7.93	1.26	0.72	0.0	0.0	17.21	
37	0.0	0.0	0.0	1.19	0.0	5.38	4.30	6.64	4.02	0.15	0.0	0.0	21.68	
38	0.0	---	---	---	---	---	---	---	---	---	---	---	---	
39	0.0	---	---	---	---	---	---	---	---	---	---	---	---	
C-18	1939-40	0.0	0.0	0.59	1.15	0.95	2.02	6.25	3.80	1.27	1.89	0.0	0.0	17.92
41	0.0	0.0	0.0	0.80	0.19	7.48	5.97	8.18	8.14	3.98	0.0	0.0	34.74	
42	0.0	0.0	0.0	0.98	0.61	9.09	1.97	0.88	2.43	3.99	0.29	0.0	20.24	
43	0.0	0.0	0.0	0.67	1.36	3.43	7.57	1.04	6.30	1.35	0.0	0.0	21.72	
44	0.0	0.0	0.0	0.94	0.38	4.15	1.50	6.54	0.74	2.00	0.16	0.0	16.41	
1944-45	0.0	0.0	0.0	0.11	3.29	1.90	0.32	3.42	4.20	0.11	0.0	0.0	13.35	
46	0.0	0.0	0.0	0.05	0.55	3.18	0.44	1.89	3.06	0.18	0.0	0.0	9.25	
47	0.0	0.0	0.0	0.69	4.47	1.85	0.43	0.67	2.07	0.0	0.64	0.21	11.03	
48	0.0	0.0	0.0	1.10	0.11	1.40	0.0	1.77	3.64	2.43	0.99	0.0	11.44	
49	0.0	0.0	0.0	0.09	0.0	3.45	1.51	2.86	4.39	0.21	0.80	0.0	13.31	
1949-50	0.0	0.0	0.0	0.0	0.89	2.99	2.79	3.93	0.0	1.14	0.16	0.0	11.90	
51	0.43	0.0	0.0	1.35	2.84	2.22	2.53	1.05	0.90	1.03	0.0	0.0	12.35	
52	0.0	0.11	0.47	2.36	6.08	6.62	0.68	6.45	1.24	0.0	0.0	24.20		
53	0.0	0.0	0.0	3.05	5.13	1.60	0.0	0.70	1.98	0.0	0.0	0.0	12.46	
54	0.0	0.0	0.0	2.99	0.34	4.77	2.00	3.88	1.04	0.07	0.04	0.04	15.13	

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT ARROYO GRANDE NO. 2

County: San Luis Obispo
 Date established: 1939
 Elevation: 125 feet, U.S.G.S. datum

Station number on Plate 3: SL0-2

Latitude: $35^{\circ}07'44''$ Longitude: $120^{\circ}34.4'$

Record obtained from: San Luis Obispo County
 Road District No. 4

In Inches

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1939-40	0.0	0.0	0.59	1.16	0.89	1.65	5.83	3.50	1.10	1.85	0.0	0.0	16.57
41	0.0	0.0	Tr	0.74	0.23	6.90	6.43	7.91	7.71	3.46	0.10	0.0	33.48
42	0.0	0.0	0.0	0.98	0.61	8.41	1.41	0.94	2.33	3.88	0.22	0.0	18.78
43	0.0	0.0	0.0	0.48	1.31	3.47	7.35	1.08	5.78	1.03	0.0	0.0	20.50
44	0.0	0.0	0.0	0.92	0.37	4.14	1.52	5.51	0.80	1.94	0.19	0.01	15.40
1944-45	0.0	0.0	Tr	0.39	3.22	1.92	0.25	3.58	3.89	0.11	0.05	0.05	13.46
46	0.0	0.0	0.10	0.71	0.74	3.17	0.46	1.92	3.51	0.17	0.03	0.0	10.81
47	0.09	Tr	0.58	4.38	1.84	0.42	0.94	2.15	0.29	0.31	0.22	0.22	11.22
48	0.0	0.0	0.07	0.98	0.12	1.38	0.08	1.76	3.65	2.31	1.03	0.0	11.38
49	0.0	0.0	0.0	0.08	0.0	3.38	1.45	2.89	4.56	0.09	0.81	0.12	13.38
1949-50	0.0	0.0	0.02	0.04	0.87	2.96	2.86	2.76	1.16	0.98	0.12	0.0	11.77
51	0.46	0.0	0.03	1.14	2.84	1.71	2.87	1.12	0.84	1.02	0.0	0.0	12.03
52	0.0	0.0	0.09	0.37	2.06	5.46	5.87	0.60	5.75	0.96	0.0	0.0	21.16
53	---	---	---	---	2.91	4.98	1.55	---	---	---	---	---	---
54	0.0	0.0	0.0	0.0	0.0	2.64	0.35	3.68	1.59	2.68	0.0	0.0	10.94

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT ARROYO GRANDE NO. 3

County: San Luis Obispo
 Date established: 1949
 Elevation: 150 feet, U.S.G.S. datum

Station number on Plate 3: SLO-3
 Latitude: 35°-08.7'
 Longitude: 120°-35.8'
 Record obtained from: San Luis Obispo County
 Farm Advisor

In Inches

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1948-49	0.0	0.0	0.0	0.07	0.0	3.29	1.57	3.18	3.70	0.0	0.82	0.0	12.63
1949-50	0.0	0.0	0.0	0.0	1.05	2.81	3.70	3.13	2.46	1.29	0.24	0.0	13.68
51	0.58	0.0	0.10	1.51	3.80	3.01	1.95	1.21	0.88	0.55	0.75	0.0	14.44
52	0.0	0.0	0.03	1.04	2.00	7.77	7.59	0.95	6.60	1.46	0.0	0.17	27.71
53	0.0	0.0	0.0	0.0	3.32	5.17	2.19	0.0	0.79	2.32	0.06	0.06	13.85
54	0.0	0.0	0.0	0.0	3.39	0.42	5.66	2.26	4.75	1.23	0.10	0.04	17.85

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT ATASCADERO PUMP STATION

County: San Luis Obispo
 Date established: 1951
 Elevation: 1,200 feet, U.S.G.S. datum

Station number on Plate 3: SLO-45
 Latitude: $35^{\circ}31.2'$
 Longitude: $120^{\circ}34.5'$
 Record obtained from: Standard Oil Company

In Inches

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1951-52	0.0	0.0	0.0	0.47	2.44	3.63	5.10	0.59	4.85	1.14	0.0	0.0	18.22
53	0.0	0.0	0.0	0.0	1.77	3.79	1.04	0.0	0.89	1.55	0.02	0.0	9.06
54	0.0	0.0	0.0	0.0	1.88	0.02	3.35	1.99	3.33	0.34	0.03	0.0	10.94

RECORD OF MONTHLY PRECIPITATION AT ATASCADERO NO. 2

County: San Luis Obispo
 Date established: 1934
 Elevation: 860 feet, U.S.G.S. datum

Station number on Plate 3: 3-049
 Latitude: $35^{\circ}27.9'$
 Longitude: $120^{\circ}40.2'$
 Record obtained from: Pacific Gas and Electric Company

In Inches

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1934-35	0.0	0.0	0.08	1.72	3.54	2.17	6.65	1.08	3.26	5.53	0.0	0.0	24.03
36	0.0	0.40	0.0	0.48	1.61	2.49	3.14	13.68	1.44	1.71	0.0	0.14	25.09
37	0.14	0.0	0.0	1.57	0.0	7.62	6.10	7.63	6.82	0.55	0.0	0.0	30.43
38	0.0	0.0	0.0	0.18	0.89	7.79	2.28	13.14	8.47	1.43	0.01	0.0	34.19
39	0.0	0.0	0.65	0.22	0.53	1.10	3.83	2.27	8.60	-----	-----	-----	-----

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT AVILA

County: San Luis Obispo County

Date established: 1930

Elevation: 150 feet, U.S.G.S. datum

Station number on Plate 3: 3-050

Latitude: $35^{\circ} - 10.8'$ Longitude: $120^{\circ} - 43.7'$

Record obtained from: Union Oil Company

In Inches

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1930-31	0.0	0.0	0.0	0.12	1.69	7.87	2.75	4.80	0.25	0.28	0.26	0.0	10.75
32	0.0	0.0	0.0	0.05	0.12	1.81	6.54	0.42	1.66	1.07	1.96	0.0	18.02
33	0.0	0.0	0.0	0.36	0.0	2.88	0.80	3.39	0.0	0.02	1.75	0.0	13.63
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	1.75	0.0	9.20
1934-35	0.0	0.0	0.0	1.47	0.76	2.48	5.48	0.81	4.35	4.60	0.05	0.0	20.00
36	0.0	0.75	0.02	0.45	1.62	1.97	2.60	7.85	1.15	1.26	0.01	0.09	17.77
37	0.15	0.0	0.22	1.20	0.0	4.72	5.25	7.85	4.24	0.24	0.0	0.0	23.87
38	0.0	0.0	0.0	0.19	0.69	2.23	3.20	6.40	4.57	1.81	0.01	0.0	19.10
39	0.0	0.0	0.0	0.44	0.26	1.00	2.99	3.26	1.53	0.0	0.0	0.0	10.15
1939-40	Tr	0.0	0.72	0.81	0.66	1.59	7.80	4.64	3.37	0.47	0.0	0.0	20.05
41	0.0	0.0	0.0	0.21	0.60	6.60	6.60	6.60	6.60	6.60	6.60	6.60	6.60
42	0.0	0.0	0.0	1.46	0.87	8.89	2.21	1.02	2.58	0.0	0.0	0.0	17.03
43	0.0	0.0	0.0	0.46	1.36	3.51	6.10	1.62	7.61	1.21	0.0	0.0	21.87
44	0.0	0.0	0.0	1.22	0.41	3.60	1.81	5.91	1.20	1.31	0.18	0.0	15.64
1944-45	0.0	0.0	0.0	1.36	3.82	2.12	1.86	3.03	4.88	0.15	0.25	0.0	17.47
46	0.0	0.0	0.0	0.85	0.84	3.71	0.88	1.90	4.30	0.08	0.25	0.0	12.81
47	0.0	0.0	0.0	0.23	4.69	2.92	0.33	1.37	2.89	0.42	0.48	0.0	13.32
48	0.0	0.0	0.0	0.60	0.0	0.0	0.0	1.96	5.84	2.96	1.52	0.0	12.88
49	0.0	0.0	0.0	0.0	0.01	2.50	2.19	2.65	3.86	0.12	0.0	0.0	11.33
1949-50	0.0	0.0	0.0	0.0	0.91	5.16	4.42	4.35	1.84	0.0	0.0	0.0	16.68
51	0.11	0.0	0.0	1.08	4.41	4.01	2.69	0.99	1.31	1.03	0.0	0.0	15.93
52	0.0	0.0	0.0	0.64	1.25	7.68	6.83	0.70	6.83	1.06	0.0	0.07	25.06
53	0.0	0.0	0.0	0.0	2.90	4.74	3.30	0.0	0.93	1.56	0.04	0.0	13.47
54	0.0	0.0	0.0	3.84	0.57	5.00	2.74	4.55	1.01	0.06	0.06	0.06	17.83

RECORD OF MONTHLY PRECIPITATION AT AYARS RANCH

County: San Luis Obispo
 Date established: 1919
 Elevation: 1,940 feet, U.S.G.S. datum

Station number on Plate 3: 3-55
 Latitude: 35°-38.7'
 Longitude: 120°-48.2'
 Record obtained from: Mrs. M. B. Ayars

In Inches

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1919-20	0.0	0.0	0.0	0.0	0.0	0.0	6.38	0.87	2.63	4.62	2.25	0.0	16.75
21	0.0	0.0	0.0	0.0	0.0	0.0	6.25	8.88	1.37	3.88	0.62	1.75	0.0
22	0.0	0.0	0.0	0.0	0.0	0.50	13.00	3.75	7.87	1.88	0.12	0.63	22.75
23	0.0	0.0	0.0	0.62	5.50	9.00	4.25	1.38	0.0	4.25	0.0	0.0	27.75
24	0.0	0.0	0.0	0.0	0.50	0.0	3.75	0.75	5.88	0.0	0.0	0.0	25.00
													10.88
1924-25	0.0	0.0	0.0	0.0	1.13	3.62	2.38	1.37	5.13	3.62	2.38	2.75	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	3.50	4.38	7.71	0.21	6.21	0.0	22.01
27	0.0	0.0	0.0	0.0	0.22	10.90	0.80	2.20	10.16	1.60	2.61	0.0	28.49
28	0.0	0.0	0.0	0.0	1.95	3.00	2.21	0.55	3.49	4.11	0.51	0.39	16.21
29	0.0	0.0	0.0	0.0	0.17	2.31	4.01	1.50	3.55	1.82	0.86	0.0	15.09
												0.87	
1929-30	0.0	0.0	0.0	0.0	0.0	0.0	0.42	5.95	3.16	3.25	0.92	0.77	0.08
31	0.0	0.0	0.07	0.0	0.0	2.32	0.0	5.38	1.99	0.66	0.97	1.26	0.97
32	0.0	0.0	0.0	0.0	0.0	3.63	13.46	4.16	6.54	1.28	0.35	0.13	0.0
33	0.0	0.0	0.0	0.0	0.16	0.27	1.28	8.38	0.09	1.26	0.23	0.52	29.55
34	0.0	0.0	0.0	0.0	1.30	0.0	8.91	3.51	5.50	0.0	0.06	0.30	12.87
												0.87	20.45
1934-35	0.0	0.0	0.07	1.29	3.63	2.79	7.48	0.54	3.90	5.22	0.0	0.0	24.92
36	0.0	0.42	0.08	0.55	1.71	2.54	2.88	14.74	1.23	1.95	0.0	0.12	26.22
37	0.38	0.0	1.06	0.0	7.62	6.07	0.0	7.49	6.47	0.24	0.0	0.0	22.86
38	0.0	0.0	0.0	0.30	0.82	9.66	2.99	16.74	7.94	1.56	0.09	0.0	40.10
39	0.0	0.0	0.68	0.37	0.63	2.05	3.96	2.40	2.24	0.01	0.0	0.0	12.34
1939-40	0.0	0.0	0.28	0.60	0.83	2.03	11.54	8.85	1.53	1.30	0.0	0.0	26.96
41	0.0	0.0	0.0	0.52	0.16	11.30	6.63	11.89	10.74	5.87	0.78	0.0	46.89
42	0.0	0.0	0.0	0.40	2.48	10.12	4.53	2.10	2.90	6.35	0.23	0.0	29.11
43	0.0	0.0	0.0	0.0	0.17	4.15	11.54	2.81	6.00	0.82	0.0	0.0	25.49
44	0.0	0.0	0.0	0.63	0.30	4.24	1.99	9.04	3.30	1.45	0.43	0.17	21.55
1944-45	0.0	0.0	0.32	4.57	3.04	0.0	6.78	4.39	0.37	0.0	0.0	0.0	19.45

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT BRANCH MOUNTAIN LOOKOUT

County: San Luis Obispo
 Date established: 1943
 Elevation: 3,770 feet, U.S.G.S. datum

Station number on Plate 3: SLO-5
 Latitude: 35°-33.5'
 Longitude: 120°-05.2'
 Record obtained from: United States Bureau
 of Reclamation

In Inches

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1943-44	0.0	0.0	0.0	0.82	0.40	3.47	1.29	9.81	2.04	1.46	0.50	0.0	19.73
Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT BITTERWATER PUMP STATION

County: San Luis Obispo
 Date established: 1935
 Elevation: 1,500 feet, U.S.G.S. datum

Station number on Plate 3: SLO-4

Latitude: $35^{\circ}33.5'$ Longitude: $120^{\circ}05.2'$

Record obtained from: Standard Oil Company

In Inches

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1935-36	0.0	0.0	0.01	0.35	0.29	0.75	0.05	5.01	1.49	0.98	0.0	0.10	9.03
37	0.56	0.01	0.0	1.22	0.0	4.19	3.61	1.61	3.07	0.09	0.0	0.0	14.36
38	0.0	0.0	0.0	0.27	0.30	2.33	1.11	5.11	3.32	1.39	0.30	0.0	14.13
39	0.0	0.0	0.21	0.02	0.07	0.66	2.14	1.39	0.98	0.07	0.0	0.0	5.54
1939-40	0.0	0.0	0.49	1.03	0.03	0.59	2.08	2.66	0.78	0.71	0.0	0.0	8.37
41	0.0	0.0	0.0	0.04	0.07	3.56	1.82	5.84	4.92	2.07	0.0	0.0	18.32
42	0.0	0.0	0.0	0.92	0.33	4.33	0.80	0.59	1.45	1.35	0.15	0.0	9.92
43	0.0	0.0	0.0	0.34	0.36	1.44	3.77	0.66	2.66	1.04	0.0	0.0	10.27
44	0.0	0.0	0.0	0.63	0.09	1.04	1.05	4.27	0.15	0.40	0.32	0.0	7.95
1944-45	0.0	0.0	0.0	0.08	1.23	0.44	0.94	2.57	2.29	0.05	0.03	0.04	7.67
46	0.0	0.0	0.0	0.32	0.24	1.44	0.20	1.30	3.46	0.03	0.18	0.0	7.17
47	0.0	0.0	0.13	0.18	1.35	2.30	0.23	0.17	0.65	0.14	0.07	0.0	5.22
48	0.0	0.0	0.0	0.10	0.55	0.59	0.0	1.56	1.35	1.20	0.19	0.0	5.54
49	0.0	0.0	0.0	0.01	0.0	2.05	0.63	0.62	1.18	0.26	0.65	0.0	5.40
1949-50	0.0	0.0	0.0	0.0	0.46	1.85	1.48	0.91	1.00	1.13	0.17	0.0	7.00
51	0.69	0.0	0.0	0.63	0.45	0.19	1.36	0.56	0.22	0.58	0.0	0.0	4.68

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT CAMBRIA COAST UNION HIGH SCHOOL

County: San Luis Obispo
 Date established: 1938
 Elevation: 100 feet, U.S.G.S. datum

Station number on Plate 3: SLO-6
 Latitude: 35°-34.1'
 Longitude: 121°-04.0'
 Record obtained from: United States Bureau
 of Reclamation

In Inches

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1938-39	0.0	0.0	0.90	1.12	0.61	1.71	3.26	2.47	2.35	0.10	0.18	0.0	12.70
1939-40	0.0	0.0	0.35	1.20	0.40	2.10	12.60	5.32	2.19	1.65	0.12	0.0	25.93

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT CAMBRIA HIGHWAY MAINTENANCE STATION

County: San Luis Obispo
 Date established: 1937
 Elevation: 60 feet, U.S.G.S. datum

Station number on Plate 3: SLO-7

Latitude: $35^{\circ} - 34^{\circ} 41'$ Longitude: $121^{\circ} - 06^{\circ} 71'$

Record obtained from: California Division of
 Highways
 San Luis Obispo

In Inches

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1937-38	0.0	0.0	0.0	0.0	0.69	4.42	4.01	8.27	5.39	0.74	0.05	0.03	23.60
39	0.0	0.03	0.38	0.82	0.46	1.45	2.14	2.06	1.77	0.13	0.28	0.01	9.53
1939-40	0.01	0.0	0.40	1.19	0.36	1.23	7.37	6.05	1.54	1.16	0.11	0.0	19.42
41	0.0	0.0	0.08	0.66	0.30	7.61	7.33	10.24	7.26	4.54	0.36	0.0	38.38
42	0.0	0.06	0.0	1.42	1.09	8.45	2.93	1.80	2.06	1.75	0.77	0.0	20.33
43	0.0	0.0	0.0	1.27	1.76	3.23	7.33	2.76	7.35	0.87	0.0	0.0	24.57
44	0.0	0.0	0.0	1.01	0.36	5.24	2.20	8.04	0.93	1.25	0.31	0.0	19.34
1944-45	0.0	0.0	0.08	0.47	3.41	2.07	1.05	4.57	4.45	0.18	0.0	0.0	16.28
46	0.0	0.0	0.13	1.68	1.45	4.10	0.93	2.17	2.25	0.23	0.16	0.0	13.10
47	0.08	0.0	0.0	0.44	5.14	2.21	0.40	1.73	1.83	0.29	0.68	0.12	12.92
48	0.0	0.0	0.18	1.76	0.33	1.51	0.10	1.73	6.38	4.10	0.76	0.0	16.85
49	0.0	0.0	0.0	0.53	0.19	3.67	1.63	2.51	5.68	0.06	0.47	0.0	14.74
1949-50	0.04	Tr	0.06	0.07	0.93	3.45	4.22	4.23	1.96	0.72	0.0	0.0	15.68
51	0.42	0.0	0.0	1.49	2.52	3.42	2.02	2.05	0.89	1.30	0.44	0.0	14.55
52	0.0	0.05	1.30	2.69	6.94	6.57	0.43	7.43	1.78	0.0	0.0	0.0	27.19
53	0.0	0.0	0.0	0.0	3.30	6.98	3.18	0.0	1.14	2.58	0.03	0.06	17.27
54	0.0	0.0	0.0	0.03	2.53	0.16	4.74	3.11	5.87	1.37	0.20	0.15	18.16

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT CAMBRIA

County: San Luis Obispo
 Date established: 1938
 Elevation: 200 feet, U.S.G.S. datum

Station number on Plate 3: SLO-41
 Latitude: $35^{\circ} - 33.9'$
 Longitude: $121^{\circ} - 04.7'$
 Record obtained from: Judge Steiner

In Inches

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1938-39	0.0	0.0	0.90	1.12	0.61	1.71	3.26	2.47	2.35	0.10	0.18	0.0	12.70
1939-40	0.0	0.0	0.35	1.20	0.40	2.10	12.60	5.32	2.19	1.65	0.12	0.0	25.93
41	0.0	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
42	0.0	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
43	0.0	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
44	0.0	0.0	0.0	1.34	0.57	6.46	2.95	10.31	1.30	1.81	0.49	0.0	25.23
1944-45	0.0	0.0	0.0	0.66	4.34	2.44	1.10	5.64	5.26	0.25	0.52	0.0	20.21
46	0.0	0.30	0.16	2.10	1.90	5.06	1.18	2.80	3.13	0.35	0.24	0.0	17.22
47	0.0	0.0	0.0	0.53	6.66	2.72	0.50	2.06	2.57	0.30	0.75	0.23	16.32
48	0.0	0.0	0.06	2.22	0.36	1.85	0.15	1.86	7.67	5.06	0.79	0.05	20.07
49	0.0	0.0	0.0	0.38	0.13	4.19	2.05	3.38	6.13	0.15	0.65	0.0	17.06
1949-50	0.30	0.0	0.0	0.11	1.38	3.73	4.70	5.19	2.31	1.07	0.24	0.0	19.03
51	0.61	0.0	0.0	2.13	3.22	4.53	3.20	2.75	1.24	1.59	0.50	0.08	19.85
52	0.0	0.0	0.12	1.57	2.66	8.78	10.99	1.19	10.38	2.17	0.13	0.08	38.07
53	0.58	0.0	0.0	0.06	3.52	8.65	4.24	0.0	1.80	3.60	0.09	0.12	22.66
54	0.0	0.0	0.0	0.03	3.46	0.29	6.31	4.46	7.41	0.81	2.13	0.18	25.08

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT CAMP TALAKI

County: San Luis Obispo
 Date established: 1952
 Elevation: 460 feet, U.S.G.S. datum
 Station number on Plate 3: SLO-42
 Latitude: $35^{\circ}12.8'$
 Longitude: $120^{\circ}28.8'$
 Record obtained from: Santa Maria Girl Scouts

In Inches

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1953-54	(- - - - -)	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	14.71	7.48	9.90	1.91	0.35	0.0
	29												38.24

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT CARRIZO PLAIN NO. 1

County: San Luis Obispo
 Date established: 1938
 Elevation: 2,000 feet, U.S.G.S. datum

Station number on Plate 3: SLO-9
 Latitude: $35^{\circ} - 21.5'$
 Longitude: $120^{\circ} - 03.0'$
 Record obtained from: San Luis Obispo County
 Farm Advisor

In Inches

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1938-39	0.0	0.0	0.80	0.0	0.20	1.29	2.31	0.81	1.25	0.25	0.0	0.0	6.91
1939-40	0.0	0.0	0.85	0.0	0.10	0.77	1.89	3.57	0.99	0.0	0.0	0.0	8.17
41	0.0	0.0	0.51	0.0	3.38	2.57	4.58	4.16	2.68	0.0	0.0	0.0	17.88
42	0.0	0.0	1.00	0.37	3.14	0.22	0.85	0.85	0.68	0.0	0.0	0.0	7.11
43	0.0	0.0	0.35	0.20	1.43	7.09	0.97	1.13	1.30	0.0	0.0	0.0	12.47
44	0.0	0.0	0.55	0.39	1.84	1.05	4.18	0.40	0.0	0.0	0.0	0.0	8.41
1944-45	0.0	0.0	0.0	0.0	1.95	0.49	0.59	2.35	1.70	0.0	0.0	0.0	7.08
46	0.0	0.0	0.25	0.32	1.33	0.38	1.50	3.99	0.0	0.0	0.0	0.0	7.77
47	0.0	0.0	0.10	2.86	1.55	0.49	0.34	0.69	0.77	0.14	0.0	0.0	6.94
48	0.0	0.0	0.0	0.0	0.72	0.0	1.67	1.82	1.18	0.37	0.0	0.0	5.76
49	0.0	0.0	0.08	0.0	2.72	0.68	0.64	1.81	0.25	0.66	0.0	0.0	6.84
1945-50	0.0	0.0	0.0	0.0	0.62	1.91	1.50	1.41	0.97	1.27	0.13	0.19	8.00
51	0.19	0.0	0.0	0.62	0.56	0.13	1.72	0.33	0.50	0.97	0.0	0.0	5.02
52	0.0	0.0	0.0	0.38	1.41	1.91	4.45	0.33	4.87	0.52	0.0	0.0	13.87
53	0.0	0.0	0.13	0.0	3.02	3.17	0.91	0.11	0.44	0.92	0.0	0.0	8.70
54	0.0	0.0	0.0	0.89	0.15	3.20	1.26	2.38	0.15	0.0	0.0	0.0	8.03

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT CARRIZO PLAIN NO. 2

County: San Luis Obispo
 Date established: 1939
 Elevation: 2,050 feet, U.S.G.S. datum

Station number on Plate 3: SLO-10
 Latitude: $35^{\circ}21.2'$
 Longitude: $119^{\circ}59.1'$
 Record obtained from: San Luis Obispo County
 Farm Advisor

In Inches

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1939-40	0.0	0.0	0.97	0.42	0.11	0.75	1.84	2.31	0.54	0.80	0.0	0.0	7.74
41	0.0	0.0	0.43	0.14	3.38	2.36	3.07	4.52	2.73	0.11	0.0	0.0	16.74
42	0.0	0.0	0.04	0.87	0.31	3.51	0.59	0.93	1.05	1.53	0.14	0.0	8.97
43	0.0	0.0	0.0	0.32	0.33	1.39	5.32	1.02	1.79	1.60	0.0	0.0	11.77
44	0.0	0.0	0.0	0.36	0.27	1.61	1.01	4.01	0.54	0.39	0.22	0.0	8.41
1944-45	---	---	---	---	---	---	---	---	---	---	---	---	---
46	---	---	---	---	---	---	---	---	---	---	---	---	---
47	---	---	---	---	---	---	---	---	---	---	---	---	---
48	---	---	---	---	---	---	---	---	---	---	---	---	---
49	---	---	---	---	---	---	---	---	---	---	---	---	---
1949-50	---	---	---	---	---	---	---	---	---	---	---	---	---
51	0.46	0.0	0.0	0.74	0.33	0.40	1.66	0.31	0.40	0.92	0.03	0.0	5.25
52	0.0	0.0	0.0	0.63	1.37	1.54	4.43	0.42	4.39	0.81	0.0	0.0	13.59
53	0.0	0.0	0.15	0.0	2.42	3.18	0.83	0.16	0.32	0.97	0.13	0.0	8.16
54	0.0	0.0	0.0	0.0	0.0	1.08	1.93	1.20	2.26	0.10	0.0	0.0	6.57

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT CARRIZO PLAIN NO. 3

County: San Luis Obispo
 Date established: 1939
 Elevation: 1,975 feet, U.S.G.S. datum

Station number on Plate 3: SLO-13
 Latitude: 35°-23.7'
 Longitude: 120°-05.7'
 Record obtained from: San Luis Obispo County
 Farm Advisor

In Inches

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1939-40	0.0	0.0	0.0	2.25	0.0	0.93	1.90	2.28	1.10	0.83	0.0	0.0	9.29
41	0.0	0.0	0.0	0.37	0.0	4.06	2.55	6.11	4.83	3.79	0.0	0.0	21.71
42	0.0	0.0	0.0	1.20	0.29	3.34	0.83	0.62	1.48	1.47	0.16	0.0	9.39
43	0.0	0.0	0.0	0.48	0.35	1.52	6.24	1.18	2.54	1.08	0.0	0.0	13.39
44	0.0	0.0	0.0	0.55	0.45	1.60	1.11	4.28	0.74	0.63	0.28	0.0	9.04
1944-45	0.0	0.0	0.0	0.0	1.69	0.91	0.13	2.89	1.80	0.08	0.07	0.0	7.57
46	0.0	0.0	0.0	0.30	0.27	1.34	0.29	1.47	3.74	0.06	0.07	0.0	7.54
47	0.0	0.0	0.0	0.25	2.60	1.76	0.45	0.20	0.99	0.19	0.09	0.0	6.53
48	0.0	0.0	0.0	0.04	0.06	0.51	0.0	1.65	1.82	1.22	0.06	0.0	5.26
49	0.0	0.0	0.0	0.06	0.0	2.75	0.71	0.50	2.05	0.42	0.33	0.0	6.82
1949-50	0.0	0.0	0.0	0.12	0.47	1.85	1.34	1.25	0.62	1.20	0.0	0.0	6.85
51	0.24	0.0	0.0	0.79	0.67	0.25	1.78	0.54	0.51	0.93	0.0	0.0	5.71
52	0.0	0.0	0.0	0.43	1.25	1.83	3.95	0.31	4.82	0.78	0.0	0.0	13.37
53	0.0	0.0	0.0	0.18	1.99	2.97	1.00	0.06	0.36	0.79	0.0	0.0	7.35
54	0.0	0.0	0.0	1.07	0.0	1.13	3.00	1.12	2.93	0.15	0.0	0.0	7.90

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT CERRO ALTO MOUNTAIN LOOKOUT

County: San Luis Obispo
 Date established: 1943
 Elevation: 2,620 feet, U.S.G.S. datum
 Station number on Plate 3: SLO-11
 Latitude: $35^{\circ}24.9'$
 Longitude: $120^{\circ}44.0'$
 Record obtained from: United States Bureau
 of Reclamation

In Inches

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1943-44	0.0	0.0	0.0	1.45	0.63	4.51	1.05	7.21	0.78	2.62	0.88	0.18	19.31

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT CHOLAME

County: San Luis Obispo
 Date established: 1928
 Elevation: 2,000 feet, U.S.G.S. datum

Station number on Plate 3: 3-53
 Latitude: $35^{\circ}40.8'$
 Longitude: $120^{\circ}11.7'$
 Record obtained from: San Luis Obispo County
 Farm Advisor

In Inches

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1928-29	0.0	0.0	0.0	0.0	1.55	2.83	0.88	0.94	1.44	0.0	0.0	0.0	7.64
1929-30	0.0	0.0	0.0	0.0	0.0	0.0	2.39	0.85	2.65	0.20	0.95	0.0	7.04
31	0.0	0.0	0.0	0.0	0.99	2.69	1.83	0.0	0.0	0.0	0.0	0.0	6.33
32	0.0	0.0	0.0	0.0	1.88	4.24	2.33	3.37	0.0	0.0	0.0	0.0	11.82
33	0.0	0.0	0.0	0.0	0.0	1.25	5.11	0.55	0.0	0.0	0.33	0.85	8.09
34	0.0	0.0	0.0	0.0	0.0	1.95	0.73	1.84	0.18	0.0	0.15	0.50	5.35
1934-35	0.0	0.0	0.0	1.41	1.73	1.67	4.36	1.18	3.37	1.40	0.0	0.0	15.12
36	0.0	0.0	0.0	0.0	0.0	0.60	0.39	6.28	1.13	1.08	0.0	0.0	9.48
37	0.0	0.0	0.0	1.28	0.0	5.17	3.41	2.52	3.29	0.0	0.0	0.0	15.67
38	0.0	0.0	0.0	0.0	0.0	2.22	2.00	6.53	4.24	1.25	0.0	0.0	16.24
39	0.0	0.0	0.0	0.0	0.66	1.03	1.97	1.21	1.38	0.23	0.0	0.0	6.48
1939-40	0.0	0.0	1.53	0.45	0.21	0.60	3.43	3.22	0.99	0.71	0.0	0.0	11.14
41	0.0	0.0	0.0	0.40	0.0	5.11	2.87	6.95	5.05	2.45	0.0	0.0	22.83

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT CLAASSEN RANCH

County: San Luis Obispo
 Date established: 1930
 Elevation: 1,075 feet, U.S.G.S. datum

Station number on Plate 3: SLO-12

Latitude: $35^{\circ} - 33.9'$ Longitude: $120^{\circ} - 46.9'$

Record obtained from: San Luis Obispo County
 Farm Advisor

In Inches

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1930-31	0.0	0.0	0.0	0.0	3.25	0.0	4.75	1.50	0.63	0.50	1.37	0.75	12.75
32	0.0	0.0	0.0	0.0	2.50	16.38	2.00	4.25	2.12	0.0	0.0	0.75	28.00
33	0.0	0.0	0.0	0.0	0.0	0.0	10.91	0.07	1.58	0.05	0.71	0.81	14.13
34	0.0	0.0	0.0	1.12	0.0	8.60	3.03	6.19	0.30	0.0	0.15	0.86	20.25
1934-35	0.48	0.0	0.0	1.63	3.96	3.58	8.23	0.56	4.05	5.83	0.0	0.25	28.57
36	0.0	0.0	0.0	0.62	1.62	2.87	3.52	16.56	1.53	2.28	0.0	0.0	29.00
37	0.0	0.0	0.0	1.74	0.0	9.02	6.58	13.38	6.30	0.20	0.0	0.0	37.22
38	0.0	0.0	0.0	0.13	1.10	11.66	3.33	20.02	9.64	1.88	0.06	0.0	47.82
39	0.0	0.0	0.54	0.28	0.41	1.81	4.01	2.18	2.21	0.12	0.41	0.0	11.97
1939-40	0.0	0.0	0.25	0.72	0.76	2.27	12.42	9.69	2.07	1.03	0.0	0.0	29.21
41	0.0	0.0	0.0	0.43	0.12	12.22	8.03	12.41	10.28	5.14	0.53	0.0	49.16
42	0.0	0.0	0.0	1.41	1.01	12.64	4.34	1.68	4.52	4.74	0.68	0.0	31.02
43	0.0	0.0	0.0	0.71	2.56	3.04	11.35	2.30	8.75	0.88	0.0	0.0	29.59
44	0.0	0.0	0.0	0.68	0.21	4.47	3.69	8.79	2.78	1.56	0.18	0.0	22.36
1944-45	0.0	0.0	0.0	0.93	4.51	1.92	1.17	6.21	5.83	0.21	0.13	0.0	20.91
46	---	---	---	---	---	---	---	---	---	---	---	---	---
47	---	---	---	---	---	---	---	---	---	---	---	---	24.88
48	---	---	---	---	---	---	---	---	---	---	---	---	15.94

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT CRESTON PUMP STATION

County: San Luis Obispo
 Date established: 1924
 Elevation: 1,100 feet, U.S.G.S. datum

Station number on Plate 3: 3-59

Latitude: $35^{\circ} - 31.7^{\prime}$

Longitude: $120^{\circ} - 30.9^{\prime}$

Record obtained from: Union Oil Company

In Inches

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1924-25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.82
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.16
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.15
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.81
29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.32
1929-30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.44
31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.69
32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.09
33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.57
34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.25
1934-35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.90
36	0.00	0.11	0.48	0.28	1.22	1.31	0.48	5.86	0.72	0.94	0.05	Tr	11.45
37	Tr	0.00	0.00	1.37	0.04	4.23	3.63	3.15	3.94	0.24	0.00	0.00	16.60
38	0.00	0.00	0.00	0.12	0.38	3.40	1.06	6.79	4.78	1.07	Tr	0.00	17.60
39	0.00	0.00	0.55	0.14	0.20	0.91	2.04	0.95	1.25	0.00	0.00	0.00	6.04
1939-40	0.00	0.00	0.93	0.98	0.54	0.90	3.50	3.78	0.81	1.31	0.00	0.00	12.75
41	0.00	0.00	0.00	0.30	0.17	3.97	2.85	6.27	4.58	1.94	0.00	0.00	20.08
42	0.00	0.00	0.00	0.37	2.54	1.05	0.49	1.41	2.92	0.18	0.00	0.00	8.96
43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-----
44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-----
1944-45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-----
46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-----
47	0.00	0.07	0.00	0.28	0.15	0.70	0.00	1.58	2.58	1.82	1.00	0.00	7.35
48	0.00	0.00	0.00	0.07	0.00	2.70	0.99	1.24	2.69	0.26	0.81	0.00	8.18
49	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.76

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT CRESTON PUMP STATION

In Inches
(continued)

	Season : July : Aug. : Sept. : Oct. : Nov. : Dec. : Jan. : Feb. : Mar. : Apr. : May : June : Total													
1949-50	0.0	0.0	0.0	0.0	0.0	0.97	2.97	2.24	1.54	1.33	1.42	0.25	0.0	10.72
51	0.92	0.0	0.0	0.0	0.95	1.20	1.32	1.84	1.34	0.11	0.99	0.15	0.0	8.82
52	0.0	0.0	0.0	0.0	0.69	2.03	2.81	4.44	0.32	4.24	0.85	0.02	Tr.	15.40
53	0.0	0.0	0.06	0.0	1.60	3.73	0.73	0.77	0.0	0.82	1.10	0.30	0.0	8.38
54	0.0	0.0	0.0	0.0	1.60	0.04	3.48	1.79	3.05	0.43	0.02	0.0	0.0	10.11

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT DELLAGANNA RANCH

County: San Luis Obispo
 Date established: 1952
 Elevation: 1,280 feet, U.S.G.S. datum
 Station number on Plate 3: SLO-14
 Latitude: 35°-32.1'
 Longitude: 120°-51.5'
 Record obtained from: Dellaganna Ranch

In Inches

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1952-53	{	-	-	-	-	-	14.80	-	-	7.45	10.25	0.0	44.35
54	0.0	0.0	0.0	0.0	0.0	5.40	0.90	10.40	8.95	9.45	3.85	0.90	39.85

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT DOVER CANYON

County: San Luis Obispo
 Date established: 1945
 Elevation: 1,160 feet, U.S.G.S. datum

Station number on Plate 3: SL0-47
 Latitude: $35^{\circ}-34.8'$
 Longitude: $120^{\circ}-51.3'$
 Record obtained from: Bergman Ranch

In Inches

Season	: July	: Aug.	: Sept.	: Oct.	: Nov.	: Dec.	: Jan.	: Feb.	: Mar.	: Apr.	: May	: June	: Total
1945-46	0.0	0.0	0.0	-	5.10	-	12.07	0.90	3.43	6.97	0.0	0.0	28.47
47	0.0	0.0	0.0	0.50	11.28	3.05	0.80	2.95	3.26	0.44	0.0	0.0	22.28
48	0.0	0.0	0.0	2.61	0.37	1.94	0.21	3.31	8.82	8.65	0.0	0.0	25.94
49	0.0	0.0	0.0	0.68	0.0	5.73	4.25	5.82	9.87	0.26	0.62	0.0	27.23
1949-50	0.0	0.0	0.0	0.0	3.53	4.86	8.01	6.05	4.26	1.50	0.0	0.0	28.21
51	0.82	0.0	0.0	4.12	9.36	5.69	4.59	2.80	1.05	1.83	1.11	0.0	31.37
52	0.0	0.0	0.0	1.22	5.83	15.21	17.65	1.04	8.94	2.70	0.0	0.0	52.59
53	0.0	0.0	0.0	0.0	3.67	15.58	7.03	0.0	3.66	5.10	0.0	0.0	35.04
54	0.0	0.0	0.0	4.56	0.32	8.05	6.58	7.82	2.58	0.58	0.0	0.0	30.49

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT EDNA (STORNETTA)

County: San Luis Obispo
 Date established: 1940
 Elevation: 425 feet, U.S.G.S. datum

Station number on Plate 3: SLO-38
 Latitude: $35^{\circ} - 12.7'$
 Longitude: $120^{\circ} - 34.1'$
 Record obtained from: San Luis Obispo County
 Farm Advisor
 (Stornetta Ranch)

In Inches

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1940-41	0.0	0.0	0.0	0.70	0.30	7.67	5.78	7.68	9.07	4.28	0.19	0.0	35.67
42	0.0	0.0	0.0	1.27	0.89	9.21	2.74	1.31	2.28	4.23	0.22	0.0	22.15
43	0.0	0.0	0.0	0.70	2.07	2.25	9.82	1.72	8.72	1.27	0.0	0.0	26.54
44	0.0	0.0	0.0	0.84	0.35	3.84	1.37	9.22	1.45	2.43	0.36	0.0	19.86
1944-45	0.0	0.0	0.0	0.20	3.99	2.20	0.28	5.84	5.71	0.20	0.0	0.0	18.42
46	0.0	0.0	0.0	1.14	0.63	5.22	0.66	2.22	5.14	0.19	0.0	0.12	15.87
47	0.12	0.0	0.0	0.59	6.53	2.59	0.77	0.74	2.55	0.40	0.0	0.19	14.48
48	0.0	0.0	0.05	0.98	0.13	1.51	0.03	1.83	4.92	3.32	1.13	0.02	13.92
49	0.0	0.0	0.0	0.19	0.0	3.71	2.29	3.29	5.05	0.14	0.98	0.0	15.65
1949-50	0.0	0.0	0.0	0.0	1.25	3.51	4.25	3.68	2.40	1.13	0.26	0.0	16.48
51	0.64	0.0	0.0	1.61	3.00	3.22	2.74	1.13	1.02	1.67	0.06	0.0	15.09
52	0.0	0.0	0.04	1.04	2.16	7.61	8.71	0.67	7.07	1.67	0.03	0.13	29.13
53	0.0	0.0	0.0	0.0	4.23	7.18	2.94	0.0	1.39	2.88	0.11	0.05	18.78
54	0.0	0.0	0.0	0.01	4.28	0.35	5.76	2.89	5.63	1.33	0.20	0.04	20.49

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT EDNA (RIGHETTI NO. 1)

County: San Luis Obispo
 Date established: 1929
 Elevation: 300 feet, U.S.G.S. datum

Station number on Plate 3: SL0-56
 Latitude: $35^{\circ} - 13.3'$
 Longitude: $120^{\circ} - 35.9'$
 Record obtained from: F. G. Righetti

In Inches

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1929-30	0.0	0.0	0.0	0.0	0.0	0.32	4.93	2.78	3.50	0.83	0.74	0.21	13.31
31	0.0	0.0	0.22	0.0	2.22	0.02	6.76	2.09	0.47	0.55	1.20	0.05	13.58
32	0.0	0.06	0.0	0.09	2.68	14.07	5.94	4.21	0.51	0.34	0.28	0.0	28.18
33	0.0	0.0	0.12	0.03	0.25	1.61	4.44	—	—	—	—	—	—
34	0.0	0.0	0.0	0.56	0.03	4.73	0.01	3.13	0.16	0.61	0.12	1.25	10.60
1934-35	0.0	0.0	0.09	2.11	4.39	2.63	6.49	1.07	3.91	5.09	0.0	0.0	25.78
36	0.17	0.85	0.04	0.85	1.72	2.40	3.80	9.33	1.77	1.57	0.14	0.23	22.87
37	0.0	0.0	0.15	1.95	0.0	5.38	3.40	9.10	5.25	0.34	0.04	0.0	25.61
38	0.0	0.0	0.0	0.16	1.13	5.58	4.29	8.14	6.04	1.72	0.06	0.0	27.12
39	0.0	0.0	0.61	0.38	0.45	1.53	3.40	2.19	2.01	0.37	0.08	0.0	11.02
1939-40	0.0	0.0	0.97	0.76	1.15	1.69	7.74	5.66	2.21	1.52	0.0	0.0	21.70

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT EDNA (RIGHETTI NO. 2)

County: San Luis Obispo
 Date established: 1943
 Elevation: 400 feet, U.S.G.S. datum

Station number on Plate 3: SLO-55
 Latitude: $35^{\circ} - 14.1'$
 Longitude: $120^{\circ} - 35.5'$
 Record obtained from F. G. Righetti

In Inches

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1943-44	0.0	0.0	0.0	1.14	0.40	4.44	1.64	8.90	0.99	2.47	0.29	0.0	20.27
1944-45	0.0	0.0	0.0	0.51	4.00	2.18	1.92	4.01	5.21	0.28	0.02	0.0	18.13
46	0.0	0.03	0.14	0.94	0.75	4.59	0.64	2.38	4.92	0.11	0.24	0.0	14.74
47	0.36	0.0	0.26	0.27	6.25	2.33	0.69	0.90	2.43	0.31	0.39	0.16	14.35
48	0.0	0.04	0.0	1.04	0.14	1.32	0.05	2.05	4.80	3.12	0.97	0.01	13.54
49	0.0	0.0	0.0	0.36	0.0	3.61	2.12	3.09	4.66	0.16	0.82	0.0	14.82
1949-50	0.0	0.0	0.0	0.0	1.55	3.25	4.12	3.66	2.05	1.58	0.25	0.0	16.46
51	0.64	0.0	0.02	1.70	3.05	2.68	3.33	2.32	0.18	1.51	0.08	0.0	15.51
52	0.0	0.0	0.13	1.29	2.92	6.96	8.35	1.92	5.90	1.56	0.0	0.05	29.08
53	0.02	0.0	0.0	0.0	3.51	6.18	2.43	0.0	1.23	2.47	0.04	0.08	15.96
54	0.0	0.0	0.0	0.0	4.14	0.51	5.78	2.37	5.12	1.12	0.20	0.06	19.30

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT ERNST RANCH

County: San Luis Obispo
 Date established: 1930
 Elevation: 900 feet, U.S.G.S. datum

Station number on Plate 3: 3-58

Latitude: $35^{\circ} - 38.4'$ Longitude: $120^{\circ} - 35.4'$

Record obtained from: United States Bureau
 of Reclamation

In Inches

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1930-31	0.0	0.0	0.0	0.06	1.23	0.0	3.05	1.35	0.12	0.67	1.22	1.29	8.99
32	0.0	0.0	0.0	0.0	1.72	5.05	2.87	1.52	0.37	0.15	0.0	0.0	11.68
33	---	---	---	---	0.0	0.40	2.87	0.49	2.15	0.0	0.0	1.05	6.15
34	0.0	0.0	0.0	0.0	0.0	0.40	0.49	0.49	0.0	0.0	0.0	1.05	6.96
1934-35	0.0	0.0	0.10	1.31	1.90	1.91	3.67	0.74	2.32	1.56	0.0	0.0	13.51
36	0.0	0.0	0.0	0.0	0.0	1.38	0.92	1.44	5.83	0.75	0.93	0.0	11.25
37	0.0	0.0	0.0	0.0	1.70	0.0	4.94	4.15	2.11	4.50	1.02	0.0	18.42
38	0.0	0.80	0.0	0.0	0.0	0.0	3.40	1.34	5.46	4.40	1.11	0.0	16.51
39	0.0	0.0	1.07	0.08	0.22	1.16	1.93	0.80	0.95	0.09	0.0	0.0	6.30
1939-40	---	---	---	---	---	---	---	---	---	---	---	---	---
41	0.0	0.0	0.0	0.0	0.25	0.20	5.81	8.38	5.79	5.09	0.30	0.12	0.0
42	0.0	0.0	0.0	0.0	0.72	0.53	3.74	1.56	0.63	3.52	0.78	0.10	0.0
43	---	---	---	---	0.0	0.40	0.56	1.36	5.61	1.95	2.78	0.68	0.0
44	0.0	0.0	0.0	0.0	0.0	0.40	0.56	1.36	5.61	1.95	2.78	0.68	0.0
1944-45	0.0	0.0	0.0	0.0	0.19	2.30	0.98	0.30	2.26	2.12	0.29	0.0	8.44
46	0.0	0.0	0.0	0.0	0.75	0.50	0.24	0.29	1.67	2.42	0.12	0.52	0.0
47	0.0	0.0	0.0	0.0	0.26	3.21	2.06	0.35	0.82	1.01	0.28	0.16	8.10
48	0.0	0.0	0.0	0.0	0.22	0.15	0.62	0.0	1.30	2.63	2.27	0.50	0.0
49	0.0	0.0	0.0	0.0	0.0	0.0	2.17	0.77	1.21	3.52	0.61	0.0	8.28
1949-50	0.0	0.0	0.0	0.0	0.0	1.09	2.19	2.31	1.68	1.27	0.96	0.0	9.50
51	0.23	0.0	0.0	1.18	0.94	1.19	1.91	1.22	0.12	0.79	0.12	0.0	7.70
52	0.0	0.0	0.0	0.30	1.63	2.98	4.25	0.45	3.43	0.0	0.0	0.0	13.04
53	0.0	0.0	0.0	0.0	1.25	3.36	0.75	0.41	1.44	1.28	0.03	0.0	7.24
54	0.0	0.0	0.0	0.0	0.0	3.28	1.29	2.92	0.43	0.0	0.0	0.0	10.01

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT ESTERO

County: San Luis Obispo
 Date established: 1929
 Elevation: 20 feet, U.S.G.S. datum

Station number on Plate 3: 3-058

Latitude: $35^{\circ} - 24.7'$ Longitude: $120^{\circ} - 52.3'$

Record obtained from: Standard Oil Company

In Inches

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total			
1929-30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.98	2.61	2.18	0.62	1.43	0.0	9.82	
31	0.0	Tr	0.02	1.86	0.06	2.41	7.77	1.85	4.92	1.12	0.61	0.64	0.42	0.65	10.30	
32	0.0	0.0	0.14	0.0	0.25	1.085	5.90	5.90	3.72	3.23	0.40	0.19	0.31	0.0	18.17	
33	0.0	0.0	0.0	0.09	0.25	0.0	0.48	0.0	4.54	0.03	3.33	0.0	0.10	0.55	1.13	10.93
34	0.0	0.0	0.0	0.48	0.0	0.48	0.48	0.48	4.54	0.03	3.33	0.0	0.29	1.46	10.13	
1934-35	0.0	0.0	0.19	1.76	3.52	2.77	5.35	5.35	5.35	0.67	2.72	4.01	0.07	0.0	21.06	
36	0.0	1.14	1.14	0.52	1.40	1.78	3.11	8.15	1.06	1.15	1.06	1.15	0.27	0.26	19.98	
37	0.28	0.0	0.0	1.00	0.0	6.31	3.80	5.34	5.34	4.20	0.37	0.0	0.12	0.12	21.42	
38	0.0	0.0	0.0	0.19	0.47	3.72	2.86	6.09	6.09	5.50	0.70	0.02	0.0	0.0	19.55	
39	0.0	0.05	0.66	0.44	0.44	0.81	2.89	2.89	2.89	2.27	1.59	0.16	0.28	0.0	9.56	
1939-40	0.05	0.0	0.26	1.03	0.60	1.18	8.60	7.19	7.19	7.16	7.16	0.39	0.06	0.0	21.14	
41	0.02	0.0	0.0	0.66	0.21	5.40	5.45	8.76	8.76	8.76	3.83	0.25	0.02	0.02	21.86	
42	0.0	0.03	0.0	0.58	1.27	9.37	1.97	1.97	1.27	2.22	3.19	0.45	0.0	0.0	20.30	
43	0.0	0.0	0.0	0.92	1.03	2.49	6.50	6.50	1.64	7.03	0.93	0.0	0.0	0.0	20.54	
44	0.0	0.0	0.0	0.88	0.29	3.91	1.44	6.33	6.33	0.96	1.44	0.17	0.0	0.0	15.42	
1944-45	0.0	0.0	0.0	0.06	3.65	1.85	0.46	3.24	3.24	3.95	0.21	0.19	0.11	0.11	13.72	
46	0.0	0.28	0.02	1.22	0.84	3.37	0.97	1.90	2.95	0.11	0.28	0.0	0.0	0.0	11.94	
47	0.0	0.0	0.0	0.41	5.25	2.88	0.38	1.39	2.12	0.35	0.58	0.0	0.0	0.0	13.36	
48	0.0	0.0	0.06	1.25	0.17	2.28	0.0	1.60	4.96	2.38	0.72	0.0	0.0	0.0	13.42	
49	0.0	0.0	0.0	0.23	0.07	2.54	1.30	2.23	3.02	3.02	0.08	0.52	0.0	0.0	9.99	
1949-50	0.0	0.0	0.0	0.0	0.96	3.81	3.34	3.83	1.29	0.05	0.18	0.0	0.0	0.0	13.46	
51	0.59	0.0	0.0	1.36	2.09	2.31	2.42	2.30	0.32	1.37	0.20	0.0	0.0	0.0	12.96	
52	0.0	0.0	0.0	1.28	2.01	5.86	6.62	0.54	6.59	1.90	0.0	0.06	0.06	0.06	24.86	
53	0.0	0.0	0.0	0.0	2.89	5.39	1.65	0.0	0.78	2.10	0.20	0.0	0.0	0.0	13.01	
54	0.0	0.0	0.0	3.12	0.20	4.56	2.39	4.97	1.02	1.02	0.0	0.0	0.0	0.0	16.26	

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT EUREKA RANCH

County: San Luis Obispo
 Date established: 1952
 Elevation: 850 feet, U.S.G.S. datum
 Station number on Plate 3: SLO-24
 Latitude: 35°-29.8'
 Longitude: 120°-38.6'
 Record obtained from: Eureka Ranch

In Inches

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1952-53	0.0	0.0	0.0	0.0	1.95	5.99	1.65	0.0	1.38	1.98	0.0	0.0	12.93
54	0.0	0.0	0.0	0.0	2.01	0.07	4.97	2.74	0.00	0.00	0.00	0.00	12.93

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT GERST RANCH

County: San Luis Obispo
 Date established: 1925
 Elevation: 1,500 feet, U.S.G.S. datum

Station number on Plate 3: SLO-15
 Latitude: $35^{\circ}40.1'$
 Longitude: $120^{\circ}51.6'$
 Record obtained from: M. E. Gerst

In Inches

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1925-26	0.0	0.0	0.0	0.0	0.0	2.75	3.63	7.87	0.25	7.13	0.0	0.0	21.63
27	0.0	0.0	0.25	9.04	0.75	2.23	9.00	2.26	1.28	0.0	0.0	0.0	24.81
28	0.0	0.0	0.44	2.72	2.16	0.58	3.59	3.97	0.50	0.13	0.0	0.0	14.09
29	0.0	0.0	0.15	2.51	4.07	1.29	3.38	2.01	1.00	0.0	0.93	0.0	15.34
1929-30	0.0	0.0	0.0	0.0	0.0	0.29	5.02	3.30	3.48	0.78	0.74	0.06	13.67
31	0.0	0.0	0.05	0.0	2.25	0.0	5.38	1.93	0.54	0.95	0.84	1.04	12.98
32	0.0	0.0	0.0	0.0	2.83	1.32	5.82	4.86	0.69	0.43	0.18	0.0	28.03
33	0.0	0.0	0.0	0.15	0.65	1.22	7.36	0.13	1.32	0.17	0.67	0.83	12.50
34	0.0	0.0	0.0	0.87	0.0	9.71	1.93	5.71	0.02	0.05	0.13	0.53	18.95
1934-35	0.0	0.0	0.0	1.99	2.47	2.59	8.12	0.60	3.55	4.36	0.0	0.0	23.68
35	0.32	0.52	0.05	0.46	1.58	2.11	2.21	13.23	1.32	1.56	0.06	0.19	23.91
37	0.0	0.0	0.0	1.65	0.0	6.49	5.36	7.03	6.71	0.24	0.0	0.0	27.48
38	0.0	0.0	0.0	0.08	0.81	9.48	5.38	16.59	9.15	1.31	0.16	0.0	42.96
39	0.0	0.0	0.86	0.52	0.37	2.16	4.20	1.34	2.45	0.16	0.0	0.0	12.06
1939-40	0.0	0.0	0.05	0.98	0.64	2.02	8.90	9.96	1.42	2.00	0.0	0.0	25.97
41	0.0	0.0	0.0	0.0	0.0	10.85	6.81	12.98	11.76	5.22	0.69	0.0	48.31
42	0.0	0.0	0.0	1.05	1.18	11.50	3.49	1.36	2.91	5.01	0.32	0.0	26.82
43	0.0	0.0	0.0	0.65	2.36	1.74	11.55	2.98	6.08	0.71	0.0	0.0	26.07
44	0.0	0.0	0.0	0.16	0.20	5.00	1.71	9.31	3.01	1.20	0.32	0.0	20.91

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT GERST RANCH

In Inches
(continued)

Season	: July	: Aug.	: Sept.	: Oct.	: Nov.	: Dec.	: Jan.	: Feb.	: Mar.	: Apr.	: May	: June	: Total
1944-45	0.0	0.0	0.0	0.30	3.73	1.68	0.0	8.21	4.21	0.16	0.12	0.0	18.51
46	0.0	0.18	0.0	2.36	0.79	7.97	0.65	2.18	5.63	0.17	0.0	0.0	19.93
47	0.0	0.0	0.0	0.20	6.88	2.07	0.70	2.13	2.30	0.21	0.25	0.0	14.71
48	0.0	0.0	0.0	0.35	0.27	0.83	0.0	2.28	5.44	5.53	0.98	0.0	15.65
49	0.0	0.0	0.0	0.22	Tr	4.78	1.62	3.20	6.68	0.50	0.31	0.0	17.31
1949-50	0.0	0.0	0.0	0.0	0.80	3.00	4.21	3.59	2.06	1.31	0.36	0.0	15.43
51	0.0	0.0	0.0	2.32	3.18	3.42	2.75	2.03	0.73	1.21	0.56	0.0	16.20
52	0.0	0.0	0.0	0.60	4.14	6.66	10.33	0.58	6.84	1.45	0.25	0.0	30.75
53	0.08	0.0	0.0	0.0	3.05	9.13	2.42	0.0	1.77	2.23	0.08	0.0	18.76
54	0.0	0.0	0.0	2.97	0.0	4.83	4.33	3.70	1.13	0.08	0.08	0.0	17.04

TABLE C-2 (continued)

RECORD OF PRECIPITATION AT HARRIS BRIDGE

County: San Luis Obispo
 Date established: 1932
 Elevation: 200 feet, U.S.G.S. datum

Station number on Plate 3: SLO-16
 Latitude: 35°-08.3'
 Longitude: 120°-22.7'
 Record obtained from: United States Bureau of Reclamation

In Inches

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1932-33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
1934-35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.00
36	0.0	1.32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.32
37	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.30
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
1939-40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
1944-45	0.0	0.0	0.0	0.0	0.53	3.02	2.00	1.38	2.67	4.35	0.0	0.0	16.95
46	0.0	0.0	0.06	0.06	0.69	0.98	2.47	0.45	1.88	3.98	0.13	0.0	14.79
47	0.47	0.0	0.0	0.0	0.69	5.07	2.13	0.14	0.47	2.73	0.39	0.32	12.77
48	0.0	0.0	0.0	0.0	0.98	0.0	1.23	0.0	1.88	4.19	2.74	1.03	12.05

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT HEARST CASTLE

County: San Luis Obispo
 Date established: 1946
 Elevation: 1,800 feet, U.S.G.S. datum

Station number on Plate 3: SLO-17
 Latitude: $35^{\circ} 11.2'$
 Longitude: $121^{\circ} 09.9'$
 Record obtained from: Hearst Castle

In Inches

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1946-47	0.0	0.0	0.0	0.0	3.38	0.35	2.56	0.30	2.58	7.13	7.44	1.40	0.0
48	0.0	0.0	0.0	0.0	0.82	0.0	5.11	3.50	4.40	7.56	0.0	0.70	0.0
49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.00
1949-50	0.0	0.0	0.0	0.0	0.06	2.10	4.15	5.37	5.35	3.73	1.20	0.20	0.0
51	0.70	0.0	0.0	0.0	2.93	6.90	6.46	4.51	2.66	1.02	0.70	0.68	22.16
52	0.0	0.0	0.0	0.0	1.70	4.18	15.91	10.42	1.64	7.83	2.17	0.24	0.0
53	0.0	0.0	0.0	0.0	0.0	2.89	14.23	8.45	0.05	2.98	4.83	0.11	0.0
54	0.0	0.0	0.0	0.0	5.38	0.82	6.87	4.54	7.71	2.94	0.42	0.25	26.56
													33.54
													28.93

C-49

TABLE C-2 (continued)

RECORD OF PRECIPITATION AT HEARST RANCH

County: San Luis Obispo
 Date established: 1937
 Elevation: 150 feet, U.S.G.S. datum

Station number on Plate 3: SLO-18
 Latitude: 35°-39.5'
 Longitude: 121°-11.2'
 Record obtained from: Hearst Ranch

In Inches

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1937-38	0.0	0.0	0.0	0.24	1.01	6.12	7.15	7.57	7.85	0.96	0.0	0.0	30.90
39	0.0	0.0	0.0	0.27	0.66	0.65	1.80	2.77	2.68	3.11	0.13	0.51	12.58
1939-40	0.0	0.0	0.0	0.26	0.87	0.45	2.63	14.93	10.04	2.25	0.62	0.30	32.37
41	0.0	0.0	0.0	0.0	0.93	0.38	9.03	9.42	12.31	8.49	5.93	0.30	46.79
42	0.0	0.0	0.0	0.0	0.42	4.58	9.60	3.90	2.77	3.00	3.45	5.62	25.91
43	0.0	0.0	0.0	0.0	1.07	2.49	4.19	10.15	3.32	9.20	1.20	0.0	31.62
44	0.0	0.0	0.0	0.0	1.07	3.36	5.36	3.02	8.41	0.69	1.77	0.63	21.41
1944-45	0.0	0.0	0.0	0.35	4.88	2.81	1.25	5.70	5.68	0.23	0.43	0.0	21.37
46	0.0	0.0	0.10	2.20	1.37	5.95	1.09	2.76	3.47	0.0	0.38	0.0	17.32
47	0.0	0.0	0.0	0.46	6.38	3.08	0.37	2.19	2.05	0.47	0.68	0.26	15.94
48	0.0	0.0	0.15	2.72	0.53	2.70	0.22	1.58	5.47	5.41	0.92	0.0	19.70
49	0.0	0.0	0.0	0.49	0.0	3.66	2.45	2.87	6.26	0.0	0.44	0.0	16.17
1949-50	0.0	0.0	0.0	0.05	1.23	4.15	4.40	5.00	3.08	0.90	0.75	0.0	18.96
51	0.73	0.0	0.0	2.11	4.89	4.82	2.95	1.97	1.40	1.60	0.40	0.0	20.87
52	0.0	0.0	0.0	1.25	3.25	10.40	9.00	1.15	5.86	1.65	0.20	0.0	32.76
53	0.0	0.0	0.0	0.0	3.35	9.25	5.70	0.0	2.20	3.70	0.30	0.0	24.50
54	0.0	0.0	0.0	4.82	0.40	6.53	3.85	7.05	2.40	0.40	0.20	0.0	25.65

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT HIDDEN VALLEY RANCH

County: San Luis Obispo
 Date established: 1952
 Elevation: 910 feet, U.S.G.S. datum

Station number on Plate 3: SLO-49
 Latitude: $35^{\circ} - 32.8'$
 Longitude: $120^{\circ} - 46.1'$
 Record obtained from: Hidden Valley Ranch

In Inches

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1952-53	0.0	0.0	0.0	0.0	4.85	10.10	4.45	0.0	3.00	3.70	0.0	0.0	26.10
54	0.0	0.0	0.0	0.0	4.75	0.35	8.25	6.50	9.60	3.30	0.0	0.0	32.75

RECORD OF MONTHLY PRECIPITATION AT HIDDEN VALLEY RANCH

County: San Luis Obispo
 Date established: 1952
 Elevation: 1,020 feet, U.S.G.S. datum

Station number on Plate 3: SLO-50
 Latitude: $35^{\circ} - 32.8'$
 Longitude: $120^{\circ} - 45.6'$
 Record obtained from: Hidden Valley Ranch

In Inches

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1952-53	0.0	0.0	0.0	0.0	3.83	7.30	3.25	0.0	1.99	2.85	0.0	0.0	19.22
54	0.0	0.0	0.0	0.0	2.91	0.16	4.38	4.10	6.14	2.25	0.0	0.0	19.94

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT HI MOUNTAIN LOOKOUT

County: San Luis Obispo
 Date established: 1943
 Elevation: 3,180 feet, U.S.G.S. datum

Station number on Plate 3: SLO-19
 Latitude: 35°-15.6'
 Longitude: 120°-25.5'
 Record obtained from: United States Bureau
 of Reclamation

In Inches

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1943-44	0.0	0.0	0.0	1.22	0.14	4.74	1.27	7.23	3.36	2.33	0.49	0.02	21.12

RECORD OF MONTHLY PRECIPITATION AT HUASNA

County: San Luis Obispo
 Date established: 1929
 Elevation: 770 feet, U.S.G.S. datum

Station number on Plate 3: 3-063

Latitude: 35°-07.1'

Longitude: 120°-23.3'

Record obtained from: San Luis Obispo County
 Farm Advisor

In Inches

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1929-30	0.0	0.0	0.0	0.0	0.0	0.16	4.86	2.12	4.51	0.63	0.56	0.20	13.04
31	0.0	0.0	0.47	0.0	1.85	0.0	4.93	1.33	0.45	0.75	1.34	0.06	11.18
32	0.15	0.07	0.07	0.0	3.70	9.85	3.02	5.51	0.25	0.64	0.51	0.0	23.70
33	---	---	---	---	---	---	---	---	---	---	---	---	---
34	0.0	0.0	0.0	0.70	0.0	5.85	0.06	3.43	0.36	0.0	0.25	1.17	11.82
1934-35	0.0	0.0	0.0	3.39	3.73	2.43	5.83	1.56	4.22	4.93	0.0	0.0	26.11
36	0.0	1.22	0.0	1.01	1.35	2.00	2.00	12.94	2.29	1.28	0.10	0.0	24.25
37	0.0	0.0	0.15	2.58	0.0	6.54	5.54	9.36	6.11	0.33	0.0	0.0	30.51
38	0.0	0.0	0.0	0.18	0.80	6.12	4.89	10.25	6.41	3.00	0.10	0.0	31.75
39	0.0	0.0	0.63	0.21	0.30	1.57	4.13	3.16	2.61	0.25	0.0	0.0	12.86
1939-40	0.0	0.0	0.50	0.99	1.09	2.29	8.27	5.10	2.08	0.86	0.0	0.0	21.18
41	0.0	0.0	0.0	0.60	0.20	7.24	5.69	11.93	7.83	4.05	0.19	0.0	37.63
42	0.03	0.05	0.0	1.00	0.37	9.73	1.66	1.72	2.15	4.27	0.54	0.0	19.52
43	0.0	11	0.0	0.40	1.81	2.94	12.48	2.09	7.04	1.38	0.0	0.0	28.14
44	0.0	0.0	0.0	1.20	0.46	5.04	2.02	6.71	1.67	3.00	0.25	0.0	20.35
1944-45	0.0	0.0	0.0	0.56	4.76	1.78	0.68	5.17	5.69	0.15	0.10	0.05	18.94
46	0.0	0.05	1.44	0.73	4.14	0.57	2.56	6.16	0.13	0.15	0.0	0.0	15.93
47	0.0	0.0	0.48	6.64	3.04	0.90	0.60	1.95	0.32	0.18	0.08	0.0	13.59
48	0.0	0.0	0.78	0.10	1.15	0.07	2.54	4.81	3.33	0.13	0.0	0.0	12.91
49	0.0	0.0	0.23	0.0	3.90	1.79	3.24	4.73	0.09	0.94	0.03	0.03	14.95
1949-50	0.0	0.0	0.0	0.0	2.67	2.92	4.57	3.60	2.43	1.16	0.0	0.0	17.35
51	0.65	0.02	2.54	5.62	1.81	2.12	1.19	1.24	1.73	0.08	0.0	0.0	17.00
52	0.0	0.09	0.86	2.36	7.51	7.55	1.37	6.79	1.28	0.04	0.04	0.0	27.89
53	0.0	0.0	0.16	3.28	7.27	2.71	0.0	1.60	2.34	0.0	0.0	0.0	17.36
54	0.0	0.0	2.35	0.42	4.11	2.82	5.44	1.01	0.23	0.0	0.0	0.0	16.38

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT JACKSON AND REINHERT, CAMP NO. 6

County: San Luis Obispo

Date established: 1939

Elevation: 1,000 feet, U.S.G.S. datum

Station number on Plate 3: SLO-46

Latitude: 35°-43.0'

Longitude: 120°-34.1'

Record obtained from:
Ranch Headquarters
Paso Robles

In Inches

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1939-40	0.0	0.0	0.0	2.50	0.0	0.0	3.57	4.84	1.76	0.35	0.0	0.0	12.95
41	0.0	0.0	0.0	0.14	0.14	6.06	2.73	7.02	4.60	2.47	0.05	0.0	24.21
42	0.0	0.0	0.0	0.35	0.38	1.50	1.32	0.72	2.37	2.71	0.0	0.21	12.38
43	0.0	0.0	0.0	0.46	0.24	1.53	5.24	0.90	3.57	0.79	0.11	0.0	12.37
44	0.0	0.0	0.0	0.0	0.0	3.42	2.05	6.07	0.23	0.72	0.18	0.0	12.65
1944-45	0.0	0.0	0.0	0.27	0.34	0.70	1.26	1.99	1.80	0.33	0.0	0.0	8.19
46	0.0	0.0	0.0	0.64	0.44	3.32	0.49	1.61	2.49	0.29	0.0	0.0	9.28
47	0.12	0.0	0.13	0.11	2.90	3.04	0.44	0.73	0.78	0.07	0.32	0.0	6.64
48	0.0	0.0	0.0	0.34	0.25	0.44	0.0	1.43	2.52	2.45	0.32	0.0	7.65
49	0.0	0.0	0.0	0.11	0.0	1.94	0.86	1.55	3.51	0.35	0.86	0.0	9.18
1949-50	0.0	0.0	0.0	0.0	0.60	2.44	2.31	1.40	1.30	0.0	0.0	0.0	8.05
51	0.85	0.0	0.0	0.61	0.72	0.95	1.84	0.86	0.58	0.84	0.0	0.0	7.44
52	0.0	0.0	0.0	0.60	1.39	2.84	4.71	0.32	3.70	0.0	0.0	0.0	13.56
53	0.0	0.0	0.0	0.0	1.54	3.54	1.00	0.0	0.40	1.15	0.10	0.0	7.73
54	0.0	0.0	0.0	0.0	2.16	0.09	2.98	2.10	2.46	0.31	0.0	0.0	10.10

C-24

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT JACKSON AND REINHERT, CAMP NO. 8

County: San Luis Obispo
 Date established: 1939
 Elevation: 1,100 feet, U.S.G.S. datum

Station number on Plate 3: SL0-20
 Latitude: 35°-33.1'
 Longitude: 120°-29.3'
 Record obtained from: San Luis Obispo
 County Farm Advisor

In Inches

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1939-40	-	-	-	-	-	-	-	-	-	-	-	-	12.91
41	-	-	-	-	-	-	-	-	-	-	-	-	23.74
42	-	-	-	-	-	-	-	-	-	-	-	-	12.32
43	-	-	-	-	-	-	-	-	-	-	-	-	-
44	-	-	-	-	-	-	-	-	-	-	-	-	12.24
C	1944-45	-	-	-	-	-	-	-	-	-	-	-	9.98
46	-	-	-	-	-	-	-	-	-	-	-	-	9.96
47	-	-	-	-	-	-	-	-	-	-	-	-	8.40
48	-	-	-	-	-	-	-	-	-	-	-	-	8.39
49	-	-	-	-	-	-	-	-	-	-	-	-	8.66
1949-50	-	-	-	-	-	-	-	-	-	-	-	-	11.23
51	-	-	-	-	-	-	-	-	-	-	-	-	-
52	0.0	0.0	0.0	0.43	2.03	2.80	4.96	0.36	4.94	1.00	0.0	0.0	16.52
53	0.0	0.0	0.0	0.0	1.35	3.66	0.55	0.72	1.19	0.19	0.0	0.0	7.66
54	0.0	0.0	0.0	0.0	1.72	0.07	4.12	1.81	2.92	0.43	0.0	0.0	11.07

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT JACKSON AND REINHART, CAMP NO. 11

County: San Luis Obispo
 Date established: 1939
 Elevation: 1,115 feet, U.S.G.S. datum

Station number on Plate 3: SLO-48

Latitude: 35°-41.8'

Longitude: 120°-29.6'

Record obtained from: Ranch Headquarters
 Paso Robles

In Inches

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1939-40	{ - - - - -	- - - - -	- - - - -	2.00	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	12.53
41	0.0	0.0	0.0	0.0	0.37	1.02	4.48	3.46	6.83	4.76	2.02	0.0	0.0
42	0.0	0.0	0.0	0.0	0.69	0.65	4.86	1.55	0.39	1.49	1.20	0.0	22.93
43	0.0	0.0	0.0	0.0	0.34	0.34	1.60	4.65	1.61	2.91	0.0	0.0	10.74
44	---	---	---	---	---	---	2.55	1.06	---	---	---	---	11.45
45	---	---	---	---	---	---	---	---	---	---	---	---	14.04
46	0.0	0.0	0.0	0.0	0.56	0.38	2.60	0.21	1.65	3.04	0.21	0.0	0.0
47	0.17	0.0	0.32	0.14	2.65	2.30	0.42	1.13	0.62	0.10	0.0	0.0	8.65
48	0.0	0.0	0.0	0.49	0.15	0.60	0.0	1.42	2.81	1.40	0.51	0.0	7.85
49	0.0	0.0	0.0	0.10	0.0	1.90	0.82	1.07	2.73	0.37	0.77	0.0	7.38
50	0.0	0.0	0.0	0.0	0.93	2.52	2.04	1.37	1.27	1.15	0.0	0.0	9.28
51	0.0	0.0	0.0	0.58	0.34	0.89	1.79	1.35	0.65	0.74	0.0	0.0	6.34
52	0.0	0.0	0.0	0.68	1.70	2.83	3.85	0.31	3.81	0.0	0.0	0.0	13.18
53	0.0	0.0	0.0	0.0	1.35	2.90	0.93	0.0	0.61	1.25	0.15	0.0	7.19
54	0.0	0.0	0.0	0.0	1.92	0.22	3.47	1.37	3.76	0.41	0.0	0.0	11.15

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TABLE C-2 (continued)

County: San Luis Obispo
 Date established: 1939
 Elevation: 700 feet, U.S.G.S. datum

RECORD OF MONTHLY PRECIPITATION AT JACKSON AND REINHERT PLANT

Station number on Plate 3: SLO-54
 Latitude: $35^{\circ} - 37.9'$
 Longitude: $120^{\circ} - 40.9'$
 Record obtained from: Ranch Headquarters
 Paso Robles

In Inches

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1939-40	{	-	-	-	3.36	-	-	-	-	-	-	-	5.58
41	0.0	0.0	0.0	0.19	0.17	0.98	4.80	8.93	5.77	1.21	0.56	0.0	0.0
42	0.0	0.0	0.0	1.34	0.75	5.33	2.76	0.73	2.05	3.48	0.12	0.0	30.92
43	0.0	0.0	0.0	0.62	1.10	1.59	9.00	1.73	3.72	0.75	0.0	0.0	16.56
44	{	-	-	-	2.69	-	-	-	0.0	3.24	1.35	6.92	0.36
											0.78	0.19	0.0
1944-45	0.0	0.0	0.0	0.29	3.05	1.30	1.66	3.79	3.09	0.25	0.0	0.0	13.43
46	0.0	0.0	0.0	1.06	0.54	4.21	0.35	1.91	3.42	0.0	0.72	0.0	12.21
47	0.23	0.0	0.11	0.13	5.27	2.48	0.59	1.07	1.22	0.13	0.29	0.0	11.52
48	0.0	0.0	0.0	0.48	0.24	0.64	0.0	1.88	3.69	3.80	0.0	0.0	10.73
49	0.0	0.0	0.0	0.11	0.0	3.15	1.12	1.98	3.88	0.38	0.42	0.0	11.04
1949-50	0.0	0.0	0.0	0.0	0.83	2.47	2.11	2.56	1.53	0.16	0.86	0.0	10.52
51	0.66	0.0	0.0	1.14	0.88	1.30	2.29	0.63	0.61	1.16	0.0	0.0	8.67
52	0.0	0.0	0.0	0.56	2.30	5.05	5.63	0.42	4.32	1.71	0.0	0.0	19.99
53	0.0	0.0	0.15	0.0	2.03	5.02	1.58	0.0	0.95	1.62	0.53	0.0	11.88
54	0.0	0.0	0.0	0.0	2.41	0.05	3.98	1.97	3.34	0.70	0.10	0.05	12.60

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT LA PANZA

County: San Luis Obispo
 Date established: 1939
 Elevation: 1,900 feet, U.S.G.S. datum

Station number on Plate 3: 3-064

Latitude: 35°-21°-7'

Longitude: 120°-13.0'

Record obtained from: United States Bureau
of Reclamation

In Inches

Season :	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1939-40	0.0	0.0	0.0	0.0	0.0	0.0	4.39	3.11	3.28	2.60	2.62	0.0	10.92
41	0.0	0.0	0.0	0.0	0.0	0.0	6.37	2.62	3.77	7.19	3.75	0.0	29.10
42	0.0	0.05	0.0	0.0	0.0	0.0	0.42	4.72	1.21	0.77	1.93	2.59	0.17
43	0.0	0.04	0.0	0.0	0.0	0.0	0.26	1.46	9.43	1.40	2.86	4.20	12.85
44	0.0	0.0	0.0	0.0	0.0	0.16	0.43	2.34	1.15	7.63	0.40	1.09	17.45
1944-45	0.0	0.05	0.0	0.05	0.05	2.54	1.09	0.68	4.26	3.01	0.07	0.0	0.0
													11.75

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT LINN RANCH

County: San Luis Obispo
 Date established: 1925
 Elevation: 800 feet, U.S.G.S. datum

Station number on Plate 3: 3-49
 Latitude: $35^{\circ}41.2'$
 Longitude: $120^{\circ}42.9'$
 Record obtained from: O. C. Linn

In Inches

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1925-26	0.0	0.0	0.0	0.0	0.0	2.50	2.52	4.25	0.12	2.90	0.0	0.0	12.29
27	0.0	0.0	0.0	7.00	0.52	1.54	6.50	1.25	0.75	0.0	0.0	0.0	17.56
28	0.0	0.0	0.0	1.18	0.98	0.0	3.50	1.76	0.25	0.0	0.0	0.0	9.07
29	0.0	0.0	0.0	1.50	2.20	1.46	1.97	1.30	0.76	0.0	0.60	0.0	9.79
1929-30	0.0	0.0	0.04	0.0	0.0	0.0	4.11	1.68	2.83	0.46	0.80	0.0	9.92
31	0.0	0.0	0.12	0.0	1.20	0.04	4.50	2.29	0.11	0.87	1.75	0.85	11.73
32	0.0	0.0	0.0	0.0	2.26	7.70	3.64	3.39	0.41	0.22	0.82	0.0	18.44
33	0.0	0.0	0.0	0.15	0.12	1.16	6.44	0.11	0.71	0.04	0.30	0.67	9.70
34	0.0	0.21	0.0	1.02	0.0	5.41	1.85	3.44	0.0	0.0	0.20	0.52	12.65
1934-35	0.0	0.0	1.36	2.22	2.26	5.71	0.64	3.13	3.19	0.0	0.0	0.0	18.51
36	0.0	0.10	0.0	0.16	1.59	1.33	0.73	8.93	0.80	1.17	0.0	0.0	14.81
37	0.24	0.0	0.0	1.75	0.0	5.57	4.39	3.93	5.32	0.18	0.0	0.0	21.38
38	0.0	0.0	0.0	0.09	0.41	5.32	3.46	10.98	4.81	1.08	0.0	0.0	26.15
39	0.0	0.0	0.40	0.16	0.30	1.14	2.85	1.03	1.78	0.09	0.0	0.0	7.75
1939-40	0.0	0.0	0.54	0.56	0.83	1.03	5.20	6.60	1.37	1.22	0.0	0.0	17.35
41	0.0	0.0	0.0	0.24	0.28	8.94	4.65	9.71	7.01	2.76	0.31	0.0	33.90
42	0.0	0.0	1.39	0.79	5.15	2.64	0.76	2.17	3.97	0.26	0.0	0.0	17.13
43	0.0	0.0	0.60	0.50	1.38	8.64	1.98	2.86	0.62	0.0	0.0	0.0	16.58
44	0.0	0.0	0.47	0.22	3.95	1.51	8.05	0.61	0.78	0.18	0.0	0.0	15.77

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT LINN RANCH

In Inches
(continued)

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1944-45	0.0	0.0	0.0	0.12	2.23	1.32	0.67	4.67	2.84	0.27	0.0	0.0	12.12
46	0.0	0.11	0.0	1.28	0.65	4.36	0.50	2.02	3.84	0.01	0.77	0.0	13.54
47	0.20	0.0	0.0	0.07	4.51	2.31	0.56	1.20	1.00	0.20	0.20	0.0	10.25
48	0.0	0.0	0.0	0.30	0.16	0.82	0.0	1.73	3.94	3.17	0.34	0.0	10.46
49	0.0	0.0	0.0	0.04	0.0	3.58	0.82	1.79	4.73	0.23	0.39	0.0	11.58
1949-50	0.0	0.0	0.0	0.0	0.0	0.94	2.34	2.95	2.17	2.42	0.0	0.0	10.82
51	0.0	0.0	0.0	1.41	0.80	1.73	2.22	0.65	0.30	0.93	0.37	0.0	8.41
52	0.0	0.0	0.0	0.31	0.37	2.59	3.79	6.65	0.41	5.86	1.69	0.05	21.52
53	0.01	0.0	0.0	0.0	0.0	1.82	5.71	1.02	0.0	0.78	1.52	1.01	11.87
54	0.0	0.0	0.0	0.0	2.68	0.04	3.94	2.60	4.29	0.53	0.10	0.0	14.13

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT MONTILLAN CANYON

County: San Luis Obispo
 Date established: 1940
 Elevation: 1,650 feet, U.S.G.S. datum

Station number on Plate 3: SLO-40
 Latitude: 35°-43.0'
 Longitude: 120°-22.4'
 Record obtained from: San Luis Obispo
 County Farm Advisor
 (Taylor Ranch)

In Inches

Season :	July :	Aug. :	Sept. :	Oct. :	Nov. :	Dec. :	Jan. :	Feb. :	Mar. :	Apr. :	May :	June :	Total
1940-41	0.0	0.0	0.0	0.50	0.09	5.93	3.35	7.10	4.38	2.69	0.0	0.0	24.04
42	0.0	0.0	0.0	0.91	0.80	5.15	1.76	0.81	1.18	2.50	0.38	0.0	13.49
43	0.0	0.0	0.0	0.38	0.85	2.02	4.97	1.78	4.47	1.10	0.30	0.0	15.87
44	0.0	0.0	0.0	0.86	0.21	3.07	1.91	4.86	0.37	0.47	0.39	0.22	12.36
1944-45	0.0	0.0	0.0	0.15	3.83	0.86	0.44	3.49	2.34	0.19	0.0	0.0	11.30
46	0.0	0.0	0.0	0.84	0.42	2.35	0.50	1.88	3.21	0.72	0.0	0.0	9.92
47	0.0	0.0	0.0	0.35	3.05	2.36	0.48	0.70	1.07	0.33	0.28	0.0	8.62
48	0.0	0.13	0.0	0.84	0.34	0.51	0.03	2.03	3.38	2.61	0.80	0.0	10.67
49	0.0	0.0	0.0	0.0	0.0	2.71	0.95	1.66	2.73	0.60	0.55	0.0	9.20
1949-50	0.0	0.0	0.0	0.0	1.53	2.43	2.15	2.04	1.88	1.99	0.0	0.0	12.02
51	0.47	0.0	0.0	1.05	0.67	0.77	2.28	1.13	0.38	0.69	0.09	0.0	7.53
52	0.0	0.0	0.0	0.24	1.43	3.25	4.65	0.57	3.70	0.85	0.0	0.0	14.69
53	0.0	0.0	0.0	0.15	1.59	3.13	0.91	0.0	0.43	1.54	0.06	0.0	7.81
54	0.0	0.0	0.0	0.0	1.68	0.0	3.76	1.31	1.87	0.53	0.10	0.0	9.25

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT MORRO BAY HIGHWAY MAINTENANCE STATION

County: San Luis Obispo
 Date established: 1947
 Elevation: 100 feet, U.S.G.S. datum

Station number on Plate 3: SLO-22
 Latitude: 35°-22.0'
 Longitude: 120°-50.4'
 Record obtained from:
 California Division
 of Highways
 San Luis Obispo

In Inches

Season	July	Aug.	Sent.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1947-48	0.0	0.0	0.0	0.0	0.35	0.08	1.62	0.08	2.05	4.69	2.21	0.86	0.04
49	0.0	0.0	0.0	0.0	0.35	0.08	3.35	1.28	2.69	3.66	0.09	0.41	0.04
1949-50	0.0	0.0	0.0	0.0	0.01	0.88	2.51	3.32	2.37	1.59	1.21	0.21	0.0
50	0.0	0.0	0.0	1.35	1.92	2.22	2.32	1.49	1.04	1.20	0.14	0.0	12.17
51	0.49	0.0	0.0	0.08	0.87	1.57	4.82	6.84	0.0	7.06	1.53	0.0	22.82
52	0.0	0.0	0.02	0.0	0.0	3.23	4.76	1.66	0.0	0.94	1.92	0.15	0.05
53	0.12	0.02	0.0	0.02	2.94	0.22	4.45	2.25	4.58	0.82	0.10	0.0	12.85
54	0.0	0.0	0.0	0.02	0.02	2.94	0.22	4.45	2.25	4.58	0.82	0.10	15.38

RECORD OF MONTHLY PRECIPITATION AT NIPOMO

County: San Luis Obispo
 Date established: 1920
 Elevation: 330 feet, U.S.G.S. datum

Station number on Plate 3: 3-68
 Latitude: 35°-03.7'
 Longitude: 120°-29.9'
 Record obtained from: Andrew Mehlsschan

In Inches

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total	
1920-21	0.0	0.0	0.0	0.70	1.02	1.90	4.73	3.69	1.69	1.46	0.20	1.24	0.0	12.27
22	0.0	0.0	0.51	0.12	0.05	2.27	4.23	2.30	0.95	0.18	0.25	0.42	0.0	16.45
23	0.0	0.0	0.0	0.54	0.11	0.28	0.31	0.85	0.50	3.45	0.61	0.0	0.09	15.53
24	0.0	0.0	0.42	0.11								0.0	0.0	6.53
1924-25	0.14	0.0	0.0	1.25	0.82	1.87	2.63	2.44	2.13	2.00	2.32	0.17	15.77	
26	0.0	0.0	0.0	0.30	0.20	2.69	1.76	3.84	0.32	2.41	0.08	0.0	0.0	11.60
27	0.0	0.0	0.0	0.64	4.02	0.92	1.85	5.41	1.39	1.50	0.12	0.26	0.0	16.11
28	0.0	0.0	0.0	2.62	1.55	4.01	0.18	3.84	4.12	0.15	0.75	0.0	0.0	17.22
29	0.0	0.0	0.0	0.0	0.0	2.20	3.74	1.63	1.77	1.50	0.81	0.0	0.21	11.86
1929-30	0.0	0.0	0.0	0.0	0.0	0.0	0.17	3.95	1.78	2.63	0.52	0.44	0.0	9.49
31	0.0	0.0	0.30	0.0	1.42	0.0	4.28	1.22	0.47	0.62	1.40	0.07	0.0	9.78
32	0.0	0.25	0.0	0.36	2.95	7.63	2.91	3.43	0.26	0.40	0.18	0.0	0.0	18.37
33	0.0	0.0	0.0	0.0	0.05	1.08	6.38	0.28	1.31	0.08	0.36	1.65	0.0	11.19
34	0.0	0.0	0.0	0.0	0.30	2.69	1.06	3.11	0.0	0.0	0.0	0.90	0.0	8.06
1934-35	0.0	0.0	0.0	1.61	4.46	2.26	5.69	1.34	3.92	3.51	0.0	0.0	0.0	22.79
36	0.0	0.65	0.0	0.70	1.84	1.79	2.21	7.43	1.45	0.0	0.0	0.0	0.0	16.07
37	0.0	0.0	0.0	1.89	0.0	5.05	3.71	6.08	4.15	0.14	0.0	0.0	0.0	21.02
38	0.0	0.0	0.0	0.0	0.41	4.75	2.45	7.67	5.32	1.60	0.03	0.0	0.0	22.23
39	0.0	0.0	0.55	0.15	0.38	1.53	3.16	2.52	2.64	0.41	0.0	0.0	0.0	11.34

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT NIPOMO

In Inches
(continued)

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1939-40	0.0	0.0	0.40	1.19	0.96	1.75	6.53	4.35	1.12	1.59	0.0	0.0	17.89
41	0.0	0.0	0.63	0.23	6.45	5.41	7.25	7.45	3.67	0.0	0.0	0.0	31.09
42	0.0	0.0	0.95	0.30	8.57	1.97	1.16	1.63	3.91	0.37	0.0	0.0	18.86
43	0.0	0.0	0.62	1.24	2.86	6.91	1.40	4.37	0.88	0.0	0.0	0.0	18.28
44	0.0	0.0	0.99	0.30	3.90	1.28	4.82	0.61	1.52	0.15	0.0	0.0	13.57
1944-45	0.0	0.0	0.0	0.0	3.09	1.76	0.24	5.31	3.96	0.10	0.12	0.0	14.58
46	0.0	0.58	0.0	0.59	0.74	3.23	0.49	1.66	3.69	0.20	0.17	0.0	11.35
47	0.0	0.0	0.0	0.40	4.81	2.42	0.22	1.01	1.63	0.39	0.30	0.05	11.23
48	0.0	0.0	0.0	0.93	0.16	1.05	0.05	1.71	4.30	2.45	0.90	0.0	11.55
49	0.0	0.0	0.0	0.10	0.0	2.89	1.45	2.64	3.83	0.09	1.04	0.0	12.09
1949-50	0.0	0.0	0.0	0.10	1.37	4.21	3.15	2.81	1.82	0.70	0.0	0.0	14.16
51	0.55	0.0	0.0	1.42	2.55	1.47	2.26	1.11	0.87	1.22	0.03	0.0	11.48
52	0.0	0.0	0.21	0.55	2.03	6.19	7.15	0.82	5.36	1.11	0.0	0.27	23.59
53	0.0	0.0	0.0	0.0	3.76	5.23	1.97	0.0	0.81	1.88	0.0	0.0	13.65
54	0.0	0.0	0.0	0.0	2.45	0.30	4.66	2.12	4.20	1.05	0.22	0.0	15.00

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT PASO ROBLES (STATE DIV. FORESTRY)

County: San Luis Obispo
 Date established: 1943
 Elevation: 700 feet, U.S.G.S. datum

Station number on Plate 3: 3-068
 Latitude: $35^{\circ} - 35.0'$
 Longitude: $120^{\circ} - 42.0'$
 Record obtained from: State Division of Forestry

In Inches

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1943-44	0.00	0.00	0.00	0.00	0.37	0.10	3.17	0.97	5.20	0.91	0.64	0.15	0.0
1944-45	0.0	0.0	0.0	0.40	3.08	1.20	0.81	4.85	3.30	0.30	0.0	0.01	13.95
46	0.0	0.05	0.0	1.19	0.53	5.13	0.52	2.02	1.42	0.0	0.47	0.0	11.33
47	0.51	0.0	0.0	0.11	0.00	0.00	0.63	1.08	1.25	0.11	0.28	0.0	0.0
48	0.0	0.0	0.13	0.00	0.00	0.00	0.76	0.0	1.81	3.84	3.73	0.50	0.0
49	0.0	0.0	0.0	0.05	0.0	3.05	1.17	2.07	4.24	0.35	0.27	0.0	11.20
1949-50	0.02	0.0	0.0	0.0	0.0	1.42	2.31	2.45	2.30	1.72	1.03	0.0	11.25
51	0.0	0.0	0.0	1.62	0.48	2.06	1.68	0.71	0.53	1.17	0.0	0.0	8.25
52	0.0	0.0	0.30	0.35	2.20	5.33	7.08	0.32	4.31	1.45	0.05	0.0	21.39
53	0.0	0.0	0.0	0.01	1.78	0.00	3.34	0.0	0.96	1.94	0.05	0.0	0.0
54	0.0	0.0	0.0	0.0	1.77	0.0	3.87	2.28	3.54	0.57	0.08	0.05	12.16
1954-55	0.0	0.0	0.0	0.0	1.34	1.51	3.77	1.65	0.45	1.12	0.00	0.00	0.0

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT PERROZI RANCH

County: San Luis Obispo
 Date established: 1951
 Elevation: 470 feet, U.S.G.S. datum

Station number on Plate 3: SLO-25
 Latitude: $35^{\circ} - 15.7'$
 Longitude: $120^{\circ} - 37.2'$
 Record obtained from: San Luis Obispo County
 Farm Advisor

In Inches

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1951-52	0.0	0.0	0.17	1.03	2.41	8.43	8.98	0.98	6.88	0.96	0.0	0.0	29.84
53	0.08	0.0	0.0	0.0	3.47	6.83	3.17	0.0	1.26	2.79	0.0	0.01	17.61
54	0.0	0.0	0.0	0.0	4.20	0.50	5.62	3.24	5.04	1.66	0.14	0.0	20.40

RECORD OF MONTHLY PRECIPITATION AT PETERSEN RANCH

County: San Luis Obispo
 Date established: 1937
 Elevation: 900 feet, U.S.G.S. datum

Station number on Plate 3: SLO-26
 Latitude: $35^{\circ} - 35.9'$
 Longitude: $120^{\circ} - 33.8'$
 Record obtained from: United States Bureau
 of Reclamation

In Inches

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1937-38	0.0	0.0	0.0	0.0	0.33	3.59	2.81	6.28	5.35	1.02	0.0	0.0	19.38
39	0.0	0.0	0.0	0.35	0.49	1.57	2.59	1.13	1.19	0.19	0.0	0.0	7.51
1939-40	0.0	0.0	0.54	0.61	0.58	0.83	4.04	4.58	1.04	1.14	0.0	0.0	13.36
41	0.0	0.0	0.0	0.25	0.26	5.88	3.52	7.60	4.92	3.03	0.07	0.0	25.53
42	0.0	0.0	0.0	1.20	0.61	4.88	1.60	0.68	1.79	3.47	0.20	0.0	14.43
43	0.0	0.0	0.0	0.35	0.57	1.71	6.48	1.64	3.68	0.78	0.0	0.0	15.21
44	0.0	0.0	0.0	0.46	0.21	3.44	1.34	5.50	0.53	0.71	0.49	0.0	12.68
1944-45	0.0	0.0	0.0	0.0	0.0	3.88	0.14	2.86	3.15	0.31	0.0	0.0	10.34

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT POZO GUARD STATION

County: San Luis Obispo
 Date established: 1950
 Elevation: 1,450 feet, U.S.G.S. datum

Station number on Plate 3: 3-070
 Latitude: 35°-18.2'
 Longitude: 120°-22.5'
 Record obtained from: United States Forest Service.

In Inches

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1949-50	0.0	0.0	0.0	0.0	2.54	4.38	3.73	3.11	1.77	1.98	0.15	1.01	18.67
51	0.0	0.0	0.0	0.0	1.15	1.26	2.95	1.16	0.93	1.74	0.13	0.0	12.04
52	0.0	0.0	0.07	0.22	3.56	2.95	13.17	0.45	8.25	1.36	0.25	0.0	30.28
53	0.0	0.0	0.11	0.16	3.88	6.45	2.03	0.0	1.15	1.62	0.12	0.0	15.52
54	0.0	0.0	0.0	0.0	1.98	0.15	6.55	3.80	4.30	2.39	0.28	0.0	19.36

RECORD OF MONTHLY PRECIPITATION AT POZO HIGHWAY MAINTENANCE STATION

County: San Luis Obispo
 Date established: 1943
 Elevation: 1,450 feet, U.S.G.S. datum

Station number on Plate 3: SLO-28
 Latitude: 35°-18.2'
 Longitude: 120°-22.5'
 Record obtained from: California Division
 of Highways
 San Luis Obispo

In Inches

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1943-44	0.0	0.0	0.0	0.83	0.24	4.83	1.71	11.91	1.31	2.11	0.17	0.0	23.11
1944-45	0.0	0.0	0.0	0.0	5.07	2.00	0.26	5.87	4.10	0.22	0.0	0.0	17.52
46	0.0	0.0	0.0	1.42	0.56	6.32	0.35	2.46	6.47	1.59	0.0	0.0	19.17
47	0.0	0.0	0.0	0.40	7.66	2.53	1.01	0.99	1.88	0.73	0.22	0.12	25.54
48	0.0	0.0	0.02	0.55	0.15	1.39	0.0	2.42	4.67	3.42	0.89	0.0	13.51
49	0.0	0.0	0.0	0.10	0.0	5.96	0.0	2.86	6.17	0.29	1.10	0.0	16.48
1949-50	0.0	0.0	0.0	0.0	2.54	4.38	3.73	3.11	1.77	1.98	0.15	1.01	18.67

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT QUENZER (RADLOFF) RANCH

County: San Luis Obispo
 Date established: 1930
 Elevation: 810 feet, U.S.G.S. datum

Station number on Plate 3: S10-29
 Latitude: $35^{\circ}43'2''$
 Longitude: $120^{\circ}36'4''$
 Record obtained from: San Luis Obispo
 County Farm Advisor?

In Inches

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1930-31	0.0	0.0	0.0	0.0	1.20	0.05	3.53	1.54	0.06	0.57	0.0	0.0	6.95
32	0.0	0.0	0.10	1.64	4.99	2.01	2.60	0.90	0.25	0.17	0.0	0.0	12.66
33	0.0	0.0	0.06	0.06	0.00	0.00	4.82	0.17	0.51	0.05	0.38	0.80	7.92
34	0.0	0.0	0.28	0.00	0.00	0.00	0.95	2.78	0.18	0.0	0.0	0.88	7.91
1934-35	0.0	0.0	0.0	0.0	1.42	1.91	0.00	4.47	0.66	2.65	2.02	0.00	15.19
36	0.0	0.20	0.0	0.28	1.27	0.00	0.47	7.19	0.92	1.13	0.05	0.00	12.64
37	0.0	0.0	0.0	0.0	0.0	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.00
38	0.0	0.0	0.0	0.0	0.0	0.00	0.50	0.00	2.40	6.49	4.86	1.07	0.10
39	0.0	0.0	0.0	0.69	0.23	0.23	0.27	0.00	2.17	0.89	1.16	0.11	0.00
40	0.0	0.0	0.0	0.45	0.30	0.32	0.00	3.43	4.81	2.47	0.40	0.00	12.95
41	0.0	0.0	0.0	0.31	0.12	0.00	0.00	3.92	5.75	5.61	2.41	0.29	0.02
42	0.0	0.02	0.0	0.0	0.99	0.77	0.00	1.84	0.71	1.40	2.62	0.23	0.0
43	0.0	0.0	0.0	0.48	0.39	0.00	0.00	5.66	1.64	2.90	0.60	0.08	0.0
44	0.0	0.0	0.0	0.0	0.40	0.20	0.00	1.21	5.24	0.38	0.44	0.14	0.00
1944-45	0.0	0.08	0.0	0.76	0.37	2.73	0.00	0.32	2.70	1.95	0.26	0.0	0.01
46	0.0	0.0	0.0	0.21	3.36	2.15	0.45	0.45	1.58	2.74	0.28	0.28	0.0
47	0.18	0.18	0.0	0.0	0.00	0.00	0.00	0.00	0.79	0.86	0.11	0.28	0.0
48	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
49	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1949-50	0.75	0.0	0.0	0.82	0.60	0.86	0.00	0.00	0.00	0.88	0.33	0.0	0.0
51	0.75	0.0	0.0	0.30	1.75	2.89	4.53	0.34	3.40	1.36	0.0	0.0	5.54
52	0.0	0.0	0.0	0.0	1.71	3.37	1.02	0.00	0.19	1.53	0.0	0.0	14.57
53	0.03	0.0	0.0	0.0	0.00	0.00	0.00	0.05	3.03	1.49	0.34	0.12	0.0
54	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.05	0.05	0.05	0.00	0.00	10.30

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT BUNITZ RANCH (EL POMAR)

County: San Luis Obispo
 Date established: 1914
 Elevation: 1,150-feet, U.S.G.S. datum

Station number on Plate 3: SLO-30
 Latitude: 35°-32.1'
 Longitude: 120°-36.7'
 Record obtained from: San Luis Obispo
 County Farm Advisor

In Inches

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1914-15	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	26.00
16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	25.00
17	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	10.00
18	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	18.10
19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	15.00
1919-20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	10.00
21	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	16.00
22	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	22.00
23	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	14.00
24	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.50
1924-25	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.25
26	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	16.00
27	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	14.00
28	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	12.00
29	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	10.00
1929-30	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	12.00
31	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	15.63
32	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	15.57
33	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9.28
34	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	10.24
1934-35	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	17.16
36	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	14.58
37	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	20.39
38	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	21.38
39	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	7.52

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT HUNITZ RANCH (EL POMAR)

In Inches
(continued)

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1939-40	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	15.52
41	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	28.24
42	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	16.25
43	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	19.81
44	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	24.49
1944-45	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	12.16
46	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.27
47	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.23
48	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.21
49	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.65
1949-50	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	7.36
51	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	19.91
52	0.000	0.000	0.000	0.51	2.28	4.51	5.59	0.51	5.07	1.40	0.04	0.0	19.91
53	0.000	0.000	0.000	0.000	2.29	4.07	1.94	0.94	1.75	0.03	0.0	0.0	21.02
54	0.0	0.0	0.0	0.0	2.15	0.03	3.99	2.05	3.13	0.52	0.07	0.0	21.94

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT SAN LUIS OBISPO TANK FARM

County: San Luis Obispo
 Date established: 1931
 Elevation: 170 feet, U.S.G.S. datum

Station number on Plate 3: 3-085
 Latitude: 35°-14.9'
 Longitude: 120°-39.8'
 Record obtained from: Union Oil Company
 Tank Farm

In Inches

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total	
1930-31	0.0	0.0	0.09	2.78	13.50	3.00	5.60	0.55	0.39	0.21	0.0	0.06	13.94	
32	0.0	0.0	0.02	0.24	1.36	9.05	0.28	1.07	0.15	1.23	0.0	26.12		
33	0.0	0.01	0.02	0.55	0.0	3.61	1.60	4.01	0.09	0.0	2.02	15.43		
34	0.0	0.0	0.55	0.0						0.56	1.85	12.27		
1934-35	0.0	0.0	0.07	1.24	0.60	2.41	5.79	0.96	4.18	4.74	0.05	0.0	20.04	
36	0.0	1.07	1.48	1.72	2.92	2.49	10.64	1.53	1.76	0.0	0.20	22.81		
37	0.23	0.0	0.18	1.43	0.10	7.15	6.77	8.23	5.09	0.32	0.0	0.0	29.50	
38	0.0	0.0	0.0	0.07	0.92	3.49	2.55	9.57	5.33	1.30	0.05	0.0	23.28	
39	0.0	0.0	0.62	0.33	0.41	1.39	3.29	2.19	1.68	0.0	0.0	0.0	9.91	
1939-40	0.03	0.0	0.67	1.07	0.99	2.25	8.37	6.30	2.12	1.41	0.0	0.0	23.21	
41	0.0	0.0	0.0	0.0	0.21	7.96	7.19	11.08	7.69	3.64	0.0	0.0	37.77	
42	0.0	0.0	0.0	1.25	1.10	10.41	2.19	1.28	2.35	3.76	0.0	0.0	22.34	
43	0.0	0.0	0.0	0.62	1.42	2.06	8.34	2.77	7.33	1.01	0.22	0.0	23.77	
44	0.0	0.0	0.0	0.90	0.34	1.84	1.75	8.19	1.28	2.06	0.14	0.0	16.50	
1944-45	0.0	0.0	0.0	0.44	3.96	1.95	1.28	4.57	5.81	0.12	0.0	0.0	18.13	
46	0.0	0.0	0.0	0.99	0.46	8.25	0.0	2.23	4.91	0.0	0.23	0.0	17.07	
47	0.0	0.0	0.0	0.10	5.91	2.49	0.56	0.95	1.80	0.21	0.35	0.0	12.37	
48	0.0	0.0	0.0	0.51	0.0	1.21	0.03	1.80	5.15	3.36	0.95	0.0	13.01	
49	0.0	0.0	0.0	0.10	0.0	1.79	2.37	3.12	3.10	0.08	0.08	0.0	10.64	
1949-50	0.0	0.0	0.01	0.0	0.0	1.78	4.29	4.66	4.14	1.94	1.35	0.11	0.0	18.28
51	0.0	0.0	0.0	0.0	1.52	2.22	3.15	1.42	0.32	1.29	0.12	0.0	11.33	
52	0.0	0.0	0.0	0.0	1.13	2.17	8.80	8.46	0.62	3.41	0.50	0.02	25.15	
53	0.0	0.0	0.0	0.0	0.0	3.54	7.23	3.13	0.0	1.81	2.83	0.09	0.0	-18.53
54	0.0	0.0	0.0	0.0	0.0	4.15	0.27	4.77	3.92	5.33	1.81	0.0	0.0	20.25

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT SAN LUIS OBISPO
 County: San Luis Obispo
 Date established: 1942
 Elevation: 330 feet, U.S.G.S. datum

Station number on Plate 3: 3-073
 Latitude: 35°-18.0'
 Longitude: 120°-41.0'
 Record obtained from: State Division of
 Forestry

In Inches

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1942-43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.53
44	0.0	0.0	0.0	1.27	0.0	4.43	1.70	4.63	4.51	1.84	0.15	0.0	
1944-45	0.0	0.0	0.0	0.0	0.28	5.55	0.52	0.80	5.51	5.14	0.02	0.05	18.01
46	0.0	0.0	0.0	0.0	1.34	0.68	2.58	0.62	2.62	5.45	0.0	0.15	13.41
47	0.03	0.02	0.0	0.0	0.53	5.81	1.75	0.29	1.26	1.34	0.23	0.28	0.20
48	0.0	0.17	0.0	0.0	1.17	0.76	----	----	1.77	3.04	3.59	0.0	0.0
49	0.0	0.0	0.0	0.0	0.37	0.01	4.16	1.57	2.17	5.29	0.44	0.0	14.01
1949-50	0.0	0.0	0.0	0.0	0.0	1.96	4.27	5.14	3.70	1.76	2.72	0.21	0.0
51	0.0	0.0	0.0	0.0	2.14	1.99	2.60	2.39	1.29	0.86	1.24	0.12	0.0
52	0.0	0.02	0.02	0.0	0.90	1.91	7.67	9.66	6.71	7.18	0.76	0.03	12.62
53	0.0	0.0	0.0	0.0	0.0	2.92	7.11	2.66	0.0	1.22	1.80	0.05	0.0
54	0.0	0.0	0.0	0.18	0.18	3.73	0.46	5.56	3.54	5.51	1.24	0.08	20.37
1954-55	0.0	0.0	0.0	0.0	0.0	2.72	3.24	6.40	2.16	0.18	2.74	0.00	0.00

C-72

TABLE C-2 (continued)

County: San Luis Obispo
 Date established: 1892
 Elevation: 615 feet, U.S.G.S. datum

RECORD OF MONTHLY PRECIPITATION AT SAN MIGUEL (S. P. MILLING CO.)

Station number on Plate 3: 3-50

Latitude: $35^{\circ}45.2'$

Longitude: $120^{\circ}41.0'$

Record obtained from: Southern Pacific
 Milling Company

In Inches

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1892-93 94	0.0 0.0	0.0 0.0	0.20 0.0	0.84 0.0	2.18 0.39	3.10 1.95	1.20 0.78	1.24 0.50	3.84 0.12	0.77 0.04	0.0 0.42	0.0 0.0	13.37 4.20
1894-95 96	0.0 0.0	0.0 0.0	0.88 0.0	0.44 0.61	0.16 1.01	4.75 0.44	4.07 3.84	0.40 1.02	1.01 1.94	0.41 1.16	0.03 0.24	0.0 0.0	12.15 10.26
97	0.0	0.0	0.0	0.85	1.85	2.82	1.23	3.29	1.86	0.12	0.0	0.0	12.02
98	0.0	0.0	0.01	0.38	0.08	0.10	0.32	1.36	0.39	0.0	0.48	0.0	3.15
99	0.0	0.0	0.05	0.02	0.17	0.39	2.48	0.27	3.30	0.99	0.23	0.0	7.90
1899-1900 01	0.0 0.0	0.0 0.0	0.0 0.0	2.29 0.54	0.93 4.18	1.03 0.12	1.40 3.37	0.0 4.61	1.71 0.20	0.49 1.72	0.50 0.56	0.0 0.0	8.35 15.30
02	0.0	0.0	0.0	1.25	0.59	0.0	0.86	3.63	2.64	0.78	0.0	0.0	9.75
03	0.0	0.0	0.0	0.51	0.54	0.36	1.23	1.06	2.40	1.35	0.0	0.0	7.45
04	0.0	0.0	0.0	0.0	0.37	0.36	0.52	2.72	2.49	0.93	0.06	0.0	7.45
1904-05 06	0.0 0.0	0.0 0.0	0.0 0.0	2.70 0.44	0.45 0.66	0.96 0.40	1.77 1.25	3.79 2.42	2.86 4.66	0.30 0.58	1.32 2.65	0.0 0.0	14.59 12.62
07	0.0	0.0	0.0	0.17	0.17	4.15	5.75	1.03	3.80	1.10	0.0	0.0	16.00
08	0.0	0.0	0.0	2.95	0.0	2.04	5.01	2.13	0.07	0.61	0.0	0.0	12.81
09	0.0	0.0	0.14	0.11	0.81	1.34	8.14	3.61	3.77	0.0	0.0	0.0	17.92
1909-10 11	0.0 0.0	0.0 0.46	0.0 0.46	0.54 0.18	2.39 0.10	4.06 0.58	0.19 9.20	2.08 0.89	2.49 1.11	0.05 0.0	0.0 5.05	0.0 2.68	11.80 22.11
12	0.0	0.0	0.0	0.0	0.07	0.07	1.11	0.89	0.0	5.05	2.68	2.87	12.67
13	0.0	0.0	0.0	0.0	0.42	0.16	2.08	1.22	0.76	0.37	0.0	0.0	5.07
14	0.24	0.48	0.10	0.0	3.00	1.32	10.60	2.28	0.91	0.20	0.07	0.0	19.20

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT SAN MIGUEL (S. P. MILLING CO.)

In Inches
(continued)

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1914-15	0.0	0.0	0.0	0.0	0.23	0.78	4.60	4.51	7.58	0.64	1.70	1.20	0.0
16	0.0	0.0	0.0	0.0	0.70	2.50	9.21	1.25	1.01	0.22	0.0	0.0	21.24
17	0.0	0.0	0.93	1.60	0.36	2.97	0.89	2.52	0.35	0.09	0.27	0.0	14.89
18	0.0	0.0	0.0	0.0	0.31	0.22	0.21	1.50	0.31	4.53	0.0	0.0	9.88
19	0.0	0.0	0.52	0.66	2.98	1.50	0.31	2.11	2.70	0.0	0.0	0.0	11.76
													10.78
1919-20	0.0	0.0	0.0	0.0	0.0	0.83	1.58	1.24	2.55	0.14	0.0	0.0	8.24
21	0.0	0.0	0.0	0.25	1.89	1.78	2.88	2.89	2.31	0.47	0.96	0.0	11.43
22	0.0	0.0	0.0	0.13	0.0	7.32	3.69	4.19	1.94	0.18	0.62	0.0	18.27
23	0.0	0.0	0.0	0.50	2.90	3.51	1.66	1.11	0.20	1.66	0.0	0.0	11.54
24	0.0	0.0	0.13	0.32	0.10	0.26	1.32	0.70	2.25	0.23	0.03	0.0	5.34
1924-25	0.0	0.0	0.0	0.21	0.36	0.82	0.17	1.23	1.92	1.36	1.60	0.0	7.76
26	0.0	0.0	0.12	0.08	0.26	1.60	1.85	3.16	0.36	3.07	0.0	0.0	10.50
27	0.0	0.0	0.0	0.30	4.64	0.81	1.20	4.78	1.05	0.44	0.24	0.0	23.36
28	0.0	0.0	0.0	1.21	0.49	1.18	0.20	2.39	1.84	0.28	0.05	0.0	7.55
29	0.0	0.0	0.0	0.06	1.45	2.49	1.21	1.25	0.87	0.96	0.0	0.0	8.29
1929-30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.27	1.10	2.59	0.48	0.0	7.44
31	0.0	0.0	0.24	0.0	1.93	0.05	3.98	1.71	0.09	0.54	2.15	0.0	9.69
32	0.0	0.0	0.0	0.0	1.58	6.04	1.93	3.43	0.24	0.23	0.20	0.0	13.55
33	0.0	0.0	0.0	0.0	0.20	1.18	2.83	0.08	0.49	0.06	0.37	0.43	6.64
34	0.0	0.0	0.0	0.22	0.0	3.00	1.45	3.77	0.10	0.0	1.10	0.53	10.27
1934-35	0.0	0.0	0.0	1.65	2.15	2.00	4.54	0.51	2.75	2.02	0.0	0.0	35.61
36	0.0	0.0	0.19	0.10	1.30	1.02	0.47	6.83	0.83	0.94	0.0	0.0	31.68
37	0.0	0.0	0.0	1.73	0.0	4.05	3.18	2.76	4.65	0.14	0.0	0.0	26.51
38	0.0	0.0	0.0	0.18	0.0	3.06	1.66	8.42	4.60	1.18	0.0	0.0	19.10
39	0.0	0.0	0.36	0.29	0.17	0.93	2.02	0.81	0.0	0.0	0.0	0.0	4.57

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT SAN MIGUEL (S. P. MILLING CO.)

In Inches
(continued)

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1939-40	0.0	0.0	0.50	0.26	0.51	0.64	3.56	5.44	0.73	1.02	0.0	0.0	12.66
41	0.0	0.0	0.0	0.25	0.13	6.16	2.91	7.52	6.66	2.45	0.0	0.0	26.08
42	0.0	0.0	0.0	1.13	0.95	4.14	2.02	0.93	1.61	2.84	0.27	0.0	13.89
43	0.0	0.0	0.0	0.57	0.34	1.84	5.50	1.68	2.75	0.55	0.0	0.0	13.23
44	0.0	0.0	0.0	0.10	0.19	3.65	1.67	6.15	0.45	0.40	0.20	0.0	12.85
1944-45	0.0	0.0	0.0	0.0	1.58	1.23	0.30	4.23	1.65	0.32	0.0	0.0	9.21
46	0.0	0.19	0.0	0.89	0.53	2.35	0.43	1.62	2.82	0.05	0.37	0.0	9.25
47	0.22	0.0	0.06	0.09	2.94	2.25	0.39	0.77	0.71	0.41	0.32	0.0	8.16
48	0.0	0.0	0.0	0.02	0.46	0.0	1.79	2.88	2.13	0.30	0.0	0.0	7.60

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT SAN MIGUEL (W. SINCLAIR)
 County: San Luis Obispo
 Date established: 1949
 Elevation: 700 feet, U.S.G.S. datum

Station number on Plate 3: SLO-52
 Latitude: 35°-45.2'
 Longitude: 120°-44.0'
 Record obtained from: W. Sinclair

In Inches

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1949-50	0.0	0.0	0.0	0.0	0.60	1.99	2.26	2.29	2.07	0.92	0.0	0.0	8.13
51	0.32	0.0	0.0	0.80	0.21	1.51	1.63	0.70	0.76	0.90	0.20	0.0	7.03
52	0.0	0.0	0.0	0.20	2.01	2.43	1.65	0.08	3.66	1.31	0.0	0.0	14.24
53	0.0	0.0	0.0	1.61	1.82	0.56	0.0	0.42	1.06	0.08	0.0	0.0	8.55
54	0.0	0.0	0.0	2.47	0.25	2.42	1.35	2.58	0.33	0.07	0.0	0.0	9.47

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT SAN MIGUEL (G. PARKER)

County: San Luis Obispo
 Date established: 1936
 Elevation: 625 feet, U.S.G.S. datum

Station number on Plate 3: SL0-53
 Latitude: 35°-45.2'
 Longitude: 120°-41.9'
 Record obtained from: G. Parker

In Inches

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1936-37	0.0	0.0	0.0	1.67	0.0	3.93	3.11	2.71	4.48	0.0	0.0	0.0	15.90
38	0.0	0.0	0.0	0.18	4.63	0.0	7.93	4.26	1.30	0.0	0.0	0.0	18.30
39	0.0	0.0	0.39	0.18	0.0	1.31	1.79	0.83	1.25	0.0	0.70	0.0	6.45
1939-40	0.0	0.0	0.50	0.30	0.61	0.43	3.97	4.99	0.80	0.91	0.0	0.0	12.51
41	0.0	0.0	0.0	0.23	0.0	6.02	3.02	7.18	6.52	2.20	0.0	0.0	25.17
42	0.0	0.0	0.0	1.97	---	1.79	2.15	0.72	1.65	2.70	0.0	0.0	13.16
43	0.0	0.0	0.0	0.47	2.02	0.42	5.58	1.70	2.84	0.55	0.0	0.0	13.58
44	0.0	0.0	0.0	0.47	----	3.36	1.47	5.54	0.62	0.40	0.0	0.0	12.13
1944-45	0.0	0.0	0.0	0.0	1.67	0.86	1.08	2.96	0.94	0.42	0.0	0.0	7.93
46	0.0	0.0	0.0	0.84	0.63	2.49	0.33	1.20	2.64	0.0	0.0	0.0	8.04
47	0.22	0.0	0.06	0.0	2.98	2.35	0.36	0.73	0.56	0.0	0.22	0.0	7.48
48	0.0	0.0	0.15	----	----	0.52	----	1.46	2.80	1.95	0.20	0.0	----
49	0.0	0.0	0.0	0.07	----	2.40	0.66	1.55	3.73	----	0.75	0.0	9.90
1949-50	0.0	0.0	0.0	0.30	0.55	1.65	2.02	1.36	1.09	1.02	0.0	0.0	7.99
51	0.38	0.0	0.0	0.86	0.39	1.43	1.68	0.67	0.25	1.09	0.0	0.0	6.75
52	0.0	0.0	0.0	0.20	2.15	2.22	4.90	0.10	3.97	1.35	0.0	0.0	14.89
53	0.0	0.0	0.0	0.0	1.46	3.93	0.52	0.0	0.20	0.24	0.0	0.0	6.35
54	(- - - - -)	(- - - - -)	(- - - - -)	(- - - - -)	(- - - - -)	(- - - - -)	(- - - - -)	(- - - - -)	(- - - - -)	(- - - - -)	0.34	0.0	10.04

TABLE C-2 (continued)

County: San Luis Obispo
 Date established: 1919
 Elevation: 995 feet, U.S.G.S. datum

RECORD OF MONTHLY PRECIPITATION AT SANTA MARCITA

Station number on Plate 3: 3-63
 Latitude: 35°-23.5'
 Longitude: 120°-36.5'
 Record obtained from: Southern Pacific Company

In Inches

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total			
1919-20	0.0	0.0	0.34	0.0	0.0	0.90	1.76	2.51	5.29	1.14	1.13	5.73	3.46	0.0	0.0	20.68
21	0.0	0.0	0.0	0.0	0.05	0.09	0.05	7.99	4.79	9.60	3.60	2.35	0.83	1.04	0.0	17.04
22	0.0	0.0	0.29	0.0	0.33	5.78	7.24	5.17	1.16	0.0	4.29	0.0	0.68	0.0	0.0	27.54
23	0.0	0.0	0.0	0.0	0.12	0.46	0.20	1.28	1.00	3.92	0.47	0.0	0.20	0.0	0.0	24.17
24	0.0	0.0	0.52	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.97
1924-25	0.0	0.0	0.0	1.07	2.35	2.18	1.24	1.24	4.08	3.62	2.25	3.56	0.11	20.46		
26	0.0	0.0	0.0	0.38	0.09	2.66	3.05	7.13	0.22	2.14	0.0	0.0	0.0	0.0	0.0	15.74
27	0.0	0.0	0.0	0.30	10.00	1.44	2.26	8.50	2.64	1.19	0.0	0.19	0.0	0.0	0.0	26.52
28	0.0	0.0	Tr	1.81	1.34	2.48	0.34	4.98	4.46	0.53	0.25	0.0	0.0	0.0	0.0	16.29
29	0.0	0.0	0.0	0.0	0.0	3.34	4.40	2.06	1.99	1.82	1.08	0.0	0.0	0.0	0.0	14.09
1929-30	0.0	0.0	0.0	0.0	0.0	0.0	0.19	4.90	2.56	3.46	0.39	1.01	0.05	12.56		
31	0.0	0.0	0.11	0.02	1.90	0.05	5.44	1.71	0.48	0.66	2.13	0.64	0.64	0.0	0.0	12.14
32	0.0	0.13	0.0	0.0	3.11	12.46	4.32	3.96	-----	-----	-----	-----	-----	-----	-----	-----
33	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
34	-----	-----	-----	-----	-----	-----	-----	-----	-----	1.73	1.71	-----	-----	-----	-----	-----
1934-35	0.35	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
36	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
37	0.0	0.0	0.0	0.66	0.0	8.31	7.87	9.00	7.15	0.41	0.0	0.0	0.0	0.0	0.0	34.40
38	0.0	0.0	0.0	0.10	0.67	7.87	2.78	11.51	8.17	1.59	0.09	0.0	0.0	0.0	0.0	32.78
39	0.0	0.0	0.63	0.19	0.35	1.29	3.98	1.48	1.68	1.04	0.01	0.0	0.0	0.0	0.0	9.65

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT SANTA MARGARITA

In Inches
(continued)

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1939-40	0.0	0.0	0.81	0.71	0.98	1.55	9.24	5.93	2.00	1.26	0.0	0.0	22.48
41	0.0	0.0	0.0	0.60	0.22	9.62	5.81	13.00	8.07	4.73	0.07	0.0	42.12
42	0.0	0.0	0.0	0.96	0.51	10.16	3.21	2.90	2.46	5.81	0.22	0.0	26.23
43	0.0	0.0	0.0	0.40	2.23	2.57	11.37	1.85	8.17	0.60	0.0	0.0	27.12
44	0.0	0.0	0.0	0.88	0.29	4.47	1.35	12.57	2.27	2.26	0.31	0.0	24.40
1944-45	0.0	0.0	0.0	0.05	6.13	1.77	0.0	6.40	6.70	0.0	0.05	0.0	21.10
45	0.0	0.0	0.0	1.32	2.25	7.13	0.45	2.58	6.72	0.98	0.06	0.0	21.49
47	0.33	0.0	0.0	0.60	5.96	2.68	0.50	1.37	1.95	0.30	0.38	0.10	24.17
48	0.0	0.0	0.14	1.00	0.14	1.49	0.0	2.66	5.77	3.01	0.45	0.0	14.66
49	0.0	0.0	0.0	Tr	0.0	5.25	2.30	3.09	5.95	0.21	0.10	0.09	16.99
C													
1949-50	0.0	0.0	0.0	0.0	1.98	3.87	5.16	3.05	3.24	2.73	0.15	0.0	20.18
51	0.53	0.0	0.0	2.39	5.53	2.75	3.79	1.35	1.09	0.40	2.00	0.0	19.83
52	0.0	0.0	0.0	1.20	3.15	8.72	10.73	0.65	7.61	0.96	0.0	0.0	33.02
53	0.0	0.0	0.0	0.0	3.60	7.12	2.90	0.0	2.31	2.37	0.0	0.0	18.30
54	0.0	0.0	0.0	2.70	0.21	6.28	3.37	6.52	1.00	0.10	0.0	0.0	20.18

TABLE C-2 (continued)

County: San Luis Obispo
 Date established: 1930
 Elevation: 974 feet, U.S.G.S. datum

RECORD OF MONTHLY PRECIPITATION AT SANTA MARGARITA (TANK FARM)

Station number on Plate 3: 3-076

Latitude: $35^{\circ} - 24.5'$ Longitude: $120^{\circ} - 36.0'$

Record obtained from: Union Oil Company

In Inches

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1930-31	-	-	-	-	-	-	-	-	-	-	-	-	13.40
32	-	-	-	-	-	-	-	-	-	-	-	-	29.67
33	-	-	-	-	-	-	-	-	-	-	-	-	17.30
34	-	-	-	-	-	-	-	-	-	-	-	-	15.95
1934-35	-	-	-	-	-	-	-	-	-	-	-	-	25.06
36	-	-	-	-	-	-	-	-	-	-	-	-	21.08
37	-	-	-	-	-	-	-	-	-	-	-	-	30.21
38	-	-	-	-	-	-	-	-	-	-	-	-	24.05
39	-	-	-	-	-	-	-	-	-	-	-	-	10.17
40	-	-	-	-	-	-	-	-	-	-	-	-	22.25
41	0.0	0.0	0.0	0.61	0.32	0.69	5.71	12.59	9.53	5.46	0.39	0.0	43.20
42	0.0	0.0	0.0	1.05	0.51	9.57	2.88	1.23	2.39	4.71	0.17	0.0	22.51
43	0.0	0.0	0.0	0.44	1.86	2.42	10.41	2.03	7.77	0.67	0.0	0.0	25.30
44	0.0	0.0	0.0	0.83	0.44	4.68	1.60	11.39	2.37	1.99	0.41	0.0	23.71
45	0.0	0.0	0.0	0.10	6.05	1.54	0.38	6.53	5.58	0.23	0.05	0.07	21.53
46	0.0	0.0	0.0	1.15	1.15	7.12	0.46	2.43	7.53	0.33	0.0	0.0	20.77
47	0.20	0.0	0.0	0.54	5.84	2.35	0.50	1.22	1.97	0.33	0.19	0.13	13.28
48	0.0	0.06	0.0	0.66	0.14	1.43	0.0	2.74	4.49	2.71	0.74	0.0	12.97
49	0.0	0.0	0.0	0.11	0.0	4.97	2.08	2.71	5.80	0.16	0.42	0.0	16.25
1944-45	0.0	0.0	0.0	0.10	6.05	1.54	0.38	6.53	5.58	0.23	0.05	0.07	21.53
50	0.0	0.0	0.0	1.15	1.15	7.12	0.46	2.43	7.53	0.33	0.0	0.0	20.77
51	0.45	0.0	0.0	1.32	3.86	2.04	2.51	1.60	0.12	2.23	0.12	0.0	14.25
52	0.0	0.0	0.03	1.03	3.16	8.29	8.73	0.66	7.00	0.88	0.12	0.0	29.90
53	0.0	0.0	0.09	0.0	3.23	6.36	2.23	0.0	1.75	2.47	0.0	0.0	16.23
54	0.0	0.0	0.0	1.14	2.82	0.14	5.92	3.89	5.25	0.91	0.07	0.0	19.00

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT SEVEN-X RANCH

County: San Luis Obispo
 Date established: 1929
 Elevation: 1,200 feet, U.S.G.S. datum

Station number on Plate 3: SLO-35

Latitude: $35^{\circ}36.3'$ Longitude: $120^{\circ}55.0'$

Record obtained from: United States Bureau
 of Reclamation and
 Seven-X Ranch

In Inches

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1929-30	0.0	0.0	0.0	0.0	0.0	1.05	9.01	4.78	4.32	0.90	0.0	0.0	20.06
31	0.0	0.0	0.0	3.38	1.00	12.07	3.25	1.25	1.00	0.0	1.00	23.95	
32	0.0	0.0	0.0	0.0	5.75	29.75	8.50	4.50	1.50	0.0	0.0	50.00	
33	0.0	0.0	0.0	0.50	1.00	5.75	10.37	0.25	3.50	0.50	1.25	1.50	24.62
34	0.0	0.0	0.0	1.50	0.0	13.51	4.03	9.66	Tr	0.0	0.11	1.75	30.56
1934-35	0.0	0.0	0.27	1.36	8.79	5.46	14.03	0.92	6.38	11.09	0.02	0.0	48.32
36	0.36	0.68	0.0	1.02	2.00	3.88	9.48	29.88	2.35	3.17	0.0	1.05	53.87
37	0.0	0.0	0.0	2.37	0.0	13.55	7.79	19.66	9.58	0.89	0.0	0.0	53.84
38	0.0	0.0	0.0	0.0	2.25	16.97	9.90	21.14	13.26	2.31	0.20	0.0	66.03
39	0.0	0.0	1.00	0.88	0.95	2.76	6.23	3.92	3.73	0.0	0.63	0.0	20.10
1939-40	0.0	0.0	0.51	1.24	0.60	3.99	26.12	14.69	4.19	1.83	0.28	0.0	53.45
41	0.0	0.0	1.26	0.09	0.33	16.20	15.00	19.73	13.40	7.88	1.74	0.0	75.63
42	0.0	0.0	0.0	2.25	1.72	24.70	9.10	3.55	5.00	6.71	0.50	0.0	53.53
43	0.0	0.0	0.0	0.75	8.48	4.71	19.05	3.08	15.08	0.0	0.0	0.0	51.15
44	—	—	—	—	—	—	—	—	—	—	—	—	—
1944-45	0.0	0.0	0.0	2.00	10.50	3.50	1.50	11.00	10.50	0.50	0.0	0.0	39.50
46	—	—	—	—	—	—	—	—	—	—	—	—	—
47	—	—	—	—	—	—	—	—	—	—	—	—	—
48	—	—	—	—	—	—	—	—	—	—	—	—	—
49	—	—	—	—	—	—	—	—	—	—	—	—	—

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT SEVEN-X RANCH

In Inches
(continued)

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1949-50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
52	0.0	0.0	0.0	3.00	6.20	23.55	21.90	1.20	1.20	2.70	0.30	0.0	70.95
53	0.0	0.0	0.0	0.0	5.15	19.05	9.25	0.0	5.40	7.80	0.0	0.0	46.65
54	0.0	0.0	0.0	0.0	5.40	0.80	11.02	8.68	9.80	3.15	0.0	0.0	38.85

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT SHANDON

County: San Luis Obispo
 Date established: 1930
 Elevation: 1,091 feet, U.S.G.S. datum

Station number on Plate 3: 3-079
 Latitude: $35^{\circ}41.4'$
 Longitude: $120^{\circ}20.2'$
 Record obtained from: Union Oil Company

In Inches

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1930-31	-	-	-	-	-	-	-	-	-	-	-	-	-
32	0.0	0.0	0.0	0.0	0.0	1.54	3.50	1.80	3.17	0.19	0.12	0.15	1.40
33	0.0	0.0	0.0	0.0	0.16	0.06	1.12	5.19	0.12	0.49	0.02	0.45	0.0
34	0.0	0.0	0.0	0.0	0.12	0.0	1.12	0.96	2.23	0.15	0.0	0.19	0.62
1934-35	0.0	0.0	0.0	0.0	0.91	0.40	2.93	3.58	0.98	2.61	1.96	0.09	0.0
36	0.0	0.23	0.20	0.21	0.63	1.08	0.40	5.29	0.95	1.15	0.0	0.0	13.46
37	0.0	0.0	0.0	1.53	0.0	4.41	3.37	2.31	3.18	0.23	0.0	0.0	19.04
38	0.0	0.0	0.0	0.31	0.19	2.03	1.15	6.23	6.02	2.15	0.0	0.0	15.03
39	0.0	0.0	0.35	0.27	0.05	1.34	1.86	1.47	2.35	0.0	0.0	0.0	18.08
													7.69

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT SHANDON HIGHWAY MAINTENANCE STATION

County: San Luis Obispo
 Date established: 1937
 Elevation: 1,090 feet, U.S.G.S. datum

Station number on Plate 3: SLO-36
 Latitude: 35°-39.4'
 Longitude: 120°-22.6'
 Record obtained from: California Division
 of Highways
 San Luis Obispo

In Inches

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1937-38	0.0	0.0	0.0	0.0	0.06	2.30	1.14	4.65	4.48	1.30	0.0	0.0	13.93
39	0.0	0.0	0.63	0.33	0.20	1.09	2.96	1.19	1.28	0.04	0.0	0.0	6.72
1939-40	0.0	0.0	1.70	0.36	0.22	0.67	4.20	3.28	0.57	1.43	0.0	0.0	12.43
41	0.0	0.0	0.0	0.38	0.08	5.18	2.73	6.67	5.28	2.25	0.32	0.0	22.89
42	0.0	0.0	0.0	0.83	0.70	3.45	1.41	0.75	2.04	2.48	0.15	0.0	10.81
43	0.0	0.0	0.0	0.32	0.29	1.60	4.89	1.38	3.24	0.63	0.0	0.0	12.45
44	0.0	0.0	0.0	0.63	0.26	2.60	1.39	4.14	0.19	0.55	0.15	0.70	10.61
1944-45	0.0	0.0	0.0	0.0	2.61	0.63	0.23	2.38	1.49	0.11	0.0	0.0	7.45
46	0.0	0.0	0.0	0.71	0.41	1.58	0.38	1.29	2.87	0.15	0.0	0.0	7.39
47	0.11	0.0	0.0	0.21	2.48	2.20	0.50	0.47	0.76	0.0	0.21	0.04	6.98
48	0.0	0.51	0.0	0.20	0.07	0.57	0.0	1.25	1.97	1.64	0.0	0.02	6.23
49	0.0	0.0	0.0	0.10	0.10	2.19	0.88	0.98	2.48	0.27	0.59	0.0	7.59
1949-50	0.0	0.0	0.0	0.0	0.74	2.42	1.83	1.43	1.15	1.25	0.09	0.0	8.91
51	0.35	0.0	0.0	0.80	0.30	0.79	1.96	0.78	0.50	0.97	0.05	0.0	6.50
52	0.0	0.0	0.0	0.25	1.36	2.50	5.14	0.34	3.84	0.90	0.0	0.0	14.33
53	0.0	0.0	0.0	1.75	2.90	1.01	0.0	0.61	1.15	0.14	0.0	0.0	7.56
54	0.0	0.0	0.0	1.36	0.12	3.58	2.23	2.52	0.38	0.06	0.07	0.07	10.32

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT SHANDON PUMP STATION

County: San Luis Obispo
 Date established: 1935
 Elevation: 1,056 feet, U.S.G.S. datum

Station number on Plate 3: 3-078
 Latitude: 35°-40.2'
 Longitude: 120°-21.7'
 Record obtained from: United States Bureau
 of Reclamation and
 Standard Oil Company

In Inches

Session	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1935-36	0.0	0.0	0.0	0.24	0.65	1.14	0.43	5.05	0.69	1.08	0.0	0.0	9.28
37	0.0	0.0	0.0	1.33	0.0	4.23	2.95	2.09	2.96	0.25	0.0	0.0	13.81
38	0.0	0.0	0.0	0.36	0.25	2.15	1.36	4.25	2.79	1.36	0.0	0.0	13.42
39	0.0	0.0	0.08	0.08	0.07	0.87	1.72	0.79	1.32	0.03	0.0	0.0	5.17
1939-40	0.0	0.0	1.57	0.28	0.19	0.57	3.82	2.72	1.02	0.49	Tr	0.0	10.65
41	0.0	0.0	0.0	0.37	0.06	4.76	2.27	5.65	3.92	1.01	0.06	0.0	18.92
42	0.0	0.0	0.0	0.76	0.57	3.39	1.15	0.67	1.13	1.65	0.04	0.0	9.36
43	0.0	0.0	0.0	0.30	0.15	1.45	4.47	1.37	5.70	0.86	0.10	0.0	12.35
44	0.0	0.0	0.0	0.55	0.27	2.36	2.31	3.45	0.05	0.38	0.27	0.38	9.02
1944-45	0.0	0.0	0.0	0.28	2.68	0.63	0.80	1.85	1.21	0.38	0.0	0.0	10.07
46	0.0	0.05	0.0	0.45	0.36	1.40	0.26	1.22	2.87	0.17	0.0	0.0	6.70
47	0.97	0.0	0.21	0.04	2.13	2.19	0.50	0.32	0.75	0.44	0.0	0.02	6.67
48	0.0	0.21	0.0	0.15	0.17	0.46	0.0	1.23	1.93	1.46	0.46	0.0	6.07
49	0.0	0.0	0.0	0.0	0.0	1.94	0.81	0.92	2.06	0.35	1.61	0.0	7.09
1949-50	0.0	0.0	0.0	0.0	0.0	0.62	2.34	1.58	1.33	0.97	1.12	0.07	0.0
51	0.28	0.0	0.0	0.78	0.52	0.51	1.45	0.89	0.18	0.52	0.01	0.0	8.03
52	0.0	0.0	Tr	0.25	1.23	1.99	2.79	0.41	2.02	0.76	0.0	0.0	5.14
53	0.0	0.0	0.09	0.10	1.39	2.35	0.84	0.0	0.37	1.02	0.12	0.0	6.28
54	0.0	0.0	0.0	0.0	1.47	0.08	3.31	1.46	1.73	0.29	0.04	0.03	8.41

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TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT SIMMLER HIGHWAY MAINTENANCE STATION

County: San Luis Obispo
 Date established: 1937
 Elevation: 2,047 feet, U.S.G.S. datum

Station number on Plate 3: SLO-37
 Latitude: $35^{\circ} 21.1'$
 Longitude: $119^{\circ} 59.5'$
 Record obtained from: California Division
 of Highways
 San Luis Obispo

In Inches

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Mey	June	Total
1937-38	0.0	0.0	0.0	0.0	0.09	2.11	1.08	4.58	2.66	2.48	0.0	0.0	13.00
39	0.0	0.0	0.97	0.09	0.02	1.30	2.19	0.78	1.12	0.0	0.0	0.0	6.47
1939-40	0.0	0.0	1.16	0.24	0.12	0.68	---	2.22	0.16	1.07	0.0	0.0	---
41	0.0	0.0	0.47	0.11	4.05	2.29	2.89	4.48	3.79	3.0	0.0	0.0	18.08
42	0.0	0.03	0.0	0.70	0.28	2.95	0.54	0.64	1.21	1.30	0.14	0.0	7.79
43	0.0	0.0	0.0	0.38	0.41	1.38	5.53	0.80	1.54	2.58	0.0	0.0	11.62
44	0.0	0.0	0.0	0.56	0.23	1.52	0.96	4.06	0.48	0.33	0.21	0.0	8.35
1944-45	0.0	0.0	0.0	0.0	2.54	0.73	0.15	2.69	1.35	0.09	0.0	0.0	6.55
46	0.0	0.0	0.0	0.16	0.35	1.05	1.82	1.20	2.77	0.32	0.07	0.0	7.74
47	0.0	0.0	0.0	0.12	2.21	1.11	0.39	0.23	0.67	0.27	0.14	0.0	5.44
48	0.0	0.0	0.0	0.08	0.93	0.19	0.0	1.59	1.38	0.92	0.31	0.0	4.80
49	0.0	0.0	0.0	0.06	0.0	2.17	0.67	0.50	1.45	0.40	0.88	0.0	6.23
1949-50	0.0	0.0	0.0	0.0	0.50	1.78	1.42	1.41	0.88	0.99	0.11	0.0	7.09
51	0.21	0.0	0.0	0.50	0.41	0.26	1.51	0.24	0.44	0.83	0.0	0.0	4.40
52	0.0	0.0	0.0	0.0	1.20	1.35	3.94	0.44	4.10	0.65	0.2	0.0	11.78
53	0.0	0.09	0.0	2.43	2.29	0.73	0.12	0.28	0.87	0.08	0.0	6.89	6.89
54	0.0	0.0	0.0	0.86	0.14	3.35	1.06	2.14	0.67	0.0	0.0	0.0	7.62

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT SODA LAKE

County: San Luis Obispo
 Date established: 1925
 Elevation: 1,975 feet, U.S.G.S. datum

Season : July : Aug. : Sept. : Oct. : Nov. : Dec. : Jan. : Feb. : Mar. : Apr. : May : June : Total

Station number on Plate 3: 3-67
 Latitude: 35°-14.8'
 Longitude: 119°-55.5'
 Record obtained from : San Luis Obispo
 County Farm Advisor

In Inches

	1925-26	0.0	0.0	0.0	0.75	0.05	0.80	1.47	2.88	2.66	2.25	0.0	0.0	10.86
	27	0.0	0.0	0.0	0.70	2.45	0.77	0.20	3.92	0.80	0.25	Tr	0.0	9.09
	28	0.0	0.0	0.0	0.70	1.27	0.29	0.15	1.40	0.54	0.26	1.18	0.0	5.79
	29	0.0	0.0	0.0	0.0	1.51	1.37	0.86	0.26	1.15	0.44	0.0	0.06	5.65
1929-30	0.0	0.0	0.0	0.0	0.0	0.42	0.0	2.63	0.79	2.07	0.20	0.79	0.0	6.90
31	0.0	0.03	0.06	0.02	0.97	0.0	1.51	2.02	0.0	0.27	0.22	0.45	5.56	
32	0.0	0.0	0.0	0.0	1.81	3.68	3.03	2.85	0.26	0.39	0.0	0.0	12.02	
33	0.0	0.0	0.0	0.25	0.9	0.0	1.43	5.71	0.11	0.31	0.02	0.56	2.67	11.06
34	0.0	0.12	0.0	0.0	0.0	1.16	1.25	0.95	1.29	0.31	0.0	0.31	5.39	
1934-35	0.0	0.0	0.0	0.96	1.61	1.20	2.93	0.91	1.46	0.90	0.0	0.0	10.35	
36	0.0	0.09	0.12	0.22	0.59	1.16	2.87	1.76	2.63	0.72	0.0	0.0	7.67	
37	0.30	0.0	0.90	0.0	0.0	0.60	2.24	2.63	3.50	0.07	0.0	0.0	10.24	
38	0.0	0.0	0.0	0.33	0.12	2.30	1.70	4.31	3.49	1.40	0.0	0.0	13.65	
39	0.0	0.0	0.49	0.63	0.0	1.23	2.54	1.57	1.64	0.42	0.07	0.0	8.59	
1939-40	0.0	0.0	1.03	0.32	0.10	1.05	1.75	2.05	1.38	0.32	0.0	0.0	8.00	
41	0.0	0.0	0.0	0.16	0.12	4.25	2.40	4.44	4.41	2.72	0.0	0.0	18.50	
42	0.0	0.0	0.0	0.74	0.40	3.92	0.87	0.94	1.19	1.32	0.0	0.0	9.38	
43	0.0	0.0	0.0	0.33	0.48	1.39	4.67	1.39	0.85	1.37	0.0	0.0	10.48	
44	0.0	0.0	0.0	0.12	0.10	2.09	1.05	4.77	0.71	0.33	0.25	0.0	9.42	

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT SODA LAKE

In Inches
(continued)

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1944-45	0.40	0.0	0.0	0.0	2.29	0.98	0.60	2.17	1.77	0.0	0.0	0.44	8.65
46	0.0	0.0	0.0	0.30	0.28	1.48	0.33	1.11	3.01	0.39	0.0	0.0	6.90
47	0.0	0.0	0.0	0.50	2.38	1.33	0.45	0.33	0.55	0.60	0.0	0.0	6.14
48	0.0	0.0	0.0	0.10	0.0	2.43	0.52	0.61	1.59	0.35	0.83	0.0	6.43
49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1949-50	0.0	0.50	0.0	0.0	0.49	1.50	1.83	1.21	1.04	1.20	0.50	0.0	8.27
51	0.0	0.0	0.0	0.74	0.36	0.41	2.13	0.69	0.07	1.05	0.0	0.0	5.45
52	0.0	0.0	0.0	0.20	0.98	1.66	4.53	0.41	4.39	0.36	0.0	0.0	12.53
53	0.0	0.0	0.11	0.0	2.59	2.50	0.75	0.22	0.30	0.0	0.0	0.0	7.47
54	0.0	0.0	0.0	0.0	1.89	0.11	3.31	1.13	2.52	0.05	0.0	0.0	9.01

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT SODA LAKE (EAST OF)

County: San Luis Obispo
 Date established: 1953
 Elevation: 2,070 feet, U.S.G.S. datum

Station number on Plate 3: SLO-44
 Latitude: $35^{\circ}15.9'$
 Longitude: $119^{\circ}50.5'$
 Record obtained from: D. Werling

In Inches

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1953-54	0.0	0.0	0.0	0.0	0.0	0.75	0.0	2.61	0.0	2.00	0.0	0.0	5.36

TABLE C-2 (continued)

County: San Luis Obispo
 Date established: 1909
 Elevation: 500 feet, U.S.G.S. datum

RECORD OF MONTHLY PRECIPITATION AT SUEY RANCH

Station number on Plate 3: SLO-39
 Latitude: 34°-59.6'
 Longitude: 120°-22.6'
 Record obtained from: Suey Ranch

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In Inches

Season :	July :	Aug. :	Sept. :	Oct. :	Nov. :	Dec. :	Jan. :	Feb. :	Mar. :	Apr. :	May :	June :	Total	
1909-10	0.0	0.0	0.0	0.0	2.62	5.11	4.90	0.75	3.83	0.53	0.0	0.0	17.74	
11	0.0	0.0	0.80	0.63	0.45	0.18	8.55	4.00	7.25	1.10	0.0	0.0	22.96	
12	0.0	0.0	0.0	0.0	0.24	2.10	1.20	0.0	4.68	1.12	1.83	0.0	11.87	
13	0.0	0.0	0.0	0.0	0.87	0.0	2.50	1.54	0.90	0.25	0.13	0.10	6.29	
14	0.15	1.90	0.0	0.0	3.63	3.05	21.75	2.15	2.15	0.10	0.05	0.25	24.18	
1914-15	0.0	0.0	0.0	0.0	0.0	0.0	5.68	5.72	6.80	0.39	2.40	1.35	0.0	23.34
16	0.0	0.0	0.0	0.0	0.22	3.56	10.65	1.00	1.72	0.0	0.0	0.0	17.15	
17	0.0	0.0	2.05	1.81	0.44	5.76	1.75	2.27	0.0	0.63	0.18	0.0	14.89	
18	0.0	0.0	0.0	0.0	0.18	0.25	0.85	11.98	4.34	0.0	0.0	0.0	17.60	
19	0.0	0.0	0.25	0.40	2.52	0.53	0.45	2.77	1.76	0.06	0.61	0.0	9.35	
1919-20	0.0	0.0	0.60	0.01	0.37	2.44	0.40	1.84	3.59	1.16	0.0	0.0	10.41	
21	0.0	0.0	0.0	0.70	1.15	1.93	3.19	2.09	1.46	0.27	1.37	0.0	12.16	
22	0.0	0.0	0.17	0.26	0.0	4.90	3.95	2.76	2.57	0.21	0.44	0.0	15.76	
23	0.0	0.0	0.0	0.0	2.08	3.87	2.55	1.23	0.22	4.42	0.0	0.0	14.37	
24	0.0	0.0	0.51	0.0	0.30	0.59	0.51	0.40	3.51	0.78	0.0	0.0	6.60	
1924-25	0.0	0.0	0.0	1.08	1.17	1.68	1.89	2.24	2.77	2.86	1.58	0.22	15.49	
26	0.0	0.0	0.0	0.30	1.30	1.05	1.79	4.26	0.27	2.70	0.0	0.0	11.67	
27	0.0	0.0	0.0	0.53	2.43	0.55	2.79	5.21	2.17	1.13	0.9	0.0	13.81	
28	0.0	0.0	0.0	2.86	1.00	3.69	0.15	2.22	4.30	1.75	0.0	0.0	15.97	
29	0.0	0.0	0.0	0.14	3.10	1.22	1.90	1.40	1.54	0.75	0.0	0.22	10.27	

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT SUEY RANCH

In Inches
(continued)

	Season : July : Aug. : Sept. : Oct. : Nov. : Dec. : Jan. : Feb. : Mar. : Apr. : May : June : Total													
1929-30	0.0	0.0	0.0	0.0	0.0	0.0	0.22	3.58	1.43	3.01	0.55	1.38	0.30	10.47
31	0.0	0.0	0.0	0.0	0.0	1.71	0.0	3.96	1.59	0.27	0.27	1.28	0.0	9.08
32	0.0	0.0	0.0	0.0	0.0	2.98	6.70	3.07	3.55	0.67	0.67	0.27	0.0	17.91
33	0.0	0.0	0.0	0.0	0.0	0.0	1.20	6.07	0.20	0.30	0.19	0.09	2.53	10.58
34	0.0	0.0	0.0	0.0	0.0	0.0	3.28	1.09	2.10	0.83	0.0	1.44	8.74	
1934-35	0.0	0.0	0.0	0.0	2.17	4.89	2.01	3.94	1.39	3.44	2.63	0.0	0.0	20.47
36	0.0	0.0	0.0	0.0	0.60	2.28	1.24	1.13	5.14	1.32	1.23	0.20	0.0	13.14
37	0.0	0.0	0.0	0.0	1.33	0.0	6.30	3.51	4.62	4.32	0.47	0.0	0.0	20.55
38	0.0	0.0	0.0	0.0	0.17	0.26	3.11	4.10	7.74	5.36	2.10	0.0	0.0	23.14
39	0.0	0.0	0.0	0.46	0.19	0.20	1.62	3.38	2.39	2.25	0.32	0.02	0.0	10.83
1939-40	0.0	0.0	0.0	0.88	0.62	1.06	1.58	6.18	3.16	1.64	1.74	0.0	0.0	16.86
41	0.0	0.0	0.0	0.0	0.72	0.04	5.34	4.37	8.46	7.36	3.65	0.08	0.0	30.02
42	0.14	0.11	0.0	0.86	0.28	7.39	1.69	1.34	1.46	4.08	0.42	0.0	0.0	17.77
43	0.0	0.0	0.0	0.64	1.05	3.55	7.02	1.26	3.93	1.62	0.0	0.0	0.0	19.07
44	0.0	0.0	0.0	1.14	0.31	3.55	1.77	5.35	0.84	1.49	0.15	0.0	0.0	14.60
1944-45	0.0	0.0	0.0	0.40	1.99	1.74	0.56	3.47	3.66	0.09	0.0	0.0	0.0	11.91
46	0.0	0.0	0.02	0.71	0.95	3.54	0.55	1.75	4.73	0.10	0.13	0.0	0.0	12.48
47	0.0	0.0	0.0	0.46	4.09	1.24	0.23	0.55	1.26	0.23	0.26	0.0	0.0	8.42
48	0.0	0.03	0.03	0.64	0.10	0.87	0.0	1.36	3.12	2.94	0.96	0.0	0.0	10.02
49	0.0	0.0	0.0	0.09	0.0	2.82	1.37	1.77	4.07	0.06	1.07	0.0	0.0	11.25
1949-50	0.0	0.0	0.0	0.0	0.0	0.74	2.73	2.75	2.14	1.39	1.01	0.22	0.0	10.98
51	0.73	0.0	0.63	1.10	3.59	1.25	2.20	1.47	0.91	1.68	0.0	0.0	0.0	13.56
52	0.0	0.0	0.06	0.55	1.40	5.13	5.61	0.75	5.65	0.41	0.0	0.12	0.0	19.68
53	0.0	0.0	0.0	0.13	5.38	5.17	1.70	0.0	0.82	1.83	0.01	0.0	0.0	15.04
54	0.0	0.0	0.0	2.22	0.39	4.21	1.94	3.87	0.61	0.15	0.0	0.0	0.0	13.39

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT TEMPLETON

County: San Luis Obispo
 Date established: 1925
 Elevation: 820 feet, U.S.G.S. datum

Station number on Plate 3: 3-56
 Latitude: 35°-33.0'
 Longitude: 120°-42.3'
 Record obtained from: C. G. Carralt

In Inches

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1925-26	0.0	0.0	0.25	0.23	0.50	2.35	2.70	5.38	0.28	4.46	0.0	0.0	16.95
27	0.0	0.0	0.0	0.30	6.19	1.36	1.78	5.79	1.48	1.00	0.0	0.0	17.90
28	0.0	0.0	0.0	1.46	1.54	1.86	0.25	2.41	3.31	0.63	0.15	0.0	11.71
29	0.0	0.0	0.0	Tr	2.72	3.15	1.55	2.43	1.68	0.52	0.0	0.47	12.52
1929-30	—	—	—	—	—	—	—	—	—	—	—	—	—
31	0.0	0.0	0.0	0.0	0.05	2.29	0.0	4.59	1.77	0.23	0.74	1.59	1.12
32	0.0	0.09	Tr	0.0	0.04	2.32	10.98	5.11	3.44	0.80	0.50	0.10	24.43
33	0.0	0.0	0.0	0.0	0.57	0.24	1.21	0.59	0.11	1.03	0.02	0.70	23.39
34	0.0	0.0	0.0	0.0	0.0	0.34	0.07	3.70	0.16	0.13	0.15	0.07	12.83
1934-35	0.0	0.0	0.0	1.52	3.35	2.21	6.37	9.95	3.21	3.86	0.0	0.0	21.47
36	0.0	0.38	0.09	0.28	1.59	2.36	2.80	9.03	1.15	1.67	0.02	0.07	19.44
37	0.0	0.0	0.0	1.82	0.0	7.09	4.80	5.84	5.47	0.0	0.29	0.0	25.21
38	0.0	0.0	0.0	0.19	0.53	7.73	3.61	12.38	5.82	1.38	0.0	0.0	31.64
39	0.0	0.0	0.55	0.29	0.41	1.29	3.39	1.80	1.67	0.03	0.08	0.0	9.42
1939-40	0.0	0.0	0.40	1.13	0.95	1.57	7.64	6.23	2.09	0.50	0.0	0.0	20.51
41	0.0	0.0	0.0	0.35	0.24	9.13	5.78	11.48	7.63	3.96	0.22	0.0	38.79
42	0.0	Tr	0.0	1.38	0.86	8.31	2.92	1.24	2.56	4.64	0.36	0.0	22.27
43	0.0	0.0	0.0	0.62	1.59	1.97	8.85	1.67	6.07	1.24	0.0	0.0	22.01
44	0.0	0.0	0.0	0.50	0.26	3.50	1.60	7.87	1.51	0.12	0.65	0.0	16.01

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT TEMPLETON

In Inches
(continued)

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1944-45	0.0	0.0	0.0	0.34	3.18	1.58	1.56	4.03	4.85	0.16	Ty	0.0	15.70
46	0.0	Tr	0.0	1.44	0.50	6.19	0.58	2.16	5.21	0.14	0.11	0.0	16.33
47	0.44	0.0	0.14	0.16	5.82	2.62	0.61	1.51	1.39	0.39	0.35	0.04	23.47
48	0.0	0.0	0.15	0.69	0.18	1.09	0.9	2.00	4.85	3.79	0.65	0.0	13.40
49	0.0	0.0	0.0	0.11	0.0	3.80	1.64	2.31	4.61	0.47	0.51	0.0	13.45
1949-50	0.0	0.0	Tr	0.0	1.88	2.73	4.06	3.16	2.28	1.35	0.11	0.0	15.57
51	0.88	0.0	0.0	1.98	2.97	2.60	2.99	2.08	0.05	1.47	0.21	0.0	15.26
52	0.0	0.0	0.06	0.74	3.43	7.11	8.35	0.83	5.53	1.50	0.09	0.0	27.64
53	0.08	0.0	0.0	Tr	3.68	7.58	1.88	0.0	1.43	2.26	0.02	0.0	16.93
54	0.0	0.0	0.0	0.0	0.63	5.13	5.05	2.60	5.00	0.80	0.15	0.06	19.42

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT TRUESDALE RANCH

County: San Luis Obispo
 Date established: 1884
 Elevation: 1,130 feet, U.S.G.S. datum

Station number on Plate 3: 3-50
 Latitude: $35^{\circ} - 36.9^{\circ}$
 Longitude: $120^{\circ} - 22.0^{\circ}$
 Record obtained from: United States Bureau
 of Reclamation

Season	In Inches											Total		
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May			
1884-85	0.0	0.0	0.0	0.0	0.0	0.0	2.35	1.25	0.0	1.00	1.75	0.13	0.0	6.48
86	0.0	0.0	0.0	0.35	9.95	1.59	2.07	1.35	0.67	0.62	0.0	0.0	16.60	
87	0.0	0.0	0.0	0.12	0.31	0.32	0.44	4.06	0.12	1.31	0.75	0.0	7.43	
88	0.0	0.0	0.0	0.34	0.0	0.22	0.33	2.65	3.39	0.27	1.74	0.05	8.96	
89	0.0	0.0	0.07	0.0	4.33	1.71	0.51	0.73	3.60	0.38	0.56	0.0	11.89	
1889-90	0.0	0.0	0.0	5.53	1.69	5.80	3.31	2.69	1.19	0.0	0.0	0.0	20.21	
91	0.0	0.0	2.00	0.0	0.25	1.53	0.27	4.31	0.85	0.93	0.0	0.0	10.24	
92	0.0	0.0	0.66	0.0	0.0	2.17	0.37	0.74	1.55	0.0	1.13	0.0	6.62	
93	0.0	0.0	0.0	0.26	1.22	1.76	1.18	1.73	3.88	0.68	0.0	0.0	19.71	
94	0.0	0.0	0.0	0.17	0.16	1.51	0.60	0.56	0.20	0.0	0.50	0.17	3.87	
1894-95	0.0	0.0	0.0	0.81	0.24	0.06	3.76	4.06	0.44	0.83	0.0	0.0	10.20	
96	0.0	0.0	0.0	0.0	1.75	1.43	3.55	2.90	0.0	2.13	0.65	0.0	8.41	
97	0.0	0.0	0.0	0.0	1.88	1.52	3.72	0.0	2.00	1.91	0.0	0.0	11.03	
98	0.0	0.0	0.0	0.0	0.0	0.20	0.15	0.74	0.99	0.58	0.40	0.0	3.06	
99	0.0	0.0	0.44	0.0	0.23	0.38	1.76	0.05	2.78	0.50	0.20	0.0	6.24	
1899-1900	0.0	0.0	0.0	1.84	1.18	0.83	1.40	0.0	1.92	0.62	0.75	0.0	8.54	
01	0.0	0.0	0.0	0.13	3.01	0.10	5.18	3.39	0.19	1.06	0.54	0.0	13.60	
02	0.0	0.0	0.0	0.70	0.27	0.0	0.66	2.51	2.34	0.90	0.0	0.0	7.38	
03	0.0	0.0	0.0	0.62	0.42	0.50	1.48	0.93	2.72	0.18	0.0	0.0	6.85	
04	---	---	---	---	---	---	---	---	---	---	---	---	---	

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT TRUESDALE RANCH

In Inches
(continued)

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1904-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.17
06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.16
07	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.95
08	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.75
09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.36
1909-10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1914-15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.69
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.61
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.73
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.88
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.60
C 69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1919-20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.69
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.39
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.29
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.16
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.68
1924-25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.95
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.90
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.77
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.44
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.28

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TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT TRUESDALE RANCH

In Inches
(continued)

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1929-30	0.0	0.0	0.0	0.0	0.0	0.0	2.33	0.65	2.30	0.25	0.72	0.0	6.25
31	0.0	0.0	0.0	0.0	0.78	0.0	3.08	1.23	0.27	0.62	0.74	0.62	7.34
32	0.0	0.0	0.0	0.0	1.62	4.82	2.58	2.61	0.20	0.13	0.18	0.0	12.14
33	0.0	0.0	0.0	0.0	0.28	1.20	6.36	0.13	0.39	0.14	0.44	1.00	9.94
34	0.0	0.0	0.0	0.0	1.72	0.93	2.16	0.11	0.0	0.16	0.60	0.60	5.88
1934-35	0.0	0.0	0.0	1.44	1.70	1.34	3.75	0.91	2.54	1.96	0.0	0.0	13.64
36	0.0	0.0	0.0	0.34	0.73	1.01	0.19	5.49	0.96	0.92	0.0	0.13	9.77
37	0.0	0.0	0.0	1.42	0.0	4.57	3.29	2.33	3.78	0.28	0.0	0.0	15.77
38	0.0	0.0	0.15	0.13	0.31	2.70	1.11	5.50	4.59	1.31	0.0	0.0	15.80
39	0.0	0.0	0.45	0.08	0.16	1.07	2.29	1.03	1.27	0.05	0.0	0.0	6.40
1939-40	0.0	0.0	1.20	0.42	0.23	0.72	3.85	3.41	0.96	0.74	0.0	0.0	11.53
41	0.0	0.0	0.0	0.32	0.09	4.23	2.47	6.57	4.66	2.40	0.0	0.0	20.74
42	0.0	0.0	0.0	0.97	0.48	4.40	1.20	1.20	1.19	2.07	0.26	0.0	11.57
43	0.0	0.0	0.0	0.30	0.31	1.82	5.05	1.56	3.18	0.57	0.14	0.0	12.92
44	0.0	0.0	0.0	0.58	0.48	2.95	1.28	4.77	0.05	0.54	0.25	0.60	11.60
1944-45	0.0	0.0	0.0	0.13	2.49	0.71	0.65	2.66	1.91	0.09	0.0	0.0	8.64
45	---	---	---	---	---	---	---	---	---	---	---	---	---
47	0.11	0.0	0.25	0.0	2.35	2.25	0.41	0.47	0.86	0.38	0.20	0.04	7.22
48	0.0	0.0	0.0	0.21	0.13	0.41	0.01	1.42	1.84	1.70	0.45	0.02	6.19
49	0.0	0.0	0.0	0.10	0.0	2.34	0.95	0.74	2.26	0.33	0.63	0.0	7.45
1949-50	0.0	0.0	0.0	0.02	0.71	2.60	2.03	1.40	1.14	1.15	0.12	0.0	9.16
51	0.35	0.0	0.0	0.81	0.48	0.66	1.86	0.86	0.07	0.76	0.0	0.0	5.85
52	0.0	0.0	0.0	0.25	1.36	2.50	5.18	0.34	3.84	0.90	0.0	0.0	14.37

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT UPPER MORRO CREEK

County: San Luis Obispo
 Date established: 1951
 Elevation: 1,050 feet, U.S.G.S. datum

Station number on Plate 3: SIO-43
 Latitude: $35^{\circ}27.3'$
 Longitude: $120^{\circ}45.2'$
 Record obtained from: Mrs. Edna Purser

In Inches

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1951-52	0.0	0.0	0.0	1.55	2.76	11.70	11.51	1.54	8.69	2.36	0.06	0.08	40.25
53	0.04	0.0	0.0	0.0	4.10	9.20	4.96	0.0	3.27	4.82	0.0	0.10	26.49
54	0.0	0.0	0.0	0.07	3.28	0.68	8.28	3.83	7.19	1.89	0.39	0.05	25.66

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT WHITE RANCH

County: San Luis Obispo
 Date established: 1931
 Elevation: 1,625 feet, U.S.G.S. datum

Station number on Plate 3: 3-080

Latitude: $35^{\circ}42'7''$ Longitude: $120^{\circ}22'9''$

Record obtained from: United States Bureau
 of Reclamation

In Inches

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1931-32	0.0	0.0	0.0	0.0	1.71	4.75	1.41	0.25	0.0	0.20	0.0	11.73	
33	0.0	0.0	0.0	0.0	0.32	1.64	5.39	0.17	0.69	0.0	0.68	0.81	9.40
34	0.0	0.0	0.0	0.22	0.0	1.97	1.45	2.49	0.22	0.0	0.21	0.77	7.32
35	0.0	0.0	0.0	1.20	2.64	1.73	3.69	0.99	3.06	2.79	0.0	0.0	16.10
1935-36	0.0	0.25	0.20	0.41	0.68	1.14	0.83	6.96	1.15	1.30	0.0	0.0	12.92
37	0.0	0.0	0.0	1.51	0.0	4.79	3.75	2.91	3.53	0.33	0.0	0.0	16.83
38	0.0	0.0	0.0	0.24	0.22	3.31	1.86	6.35	5.50	1.49	0.0	0.0	18.97
39	0.0	0.43	0.0	0.0	0.0	1.05	2.37	1.72	1.99	0.0	0.0	0.0	7.56
40	0.0	0.0	1.30	0.33	0.26	0.75	5.75	3.83	0.83	0.56	0.0	0.0	13.61
1940-41	0.0	0.0	0.0	0.45	0.10	5.94	3.18	6.90	4.42	2.62	0.0	0.0	23.61
42	0.0	0.0	0.0	0.92	0.28	4.94	1.71	0.60	0.62	0.0	0.0	0.0	9.07

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT ANNETTE

County: Kern
 Date established: 1951
 Elevation: 2,150 feet, U.S.G.S. datum

Station number on Plate 3: K-1
 Latitude: $35^{\circ}38.8'$
 Longitude: $120^{\circ}10.2'$
 Record obtained from:
 San Luis Obispo
 County Farm Advisor
 (E. Still Ranch)

In Inches

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1951-52	0.0	0.0	0.0	0.25	1.27	2.25	5.15	0.40	4.95	0.97	0.0	0.0	15.24
53	0.0	0.0	0.26	Tr	1.90	2.33	1.22	0.08	0.0	0.0	0.0	0.0	5.79
54	0.0	0.0	0.0	0.0	0.38	0.0	5.25	2.29	4.95	0.84	0.0	0.0	13.71

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT PERMasse RANCH

County: Santa Barbara
 Date established: 1921
 Elevation: 1,000 feet, U.S.G.S. datum

Station number on Plate 3: SB-3
 Latitude: 35°-04.5'
 Longitude: 120°-09.3'
 Record obtained from: United States Bureau
 of Reclamation

In Inches

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1921-22	-	-	-	-	-	-	8.50	4.25	4.00	4.00	1.00	0.37	0.2
23	0.0	0.0	0.0	0.25	2.25	4.75	2.75	1.25	0.25	4.87	0.0	0.0	16.37
24	0.0	0.0	0.75	0.50	0.50	0.0	0.37	0.25	5.00	0.50	0.0	0.0	7.87
1924-25	0.0	0.0	0.0	1.50	4.50	0.0	1.25	2.50	4.50	3.75	1.87	2.0	19.87
26	0.0	0.0	0.0	0.0	0.0	2.25	1.75	4.50	0.75	4.50	0.0	0.0	13.75
27	0.0	0.0	0.0	0.75	5.00	1.50	2.75	7.25	4.50	0.73	0.0	1.00	23.48
28	0.0	0.0	0.0	2.00	1.25	0.0	1.00	2.50	4.00	0.25	0.75	0.9	12.75
29	0.0	0.0	0.0	0.0	2.50	2.75	2.00	1.25	2.00	1.50	0.0	0.0	12.00
C-100	-	-	-	-	-	-	-	-	-	-	-	-	-
1929-30	0.0	0.0	0.0	0.0	0.0	0.0	4.75	2.00	4.25	1.00	1.50	0.0	13.50
31	0.0	0.0	0.25	0.0	2.00	0.0	4.25	1.25	0.50	0.25	1.50	0.0	10.00
32	0.0	0.0	0.0	0.0	3.25	7.99	3.75	5.37	1.00	0.25	0.50	0.0	22.11
33	0.0	0.0	0.0	0.0	0.0	2.25	9.25	0.12	1.12	0.0	0.50	1.75	14.99
34	-	-	-	-	-	-	-	-	-	-	-	-	-
1934-35	0.0	0.0	0.0	1.75	3.50	2.00	4.75	1.25	5.24	4.00	0.0	0.0	22.49
36	0.0	1.50	0.0	0.38	1.00	1.50	1.75	12.00	0.0	2.00	0.0	0.25	20.38
37	0.0	0.0	0.0	2.62	0.0	6.75	4.50	7.62	6.75	0.50	0.0	0.0	28.74
38	0.0	0.0	0.0	0.0	0.50	4.50	3.50	8.00	3.00	0.0	0.0	0.0	27.50
39	0.0	0.0	1.00	0.0	0.0	2.00	4.75	2.75	2.00	0.50	0.0	0.0	13.00

C-100

TABLE C-2 (continued)

RECORD OF MONTHLY PRECIPITATION AT PERMASSE DANCH

In Inches
(continued)

Season	JULY	AUG.	Sept.	OCT.	Nov.	Dec.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	Total
1939-40	2.0	0.0	1.00	0.50	0.25	1.75	7.00	4.00	1.50	1.50	0.0	0.0	17.50
41	0.0	0.0	0.0	0.88	0.12	5.50	4.00	19.25	7.50	5.00	0.0	0.0	33.25
42	0.0	0.0	0.0	0.00	0.50	7.00	2.62	1.50	2.11	3.49	0.34	0.0	18.56
43	0.0	0.08	0.08	0.54	1.43	2.50	9.10	1.21	5.21	1.34	0.0	0.0	21.41
44	0.0	0.0	0.0	1.23	0.28	4.35	1.99	5.91	1.66	1.53	0.35	0.0	18.30
1944-45	3.0	0.0	0.0	0.0	4.16	1.89	0.86	4.93	4.13	0.13	0.0	0.09	16.49

APPENDIX D

RECORDS OF DAILY RUNOFF AND MISCELLANEOUS
STREAM FLOW MEASUREMENTS IN SAN LUIS OBISPO
COUNTY AND VICINITY, NOT PREVIOUSLY PUBLISHED

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TABLE D-1

RECORDS OF DAILY RUNOFF IN SAN LUIS OBISPO COUNTY
AND VICINITY NOT PREVIOUSLY PUBLISHED
HUERHUEO CREEK NEAR GENESEO SCHOOL

1952-53 Season

Station number on Plate 5: SLO-2	Date	Daily Mean Flow ^a in Second-Feet			Location: NE $\frac{1}{4}$, Sec. 5, T. 27 S. 2 R. 13 E. 2 M.D.B. & N.		
		Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	2.7	0.5	0.6	1.0	1.3	1.3	0.4
2	0.6	0.5	0.6	1.0	1.4	1.1	0.4
3	0.5	0.5	0.6	1.0	1.4	1.1	0.4
4	NO FLOW	0.5	0.5	0.6	1.0	1.4	1.1
5	0.7	0.6	0.6	1.0	1.6	1.2	0.3
6	0.7	0.6	0.6	1.0	1.6	1.2	0.3
7	1.4	0.6	0.6	0.8	1.6	1.0	0.4
8	1.1	0.7	0.7	0.8	1.6	1.0	0.3
9	0.8	0.6	0.7	0.8	1.6	0.8	0.4
10	1.0	0.6	0.7	0.8	1.6	0.8	0.4
11	1.1	0.6	0.7	0.8	1.9	0.7	0.3
12	0.2	1.1	0.6	0.7	0.8	1.9	0.7
13	0.2	0.8	0.7	0.8	1.9	0.7	0.3
14	0.4	0.7	0.6	0.7	0.9	1.6	0.7
15	0.5	0.7	0.6	0.7	0.8	1.6	0.6
16	0.2	0.8	0.6	0.7	0.8	1.6	0.6
17	0.2	0.8	0.6	0.7	0.8	1.4	0.5
18	0.2	0.8	0.6	0.7	0.9	1.4	0.5
19	0.2	0.8	0.6	0.7	1.5	1.6	0.5
20	0.2	0.6	0.5	0.7	1.4	1.4	0.5
21	0.2	0.6	0.5	0.7	1.2	1.3	0.3
22	0.2	0.6	0.6	0.7	1.4	1.1	0.5
23	0.2	0.6	0.6	0.7	1.4	1.1	0.5
24	0.2	0.6	0.6	0.8	1.4	1.3	0.5
25	0.2	0.5	0.6	0.8	1.4	1.4	0.5
26	0.3	0.5	0.6	0.8	1.6	1.6	0.5
27	0.3	0.6	0.6	0.8	1.6	2.1	0.5
28	0.3	0.6	0.6	1.0	1.9	1.4	0.5
29	0.3	0.4	0.5	-	1.9	1.1	0.5
30	0.3	0.4 ^e	0.5	-	1.9	1.3	0.4
31	-	0.6	0.5	-	1.9	-	0.4
Average	0.2	0.7	0.6	0.7	1.2	1.5	0.7
Runoff in acre-feet	10	40	40	40	70	90	40
e Estimated							15

TABLE D-1 (continued)

ESTRELLA CREEK NEAR ESTRELLA

1952-53 Season

Station number on Plate 5: SL0-2	Daily mean flow, in second-feet ^a										Location: NW $\frac{1}{4}$, Sec. 5, T. 26 S., R. 13 E., M.D.B.&M.	
	Date : Oct.	: Nov.	: Dec.	: Jan.	: Feb.	: Mar.	: Apr.	: May	: June	: July	: Aug.	
1	28	67		7.8	7.0	4.5	8.2	1.9	0.1			
2	5.6	9.0	7.8	7.0	4.5	8.2	2.0	0.1				
3	5.0	7.8	6.8	4.5	6.9	2.5	0.1					
4	1.1	4.8	7.8	6.8	4.2	6.2	2.0	0.1				
5	4.7	4.8	7.8	7.0	3.8	6.0	2.0	0.1				
6	2.8	4.8	7.8	6.8	3.9	5.4	1.5	0.1				
7	1.5	5.0	7.8	6.5	3.8	5.6	1.6	0.1				
8	4.6	5.0	7.8	6.2	3.7	5.2	1.8	0.1				
9	3.1	8.8	7.4	6.2	3.7	5.2	1.6	0.1				
10	2.4	4.2	7.0	6.0	2.7	5.2	1.6	0.1				
11	2.3	1.8	19	7.0	5.6	3.7	5.2	0.9	0.1			
12	2.4	1.4	11	7.0	5.8	3.9	5.0	0.7	0.1			
13	2.4	1.1	11	7.0	5.8	4.0	5.0	0.6	0.1			
14	3.0	0.9	13	7.0	5.8	4.2	5.0	0.5	0.1			
15	4.6	0.9	24	7.0	5.4	4.0	5.2	0.4	0.1			
16	4.4	0.9	26	7.0	5.4	4.0	4.5	0.3	0.1			
17	4.1	0.8	15	7.0	5.2	4.0	4.5	0.4	0.1			
18	4.3	0.8	20	7.0	5.2	4.2	4.2	0.4	0.1			
19	4.1	0.9	2.3	7.0	5.0	4.0	3.9	0.4	0.1			
20	19 ^e	8.9	7.0	5.2	4.8	3.6	0.4	0.1				
21	15 ^e	8.9	7.0	5.6	5.0	3.3	0.4	0.1				
22	3.7	13 ^e	8.5	7.0	5.6	4.8	3.4	0.3	0.1			
23	3.7	12	8.2	7.0	5.6	4.5	3.7	0.3	0.1			
24	3.6	12	8.2	7.0	5.4	4.0	3.3	0.2	0.1			
25	2.6	13	7.8	6.8	5.2	4.0	3.3	0.2	0.1			
26	2.7	36	7.8	6.8	5.2	3.7	2.0	0.2	0.1			
27	3.7	35	7.4	6.8	5.8	2.0	0.1	0.1				
28	3.8	25	7.4	6.8	5.2	7.4	2.7	0.1				
29	2.9	35	7.8	-	5.0	7.8	2.6	0.2				
30	4.3	98	7.8	-	4.5	7.8	2.9	0.3				
31	-	24	7.8	-	4.5	-	2.6	-				
Average	2.6	14.7	14.3	7.2	5.7	4.5	4.5	0.9	0.1			
Runoff in acre-feet	150	900	880	400	350	270	280	50	50	5.4		

^e Estimated

TABLE D-1 (continued)

ESTRELLA CREEK NEAR ESTRELLA

1953-54 Season

Station number on Plate 5: SL0-3 Location: NE $\frac{1}{4}$, Sec. 4, T. 26 S., R. 12 E., M.D.B.&M.

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Daily mean flow, in.-second-feet	May	June	July	Aug.	Sept.
1							5.4	2.4	1.4	14	6.0	0.1
2	4.0	5.6	5.6	5.6	2.2	1.4	1.4	14	4.9	0.1		
3	4.2	4.8	5.6	5.6	2.1	1.4	1.4	23	3.8	0.1		
4	4.8	5.8	5.8	5.8	2.1	1.5	1.5	17	2.1	0.1		
5	4.5	5.6	5.6	5.6	2.0	1.7	1.7	20	2.3	0.1		
6	4.5	5.6	5.6	5.6	1.9	1.8	1.8	14	1.4			
7							5.6	1.9	2.1	14	1.1	
8							5.4	1.8	2.3	15	1.1	
9							5.4	1.8	2.9	15	1.9	
10							5.0	1.8	2.1	15	1.9	
11							4.7	4.8	1.8	16	1.9	
12							4.5	5.0	1.8	16	1.5	
13							4.8	7.4	3.0	18	1.4	
14							4.5	7.4	3.0	18	1.4	
15							6.3	4.0	7.0	47	4.2	
16							5.6	5.2	6.8	32	5.4	
17							5.2	5.4	7.0	11	7.6	
18							4.8	5.2	7.0	7.0	9.4	
19							4.8	5.2	7.8	6.2	8.2	
20							4.2	5.2	5.2	15	5.8	
21							4.0	5.2	14	6.8	12	
22							3.8	5.2	14	6.8	14	
23							3.7	5.0	14	6.8	14	
24							3.7	5.0	11	6.8	27	
25							3.9	5.0	11	6.8	23	
26							4.0	5.0	157	6.8	16	
27							4.0	5.0	114	6.7	11	
28							4.0	5.2	22 ^e	7.0	10	
29							4.0	5.2	8.9 ^e	7.0	9.0	
30							4.2	5.4	5.2 ^e	-	10	
31							-	5.4	3.3 ^e	-	12	
									2.6 ^e	-	13	
Average	2.5	4.9	16.0	7.1	7.7					12.0	1.2	
Runoff in acre-feet	150	300	980	390	480					710	80	1

> Estimated

TABLE D-1 (continued)

SANTA ROSA CREEK AT CAMBRIA

1952-53 Season:

Station number on Plate 5: S10-7	Daily mean flow, in second-feet												Location: NW $\frac{1}{4}$, Sec. 26, T. 27 S., R. 8 E. 2 ft. D. 7.3 M.	
	Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sect.	
1	133	73	34	15	8.1	25.2	5.3	1.8						
2	24	47	31	13	7.2	18.0	5.2	1.8						
3	5.3	24	29	12	6.7	14.6	4.9	1.8						
4	2.3	25	28	12	6.7	21	4.5	1.8						
5	4.2	20	27	12	6.4	8.9	4.2	2.0						
6	6.7	158	24	12	6.0	8.1	4.2	2.0						
7	851	466	22	11	6.0	7.6	4.2							
8	1,174	21	10	6.0	7.1	4.2								
9	54	313	20	10	6.0	6.8	3.6							
10	35	178	19	13	5.6	6.4	3.5							
11	26	120	19	10	5.6	6.0	2.8							
12	22	29	18	10	5.2	5.6	2.2							
13	17	484	18	9.0	5.3	5.2	2.5							
14	16	223	17	9.0	4.5	4.5	2.5							
15	16	155	16	9.0	4.2	5.2	2.2							
16	1.6	139	16	8.0	3.9	5.6	2.2							
17	1.6	123	16	8.0	3.9	6.7	1.8							
18	1.6	128	16	8.0	3.6	6.0	1.8							
19	1.6	122	16	4.6	5.6	6.0	1.8							
20	1.6	112	15	16	8.4	6.0	1.6							
21	1.4	102	15	16	5.3	5.6	1.1							
22	1.4	25	89	14	4.5	5.6	0.4							
23	1.4	20	80	15	13	4.2	5.6	0.4						
24	1.6	18	70	15	12	3.0	5.6	0.4						
25	1.6	15	59	14	11	3.0	5.6	0.3						
26	1.6	13	49	14	10	3.6	5.6	0.3						
27	1.6	62	49	24	9.9	239	5.6	0.6						
28	1.6	277	45	13	9.4	59	5.6	0.4						
29	1.8	40	42	-	8.9	22	5.2	0.9						
30	1.8	422	39	-	8.4	29	5.3	1.6						
31	-	148	37	-	8.1	-	5.2	-						
Average	0.5 ^e	1.5 ^e	85.3	157.2	17.3	12.6	16.6	7.4	2.4	1.0 ^e	0.8 ^e	0.4 ^e		
Runoff in acre-feet	30 ^e	90 ^e	5,250	9,660	1,060	760	990	460	140	60 ^e	50 ^e	20 ^e		

^e Estimated

TABLE D-1 (continued)

SANTÁ ROSA CREEK AT CAMBRIA

1953-54 Season

Station number on Plate 5: SL0-7

Location: NE $\frac{1}{4}$, Sec. 26, T. 22 S., R. 8 E., M.D.N. 2%

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Daily mean flow, in second-feet		June	July	Aug.	Sept.
							At 6 ^a	At 6 ^a				
1	0.4	0.9	1.6	1.4	1.0	1.2	92	12	30.9	0.9	1.1	0.2
2	0.4	1.2	1.5	1.4	8.9	12	71	10	30.6	0.9	1.1	0.2
3	0.4	1.2	1.4	1.4	8.1	11	60	9.4	30.3	0.9	1.1	0.2
4	0.3	1.2	1.4	1.4	7.2	10	53	8.4	2.8	1.2	1.1	0.3
5	0.3	1.2	1.4	1.4	6.7	10	47	8.4	2.5	1.8	0.9	0.4
6	0.8	1.2	1.4	1.4	6.7	9.4	43	8.4	2.3	1.4	0.8	0.5
7	0.4	1.2	1.4	1.4	6.4	9.4	38	8.4	2.2	1.4	0.6	0.2
8	0.5	1.2	1.4	1.4	6.0	8.1	34	8.4	2.3	1.4	0.5	0.3
9	0.6	1.4	1.4	1.4	6.0	10	30	9.4	2.5	1.8	0.5	0.2
10	1.1	2.6	1.4	1.4	5.6	18	26	11	2.0	1.8	0.5	0.1
11	0.6	1.6	1.4	1.4	5.6	9.9	22	8.9	1.6	1.6	0.5	0.2
12	0.5	1.6	1.4	1.4	7.1	9.4	18	8.4	1.8	1.3	0.6	0.2
13	0.5	1.6	1.4	1.4	14.3	8.1	17	8.1	2.0	0.9	0.8	0.2
14	0.4	1.4	1.4	1.4	35.3	7.1	17	7.2	2.1	1.4	0.9	0.3
15	0.4	26	1.2	1.4	58	7.1	15	6.7	2.0	1.4	1.1	0.2
16	0.3	1.4	1.2	1.4	59	27	14	6.4	3.0	2.0	1.1	0.3
17	0.3	1.2	1.2	1.2	37.6	62	12	6.0	3.0	1.8	1.1	0.4
18	0.3	1.2	1.6	1.6	18.8	22	12	5.6	3.0	1.8	1.1	0.4
19	0.8	1.2	1.6	1.6	91	40.2	12	5.6	2.3	1.8	1.1	0.8
20	0.8	1.2	1.4	1.4	5.2	60	164	12	5.6	2.3	1.1	0.8
21	0.6	1.2	1.2	1.2	4.2	44	143	12	5.3	2.0	0.8	1.1
22	0.5	1.2	1.2	1.2	1.1	34	76	12	4.9	2.8	0.5	0.9
23	0.5	1.4	1.2	1.2	47	28	60	11	4.5	2.5	0.4	0.9
24	0.4	1.4	1.2	1.2	42.6	24	56	10	3.9	2.5	0.3	0.5
25	0.4	1.4	1.4	1.2	126	21	45	10	3.6	2.5	0.2	0.5
26	0.2	1.4	1.2	1.2	48	19	38	10	3.3	2.0	0.2	0.4
27	0.2	1.4	1.2	1.2	34	18	37	58	3.3	2.0	0.2	0.3
28	0.4	1.4	1.4	1.4	26	25	37	47	3.3	1.4	0.6	0.2
29	0.5	1.4	1.4	1.4	21	-	198	28	3.3	1.1	0.2	0.2
30	0.5	1.4	1.4	1.4	16	-	189	14	3.6	1.2	0.6	0.3
31	0.8	-	1.4	1.3	-	-	125	-	3.9	-	0.9	0.3
Average	0.5	3.6	1.4	1.4	26.0	57.7	61.4	28.2	6.6	2.5	1.1	0.8
Rainoff in second-feet	30	210	80	1,600	3,200	3,770	1,680	710	150	70	50	20

^e Estimated

TABLE D-1 (continued)

ARROYO GRANDE CREEK BELOW SANTA MARUELA SCHOOL

1952-53 Season

Station number on Plate 5; SL0-9 Location: NW 1/4, Sec. 32, T. 31 S., R. 14 E., M.D.T., & M.

Date	Oct.	Nov.	Dec.	Jan.	Daily mean flow, in second-feet							
					Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.
1			6.0 ^e		25	5.8	1.8	0.9	0.7	0.7	0.6	0.7
2		13 ^e	18	5.8	1.9	0.9	0.9	0.9	0.7	0.7	0.6	0.7
3		2.4 ^e	11	5.8	1.9	0.9	0.9	0.9	0.7	0.7	0.6	0.7
4		0.5 ^e	5.8	5.4	1.9	0.9	0.9	0.9	0.7	0.7	0.6	0.7
5		0.0	3.6	5.4	1.9	0.8	0.8	0.8	0.7	0.7	0.6	0.7
6		0.0	4.0	5.0	1.8	0.8	0.8	0.8	0.7	0.7	0.6	0.7
7		12 ^e	20	4.7	1.7	0.7	0.7	0.7	0.7	0.7	0.6	0.7
8		3.4 ^e	29	4.4	1.3	0.7	0.7	0.8	0.7	0.7	0.6	0.7
9		0.3 ^e	45	4.0	1.2	0.6	0.6	0.6	0.5	0.5	0.4	0.5
10		0.0	28	3.8	1.3	0.6	0.6	0.7	0.6	0.6	0.5	0.6
11		0.0	23	2.6	1.2	0.6	0.6	0.7	0.6	0.6	0.5	0.6
12		0.0	18	2.5	1.1	0.6	0.6	0.8	0.7	0.7	0.6	0.7
13		0.0	27	2.3	1.0	0.5	0.5	0.8	0.7	0.7	0.6	0.7
14		0.0	41	3.1	1.0	0.5	0.5	0.8	0.7	0.7	0.6	0.7
15		0.0	31	2.9	0.9	0.5	0.5	0.7	0.6	0.6	0.5	0.6
16		0.0	25	2.9	0.7	0.4	0.4	0.7	0.6	0.6	0.5	0.6
17		0.0	22	2.9	0.6	0.4	0.4	0.7	0.6	0.6	0.5	0.6
18		0.0	19	2.7	0.5	0.4	0.4	0.6	0.5	0.5	0.4	0.5
19		0.0	18	2.7	0.8	0.4	0.4	0.6	0.5	0.5	0.4	0.5
20		1.5	15	2.7	0.6	0.4	0.4	0.6	0.5	0.5	0.4	0.5
21		0.7	12	2.4	2.1	0.5	0.5	0.5	0.4	0.4	0.3	0.4
22		1.1	10	2.5	1.9	0.5	0.5	0.5	0.4	0.4	0.3	0.4
23		1.1	10	2.4	1.5	0.4	0.4	0.4	0.3	0.3	0.2	0.3
24		1.1	8.8	2.3	1.4	0.3	0.3	0.3	0.2	0.2	0.1	0.2
25		1.2	7.6	2.1	1.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1
26		1.3	6.3	1.8	1.2	0.1	0.1	0.1	0.0	0.0	0.0	0.1
27		1.9	6.3	1.7	1.1	0.8	0.8	0.8	0.7	0.7	0.6	0.7
28		6.1	6.3	1.8	1.0	0.7	0.7	0.7	0.6	0.6	0.5	0.6
29		2.9	6.3	-	0.9	0.9	0.9	1.4	1.4	1.4	1.1	1.4
30		25	5.8	-	0.9	0.9	0.9	1.1	1.1	1.1	0.9	1.1
31		40	5.8	-	-	-	-	-	-	-	-	-
Average				18.8	9.5	4.4	4.4	4.7	4.6	4.6	4.5	4.6
Runoff in acre-feet												
240 1,160 190 90 40 30												

e Estimated

TABLE D-1 (continued)

ARROYO GRANDE CREEK BELOW SANTA MANUELA SCHOOL

1953-54 Season

Station number on Plate 5: Slo-2		Daily mean flow, in second-feet													
Date	Sec.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.		
1														2.4	25
2														2.3	22
3														2.1	19
4														1.9	14
5														1.8	9.5
6														1.6	7.6
7														1.5	6.3
8														1.4	5.4
9														1.5	5.0
10														1.6	5.0
11														1.4	5.0
12														1.3	5.0
13														1.1	4.7
14														0.9	4.4
15														0.9	4.0
16														4.6	2.1
17														14	2.4
18														25	1.4
19														14	5.5
20														7.2	29
21														4.0	19
22														3.6	9.5
23														3.6	5.8
24														3.6	6.9
25														52	14
26														2.1	14
27														2.9	11
28														2.7	5
29														-	8.5
30														-	73
31														-	35
Average		3.4	4.2											8.5	5.8
Runoff in cubic feet		210	230											350	60

TABLE D-1 (continued)

MAGIMIENTO RIVER AT SAN LUIS OBISPO-MONTEREY COUNTY LINE

1953-54 Season

Station number on Plate 5: M-1
Location: NE $\frac{1}{4}$ Sec. 4, T. 25 S., R. 8 E., M.D.B. & M.

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												

D₆₀

Average Runoff in acre-feet

130	7,260	22,640	14,280	3,790	960	200	10
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e Estimated

SAN LUIS OBISPO COUNTY INVESTIGATION

APPENDIX D

TABLE D-2

RECORDS OF INTERMITTENT STREAM FLOW MEASUREMENTS IN
SAN LUIS OBISPO COUNTY AND VICINITY

Discharge in Second-Feet

Date	: Dis-	: Dis-	: Dis-	: Dis-	: Dis-
	: charge	: Date	: charge	: Date	: charge
Salinas River near Pozo, at U.S.G.S. gaging station 0.4 mile downstream from State Highway 178 bridge, Southeast $\frac{1}{4}$ Section 18, Township 30 South, Range 15 East, M.D.B.&M.					
10-22-53	0.2				
Salinas River above Pilitas Creek at U.S.G.S. gaging station, Northeast $\frac{1}{4}$ Section 6, Township 30 South, Range 14 East, M.D.B.&M.					
11-28-52	0.01	1-21-53	0.4	7-14-53	1.0
Salinas River above confluence with Rinconada Creek, Northwest $\frac{1}{4}$ Section 36, Township 30 South, Range 13 East, M.D.B.&M.					
7- 8-53	144	7-13-53	247	7-14-53	1.0
Salinas River at Calf Canyon Road bridge near Santa Margarita, Northeast $\frac{1}{4}$ Section 15, Township 29 South, Range 13 East, M.D.B.&M.					
11-28-52	1.1	6- 2-53	1.4	7- 8-53	125
1-21-53	7.9	6-17-53	0.9	7- 9-53	145
2- 6-53	4.3	7- 3-53	0.2	7-11-53	253
2-20-53	3.5				
Moreno Creek at confluence with Salinas River, Northeast $\frac{1}{4}$ Section 15, Township 29 South, Range 13 East, M.D.B.&M.					
1-21-53	0.3	6- 2-53	0.5	6-17-53	0.6
2-20-53	0.4				
Rinconada Creek at State Highway 178, Southwest $\frac{1}{4}$ Section 36, Township 30 South, Range 13 East, M.D.B.&M.					
11-28-52	1.1	2- 6-53	3.0	6- 2-53	2.1
1-21-53	6.0	2-20-53	2.0	7- 3-53	1.1
Trout Creek at State Highway 178, Northwest $\frac{1}{4}$ Section 21, Township 29 South, Range 13 East, M.D.B.&M.					
10-22-53	1.6				

TABLE D-2 (continued)
RECORDS OF INTERMITTENT STREAM FLOW MEASUREMENTS IN
SAN LUIS OBISPO COUNTY AND VICINITY

Discharge in Second-Feet

Date	Dis- charge	Date	Dis- charge	Date	Dis- charge	Date	Dis- charge
Santa Margarita Creek 0.1 mile below confluence with Trout Creek, Northwest $\frac{1}{4}$ Section 5, Township 29 South, Range 13 East, M.D.B.&M.							
11-28-52	0.0	2- 6-53	10.7	6- 2-53	1.0	7- 3-53	0.03
1-21-53	27.4	2-20-53	6.3				
Salinas River below Santa Margarita Creek, Southeast $\frac{1}{4}$ Section 31, Township 28 South, Range 13 East, M.D.B.&M.							
11-28-52	1.7	6- 2-53	1.1	7-10-53	144	7-14-53	19.6
1-21-53	43.6	7- 3-53	0.0	7-11-53	255	1-24-54	56.0
2- 6-53	17.3	7- 9-53	116	7-13-53	245	7- 2-54	304
2-20-53	9.6	7- 9-53	133				
Salinas River 2.9 miles upstream from Eureka Bridge Southeast $\frac{1}{4}$ Section 25, Township 28 South, Range 12 East, M.D.B.&M.							
7- 9-53	45.6	7-10-53	116	7-13-53	241	7-14-53	21.6
7- 9-53	83.0	7-11-53	223				
Salinas River at Eureka Bridge near Atascadero, Southeast $\frac{1}{4}$ Section 14, Township 28 South, Range 12 East, M.D.B.&M.							
11-28-52	1.1	7-10-53	15.3	7-13-53	161	1-25-54	2.1
11-30-52	1.5	7-10-53	12.4	7-13-53	203	2- 1-54	0.8
12- 2-52	12.3	7-10-53	61.0	7-14-53	37.6	2- 9-54	1.4
2-20-53	10.2	7-10-53	48.4	1-17-54	1.1	2-14-54	316
6- 2-53	1.5	7-11-53	169	1-19-54	1.5	7- 2-54	164
Atascadero Creek at bridge No. 49-49 on U. S. Highway No. 466, Northwest $\frac{1}{4}$ Section 28, Township 28 South, Range 12 East, M.D.B.&M.							
1- 9-54	2.6	1-18-54	0.6	1-25-54	96.0	2-13-54	65.4
1-17-54	2.0	1-19-54	2.0	1-26-54	28.9		
Atascadero Creek above confluence with Salinas River, Southeast $\frac{1}{4}$ Section 10, Township 28 South, Range 12, M.D.B.&M.							
1-21-53	19.9	2-20-53	3.2	7- 3-53	0.1	2- 9-54	1.9
2- 6-53	6.2	6- 2-53	1.3	1-25-54	110		

TABLE D-2 (continued)

RECORDS OF INTERMITTENT STREAM FLOW MEASUREMENTS IN
SAN LUIS OBISPO COUNTY AND VICINITY

Discharge in Second-Feet

Date	: Dis-	charge	Date	: Dis-	charge	Date	: Dis-	charge	Date	: Dis-	charge
Salinas River below Atascadero Creek, Southeast $\frac{1}{4}$ Section 10, Township 28 South, Range 12 East, M.D.B.&M.											
1-21-53	70.8	6- 2-53	0.0	7-13-53	199	7- 2-54	131				
2- 6-53	23.8	7- 3-53	0.0	7-14-53	30.6	7- 3-54	245				
2-20-53	35.2	7-11-53	92.8	2- 9-54	1.1						
Graves Creek at U. S. Highway 101, Northwest $\frac{1}{4}$ Section 5, Township 28 South, Range 12 East, M.D.B.&M.											
11-28-52	0.1	2- 6-53	3.0	7- 3-53	0.0	1-25-54	22.2				
1-21-53	7.5	2-20-53	1.6								
Paso Robles Creek at U. S. Highway 101, Southwest $\frac{1}{4}$ Section 32, Township 27 South, Range 12 East, M.D.B.&M.											
1-21-53	75.2	2-20-53	13.9	7- 3-53	0.9	2- 9-54	5.6				
2- 6-53	23.4	6- 2-53	7.1	1-25-54	207						
Salinas River at Templeton at county bridge, Northwest $\frac{1}{4}$ Section 32, Township 27 South, Range 12 East, M.D.B.&M.											
11-28-52	3.6	2- 6-53	54.1	6- 2-53	9.2	7-14-53	39.4				
11-30-52	3.9	2-20-53	33.5	7- 3-53	0.0	1-25-54	436				
1-21-53	152	2-23-53	35.4	7-13-53	154	2- 9-54	8.2				
Salinas River 4.0 miles downstream from county bridge at Templeton, Southeast $\frac{1}{4}$ Section 9, Township 27 South, Range 12 East, M.D.B.&M.											
7-14-53	33.7										
Salinas River at Paso Robles at U.S.G.S. gaging station, Northeast $\frac{1}{4}$ Section 33, Township 26 South, Range 12 East, M.D.B.&M.											
12-20-54	0.0	2-13-54	35.5	3-17-54	116	3-30-54	757				
2- 9-54	9.1	2-23-54	106								
Huerhuero Creek at county bridge, 1.1 miles northwest of Geneseo School, Northeast $\frac{1}{4}$ Section 15, Township 27 South, Range 13 East, M.D.B.&M.											
12- 1-52	0.6	12-31-52	0.8	1- 7-53	0.7	6-17-53	0.2				

TABLE D-2 (continued)
RECORDS OF INTERMITTENT STREAM FLOW MEASUREMENTS IN
SAN LUIS OBISPO COUNTY AND VICINITY

Discharge in Second-Feet

Date	Dis-	Date	Dis-	Date	Dis-	Date	Dis-
	charge		charge		charge		charge
San Marcos Creek at Oak Flat Road bridge, Northwest $\frac{1}{4}$ Section 11, Township 26 South, Range 11 East, M.D.B.&M.							
2-14-54	4.3						
Cholame Creek at county bridge 1.3 miles north of State Highway 41, Southwest $\frac{1}{4}$ Section 18, Township 25 South, Range 16 East, M.D.B.&M.							
1- 7-53	0.5	1-13-53	0.3	1-28-53	0.3		
Cholame Creek at State Highway bridge at Palo Prieto Canyon Road, Southeast $\frac{1}{4}$ Section 36, Township 25 South, Range 16 East, M.D.B.&M.							
1- 7-53	0.5	1-13-53	0.4	1-28-53	0.3		
Cholame Creek at bridge on State Highway 41, 3.4 miles northeast of Shandon, Southwest $\frac{1}{4}$ Section 2, Township 26 South, Range 15 East, M.D.B.&M.							
12-15-52 through 4-27-53	no flow						
2-14-54	99.9						
Cholame Creek above confluence with Estrella Creek, Northwest $\frac{1}{4}$ Section 21, Township 26 South, Range 15 East, M.D.B.&M.							
1- 7-53	0.4	1-13-53	1.0	1-28-53	0.3	1-25-54	68.8
San Juan Creek at State Highway 41 bridge, near Shandon, Northwest $\frac{1}{4}$ Section 21 Township 26 South, Range 15 East, M.D.B.&M.							
11-18-52	0.7	1- 7-53	1.3	1-28-53	1.2	6-17-53	0.4
11-30-52	0.5	1-13-53	2.0	3-19-53	0.9		
Estrella Creek below confluence of Cholame and San Juan Creeks, Northwest $\frac{1}{4}$ Section 21, Township 26 South, Range 15 East, M.D.B.&M.							
1- 7-53	2.1	1-13-53	3.5	1-28-53	2.0		
Estrella Creek at 15-Mile Bridge, on State Highway 41, near River Grove, Northwest $\frac{1}{4}$ Section 19, Township 26 South, Range 14 East, M.D.B.&M.							
11-18-52	3.7	1- 7-53	7.1	3-19-53	5.6	11-30-53	5.1
11-30-52	6.3	1-28-53	5.6	6-17-53	3.2		

TABLE D-2 (continued)

RECORDS OF INTERMITTENT STREAM FLOW MEASUREMENTS IN
SAN LUIS OBISPO COUNTY AND VICINITY

Discharge in Second-Feet

Date	: Dis-	: Dis-	: Dis-	: Dis-
	charge	Date	charge	Date

Estrella Creek at county bridge 0.6 mile southeast of Estrella, Northwest $\frac{1}{4}$ Section 5, Township 26 South, Range 13 East, M.D.B.&M.

11-18-52	4.1	6-17-53	0.4	1-18-54	7.2	2-15-54	80.6
11-30-52	5.4	12-21-53	5.4	1-10-54	9.0	2-23-54	7.0
12-31-52	15.5	1-11-54	5.7	1-25-54	35.6	3-17-54	12.9
1-13-53	10.8	1-12-54	8.6	1-26-54	94.3	3-30-54	10.2
1-28-53	7.4						

Estrella Creek 1.1 miles above confluence with Salinas River, at concrete road dip, Northeast $\frac{1}{4}$ Section 28, Township 25 South, Range 12 East, M.D.B.&M.

1- 7-53	8.0	2- 6-53	6.5	7- 3-53	0.0	1-25-54	19.5
1- 3-53	10.5	2-20-53	5.4	1-12-54	0.9	2- 9-54	10.4
1-28-53	6.9	6- 1-53	0.0	1-19-54	6.3	2-23-54	6.6

Salinas River at San Miguel, Southwest $\frac{1}{4}$ Section 16, Township 25 South, Range 12 East, M.D.B.&M.

11-18-52	2.1	2-20-53	47.5	2- 9-54	10.7	2-23-54	109.0
11-30-52	0.4	6- 2-53	1.8	2-14-54	353		
2- 6-53	79.6	7- 3-53	0.7				

Salinas River at San Luis Obispo-Monterey County line, Northwest $\frac{1}{4}$ Section 6, Township 25 South, Range 12 East, M.D.B.&M.

10- 9-53	3.4	2- 9-54	51.4
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Nacimiento River at San Luis Obispo-Monterey County line, Northeast $\frac{1}{4}$ Section 4, Township 25 South, Range 8 East, M.D.B.&M.

12-15-53	3.0	1-17-54	757	2- 9-54	22.9	6-23-54	2.7
1-11-54	6.1	1-25-54	512	2-15-54	562	7- 5-54	0.7
1-12-54	5.4						

Nacimiento River 24.7 miles above confluence with Salinas River, at Pebbleston Shut-In Dam Site, Northeast $\frac{1}{4}$ Section 20, Township 25 South, Range 9 East, M.D.B.&M.

1-12-54	9.3
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Nacimiento River 9.8 miles above confluence with Salinas River, at El Nacimiento Dam Site, Northeast $\frac{1}{4}$ Section 14, Township 25 South, Range 10 East, M.D.B.&M.

2- 9-54	36.0
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TABLE D-2 (continued)
RECORDS OF INTERMITTENT STREAM FLOW MEASUREMENTS IN
SAN LUIS OBISPO COUNTY AND VICINITY

Discharge in Second-Feet

Date	: Dis-	: Dis-	: Dis-	: Dis-
	charge	Date	charge	Date
Nacimiento River near San Miguel at U.S.G.S. gaging station, Southeast $\frac{1}{4}$ Section 4, Township 25 South, Range 11 East, M.D.B.&M.				
1-12-54	6.4	2- 9-54	35.3	2-15-54
1-17-54	9.1	2-14-54	5,000	2-23-54
1-25-54	1,520			
Nacimiento River above confluence with Salinas River, Northwest $\frac{1}{4}$ Section 23, Township 24 South, Range 11 East, M.D.B.&M.				
2- 9-54	18.6	2-23-54	285	
San Antonio River at Pleyto Bridge, Southeast $\frac{1}{4}$ Section 26, Township 24 South, Range 10 East, M.D.B.&M.				
2- 9-54	3.4	2-23-54	136	
San Antonio River above confluence with Salinas River, Northeast $\frac{1}{4}$ Section 8, Township 24 South, Range 11 East, M.D.B.&M.				
2- 9-54	1.2			
Salinas River at U. S. Highway 101 bridge, at Bradley, Northwest $\frac{1}{4}$ Section 8, Township 24 South, Range 11 East, M.D.B.&M.				
10- 9-53	6.8	2- 9-54	65.6	
Salinas River near Bradley at U.S.G.S. gaging station, Northwest $\frac{1}{4}$ Section 14, Township 23 South, Range 10 East, M.D.B.&M.				
12- 9-53	7.6	2-23-54	672	3-17-54
2- 9-54	70.9			2,280
Arroyo de la Cruz near San Simeon at U.S.G.S. gaging station, Northeast $\frac{1}{4}$ Section 35, Township 25 South, Range 6 East, M.D.B.&M.				
12- 2-52	140	1- 2-53	113	4-30-53
12- 7-52	1,370	3- 4-53	10.9	3-16-54
12-27-52	141			1,120
San Simeon Creek at county bridge below Palmer Flats, Northeast $\frac{1}{4}$ Section 10, Township 27 South, Range 6 East, M.D.B.&M.				
12- 2-52	24.9	12- 5-52	16.5	12- 7-52
				453
				4-30-53
				50.5

TABLE D-2 (continued)

RECORDS OF INTERMITTENT STREAM FLOW MEASUREMENTS IN
SAN LUIS OBISPO COUNTY AND VICINITY

Discharge in Second-Feet

: Dis-	: Dis-	: Dis-	: Dis-
Date	charge	Date	charge

San Simeon Creek at State Highway 1, Southeast $\frac{1}{4}$ Section 8, Township 27 South, Range 8 East, M.D.B.&M.

7-10-54 1.0

Santa Rosa Creek at Cambria, at county steel bridge, Northwest $\frac{1}{4}$ Section 26, Township 27 South, Range 8 East, M.D.B.&M.

11-14-52	1.7	1-15-53	149	-	6-22-53	0.9	1-12-54	2.2
11-30-52	1.8	1-26-53	52.5		7-28-53	1.2	1-19-54	4.9
12- 1-52	8.4	3- 4-53	11.2		10-19-53	0.7	1-24-54	326
12- 5-52	3.1	3-20-53	36.8		11-10-53	2.0	2-13-54	270
12- 7-52	2,970	3-31-53	7.4		11-14-53	57.7	2-15-54	52.3
12- 7-52	426	4-30-53	30.2		11-16-53	1.4	3-23-54	63.1
12-27-52	38.7	6- 1-53	5.3		11-23-53	1.4	9- 6-54	1.5
1-14-53	239							

Old Creek at State Highway 1, near Cayucos, Northwest $\frac{1}{4}$ Section 3, Township 29 South, Range 10 East, M.D.B.&M.

11-14-52	0.7	1-14-53	79.7		4-29-53	9.8	5-26-53	1.5
11-30-52	0.9	3- 4-53	5.4		4-30-53	9.3	6-22-53	0.6
12- 5-52	9.7	4-27-53	98.8					

Toro Creek above State Highway 1 at Pacific Gas and Electric Company gaging station, Southeast $\frac{1}{4}$ Section 11, Township 29 South, Range 10 East, M.D.B.&M.

12-18-52	2.3	3-20-53	6.0		4-29-53	8.6	1-19-54	1.7
1- 6-53	13.9	4- 9-53	2.8		4-30-53	7.7	1-24-54	60.4
1- 7-53	60.3	4- 9-53	2.6		11-10-53	0.3	3-22-54	18.7
1- 8-53	99.8	4-27-53	22.4		11-14-53	1.2	6-18-54	0.4
3-11-53	3.2	4-28-53	17.2		1-12-54	0.8		

Morro Creek at State Highway 1, Northwest $\frac{1}{4}$ Section 25, Township 29 South, Range 10 East, M.D.B.&M.

12-18-52	4.3	1- 8-53	113.8		3-12-53	3.6	4-28-53	25.9
1- 6-53	23.7	1-15-53	45.7		4- 8-53	3.1	6- 4-53	1.3
1- 7-53	65.9							

Chorro Creek near Morro Bay State Park, Southeast $\frac{1}{4}$ Section 31, Township 29 South, Range 11 East, M.D.B.&M.

7-18-54 0.0

TABLE D-2 (continued)
RECORDS OF INTERMITTENT STREAM FLOW MEASUREMENTS IN
SAN LUIS OBISPO COUNTY AND VICINITY

Discharge in Second-Feet

Date	Dis- charge	Date	Dis- charge	Date	Dis- charge	Date	Dis- charge
San Luis Obispo Creek at San Luis Obispo, Northeast $\frac{1}{4}$ Section 34, Township 30 South, Range 12 East, M.D.B.&M.							
11-15-52	17.6	2-10-53	3.7	4-28-53	4.0	5-18-53	0.6
12- 1-52	0.1	3-20-53	5.6	5-27-53	1.2	7-13-53	0.0
12-27-52	11.7						
San Luis Obispo Creek near Avila, at U. S. Highway 101 Bridge, Northwest $\frac{1}{4}$ Section 33, Township 32 South, Range 12, M.D.B.&M.							
11-15-52	63.9	1-28-53	35.2	4-28-53	22.9	7-29-53	0.1
12- 1-52	5.4	3-13-53	10.0	5-28-53	3.3	9-10-53	0.1
12-27-52	28.7	3-20-53	25.8	6-18-53	2.9	12-21-53	2.6
Pismo Creek near Tiber railroad siding, at Division of Water Resources Staff. Southwest $\frac{1}{4}$ Section 6, Township 32 South, Range 13 East, M.D.B.&M.							
4- 7-54	3.7	5-12-54	1.6	6-26-54	0.5		
Lopez Canyon Creek, 1.7 miles above confluence with Arroyo Grande Creek, Southwest $\frac{1}{4}$ Section 21, Township 31 South, Range 14 East, M.D.B.&M.							
11-29-52	5.3	3-11-53	6.3	6-18-53	4.5	9- 8-53	2.3
12- 9-52	12.7	5-29-53	2.5	7-27-53	2.6	2-24-54	9.5
1-22-53	11.9						
Arroyo Grande Creek, 0.7 mile above confluence with Lopez Creek, Northeast $\frac{1}{4}$ Section 33, Township 31 South, Range 14 East, M.D.B.&M.							
11-29-52	2.3	3-11-53	4.2	7-27-53	1.6	1-24-54	8.2
12- 9-52	3.4	5-29-53	2.8	9- 8-53	1.7	2-24-54	2.6
1-22-53	7.0	6-18-53	2.0				
Arroyo Grande Creek above confluence with Lopez Creek, at county bridge, Northwest $\frac{1}{4}$ Section 33, Township 31 South, Range 14 East, M.D.B.&M.							
12- 1-52	1.3	3-11-53	2.7	9- 8-53	0.3	1-26-54	2.7
12- 5-52	6.0	5-29-53	1.0	1-19-54	1.8	2-13-54	5.3
12- 8-52	3.8	6-18-53	0.5	1-24-54	4.7	2-24-54	3.8
12-30-52	4.3	7-27-53	0.6	1-24-54	4.7		

TABLE D-2 (continued)

RECORDS OF INTERMITTENT STREAM FLOW MEASUREMENTS IN
SAN LUIS OBISPO COUNTY AND VICINITY

Discharge in Second-Feet

Date	: Dis-	: Date	: Dis-	: Date	: Dis-	: Date	: Dis-
	: charge		: charge		: charge		: charge
Arroyo Grande Creek below Santa Manuela School at Division of Water Resources gaging station, Northwest $\frac{1}{4}$ Section 32, Township 31 South, Range 14 East, M.D.B.&M.							
12- 2-52	2.8	12-30-52	41.7	5-29-53	0.0	3-16-54	4.4
12- 8-52	4.7	1-20-53	15.0	6-18-53	0.0	3-22-54	8.0
12- 9-52	0.4	1-22-53	10.8	7-27-53	0.0	3-30-54	99.3
12-27-52	1.6	3-11-53	1.8	2-15-54	5.2	7-18-54	0.0
12-30-52	6.0	5-25-53	0.1	2-24-54	3.5		
Arroyo Grande Creek at Orcutt Road, Northeast $\frac{1}{4}$ Section 1, Township 32 South, Range 13 East, M.D.B.&M.							
11-24-52	6.0	12- 5-52	7.5	3-11-53	14.8	7-27-53	6.7
11-29-52	9.5	12- 9-52	9.3	5-29-53	10.8	9- 8-53	3.2
12- 1-52	6.7	12-30-52	29.0	6-18-53	7.5	2-24-54	12.8
12- 1-52	6.2	1-22-53	25.4				
Arroyo Grande Creek at Branch School Road, Southwest $\frac{1}{4}$ Section 12, Township 32 South, Range 13 East, M.D.B.&M.							
11-29-52	8.8	12-30-52	29.6	6-18-53	5.6	1-24-54	6.6
12- 1-52	8.2	1-22-53	26.8	7-27-53	5.9	1-26-54	12.0
12- 5-52	9.8	3-11-53	14.7	9- 8-53	3.8	2-24-54	13.2
12- 9-52	10.2	5-29-53	7.9	1-19-54	7.6		
Arroyo Grande Creek at Harris Bridge, Southeast $\frac{1}{4}$ Section 14, Township 32 South, Range 13 East, M.D.B.&M.							
11-29-52	9.7	1-22-53	26.6	5-29-53	7.5	7-27-53	6.4
12- 9-52	11.7	3-11-53	14.9	6-18-53	7.5	9- 8-53	1.2
Tar Springs Creek at county bridge above confluence with Arroyo Grande Creek, Northeast $\frac{1}{4}$ Section 23, Township 32 South, Range 13 East, M.D.B.&M.							
12- 1-52	1.2	12-30-52	64.9	6-18-53	0.4	7-27-53	0.3
12- 8-52	6.4	5-29-53	0.5				
Arroyo Grande Creek at Arroyo Grande, at U.S.G.S. gaging station, Southeast $\frac{1}{4}$ Section 22, Township 32, South, Range 13 East, M.D.B.&M.							
11-15-52	18.2	12- 9-52	14.1	5-29-53	9.3	9- 8-53	0.7
11-28-52	10.5	1-22-53	28.4	6-18-53	5.8	2-24-54	17.7
12- 8-52	17.6	3-11-53	16.8	7-27-53	2.4	3-16-54	21.8

TABLE D-2 (continued)

RECORDS OF INTERMITTENT STREAM FLOW MEASUREMENTS IN
SAN LUIS OBISPO COUNTY AND VICINITY

Discharge in Second-Feet

Date	: Dis-						
	charge		charge		charge		charge

Arroyo Grande Creek at State Highway 1 bridge, Northwest $\frac{1}{4}$ Section 33, Township 32 South, Range 13 East, M.D.B.&M.

11-28-52	7.4	12- 9-52	11.9	3-11-53	11.7	7-27-53	0.0
12- 1-52	7.2	12-30-52	77.4	5-29-53	5.3	1-19-54	9.2
12- 8-52	19.1	1-22-53	28.7	6-18-53	3.6	1-24-54	10.1
						1-26-54	10.7

Arroyo Grande Creek at Southern Pacific Railroad bridge, Southwest $\frac{1}{4}$ Section 32, Township 32 South, Range 13 East, M.D.B.&M.

12- 9-52	10.2	5-29-53	5.7	2-13-54	12.7	2-24-54	13.0
1-22-53	24.1	6-18-53	2.9	2-15-54	14.4	7-18-54	0.0
3-11-53	11.3	7-27-53	0.0				

APPENDIX E

RECORDS OF DEPTHS TO GROUND WATER
AT MEASUREMENT WELLS IN SAN LUIS OBISPO COUNTY AND VICINITY

TABLE OF CONTENTS

RECORDS OF DEPTHS TO GROUND WATER AT MEASUREMENT WELLS IN SAN LUIS OBISPO COUNTY AND VICINITY

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Wells listed in this appendix are numbered by the system utilized by the U. S. Geological Survey. An explanation of the numbering system is given on page 56 of Chapter II.

Reference point elevations given to the nearest foot have been estimated from U. S. Geological Survey topographic maps or from barometric leveling. Reference point elevations given to the nearest 0.1 foot have been established by field surveys.

Measurements followed by symbol "P" indicate well measured while pumping.

APPENDIX E

TABLE E-1

DEPTHS TO GROUND WATER AT MEASUREMENT WELLS IN UPPER SALINAS HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

23S/11E-30Q1--Reference point--top of casing, elevation 640 feet. Sarah Canyon 0.8 mile upstream from confluence with Salinas River. Wunpost Quad.
3/2/54, 104.0; 11/30/54, 109.0.

23S/11E-30Q2--Reference point--top of casing, elevation 640 feet. Sarah Canyon 0.8 mile upstream from confluence with Salinas River. Wunpost Quad.
3/2/54, 90.0; 11/30/54, 81.0.

23S/12E-25H1--Reference point--crack between pipe and cover, elevation 1,460 feet. Portuguese Canyon 6.0 miles above Vineyard School. Stockdale Mountain Quad. 7/20/54, 144.0; 12/1/54, 138.1.

23S/12E-29N1--Reference point--crack between pump and concrete base, elevation 990 feet. 11.0 miles up Indian Valley from Salinas River Bridge at San Miguel and 0.3 mile west of road. Vallleton Quad. 4/8/53, 127.0; 12/2/53, 137.5 P; 3/22/54, 134.0; 11/30/54, 130.8.

23S/12E-29N2--Reference point--top of casing, elevation 990 feet. 11.0 miles up Indian Valley from Salinas River Bridge at San Miguel and 0.3 mile west of road. Vallleton Quad. 4/8/53, 144.9; 12/2/53, 148.0; 3/22/54, 142.2.

23S/12E-29P1--Reference point--top of casing, elevation 970 feet. 11.0 miles up Indian Valley from Salinas River Bridge at San Miguel and 0.2 mile west of road. Vallleton Quad. 7/16/54, 92.1; 7/25/54, 92.6; 11/30/54, 92.5.

23S/12E-32D1--Reference point--top of casing, elevation 945 feet. 10.5 miles up Indian Valley from Salinas River Bridge at San Miguel and 0.3 mile west of road. Vallleton Quad. 7/16/54, 77.6; 11/30/54, 77.0.

23S/14E-26L1--Reference point--top of casing, elevation 1,520 feet. 0.38 mile south of Parkfield, north of road junction. Parkfield Quad.
7/15/54, 4.0; 11/30/54, 0.0.

23S/14E-35F1--Reference point--hole in pump base, elevation 1,490 feet. 0.9 mile due south of Parkfield. Parkfield Quad. 7/15/54, 51.0; 11/30/54, 42.0.

24S/10E-9A1--Reference point--top of casing, elevation 700 feet. 2.9 miles west and 0.7 mile south of intersection of Hames Valley Road and Highway 101. Tierra Redonda Mountain Quad. 7/27/54, 146.0.

24S/10E-11C1--Reference point--top of casing, elevation 620 feet. 1.4 miles west and 0.8 mile south of intersection of Hames Valley Road and Highway 101. Bradley Quad. 2/25/54, 55.3; 11/30/54, 58.7.

TABLE E-1 (continued)
DEPTHS TO GROUND WATER AT MEASUREMENT WELLS
IN UPPER SALINAS HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

24S/10E-13B1--Reference point--top of casing, elevation 618 feet. 1.7 miles south and 0.2 mile west of intersection of Hames Valley Road and Highway 101. Bradley Quad. 2/25/54, 51.8; 11/30/54, 57.2.

24S/10E-13P1--Reference point--hole under pump, elevation 668 feet. 2.6 miles south and 0.4 mile west of intersection of Hames Valley Road and Highway 101. Bradley Quad. 2/25/54, 123.6; 11/30/54, 121.7.

24S/11E-6A1--Reference point--top of casing, elevation 580 feet. 1.0 mile east and 0.1 mile north of intersection of Hames Valley Road and Highway 101. Wunpost Quad. 11/30/54, 72.6.

24S/11E-23N1--Reference point--hole in pump base, elevation 557.5 feet, Camp Roberts, 0.4 mile west and 0.1 mile south of south bridge abutment of Southern Pacific Railroad. Bradley Quad. 12/2/53, 23.2; 1/23/54, 19.8; 3/15/54, 23.3.

24S/11E-23N2--Reference point--hole in pump, elevation 558 feet. Camp Roberts, 0.44 mile west and 0.1 mile south of the south bridge abutment of Southern Pacific Railroad. Bradley Quad. 12/2/53, 15.9; 3/15/54, 14.1; 11/23/54, 14.5.

24S/11E-25N1--Reference point--plug in concrete base, elevation 604.5 feet. Camp Roberts, 0.5 mile east and 0.9 mile south of south bridge abutment of Southern Pacific Railroad. Bradley Quad. 12/3/53, 37.6; 3/15/54, 43.3.

24S/11E-26N1--Reference point--hole in pump base, elevation 559.5 feet. Camp Roberts, 1.1 miles south and 0.5 mile west of south bridge abutment of Southern Pacific Railroad. Bradley Quad. 12/2/53, 26.5; 3/15/54, 20.9; 11/23/54, 22.8.

24S/11E-26Q1--Reference point--hole in pump base, elevation 595.8 feet. Camp Roberts, 1.2 miles southeasterly along Southern Pacific Railroad from south bridge abutment of Southern Pacific Railroad and 400 feet west of Highway 101. San Miguel Quad. 12/2/53, 55.7; 3/15/54, 53.5; 11/23/54, 54.5.

24S/11E-33R1--Reference point--pipe in concrete, elevation 565 feet. Camp Roberts, 1.9 miles south and 1.7 miles west of south bridge abutment of Southern Pacific Railroad. Bradley Quad. 12/2/53, 35.2; 3/15/54, 31.8; 11/23/54, 32.0.

24S/11E-34A1--Reference point--hole in pump base, elevation 560 feet. Camp Roberts, 1.1 miles south and 0.6 mile west of south bridge abutment of Southern Pacific Railroad. Bradley Quad. 12/2/53, 24.9; 3/15/54, 24.8.

TABLE E-1 (continued)
DEPTHES TO GROUND WATER AT MEASUREMENT WELLS
IN UPPER SALINAS HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

24S/11E-34F1--Reference point--hole in pump base, elevation 575 feet. Camp Roberts, 1.6 miles south and 1.1 miles west of south bridge abutment of Southern Pacific Railroad. Bradley Quad. 12/3/53, 34.5; 3/15/54, 29.0.

24S/11E-34G1--Reference point--hole in base, elevation 574 feet. Camp Roberts, 1.6 miles south and 1.0 mile west of south bridge abutment of Southern Pacific Railroad. Bradley Quad. 12/2/53, 34.9; 3/15/54, 29.5; 11/23/54, 28.7.

24S/11E-34J1--Reference point--end of discharge pipe, elevation 575 feet. Camp Roberts, 1.8 miles south and 0.7 mile west of south bridge abutment of Southern Pacific Railroad. Bradley Quad. 12/2/53, 40.1; 3/15/54, 35.8; 11/23/54, 34.0.

24S/11E-34K1--Reference point--hole in pump base, elevation 596 feet. Camp Roberts, 1.9 miles south and 1.1 miles west of south bridge abutment of Southern Pacific Railroad. Bradley Quad. 12/2/53, 53.2; 3/15/54, 42.8; 11/23/54, 51.2.

24S/11E-34P1--Reference point--plug in base, elevation 600 feet. Camp Roberts, 2.0 miles south and 1.3 miles west of south bridge abutment of Southern Pacific Railroad. Bradley Quad. 3/15/54, 53.6; 11/23/54, 50.8.

24S/11E-35D1--Reference point--plug in pump base, elevation 572.1 feet. Camp Roberts, 1.3 miles south and 0.3 mile west of south bridge abutment of Southern Pacific Railroad. Bradley Quad. 12/2/53, 40.2; 3/15/54, 40.2; 11/23/54, 34.0.

24S/11E-35E1--Reference point--hole at air line, elevation 575 feet. Camp Roberts, 1.5 miles south and 0.5 mile west of south bridge abutment of Southern Pacific Railroad. Bradley Quad. 12/3/53, 37.0; 3/15/54, 33.5; 11/23/54, 33.6.

24S/11E-35J1--Reference point--top of concrete under metal plate, elevation 617.8 feet. Camp Roberts in front of Headquarters Building at main gate. San Miguel Quad. 12/2/53, 65.2; 3/15/54, 64.8; 11/23/54, 63.2.

24S/11E-36R1--Reference point--top of casing, elevation 590 feet. Camp Roberts, 1,000 feet north of crossing of Southern Pacific Railroad and county line. San Miguel Quad. 8/2/54, 20.5; 8/16/54, 20.5; 11/23/54, 20.7.

24S/12E-5N1--Reference point--crack between cap and casing, elevation 882 feet. 5.4 miles north along Indian Valley Road from county line and 1,400 feet west across creek from road. San Miguel Quad. 7/16/54, 43.2; 11/30/54, 43.9.

TABLE E-1 (continued)
 DEPTHS TO GROUND WATER AT MEASUREMENT WELLS
 IN UPPER SALINAS HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

24S/12E-13H1--Reference point--hole in pump base, elevation 1,256 feet. 6.8 miles northeasterly along Vineyard Canyon Road from Indian Valley Road and 1,400 feet north of road. Ranchito Canyon Quad. 3/22/54, 189.5; 11/30/54, 189.5.

24S/12E-17L1--Reference point--hole in pump base, elevation 790 feet. Approximately 3.1 miles north of county line along Indian Valley Road to Y in road and 0.7 mile north along farm road on west side of creek. San Miguel Quad. 4/8/53, 160 P (owner); 11/25/53, 123 (owner); 3/22/54, 57.9; 11/30/54, 50.7.

24S/12E-17N1--Reference point--top of casing, elevation 770 feet. Approximately 3 miles north of county line to Y in road and 0.3 mile along farm road, 400 feet southeast of windmill. San Miguel Quad. 4/8/53, 17.4; 11/25/53, 18.3; 3/22/54, 18.4; 11/30/54, 19.2.

24S/12E-18B1--Reference point--hole in metal cover over casing, elevation 995 feet. 7.1 miles up Indian Valley Road from Vineyard Canyon Road, 0.8 mile west across creek. San Miguel Quad. 7/16/54, 199; 11/30/54, 133.5 P.

24S/12E-23G1--Reference point--crack in wood blocks under windmill, elevation 1,160 feet. 4.9 miles northeasterly along Vineyard Canyon Road from Indian Valley Road, on left side of road. San Miguel Quad. 3/22/54, 112.7; 12/1/54, 111.9.

24S/12E-33H1--Reference point--top of casing, elevation 837 feet. 0.7 mile north along Vineyard Canyon Road from county line and 100 feet west of road. San Miguel Quad. 9/4/53, 28.5 P; 10/19/53, 30.7 P; 11/25/53, 15.8; 3/22/54, 13.8; 12/1/54, 16.7.

24S/13E-4H1--Reference point--top of casing, elevation 1,595 feet. Approximately 8.7 miles northeasterly along Vineyard Canyon Road from county line. Ranchito Canyon Quad. 7/21/54, 112.3.

24S/13E-24N1--Reference point--top of casing, elevation 1,535 feet. 3.2 miles northeasterly along Ranchito Canyon Road from county line and 0.7 mile east of road. Ranchito Canyon Quad. 7/20/54, 83.7; 12/1/54, 83 P.

24S/13E-26R1--Reference point--crack in cover, elevation 1,410 feet. 1.4 miles northeasterly along Hog Canyon Road from county line, across road from Ellis School. Ranchito Canyon Quad. 10/26/53, 52.5; 3/22/54, 51.8; 12/1/54, 52.1.

TABLE E-1 (continued)

DEPTHS TO GROUND WATER AT MEASUREMENT WELLS
IN UPPER SALINAS HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

- 24S/13E-33P1--Reference point--top of wire screen, elevation 1,220 feet. 1,200 feet northeasterly along Ranchito Canyon road from county line and 800 feet east of road. Ranchito Canyon Quad. 3/12/54, 72.0; 12/1/54, 72.7.
- 24S/15E-17F2--Reference point--top of casing, elevation 1,345 feet. 3.9 miles south of Parkfield along Parkfield Road, 200 feet west of road. Cholame Hills Quad. 7/28/53, 81.4; 12/1/53, 79.5; 11/30/54, 89.2.
- 24S/15E-27L1--Reference point--top of casing, elevation 1,212 feet. 1.3 miles north along Parkfield Road from county line, 0.5 mile northeast along dirt road, 0.3 mile east of road. Cholame Ranch Quad. 7/28/53, 55.8; 12/1/53, 47.5; 3/12/54, 38.3; 11/30/54, 66.4.
- 24S/15E-33C1--Reference point--top of casing, elevation 1,253 feet. 2.0 miles northwesterly along Parkfield Road from county line, 400 feet south on dirt road, on west side of road. Cholame Ranch Quad.
- | | | |
|---------------|----------------|----------------|
| 7/28/53, 14.9 | 11/30/54, 17.2 | 11/29/56, 20.5 |
| 12/1/53, 18.3 | 11/7/55, 19.5 | 11/29/56, 20.9 |
| 3/12/54, 17.7 | | |
- 25S/11E-1A1--Reference point-under cap on pipe, elevation 604.9 feet. Camp Roberts, 800 feet south of crossing point of county line and Southern Pacific Railroad. San Miguel Quad. 12/2/53, 24.9; 3/15/54, 30.5; 11/23/54, 41.0.
- 25S/11E-5E1--Reference point--top of casing, elevation 665 feet. Camp Roberts, 1.6 miles west and 400 feet north of U.S.G.S. stream gaging station on east bank of Nacimiento River. Bradley Quad. 12/3/53, 92.9; 3/15/54, 92.5.
- 25S/11E-13G1--Reference point--top of casing, elevation 775 feet. 2.6 miles south along road from Camp Roberts cantonment area and 1.0 mile west of Military Reservation boundary line. San Miguel Quad. 12/3/53, 136.5; 3/15/54, 137.7; 11/23/54, 140.9.
- 25S/11E-24F1--Reference point--hole beneath discharge pipe, elevation 830 feet. 3.7 miles south along road from Camp Roberts cantonment area and 600 feet east of road. Paso Robles Quad. 3/-/54, 190 (owner).
- 25S/11E-35G1--Reference point--hole in tin at pump base, elevation 880 feet. 2.0 miles northerly along Generals Road from its junction with San Miguel Road and 0.9 mile east of Generals Road. Adelaide Quad. 10/6/53, 32.5; 3/25/54, 32.0; 11/21/54, 33.0.

TABLE E-1 (continued)

**DEPTHS TO GROUND WATER AT MEASUREMENT WELLS
IN UPPER SALINAS HYDROLOGIC UNIT**

(Depths to water in feet measured from reference point)

25S/11E-36N1--Reference point--hole beneath pump, elevation 838 feet. 3.8 miles southwesterly along San Miguel Road from U.S. Highway 101 and 0.8 mile north of road. Paso Robles Quad. 10/6/53, 32.0; 3/25/54, 31.4; 11/21/54, 32.0.

25S/12E-1P1--Reference point--crack around suction pipe, elevation 982 feet. 2.2 miles north on Lower Canyon road from its junction with Ranchito Canyon road. San Miguel Quad. 7/20/54, 58; 12/1/54, 58.6.

25S/12E-16D1--Reference point--hole in east side of pump base, elevation 605 feet at San Miguel Sewage Disposal Plant, 0.2 mile north of town and 600 feet east of Southern Pacific Railroad. San Miguel Quad. 7/14/54, 41.0; 11/19/54, 32.2.

25S/12E-16K1--Reference point--hole in north side of concrete base, elevation 715 feet. 0.6 mile east across Salinas River from U.S. Highway 101 and 2.7 miles south of county line, between PG and E substations. San Miguel Quad. 7/15/54, 132.0; 8/16/54, 126.0.

25S/12E-16N1--Reference point--air gage, elevation 620 feet. In San Miguel, on north side of 12th Street, 600 feet east of Southern Pacific Railroad. San Miguel Quad. 7/14/54, 65.0; 11/19/54, 51.0 (owner).

25S/12E-17J1--Reference point--air line hole in pump base, elevation 640 feet. In San Miguel, on west side of alley, between 13th and 14th Streets, and 400 feet west of Southern Pacific Railroad. San Miguel Quad. 7/14/54, 72.7; 11/19/54, 54.0 (owner).

25S/12E-17R1--Reference point--hole in base of pump, elevation 640 feet. In San Miguel, east side of alley between 12th and 13th Streets, and 400 feet west of Southern Pacific Railroad. San Miguel Quad. 7/14/54, 63.8; 11/19/54, 53.8 (owner).

25S/12E-19B1--Reference point--hole near pipe, elevation 825 feet. 600 feet north and 1.1 miles west of San Miguel Mission. Paso Robles Quad. 11/8/53, 215.9 P; 3/25/54, 210.6; 11/19/54, 217.2.

25S/12E-20A1--Reference point--top of casing, elevation 600 feet. South of town of San Miguel, 800 feet east of San Miguel Mission. Paso Robles Quad. 6/24/53, 16.2; 7/27/53, 17.4; 8/31/53, 18.0; 3/25/54, 15.2; 11/19/54, 17.6.

TABLE E-1 (continued)
 DEPTHS TO GROUND WATER AT MEASUREMENT WELLS
 IN UPPER SALINAS HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

25S/12E-21LL--Reference point--top of casing, elevation 652 feet. 740 feet north and 900 feet west of junction of East River Road and San Miguel-Estrella road. Paso Robles Quad.

4/ 2/53, 19.8 P	4/ 6/54, 10.2	7/31/54, 20.5 P
4/27/53, 19.6 P	5/10/54, 19.2 P	1/ 4/55, 15.2
5/25/53, 19.9	5/31/54, 19 P	2/ 1/55, 13.0
6/23/53, 19.5 P	6/29/54, 21 P	3/ 7/55, 11.4

25S/12E-24F1--Reference point--top of casing, elevation 899 feet. 0.3 mile south and 0.4 mile east of the northwest corner of section, 200 feet before the end of the dirt road. Paso Robles Quad. 9/10/53, 217.9; 11/25/53, 218.6; 3/25/54, 219.0; 11/30/54, 222.6.

25S/12E-25G1--Reference point--top of casing, elevation 750 feet. 0.4 mile south and 0.2 mile west of the northeast corner of section, 700 feet north of fork in road. Paso Robles Quad. 7/20/54, 32.5; 11/30/54, 31.3.

25S/12E-26D1--Reference point--crack in pump, elevation 714 feet. 100 feet west of road, 0.2 mile south and 400 feet east of northwest corner of section. Paso Robles Quad.

6/29/53, 62.0 P	11/30/54, 45.0	3/ 7/55, 32.2
3/25/54, 31.9	1/ 4/55, 47.8	11/16/55, 68.8
7/31/54, 64.0 P	2/ 1/55, 41.5	11/29/55, 57.2

25S/12E-26K1--Reference point--top of casing, elevation 749 feet. 0.2 mile north and 0.3 mile west of the southeast corner of section. Paso Robles Quad.

3/16/53, 70.5	2/ 4/54, 73.0	11/30/54, 87.9
6/24/53, 77.2	3/25/54, 71.7	1/ 4/55, 72.2
7/27/53, 121.6 P	5/10/54, 94.3	2/ 1/55, 83
8/31/53, 99.5	5/31/54, 123 P	3/ 7/55, 82.2
11/25/53, 77.8	11/ 1/54, 104.5	11/16/55, 109.5

25S/12E-26M1--Reference point--air gage, elevation 684 feet. At the transformer station, 0.5 mile south and 480 feet east of the northwest corner of section. Paso Robles Quad. 6/24/53, 92.0; 6/24/53, 115.0 P; 7/27/53, 90.0; 3/25/54, 18.0; 11/30/54, 20.8.

25S/12E-28M1--Reference point--top of casing, elevation 654 feet. 1,920 feet east and 400 feet north of junction of Highway 101 and San Miguel Road. Paso Robles Quad. 4/2/53, 65.9; 11/25/53, 72.5; 3/25/54, 50.2; 11/21/54, 75.0.

25S/12E-28N1--Reference point--top of boxing around pit, elevation 639 feet. 210 feet east of junction of Highway 101 and San Miguel Road. Paso Robles Quad. 4/2/53, 13.0; 11/25/53, 18.5; 3/25/54, 11.5.

TABLE E-1 (continued)

**DEPTHS TO GROUND WATER AT MEASUREMENT WELLS
IN UPPER SALINAS HYDROLOGIC UNIT**

(Depths to water in feet measured from reference point)

25S/12E-28N1--Reference point--hole on east side of pump base, elevation 654 feet. 360 feet north and 1,030 feet east of junction of U.S. Highway 101 and San Miguel Road. Paso Robles Quad. 7/27/54, 64.5 P.

25S/12E-32A1--Reference point--top of pipe, elevation 700 feet. 0.3 mile south of junction of U.S. Highway 101 and San Miguel Road, 200 feet west of highway. Paso Robles Quad.

10/2/53, 136.0 P	11/19/54, 86.4	3/7/55, 58.3
2/4/54, 57.3	1/4/55, 65.0	11/6/55, 109.1
3/25/54, 54.2	2/1/55, 60.1	11/29/56, 96.0

25S/12E-33Q1--Reference point--top of casing, elevation 630 feet. 800 feet east of Salinas River and 0.7 mile northeast of intersection of U.S. Highway 101 at Wellsona. Paso Robles Quad. 9/10/53, 19.7 P; 11/25/53, 5.3; 3/25/54, 0.6; 11/20/54, 6.3.

25S/12E-35C1--Reference point--top of casing, elevation 630 feet. 5.3 miles from San Miguel on road to Estrella, 500 feet south of highway in river bed. Paso Robles Quad. 7/20/54, 15 P; 11/30/54, 16.6.

25S/13E-8L1--Reference point--top of casing, elevation 1,045 feet. 1.8 miles south on Ranchito Canyon road from county line, east of road. Ranchito Canyon Quad. 3/22/54, 36.0; 12/1/54, 31.3.

25S/13E-11D1--Reference point--hole in wood blocks, elevation 1,220 feet. 6.4 miles up Hog Canyon road from Estrella. Ranchito Canyon Quad. 10/26/53, 67.3; 3/22/54, 66.7; 12/1/54, 65.6 P.

25S/13E-19C1--Reference point--hole inside pump base, elevation 908 feet. 4.4 miles north of Estrella along Parkfield Road, 800 feet west of road. Estrella Quad. 8/17/53, 288 P; 3/25/54, 243.7; 11/30/54, 260.

25S/13E-19R1--Reference point--top of casing, elevation 921 feet. 1.8 miles north along Parkfield Road from Pleasant Valley School, 300 feet west of road. Estrella Quad. 9/10/53, 185.4; 12/2/53, 173.3; 3/25/54, 173.7; 11/30/54, 177.6.

25S/13E-20P1--Reference point--top of casing, elevation 911 feet. 1.8 miles northerly along Parkfield Road from Pleasant Valley School and 0.5 mile east on Parkfield Road, 500 feet north of road. Estrella Quad. 9/10/53, 81.5; 3/25/54, 81.0; 11/30/54, 82.4.

25S/13E-20Q1--Reference point--top of casing, elevation 900 feet. 1.8 miles northerly along Parkfield Road from Pleasant Valley School and 0.5 mile east on Parkfield Road, 500 feet north of road. Estrella Quad. 9/10/53, 67.7.

TABLE E-1 (continued)

DEPTHS TO GROUND WATER AT MEASUREMENT WELLS
IN UPPER SALINAS HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

25S/13E-21E1--Reference point--top of casing, elevation 1,010 feet. 1.8 miles northerly, then 1.7 miles easterly along Parkfield Road from Pleasant Valley School, 0.3 mile northwesterly along dirt road. Estrella Quad. 7/28/54, 134; 11/30/54, 163.8.

25S/13E-22M1--Reference point--hole in top of wooden platform, elevation 965 feet. 3.5 miles northerly along Hog Canyon Road from Estrella Creek and 300 feet south of road. Estrella Quad. 9/10/53, 67.3 P; 10/26/53, 50.1; 12/2/53, 48.8; 3/25/54, 42.0; 11/30/54, 51.5.

25S/13E-32E1--Reference point--top of casing, elevation 800 feet. 0.7 mile northerly along Hog Canyon Road from Estrella Creek and 800 feet west of road. Estrella Quad. 10/26/52, 65.0; 3/22/54, 65.1; 11/30/54, 65.6.

25S/14E-33Q1--Reference point--top of casing under pump, elevation 1,230 feet. 3.9 miles north on Pine Canyon Road from its junction with Highways 466 and 41, just south of Hillman Ranch. Shandon Quad. 10/26/53, 243.0.

25S/15E-11C1--Reference point--top of casing, elevation 1,160 feet. 1.45 miles south on Parkfield Road from county line and 0.2 mile west of road. Cholame Ranch Quad. 7/28/53, 17.6; 12/1/53, 14.3; 11/30/54, 17.9.

25S/15E-11C2--Reference point--top of casing, elevation 1,165 feet. 1.45 miles south on Parkfield Road from county line and 0.2 mile west of road. Cholame Ranch Quad. 7/28/53, 27.8; 3/12/54, 13.5; 11/30/54, 33.5 P.

25S/15E-13B1--Reference point--top of planking, elevation 1,140 feet. 2.1 miles north on Parkfield Road from State Highway 41, 500 feet west of road. Cholame Ranch Quad.

3/27/53, 7.4	3/12/54, 6.8	11/17/55, 9.4
7/14/53, 9.1	11/30/54, 9.0	11/29/56, 8.2
12/ 1/53, 7.7		

25S/15E-23J1--Reference point--top of casing, elevation 1,625 feet. 800 feet north and 2.1 miles west of junction of Parkfield Road and State Highway 41. Cholame Quad. 3/27/54, 40.0.

25S/16E-17L1--Reference point--top of casing, elevation 1,165 feet. 1.1 miles northeast on State Highway 41 from junction with U.S. Highway 466, 0.4 mile north on dirt road, 300 feet west of road. Cholame Ranch Quad.

7/14/53, 40.9 P	12/ 1/53, 35.2	11/30/54, 41.0
8/19/53, 40.7 P	3/12/54, 36.3	11/17/55, 49.6

TABLE E-1 (continued)

DEPTH TO GROUND WATER AT MEASUREMENT WELLS
IN UPPER SALINAS HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

25S/16E-30L1--Reference point--top of casing, elevation 1,195 feet. 1 mile south along State Highway 41 from junction with U.S. Highway 466, just north of Cholame School. Cholame Quad. 7/30/53, 40.9; 12/1/54, 42.3; 3/23/54, 41.2; 11/30/54, 41.8.

25S/16E-30M1--Reference point--hole at ground surface on west side of casing, elevation 1,218 feet. 1 mile south along State Highway 41 from junction with U.S. Highway 466, 600 feet west of highway. Cholame Quad. 7/30/53, 137 P; 12/1/53, 92.0; 3/23/54, 88.5; 11/30/54, 89.2.

25S/16E-30M2--Reference point--top of casing, elevation 1,208 feet. 1 mile south along State Highway 41 from junction with U.S. Highway 466, 200 feet west of highway. Cholame Quad. 7/30/53, 61.0; 12/1/53, 62.5.

25S/16E-31E1--Reference point--top of casing, elevation 1,160 feet. 2.4 miles south along State Highway 41 from junction with U.S. Highway 466, 0.7 mile east on Prieto Canyon Road, 400 feet north of road. Cholame Quad. 7/30/53, 46.0; 12/1/53, 45.6; 3/23/54, 45.0; 11/30/54, 45.0.

26S/11E-1M1--Reference point--hole in pump base, elevation 820 feet. 3.9 miles southwest along San Miguel Road from junction of San Miguel Road and Highway 101, 0.2 mile north of road. Paso Robles Quad. 10/8/53, 39.0.

26S/12E-1L1--Reference point--pipe in base, elevation 845 feet. 1.1 miles southwest of Estrella, 0.5 mile north and 0.2 mile west of southeast corner of section. Paso Robles Quad. 8/17/55, 202.0 P.

26S/12E-2J1--Reference point--top of casing, elevation 795 feet. 3.0 miles east along road from Wellsona, southwest of junction. Paso Robles Quad. 7/20/54, 119.5; 11/30/54, 120.0; 8/16/55, 125.4.

26S/12E-2R1--Reference point--top of casing, elevation 780 feet. 3.0 miles east on road from Wellsona, 0.5 mile south on road to Paso Robles County Airport, 200 feet west of road. Paso Robles Quad. 7/21/54, 80.0; 8/16/55, 78.0.

TABLE E-1 (continued)

DEPTHES TO GROUND WATER AT MEASUREMENT WELLS
IN UPPER SALINAS HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

26S/12E-4N1--Reference point--hole in pump base, elevation 675 feet. 1.1 miles south on Highway 101 from Wellsona and Highway 101 intersection, 300 feet west of highway. Paso Robles Quad.

4/ 8/53, 55.0 P	7/13/53, 58.0 P	3/25/54, 45.2
4/28/53, 54.4 P	7/20/53, 58.5 P	7/30/54, 43.5 P
5/25/53, 53.9 P	7/27/53, 59.5 P	8/31/54, 63.0 P
6/ 1/53, 52.2 P	8/ 3/53, 59.3 P	11/19/54, 51.7
6/ 8/53, 52.7 P	8/10/53, 59.8 P	1/ 4/55, 48.5
6/15/53, 56.7 P	8/17/53, 59.3 P	2/ 1/55, 47.9
6/23/53, 57.9 P	11/ 2/53, 75.0 P	3/ 7/55, 46.0
6/29/53, 57.5 P	11/25/53, 50.5 P	11/16/55, 66.8
7/ 6/53, 57.3 P	2/ 4/54, 47.5 P	11/29/56, 85.0

26S/12E-4Q1--Reference point--top of planking, elevation 650 feet. 0.6 mile east on road from Wellsona, 0.3 mile south on east river road, 400 feet west of road. Paso Robles Quad. 4/2/53, 16.0 P; 11/25/53, 15.3; 3/25/54, 8.5; 11/21/54, 15.4.

26S/12E-5D1--Reference point--top of casing, elevation 705 feet. 1.4 miles southwesterly along San Miguel Road from Highway 101, 0.2 mile south of road. Paso Robles Quad. 7/21/54, 68.0 P; 11/21/54, 40.5.

26S/12E-9C1--Reference point--top of pump base, elevation 650 feet. 0.6 mile east on road from Wellsona, 0.7 mile south on east river road, 0.2 mile west of road. Paso Robles Quad. 7/21/54, 19.4; 11/21/54, 28.5.

26S/12E-9C2--Reference point--top of casing, elevation 650 feet. 0.6 mile east on road from Wellsona, 0.6 mile south on east river road, 0.2 mile westerly on dirt road. Paso Robles Quad. 7/21/54, 17.2.

26S/12E-9E1--Reference point--top of casing, elevation 638 feet. 0.9 mile south on Highway 101 from its intersection at Wellsona. 0.3 mile east of highway. Paso Robles Quad. 7/23/54, 14.3.

26S/12E-9F1--Reference point--top of casing, elevation 660 feet. 0.9 mile south on Highway 101 from its intersection at Wellsona, 0.5 mile east of highway. Paso Robles Quad. 7/21/54, 18.2.

26S/12E-9F2--Reference point--top of pump base, elevation 636 feet. 0.9 mile south on Highway 101 from its intersection at Wellsona, 0.5 mile east of highway. Paso Robles Quad. 7/21/54, 21.0; 11/30/54, 22.1.

TABLE E-1 (continued)

DEPTHS TO GROUND WATER AT MEASUREMENT WELLS
IN UPPER SALINAS HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

26S/12E-9F3--Reference point--hole in pump base, elevation 660 feet. 1.0 mile south on Highway 101 from its intersection at Wellsona, 0.5 mile east of highway. Paso Robles Quad. 7/21/54, 28.5 P.

26S/12E-9M1--Reference point--top of pipe, elevation 657 feet. 1.3 miles south on Highway 101 from its intersection at Wellsona, 0.2 mile east of highway. Paso Robles Quad.

4/28/53, 16.0	1/27/54, 21.8	3/25/54, 15.4
5/26/53, 16.4	2/4/54, 17.3	11/19/54, 22.3

26S/12E-9M2--Reference point--hole in pump base, elevation 652 feet. 1.2 miles south on Highway 101 from its intersection at Wellsona, 0.3 mile east of highway. Paso Robles Quad.

4/28/53, 15.0	10/30/54, 25.3	3/7/55, 14.2
11/27/53, 29.9	11/19/54, 21.6	11/16/55, 22.9
3/25/54, 14.1	1/4/55, 18.2	11/29/56, 25.2
5/31/54, 16.4	2/2/55, 16.0	

26S/12E-10A1--Reference point--crack under pump, elevation 760 feet. 1.9 miles east on road from Wellsona, 0.6 mile south of road. Paso Robles Quad. 8/27/55, 155.5 P.

26S/12E-11J1--Reference point--top of casing, elevation 790 feet. 3.0 miles east on road from Wellsona, 1.3 miles south along road, 200 feet west on dirt road. Paso Robles Quad. 7/21/54, 136.0; 11/21/54, 111.0; 8/16/55, 134.7.

26S/12E-13D1--Reference point--hole for air line, elevation 800 feet. 0.2 mile north along road from main entrance to Paso Robles County Airport, 100 feet east of road. Paso Robles Quad. 7/28/54, 116.0 P.

26S/12E-14A1--Reference point--hole under pump base, elevation 795 feet. 0.3 mile north along road from main entrance to Paso Robles County Airport. 400 feet west of road. Paso Robles Quad. 8/17/55, 189.7.

26S/12E-14L1--Reference point--top of hole in pump base, elevation 785 feet. 4.3 miles northeast of Paso Robles, 0.3 mile south and 0.5 mile west of main entrance to Paso Robles County Airport. 100 feet south of road. Paso Robles Quad. 6/1/53, 168.7.

26S/12E-15L1--Reference point--cap on pipe, elevation 775 feet. 2.4 miles northeast of Paso Robles, 0.4 mile north and 0.4 mile east of southwest corner of section. Paso Robles Quad. 7/27/54, 164.0 P; 8/12/55, 144.3.

TABLE E-1 (continued)
DEPTHES TO GROUND WATER AT MEASUREMENT WELLS
IN UPPER SALINAS HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

26S/12E-16C2--Reference point--top of casing, elevation 640 feet. 3.3 miles north along east river road from Salinas River bridge, 75 feet west of road. Paso Robles Quad. 7/23/54, 5.2.

26S/12E-21D1--Reference point--top of casing, elevation 660 feet. 2.1 miles north along east river road from Salinas River bridge, 0.1 mile west of road. Paso Robles Quad. 7/23/54, 13.2 P.

26S/12E-21RL--Reference point--top of casing, elevation 795 feet. 1.2 miles northeast of Salinas River bridge, 400 feet north and 250 feet west of southeast corner of section. Paso Robles Quad. 8/17/55, 186.1 P.

26S/12E-22Fl--Reference point--depression in base, elevation 785 feet. 1.8 miles northeast of Salinas River bridge, 0.4 mile south and 0.3 mile east of northwest corner of section. Paso Robles Quad. 11/26/52, 155.0; 3/26/53, 148.6; 3/22/54, 139.0; 11/19/54, 157.1; 8/17/55, 191.8.

26S/12E-22KL--Reference point--top of casing, elevation 811 feet. 1.7 miles northeast of Salinas River bridge, 0.3 mile north and 0.5 mile west of southeast corner of section. Paso Robles Quad. 11/27/53, 159.8; 3/22/54, 134.6; 11/19/54, 148.0; 8/17/55, 153.2.

26S/12E-22L1--Reference point--pipe in pump base, elevation 800 feet, 1.4 miles northeast of Salinas River bridge, 1,800 feet north and 1,800 feet east of southwest corner of section. Paso Robles Quad. 3/26/53, 205.0 P.

26S/12E-22Pl--Reference point--top of casing, elevation 822 feet. 1.4 miles northeast of Salinas River bridge, 264 feet north and 0.4 mile east of southwest corner of section. Paso Robles Quad. 11/26/52, 136.9; 3/26/53, 146.3; 11/27/53, 146.2; 3/22/54, 143.0; 11/19/54, 146.1.

26S/12E-22P2--Reference point--top of casing, elevation 824 feet. 1.4 miles northeast of Salinas River bridge, 350 feet north and 0.4 mile east of southwest corner of section. Paso Robles Quad. 11/26/52, 137.4; 3/26/53, 272.0 P; 11/27/53, 167.1; 3/22/54, 149.6; 11/19/54, 153.2.

26S/12E-23D1--Reference point--top of casing, elevation 800 feet. 2.3 miles northeast of Salinas River bridge, 0.2 mile south and 130 feet east of northwest corner of section. Paso Robles Quad. 11/26/52, 106.5; 3/26/53, 113.0 P; 11/27/53, 114.9; 11/19/54, 128.0.

TABLE E-1 (continued)
 DEPTHS TO GROUND WATER AT MEASUREMENT WELLS
 IN UPPER SALINAS HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

26S/12E-23P1--Reference point--top of timber base, elevation 800 feet. 0.3 mile north and 0.3 mile east along road from intersection of Golden Hill Road and old State Highway 41, 0.1 mile north of road. Paso Robles Quad. 11/28/52, 90.3; 3/26/53, 91.5; 11/27/53, 96.2; 3/22/54, 92.5; 11/18/54, 96.6.

26S/12E-25K1--Reference point--top of casing elevation 750 feet. 3.4 miles northeast of Paso Robles along old State Highway 41 from Salinas River bridge, 0.2 mile northwest of Huerhuero bridge, 75 feet north of highway. Paso Robles Quad. 7/28/54, 63.3 P.

26S/12E-25K2--Reference point--top of casing, elevation 757 feet. 3.5 miles northeast of Paso Robles from Salinas River bridge along old State Highway 41, 0.2 mile northwest of Huerhuero bridge, 75 feet north of highway. Paso Robles Quad. 7/28/54, 40.0; 12/1/54, 42.8.

26S/12E-26C1--Reference point--hole under pump base, elevation 801 feet. 2.3 miles northeast of Paso Robles from Salinas River bridge along old State Highway 41, 150 feet south of highway. Paso Robles Quad. 11/28/52, 84.0; 3/26/53, 88.0; 11/27/53, 91.2; 3/22/54, 90.3; 11/18/54, 90.2.

26S/12E-26C2--Reference point--top of casing, elevation 795 feet. 2.3 miles northeast of Paso Robles from Salinas River bridge on old State Highway 41, 150 feet south of highway. Paso Robles Quad. 11/28/52, 111.2; 3/26/53, 117.0; 3/22/54, 112.5; 11/18/54, 151.5.

26S/12E-26E1--Reference point--crack under pump base, elevation 840 feet. 0.1 mile north on Golden Hill Road from intersection with old State Highway 41, 150 feet east of road. Paso Robles Quad.

11/28/52, 139.2	6/29/54, 162.2	1/ 4/55, 154.5
3/26/53, 138.7	7/30/54, 166.0	2/ 1/55, 152.2
11/27/53, 149.2	8/31/54, 176.0	3/ 7/55, 149.3
2/ 4/54, 140.7	9/30/54, 175.0	11/16/55, 147.0
3/22/54, 138.0	10/30/54, 176.0	11/28/56, 178.5
5/30/54, 156.5	11/18/54, 163.5	

26S/12E-27G1--Reference point--slot inside base of pump, elevation 905 feet. 1.0 mile northeast of Paso Robles from Salinas River bridge along old State Highway 41, 0.2 mile northeast on dirt road. Paso Robles Quad. 11/28/52, 172.7; 3/27/53, 173.7; 11/27/53, 183.5; 3/23/54, 185.3; 11/19/54, 205.0.

TABLE E-1 (continued)
 DEPTHS TO GROUND WATER AT MEASUREMENT WELLS
 IN UPPER SALINAS HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

26S/12E-27G2--Reference point--top of pump base, elevation 925 feet. 1.0 mile northeast of Paso Robles from Salinas River bridge on old State Highway 41, 0.2 mile northeast on dirt road. Paso Robles Quad. 11/28/52, 184.6; 11/27/53, 192.5; 3/23/54, 192.5.

26S/12E-27H2--Reference point--slot in casing, elevation 835 feet. 1.6 miles northeast of Paso Robles from Salinas River bridge along old State Highway 41, 200 feet northwest of Golden Hill intersection. Paso Robles Quad.

7/24/51, 150.5	7/ 6/53, 184.0 P	3/22/54, 129.5
11/28/52, 130.0	7/14/53, 139.3	4/ 1/54, 129.1
3/26/53, 132.5	7/20/53, 137.6	8/31/54, 146.0
4/28/53, 130.4	7/27/53, 137.2	11/18/54, 150.0
5/26/53, 191.6 P	8/17/53, 194.0 P	1/ 4/55, 139.3
6/ 1/53, 193.8 P	8/24/53, 183.5 P	2/ 1/55, 144.6
6/ 8/53, 133.4	11/ 2/53, 139.5	3/ 7/55, 142.2
6/15/53, 132.6	11/27/53, 138.5	11/16/55, 178.8
6/23/53, 174.9 P	2/ 4/54, 131.8	11/28/56, 170.0
6/29/53, 185.5 P		

26S/12E-27K1--Reference point--hole in pump base, elevation 895 feet. 1.0 mile northeast of Paso Robles from Salinas River bridge along old State Highway 41, 0.1 mile north of highway. Paso Robles Quad. 11/28/52, 160.0; 3/27/53, 164.3 P; 11/27/53, 167.8 P; 3/23/54, 168.0; 11/19/54, 194.4.

26S/12E-27Q1--Reference point--top of base, elevation 960 feet. 1.2 miles northeast of Paso Robles from Salinas River bridge along old State Highway 41, 0.3 mile south along dirt road. Paso Robles Quad. 3/27/53, 254.5.

26S/12E-27Q2--Reference point--top of casing, elevation 910 feet. 1.2 miles northeast of Paso Robles from Salinas River bridge along old State Highway 41, 0.3 mile south along dirt road. Paso Robles Quad. 2/2/53, 205.3; 3/27/53, 206.4.

26S/12E-28A1--Reference point--hole in pump base, elevation 792 feet. 0.9 mile north along east river road from Salinas River bridge, 200 feet east of road. Paso Robles Quad. 11/28/52, 113.3; 3/26/53, 113.0; 11/19/54, 114.1.

26S/12E-28A2--Reference point--top of casing, elevation 730 feet. 0.8 mile north along east river road from Salinas River bridge, 300 feet east of road. Paso Robles Quad. 3/22/54, 72.6; 11/19/54, 77.1.

TABLE E-1 (continued)
DEPTHS TO GROUND WATER AT MEASUREMENT WELLS
IN UPPER SALINAS HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

- 26S/12E-28H1--Reference point--hole in plate over casing, elevation 800 feet. 0.8 mile north along east river road from Salinas River bridge, 0.1 mile east of road. Paso Robles Quad. 7/23/54, 105.6.
- 26S/12E-33Q5--Reference point--slot in casing, elevation 686.5 feet. 0.8 mile south along east river road from Salinas River bridge, 0.2 mile west of road, in river bed. Templeton Quad. 7/7/53, 14.8; 11/25/53, 10.0; 8/10/54, 11.7; 11/18/54, 12.5.
- 26S/12E-33R1--Reference point--top of casing, elevation 772.5 feet. 0.7 mile south along east river road, 0.1 mile east on dirt road. Templeton Quad.
 2/5/53, 75.6 P 7/17/53, 78.4 3/15/54, 82.8
 3/27/53, 77.7 P 11/25/53, 79.5 11/18/54, 80.4
 7/10/53, 80.0 P
- 26S/12E-34F1--Reference point--top of casing, elevation 800 feet. 0.5 mile east of the east river road, 0.3 mile east and 0.6 mile north of the southwest corner of section. Templeton Quad. 2/5/53, 32.0; 3/27/53, 31.7; 11/25/53, 28.6; 3/15/54, 37.5; 11/18/54, 51.5.
- 26S/12E-35N1--Reference point--crack under pump base, elevation 790 feet. 0.4 mile due east and 1.4 miles southeast along road from Salinas River bridge, 0.1 mile east of road. Templeton Quad. 3/27/53, 63.5; 3/15/54, 73.5 P; 11/18/54, 83.0.
- 26S/12E-36H1--Reference point--top of casing, elevation 820 feet. 0.6 mile southeast on old State Highway 41 from Huerhuero Creek bridge, 0.3 mile south of highway across Huerhuero Creek. Estrella Quad. 9/22/53, 106.5; 11/25/53, 106.5; 3/22/54, 106.2.
- 26S/13E-4F1--Reference point--hole in pump base, elevation 796.0 feet. 1.8 miles southeast along Estrella Creek Road from bridge at Hog Canyon Road, 0.6 mile north along dirt road. Estrella Quad. 9/4/53, 108.8 P; 12/2/53, 57.5; 3/25/54, 46.0; 11/30/54, 62.3.
- 26S/13E-4K1--Reference point--hole in side of pump base, elevation 773.2 feet. 2.0 miles southeast along Estrella Creek Road from bridge at Hog Canyon Road. Estrella Quad. 9/2/53, 87.8 P; 12/2/53, 41.0; 3/25/54, 38.8; 11/30/54, 41.9.
- 26S/13E-5F1--Reference point--hole in pump base, elevation 740 feet. 0.5 mile southeast along Estrella Creek Road from bridge at Hog Canyon Road. Estrella Quad. 6/24/53, 24.0 P; 7/27/53, 27.8 P; 12/2/53, 14.6; 3/25/54, 13.9; 11/30/54, 14.6.

TABLE E-1 (continued)

DEPTHS TO GROUND WATER AT MEASUREMENT WELLS
IN UPPER SALINAS HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

26S/13E-5G1--Reference point--top of casing, elevation 770 feet. 0.7 mile southeast along Estrella Creek Road from bridge at Hog Canyon Road. Estrella Quad. 12/2/53, 23.9; 3/25/54, 23.0; 11/30/54, 29.3.

26S/13E-6B1--Reference point--top of casing, elevation 710 feet. 0.2 mile west along road from northwest corner of Estrella, 0.3 mile south of road. Estrella Quad. 7/28/54, 36.0; 11/30/54, 6.0.

26S/13E-6B2--Reference point--top of casing, elevation 710 feet. 0.2 mile west on road from northwest corner of Estrella, 0.3 mile south of road. Estrella Quad. 8/23/54, 15.5.

26S/13E-7M1--Reference point--hole in pump base, elevation 800 feet. 1.9 miles south along road from Estrella Creek bridge at Hog Canyon Road, 0.8 mile west from road. Estrella Quad. 7/28/54, 124.0 P; 11/30/54, 100.0; 8/17/55, 115.5.

26S/13E-10D1--Reference point--top of casing, elevation 800 feet. 2.7 miles southeast along Estrella Creek Road from bridge at Hog Canyon Road, 700 feet south of road. Estrella Quad.

3/ 9/53,	flowing	6/ 1/53, 168.9 P	4/ 1/54, 7.4
3/16/53,	flowing	6/ 8/53, 168.3 P	11/30/54, 62.1
3/23/53,	flowing	6/15/53, 172.9 P	1/ 4/55, 31.8
3/30/53,	flowing	6/22/53, 177.6 P	2/ 1/55, 21.3
4/ 6/53,	flowing	12/ 2/53, 46.3	3/ 7/55, 13.8
4/13/53,	flowing	2/ 4/54, 15.5	11/16/55, 105.4
4/20/53,	1.9	3/25/54, 8.8	11/29/56, 142.0
5/25/53,	168.5 P		

26S/13E-10D2--Reference point--hole in pump base, elevation 800 feet. 2.6 miles southeast along Estrella Creek Road from bridge at Hog Canyon Road, 0.2 mile south of road. Estrella Quad. 9/2/53, 46.7.

26S/13E-18N1--Reference point--base of pump, elevation 775 feet. 1.2 miles along road from southeast corner of State School for Boys, 0.1 mile south of road. Estrella Quad. 7/28/54, 87.0

26S/13E-19Q1--Reference point--top of casing, elevation 920 feet. 1.0 mile north of old State Highway 41, 200 feet north and 0.3 mile west of southeast corner of section. Estrella Quad. 7/30/54, 199.0.

26S/13E-27K1--Reference point--under tin cover, elevation 1,093 feet. 0.4 mile east along old State Highway 41 from Union School. 0.2 mile south on road. Estrella Quad. 9/8/53, 226.5 P; 12/2/53, 215.3; 3/23/54, 215.0; 11/30/54, 226.2.

TABLE E-1 (continued)
DEPTHS TO GROUND WATER AT MEASUREMENT WELLS
IN UPPER SALINAS HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

26S/13E-28J1--Reference point--top of casing, elevation 990 feet. 0.4 mile west along old State Highway 41 from Union School, 0.2 mile south of highway. Estrella Quad. 9/21/53, 150.5; 12/2/53, 149.0; 3/23/54, 146.8; 11/30/54, 152.0.

26S/13E-28L1--Reference point--top of casing, elevation 968 feet. 0.8 mile west along old State Highway 41 from Union School, 200 feet south of highway. Estrella Quad. 9/21/53, 163.3; 12/3/53, 163.1; 3/23/54, 162.3; 6/21/54, 170.0; 11/30/54, 163.5.

26S/13E-28L2--Reference point--top of casing, elevation 965 feet. 0.8 mile west along old State Highway 41 from Union School, 200 feet south of highway. Estrella Quad. 9/21/53, 120.0; 12/3/53, 122.5; 3/23/54, 123.3; 11/30/54, 136.0.

26S/13E-30B1--Reference point--top of casing, elevation 935 feet. 0.7 mile east along new State Highway 41 from Huerhuero Creek bridge, 1.1 mile southeast along road. Estrella Quad. 7/27/54, 192.3 P; 11/30/54, 185.0.

26S/13E-31A1--Reference point--top of casing, elevation 895 feet. 1.5 miles east along old State Highway 41 from Huerhuero Creek bridge, 0.1 mile south on dirt road. Estrella Quad. 9/21/53, 81.8; 12/3/53, 76.0; 3/23/54, 78.6.

26S/13E-31A2--Reference point--top of casing, elevation 920 feet. 1.5 miles east along old State Highway 41 from Huerhuero Creek bridge, 0.3 mile south on dirt road. Estrella Quad. 9/21/53, 84.5; 3/23/54, 90.1.

26S/13E-31D1--Reference point--top of casing, elevation 863 feet. 0.9 mile east along old State Highway 41 from Huerhuero Creek bridge, 0.2 mile south on dirt road. Estrella Quad. 9/22/53, 113.6; 12/3/53, 113.2.

26S/13E-31L1--Reference point--pipe base, elevation 825 feet. 1.1 miles east along old State Highway 41 from Huerhuero Creek bridge, 0.7 mile south along road. Creston Quad. 9/21/53, 51.0; 12/3/53, 42.1; 3/23/54, 39.8.

26S/13E-31Q1--Reference point--hole in pump base, elevation 835 feet. 1.1 miles east along old State Highway 41 from Huerhuero Creek bridge, 0.9 mile south along road. Creston Quad. 9/21/53, 50.0 P; 3/23/54, 50.1.

TABLE E-1 (continued)
 DEPTHS TO GROUND WATER AT MEASUREMENT WELLS
 IN UPPER SALINAS HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

26S/13E-34B1--Reference point--bottom of slot in casing, elevation 1,005 feet. 0.3 mile east on old State Highway 41 from Union School, 0.7 mile south and east on road. Estrella Quad.

6/ 3/52, 135.3	8/31/53, 140.7	9/30/54, 143.2
6/ 8/53, 135.3	12/ 3/53, 144.0	11/ 1/54, 167.5
6/15/53, 168.7 P	2/ 4/54, 145.2	11/30/54, 143.0
6/22/53, 174.4 P	3/23/54, 135.5	1/ 4/55, 140.7
6/29/53, 141.6	4/ 5/54, 135.7	2/ 1/55, 140.4
7/ 6/53, 176.2 P	5/ 4/54, 142.0	3/ 7/55, 139.9
7/13/53, 175.0 P	6/29/54, 158.4	11/28/56, 160.0
7/27/53, 172.0 P	7/31/54, 156.0	

26S/13E-34B2--Reference point--hole in pump, elevation 1,030 feet. 0.3 mile easterly along old State Highway 41 from Union school. 0.7 mile south of highway. Estrella Quad. 9/20/53, 151.1.

26S/13E-35L1--Reference point--top of clamps, elevation 1,070 feet. 1.6 miles south along road from intersection at old State Highway 41, 0.5 mile north and 0.3 mile east of southwest corner of section. Creston Quad.

2/4/54, 174.6; 11/30/54, 176.2.

26S/14E-8J1--Reference point--hole in cap, elevation 1,120 feet. 4.7 miles west along State Highway 41 from junction of State Highway 41 with U.S. Highway 466, 1.3 miles north on Pine Canyon Road. Shandon Quad.
 10/26/53, 135.3; 3/15/54, 136.8 P; 12/1/54, 138.6 P.

26S/14E-14R1--Reference point--top of casing, elevation 985 feet. 1.9 miles west of junction of State Highway 41 with U.S. Highway 466, south of State Highway 41. Shandon Quad.

3/30/53, 53.0 P	12/ 3/53, flowing	9/30/54, flowing
5/ 4/53, flowing	3/15/54, flowing	12/ 1/54, flowing
5/18/53, 50.0 P	5/30/54, 0	1/ 4/55, flowing
6/ 1/53, flowing	6/29/54, flowing	2/ 1/55, flowing
7/13/53, flowing	7/30/54, flowing	3/ 7/55, flowing
8/31/53, flowing	8/31/54, flowing	11/28/56, flowing
10/31/53, flowing		

26S/14E-16L1--Reference point--hole in pump base, elevation 1,019 feet. 2.2 miles east along State Highway 41 from Estrella Creek bridge at Whitley Gardens, 0.5 mile north along Simmons Canyon Road. Shandon Quad. 6/7/49, 37.0; 8/13/53, 53.5; 12/3/53, 46.8; 3/15/54, 39.3; 12/1/54, 52.6.

26S/14E-22Q1--Reference point--top of casing, elevation 1,050 feet. 3.0 miles west along State Highway 41 from junction with State Highway 41 and U.S. Highway 466, 0.9 mile south of highway. Shandon Quad. 8/27/53, 129.3; 12/3/53, 123.0; 12/1/54, 132.7.

TABLE E-1 (continued)

DEPTH TO GROUND WATER AT MEASUREMENT WELLS
IN UPPER SALINAS HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

- 26S/14E-24H1--Reference point--hole in pump base, elevation 1,035 feet. 0.5 mile south and west along dirt road from junction with State Highway 41 at Estrella Creek bridge. Shandon Quad. 8/20/53, 79.2 P; 8/27/53, 53.6; 12/3/53, 23.0; 3/5/54, 15.0; 12/1/54, 28.6.
- 26S/14E-25L1--Reference point--top of casing, elevation 1,130 feet. 1.2 miles southwest along dirt road from junction with State Highway 41 at Estrella Creek bridge, 0.5 mile south of road. Shandon Quad. 8/27/53, 113.0; 12/3/53, 106.2; 7/22/54, 118.0; 12/1/54, 122.9.
- 26S/14E-35C1--Reference point--top of casing, elevation 1,045 feet. Shedd Canyon, 2.8 miles southwest of junction of State Highway 41 and U.S. Highway 466, 0.1 mile south and 0.4 mile east of northwest corner of section. Shandon Quad.
- | | | |
|-----------------|----------------|----------------|
| ~ 8/27/53, 25.8 | 12/ 1/54, 26.1 | 3/ 7/55, 26.2 |
| 12/ 3/53, 26.0 | 1/ 4/55, 26.3 | 11/17/55, 26.2 |
| 3/15/54, 26.0 | 2/ 2/55, 26.2 | |
- 26S/14E-35D1--Reference point--top of casing, elevation 1,135 feet. Shedd Canyon, 3.0 miles southwest of junction of State Highway 41 and U.S. Highway 466, 0.1 mile south and 0.1 mile east of northwest corner of section. Shandon Quad. 8/27/53, 114.9; 12/3/53, 114.0; 3/15/54, 116.0 P.
- 26S/15E-2B1--Reference point--top of casing, elevation 1,115 feet. 1.1 miles southwest along State Highway 41 from junction with Prieto Canyon Road, 0.1 mile northwest along dirt road. Cholame Quad. 7/30/53, 45.1; 11/30/53, 31.1; 3/23/54, 30.2; 11/30/54, 29.9.
- 26S/15E-2F1--Reference point--hole in pump base, elevation 1,100 feet. 1.4 miles southwest along State Highway 41 from junction with Prieto Canyon Road, north of Cholame Creek. Cholame Quad. 7/30/53, 27.1.
- 26S/15E-2N1--Reference point--top of casing, elevation 1,095 feet. 3.2 miles northeast along State Highway 41 from San Juan Creek bridge, 0.1 mile north of Cholame Creek. Cholame Quad. 7/30/53, 57.6; 11/30/53, 57.7; 3/23/54, 44.0; 11/30/54, 60.3.
- 26S/15E-7F1--Reference point--top of casing, elevation 1,150 feet. 0.9 mile west along State Highway 41 from junction with U.S. Highway 466, 1.8 miles northeast along McMillan Canyon Road. Shandon Quad. 12/1/54, 154.7.
- 26S/15E-11D1--Reference point--top of casing, elevation 1,125 feet. 3.0 miles northeast along State Highway 41 from San Juan Creek bridge, 0.1 mile east along dirt road. Cholame Quad. 7/30/53, 77.0; 11/30/53, 72.5.

TABLE E-1 (continued)
 DEPTHS TO GROUND WATER AT MEASUREMENT WELLS
 IN UPPER SALINAS HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

26S/15E-15C1--Reference point--top of casing, elevation 1,074 feet. 1.8 miles northeast along State Highway 41 from San Juan Creek bridge, 100 feet east of highway. Cholame Quad. 7/30/53, 51.5; 8/18/53, 95.5 P; 11/30/53, 29.5; 3/23/54, 30.8.

26S/15E-16A1--Reference point--hole in pump base, elevation 1,060 feet. 1.4 miles northeast along State Highway 41 from San Juan Creek bridge, 0.1 mile northwest along dirt road, south of Cholame Creek. Cholame Quad. 8/12/53, 19.4; 11/30/53, 18.2; 3/23/54, 17.9; 11/30/54, 18.8.

26S/15E-16B1--Reference point--top of casing, elevation 1,070 feet. 1.3 miles northeast along State Highway 41 from San Juan Creek bridge, 0.2 mile west on dirt road. Cholame Quad. 8/12/53, 228.0 P; 11/30/53, 44.0; 3/23/54, 200.2 P; 11/30/54, 216.0 P.

26S/15E-16R1--Reference point--notch in casing, elevation 1,060 feet. 0.5 mile northeast along State Highway 41 from San Juan Creek bridge, 0.4 mile east and north on dirt road. Cholame Quad.

7/22/53, 67.3 P	8/31/54, 54.6	1/ 4/55, 22.5
11/30/53, 23.0	9/21/54, 57.1	2/ 2/55, 20.2
3/23/54, 18.8	9/30/54, 56.5	3/ 7/55, 17.6
5/30/54, 44.0	11/30/54, 20.8	

26S/15E-18J1--Reference point--plug in pump base, elevation 1,025 feet. 0.9 mile west along State Highway 41 from junction with U.S. Highway 466, 0.2 mile north along MacMillan Canyon Road, 1.2 miles east along dirt road. Shandon Quad. 7/20/54, 71.0; 12/1/54, 16.8.

26S/15E-19F1--Reference point--hole in pump base, elevation 1,030 feet. 0.2 mile south along U.S. Highway 466 from junction with State Highway 41, 0.1 mile west of highway. Shandon Quad. 8/21/53, 60.2 P; 12/3/53, 16.1; 3/16/54, 7.2; 12/1/54, 23.4.

26S/15E-19G1--Reference point--top of casing, elevation 1,030.5 feet. 1.0 mile west of Shandon, 0.3 mile east along State Highway 41 from junction with U.S. Highway 466, 0.1 mile south of highway. Shandon Quad. 8/20/53, 67.2; 12/3/53, 19.2; 3/18/54, 8.0; 12/1/54, 28.2.

26S/15E-19H1--Reference point--top of casing, elevation 1,059.3 feet. 0.8 mile west of Shandon, 0.5 mile east along State Highway 41 from junction with U.S. Highway 466, 0.1 mile south and west along road. Shandon Quad. 8/20/53, 70.0; 12/3/53, 71.0; 3/18/54, 58.0; 12/1/54, 62.0.

26S/15E-20A1--Reference point--top of casing, elevation 1,035 feet. In Shandon, 1 block north of State Highway 41 across street from Town Hall. Shandon Quad. 8/26/53, 41.8; 12/3/53, 16.7; 3/18/54, 14.0; 12/1/54, 21.0.

TABLE E-1 (continued)
 DEPTHS TO GROUND WATER AT MEASUREMENT WELLS
 IN UPPER SALINAS HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

26S/15E-20E2--Reference point--crack between wooden blocks, elevation 1,070 feet. 0.7 mile west of Shandon, 0.7 mile east along State Highway 41 from junction with U.S. Highway 466, 0.1 mile south of highway. Shandon Quad. 8/20/53, 42.1; 12/3/53, 41.6; 3/18/54, 42.0; 12/1/54, 40.8.

26S/15E-20E3--Reference point--pipe in base, elevation 1,050 feet. 0.5 mile west of Shandon, 0.8 mile east along State Highway 41 from junction with U.S. Highway 466, 0.1 mile south along dirt road. Shandon Quad. 8/20/53, 79.7.

26S/15E-20F1--Reference point--top of casing, elevation 1,058 feet. In Shandon Heights, 1.0 mile east along State Highway 41 from junction with U.S. Highway 466, 0.2 mile south of highway. Shandon Quad. 12/3/53, 41.0; 3/18/54, 37.0; 12/1/54, 42.4.

26S/15E-20K1--Reference point--top of casing, elevation 1,045 feet. 0.3 mile south and 200 feet east of intersection of State Highway 41 and county road at Shandon School. Shandon Quad. 8/26/53, 63.7; 12/1/54, 16.6.

26S/15E-20N1--Reference point--notch in casing, elevation 1,085 feet. 0.5 mile south and 0.5 mile west of intersection of State Highway 41 and county road at Shandon School. Shandon Quad.
 12/ 3/53, 47.1 4/ 5/54, 40.0 2/ 2/55, 40.6
 3/18/54, 43.6 1/ 4/55, 43.2 3/ 7/55, 39.5

26S/15E-20Q1--Reference point--top of casing, elevation 1,070 feet. 0.6 mile south and 150 feet west of intersection of State Highway 41 and county road at Shandon School. Shandon Quad. 8/20/53, 72.7; 12/3/53, 31.2; 3/18/54, 29.5.

26S/15E-21D1--Reference point--hole in casing, elevation 1,032 feet. 410 feet east along State Highway 41 from San Juan Creek bridge, north of highway. Cholame Quad. 8/26/53, 46.0; 12/3/53, flowing. .

26S/15E-21D2--Reference point--top of casing, elevation 1,030 feet. 700 feet west along State Highway 41 from San Juan Creek bridge, 900 feet north of highway. Cholame Quad.

12/ 3/53, 20.2	5/ 4/54, 20.9	1/ 4/55, 18.3
3/18/54, 20.2	7/31/54, 58.0 P	2/ 2/55, 18.3
4/ 6/54, 18.1	11/30/54, 18.2	3/ 7/55, 18.0

26S/15E-21G1--Reference point--hole in pump base, elevation 1,065 feet. 0.6 mile east of San Juan Creek bridge, at State Highway 41, 100 feet beyond end of dirt road. Cholame Quad. 7/22/53, 45.5.

TABLE E-1 (continued)
 DEPTHS TO GROUND WATER AT MEASUREMENT WELLS
 IN UPPER SALINAS HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

26S/15E-21M1--Reference point--top of casing, elevation 1,050 feet. 0.4 mile south of State Highway 41, 0.2 mile east and 9.6 mile south of northwest corner of section. Cholame Quad.

7/22/53, 111.1 P	7/31/54, 75.0	11/30/54, 14.5
3/23/54, 1.8	11/ 1/54, 39.8	1/ 4/55, 2.5

26S/15E-21P1--Reference point--hole in casing, elevation 1,072 feet. 0.4 mile east of San Juan Creek bridge, at State Highway 41, 0.5 mile south on dirt road. Cholame Quad.

6/12/53, 109.8 P	8/31/53, 127.5 P	3/18/54, 24.1
7/27/53, 67.5	11/30/53, 25.6	11/30/54, 33.4

26S/15E-27C1--Reference point--hole in pump base, elevation 1,205 feet. 0.4 mile east and 500 feet south of northwest corner of section. Cholame Quad. 2/10/54, 151.0; 12/2/54, 164.0.

26S/15E-28Q1--Reference point--crack under pump base on east side, elevation 1,090 feet. 0.4 mile east of San Juan Creek bridge at State Highway 41, 1.7 miles south on dirt road. Cholame Quad.

6/30/53, 105.0 P	3/18/54, 35.9	2/ 2/55, 30.9
7/27/53, 106.5 P	4/ 5/54, 30.2	3/ 7/55, 30.0
8/31/53, 72.8	9/30/54, 81.0	11/17/55, 71.2
11/ 2/53, 52.8	12/ 2/54, 46.0	11/28/56, 62.6
11/30/53, 34.8	1/ 4/55, 32.7	

26S/15E-28Q2--Reference point--top of casing, elevation 1,112 feet. 0.4 mile east of San Juan Creek bridge at State Highway 41, 1.8 miles south on dirt road. Cholame Quad.

7/27/53, 83.8	11/ 2/53, 64.9	9/30/54, 92.3
7/13/53, 87.0	11/30/53, 57.8	10/30/54, 77.5
7/27/53, 91.4	3/18/54, 53.9	12/ 2/54, 59.0
8/ 3/53, 90.7	4/ 5/54, 46.1	1/ 4/55, 46.6
8/11/53, 89.4	5/ 4/54, 75.9	2/ 2/55, 44.9
8/17/53, 85.9	5/30/54, 80.7	3/ 7/55, 44.2
8/24/53, 86.0	6/29/54, 95.0	11/17/55, 67.5
8/31/53, 81.0	7/30/54, 111.5	11/28/56, 49.0
9/ 8/53, 87.9		

26S/15E-29C1--Reference point--top of casing, elevation 1,107.9 feet. 0.7 mile south along U.S. Highway 466 from junction with State Highway 41, 0.9 mile east on dirt road. Shandon Quad. 8/13/53, 86.0; 12/3/53, 60.8; 3/18/54, 89.6 P; 12/1/54, 65.6.

TABLE E-1 (continued)
 DEPTHS TO GROUND WATER AT MEASUREMENT WELLS
 IN UPPER SALINAS HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

26S/15E-29C2--Reference point--top of casing, elevation 1,105.7 feet. 0.7 mile south along U.S. Highway 466 from junction with State Highway 41, 1.0 mile east on dirt road. Shandon Quad. 8/13/53, 48.5; 12/3/53, 43.8; 3/18/54, 45.9; 2/1/55, 44.3.

26S/15E-29C3--Reference point--top of casing, elevation 1,106.6 feet. 0.7 mile south along U.S. Highway 466 from junction with State Highway 41, 0.9 mile east on dirt road. Shandon Quad. 8/12/53, 128.5; 12/3/53, 56.5; 3/18/54, 51.7; 12/1/54, 64.6.

26S/15E-29D1--Reference point--top of casing, elevation 1,090 feet. 0.7 mile south on U.S. Highway 466 from junction with State Highway 41, 0.8 mile east on dirt road. Shandon Quad. 8/13/53, 60.0.

26S/15E-29N1--Reference point--top of casing, elevation 1,135 feet. 1.7 miles south along U.S. Highway 466 from junction with State Highway 41, 0.8 mile east on road. Shandon Quad.

3/ 9/53, 64.8	8/17/53, 88.5	5/30/54, 78.9
4/ 6/53, 74.3	8/24/53, 89.5	7/30/54, 95.0
4/20/53, 69.3	8/31/53, 84.5	10/30/54, 71.5
4/27/53, 69.8	9/ 8/53, 93.6	12/ 1/54, 64.8
6/22/53, 84.0	11/ 2/53, 74.5	1/ 4/55, 57.5
6/29/53, 86.5	12/ 3/53, 57.8	2/ 2/55, 57.5
7/ 6/53, 87.5	2/ 4/54, 54.0	3/ 7/55, 54.5
7/20/53, 86.3	3/18/54, 57.9	11/26/55, 78.7
8/ 3/53, 91.1		

26S/15E-30B1--Reference point--hole in pump base, elevation 1,105 feet. 0.7 mile south along U.S. Highway 466 from junction with State Highway 41, 0.3 mile east along road. Shandon Quad. 8/20/53, 63.5; 12/3/53, 63.5; 3/18/54, 64.2; 12/1/54, 64.6.

26S/15E-30M1--Reference point--top of casing, elevation 1,125 feet. 1.3 miles south along U.S. Highway 466 from junction with State Highway 41, 0.3 mile west along dirt road. Shandon Quad. 8/21/53, 72.0; 3/16/54, 69.5; 4/6/54, 67.4; 5/30/54, 75.0; 7/31/54, 76.5.

26S/15E-30M2--Reference point--top of casing, elevation 1,128 feet. 1.3 miles south along U.S. Highway 466 from junction with State Highway 41, 0.3 mile west along dirt road. Shandon Quad.

8/23/53, 155.0	3/16/54, 101.7	5/ 4/54, 112.5
12/ 3/53, 103.0	4/ 6/54, 94.4	5/30/54, 163.5

TABLE E-1 (continued)

DEPTHS TO GROUND WATER AT MEASUREMENT WELLS
IN UPPER SALINAS HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

26S/15E-32B1--Reference point--top of casing, elevation 1,120 feet. 1.7 miles south on U.S. Highway 466 from junction with State Highway 41, 1.1 miles west on road, 200 feet southeast of intersection. Shandon Quad.

7/13/53, 47.6	8/31/53, 47.8	1/ 4/55, 44.0
7/27/53, 50.5	12/ 3/53, 45.0	2/ 2/55, 43.2
8/ 3/53, 48.0	2/ 2/54, 43.5	3/ 7/55, 43.0
8/12/53, 48.3	3/18/54, 43.8	11/17/55, 55.1
8/24/53, 48.2	12/ 1/54, 45.2	

26S/15E-32K1--Reference point--crack under pump base, elevation 1,135 feet. 2.3 miles south of Shandon, 0.4 mile north and 0.7 mile east of southwest corner of section. Shedd Canyon Quad.

3/ 9/53, 82.7	2/ 4/54, 61.0	1/ 4/55, 13.4
3/16/53, 73.9	3/24/54, 63.0	2/ 2/55, 62.0
4/20/53, 82.8	4/ 5/54, 61.0	3/ 7/55, 60.5
6/22/53, 108.0	5/ 4/54, 88.0	11/17/55, 99.5
12/ 2/53, 65.0	12/ 1/54, 73.0	

26S/15E-33A1--Reference point--top of pipe, elevation 1,130 feet. 0.6 mile east of San Juan Creek, 0.2 mile south and 0.2 mile west of northeast corner of section. Cholame Quad.

6/ 4/50, 65.0	8/31/53, 72.0	3/24/53, 55.6
7/22/53, 75.9	11/30/53, 56.3	12/ 2/54, 66.5

26S/15E-33K1--Reference point--top of casing, elevation 1,100 feet. East of San Juan Creek, 0.4 mile north and 0.3 mile west of southeast corner of section. Commatti Canyon Quad.

6/30/53, 53.8	8/24/53, 63.0	10/30/54, 70.5 P
7/ 7/53, 57.0	8/31/53, 62.6	12/ 2/54, 50.5
7/13/53, 70.2 P	11/30/53, 25.2	1/ 4/55, 13.7
7/20/53, 70.1 P	3/24/54, 25.0	2/ 2/55, 25.0
7/27/53, 70.8 P	7/30/54, 75.0 P	3/ 7/55, 21.5
8/11/53, 70.5 P	8/31/54, 72.0 P	11/28/56, 36.8
8/17/53, 71.0	9/30/54, 65.6	

26S/15E-34P1--Reference point--top of casing, elevation 1,130 feet. 0.7 mile east of San Juan Creek, 0.3 mile east and 130 feet north of southwest corner of section. Commatti Canyon Quad. 7/22/53, 49.2 P.

26S/15E-34P2--Reference point--top of casing, elevation 1,130 feet. 0.7 mile east of San Juan Creek, 0.2 mile east and 130 feet north of southwest corner of section. Commatti Canyon Quad. 7/22/53, 45.2; 11/30/53, 44.2; 3/24/53, 43.4; 9/6/54, 48.5; 12/2/54, 46.3.

TABLE E-1 (continued)

DEPTH TO GROUND WATER AT MEASUREMENT WELLS
IN UPPER SALINAS HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

26S/16E-28M1--Reference point--top of casing, elevation 1,800 feet. 4.3 miles northeast along Gillis Canyon Road from junction with San Juan Road. 0.6 mile south and 0.1 mile east of northwest corner of section. Cholame Quad. 8/6/54, 24.0; 12/2/54, 23.5.

26S/16E-30J1--Reference point--crack under base, elevation 1,650 feet. 0.7 mile west of Gillis Canyon Road, 0.3 mile north and 0.2 mile west of southeast corner of section. Cholame Quad. 7/15/53, 118.6; 12/2/53, 110.0; 12/2/54, 134.0.

26S/16E-31B2--Reference point--top of board cover, elevation 1,500 feet. 2.8 miles northeast along Gillis Canyon Road from junction with San Juan Road, 0.2 mile south and 0.3 mile west of northeast corner of section. Cholame Quad. 1/21/54, 9.0.

27S/12E-1E1--Reference point--top of casing, elevation 830 feet. 0.3 mile south and 200 feet east of northwest corner of section, south of road. Templeton Quad. 11/26/52, 40.0; 3/27/53, 39.6 P; 11/25/53, 39.0; 3.22.54, 39.0; 11/18/54, 39.0.

27S/12E-1 NL--Reference point--top of planking, elevation 905 feet. 250 feet north and 0.1 mile east of southwest corner of section. Templeton Quad. 5/13/52, 100.0; 11/26/52, 101.5; 11/25/53, 105.6; 3/22/54, 101.9; 11/18/54, 110.0.

27S/12E-2D1--Reference point--hole in casing under pump, elevation 810 feet. 2.0 miles southeast along road from Salinas River bridge south of road. 0.1 mile east and 100 feet south of northwest corner of section. Templeton Quad.

9/ 9/50, 36.5	4/28/53, 58.8	11/25/53, 58.9
1/25/52, 45.3	5/26/53, 54.3	9/30/54, 76.1
3/10/52, 46.0	6/23/53, 60.6	2/ 1/55, 73.0
7/15/52, 48.0	7/10/53, 60.5	3/ 7/55, 67.4
11/10/52, 49.5	7/27/53, 62.0	11/17/55, 81.6
3/27/53, 55.8 P	8/31/53, 61.8	11/28/56, 89.6
3/27/53, 53.6		

27S/12E-2L2--Reference point--crack under pump base, elevation 810 feet. 2.6 miles southeast along road from Salinas River bridge, 0.3 mile east and 0.3 mile north of southwest corner of section. Templeton Quad. 3/27/53, 36.0; 11/25/53, 42.1; 3/22/54, 38.0; 11/18/54, 49.5

27S/12E-3C1--Reference point--top of casing, elevation 770 feet. 1.0 mile south along east river road from Salinas River bridge, 0.5 mile east along road. Templeton Quad. 3/27/53, 53.2; 11/25/53, 60.5; 3/15/54, 65.6; 11/18/54, 76.0.

TABLE E-1 (continued)

DEPTHS TO GROUND WATER AT MEASUREMENT WELLS
IN UPPER SALINAS HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

27S/12E-3J1--Reference point--top of casing, elevation 785 feet. 2.5 miles southeast along road from Salinas River bridge, 0.5 mile south and 0.1 mile west of northeast corner of section. Templeton Quad. 11/10/52, 43.8; 3/27/53, 42.8; 11/28/53, 47.1; 3/15/54, 45.9; 6/17/54, 54.6; 11/18/54, 55.0.		
27S/12E-4A1--Reference point--top of casing, elevation 700 feet. 1.2 miles south along east river road from Salinas River bridge, 250 feet west of road. Templeton Quad. 9/14/53, 0.0; 11/25/53, 0.0; 3/15/54, 0.0.		
27S/12E-4B1--Reference point--top of casing, elevation 700.5 feet. 1.3 miles south along east river road from Salinas River bridge, 0.2 mile west of road on river bank. Templeton Quad. 8/19/53, 12.0.		
27S/12E-4F1--Reference point--top of air line pipe, elevation 705 feet. 1.3 miles south on east river road from Salinas River bridge, 0.3 mile west of road. Templeton Quad.		
5/20/53, 16.8 P	7/17/53, 9.1	3/15/54, 8.4
6/ 8/53, 12.8	11/25/53, 8.2	11/18/54, 14.0
27S/12E-4F2--Reference point--top of casing, elevation 705 feet. 1.3 miles south along east river road from Salinas River bridge, 0.3 mile west of road. Templeton Quad.		
5/20/53, 11.0	7/17/53, 11.0	3/15/54, 10.6
6/ 8/53, 11.2	11/25/53, 13.8	11/18/54, 16.0
7/10/53, 12.7		
27S/12E-4K2--Reference point--top of casing, elevation 741.2 feet. 1.6 miles south along east river road from Salinas River bridge, 100 feet west of road. Templeton Quad.		
5/20/53, 37.0 P	7/17/53, 37.6 P	3/15/54, 26.2
7/10/53, 32.3 P	11/25/53, 27.0	11/18/54, 34.2
27S/12E-4K3--Reference point--top of casing, elevation 741 feet. 1.7 miles south along east river road from Salinas River bridge, 200 feet west of road. Templeton Quad. 5/20/53, 13.4; 7/10/53, 13.1; 7/17/53, 13.6.		
27S/12E-4K5--Reference point--top of concrete base, elevation 744.6 feet. 1.8 miles south along east river road from Salinas River bridge, 50 feet east of road. Templeton Quad. 7/17/53, 37.2; 9/23/53, 56.0 P; 11/25/53, 30.0; 3/15/54, 40.8; 11/18/54, 29.8.		
27S/12E-4P1--Reference point--hole in casing, elevation 720 feet. 1.8 miles south along east river road from Salinas River bridge, 0.3 mile west along road. Templeton Quad. 5/20/53, 17.5.		

TABLE E-1 (continued)

DEPTH TO GROUND WATER AT MEASUREMENT WELLS
IN UPPER SALINAS HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

- 27S/12E-5B1--Reference point--crack between pump base and metal cover, elevation 925 feet. 0.5 mile west of U.S. Highway 101, 0.3 mile west and 0.1 mile south of northeast corner of section. Templeton Quad.
7/30/54, 185.7.
- 27S/12E-9L1--Reference point--top of casing, elevation 715 feet. 0.4 mile east of U.S. Highway 101, 0.3 mile north and 0.5 mile east of the southwest corner of section. Templeton Quad. 7/10/53, 11.5 P; 7/17/53, 12.0 P.
- 27S/12E-9P1--Reference point--top of planking, elevation 720 feet. 0.3 mile east of U.S. Highway 101, 0.3 mile east and 0.2 mile north of the southwest corner of section. Templeton Quad.
- | | | |
|-----------------|-----------------|----------------|
| 4/ 1/53, 12.1 | 7/17/53, 17.4 P | 3/15/54, 11.4 |
| 7/10/53, 17.5 P | 11/25/53, 15.0 | 11/18/54, 15.9 |
- 27S/12E-11E1--Reference point--crack between base and board, elevation 860 feet. 100 feet west of county road, 0.2 mile east and 0.3 mile south of the northwest corner of section. Templeton Quad. 9/23/53, 79.8; 11/25/53, 80.5; 3/15/54, 82.0; 11/18/54, 86.5.
- 27S/12E-17A2--Reference point--pipe in pump base, elevation 784 feet. 640 feet south of junction of State Highway 41 with U.S. Highway 101, 200 feet west of U.S. Highway 101. Templeton Quad. 8/4/54, 82.0.
- 27S/12E-17B1--Reference point--concrete base under discharge pipe, elevation 875 feet. 625 feet south and 0.2 mile west of junction of State Highway 41 with U.S. Highway 101. Templeton Quad. 8/4/54, 149.0.
- 27S/12E-17J1--Reference point--concrete base under metal cover, elevation 780 feet. 0.7 mile south along U.S. Highway 101 from junction of State Highway 41 and U.S. Highway 101, 50 feet west of frontage road. Templeton Quad. 8/5/54, 58.0.
- 27S/12E-18Q1--Reference point--top of casing, elevation 920 feet. 1.9 miles west along State Highway 41 from junction with U.S. Highway 101, 0.3 mile south on secondary road, 250 feet west of road. Templeton Quad. 8/4/54, 77.9.
- 27S/12E-20B1--Reference point--top of casing, elevation 795 feet. 1.1 miles south along U.S. Highway 101 from junction of State Highway 41 and U.S. Highway 101. 0.2 mile west of U.S. Highway 101 to west side of Templeton Cemetery. Templeton Quad. 8/5/54, 49.1.

TABLE E-1 (continued)

DEPTHS TO GROUND WATER AT MEASUREMENT WELLS
IN UPPER SALINAS HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

27S/12E-20H1--Reference point--top of casing, elevation 760 feet. 0.2 mile north of Templeton along U.S. Highway 101, 800 feet east of U.S. Highway 101. Templeton Quad. 11/25/53, 36.5 P; 3/22/54, 40.5 P; 11/18/54, 40.0 P.

27S/12E-21E1--Reference point--top of casing, elevation 740 feet. 0.5 mile east of U.S. Highway 101, 0.5 mile south and 0.2 mile east of northwest corner of section. Templeton Quad. 7/10/53, 17.4; 7/21/53, 31.0 P; 11/25/53, 17.4; 3/22/54, 10.0; 11/18/54, 18.6.

27S/12E-21F1--Reference point--top of casing, elevation 750 feet. 0.8 mile east of Highway 101, 0.5 mile east and 0.3 mile south of the northwest corner of section. Templeton Quad. 7/9/53, 11.0; 7/17/53, 11.0 P.

27S/12E-21H1--Reference point--top of casing, elevation 740 feet. 0.3 mile east of U.S. Highway 101, 0.3 mile east and 0.5 mile north of the southwest corner of section. Templeton Quad. 7/9/53, 10.3 P; 7/17/53, 7.8 P.

27S/12E-21M1--Reference point--top of casing, elevation 740 feet. 0.5 mile east of U.S. Highway 101, 0.2 mile east and 0.5 mile south of the northwest corner of section. Templeton Quad. 7/21/53, 37.6 P; 11/25/53, 18.2; 3/22/54, 11.0; 11/18/54, 19.4.

27S/12E-21N1--Reference point--top of casing, elevation 750 feet. 0.5 mile east of U.S. Highway 101, 0.1 mile north and 0.2 mile east of the southwest corner of section. Templeton Quad.

4/ 1/53, 9.6 P	2/ 4/54, 7.8	9/30/54, 18.2 P
4/25/53, 7.3	3/22/54, 5.4	10/30/54, 14.8
5/26/53, 10.1 P	5/31/54, 11.1 P	2/ 1/55, 7.1
6/23/53, 8.2	6/30/54, 12.9 P	3/ 7/55, 6.7
7/10/53, 12.6 P	7/31/54, 11.0	11/18/55, 16.2
7/21/53, 12.0 P	9/ 2/54, 15.8 P	11/25/56, 12.5
11/25/53, 12.7		

27S/12E-22N1--Reference point--top of casing, elevation 850 feet. 1.5 miles east of U.S. Highway 101, 0.1 east and 0.1 mile north of southwest corner of section. Templeton Quad. 9/24/53, 66.8; 11/25/53, 67.0; 3/15/54, 67.5; 11/19/54, 69.4.

TABLE E-1 (continued)

DEPTH TO GROUND WATER AT MEASUREMENT WELLS
IN UPPER SALINAS HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

27S/12E-28D1--Reference point--hole in pump base, 0.5 foot above ground surface, elevation 745 feet. 0.6 mile east of U.S. Highway 101, 0.2 mile east and 0.2 mile south of the northwest corner of section. Templeton Quad.

4/ 1/53, 19.5	7/17/53, 30.0 P	8/24/53, 29.3 P
4/27/53, 18.8	7/20/53, 29.9 P	8/31/53, 30.1 P
5/25/53, 19.4	7/27/53, 28.9 P	9/ 8/53, 30.8 P
6/ 1/53, 18.9	8/ 3/53, 30.0 P	11/ 2/53, 35.0 P
7/ 6/53, 29.5 P	8/10/53, 29.1 P	3/15/54, 28.8 P
7/ 9/53, 29.6 P	8/17/53, 29.2 P	11/19/54, 25.9
7/13/53, 29.8 P		

27S/12E-28E1--Reference point--edge of pit, 500 feet southwest of well, elevation 735 feet. 0.5 mile east of U.S. Highway 101, on west side of Salinas River, 0.2 mile east and 0.5 mile south of northwest corner of section. Templeton Quad. 7/9/53, 6.6; 7/17/53, 5.7 P.

27S/12E-29G1--Reference point--top of casing, elevation 790 feet. 0.1 mile north of First Street and 100 feet west of U.S. Highway 101. Templeton Quad. 7/10/53, 41.2 P; 7/21/53, 34.5; 11/25/53, 32.5; 3/22/54, 29.8; 11/18/54, 33.0.

27S/12E-32C1--Reference point--hole in pump base, elevation 750 feet. 0.2 mile east of U.S. Highway 101, 0.1 mile south and 0.3 mile east of the northwest corner of section. Templeton Quad. 7/9/53, 14.2; 7/17/53, 17.0 P.

27S/12E-32C2--Reference point--top of plank platform, elevation 750 feet. 0.2 mile east of U.S. Highway 101, 0.1 mile south and 0.3 mile east of the northwest corner of section. Templeton Quad. 7/9/53, 16.1; 7/17/53, 15.0.

27S/12E-32C3--Reference point--hole near base of pump, elevation 760 feet. 0.1 mile east of U.S. Highway 101, 0.3 mile east and 350 feet south of the northwest corner of section. Templeton Quad. 7/10/53, 14.9 P; 7/20/53, 12.9; 11/25/53, 15.4; 3/15/54, 11.1; 11/19/54, 16.0.

27S/12E-32E1--Reference point--wooden floor of pump house, elevation 760 feet. 50 feet west of U.S. Highway 101, 0.1 mile east and 0.4 mile south of the northwest corner of section. Templeton Quad.

7/20/53, 30.2 P	2/ 4/54, 28.3	10/30/54, 34.0
8/10/53, 34.4 P	3/22/54, 27.0	1/ 4/55, 28.8
8/17/53, 32.0 P	5/31/54, 31.0 P	2/ 1/55, 27.9
8/24/53, 32.8 P	6/30/54, 31.3 P	3/ 7/55, 28.0
8/31/53, 33.6	7/30/54, 33.5 P	11/17/55, 32.6
9/ 8/53, 33.5	9/ 2/54, 35.4 P	11/28/56, 49.6
11/25/53, 33.2	9/30/54, 34.9	

TABLE E-1 (continued)

DEPTHS TO GROUND WATER AT MEASUREMENT WELLS
IN UPPER SALINAS HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

27S/12E-32F1--Reference point--top of casing, elevation 770 feet. 0.2 mile east of U.S. Highway 101, 0.3 mile east and 0.4 mile south of the northwest corner of section. Templeton Quad. 7/9/53, 10.4; 7/17/53, 8.7.

27S/12E-32F2--Reference point--hole in pump base, elevation 770 feet. 0.2 mile east of U.S. Highway 101, 0.3 mile east and 0.5 mile south of the northwest corner of section. Templeton Quad. 7/9/53, 18.5 P; 7/17/53, 16.4 P.

27S/12E-32F1--Reference point--crack between pump and iron stand, elevation 765 feet. 50 feet west of U.S. Highway 101, 0.2 mile east and 200 feet north of the southwest corner of section. Templeton Quad. 7/10/53, 10.6; 7/20/53, 10.9; 11/25/53, 12.3; 3/22/54, 8.5; 11/18/54, 12.4.

27S/12E-32F3--Reference point--top of casing, elevation 765 feet. 100 feet east of U.S. Highway 101, 0.2 mile north and 0.3 mile east of the southwest corner of section. Templeton Quad. 7/10/53, 12.5 P; 7/20/53, 9.6.

27S/12E-32F4--Reference point--top of casing, elevation 765 feet. 800 feet east of U.S. Highway 101, 0.2 mile north and 0.3 mile east of the southwest corner of section. Templeton Quad. 7/10/53, 15.4 P; 7/20/53, 13.4 P.

27S/12E-32F5--Reference point--top of casing, elevation 760 feet. 900 feet east of U.S. Highway 101, 0.2 mile north and 0.3 mile east of the southwest corner of section. Templeton Quad. 7/10/53, 14.5; 7/20/53, 12.3; 11/25/53, 17.0; 3/22/54, 9.0; 11/18/54, 17.5.

27S/12E-32Q1--Reference point--top of 2-inch pipe, elevation 760 feet. 0.4 mile east of U.S. Highway 101, 0.4 mile west and 0.1 mile north of the southeast corner of section. Templeton Quad.

7/ 9/53, 8.5 P	11/25/53, 5.4	8/ 6/54, 13.1 P
7/17/53, 2.3 P	3/15/54, 1.4	11/17/54, 7.8

27S/12E-33Q1--Reference point--top of casing, elevation 840 feet. 1.4 miles east of U.S. Highway 101, 0.3 mile west and 0.1 mile north of the southeast corner of section. Templeton Quad. 7/9/53, 51.0; 7/17/53, 50.6; 11/25/53, 51.1; 3/15/54, 50.8; 11/17/54, 60.0.

27S/12E-34NL--Reference point--hole in pump base, elevation 840 feet. 1.7 miles east of U.S. Highway 101, 80 feet east and 200 feet north of the southwest corner of section. Templeton Quad. 8/6/54, 33.6 P.

27S/13E-8D1--Reference point--top of casing, elevation 820 feet. 50 feet east of Huerhuero Creek bridge, 0.2 mile east and 90 feet south of the northwest corner of section. Creston Quad. 3/23/54, 12.4; 11/30/54, 16.0.

TABLE E-1 (continued)

DEPTHS TO GROUND WATER AT MEASUREMENT WELLS
IN UPPER SALINAS HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

27S/13E-9Pl--Reference point--top of casing, elevation 905 feet. 0.3 mile east and 250 feet north of the southwest corner of section. Creston Quad. 3/23/54, flowing; 11/30/54, flowing.

27S/13E-13Q1--Reference point--top of casing, elevation 1,125 feet. 1.3 miles east of Genesee School, 0.4 mile west and 100 feet north of the southeast corner of section. Creston Quad. 9/10/53, 103.0 (owner); 9/24/53, 104.3; 12/4/53, 103.1; 3/12/54, 101.7; 12/1/54, 106.8.

27S/13E-14M1--Reference point--top of casing, elevation 1,010 feet. 0.5 mile north along county road from Genesee School, 250 feet west of county road. Creston Quad. 9/10/53, 12.9; 12/4/53, 14.8 P; 3/12/54, 10.7; 12/1/54, 12.0.

27S/13E-14M2--Reference point--top of casing, elevation 1,000 feet. 0.4 mile north along county road from Genesee School, 150 feet west of county road. Creston Quad. 9/10/53, 13.8.

27S/13E-14N1--Reference point--top of pit, elevation 1,005 feet. 0.2 mile north along county road from Genesee School, 525 feet west of county road. Creston Quad. 9/10/53, 17.4.

27S/13E-14N2--Reference point--top of casing, elevation 1,010 feet. 0.2 mile north along county road from Genesee School, 400 feet west of county road. Creston Quad. 9/10/53, 15.0; 12/4/53, 13.9; 3/12/54, 12.9; 12/1/54, 14.5.

27S/13E-14Pl--Reference point--top of concrete pit, elevation 1,010 feet. 0.2 mile north along county road from Genesee School, 250 feet east of county road. Creston Quad. 9/10/53, 19.0 P; 12/4/53, 10.8; 3/12/54, 9.5; 12/1/54, 11.0.

27S/13E-20R1--Reference point--top of casing, elevation 960 feet. 20 feet north of reservoir, 0.3 mile north and 250 feet west of southeast corner of section. Creston Quad. 3/12/54, flowing; 12/1/54, flowing.

27S/13E-21J1--Reference point--top of casing, elevation 1,035 feet. 0.4 mile north and 400 feet west of southeast corner of section. Creston Quad. 3/23/54, 38.1; 12/1/54, 38.7.

27S/13E-23R1--Reference point--slot in casing, elevation 1,030 feet. 0.9 mile south along county road from Genesee School, 75 feet west of county road, northwest of junction of roads. Creston Quad. 6/25/53, 81.0 P; 7/27/53, 76.3 P; 8/31/53, 17.2; 12/4/53, 4.6; 3/12/54, 3.1; 12/1/54, 6.8.

TABLE E-1 (continued)

DEPTH TO GROUND WATER AT MEASUREMENT WELLS
IN UPPER SALINAS HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

27S/13E-24NL--Reference point--hole in pump base, elevation 1,035 feet. 0.4 mile east of junction at county road, 0.9 mile south of Geneseo School. Creston Quad.

6/25/53, 17.0	3/12/54, 3.2	10/30/54, 101.0 P
7/27/53, 70.0 P	5/30/54, 103.5 P	12/1/54, 6.8
8/31/53, 28.1	6/29/54, 105.0 P	1/4/55, 5.7
9/11/53, 91.2 P	7/30/54, 101.0 P	2/2/55, 4.9
12/4/53, 6.4	9/6/54, 103.2 P	3/7/55, 4.6
2/4/54, 5.0	10/3/54, 20.2	11/17/55, 8.2

27S/13E-25DL--Reference point--top of casing, elevation 1,075 feet. 550 feet east of county road, 800 feet south and 500 feet east of northwest corner of section. Creston Quad. 9/11/53, 39.0; 12/4/53, 36.5; 3/12/54, 35.8; 12/1/54, 39.0.

27S/13E-26AL--Reference point--top of casing, elevation 1,060 feet. 500 feet west of county road, 0.2 mile west and 250 feet south of northeast corner of section. Creston Quad. 9/11/53, 42.5.

27S/13E-26CL--Reference point--top of casing, elevation 1,030 feet. 0.5 mile west of county road, 0.4 mile east and 0.2 mile south of northwest corner of section. Creston Quad. 9/11/53, 15.1; 12/4/53, 12.6; 3/12/54, 11.1; 11/28/54, 13.0 (owner).

27S/13E-27CL--Reference point--hole under pump, elevation 1,025 feet. 200 feet west of county road, 0.2 mile south and 0.5 mile west of northeast corner of section. Creston Quad. 3/12/54, 21.3; 12/1/54, 25.0 P.

27S/13E-27PL--Reference point--crack between wood blocks, elevation 1,050 feet. 100 feet east of county road, 0.5 mile west and 0.3 mile north of southeast corner of section. 10/26/53, 48.7; 3/12/54, 44.0; 12/1/54, 46.2.

27S/13E-32BL--Reference point--top of casing, elevation 1,100 feet. 380 feet north of county road, 0.3 mile west and 0.2 mile south of northeast corner of section. Creston Quad. 10/26/53, 57.4; 3/12/54, 53.0; 12/1/54, 54.5.

27S/13E-34KL--Reference point--crack in metal base plate, elevation 1,115 feet. Near intersection of county roads, 0.4 mile west and 0.3 mile north of southeast corner of section. Creston Quad. 10/26/53, 34.2; 3/12/54, 33.8; 12/1/54, 34.0.

27S/13E-36KL--Reference point--top of concrete pit, elevation 1,090 feet. 1 mile north along U.S. Highway 466, 175 feet west of highway, north of reservoir. Creston Quad. 9/11/53, 11.8; 12/4/53, 10.4; 3/12/54, 7.8; 12/1/54, 10.8.

TABLE E-1 (continued)

DEPTHS TO GROUND WATER AT MEASUREMENT WELLS
IN UPPER SALINAS HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

- 27S/13E-36L1--Reference point--top of tin casing, elevation 1,090 feet. 1.1 miles north from Creston along U.S. Highway 466, thence 0.5 mile north along road to Shandon. Creston Quad. 9/11/53, 9.5.
- 27S/13E-36Q1--Reference point--top of casing, elevation 1,085 feet. 0.7 mile north of Creston along U.S. Highway 466, 0.1 mile west of highway. Creston Quad. 9/11/53, 6.0.
- 27S/13E-36R1--Reference point--top of casing, elevation 1,100 feet. 1 mile northwest of Creston, 100 feet west and 50 feet north of southeast corner of section. Creston Quad. 9/11/53, 14.8; 12/4/53, 14.5; 3/12/54, 12.7; 12/1/54, 15.1.
- 27S/14E-2C1--Reference point--top of casing, elevation 1,070 feet. 3.2 miles southwesterly of Estrella Creek bridge at State Highway 41. 0.5 mile west and 200 feet south of northeast section corner. Shedd Canyon Quad. 8/27/53, 28.5; 12/3/53, 28.8.
- 27S/14E-11G1--Reference point--top of old pump, elevation 1,130 feet. 0.9 mile north along Shedd Canyon road from U.S. Highway 466 (Shandon Road), 0.3 mile west and 0.4 mile south of northeast corner of section. Shedd Canyon Quad. 12/1/54, 62.7.
- 27S/14E-14M1--Reference point--top of casing, elevation 1,260 feet. 1.0 mile west along U.S. Highway 466 to Shedd Canyon, 250 feet south of highway, 0.2 mile east and 0.3 mile north of southwest corner of section. Shedd Canyon Quad. 10/26/53, 153.3; 3/24/54, 152.5.
- 27S/14E-25A1--Reference point--top of casing, elevation 1,225 feet. 2.0 miles south along Shedd Canyon road from U.S. Highway 466, 100 feet east of road, 0.2 mile west and 130 feet south of northeast corner of section. Shedd Canyon Quad. 11/30/54, 97.2.
- 27S/14E-30D1--Reference point--top of casing, elevation 1,130 feet. 0.4 mile south of county road, 0.3 mile east and 0.1 mile south of northwest corner of section. Paso Robles Quad. 9/11/53, 60.3 P; 3/12/54, 48.0; 12/1/54, 49.2.
- 27S/15E-2P1--Reference point--base of pump, elevation 1,160 feet. 50 feet south of intersection of Gillis Canyon road and county road, 0.5 mile west and 0.2 mile north of southwest corner of section. Commatti Canyon Quad. 7/22/53, 95.0 P; 12/1/53, 61.3; 3/24/54, 58.1; 12/2/54, 62.1.
- 27S/15E-3F1--Reference point--top of casing, elevation 1,125 feet. 1.0 mile south of junction of Tucker Canyon road with county road between county road and San Juan Creek. Commatti Canyon Quad. 7/22/53, 31.7; 12/1/53, 33.4; 3/24/54, 32.3; 12/2/54, 35.0.

TABLE E-1 (continued)

DEPTHS TO GROUND WATER AT MEASUREMENT WELLS
IN UPPER SALINAS HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

27S/15E-4C1--Reference point--top of casing, elevation 1,100 feet. Between road and San Juan Creek, 0.5 mile west and 450 feet south of northeast corner of section. Commatti Canyon Quad.

3/ 6/53, 23.1	3/30/53, 34.9	3/24/54, 21.0
3/16/53, 35.4	4/ 6/53, 34.9	12/ 2/54, 31.3
3/23/53, 36.6	12/ 2/53, 19.5	

27S/15E-4J1--Reference point--top of casing, elevation 1,110 feet. 0.1 mile east of county road, 0.3 mile north and 250 feet west of southeast corner of section. Commatti Canyon Quad. 8/12/53, 25.6; 12/2/53, 19.7; 3/24/54, 18.4; 12/2/54, 22.8.

27S/15E-5C1--Reference point--top of casing, elevation 1,190 feet. 1.3 miles east of U.S. Highway 101, 0.5 mile east and 250 feet south of northwest corner of section. Shedd Canyon Quad. 12/2/53, 98.0; 3/24/54, 99.2; 12/1/54, 99.8.

27S/15E-5Q1--Reference point--top of casing, elevation 1,225 feet. 0.3 mile west and 0.1 mile north of southeast corner of section. Shedd Canyon Quad. 12/2/53, 117.0; 3/28/54, 121.0; 12/1/54, 120.0.

27S/15E-7F1--Reference point--top of casing, elevation 1,325 feet. 1.0 mile east of U.S. Highway 101, 0.5 mile east and 0.5 mile south of northwest corner of section. Shedd Canyon Quad. 8/21/53, 37.0; 12/3/53, 36.5; 12/1/54, 37.2.

27S/15E-9J1--Reference point--top of casing, elevation 1,180 feet. 0.9 mile south along McDonald Canyon Road from junction with county road, 270 feet east of road. Commatti Canyon Quad. 8/12/53, 92.5; 12/2/53, 88.6; 3/24/54, 88.4; 4/1/54, 88.2; 12/2/54, 90.8 P.

27S/15E-10A1--Reference point--top of casing, elevation 1,120 feet. 0.1 mile north of county road, 0.1 mile west and 0.1 mile south of northeast corner of section. Commatti Canyon Quad. 8/11/53, 48.2 P; 12/2/53, 22.9; 3/24/54, 24.0.

27S/15E-10M1--Reference point--top of casing, elevation 1,200 feet. 0.5 mile south of county road, 0.5 mile north and 0.1 mile east of southwest corner of section. Commatti Canyon Quad. 8/13/53, 101.0; 12/2/53, 101.6; 4/1/54, 102.2; 12/2/54, 113.0 P.

27S/15E-10R2--Reference point--top of casing, elevation 1,130 feet. In Commatti Canyon, 0.7 mile south of county road, 0.1 mile west and 0.2 mile north of southeast corner of section. Commatti Canyon Quad. 8/11/53, 96.5 P; 12/1/53, 31.0; 12/2/54, 32.9.

TABLE E-1 (continued)

**DEPTHS TO GROUND WATER AT MEASUREMENT WELLS
IN UPPER SALINAS HYDROLOGIC UNIT**

(Depths to water in feet measured from reference point)

27S/15E-13AL--Reference point--top of 4-inch blocks, elevation 1,160 feet. In river bed of San Juan Creek, 0.1 mile south and 0.1 mile west of northeast corner of section. Commatti Canyon Quad. 7/22/53, 20.1; 12/1/53, 27.0 P; 3/23/54, 14.0 P; 12/2/54, 18.5 P.

27S/15E-14ML--Reference point--top of casing, elevation 1,165 feet. In Commatti Canyon, 1.5 miles south of county road, 0.3 mile north and 100 feet east of southwest corner of section. Commatti Canyon Quad. 8/11/53, 107.5 P; 12/1/53, 53.4; 3/24/54, 106.1 P; 12/2/54, 52.7.

27S/15E-15FL--Reference point--top of casing, elevation 1,300 feet. 0.3 mile east and 0.5 mile north of southwest corner of section. Commatti Canyon Quad. 8/13/53, 197.0; 12/1/53, 202.3; 4/1/54, 196.0; 12/2/54, 202.0.

27S/15E-23EL--Reference point--hole in casing, elevation 1,180 feet. In Commatti Canyon, 2.2 miles south of county road, 0.3 mile south and 0.1 mile east of northwest corner of section. Commatti Canyon Quad. 8/11/53, 99.1 P; 12/1/53, 59.0; 3/24/54, 98.1 P; 12/2/54, 61.8.

27S/15E-23LL--Reference point--crack between base and top of casing, elevation 1,195 feet. In Commatti Canyon, 2.6 miles south of county road, 0.3 mile east and 0.4 mile north of southwest corner of section. Commatti Canyon Quad. 8/11/53, 50.9.

27S/15E-23ML--Reference point--hole in casing, elevation 1,200 feet. 800 feet east and 0.2 mile north of southwest corner of section. Commatti Canyon Quad. 3/27/53, 74.3; 8/11/53, 80.5; 12/1/53, 39.0; 3/24/54, 80.1; 8/15/54, 50.9; 12/2/54, 42.0.

27S/15E-26NL--Reference point--hole in casing, elevation 1,218 feet. 0.2 mile east and 0.1 mile north of southwest corner of section. Commatti Canyon Quad. 8/11/53, 38.1; 12/2/53, 35.0; 3/24/54, 39.2; 12/2/54, 42.0 P.

27S/15E-31KL--Reference point--top of wood blocks, elevation 1,285 feet. At Upton Ranch site, 0.3 mile north and 0.5 mile west of southeast corner of section. Shedd Canyon Quad. 4/6/54, 110.4 P; 12/1/54, 114.2 P.

27S/15E-35CL--Reference point--hole in casing, elevation 1,225 feet. 0.4 mile east and 0.1 mile south of northwest corner of section. Commatti Canyon Quad. 8/11/53, 28.2; 12/2/53, 25.9; 4/1/54, 26.5; 12/2/54, 31.0 P.

27S/15E-35FL--Reference point--top of casing, elevation 1,232 feet. 0.3 mile east and 0.3 mile south of northwest corner of section. Commatti Canyon Quad. 8/11/53, 122.5 P; 12/2/53, 28.0; 3/24/54, 29.9; 12/2/54, 30.0.

TABLE E-1 (continued)

DEPTHS TO GROUND WATER AT MEASUREMENT WELLS
IN UPPER SALINAS HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

27S/16E-7Pl--Reference point--hole in casing, elevation 1,225 feet. 50 feet south of San Juan Creek road, 0.3 mile east and 100 feet north of southwest corner of section. Commatti Canyon Quad.

7/22/53, 70.2 P	4/ 5/54, 61.0	6/29/54, 69.5 P
12/ 1/53, 66.2 P	5/ 4/54, 66.1 P	7/31/54, 70.0 P
3/23/54, 66.6 P	5/30/54, 68.8 P	8/31/54, 71.2 P

27S/16E-18H1--Reference point--top of 4-inch blocks, elevation 1,240 feet. 100 feet north of San Juan Creek road, 0.2 mile west and 0.5 mile north of southeast corner of section. Commatti Canyon Quad. 7/22/53, 70.0; 12/1/53, 88.0 P; 12/2/54, 79.0 P.

27S/16E-21E2--Reference point--top of 2-inch block, elevation 1,255 feet. 850 feet north of San Juan Creek road, 0.3 mile east and 0.3 mile south of northwest corner of section. Commatti Canyon Quad. 7/22/53, 59.0; 12/1/53, 59.2; 3/22/54, 59.3; 12/2/54, 57.9.

27S/16E-35R1--Reference point--top of casing, elevation 1,300 feet. 0.3 mile east of San Juan Creek road, 0.2 mile west and 0.1 mile north of southeast corner of section. Grant Lake Quad. 7/21/53, 23.4; 12/1/53, 23.5; 3/23/54, 22.0; 12/2/54, 22.8.

28S/12E-3E1--Reference point--top of casing, elevation 820 feet. 450 feet north of county road, 0.3 mile east and 0.1 mile south of northwest corner of section. Templeton Quad. 7/8/53, 21.5; 7/16/53, 20.4.

28S/12E-3K1--Reference point--top of pit, elevation 806 feet. 0.3 mile west of county road, 0.4 mile west and 0.4 mile north of southeast corner of section. Templeton Quad. 7/8/53, 8.9; 7/16/53, 5.8; 11/25/53, 13.1; 3/15/54, 5.5; 11/17/54, 14.2.

28S/12E-3K2--Reference point--hole in pump base, elevation 800 feet. 0.3 mile west of county road, 0.4 mile west and 0.3 mile north of southeast corner of section. Templeton Quad. 7/14/49, 22.0 P; 7/14/49, 17.4; 7/8/53, 21.5 P; 7/16/53, 13.3.

28S/12E-3F1--Reference point--top of casing, elevation 805 feet. 0.3 mile south of county road, 0.3 mile east and 0.4 mile south of northwest corner of section. Templeton Quad. 7/8/53, 13.7; 7/16/53, 11.6; 11/25/53, 17.2; 3/15/54, 11.0; 11/17/54, 17.7.

28S/12E-4A1--Reference point--top of casing, elevation 820 feet. 250 feet south of county road, 0.2 mile south and 100 feet west of northeast corner of section. Templeton Quad. 7/9/53, 27.0; 7/16/53, 26.5; 11/25/53, 28.2; 3/15/54, 25.6; 11/17/54, 29.0.

TABLE E-1 (continued)

DEPTHS TO GROUND WATER AT MEASUREMENT WELLS
IN UPPER SALINAS HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

28S/12E-4C1--Reference point--hole in concrete base, elevation 808 feet. 0.2 mile south of county road, 0.3 mile east and 250 feet south of northwest corner of section. Templeton Quad. 7/9/53, 20.2; 7/17/53, 20.5; 11/25/53, 21.8; 3/15/54, 21.8 P; 11/17/54, 20.8.

28S/12E-4D1--Reference point--top of plank, elevation 780 feet. In Salinas River bed, 150 feet east and 150 feet south of northwest corner of section. Templeton Quad. 7/9/53, 9.1; 7/17/53, 9.1; 11/25/53, 9.7; 3/15/54, 8.7; 11/17/54, 9.0.

28S/12E-4G1--Reference point--top of casing, elevation 780 feet. In Salinas River bed 0.5 mile west and 0.3 mile south of northeast corner of section. Templeton Quad. 7/9/53, 19.1 P; 7/17/53, 18.5 P.

28S/12E-4G2--Reference point--top of casing, elevation 783 feet. In Salinas River bed, 0.4 mile west and 0.5 mile south of northeast corner of section. Templeton Quad. 8/16/54, 7.6.

28S/12E-4H1--Reference point--top of concrete pipe, elevation 790 feet. 0.3 mile south of county road, in Salinas River bed, 100 feet west and 0.5 mile south of northeast corner of section. Templeton Quad. 7/9/53, 8.0 P; 7/16/53, 6.1 P.

28S/12E-4H2--Reference point--top of casing, elevation 790 feet. 0.3 mile south of county road, in Salinas River bed, 0.1 mile west and 0.4 mile south of northeast corner of section. Templeton Quad. 7/9/53, 12.0 P; 7/16/53, 8.8 P.

28S/12E-4J1--Reference point--top of casing, elevation 800 feet. 0.6 mile south of county road, 0.3 mile north and 250 feet west of southeast corner of section. Templeton Quad. 8/6/54, 6.3.

28S/12E-5C1--Reference point--top of casing, elevation 784 feet. 80 feet west of U.S. Highway 101, 0.5 mile east and 0.2 mile south of northwest corner of section. Templeton Quad. 8/5/54, 63.5.

28S/12E-10A1--Reference point--top of casing, elevation 810 feet. 0.4 mile northwest of old Eureka School; 0.3 mile south and 800 feet west of northeast corner of section. Templeton Quad. 7/8/53, 7.6; 7/16/53, 4.2 P.

TABLE E-1 (continued)

DEPTH TO GROUND WATER AT MEASUREMENT WELLS
IN UPPER SALINAS HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

28S/12E-10G1--Reference point--top of casing, elevation 825 feet. 0.5 mile west of old Eureka School, 0.3 mile south and 0.3 mile west of northeast corner of section. Templeton Quad.

12/ 4/53, 10.2	6/15/53, 8.9	11/25/53, 17.3
6/ 8/53, 9.5	6/22/53, 9.7 P	3/11/54, 7.0
8/10/53, 11.1	6/29/53, 10.6	5/ 4/54, 9.1
4/ 2/53, 7.0	7/ 6/53, 10.9	5/31/54, 9.3 P
4/ 6/53, 7.2	7/ 8/53, 11.2	6/30/54, 8.0 P
4/14/53, 8.2 P	7/13/53, 10.2 P	7/31/54, 9.0
4/20/53, 8.3 P	7/20/53, 9.2 P	8/31/54, 15.5 P
4/27/53, 7.2	7/27/53, 10.1 P	9/30/54, 16.6 P
5/ 4/53, 6.9	8/ 3/53, 10.4 P	10/30/54, 19.0 P
5/11/53, 7.9 P	8/10/53, 11.6 P	11/17/54, 18.5
5/18/53, 8.4 P	8/17/53, 12.2 P	1/ 4/55, 18.0
5/25/53, 8.5 P	8/24/53, 13.0 P	2/ 1/55, 7.5
6/ 1/53, 8.5 P	9/ 1/53, 13.7 P	3/ 7/55, 7.0
6/ 8/53, 9.2 P	9/ 8/53, 14.1 P	11/18/55, 20.2
	11/ 2/53, 17.7	11/28/56, 17.2

28S/12E-10H1--Reference point--top of casing, elevation 815 feet. 0.3 mile southwest of old Eureka School, 0.5 mile south and 0.1 mile west of northeast corner of section. Templeton Quad. 7/8/53, 15.5 P; 7/10/53, 14.5; 7/16/53, 9.5.

28S/12E-10H2--Reference point--top of casing, elevation 820 feet. 0.2 mile west of old Eureka School, in Salinas River bed, 0.4 mile south and 150 feet west of northeast corner of section. Templeton Quad. 7/8/53, 10.0; 7/16/53, 5.5.

28S/12E-10R1--Reference point--top of recorder platform, elevation 820 feet. In Salinas River bed, 0.2 mile north and 100 feet west of southeast corner of section. Templeton Quad.

4/22/53, 9.0	11/25/53, 15.9	11/17/54, 22.1
4/28/53, 7.9	3/12/54, 9.7	11/28/56, 29.0 P

28S/12E-11E1--Reference point--top of casing, elevation 870 feet. Across road from old Eureka School, 0.3 mile south and 0.2 mile east of northwest corner of section. Templeton Quad. 7/8/53, 54.0; 7/16/53, 55.0.

28S/12E-11E2--Reference point--crack between pump base and blocks, elevation 895 feet. In yard of old Eureka School. Templeton Quad. 7/8/53, 57.5; 7/16/53, 58.5 P.

TABLE E-1 (continued)

DEPTH TO GROUND WATER AT MEASUREMENT WELLS
IN UPPER SALINAS HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

28S/12E-11M2--Reference point--top of casing, elevation 825 feet. 0.2 mile west of county road, 0.5 mile south and 250 feet east of northwest corner of section. Templeton Quad.

7/ 8/53, 28.2	11/25/53, 35.0	6/21/54, 28.6
7/16/53, 26.0	3/15/54, 25.0	11/17/54, 36.5

28S/12E-11N1--Reference point--top of casing, elevation 820 feet. On east bank of Salinas River, 0.2 mile east and 400 feet north of southwest corner of section. Templeton Quad. 7/8/53, 11.5 P; 7/16/53, 9.3 P.

28S/12E-11N2--Reference point--top of casing, elevation 830 feet. 100 feet east of Salinas River, 0.2 mile east and 400 feet north of southwest corner of section. Templeton Quad. 7/8/53, 16.6; 7/16/53, 13.4; 11/17/54, 21.5.

28S/12E-11N4--Reference point--hole in pump base, elevation 820 feet. 0.2 mile east of Atascadero, 0.2 mile north and 400 feet east of southwest corner of section. Templeton Quad. 7/8/53, 19.0; 7/16/53, 13.1; 11/25/53, 23.9; 3/15/54, 13.0; 11/17/54, 25.1.

28S/12E-11Q2--Reference point--top of casing, elevation 840 feet. 0.8 mile south along county road from old Eureka School, 50 feet east of road. NW $\frac{1}{4}$ of San Luis Obispo Quad. 3/15/53, 17.5; 7/8/53, 66.2.

28S/12E-11Q3--Reference point--hole in pump house floor, elevation 870 feet. 0.6 mile south along county road from old Eureka School, 400 feet east on road. Templeton Quad. 7/8/53, 40.3; 7/16/53, 41.0.

28S/12E-13N1--Reference point--top of casing, elevation 850.8 feet. In Salinas River flood plain, 0.8 mile southeast of Atascadero Bridge along Rocky Canyon Road to Creston. NW $\frac{1}{4}$ of San Luis Obispo Quad.

3/ 6/53, 6.9	6/29/53, 9.7	2/ 4/54, 8.9
3/17/53, 6.9	7/ 6/53, 12.9 P	3/11/54, 7.1
3/23/53, 6.8	7/ 8/53, 13.3 P	4/ 1/54, 6.2
3/30/53, 6.9	7/13/53, 9.0 P	5/ 4/54, 6.9
4/ 6/53, 7.0	7/20/53, 10.3 P	5/30/54, 8.7
4/13/53, 9.7 P	7/27/53, 8.7	7/12/54, 8.0
4/20/53, 9.7 P	8/ 3/53, 9.1	7/31/54, 10.0
4/28/53, 7.2	8/10/53, 12.5 P	8/31/54, 9.8
5/ 4/53, 7.0	8/17/53, 12.3 P	9/30/54, 11.5
5/11/53, 7.0	8/24/53, 12.2 P	11/ 1/54, 11.5
5/18/53, 7.8	9/ 1/53, 13.9 P	11/17/54, 12.5
5/25/53, 10.4 P	9/ 8/53, 10.5	1/ 4/55, 11.3
6/ 1/53, 8.9	11/ 2/53, 11.0	2/ 1/55, 7.4
6/ 8/53, 9.1	11/25/53, 11.2	3/ 7/55, 7.0
6/15/53, 11.8 P	1/17/54, 11.2	11/18/55, 11.6
6/22/53, 9.6	1/25/54, 8.9	11/28/56, 10.9

TABLE E-1 (continued)

DEPTH TO GROUND WATER AT MEASUREMENT WELLS
IN UPPER SALINAS HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

28S/12E-13Q1--Reference point--hole in wood platform, elevation 925 feet. 0.7 mile south along county road from old Eureka School, 600 feet east of road. NW $\frac{1}{4}$ of San Luis Obispo Quad. 3/18/53, 82.0; 7/8/53, 83.2; 7/16/53, 83.5.

28S/12E-14B1--Reference point--top of 4' x 4' wood casing, elevation 825 feet. 60 feet east of road, 0.2 mile south and 0.4 mile west of northeast corner of section. NW $\frac{1}{4}$ of San Luis Obispo Quad. 3/12/53, 12.9; 7/8/53, 15.1; 7/16/53, 14.9.

28S/12E-14G1--Reference point--metal cover on top of cistern, elevation 830.1 feet. 400 feet north of Eureka Bridge, on east bank of Salinas River. NW $\frac{1}{4}$ of San Luis Obispo Quad.

3/ 9/53, 5.5	11/25/53, 5.6	8/31/54, 19.0 P
3/17/53, 15.0 P	3/11/54, 5.2	9/30/54, 19.7 P
3/23/53, 5.2	5/ 4/54, 5.2 P	11/ 1/54, 19.3 P
3/30/53, 5.4	7/12/54, 12.1 P	1/ 4/55, 5.5
4/ 6/53, 13.8 P	7/31/54, 19.0 P	2/ 1/55, 5.0
		3/ 7/55, 5.0

28S/12E-14G2--Reference point--top of wood casing, elevation 830 feet. 600 feet north of Eureka Bridge, 200 feet east of road, on west side of river. NW $\frac{1}{4}$ San Luis Obispo Quad. 3/12/53, 15.7; 7/8/53, 18.8 P; 7/16/53, 18.2 P.

28S/12E-14K1--Reference point--top of casing elevation 830 feet. 850 feet west of Eureka Bridge between Southern Pacific Railroad and road. NW $\frac{1}{4}$ San Luis Obispo Quad. 3/12/53, 15.0.

28S/12E-14Q1--Reference point--top of wood casing, elevation 849.2 feet. 0.5 mile south of Eureka Bridge, 250 feet east of Southern Pacific Railroad. NW $\frac{1}{4}$ San Luis Obispo Quad. 3/12/53, 14.5 P; 7/8/53, 16.3 P; 7/16/53, 14.4; 3/11/54, 16.4; 11/17/54, 16.1.

28S/12E-23K1--Reference point--floor of pump house, elevation 900 feet. 0.3 mile east of U.S. Highway 101, 0.4 mile west and 0.3 mile north of southeast corner of section. NW $\frac{1}{4}$ San Luis Obispo Quad. 3/12/53, 12.0.

28S/12E-23Q1--Reference point--top of wood cover at trap door, elevation 884.3 feet. 0.3 mile east of U.S. Highway 101, at intersection of El Borda Avenue and dirt road. NW $\frac{1}{4}$ San Luis Obispo Quad. 3/18/53, 4.9; 11/25/53, 7.4; 3/11/54, 5.0; 11/17/54, 7.4.

TABLE E-1 (continued)

DEPTHS TO GROUND WATER AT MEASUREMENT WELLS
IN UPPER SALINAS HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

28S/12E-24C1--Reference point--top of casing, elevation 852.6 feet. 1 mile southeast along Rocky Canyon Road from Eureka Bridge, 0.3 mile east and 0.1 mile south of northwest corner of section. NW $\frac{1}{4}$ San Luis Obispo Quad.

3/11/53, 5.5	6/ 8/53, 12.0 P	3/11/54, 5.1
3/17/53, 10.1 P	6/15/53, 13.4 P	4/ 1/54, 4.1
3/23/53, 5.2	6/22/53, 15.8 P	5/ 4/54, 5.5
3/30/53, 5.2	6/29/53, 8.2	5/30/54, 14.5 P
4/ 6/53, 9.7 P	7/ 6/53, 13.7 P	7/17/54, 12.5 P
4/20/53, 6.3	7/13/53, 6.1	7/31/54, 15.0 P
4/28/53, 5.6	7/20/53, 11.7 P	8/31/54, 10.8
5/ 4/53, 5.1	8/10/53, 14.2 P	9/30/54, 18.5 P
5/11/53, 5.4	8/24/53, 15.5 P	11/ 1/54, 15.2 P
5/18/53, 11.1 P	9/ 8/53, 16.4 P	11/17/54, 10.0
5/25/53, 6.3	11/ 2/53, 17.9 P	1/ 1/55, 5.9
6/ 1/53, 10.8 P	11/25/53, 9.8	3/ 7/55, 5.0

28S/12E-24F1--Reference point--top of pipe, elevation 850 feet. 1.2 miles southwest along Rocky Canyon Road from Eureka Bridge, 0.4 mile east and 0.3 mile south of northwest corner of section. NW $\frac{1}{4}$ San Luis Obispo Quad.

4/16/53, 12.0 P.

28S/12E-24F2--Reference point--top of casing, elevation 850 feet. 0.3 mile southwest of Rocky Canyon Road, 0.4 mile east and 0.4 mile south of northwest corner of section. NW $\frac{1}{4}$ San Luis Obispo Quad. 4/16/53, 7.5 P; 7/8/53, 9.5 P; 7/16/53, 6.4 P.

28S/12E-24F3--Reference point--top of casing, elevation 850 feet. 0.2 mile southwest of Rocky Canyon Road, 0.5 mile east and 0.5 mile south of northwest corner of section. NW $\frac{1}{4}$ San Luis Obispo Quad. 4/16/53, 0.5; 7/8/53, 10.3; 7/16/53, 8.2.

28S/12E-24J1--Reference point--top of casing, elevation 857.7 feet. 1.6 miles southeast of Eureka Bridge, 0.8 mile east and 0.3 mile north of southwest corner of section. NW $\frac{1}{4}$ San Luis Obispo Quad.

4/16/53, 1.0	11/25/53, 5.1	6/29/54, 16.3
7/ 8/53, 14.3 P	3/11/54, 0.8	11/17/54, 6.0
7/16/53, 16.9 P		

28S/12E-25A1--Reference point--top of wood planking, elevation 868.9 feet. 510 feet west of Rocky Canyon Road, 0.2 mile south and 650 feet west of northeast corner of section. NE $\frac{1}{4}$ San Luis Obispo Quad.

4/16/53, 6.6	7/16/53, 7.5 P	3/11/54, 6.2
7/ 8/53, 9.8 P	11/25/53, 14.2	11/17/54, 13.0

TABLE E-1 (continued)

DEPTHS TO GROUND WATER AT MEASUREMENT WELLS
IN UPPER SALINAS HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

28S/12E-25H1--Reference point--top of casing, elevation 867.9 feet. 480 feet west of Rocky Canyon Road, 0.3 mile south and 0.1 mile west of northeast corner of section. NE $\frac{1}{4}$ San Luis Obispo Quad. 6/4/53, 3.5; 7/8/53, 5.8 P; 7/16/53, 3.3 P; 11/25/53, 9.5; 3/11/54, 3.0.

28S/12E-25H2--Reference point--top of casing, elevation 867.4 feet. 540 feet west of Rocky Canyon Road, in Salinas River, 0.4 mile south and 700 feet west of northeast corner of section. NE $\frac{1}{4}$ San Luis Obispo Quad. 7/8/53, 8.9 P; 7/16/53, 4.8 P; 11/17/54, 9.6.

28S/12E-25J1--Reference point--notch in casing, elevation 870 feet. 0.1 mile southeast along dirt road from ford across Salinas River, 400 feet west and 0.3 mile north of southeast corner of section. NE $\frac{1}{4}$ San Luis Obispo Quad. 4/2/53, 21.1 P; 4/14/53, 14.6; 7/8/53, 22.7 P; 7/13/53, 19.3 P; 7/16/53, 21.6 P.

28S/12E-25Q1--Reference point--top of casing, elevation 885 feet. 0.5 mile northeast along Paloma Creek Road from old U.S. Highway 101, 100 feet north of road. NW $\frac{1}{4}$ San Luis Obispo Quad. 4/2/53, 8.9; 7/8/53, 10.2; 7/16/53, 10.3.

28S/12E-25R1--Reference point--hole in casing, elevation 878.0 feet. 0.3 mile southeast along dirt road from ford across Salinas River 300 feet east of railroad tracks, 0.2 mile north and 250 feet west of southeast corner of section. NE $\frac{1}{4}$ San Luis Obispo Quad.

4/2/53, 21.0 P	7/13/53, 18.8 P	3/11/54, 11.6
4/14/53, 11.7	7/16/53, 20.5 P	11/17/54, 19.8
7/8/53, 24.7 P	11/24/53, 20.0	

28S/12E-36C1--Reference point--top of casing, elevation 887 feet. 0.2 mile south along old U.S. Highway 101 from its north junction with U.S. Highway 101, 250 feet west of road. NW $\frac{1}{4}$ San Luis Obispo Quad. 6/4/53, 6.2; 3/11/54, 10.4; 11/18/54, 14.4.

28S/12E-36L1--Reference point--top of casing, elevation 955 feet. 200 feet west of road, 0.4 mile north and 0.4 mile east of southwest corner of section. NW $\frac{1}{4}$ San Luis Obispo Quad. 6/4/53, 26.9.

TABLE E-1 (continued)

DEPTHS TO GROUND WATER AT MEASUREMENT WELLS
IN UPPER SALINAS HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

28S/12E-36N1--Reference point--top of casing, elevation 910 feet. 230 feet north of road, 0.1 mile east and 0.2 mile north of southwest corner of section, 0.4 mile southwest of U.S. Highway 101. NW $\frac{1}{4}$ San Luis Obispo Quad.		
4/2/53, 4.4	3/11/54, 7.9	11/18/54, 20.6
4/29/53, 4.8	5/30/54, 6.2	1/3/55, 24.6
5/25/53, 9.6 P	6/30/54, 12.6 P	2/1/55, 12.8
6/22/53, 7.7	7/30/54, 11.0	3/7/55, 4.3
7/27/53, 11.0	9/2/54, 14.0	11/18/55, 23.4
8/31/53, 14.1	9/30/54, 16.2	11/28/56, 21.4
11/24/53, 21.4	10/30/54, 18.5	

28S/12E-36N2--Reference point--top of casing, elevation 910 feet. 0.4 mile southwest of U.S. Highway 101, 0.1 mile east and 800 feet north of southwest corner of section. NW $\frac{1}{4}$ San Luis Obispo Quad. 4/2/53, 7.7.

28S/13E-4K1--Reference point--top of steel plate, elevation 1,199.5 feet. At Standard Oil Pump Station, 400 feet north of Atascadero-Creston road. Creston Quad.

1/-/47, 56.0 (owner)	5/-/47, 85.0 (owner)	6/-/49, 87.0 (owner)
1/-/47, 140.0 P (owner)	5/-/47, 146.0 P (owner)	6/-/49, 142.0 P (owner)
2/-/47, 79.0 (owner)	12/-/47, 85.0 (owner)	11/-/49, 86.0 (owner)
2/-/47, 106.0 P (owner)	12/-/47, 132.0 P (owner)	11/-/49, 142.0 P (owner)
3/-/47, 71.0 (owner)	3/-/48, 71.0 (owner)	7/-/50, 79.0 (owner)
3/-/47, 106.0 P (owner)	3/-/48, 132.0 P (owner)	7/-/50, 138.0 P (owner)
4/-/47, 79.0 (owner)	10/-/48, 94.0 (owner)	10/23/53, 127.0 P
4/-/47, 106.0 P (owner)	10/-/48, 150.0 P (owner)	3/12/54, 82.8
		12/1/54, 191.0 P

28S/13E-4K2--Reference point--top of 2-inch pipe, elevation 1,195.0 feet. At Standard Oil Pump Station, 200 feet north of Atascadero-Creston road. Creston Quad.

12/-/46, 84.0 (owner)	10/-/48, 120.0 (owner)	7/-/50, 146.0 (owner)
12/-/46, 102.0 P (owner)	10/-/48, 186.0 P (owner)	7/-/50, 185.0 P (owner)
5/-/47, 142.0 (owner)	6/-/49, 123.0 (owner)	11/-/50, 99.0 (owner)
5/-/47, 184.0 P (owner)	6/-/49, 183.0 P (owner)	11/-/50, 184.0 P (owner)
12/-/47, 82.0 (owner)	11/-/49, 124.0 (owner)	10/23/50, 87.8
12/-/47, 179.0 P (owner)	11/-/49, 185.0 P (owner)	3/12/54, 52.2

28S/13E-8G1--Reference point--top of concrete blocks, elevation 1,315 feet. 50 feet south of Atascadero-Creston road, 0.4 mile west and 0.5 mile south of northeast corner of section. Creston Quad. 10/23/53, 110.3; 3/12/54, 106.5; 12/1/54, 110.0.

TABLE E-1 (continued)

DEPTHS TO GROUND WATER AT MEASUREMENT WELLS
IN UPPER SALINAS HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

28S/13E-12J1--Reference point--top of casing, elevation 1,140 feet. 0.9 mile south along southeast road out of Creston, 800 feet east of road, in east branch of Huerhuero Creek. Creston Quad. 6/25/53, 17.7; 12/4/53, 18.0; 3/12/54, 16.3; 12/1/54, 18.3.

28S/13E-12M1--Reference point--top of casing, elevation 1,150 feet. 0.8 mile south along U.S. Highway 466 from Creston, 150 feet east of road. Creston Quad. 6/25/53, 16.5 P; 12/4/53, 13.8; 3/12/54, 12.0; 12/1/54, 13.0.

28S/13E-14K1--Reference point--top of 4" x 4" blocks, elevation 1,183 feet. 200 feet south of intersection of U.S. Highway 466 and Rocky Canyon road, 50 feet west of road. NE $\frac{1}{4}$ San Luis Obispo Quad. 6/25/53, 14.7; 12/4/53, 18.4; 3/12/54, 18.5; 12/1/54, 21.2 P.

28S/13E-30N1--Reference point--hole in casing, elevation 877.1 feet. 0.4 mile southeast of Rocky Canyon road, 0.2 mile east and 0.2 mile north of southwest corner of section. NE $\frac{1}{4}$ San Luis Obispo Quad. 6/4/53, 15.1 P; 11/25/53, 15.5; 3/11/54, 7.2; 11/17/54, 15.7.

28S/13E-31C1--Reference point--crack between concrete floor and base, elevation 880 feet. 0.7 mile south of Rocky Canyon road, 0.5 mile east and 800 feet south of northwest corner of section. NE $\frac{1}{4}$ San Luis Obispo Quad. 10/2/53, 17.1 P.

28S/13E-31D1--Reference point--top of casing, elevation 877.0 feet. 0.6 mile south of Rocky Canyon road, 300 feet east of Southern Pacific Railroad, 0.1 mile east and 0.1 mile south of northwest corner of section. NE $\frac{1}{4}$ San Luis Obispo Quad.

6/ 4/53, 8.5 P	7/17/53, 7.9 P	3/11/54, 6.5
7/ 8/53, 9.5	11/24/53, 15.3	11/17/54, 15.1

28S/13E-31G1--Reference point--crack between blocks under pump, elevation 885 feet. 0.2 mile east of Southern Pacific Railroad, 0.5 mile south and 0.4 mile west of northeast corner of section. NE $\frac{1}{4}$ San Luis Obispo Quad. 7/7/53, 10.7; 7/16/53, 8.0.

TABLE E-1 (continued)

DEPTH TO GROUND WATER AT MEASUREMENT WELLS
IN UPPER SALINAS HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

28S/13E-31K1--Reference point--hole in pump base, elevation 884.8 feet. 0.2 mile east of Southern Pacific Railroad, on west bank of the Salinas River, 0.4 mile north and 0.3 mile west of southeast corner of section. NE $\frac{1}{4}$ San Luis Obispo Quad.

4/13/53, 8.4 P	7/16/53, 8.3 P	3/11/54, 5.2
4/20/53, 5.1	7/21/53, 9.1 P	4/ 1/54, 4.3
4/28/53, 4.7	7/27/53, 7.1	5/ 4/54, 5.3
5/ 4/53, 5.1	8/ 3/53, 11.3 P	5/30/54, 5.6
5/11/53, 5.3	8/10/53, 9.4	6/30/54, 9.0
5/18/53, 5.3	8/17/53, 10.7	9/ 1/54, 12.3
5/25/53, 5.3	8/24/53, 15.4 P	9/30/54, 15.5
6/ 1/53, 5.6	8/31/53, 16.7 P	11/ 1/54, 16.0
6/ 8/53, 8.4 P	9/ 7/53, 17.1 P	11/17/54, 15.8
6/15/53, 5.5	9/28/53, 17.0	1/ 3/55, 9.2
6/22/53, 6.2	10/ 9/53, 21.6 P	2/ 1/55, 5.1
6/29/53, 6.8	11/ 2/53, 17.4	3/ 7/55, 5.1
7/ 6/53, 7.8	11/ 9/53, 21.3 P	11/18/55, 18.3
7/ 8/53, 11.2 P	11/24/53, 15.8	11/28/56, 12.5
7/13/53, 3.9	2/ 4/54, 5.3	

28S/13E-31K2--Reference point--top of casing, elevation 883.5 feet. 0.2 mile east of Southern Pacific Railroad, on west bank of the Salinas River, 0.4 mile north and 0.3 mile west of southeast corner of section. NE $\frac{1}{4}$ San Luis Obispo Quad. 11/24/53, 14.5; 3/11/54, 3.9; 4/1/54, 3.0; 11/17/54, 14.3.

28S/13E-31K3--Reference point--crack in 2-inch planking, elevation 890 feet. 0.2 mile east of Southern Pacific Railroad, on west bank of the Salinas River, 0.3 mile north and 0.2 mile west of southeast corner of section. NE $\frac{1}{4}$ San Luis Obispo Quad. 7/7/53, 11.6; 7/16/53, 8.9.

28S/13E-31R1--Reference point--hole in pump base, elevation 891.6 feet. 0.2 mile east of Southern Pacific Railroad, 0.3 mile west and 0.2 mile north of southeast corner of section. NE $\frac{1}{4}$ San Luis Obispo Quad. 11/24/53, 20.9; 3/11/54, 10.5; 11/17/54, 21.2.

28S/13E-31R2--Reference point--hole in pump base, elevation 894.2 feet. 0.3 mile east of Southern Pacific Railroad, 0.2 mile north and 0.1 mile west of southeast corner of section. NE $\frac{1}{4}$ San Luis Obispo Quad. 7/7/53, 16.9; 7/16/53, 16.8 P.

28S/13E-32N1--Reference point--top of plank platform, elevation 889.6 feet. 0.4 mile east of Southern Pacific Railroad, 150 feet west of Salinas River, 0.1 mile east and 0.1 mile north of southwest corner of section. NE $\frac{1}{4}$ San Luis Obispo Quad.

4/16/53, 4.3 P	7/13/53, 3.3	11/24/53, 15.2
7/ 8/53, 6.6 P	7/16/53, 4.7	11/17/54, 22.0

TABLE E-1 (continued)

DEPTHS TO GROUND WATER AT MEASUREMENT WELLS
IN UPPER SALINAS HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

28S/13E-32N2--Reference point--hole in pump base, elevation 889.1 feet. On east bank of Salinas River, 0.2 mile north and 0.1 mile east of southwest corner of section. NE $\frac{1}{4}$ San Luis Obispo Quad.

4/16/53, 6.5	7/16/53, 7.0	3/11/54, 6.4
7/8/53, 18.6 P	11/24/53, 16.1	11/17/54, 16.1

28S/14E-7E1--Reference point--top of pit, elevation 1,150 feet. 0.9 mile on southeast road out of Creston, 300 feet west of road. Creston Quad.

8/10/50, 18.2;	6/25/53, 22.4 P; 12/4/53, 13.5;	3/12/54, 13.3;
12/1/54, 14.9.		

28S/14E-22B1--Reference point--top of casing, elevation 1,580 feet. 0.8 mile south of paved road, 0.4 mile west and 0.3 mile south of northeast corner of section. NW $\frac{1}{4}$ Pozo Quad. 8/6/54, 81.0.

28S/15E-2F1--Reference point--top of casing, elevation 1,257 feet. 100 feet east of road, on west side of Commatti Canyon, 0.4 mile west and 0.4 mile south of northeast corner of section. Commatti Canyon Quad. 8/11/53, 39.4; 12/2/53, 37.0; 3/25/54, 38.6 P; 12/2/54, 38.9.

28S/15E-8H1--Reference point--top of casing, elevation 1,390 feet. 80 feet east of west fork of Upton Canyon road, 0.3 mile south and 0.1 mile west of the northeast corner of section. Shedd Canyon Quad. 4/6/54, 147.0; 12/1/54, 148.2.

28S/15E-11B1--Reference point--notch in pump base, elevation 1,275 feet. At Commatti Ranch site, 100 feet east of road, 0.5 mile east and 700 feet south of the northwest corner of section. Commatti Canyon Quad. 8/11/53, 74.0; 12/2/53, 53.5; 3/24/54, 54.5; 12/2/54, 56.0.

28S/15E-14C1--Reference point--hole in pump base, elevation 1,325 feet. 0.2 mile east of Commatti Canyon road, in Commatti Creek, 0.3 mile east and 0.2 mile south of northwest corner of section. Commatti Canyon Quad. 8/11/53, 96.5 P; 12/2/53, 95.5 P; 3/24/54, 91.7 P; 12/2/54, 69.0.

28S/15E-14F1--Reference point--top of casing, elevation 1,335 feet. 50 feet east of Commatti Canyon road, 0.5 mile south and 0.3 mile east of northwest corner of section. Commatti Canyon Quad. 8/11/53, 76.5; 12/2/53, 76.0; 3/24/54, 71.5; 12/2/54, 76.0.

28S/16E-1D1--Reference point--top of casing, elevation 1,400 feet. In San Luis Canyon, 800 feet east and 400 feet south of northwest corner of section. Grant Lake Quad. 2/8/54, 31.6.

TABLE E-1 (continued)

DEPTHS TO GROUND WATER AT MEASUREMENT WELLS
IN UPPER SALINAS HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

28S/16E-14N1--Reference point--base of pump, elevation 1,440 feet. Near French Camp, north of Navajo Canyon, 0.1 mile and 0.2 mile east of southwest corner of section. NW $\frac{1}{4}$ La Panza Quad. 4/9/54, 38.1; 12/2/54, 57.0 P.

28S/16E-23M1--Reference point--top of casing, elevation 1,440 feet. 0.7 mile south of Navajo Canyon road, 100 feet east and 0.4 mile north of southwest corner of section. NW $\frac{1}{4}$ La Panza Quad. 4/8/54, 29.1; 12/2/54, 32.0.

29S/12E-1B1--Reference point--top of casing, elevation 1,008 feet. In Paloma Creek, 0.3 mile southwest of U.S. Highway 101, 0.3 mile west and 0.2 mile south of northeast corner of section. NW $\frac{1}{4}$ San Luis Obispo Quad. 4/23/53, 44.5; 3/11/54, 46.2; 11/18/54, 49.1.

29S/12E-1G1--Reference point--top of casing, elevation 958 feet. In Paloma Creek, 0.6 mile southwest of U.S. Highway 101, 0.4 mile west and 0.4 mile south of northeast corner of section. NW $\frac{1}{4}$ San Luis Obispo Quad. 4/23/53, 9.0; 11/24/53, 11.5; 3/11/54, 8.6; 11/18/54, 16.8.

29S/12E-1Q1--Reference point--top of concrete pipe casing, elevation 970 feet. On west bank of Paloma Creek, 0.3 mile west and 0.2 mile north of southeast corner of section. NW $\frac{1}{4}$ San Luis Obispo Quad. 4/23/53, 2.5.

29S/13E-5C1--Reference point--top of casing, elevation 908.9 feet. 0.5 mile north of U.S. Highway 101, 200 feet east of Southern Pacific Railroad. NE $\frac{1}{4}$ San Luis Obispo Quad.

4/16/53, 10.4	7/16/53, 10.5	3/11/54, 9.1
7/8/53, 11.5	11/24/53, 10.0	11/17/54, 11.1
7/8/53, 11.7 P		

29S/13E-5C2--Reference point--top of blocks under pump, elevation 930 feet. 0.2 mile east of Southern Pacific Railroad, 0.5 mile north of U.S. Highway 101. NE $\frac{1}{4}$ San Luis Obispo Quad. 4/16/53, 8.8; 7/8/53, 9.5; 7/16/53, 9.6.

29S/13E-5C3--Reference point--top of casing, elevation 940 feet. 0.2 mile east of Southern Pacific Railroad, 0.5 mile north of U.S. Highway 101. NE $\frac{1}{4}$ San Luis Obispo Quad. 9/-/52, 13.0 (owner); 4/16/53, 12.0.

29S/13E-5D1--Reference point--top of casing, elevation 907.7 feet. 700 feet west of Southern Pacific Railroad, 0.4 mile north of U.S. Highway 101. NE $\frac{1}{4}$ San Luis Obispo Quad. 4/16/53, 11.7.

29S/13E-5D2--Reference point--top of casing, elevation 901.7 feet. 100 feet west of Southern Pacific Railroad, 0.6 mile north of U.S. Highway 101. NE $\frac{1}{4}$ San Luis Obispo Quad. 4/16/53, 12.8; 11/24/53, 14.0; 3/11/54, 14.0; 11/17/54, 17.5.

TABLE E-1 (continued)

DEPTHS TO GROUND WATER AT MEASUREMENT WELLS
IN UPPER SALINAS HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

29S/13E-5D3--Reference point--top of casing, elevation 903.2 feet. 125 feet west of Southern Pacific Railroad, 0.5 mile north of U.S. Highway 101. NE $\frac{1}{4}$ San Luis Obispo Quad. 3/11/54, 14.8; 11/17/54, 18.5.

29S/13E-5E2--Reference point--top of cover over casing, elevation 915 feet. 0.2 mile west of Southern Pacific Railroad, 700 feet north of U.S. Highway 101. NE $\frac{1}{4}$ San Luis Obispo Quad. 4/16/53, 6.7.

29S/13E-5E3--Reference point--0.5 feet below top of casing, elevation 920 feet. 450 feet west of Southern Pacific Railroad, 0.3 mile north of U.S. Highway 101. NE $\frac{1}{4}$ San Luis Obispo Quad. 4/16/53, 7.0; 7/8/53, 9.6; 7/16/53, 9.5.

29S/13E-5F3--Reference point--hole at edge of pump, elevation 916.1 feet. 500 feet west of Southern Pacific Railroad, 0.2 mile north of U.S. Highway 101, 50 feet west of road. NE $\frac{1}{4}$ San Luis Obispo Quad.

4/16/54, 15.0	7/27/53, 34.0 P	6/30/54, 17.7
4/28/53, 26.8 P	8/31/53, 18.0	7/30/54, 19.0
5/25/53, 17.6 P	11/24/53, 17.1	9/ 2/54, 20.0
6/22/53, 16.6	3/11/54, 14.8	9/30/54, 19.0
6/ 8/53, 31.9 P	5/30/54, 15.8	

29S/13E-5K1--Reference point--hole in casing, elevation 930 feet. 700 feet east of Southern Pacific Railroad, 0.3 mile northeast of Santa Margarita Creek bridge. NE $\frac{1}{4}$ San Luis Obispo Quad. 4/1/53, 9.3; 5/21/53, 13.8 P; 5/21/53, 9.7; 7/8/53, 14.9 P; 7/16/53, 17.8 P.

29S/13E-5K2--Reference point--top of casing, elevation 928.5 feet. 900 feet east of Southern Pacific Railroad, 0.3 mile northeast of Santa Margarita Creek bridge. NE $\frac{1}{4}$ San Luis Obispo Quad.

4/13/53, 14.6 P	7/ 6/53, 10.5	11/ 2/53, 15.8
4/20/53, 7.5	7/13/53, 14.6 P	11/24/53, 14.7
4/28/53, 6.2	7/16/53, 13.0 P	4/ 1/54, 10.5
5/ 4/53, 6.8	7/20/53, 12.0 P	5/ 4/54, 11.3
5/11/53, 7.4	7/27/53, 21.0 P	5/30/54, 17.3 P
5/18/53, 8.2	8/ 3/53, 15.5 P	6/30/54, 25.0 P
5/25/53, 9.2	8/10/53, 16.1 P	8/31/54, 18.0
6/ 1/53, 15.3 P	8/17/53, 18.3 P	10/30/54, 18.5
6/15/53, 9.4	8/24/53, 14.0	11/17/54, 19.0
6/18/53, 14.1 P	8/31/53, 14.8	1/ 3/55, 16.0
6/22/53, 14.4 P	9/ 8/53, 18.5 P	2/ 1/55, 14.9
6/29/53, 14.6 P	9/28/53, 17.0 P	3/ 7/55, 13.8

TABLE E-1 (continued)

DEPTHS TO GROUND WATER AT MEASUREMENT WELLS
IN UPPER SALINAS HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

29S/13E-5K3--Reference point--top of casing, elevation 940 feet. 0.2 mile east of Southern Pacific Railroad, 0.3 mile northeast of Santa Margarita Creek bridge. NE 1/4 San Luis Obispo Quad. 8/8/51, 18.0 (driller); 4/16/53, 11.2.

29S/13E-5K4--Reference point--top of casing, elevation 940 feet. 0.2 mile east of Southern Pacific Railroad, 0.3 mile northeast of Santa Margarita Creek bridge. NE 1/4 San Luis Obispo Quad. 4/16/53, 10.3.

29S/13E-5L1--Reference point--top of casing, elevation 930.3 feet. 0.2 mile northwest along U.S. Highway 101 from Santa Margarita Creek bridge, 300 feet northeast of highway, west of creek. NE 1/4 San Luis Obispo Quad. 4/16/53, 43.0 P; 11/24/53, 32.1 P; 3/11/55, 23.1 P; 11/17/54, 28.6 P.

29S/13E-5L2--Reference point--top of wood casing, elevation 930.4 feet. 0.2 mile northwest along U.S. Highway 101 from Santa Margarita Creek bridge, 200 feet northeast of highway, west of creek. NE 1/4 San Luis Obispo Quad. 4/16/53, 19.0; 11/24/53, 26.0; 3/11/54, 21.7; 11/17/54, 26.6.

29S/13E-5L4--Reference point--crack between floor and wood block, elevation 910 feet. 0.1 mile northwest along U.S. Highway 101 from Santa Margarita Creek bridge, 550 feet northeast of highway, 200 feet west of Southern Pacific Railroad. NE 1/4 San Luis Obispo Quad. 4/16/53, 14.5.

29S/13E-5P1--Reference point--top of casing, elevation 915 feet. 130 feet east of Santa Margarita Creek bridge, 0.2 mile north and 0.4 mile east of southwest corner of section. NE 1/4 San Luis Obispo Quad. 4/16/53, 34.8 P.

29S/13E-5P2--Reference point--top of casing, elevation 945 feet. 260 feet west of Santa Margarita Creek bridge, 260 feet south of U.S. Highway 101. NE 1/4 San Luis Obispo Quad. 4/23/53, 17.5.

29S/13E-5P3--Reference point--top of casing, elevation 930 feet. 0.2 mile south of Santa Margarita Creek bridge, 300 feet west of U.S. Highway 101. NE 1/4 San Luis Obispo Quad. 8/5/54, 13.0.

29S/13E-6A1--Reference point--top of casing, elevation 920 feet. 0.6 mile north of U.S. Highway 101, 0.2 mile west of Southern Pacific Railroad. NE 1/4 San Luis Obispo Quad.

4/16/53, 53.0 P	8/31/53, 52.0 P	9/30/54, 63.6 P
4/28/53, 35.7	11/24/53, 40.8	10/30/54, 62.5 P
5/25/53, 51.1 P	3/11/54, 36.0	11/17/54, 43.0
6/22/53, 51.5 P	5/30/54, 51.3 P	1/ 3/55, 38.7
7/ 8/53, 54.5 P	6/30/54, 56.7 P	2/ 1/55, 37.3
7/27/53, 42.0	9/ 2/54, 54.4 P	3/ 7/55, 37.4
		11/28/56, 55.2

TABLE E-1 (continued)

DEPTHS TO GROUND WATER AT MEASUREMENT WELLS
IN UPPER SALINAS HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

29S/13E-6A2--Reference point--crack between pump and concrete base, elevation 920 feet. 0.6 mile north of U.S. Highway 101, 0.1 mile west of Southern Pacific Railroad. NE $\frac{1}{4}$ San Luis Obispo Quad. 4/16/53, 27.0.

29S/13E-6D1--Reference point--top of casing, elevation 960 feet. 1.4 mile north along U.S. Highway 101 from Santa Margarita Creek bridge, 150 feet east of highway. NE $\frac{1}{4}$ San Luis Obispo Quad. 4/23/53, 6.0; 11/24/53, 12.7; 3/11/54, 6.9; 11/18/54, 11.9.

29S/13E-6D2--Reference point--top of casing, elevation 1,000 feet. 1.3 miles north along U.S. Highway 101 from Santa Margarita Creek bridge, 225 feet west of highway. NE $\frac{1}{4}$ San Luis Obispo Quad. 4/23/53, 6.2.

29S/13E-6E--Reference point--top of casing, elevation 1,025 feet. 1.2 miles north along U.S. Highway 101 from Santa Margarita Creek bridge, 500 feet west of highway. NE $\frac{1}{4}$ San Luis Obispo Quad. 4/23/53, 15.0.

29S/13E-6H1--Reference point--crack between pump and concrete base, elevation 950 feet. 0.6 mile north along U.S. Highway 101 from Santa Margarita Creek bridge, 0.3 mile east of highway, 250 feet south of Carmel road. NE $\frac{1}{4}$ San Luis Obispo Quad. 4/16/53, 53.3.

29S/13E-6M1--Reference point--hole in casing, elevation 1,000 feet. 200 feet southwest of road, 0.2 mile east and 0.3 mile north of southwest corner of section. NE $\frac{1}{4}$ San Luis Obispo Quad. 4/23/53, 11.0.

29S/13E-6M2--Reference point--bottom of pump base, elevation 1,010 feet. 250 feet east of road, 0.2 mile east and 0.4 mile north of southwest corner of section. NE $\frac{1}{4}$ San Luis Obispo Quad. 4/23/53, 20.0.

29S/13E-6P1--Reference point--top of blocks under pump, elevation 1,017 feet. 0.5 mile southwest of U.S. Highway 101, 0.3 mile east and 0.2 mile north of southwest corner of section. NE $\frac{1}{4}$ San Luis Obispo Quad. 4/23/53, 13.9; 11/24/53, 23.6; 3/11/54, 16.5; 11/18/54, 22.4.

29S/13E-8N1--Reference point--top of concrete casing, elevation 950 feet. 1.3 miles north of junction of State Highway 178 with U.S. Highway 101. 0.3 mile west of U.S. Highway 101. NE $\frac{1}{4}$ San Luis Obispo Quad.

4/15/53, 9.2	3/11/54, 6.4	11/17/54, 11.8
4/28/53, 5.9	5/30/54, 25.0 P	1/ 3/55, 9.9
5/25/53, 28.3 P	6/30/54, 19.6 P	2/ 1/55, 8.2
6/22/53, 37.4 P	7/30/54, 22.5 P	3/ 7/55, 6.2
7/27/53, 35.3 P	9/ 2/54, 25.0 P	11/18/55, 18.3
8/31/53, 32.0 P	9/30/54, 31.0 P	11/28/56, 13.6
11/24/53, 13.4	10/30/54, 28.0 P	

TABLE E-1 (continued)

DEPTHS TO GROUND WATER AT MEASUREMENT WELLS
IN UPPER SALINAS HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

29S/13E-8N2--Reference point--top of casing, elevation 950 feet. 1.3 miles north of junction of State Highway 178 with U.S. Highway 101, 0.3 mile west of U.S. Highway 101. NE $\frac{1}{4}$ San Luis Obispo Quad. 4/15/53, 6.0.

29S/13E-8N4--Reference point--hole in casing, elevation 960 feet. 1.3 miles north of junction of State Highway 178 with U.S. Highway 101, 0.3 mile west of U.S. Highway 101. NE $\frac{1}{4}$ San Luis Obispo Quad. 8/5/54, 14.5.

29S/13E-17C1--Reference point--top of casing, elevation 975.0 feet. In Union Oil Company Pumping Plant yard, 300 feet east of U.S. Highway 101. NE $\frac{1}{4}$ San Luis Obispo Quad. 7/7/53, flowing; 1/24/53, 2.0; 3/11/54, flowing; 11/17/54, 0.7.

29S/13E-17C2--Reference point--crack under welded cap, elevation 973.0 feet. In Union Oil Company Pumping Plant yard, 300 feet east of U.S. Highway 101. NE $\frac{1}{4}$ San Luis Obispo Quad. 7/7/53; 7.9; 11/24/53, 11.7; 3/11/54, 7.3.

29S/13E-17D1--Reference point--crack between pump and wood base, elevation 970 feet. 0.3 mile west of U.S. Highway 101, 530 feet south and 50 feet east of northwest corner of section. NE $\frac{1}{4}$ San Luis Obispo Quad. 4/15/53, 9.1.

28S/13E-18A1--Reference point--top of wood platform elevation 946.4 feet. 0.4 mile west of U.S. Highway 101, 400 feet west and 0.2 mile south of northeast corner of section. NE $\frac{1}{4}$ San Luis Obispo Quad. 4/15/53, 4.7; 11/24/53, 7.5; 3/11/54, 2.8; 11/17/54, 8.1.

29S/13E-19H1--Reference point--hole in pump base, elevation 1,002.6 feet. In Santa Margarita, 150 feet south of U.S. Highway 101, between highway and Southern Pacific Railroad. NE $\frac{1}{4}$ San Luis Obispo Quad.

4/15/53, 6.7	7/27/53, 11.9	9/30/54, 19.0
4/28/53, 5.4	8/3/53, 11.2	9/2/54, 21.0
5/25/53, 7.0	8/10/53, 12.9	9/30/54, 28.9
6/1/53, 7.0	8/17/53, 13.7	10/30/54, 37.0
6/8/53, 8.2	8/24/53, 14.7	11/17/54, 29.2
6/15/53, 8.0	8/31/53, 15.3	1/3/55, 12.8
6/22/53, 8.8	11/24/53, 23.4	2/1/55, 5.8
6/29/53, 8.1	2/4/54, 8.0	3/2/55, 4.1
7/6/53, 8.6	3/11/54, 6.2	11/18/55, 29.0
7/13/53, 10.0	5/30/54, 8.0	11/28/56, 18.4
7/20/53, 11.4		

29S/13E-19H2--Reference point--hole in pump base, elevation 1,002 feet. In Santa Margarita, 150 south of U.S. Highway 101, between high and Southern Pacific Railroad. NE $\frac{1}{4}$ San Luis Obispo Quad. 8/10/53, 12.7.

TABLE E-1 (continued)

DEPTHS TO GROUND WATER AT MEASUREMENT WELLS
IN UPPER SALINAS HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

30S/15E-3Q2--Reference point--top of casing, elevation 1,650 feet. 1.6 miles north from junction of county road with State Highway 178, 0.2 mile southeast of Pozo School. SE $\frac{1}{4}$ Pozo Quad. 1/31/53, 42.2; 2/24/53, 39.0.

30S/15E-3RL--Reference point--top of casing, elevation 1,675 feet. 1.7 miles north from junction of county road with State Highway 178, 0.2 mile east of county road. SE $\frac{1}{4}$ Pozo Quad. 1/31/53, 47.0; 3/24/53, 46.0.

30S/15E-10GL--Reference point--top of concrete base, elevation 1,610 feet. 0.9 mile north from junction of county road with State Highway 178, 0.3 mile east of road. SE $\frac{1}{4}$ Pozo Quad. 2/14/53, 45.6 P.

30S/15E-10K1--Reference point--top of casing, elevation 1,580 feet. 0.8 mile north from junction of county road with State Highway 178, 650 feet east of road. SE $\frac{1}{4}$ Pozo Quad. 2/7/53, 27.1; 3/24/53, 23.3.

30S/15E-10K2--Reference point--top of casing, elevation 1,580 feet. 0.8 mile north from junction of county road with State Highway 178, 700 feet east of road. SE $\frac{1}{4}$ Pozo Quad. 2/7/53, 30.4; 3/24/53, 25.9.

30S/15E-10K3--Reference point--top of casing, elevation 1,580 feet. 0.8 mile north of junction of county road with State Highway 178, 750 feet east of road. SE $\frac{1}{4}$ Pozo Quad. 2/7/53, 28.3; 3/24/53, 20.4.

30S/15E-15H1--Reference point--top of casing, elevation 1,530 feet. 2.1 miles northeast along State Highway 178 from Pozo, 0.6 mile east of junction of county road with State Highway 178. SE $\frac{1}{4}$ Pozo Quad. 1/24/53, 27.0; 3/23/53, 29.0.

30S/15E-15L1--Reference point--crack in casing cover, elevation 1,530 feet. 1.2 miles northeast from Pozo along State Highway 178, 0.1 mile south of junction of county road with State Highway 178, west of highway. SE $\frac{1}{4}$ Pozo Quad. 2/14/53, 30.8.

30S/15E-15L2--Reference point--hole in side of casing, elevation 1,541 feet. 1.2 miles northeast from Pozo along State Highway 178, 0.1 mile south of junction of county road with State Highway 178, east of highway. SE $\frac{1}{4}$ Pozo Quad. 2/14/53, 31.4; 7/27/53, 33.9; 9/1/53, 34.7.

30S/15E-16PL--Reference point--crack in cover, elevation 1,480 feet. At northeast corner of Pozo, 50 feet north of State Highway 178, 300 feet north and 0.7 mile west of southeast corner of section. SE $\frac{1}{4}$ Pozo Quad. 3/7/53, 28.2.

TABLE E-1 (continued)

DEPTHS TO GROUND WATER AT MEASUREMENT WELLS
IN UPPER SALINAS HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

30S/15E-16P2--Reference point--top of casing, elevation 1,480 feet. At northeast corner of Pozo, 380 feet north of State Highway 178, 380 feet north and 0.7 mile west of southeast corner of section. SE $\frac{1}{4}$ Pozo Quad. 3/7/53, 27.6; 3/23/53, 24.8.

30S/15E-16Q1--Reference point--top of casing, elevation 1,470 feet. 0.5 mile east along State Highway 178 from Pozo, 400 feet north and 0.4 mile west of southeast corner of section. SE $\frac{1}{4}$ Pozo Quad. 3/7/53, 27.4; 3/24/53, 27.7.

30S/15E-16Q2--Reference point--top of casing, elevation 1,470 feet. 0.5 mile east along State Highway 178 from Pozo, north of highway, 400 feet north and 0.4 mile west of southeast corner of section. SE $\frac{1}{4}$ Pozo Quad. 3/7/53, 27.1; 3/24/53, 27.4.

30S/15E-20A2--Reference point--top of casing, elevation 1,450 feet. West of Pozo, 1.3 miles east along State Highway 178 from Salinas River bridge, 1,000 feet south of road. SW $\frac{1}{4}$ Pozo Quad. 3/14/53, 22.2.

30S/15E-21C1--Reference point--top of casing, elevation 1,460 feet. East of Pozo, 10 feet south of State Highway 178, 10 feet south and 0.6 mile west of northeast corner of section. SE $\frac{1}{4}$ Pozo Quad. 3/24/53, 23.0.

30S/15E-25F1--Reference point--top of concrete wall, elevation 1,490 feet. 2.2 miles south of junction of Salinas River road with State Highway 178, 30 feet north of Salinas River road, 0.4 mile east and 0.3 mile south of northwest corner of section. SE $\frac{1}{4}$ Pozo Quad. 1/17/53, 9.2; 1/23/53, 9.6.

30S/15E-26B1--Reference point--top of casing, elevation 1,500 feet. 0.5 mile west of road, 0.3 mile west and 0.1 mile south of the northeast corner of section. SE $\frac{1}{4}$ Pozo Quad. 3/7/53, 8.2; 3/23/53, 8.4.

30S/16E-31G1--Reference point--top of concrete wall, elevation 1,530 feet. 6.5 miles south along Salinas River road from junction with State Highway 178, between river and road. SE $\frac{1}{4}$ Pozo Quad. 1/17/53, 4.8; 3/23/53, 5.7.

APPENDIX E

TABLE E-2

DEPTHES TO GROUND WATER AT MEASUREMENT WELLS
IN COASTAL HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

25S/6E-16A1--Reference point--top of casing, elevation 35 feet. Windmill near south abutment of State Highway 1 bridge at San Carpofooro Creek, 70 feet west of State Highway 1. SE 1/4 Cape San Martin Quad. 7/7/53, 8.9.

25S/6E-35H1--Reference point--slot in pump case, elevation 30 feet. 0.4 mile south and 0.2 mile west of northeast corner of section. NE 1/4 Piedras Blancas Quad. 7/7/53, 13.2.

25S/6E-35H2--Reference point--top of casing, elevation 30 feet. 0.4 mile south and 0.2 mile west of northeast corner of section, 25 feet northwest of highway. NE 1/4 Piedras Blancas Quad. 7/7/53, 11.8.

25S/6E-35N2--Reference point--top of casing, elevation 20 feet. 0.4 mile east of State Highway 1, 0.3 mile north and 0.1 mile east of southwest corner of section. NE 1/4 Piedras Blancas Quad. 7/7/53, 9.1.

25S/6E-35P1--Reference point--slot in pump base, elevation 20 feet. 0.5 mile east and 0.1 mile north of the southwest corner of section. NE 1/4 Piedras Blancas Quad. 7/7/53, 13.3.

26S/7E-5C1--Reference point--top of casing, elevation 120 feet. In Arroyo de la Cruz Basin near Chileno Camp, 0.2 mile south and 0.4 mile east of the northwest corner of section. NW 1/4 San Simeon Quad. 7/7/53, 8.0.

26S/7E-16A1--Reference point--pump base, elevation 110 feet. 2 miles north of San Simeon, 0.2 mile south and 0.2 mile west of northeast corner of section. NW 1/4 San Simeon Quad. 7/16/53, 10.2.

27S/8E-2Q1--Reference point--top of casing, elevation 110 feet. 0.7 mile east and 0.1 mile north of southwest corner of section. SE 1/4 San Simeon Quad. 7/30/53, 18.5; 11/11/53, 35.0; 3/9/54, 17.0; 11/20/54, 30.5

27S/8E-4G1--Reference point--top of joint in pump base, elevation 240 feet. 0.3 mile south and 0.5 mile west of northeast corner of section. SE 1/4 San Simeon Quad. 7/23/53, 15.8.

27S/8E-6A1--Reference point--slot in pump base, elevation 40 feet. 0.1 mile south and 0.1 mile west of northeast corner of section. SW 1/4 San Simeon Quad. 7/20/53, 13.8.

TABLE E-2 (continued)

DEPTHS TO GROUND WATER AT MEASUREMENT WELLS
IN COASTAL HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

27S/8E-8R1--Reference point--top of casing, elevation 20 feet. Windmill, 0.1 mile north and 0.1 mile west of the southeast corner of section. SE 1/4 San Simeon Quad. 7/20/53, 9.5; 11/11/53, 9.5; 3/9/54, 8.8; 11/20/54, 9.5.

27S/8E-9E1--Reference point--bottom of pump base, elevation 70 feet. Windmill, 0.5 mile north and 0.2 mile east of southwest corner of section. SE 1/4 San Simeon Quad. 7/23/53, 14.9.

27S/8E-9J1--Reference point--top of casing, elevation 27 feet. Windmill, 0.4 mile north and 0.1 mile west of southeast corner of section, 20 feet south of road. SE 1/4 San Simeon Quad. 7/20/53, 7.4; 11/11/53, 14.5; 11/20/54, 15.7.

27S/8E-9J2--Reference point--top of casing, elevation 30 feet. 0.4 mile north and approximately 300 feet west of southeast corner of section, 20 feet north of road. SE 1/4 San Simeon Quad. 7/20/53, 14.8 P.

27S/8E-9L1--Reference point--top of casing, elevation 30 feet. 0.3 mile north and 0.5 mile east of southwest corner of section, 500 feet southeast of road. SE 1/4 San Simeon Quad. 7/---/54, 11.5 P; 11/20/54, 12.2.

27S/8E-9P1--Reference point--top of casing, elevation 50 feet. 0.2 mile north and 0.3 mile east of southwest corner of section. SE 1/4 San Simeon Quad. 7/20/53, 2.1.

27S/8E-9P2--Reference point--top of casing, elevation 50 feet. 0.2 mile north and 0.3 mile east of southwest corner of section. SE 1/4 San Simeon Quad. 7/20/53, 7.6.

27S/8E-10A1--Reference point--bottom of pump base, elevation 50 feet. 0.1 mile west and 0.1 mile south of northeast corner of section, 300 feet east of road. SE 1/4 San Simeon Quad. 7/20/53, 18.8.

27S/8E-10A2--Reference point--bottom of pump base, elevation 45 feet. 0.3 mile west and 0.2 mile south of northwest corner of section. SE 1/4 San Simeon Quad. 7/20/53, 13.8; 11/11/53, 23.5; 3/9/54, 12.0; 10/20/54, 27.5.

27S/8E-10M1--Reference point--bottom of floor at pump, elevation 40 feet. 0.4 mile north and 200 feet east of southwest corner of section. SE 1/4 San Simeon Quad. 7/20/53, 9.6.

27S/8E-11B1--Reference point--bottom of pump base, elevation 120 feet. 0.5 mile west and 0.1 mile south of northeast corner of section, 400 feet south of road. SE 1/4 San Simeon Quad. 7/20/53, 22.1.

TABLE E-2 (continued)

DEPTHS TO GROUND WATER AT MEASUREMENT WELLS
IN COASTAL HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

27S/8E-21R1--Reference point--top of casing, elevation 10 feet. 0.1 mile south of State Highway 1, on west side of road to county park, south side of Santa Rosa Creek. SE $\frac{1}{4}$ San Simeon Quad. 7/23/53, 6.6; 11/11/53, 6.2; 3/9/54, 6.0; 11/20/54, 5.9.

27S/8E-21R2--Reference point--bottom of pump base, elevation 30 feet. 0.2 mile south of State Highway 1 on road to county park, 200 feet southeast of road. SE $\frac{1}{4}$ San Simeon Quad. 7/23/53, 13.9.

27S/8E-24G1--Reference point--top of casing, elevation 130 feet. 0.5 mile west and 0.5 mile south of northeast corner of section, 0.3 mile north of State Highway 41. SE $\frac{1}{4}$ San Simeon Quad. 7/28/53, 7.1.

27S/8E-24J1--Reference point--hole in west side of pump base, elevation 84 feet. 1.5 miles east of State Highway 1 in Cambria along Paso Robles Road, 0.1 mile south of road. SE $\frac{1}{4}$ San Simeon Quad.

11/17/36, 27.6	5/25/53, 28.1	3/ 8/54, 25.5
3/ 4/53, 24.9	6/ 1/53, 27.7	5/10/54, 25.2
3/16/53, 25.4	6/ 8/53, 27.7	5/31/54, 26.3
3/23/53, 25.3	6/15/53, 28.2	7/12/54, 26.9
3/30/53, 25.3	6/22/53, 30.7	9/ 6/54, 26.7
4/13/53, 25.6	7/ 6/53, 29.1	10/10/54, 25.5
4/20/53, 25.6	7/28/53, 27.6	10/31/54, 27.5
4/27/53, 25.7	8/17/53, 29.9	11/20/54, 25.8
5/ 4/53, 25.6	8/24/53, 25.6	3/ 8/55, 25.0
5/11/53, 26.7	8/31/53, 25.3	11/18/55, 28.7
5/18/53, 26.2	2/ 8/54, 26.1	11/28/56, 27.5

27S/8E-24L1--Reference point--hole in casing, elevation 80 feet. 0.3 mile north and 0.4 mile east of southwest corner of section. SE $\frac{1}{4}$ San Simeon Quad. 6/23/37, 84.0 P; 12/6/38, 24.0; 4/5/50, 91.0 P; 9/4/50, 31.1; 7/28/53, 39.7.

27S/8E-24L2--Reference point--top of casing, elevation 80 feet. 0.3 mile north and 0.3 mile east of southwest corner of section. SE $\frac{1}{4}$ San Simeon Quad. 7/28/53, 22.0.

27S/8E-24L3--Reference point--top of wooden casing, elevation 90 feet. 0.3 mile north and 0.4 mile east of southwest corner of section, and 50 feet south of State Highway 41. SE $\frac{1}{4}$ San Simeon Quad. 7/28/53, 11.8.

27S/8E-24NL--Reference point--top of casing, elevation 90 feet. On south side of State Highway 41 0.2 mile east of Coast High School. SE $\frac{1}{4}$ San Simeon Quad. 7/23/53, 17.1.

TABLE E-2 (continued)

DEPTH TO GROUND WATER AT MEASUREMENT WELLS
IN COASTAL HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

27S/8E-26Cl--Reference point--hole in casing, elevation 32 feet. 0.1 mile south and 0.3 mile east of northwest corner of section, in Cambria. SE $\frac{1}{4}$ San Simeon Quad. 7/31/53, 23.1; 11/11/53, 6.7; 3/9/54, 6.1; 11/20/54, 7.7.

27S/8E-27Gl--Reference point--slot in casing air gauge, elevation 40 feet. 0.5 mile west and 0.4 mile south of northeast corner of section. SE $\frac{1}{4}$ San Simeon Quad. 7/23/53, 15.1.

27S/9E-19KL--Reference point--north side pump base, elevation 190 feet. 2.4 miles east of State Highway 1 on State Highway 41, windmill 300 feet south of highway. SE $\frac{1}{4}$ San Simeon Quad. 7/28/53, 11.0; 11/11/53, 10.9; 3/9/54, 10.2; 11/20/54, 11.0.

27S/9E-19Ll--Reference point--top of casing, elevation 150 feet. 2.1 miles east of State Highway 1 on State Highway 41 and 0.1 mile south of State Highway 41. SE $\frac{1}{4}$ San Simeon Quad. 11/9/45, 30.7; 7/28/53, 29.1.

27S/9E-19Ml--Reference point--top of casing, elevation 140 feet. 1.9 miles east of State Highway 1 on State Highway 41 and 30 feet south of State Highway 41. SE $\frac{1}{4}$ San Simeon Quad. 7/28/53, 16.1.

27S/9E-21B1--Reference point--top of sill north side of well house, elevation 240 feet. 0.1 mile south and 0.7 mile east of the northwest corner of section. SE $\frac{1}{4}$ San Simeon Quad. 7/28/53, 8.9; 11/11/53, 15.1; 3/9/54, 8.7.

27S/9E-28Q1--Reference point--bottom of pump base, elevation 260 feet. 0.1 mile north and 0.3 mile east of the southwest corner of section. SE $\frac{1}{4}$ San Simeon Quad. 8/7/55, 29.9 P.

27S/9E-32Pl--Reference point--top of casing, elevation 170 feet. 1.3 miles northeast of State Highway 1 on Green Valley Road, 200 feet north of 90° turn in road. SE $\frac{1}{4}$ San Simeon Quad. 8/7/53, 13.9.

27S/9E-34Ll--Reference point--bottom of pump base, elevation 340 feet. 0.5 mile east and 0.3 mile north of southwest corner of section. SW $\frac{1}{4}$ Adelaida Quad. 8/7/53, 17.9 P.

28S/9E-5Al--Reference point--top of wood casing, elevation 200 feet. 2.4 miles northeast of State Highway 1 on Green Valley Road, 200 feet southeast of road. SE $\frac{1}{4}$ San Simeon Quad. 8/3/53, 15.8.

28S/9E-5Cl--Reference point--access pipe, elevation 150 feet. 0.2 mile south and 0.4 mile east of northwest corner of section, in Green Valley. SE $\frac{1}{4}$ San Simeon Quad. 8/3/53, 9.3.

TABLE E-2 (continued)

DEPTHS TO GROUND WATER AT MEASUREMENT WELLS
IN COASTAL HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

28S/9E-6El--Reference point--top of casing, elevation 100 feet. In Green Valley, 0.4 mile south and 250 feet east of the northwest corner of section. SE $\frac{1}{4}$ San Simeon Quad. 7/31/53, 8.3.

28S/9E-7Hl--Reference point--top of casing, elevation 140 feet. 0.9 mile southeast of Green Valley Road on State Highway 1, 0.1 mile northwest of State Highway 1 on farm road, 200 feet north of farm road. SE $\frac{1}{4}$ San Simeon Quad. 8/10/53, 9.8.

28S/9E-8Kl--Reference point--bottom of pump base, elevation 190 feet. From State Highway 1 northeasterly 0.3 mile along Harmony Valley Road, windmill 200 feet northwest of road. SE $\frac{1}{4}$ San Simeon Quad. 8/7/53, 13.0.

28S/9E-8Pl--Reference point--bottom of pump base, elevation 180 feet. 0.2 mile west of the intersection State Highway 1 and Harmony Valley Road, 300 feet southwest of State Highway 1. SE $\frac{1}{4}$ San Simeon Quad. 8/7/53, 19.4.

28S/9E-8Ql--Reference point--top of casing, elevation 200 feet. 0.3 mile along Harmony Valley Road from State Highway 1 on northwest side of road. SE $\frac{1}{4}$ San Simeon Quad. 8/7/53, 16.4 P.

28S/9E-9Ml--Reference point--top of casing, elevation 240 feet. 1.0 mile northeast of State Highway 1 on Harmony Valley Road, 0.2 mile north of Harmony Valley Road. SE $\frac{1}{4}$ San Simeon Quad. 8/10/53, 13.2.

28S/9E-9Pl--Reference point--hole in wooden cover, elevation 240 feet. 1.0 mile along Harmony Valley Road from State Highway 1, windmill 100 feet south of road. SE $\frac{1}{4}$ San Simeon Quad. 8/10/53, 14.2.

28S/9E-10Jl--Reference point--top of access pipe, elevation 250 feet. 0.1 mile west and 0.5 mile north of southeast corner of section. SW $\frac{1}{4}$ Adelaida Quad. 8/12/53, 9.8 P.

28S/9E-10Kl--Reference point--top of casing, elevation 230 feet. 0.5 mile west and 0.3 mile north of southeast corner of section. SW $\frac{1}{4}$ Adelaida Quad. 8/6/54, 8.0.

28S/9E-15Jl--Reference point--bottom of pump base, elevation 120 feet. 0.2 mile west and 0.3 mile north of southeast corner of section. NW $\frac{1}{4}$ Cayucos Quad. 8/12/53, 18.9.

28S/9E-17H2--Reference point--top of concrete, north edge, elevation 300 feet. 0.4 mile southeast along State Highway 1 from Harmony Valley Road, 30 feet west of highway. SE $\frac{1}{4}$ San Simeon Quad. 8/10/53, 6.2.

TABLE E-2 (continued.)

DEPTHS TO GROUND WATER AT MEASUREMENT WELLS
IN COASTAL HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

28S/9E-17K1--Reference point--top of casing, elevation 440 feet. 0.4 mile southeast of Harmony Valley Road on State Highway 1, 0.9 mile west then south on farm road. NW $\frac{1}{4}$ Cayucos Quad. 8/12/53, 60.8.

28S/9E-21H1--Reference point--top of wooden casing, east side, elevation 110 feet. 2.0 miles northwest of Villa Creek Road on State Highway 1, south side of highway. NW $\frac{1}{4}$ Cayucos Quad. 8/14/53, 10.9.

28S/9E-21J1--Reference point--top of casing, elevation 90 feet. 2.0 miles northwest of Villa Creek Road on State Highway 1, 100 feet south of State Highway 1. NW $\frac{1}{4}$ Cayucos Quad. 8/14/53, 20.5.

28S/9E-22E1--Reference point--top of wooden casing, elevation 140 feet. 2.0 miles northwest of Villa Creek Road on State Highway 1, 0.3 mile north of State Highway 1 on ranch road, 200 feet west of road. NW $\frac{1}{4}$ Cayucos Quad. 8/14/53, 16.3.

28S/9E-22M1--Reference point--bottom of pump base, elevation 70 feet. 1.2 miles northwest of Villa Creek Road on State Highway 1, 100 feet south of highway. NW $\frac{1}{4}$ Cayucos Quad. 8/10/53, 3.3.

28S/9E-22N2--Reference point--top of casing, elevation 70 feet. 1.1 miles northwest of Villa Creek Road on State Highway 1, 200 feet south of highway. NW $\frac{1}{4}$ Cayucos Quad. 8/10/53, 7.0.

28S/9E-23E2--Reference point--top of casing, elevation 70 feet. 1.2 miles north along Villa Creek Road from State Highway 1 and 0.1 mile northeast of Someo School. NW $\frac{1}{4}$ Cayucos Quad. 8/12/53, 17.8.

28S/9E-26N1--Reference point--top of wooden casing at east corner, elevation 50 feet. 0.1 mile east of Villa Creek Road on State Highway 1, 0.3 mile south of highway on dirt road, 100 feet east of road. NW $\frac{1}{4}$ Cayucos Quad. 8/14/53, 6.0.

28S/9E-26N2--Reference point--top of wooden casing at east corner, elevation 40 feet. 0.1 mile east of Villa Creek Road on State Highway 1, 0.3 mile south of highway on dirt road, 250 feet east of road. NW $\frac{1}{4}$ Cayucos Quad. 8/14/53, 8.4.

28S/9E-27D1--Reference point--top of casing, elevation 60 feet. 1.1 mile northwest of Villa Creek Road on State Highway 1, 150 feet south of highway. NW $\frac{1}{4}$ Cayucos Quad. 8/10/53, 9.9.

28S/9E-27D2--Reference point--top of wooden casing, elevation 80 feet. 1.0 mile northwest of Villa Creek Road on State Highway 1, 0.3 mile south of highway on dirt road. 100 feet south of road. NW $\frac{1}{4}$ Cayucos Quad. 8/14/53, 5.8.

TABLE E-2 (continued)

DEPTHS TO GROUND WATER AT MEASUREMENT WELLS
IN COASTAL HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

28S/9E-35A1--Reference point--top of casing, elevation 50 feet. 0.9 mile southeast along State Highway 1 from Villa Creek Road, 150 feet north of highway. NW $\frac{1}{4}$ Cayucos Quad. 8/14/53, 6.6.

28S/10E-22E1--Reference point--top of casing, elevation 350 feet. 0.4 mile south and 0.3 mile east of northwest corner of section. NW $\frac{1}{4}$ Cayucos Quad. 8/21/53, 34.2.

28S/10E-22Q1--Reference point--top of casing, elevation 270 feet. 0.6 mile east and 0.3 mile north of southwest corner of section. NW $\frac{1}{4}$ Cayucos Quad. 8/21/53, 10.6.

28S/10E-24C1--Reference point--top of casing, elevation 450 feet. 0.3 mile east and approximately 300 feet south of northwest corner of section. NE $\frac{1}{4}$ Cayucos Quad. 8/21/53, 27.3.

28S/10E-26H1--Reference point--top of casing, elevation 280 feet. 2.8 miles northeast along Old Creek Road from State Highway 1, 200 feet north of road. NE $\frac{1}{4}$ Cayucos Quad. 8/21/53, 8.2.

28S/10E-26N1--Reference point--top of casing, elevation 180 feet. 2.5 miles north of State Highway 1 on Old Creek Road and Cottontail Creek Road, 0.1 mile south of Cottontail Creek Road. NE $\frac{1}{4}$ Cayucos Quad. 8/24/53, 12.2.

28S/10E-32A1--Reference point--top of casing, elevation 24 feet. 0.1 mile west and 0.2 mile south of northeast corner of section. NW $\frac{1}{4}$ Cayucos Quad. 8/21/53, 24.7 P; 11/11/53, 12.2; 3/9/54, 9.3; 11/20/54, 11.0.

28S/10E-33K1--Reference point--top of casing, elevation 50 feet. 0.6 mile south and 0.5 mile west of northeast corner of section. NW $\frac{1}{4}$ Cayucos Quad. 8/21/53, 10.5.

28S/10E-33K2--Reference point--top of casing, elevation 50 feet. 0.6 mile south and 0.4 mile west of the northeast corner of section. NW $\frac{1}{4}$ Cayucos Quad. 8/21/53, 12.4.

28S/10E-33L1--Reference point--top of east side of concrete casing, elevation 10 feet. Southeast corner of D and Ash Streets in Cayucos. NW $\frac{1}{4}$ Cayucos Quad. 9/14/53, 16.2.

28S/10E-34H1--Reference point--top of casing, elevation 120 feet. 1.2 miles northeasterly along Old Creek Road from State Highway 1, 0.1 mile southeast of road. NE $\frac{1}{4}$ Cayucos Quad. 8/24/53, 13.9; 11/11/53, 16.0; 3/9/54, 54.0; 11/20/54, 27.0 P.

TABLE E-2 (continued)

DEPTHS TO GROUND WATER AT MEASUREMENT WELLS
IN COASTAL HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

28S/10E-34NL--Reference point--top of casing, elevation 33 feet. 0.3 mile northeast along Old Creek Road from State Highway 1, 40 feet east of road. NW $\frac{1}{4}$ Cayucos Quad. 8/24/53, 24.5; 11/11/53, 24.0; 9/3/54, 23.5; 11/20/54, 28.0.

28S/10E-34NP--Reference point--top of casing, elevation 47 feet. 0.1 mile east and 0.1 mile north of Old Creek Road and State Highway 1 junction. NW $\frac{1}{4}$ Cayucos Quad. 8/24/53, 16.9; 11/11/53, 16.1; 11/20/54, 17.7.

28S/10E-35EL--Reference point--top of casing, elevation 130 feet. 2.0 miles along Old Creek Road from State Highway 1, 200 feet west of Old Creek Road. NE $\frac{1}{4}$ Cayucos Quad. 8/24/53, 25.5; 3/9/54, 25.2; 11/20/54, 25.8.

28S/11E-31QL--Reference point--top of casing, elevation 300 feet. 0.3 mile east of Fairview School, 250 feet south of Toro Creek Road. NE $\frac{1}{4}$ Cayucos Quad. 8/27/53, 22.9; 10/21/53, 14.0; 3/9/54, 11.0; 11/22/54, 12.2.

29S/10E-1PL--Reference point--top of casing, elevation 130 feet. 1.4 miles northeast along Toro Creek from State Highway 1, 150 feet south of road. NE $\frac{1}{4}$ Cayucos Quad. 8/21/53, 8.2.

29S/10E-3CL--Reference point--top of casing, elevation 20 feet. 0.3 mile southeast along State Highway 1 from Toro Creek Road, 150 feet east of highway. NW $\frac{1}{4}$ Cayucos Quad. 9/2/53, 17.4.

29S/10E-3C2--Reference point--top of casing, elevation 20 feet. 0.4 mile southeast along State Highway 1 from Toro Creek Road, 150 feet east of highway. NW $\frac{1}{4}$ Cayucos Quad. 10/29/53, 10.9; 9/2/53, 15.5.

29S/10E-3GL--Reference point--top of casing, elevation 10 feet. 0.4 mile southeast along State Highway 1 from Old Creek Road, in west corner of cemetery. NW $\frac{1}{4}$ Cayucos Quad. 8/27/53, 17.3.

29S/10E-24RL--Reference point--top of casing, elevation 50 feet. 0.7 mile northeast along U.S. Highway 101 from State Highway 1. 0.1 mile south. NE $\frac{1}{4}$ Cayucos Quad. 9/4/53, 37.1 P.

29S/10E-25ML--Reference point--top of casing, elevation 50 feet. 0.1 mile south and 300 feet west of northeast corner of section. NE $\frac{1}{4}$ Cayucos Quad. 9/4/53, 25.9.

29S/10E-25B2--Reference point--top of casing, elevation 42.3 feet. 0.2 mile south and 0.2 mile west of northeast corner of section. NE $\frac{1}{4}$ Cayucos Quad. 8/17/53, 4.0; 9/4/53, 22.2; 3/10/54, 7.8; 11/20/54, 13.5.

TABLE E-2 (continued)

DEPTH TO GROUND WATER AT MEASUREMENT WELLS
IN COASTAL HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

29S/10E-25C1--Reference point--top of access pipe, elevation 30 feet. 500 feet south of U.S. Highway 466 and 900 feet east of State Highway 1. NE $\frac{1}{4}$ Cayucos Quad. 9/2/53, 15.1; 9/2/53, 18.1 P.

29S/10E-25C2--Reference point--top of access pipe, elevation 20.6 feet. 400 feet south of U.S. Highway 466 and 150 feet west of State Highway 1. NE $\frac{1}{4}$ Cayucos Quad. 9/2/53, 17.0 P; 11/12/53, 19.8 P; 3/10/54, 12.4.

29S/10E-25L1--Reference point--top of casing, elevation 20.0 feet. 40 feet west of State Highway 1 at Little Morro Creek Road junction. SE $\frac{1}{4}$ Cayucos Quad. 9/14/53, 3.1; 11/12/53, 7.5; 3/10/54, 5.3; 11/19/54, 5.6.

29S/11E-6J1--Reference point--top of wooden casing, elevation 250 feet. 2.6 miles northwest of State Highway 1 on Toro Creek Road, 0.8 mile east of road on farm road. NE $\frac{1}{4}$ Cayucos Quad. 8/27/53, 13.1.

29S/11E-6L1--Reference point--top of casing, elevation 220 feet. 2.6 miles northeast of State Highway 1 on Toro Creek Road, 250 feet south of road. NE $\frac{1}{4}$ Cayucos Quad. 8/27/53, 15.3.

29S/11E-9J1--Reference point--top of casing, elevation 278 feet. 4.6 miles northeast of State Highway 1 on U.S. Highway 466, 350 feet east of highway. NE $\frac{1}{4}$ Cayucos Quad. 9/4/53, 47.4 P; 11/11/53, 34.7; 3/10/54, 33.0; 11/22/54, 33.5.

29S/11E-9Q1--Reference point--air gauge, elevation 260 feet. 4.5 miles northeast of State Highway 1 on U.S. Highway 466, 0.1 mile southeast of highway. NE $\frac{1}{4}$ Cayucos Quad. 9/4/53, 31.0 P.

29S/11E-17A1--Reference point--hole in pump base, elevation 210 feet. 3.3 miles northeast of State Highway 1 on U.S. Highway 466, 300 feet south of highway. NE $\frac{1}{4}$ Cayucos Quad. 9/2/53, 20.6; 11/11/53, 18.9; 3/10/54, 18.1; 11/22/54, 19.2.

29S/11E-19G1--Reference point--top of casing, elevation 100 feet. 1.4 miles northeast of State Highway 1 on Highway 466, 300 feet southeast of highway. NE $\frac{1}{4}$ Cayucos Quad. 9/2/53, 13.3; 11/12/53, 9.3; 3/10/54, 9.6.

29S/11E-19G2--Reference point--top of casing, elevation 100 feet. 1.2 miles northeast of State Highway 1 on U.S. Highway 466, 250 feet southeast of highway. NE $\frac{1}{4}$ Cayucos Quad. 9/2/53, 52.6 P.

TABLE E-2 (continued)

DEPTH TO GROUND WATER AT MEASUREMENT WELLS
IN COASTAL HYDROLOGIC UNIT

(Depths to water in feet measured from reference point.)

29S/11E-19K1--Reference point--bottom of pump base, elevation 101.4 feet. 1.7 miles northeast of State Highway 1 on Little Morro Creek Road, 350 feet northwest on farm road. NE $\frac{1}{4}$ Cayucos Quad.

9/ 4/53, 22.0	8/ 1/54, 22.7	11/20/54, 25.4
4/ 1/54, 20.2	9/ 1/54, 25.3	1/ 3/55, 24.2
5/31/54, 18.4	9/30/54, 26.2	1/31/55, 23.3
6/30/54, 23.5	11/ 1/54, 26.8	3/ 8/55, 22.2

29S/11E-19K2--Reference point--bottom of pump base, elevation 101.1 feet. 1.7 miles northeast of State Highway 1 on Little Morro Creek Road, 300 feet northwest on farm road. NE $\frac{1}{4}$ Cayucos Quad. 9/4/53, 22.1; 4/1/54, 19.6; 6/30/54, 22.8; 11/20/54, 21.8; 1/3/55, 23.6.

29S/11E-19L1--Reference point--slot in casing, elevation 109.0 feet. 1.7 miles northeast on State Highway 1 on Little Morro Creek Road, 0.2 mile north on farm road. NE $\frac{1}{4}$ Cayucos Quad.

9/ 4/53, 35.0	8/ 1/54, 49.5	11/20/54, 36.0
4/ 1/54, 33.8	9/30/54, 35.2	1/ 3/55, 35.7
5/31/54, 32.5	11/ 1/54, 35.6	3/ 8/55, 34.9
6/ 3/54, 41.4		

29S/11E-19F1--Reference point--top of hole in southeast side of pump base, elevation 79.1 feet. 1.2 miles from State Highway 1 on Little Morro Creek Road, 0.1 mile northwest of road. NE $\frac{1}{4}$ Cayucos Quad.

6/26/53, 30.6	6/26/53, 35.5	3/10/54, 38.8
3/11/53, 34.5	6/29/53, 34.4	4/ 1/54, 35.4
3/23/53, 34.9	7/ 6/53, 44.7 P	5/ 3/54, 35.2
3/30/53, 34.6	7/13/53, 46.3 P	5/31/54, 33.9
4/ 6/53, 34.7	7/20/53, 40.1	6/30/54, 37.0
4/13/53, 34.9	7/28/53, 39.4	8/ 1/54, 49.2 P
4/20/53, 33.7	8/ 3/53, 49.1 P	9/ 1/54, 44.0
4/27/53, 32.8	8/10/53, 50.8 P	9/30/54, 46.2
5/ 4/53, 33.8	8/17/53, 40.8 P	11/ 1/54, 48.4
5/11/53, 35.1	8/24/53, 42.1	11/20/54, 46.3
6/ 1/53, 32.8	8/31/53, 41.7	1/ 3/55, 43.4
6/ 8/53, 32.7	9/ 5/53, 42.1	1/31/55, 43.2
6/15/53, 33.7	9/14/53, 37.9	3/ 8/55, 38.5
		11/18/55, 59.4

29S/11E-19Q1--Reference point--bottom of pump base, elevation 100 feet, 1.7 miles northeast of State Highway 1 on Little Morro Creek Road, 250 feet north on farm road. NE $\frac{1}{4}$ Cayucos Quad. 9/4/53, 21.8.

TABLE E-2 (continued)

DEPTHS TO GROUND WATER AT MEASUREMENT WELLS
IN COASTAL HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

29S/11E-30D1--Reference point--top of concrete pedestal, elevation 63.0 feet. 1.1 miles north of State Highway 1 on Little Morro Creek Road, 0.1 mile northwest of road. NE $\frac{1}{4}$ Cayucos Quad.

6/26/53, 17.6	6/15/53, 27.3 P	3/10/54, 26.3
3/11/53, 26.0 P	6/22/53, 24.7	4/ 1/54, 20.8
3/17/53, 22.0	6/29/53, 22.0	5/ 3/54, 20.2
3/23/53, 25.2 P	7/ 6/53, 28.6 P	5/31/54, 22.0
3/30/53, 20.5	7/13/53, 28.0 P	6/30/54, 23.6
4/ 6/53, 22.9	7/20/53, 25.2	8/ 1/54, 30.3
4/13/53, 21.2	7/28/53, 25.1	9/ 1/54, 30.2
4/20/53, 20.0	8/ 3/53, 26.9	9/30/54, 33.2
4/27/53, 18.8	8/10/53, 30.1 P	11/ 1/54, 37.8
5/ 4/53, 20.6	8/17/53, 28.9	11/20/54, 37.0
5/11/53, 22.9	8/24/53, 28.1	1/31/55, 27.3
5/18/53, 26.2	8/31/53, 28.6	3/ 8/55, 24.8
5/26/53, 20.1	9/ 8/53, 29.1	11/18/55, 35.8
6/ 1/53, 20.4	9/14/53, 28.0	11/28/56, 31.3
6/ 8/53, 22.0		

29S/11E-32J1--Reference point--top of 2-inch pipe, elevation 36.5 feet. 0.2 mile west of San Bernardo Creek Road on State Highway 1, 0.2 mile south of highway on dirt road. SE $\frac{1}{4}$ Cayucos Quad.

3/ 6/53, 11.5	8/ 3/53, 18.9 P	9/ 1/54, 13.1
4/ 6/53, 11.7	8/17/53, 18.2 P	10/31/54, 18.8 P
5/ 4/53, 11.6	9/14/53, 18.7	11/18/54, 12.1
6/ 1/53, 12.0	3/20/54, 17.5	1/ 3/55, 12.1
6/29/53, 12.8	5/31/54, 17.0 P	1/31/55, 11.8
7/13/53, 18.3 P	6/30/54, 18.0 P	3/ 8/55, 18.0 P

29S/11E-32J2--Reference point--top of casing, elevation 34.6 feet. 0.2 mile west of San Bernardo Creek Road on State Highway 1, 0.1 mile south of highway. 200 feet west of Well J3. SE $\frac{1}{4}$ Cayucos Quad. 9/14/53, 16.6 P; 11/18/52, 8.2; 3/11/54, 7.5; 4/19/54, 8.3.

29S/11E-32J3--Reference point--top of casing, elevation 39 feet. 0.1 mile west of San Bernardo Creek Road on State Highway 1, 0.1 mile south of highway. SE $\frac{1}{4}$ Cayucos Quad. 9/14/53, 13.2; 11/18/53, 11.0; 3/11/54, 10.5; 11/19/54, 9.1.

29S/11E-32K1--Reference point--top of casing, elevation 35 feet. 0.2 mile west of San Bernardo Creek Road on State Highway 1, 0.2 mile south of highway, 100 feet west of dirt road. SE $\frac{1}{4}$ Cayucos Quad. 9/4/53, 8.9; 11/18/53, 7.4.

TABLE E-2 (continued)

DEPTH TO GROUND WATER AT MEASUREMENT WELLS
IN COASTAL HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

29S/11E-32M1--Reference point--top of casing, elevation 15 feet. 1.0 mile west of San Bernardo Creek Road on State Highway 1, 0.2 mile south on Baywood Park Road, 350 feet east of road. SE $\frac{1}{4}$ Cayucos Quad. 11/18/53, 30.5 P; 3/10/54, 7.1.

29S/11E-32M2--Reference point--top of casing, elevation 16.4 feet. 1.0 mile west of San Bernardo Creek Road on State Highway 1, 0.2 mile south on Baywood Park Road, 400 feet east of road. SE $\frac{1}{4}$ Cayucos Quad. 9/18/53, 18.6; 3/10/54, 6.9; 11/17/54, 8.0.

29S/11E-33C1--Reference point--top of wood planks under pump, elevation 70.8 feet. 0.2 mile north of State Highway 1 and 0.1 mile east of San Bernardo Creek Road. SE $\frac{1}{4}$ Cayucos Quad. 11/18/53, 13.4; 3/11/54, 13.3; 11/19/54, 14.0.

29S/11E-33E1--Reference point--top of masonry casing, elevation 45.9 feet. 100 feet south of intersection of State Highway 1 and San Bernardo Creek Road. SE $\frac{1}{4}$ Cayucos Quad. 9/14/53, 23.6; 11/18/53, 19.3; 3/11/54, 18.5; 11/19/54, 20.8.

29S/11E-33P1--Reference point--top of casing, elevation 51.6 feet. 0.5 mile east of San Bernardo Creek Road on State Highway 1, 0.2 mile south of highway on dirt road. SE $\frac{1}{4}$ Cayucos Quad. 9/18/53, 19.8; 11/12/53, 13.5; 11/18/53, 13.8; 3/11/54, 12.5; 12/19/54, 14.6.

29S/11E-34N1--Reference point--top of casing, elevation 84.3 feet. 0.1 mile south of State Highway 1 at Banning School, 0.1 mile west of dirt road. SE $\frac{1}{4}$ Cayucos Quad. 11/18/53, 21.7; 3/11/54, 21.5; 11/19/54, 20.5 P.

30S/10E-13G1--Reference point--top of casing, elevation 20 feet. 0.6 mile north and 0.5 mile west of southeast corner of section. SE $\frac{1}{4}$ Cayucos Quad. 10/2/54, 12.3; 11/19/54, 11.0.

30S/11E-4B1--Reference point--top of casing 1 foot below ground surface (north side), elevation 50 feet. 0.3 mile south and 0.7 mile west of the Banning School. SE $\frac{1}{4}$ Cayucos Quad. 9/14/53, 2.3; 11/18/53, 2.8; 11/19/54, 18.5.

30S/11E-4B2--Reference point--top of casing, elevation 57.4 feet. 0.3 mile south and 0.7 mile west of Banning School. SE $\frac{1}{4}$ Cayucos Quad.

11/18/53, 2.4	8/1/54, 5.0	11/19/54, 2.8
3/11/54, 2.7	9/1/54, 3.5	1/3/55, 3.7
5/31/54, 3.9	9/30/54, 3.7	3/8/55, 3.0
6/30/54, 3.5	11/1/54, 3.2	

TABLE E-2 (continued)

DEPTHS TO GROUND WATER AT MEASUREMENT WELLS
IN COASTAL HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

30S/11E-7K1--Reference point--top of casing, elevation 50 feet. Approximately 4 miles south of town of Morro Bay at southwest corner of Santa Isabel and 9th Street. SE $\frac{1}{4}$ Cayucos Quad. 10/2/54, 24.0; 11/19/54, 43.0; 11/18/55, 43.5; 11/27/56, 42.6.

30S/11E-7N2--Reference point--top of casing, elevation 15.9 feet. Approximately 250 feet south of intersection of 3rd Street and Elmorro Street on west side of 3rd Street. SE $\frac{1}{4}$ Cayucos Quad. 11/19/54, 4.2.

30S/11E-7Q2--Reference point--top of casing, elevation 25 feet. At the southeast corner of intersection of 8th and El Morro Streets. SE $\frac{1}{4}$ Cayucos Quad. 10/2/54, 24.7; 11/19/54, 21.2.

30S/11E-16NL--Reference point--top of casing, elevation 62.3 feet. 1 mile east along Los Osos Road, thence north 0.4 mile along dirt road, 0.1 mile east of road, 0.1 mile east and 300 feet north of southwest corner of section. SE $\frac{1}{4}$ Cayucos Quad. 11/17/53, 8.9; 3/11/54, 8.3; 11/20/54, 11.0.

30S/11E-17A1--Reference point--notch in top of casing on east side of pump, elevation 25 feet. 0.4 mile east along Los Osos Road from Sunnyside School, thence north 1.1 miles along dirt road, 0.2 mile west and 0.2 mile south of northeast corner of section. SE $\frac{1}{4}$ Cayucos Quad. 11/17/53, 8.7; 3/11/54, 7.8; 11/19/54, 8.8.

30S/11E-17B1--Reference point--top of casing, elevation 21.7 feet. 0.4 mile east along Los Osos Road from Sunnyside School, thence north 1.1 miles along dirt road, 0.3 mile west and 0.2 mile south of northeast corner of section. SE $\frac{1}{4}$ Cayucos Quad. 11/17/53, 6.3; 3/11/54, 5.0; 11/19/54, 5.5.

30S/11E-17H1--Reference point--furrow in concrete base at northeast corner of pump, elevation 25.1 feet. 0.4 mile east along Los Osos Road from Sunnyside School, thence north 0.9 mile along dirt road, 250 feet east of road. SE $\frac{1}{4}$ Cayucos Quad. 11/17/53, 11.8; 3/11/54, 10.8; 11/19/54, 29.0.

30S/11E-17P1--Reference point--top of casing, elevation 170 feet. 300 feet north of road at Sunnyside School. SE $\frac{1}{4}$ Cayucos Quad. 11/18/53, 22.4; 3/11/54, 22.3.

30S/11E-17R1--Reference point--top of casing, elevation 73.1 feet. Easterly 0.4 mile along Los Osos Road, thence 0.4 mile northerly along dirt road, 100 feet east of road. SE $\frac{1}{4}$ Cayucos Quad. 11/17/53, 20.9; 3/11/54, 15.7.

30S/11E-18G1--Reference point--slot in flange, elevation 75 feet. 0.5 mile west and 0.4 mile south of northeast corner of section. SE $\frac{1}{4}$ Cayucos Quad. 10/2/54, 26.8; 11/19/54, 18.5.

TABLE E-2 (continued.)

**DEPTHS TO GROUND WATER AT MEASUREMENT WELLS
IN COASTAL HYDROLOGIC UNIT**

(Depths to water in feet measured from reference point)

30S/11E-18P1--Reference point--top of casing, elevation 125 feet. 0.2 mile north and 0.4 mile east of southwest corner of section, 180 feet north of road. SE $\frac{1}{4}$ Cayucos Quad. 10/2/54, 77.7; 11/19/54, 71.5.

30S/11E-18Q1--Reference point--top of casing, elevation 130 feet. 0.7 mile westerly along Los Osos Road from Sunnyside School, east of Los Osos Valley Electric Company. SE $\frac{1}{4}$ Cayucos Quad. 11/18/53, 78.0; 3/11/54, 75.5; 11/19/54, 83.1.

30S/11E-20D1--Reference point--bottom of pump base, elevation 190 feet. 0.2 mile westerly along Los Osos Road from Sunnyside School, 100 feet south of road. SE $\frac{1}{4}$ Cayucos Quad. 9/24/54, 31.; 11/19/54, 30.

30S/11E-20G1--Reference point--horizontal cut in casing (on west side), elevation 101.4 feet. 0.3 mile west and 0.4 mile south of northeast corner of section. SE $\frac{1}{4}$ Cayucos Quad. 11/17/53, 39.4; 3/11/54, 39.3; 11/2/54, 46.5.

30S/11E-20H1--Reference point--top of casing, elevation 95 feet. 0.5 mile south and 0.2 mile west of northeast corner of section. 0.2 mile south of road. SE $\frac{1}{4}$ Cayucos Quad. 11/17/53, 22.5; 3/11/54, 16.3; 11/20/54, 24.5.

30S/11E-20J1--Reference point--top of casing, elevation 97.2 feet. 0.6 mile easterly along Los Osos Road from Sunnyside School, then 0.5 mile south. SE $\frac{1}{4}$ Cayucos Quad. 11/17/53, 28.9; 3/11/54, 19.7; 11/20/54, 31.5.

30S/11E-20J2--Reference point--hole inside pump frame at bottom of pump, elevation 100.6 feet. 0.2 mile west and 0.4 mile north of southeast corner of section, 250 feet west of Well J2. SE $\frac{1}{4}$ Cayucos Quad. 11/17/53, 32.5; 3/11/54, 22.5; 11/20/54, 38.0.

30S/11E-20K2--Reference point--hole in west side of casing, elevation 103.5 feet. 0.3 mile west and 0.4 mile north of southeast corner of section. SE $\frac{1}{4}$ Cayucos Quad.

11/17/53, 35.3	6/30/54, 37.9	11/1/54, 50.5
3/11/54, 25.2	8/1/54, 44.0	11/19/54, 39.0
5/3/54, 27.2	9/1/54, 42.5	3/8/54, 28.9
5/31/54, 31.9	10/1/54, 46.0	

30S/11E-20L1--Reference point--top of casing, elevation 180 feet. 0.3 mile north and 0.4 mile east of southwest corner of section. SE $\frac{1}{4}$ Cayucos Quad. 11/17/53, 62.4; 3/11/54, 54.0; 11/2/54, 72.5.

30S/11E-21D1--Reference point--hole inside of casing, elevation 78.7 feet. 0.1 mile south and approximately 200 feet east of northwest corner of section, 0.1 mile north of Los Osos Road. SE $\frac{1}{4}$ Cayucos Quad. 3/30/53, 45.2 P; 11/17/53, 26.6; 3/11/54, 26.3; 11/20/54, 28.2.

TABLE E-2 (continued)

DEPTHS TO GROUND WATER AT MEASUREMENT WELLS
IN COASTAL HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

30S/11E-21E1--Reference point--hole in pump base, elevation 75.4 feet. 0.9 mile east of Suhnside School on Los Osos Road, 20 feet south of road.
SE $\frac{1}{4}$ Cayucos Quad.

3/31/53, 75.8 P	8/17/53, 65.4 P	9/30/54, 34.5
4/27/53, 81.0 P	8/31/53, 36.9	10/ 3/54, 59.0 P
5/25/53, 85.1 P	9/ 8/53, 36.8	11/20/54, 22.0
6/22/53, 81.6 P	11/17/53, 19.5	1/ 3/55, 20.3
7/20/53, 40.1	3/11/54, 17.3	1/31/55, 19.2
7/28/53, 71.4 P	6/30/54, 31.6	3/ 8/55, 18.0
8/ 3/53, 70.4 P	8/ 1/54, 28.6	11/18/55, 32.6
8/10/53, 63.9 P	9/ 1/54, 35.3	11/27/56, 33.1

30S/11E-21J1--Reference point--access pipe in concrete pump base, elevation 47.2 feet. 0.5 mile north and 0.1 mile west of southeast corner of section, 25 feet south of Los Osos Road. SE $\frac{1}{4}$ Cayucos Quad. 3/31/53, 1.8; 11/17/53, 1.4; 3/11/54, 3.6.

30S/11E-22L1--Reference point--1-inch hole in east side of pump base, elevation 41.0 feet. 0.5 mile north and 0.5 mile west of southeast corner of section, 0.2 mile north of Los Osos Road. SE $\frac{1}{4}$ Cayucos Quad. 11/17/53, 8.9; 3/11/54, 9.2; 5/31/54, 9.0; 8/1/54, 10.5; 11/20/54, 9.4.

30S/12E-29M1--Reference point--top of crib, elevation 150 feet. 0.4 mile north and 0.2 mile east of southwest corner of section. 0.3 mile southwesterly of Stowe School. SW $\frac{1}{4}$ San Luis Obispo Quad. 11/13/53, 10.0; 3/11/54, 5.1; 11/23/54, 9.0.

30S/12E-29M2--Reference point--top of casing, elevation 150 feet. 0.3 mile north and 0.2 mile east of southwest corner of section, 0.4 mile southwesterly of Stowe School. SW $\frac{1}{4}$ San Luis Obispo Quad. 11/13/53, 9.4; 3/11/54, 5.5; 11/23/54, 10.2.

30S/12E-30N1--Reference point--top of wooden crib, elevation 170 feet. 0.2 mile north and 0.2 mile east of southwest corner of section, 350 feet south of Los Osos Road. SW $\frac{1}{4}$ San Luis Obispo Quad. 11/16/53, 12.8; 3/11/54, 5.9; 11/23/54, 11.5.

30S/12E-32J1--Reference point--water return hole, elevation 130 feet. 0.2 mile west and 0.4 mile north of southeast corner of section, 25 feet northeast of Los Osos Road. SW $\frac{1}{4}$ San Luis Obispo Quad. 3/31/53, 7.1; 11/18/53, 14.0; 3/11/54, 9.9; 11/23/54, 13.5.

31S/12E-1NL--Reference point--hole in pumphouse floor, elevation 190 feet. 0.2 mile north and 0.2 mile east of southwest corner of section, 25 feet northeast of Edna Road. SW $\frac{1}{4}$ San Luis Obispo Quad. 5/23/53, 8.9; 11/18/53, 2.7; 3/12/54, 1.6; 11/20/54, 3.1.

TABLE E-2 (continued)

DEPTHES TO GROUND WATER AT MEASUREMENT WELLS
IN COASTAL HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

31S/12E-1N2--Reference point--edge of pit, elevation 190 feet. 0.3 mile north and 0.3 mile east of southwest corner of section, 35 feet northeast of Edna Road. SW $\frac{1}{4}$ San Luis Obispo Quad. 5/23/53, 2.8.

31S/12E-2K1--Reference point--top of box, north side, elevation 170 feet. 0.4 mile north and 0.4 mile west of southeast corner of section. SW $\frac{1}{4}$ San Luis Obispo Quad. 5/23/53, 18.0.

31S/12E-2Q1--Reference point--top of covering over pit, elevation 160 feet. 0.3 mile west and 0.2 mile north of southeast corner of section. SW $\frac{1}{4}$ San Luis Obispo Quad. 11/18/53, 6.0; 3/12/54, 4.2; 11/20/54, 8.8.

31S/12E-3A1--Reference point--hole inside pump base, elevation 160 feet. 0.3 mile west and 0.1 mile south of northeast corner of section, on west side of highway. SW $\frac{1}{4}$ San Luis Obispo Quad. 4/1/54, 16.0.

31S/12E-3N1--Reference point--top of casing, elevation 125 feet. 0.2 mile north and 0.1 mile east of southwest corner of section, 0.5 mile south-easterly of Laguna School. SW $\frac{1}{4}$ San Luis Obispo Quad. 11/16/53, 7.1; 3/12/54, 6.1; 11/20/54, 7.1.

31S/12E-3N2--Reference point--hole next to air line, elevation 125 feet. 0.2 mile east and 0.2 mile north of southwest corner of section, 0.3 mile west of U.S. Highway 101. SW $\frac{1}{4}$ San Luis Obispo Quad. 11/16/53, 7.2; 3/12/54, 4.7; 11/23/54, 7.0.

31S/12E-3P2--Reference point--hole in west side of casing, elevation 125 feet. 0.1 mile north and 0.3 mile east of southwest corner of section, 100 feet west of highway patrol station on U.S. Highway 101. SW $\frac{1}{4}$ San Luis Obispo Quad.

3/27/53, 4.3	11/16/53, 7.0	9/30/54, 7.1
4/27/53, 4.9	2/ 5/54, 6.2	10/31/54, 7.2
5/25/53, 7.8	3/12/54, 4.8	11/20/54, 7.0
6/22/53, 6.7	6/ 1/54, 6.0	1/ 3/55, 6.1
7/28/53, 7.3	6/30/54, 5.6	1/31/55, 4.9
8/24/53, 6.9	7/31/54, 6.6	3/ 8/55, 4.9
8/31/53, 8.7	9/ 1/54, 6.6	

31S/12E-4K1--Reference point--top of casing, elevation 130 feet. 1 mile southwest of San Luis Obispo in field by Laguna School. SW $\frac{1}{4}$ San Luis Obispo Quad.

6/ 2/36, 14.3	11/13/53, 18.1	11/18/55, 20.7
6/26/45, 20.8	3/12/54, 12.3	11/27/56, 18.5

TABLE E-2 (continued)

DEPTHS TO GROUND WATER AT MEASUREMENT WELLS
IN COASTAL HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

31S/12E-10G2--Reference point--hole in concrete base, elevation 125 feet. 1.3 miles northeast along old U.S. Highway 101 from junction of highway with U.S. Highway 101, 0.2 mile east on dirt road, 200 feet north of road. NW $\frac{1}{4}$ Arroyo Grande Quad.

6/22/53, 13.4	3/11/54, 12.6	11/19/55, 23.1
11/18/53, 15.4	4/ 6/54, 10.7	11/27/56, 17.9

31S/12E-11H1--Reference point--base of metal platform 5.8 feet below ground surface, elevation 144 feet. 0.5 mile north and 100 feet west of southeast corner of section. NW $\frac{1}{4}$ Arroyo Grande Quad. 5/28/53, 4.2; 3/11/54, 2.0; 11/20/54, 8.6.

31S/12E-12J1--Reference point--top of casing, elevation 200 feet. 0.1 mile west and 0.5 mile north of southeast corner of section, 0.3 mile northeast of Edna Road. NW $\frac{1}{4}$ Arroyo Grande Quad. 6/15/53, 21.7; 11/18/53, 12.3; 3/11/54, 13.0; 11/20/54, 15.5.

31S/12E-12J2--Reference point--top of casing, elevation 200 feet. 0.1 mile west and 0.4 mile north of southeast corner of section, 0.2 mile northeast of Edna Road. NW $\frac{1}{4}$ Arroyo Grande Quad. 6/15/53, 24.3.

31S/12E-13C1--Reference point--edge of wooden pit lining, elevation 150 feet. 0.3 mile east and 0.2 mile south of northwest corner of section, 0.1 mile southeast of East Santa Fe School. NW $\frac{1}{4}$ Arroyo Grande Quad. 5/28/53, 5.3.

31S/12E-14A1--Reference point--base of pump flange, elevation 150 feet. East Santa Fe School ground west of schoolhouse. NW $\frac{1}{4}$ Arroyo Grande Quad. 5/28/53, 33.9; 11/18/53, 37.7 P.

31S/12E-14C1--Reference point--top of pipe in base, elevation 135 feet. 0.7 mile west of intersection at East Santa Fe School along road and 11 feet south of road. NW $\frac{1}{4}$ Arroyo Grande Quad.

3/28/53, 12.6	3/11/54, 13.5	11/19/55, 16.6
11/11/53, 15.3	11/20/54, 15.5	11/27/56, 15.5

31S/12E-15E1--Reference point--edge board side of sump, elevation 85 feet. 0.5 mile north and 0.1 mile east of southwest corner of section. NW $\frac{1}{4}$ Arroyo Grande Quad. 5/12/54, 2.0; 11/20/54, 1.7.

31S/12E-15H1--Reference point--top of well covering, elevation 95 feet. 0.1 mile west and 0.2 mile south of northeast corner of section, 200 feet north of side road. NW $\frac{1}{4}$ Arroyo Grande Quad. 6/22/53, 11.5; 11/18/53, 12.6; 3/11/54, 11.8; 11/20/54, 12.6.

TABLE E-2 (continued)

DEPTHES TO GROUND WATER AT MEASUREMENT WELLS
IN COASTAL HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

31S/12E-28C1--Reference point--top of casing, elevation 45 feet. 0.5 mile west and 0.2 mile south of northeast corner of section, 200 feet west of road. NW $\frac{1}{4}$ Arroyo Grande Quad. 5/6/54, 7.0; 11/20/54, 8.7.

31S/12E-28N1--Reference point--top of casing, elevation 40 feet. 0.5 mile north of Santa Fe School on U.S. Highway 101, 15 feet west of highway, approximately 3 miles north of Shell Beach. NW $\frac{1}{4}$ Arroyo Grande Quad.

3/27/53, 7.3	11/19/53, 8.5	10/31/54, 8.3
4/27/53, 7.1	3/11/54, 7.7	11/24/54, 8.1
5/25/53, 7.6	6/ 1/54, 36.0 P	1/ 3/55, 7.9
6/22/53, 8.0	6/30/54, 10.8	1/31/55, 6.8
7/28/53, 22.9 P	7/31/54, 7.8	3/ 8/55, 6.6
8/24/53, 8.2	9/ 1/54, 8.3	11/19/55, 8.6
8/31/53, 7.9	9/30/54, 8.0	11/27/56, 8.9

31S/12E-28P2--Reference point--top of casing, elevation 40 feet. Approximately 0.5 mile north of Santa Fe School, 0.3 mile east of U.S. Highway 101. NW $\frac{1}{4}$ Arroyo Grande Quad. 11/20/54, 6.7.

31S/12E-33E1--Reference point--floor of pump house, elevation 32 feet. 0.1 mile east and 0.3 mile south of northwest corner of section. NW $\frac{1}{4}$ Arroyo Grande Quad. 3/27/53, 6.4; 11/19/53, 7.2; 3/11/54, 4.9; 11/20/54, 8.5.

31S/13E-6K1--Reference point--hole in floor of pump house, elevation 300 feet. 0.5 mile west and 0.4 mile north of southeast corner of section. SE $\frac{1}{4}$ San Luis Obispo Quad. 5/21/53, 6.9; 11/19/53, 9.8; 3/11/54, 6.0; 11/19/54, 10.6.

31S/13E-6K2--Reference point--top of wooden planking over pit, elevation 330 feet. 0.4 mile west and 0.4 mile north of southeast corner of section. SE $\frac{1}{4}$ San Luis Obispo Quad. 5/21/53, 3.0.

31S/13E-6L1--Reference point--top of wooden cover over brick-lined pit, elevation 350 feet. 0.6 mile west and 0.4 mile north of southeast corner of section. SE $\frac{1}{4}$ San Luis Obispo Quad. 4/24/53, 8.7; 5/21/53, 15.4.

31S/13E-7M1--Reference point--slit in planking, elevation 230 feet. 0.1 mile east and 0.3 mile north of southwest corner of section, 0.4 mile northeast of Edna Road. NW $\frac{1}{4}$ Arroyo Grande Quad. 5/28/53, 4.7; 11/19/53, 5.2; 11/19/54, 6.6.

31S/13E-8F1--Reference point--top of casing, elevation 290 feet. 0.4 mile east and 0.6 mile north of southwest corner of section, 0.2 mile northeast of Orcutt Road. NE $\frac{1}{4}$ Arroyo Grande Quad. 5/21/53, 9.7; 11/19/53, 11.2; 3/11/54, 8.5; 11/19/54, 11.7.

TABLE E-2 (continued)

DEPTH TO GROUND WATER AT MEASUREMENT WELLS
IN COASTAL HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

31S/13E-9M1--Reference point--top of wooden pit cover, elevation 395 feet. 0.2 mile north and 0.3 mile east of southwest corner of section, on west side of road. NE $\frac{1}{4}$ Arroyo Grande Quad. 5/21/53, 7.0; 11/19/53, 6.6; 3/10/54, 6.6; 11/19/54, 9.8.

31S/13E-16E1--Reference point--top of 2-inch pipe, elevation 340 feet. 0.5 mile south and 0.2 mile east of northwest corner of section, 0.4 mile east of Independence School. NE $\frac{1}{4}$ Arroyo Grande Quad. 5/27/53, 21.5.

31S/13E-16E2--Reference point--slit in floor of pump house, elevation 340 feet. 0.5 mile north and 0.2 mile east of southwest corner of section, 0.4 mile east of Independence School. NE $\frac{1}{4}$ Arroyo Grande Quad. 5/27/53, 25.2.

31S/13E-16N1--Reference point--top of casing, elevation 325 feet. 0.4 mile south of Independence School on Orcutt Road, 0.2 mile northeast of road. NE $\frac{1}{4}$ Arroyo Grande Quad.

3/28/53, 13.3	11/19/53, 43.5	10/30/54, 44.2
4/23/53, 16.7	3/10/54, 21.4 P	11/19/54, 45.8
5/22/53, 20.6	6/ 1/54, 17.0	1/ 3/55, 45.2
6/22/53, 23.0	7/ 1/54, 21.8	1/31/54, 28.3
7/25/53, 30.8	7/31/54, 29.2	3/ 8/55, 17.5
8/24/53, 35.3	9/ 1/54, 37.0 P	11/19/55, 53.4
8/31/53, 36.1	9/30/54, 41.5	11/27/56, 52.9

31S/13E-17Q1--Reference point--slit in platform beneath pump base, elevation 300 feet. 0.3 mile south of Independence School, 0.2 mile west and 0.2 mile north of southeast corner of section. NE $\frac{1}{4}$ Arroyo Grande Quad. 5/27/53, 18.1; 11/19/53, 21.5; 11/19/54, 21.5.

31S/13E-18D1--Reference point--edge of slit in board cover, elevation 205 feet. 0.2 mile south and 0.1 mile east of northwest corner of section, 0.3 mile southeast of East Santa Fe School. NW $\frac{1}{4}$ Arroyo Grande Quad. 5/28/53, 6.9; 11/24/53, 3.4; 3/11/54, 4.3; 11/19/54, 12.8.

31S/13E-19A1--Reference point--top of casing, elevation 260 feet. 3.6 miles southeast from Orcutt Road junction along Edna Road, 0.2 mile south and 0.2 mile west of northeast corner of section. NE $\frac{1}{4}$ Arroyo Grande Quad. 5/27/53, 14.2.

TABLE E-2 (continued)

DEPTHS TO GROUND WATER AT MEASUREMENT WELLS
IN COASTAL HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

31S/13E-19H1--Reference point--hole in pump base, elevation 263 feet. 0.9 mile northwest of Edna on Edna Road, 0.2 mile northeast of road. NE 1/4 Arroyo Grande Quad.

3/28/53, 16.0	8/24/53, 21.6	7/31/54, 31.0 P
4/28/53, 15.8	8/31/53, 17.3	9/ 1/54, 19.1
5/25/53, 14.7	9/ 8/53, 18.1	9/30/54, 19.2
6/22/53, 34.9 P	11/23/53, 19.7 P	11/ 1/54, 18.0
6/21/53, 19.8	2/ 5/54, 16.8	1/ 3/55, 18.5
7/28/53, 32.4 P	3/10/54, 16.5	1/31/55, 17.6
8/ 3/53, 29.6 P	4/ 6/54, 15.9	3/ 8/55, 16.5
8/10/53, 33.9 P	6/ 1/54, 15.2	11/19/55, 23.5
8/17/53, 18.8	7/ 1/54, 16.2	11/27/56, 19.0

31S/13E-19H2--Reference point--top of casing, elevation 260 feet. 3.8 miles southeast from Orcutt Road junction along Edna Road, thence across railroad tracks about 0.2 mile, 0.3 mile south of northeast corner of section. NE 1/4 Arroyo Grande Quad. 5/27/53, 28.0; 11/23/53, 14.3; 3/10/54, 14.0.

31S/13E-19M1--Reference point--top of casing, elevation 210 feet. 3.0 miles southeast from Orcutt Road junction along Edna Road, thence about 0.7 mile southwest along dirt road, 0.5 mile south of northwest corner of section. NW 1/4 Arroyo Grande Quad. 5/27/53, 6.2; 11/24/53, 6.5; 11/19/54, 7.8.

31S/13E-20B1--Reference point--hole in side of casing, elevation 312 feet. 0.3 mile west and 0.1 mile south of northeast corner of section, 30 feet south of road. NE 1/4 Arroyo Grande Quad. 3/28/53, 21.3; 11/23/53, 29.9; 3/10/54, 29.1; 11/19/54, 31.8.

31S/13E-20N1--Reference point--hole in pump base, elevation 255 feet. 0.3 mile north and 0.2 mile east of southwest corner of section, 0.2 mile northeast of Edna Road. NE 1/4 Arroyo Grande Quad. 6/24/57, 3.0; 6/19/46, 20.5; 11/13/53, 15.0; 3/9/54, 13.1; 11/19/54, 15.8.

31S/13E-27D1--Reference point--top of casing, elevation 330 feet. 0.1 mile south and 250 feet east of northwest corner of section, northeast side of Orcutt Road. NE 1/4 Arroyo Grande Quad. 11/13/53, 42.9; 3/10/54, 34.6.

31S/13E-27D2--Reference point--top of cribbing, elevation 300 feet. 0.3 mile south and 0.2 mile east of northwest corner of section. NE 1/4 Arroyo Grande Quad. 11/13/53, 24.7; 3/10/54, 15.6; 11/19/54, 22.9.

31S/13E-28J1--Reference point--under pump base, elevation 270 feet. 0.3 mile north and 250 feet west of southeast corner of section. NE 1/4 Arroyo Grande Quad. 11/13/53, 38.1; 3/10/54, 14.3.

TABLE E-2 (continued)

DEPTH TO GROUND WATER AT MEASUREMENT WELLS
IN COASTAL HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

31S/13E-29F1--Reference point--top of casing, elevation 227 feet. 0.4 mile south and 0.4 mile east of northwest corner of section, 15 feet west of highway. NE 1/4 Arroyo Grande Quad.

3/28/53, flowing	5/ 6/54, flowing	9/28/54, 0.0
11/23/53, flowing	8/28/54, flowing	11/19/54, flowing
3/10/54, flowing		

31S/14E-27E1--Reference point--top of casing, elevation 468 feet. 1.2 miles east of Santa Manuela School along north valley road, then 0.5 mile northeast along farm road. NW 1/4 Nipomo Quad. 9/11/52, 8.4; 3/24/53, 6.3; 11/23/53, 14.2; 3/10/54, 8.0; 11/19/54, 17.0.

31S/14E-28R1--Reference point--top of casing, elevation 440 feet. At north end of north valley road in county park. NW 1/4 Nipomo Quad. 9/11/52, 11.2; 3/24/52, 10.9; 11/23/53, 11.0; 3/10/53, 11.0.

31S/14E-31KL--Reference point--top of casing, elevation 342 feet. 1.1 miles northeast of Orcutt Road on north valley road, 450 feet south of road. NE 1/4 Arroyo Grande Quad. 11/9/50, 16.8; 3/24/53, 8.1; 11/23/53, 10.0; 3/10/54, 8.0; 11/19/54, 17.5.

31S/14E-31LL--Reference point--top of wood lining, elevation 336.3 feet. 1.1 miles northeast of Orcutt Road on north valley road, on south side of road. NE 1/4 Arroyo Grande Quad.

11/ 9/50, 16.9	7/27/53, 11.9	7/ 1/53, 11.8
4/ 3/51, 11.8	8/ 3/53, 11.9	7/ 3/54, 12.4
11/19/51, 16.3	8/10/53, 12.3	9/ 1/54, 12.5
4/ 6/52, 10.6	8/17/53, 12.2	9/30/54, 13.0
9/10/52, 12.3	8/24/53, 12.2	10/30/54, 13.7
3/24/53, 12.0	8/31/53, 12.2	1/ 3/55, 14.9
4/28/53, 12.2	9/ 8/53, 12.2	8/ 8/55, 12.0
5/25/53, 11.8	11/23/53, 13.0	11/27/56, 13.9
6/22/53, 12.0		

31S/14E-31N1--Reference point--air line gage, elevation 340 feet. 1.2 miles northeast of Orcutt Road on north valley road, 25 feet south of road. NE 1/4 Arroyo Grande Quad. 9/10/52, 38.0.

31S/14E-32G1--Reference point--top of casing, elevation 420 feet. 20 feet south of road, 0.4 mile west and 0.3 mile south of northeast corner of section. NW 1/4 Nipomo Quad.

11/ 9/50, 45.4	9/10/52, 22.8	3/10/54, 17.3
4/ 3/51, 19.3	3/24/53, 16.9	11/19/54, 31.0
11/19/51, 52.3	11/23/53, 35.0	3/ 8/55, 17.8
4/ 6/52, 16.0		

TABLE E-2 (continued)

DEPTH TO GROUND WATER AT MEASUREMENT WELLS
IN COASTAL HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

31S/14E-32G2--Reference point--top of casing, elevation 365.5 feet. 0.2 mile east of Arroyo Grande Creek bridge on north valley road, 300 feet south of road. NW $\frac{1}{4}$ Nipomo Quad.

9/10/52, 20.9	4/ 7/54, 17.4	1/31/55, 33.8
3/24/53, 17.8	6/ 1/54, 19.3	1/31/55, 22.8
3/10/54, 17.9	7/ 1/54, 23.2	3/ 8/55, 18.1

31S/14E-33B1--Reference point--top of wooden supports, elevation 398.6 feet. 100 feet north of north valley road, 1.7 miles east of Lopez Canyon road. NW $\frac{1}{4}$ Nipomo Quad.

8/16/58, 27.9 P	4/ 6/54, 7.7	11/19/54, 12.0
9/13/50, 17.0 P	7/ 1/54, 10.2	1/ 3/55, 11.4
9/11/52, 10.2	7/31/54, 15.2	1/31/55, 10.4
3/24/53, 11.2	9/ 1/54, 17.5	3/ 8/55, 10.1
11/23/53, 12.0	9/30/54, 15.5	
3/10/54, 7.9	11/ 1/54, 13.0	

31S/14E-33D1--Reference point--top of casing, elevation 418 feet. In northwest corner of Santa Manuela School yard. NW $\frac{1}{4}$ Nipomo Quad.

11/ 9/50, 46.7	4/ 6/52, 13.8	11/23/53, 36.7
4/ 3/51, 17.0	9/10/52, 22.1	3/10/54, 14.8
11/19/51, 49.5	3/24/53, 14.8	11/19/54, 41.0

32S/12E-4F1--Reference point--top of casing, elevation 100 feet. 0.5 mile south and 0.5 mile east of northwest corner of section, 250 feet west of U.S. Highway 101. NW $\frac{1}{4}$ Arroyo Grande Quad. 5/6/54, 40.2.

32S/12E-4K1--Reference point--top of boards around casing, elevation 110 feet. 0.3 mile north and 0.4 mile west of southeast corner of section, on west side of U.S. Highway 101. NW $\frac{1}{4}$ Arroyo Grande Quad. 3/27/53, 43.1.

32S/12E-13R1--Reference point--edge of pump base under discharge pipe, elevation 9.9 feet. 0.2 mile west and 0.2 mile north of southeast corner of section, 0.2 mile southwest of U.S. Highway 101. NW $\frac{1}{4}$ Arroyo Grande Quad.

11/ 6/45, 2.5	7/ 1/54, 15.0	9/30/54, 7.2
4/ 7/54, 4.5	7/ 3/54, 6.5	11/ 1/54, 4.8
5/ 3/54, 6.2	8/31/54, 5.3	3/ 8/55, 4.5
6/ 1/54, 5.1		

32S/13E-1C1--Reference point--base of windmill pump (top of 8-inch by 8-inch timbers set on casing), elevation 305 feet. Approximately 0.5 mile northwesterly along Orcutt Road from north valley road junction, 150 feet southwest of Orcutt Road. NE $\frac{1}{4}$ Arroyo Grande Quad. 11/24/52, 5.0; 3/24/53, 2.8; 11/23/53, 12.5.

TABLE E-2 (continued)

DEPTHS TO GROUND WATER AT MEASUREMENT WELLS
IN COASTAL HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

- 32S/13E-1G1--Reference point--pipe in concrete base, elevation 305 feet. 0.3 mile west and 0.3 mile south of northeast corner of section, 0.1 mile south of north valley road, on south side of creek. NE $\frac{1}{4}$ Arroyo Grande Quad.
- | | | |
|----------------|----------------|----------------|
| 8/15/38, 25.0 | 11/19/51, 20.5 | 3/10/54, 33.5 |
| 6/9/48, 27.6 | 3/24/53, 22.6 | 11/19/54, 23.4 |
| 11/10/50, 22.9 | 11/23/53, 21.6 | |
- 32S/13E-2E1--Reference point--top of casing, elevation 370 feet. 0.3 mile south and 0.2 mile east of northwest corner of section, 0.1 mile northeast of Verde School. NE $\frac{1}{4}$ Arroyo Grande Quad. 3/25/53, 13.0; 11/24/53, 21.6; 3/9/54, 17.4.
- 32S/13E-2E2--Reference point--top of wooden cover, elevation 350 feet. 0.4 mile south and 0.2 mile east of northwest corner of section, 0.1 mile south along Corbett Canyon road from Verde School on east side of road. NE $\frac{1}{4}$ Arroyo Grande Quad. 3/25/53, 5.5.
- 32S/13E-2E3--Reference point--top of casing, elevation 360 feet. In Verde School yard near northwest corner of property. NE $\frac{1}{4}$ Arroyo Grande Quad. 11/19/54, 28.6.
- 32S/13E-2M1--Reference point--top of wood planking on pit at 2-inch by 3-inch hole, elevation 370 feet. 3.3 miles north on Corbett Canyon road from Arroyo Grande, on east side of road, 0.2 mile south of Verde School. NE $\frac{1}{4}$ Arroyo Grande Quad. 11/28/52, 6.6; 3/25/53, 3.7.
- 32S/13E-2N1--Reference point--top of wood cover at pipe hole, elevation 310 feet. 100 feet west of Corbett Canyon road, 0.6 mile south of Verde School. NE $\frac{1}{4}$ Arroyo Grande Quad. 3/25/53, 13.4; 11/24/53, 17.2; 3/10/54, 16.9; 11/19/54, 11.8.
- 32S/13E-10E1--Reference point--top of concrete wall, elevation 450 feet. 0.3 mile south and 250 feet east of northwest corner of section, east of Carpenter Canyon road. NE $\frac{1}{4}$ Arroyo Grande Quad. 12/6/52, 7.7; 3/26/53, 4.9.
- 32S/13E-10J1--Reference point--top of concrete base, elevation 250 feet. 0.4 mile north and 250 feet west of southeast corner of section, on west side of Corbett Canyon road. NE $\frac{1}{4}$ Arroyo Grande Quad. 10/28/52, 1.7; 3/27/53, 0.7; 3/9/54, 1.3; 11/19/54, 0.5.
- 32S/13E-11D1--Reference point--top of ground at side of pit, elevation 290 feet. 0.3 mile south and 0.2 mile east of northwest corner of section, on east side of Corbett Canyon road. 11/28/52, 11.3; 4/10/53, 5.4; 11/24/53, 6.3; 3/9/54, 4.5; 11/19/54, 6.8.

TABLE E-2 (continued)

DEPTH TO GROUND WATER AT MEASUREMENT WELLS
IN COASTAL HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

32S/13E-12C1--Reference point--top of casing, elevation 271.0 feet. 0.8 mile south of junction of Orcutt Road and north valley road, 40 feet south of valley road. NE $\frac{1}{4}$ Arroyo Grande Quad.

8/ 2/47, 27.0 (owner)	8/10/53, 31.1	7/31/54, 50.0 P
11/ 9/50, 17.8	8/17/53, 33.6	9/ 1/54, 54.8 P
4/ 3/51, 16.0	8/24/53, 38.3 P	9/30/54, 29.9
11/19/51, 18.7	8/31/53, 31.2 P	10/30/54, 26.0
4/ 6/52, 14.7	9/ 8/53, 34.0 P	11/19/54, 22.0
9/10/52, 25.0	11/23/53, 20.9	1/ 3/55, 18.9
3/24/53, 19.7	2/ 5/54, 18.5	1/31/55, 18.1
7/13/53, 45.8 P	3/ 9/54, 18.2	3/ 8/55, 18.3
7/21/53, 45.1 P	6/ 1/54, 38.2 P	11/19/55, 23.3
7/27/53, 29.4	7/ 1/54, 41.8 P	11/27/56, 34.5
8/ 3/53, 28.8		

32S/13E-12C2--Reference point--top of casing, elevation 260 feet. 0.2 mile south and 0.4 mile east of northwest corner of section. NE $\frac{1}{4}$ Arroyo Grande Quad.

11/ 9/50, 15.7	4/ 6/52, 13.5	11/23/53, 19.8
4/ 3/51, 14.1	9/10/52, 22.4	3/ 9/54, 17.9
11/19/51, 16.9	3/24/53, 23.7 P	

32S/13E-12F2--Reference point--top of casing, elevation 250.8 feet. 0.3 mile south and 0.4 mile east of northwest corner of section, 1.2 miles south of Orcutt Road. NE $\frac{1}{4}$ Arroyo Grande Quad.

11/ 9/50, 10.7	9/11/52, 21.1	11/23/53, 18.0
11/19/51, 12.3	9/16/52, 20.5	3/ 9/54, 15.8
4/ 7/52, 10.0	3/24/53, 17.8	

32S/13E-12K1--Reference point--top of casing, elevation 260 feet. East side of Arroyo Grande Creek, north of Arroyo Grande, 0.5 mile north of Branch School, 250 feet west of road. NE $\frac{1}{4}$ Arroyo Grande Quad. 9/11/52, 2.0; 3/24/53, 2.0.

32S/13E-12K3--Reference point--top of casing, elevation 270 feet. 0.6 mile north of Branch School, 25 feet west of road. NE $\frac{1}{4}$ Arroyo Grande Quad. 9/11/52, 4.2; 9/24/53, 4.4.

32S/13E-12N1--Reference point--top of casing, elevation 232.8 feet. 0.3 mile east and 0.1 mile north of southwest corner of section, on southwest side of road. NE $\frac{1}{4}$ Arroyo Grande Quad.

11/ 9/50, 17.7	9/11/52, 23.0	3/ 9/54, 24.3
4/ 3/51, 17.8	9/24/53, 31.1	4/ 6/54, 21.0
11/19/51, 17.9	11/23/53, 22.9	11/19/54, 29.6
4/ 7/52, 17.0		

TABLE E-2 (continued)

DEPTHS TO GROUND WATER AT MEASUREMENT WELLS
IN COASTAL HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

32S/13E-12Q1--Reference point--top of casing, elevation 300 feet. 0.4 mile north of Branch School, 0.3 mile west and 0.3 mile north of southeast corner of section, 80 feet east of road. NE $\frac{1}{4}$ Arroyo Grande Quad. 9/11/52, 18.6; 9/24/53, 22.5.

32S/13E-12Q2--Reference point--top of casing, elevation 245 feet. 0.3 mile north of Branch School in Arroyo Grande Valley and 600 feet west of road, along fence line toward Arroyo Grande Creek. NE $\frac{1}{4}$ Arroyo Grande Quad. 9/16/52, 12.4; 3/24/53, 14.0; 11/23/53, 14.0; 3/9/54, 12.6; 11/19/54, 12.2.

32S/13E-12Q3--Reference point--hole in pump base, elevation 238.0 feet. Approximately 4 miles north of Arroyo Grande, on east side of Arroyo Grande Creek, 0.1 mile north and 0.2 mile west of Branch School. NE $\frac{1}{4}$ Arroyo Grande Quad.

3/24/53, 47.3 P	8/31/53, 39.8	9/30/54, 42.4
7/13/53, 47.8 P	9/8/53, 41.4	10/30/54, 48.3
7/21/53, 45.2	11/23/53, 23.5	11/18/54, 27.5
7/27/53, 41.7	3/9/54, 25.3	1/3/55, 26.3
8/3/53, 40.2	6/1/54, 37.4	1/31/55, 26.5
8/10/53, 48.9 P	7/1/54, 40.9	3/8/55, 35.3
8/17/53, 33.7	7/31/54, 52.4 P	11/19/55, 21.5
8/24/53, 45.1	9/7/54, 53.5 P	11/27/56, 24.8

32S/13E-13B1--Reference point--top of casing, elevation 260 feet. 0.1 mile north and 0.1 mile west of Branch School, south side of dirt road. NE $\frac{1}{4}$ Arroyo Grande Quad. 9/11/52, 38.0 P; 3/24/53, 46.0.

32S/13E-13C1--Reference point--top of casing, elevation 260 feet. 0.1 mile northwesterly along road from Branch School, 35 feet southwest of road. NE $\frac{1}{4}$ Arroyo Grande Quad. 11/9/50, 21.2; 4/3/51, 27.3; 11/19/51, 28.4; 4/7/52, 23.8; 9/11/52, 30.5.

32S/13E-13C2--Reference point--top of 2-inch pipe in concrete base, elevation 240 feet. 0.1 mile northwesterly along road from Branch School, 40 feet southwesterly of road. NE $\frac{1}{4}$ Arroyo Grande Quad.

3/9/53, 57.3 P	3/24/53, 38.7	11/23/53, 24.8
3/9/53, 43.2	3/30/53, 45.4	3/9/54, 28.7
3/23/53, 62.4 P		

32S/13E-14P2--Reference point--top of casing, elevation 190 feet. 0.4 mile southwest from Harris bridge, 50 feet southeast of north valley road. NE $\frac{1}{4}$ Arroyo Grande Quad. 10/17/52, 30.9; 3/25/53, 31.2.

TABLE E-2 (continued)

DEPTH TO GROUND WATER AT MEASUREMENT WELLS
IN COASTAL HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

32S/13E-14P3--Reference point--pipe in pump base, elevation 164.7 feet. 0.3 mile south along north valley road from Harris bridge, 50 feet northwest of valley road. NE $\frac{1}{4}$ Arroyo Grande Quad. 3/25/53, 21.8; 11/23/53, 21.8; 3/9/54, 24.3; 11/19/54, 23.6.

32S/13E-14Q1--Reference point--hole in pump base, elevation 200 feet. 0.5 mile west and 0.2 mile north of southeast corner of section, 20 feet southeast of north valley road, 0.6 mile southwest of Harris bridge. NE $\frac{1}{4}$ Arroyo Grande Quad. 10/17/52, 16.6; 3/25/53, 16.8.

32S/13E-14R1--Reference point--top of casing, elevation 199.5 feet, 0.2 mile north and 200 feet west of southeast corner of section, 600 feet northwest of road. NE $\frac{1}{4}$ Arroyo Grande Quad.

4/ 3/51, 23.2	9/16/52, 53.0	3/ 9/54, 15.2
11/20/51, 17.9	3/24/53, 16.1	11/18/54, 26.0
4/ 7/52, 13.7		

32S/13E-14R2--Reference point--cut in top of casing, elevation 198.1 feet. 0.1 mile west and 0.2 mile north of southeast corner of section, 0.2 mile northeast of road. NE $\frac{1}{4}$ Arroyo Grande Quad.

10/24/54, 10.0	11/19/51, 17.0	11/23/53, 12.0
8/11/42, 22.0	4/ 7/52, 12.1	3/ 9/54, 13.7
4/31/51, 22.0	3/24/53, 14.6	11/18/54, 9.0

32S/13E-15F1--Reference point--top of casing, elevation 230 feet. 0.2 mile south and 0.4 mile east of northwest corner of section, on east bank of Carpenter Canyon Creek. NE $\frac{1}{4}$ Arroyo Grande Quad. 12/6/52, 4.7; 3/26/53, 4.2.

32S/13E-15F2--Reference point--top of concrete slab, elevation 230 feet. 0.3 mile south and 0.4 mile east of northwest corner of section, northeast side of Carpenter Canyon road. NE $\frac{1}{4}$ Arroyo Grande Quad. 12/6/52, 3.1; 3/26/53, 3.6.

32S/13E-15H1--Reference point--1.5 feet above ground surface, elevation 210 feet. 2.5 miles north of Arroyo Grande on Corbett Canyon road. NE $\frac{1}{4}$ Arroyo Grande Quad. 3/27/53, 20.44; 11/24/53, 19.2; 3/19/54, 18.6; 11/19/54, 18.6.

32S/13E-15M1--Reference point--top of casing, elevation 250 feet. 0.6 mile north along Poorman Canyon road from intersection with Corbett Canyon road, east of road. NE $\frac{1}{4}$ Arroyo Grande Quad. 12/6/52, 19.2; 3/27/53, 19.5; 11/24/53, 20.1; 3/9/54, 20.1; 11/19/54, 20.6.

32S/13E-15M2--Reference point--inside well at ground surface, elevation 250 feet. 0.6 mile north along Poorman Canyon road from intersection with Corbett Canyon road, south well on west side of road. NE $\frac{1}{4}$ Arroyo Grande Quad. 3/27/53, 0.9.

TABLE E-2 (continued)

DEPTHS TO GROUND WATER AT MEASUREMENT WELLS
IN COASTAL HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

32S/13E-15N1--Reference point--side of pit, elevation 250 feet. 0.2 mile north of Carpenter Canyon road, along Poorman Canyon road, west of road. NE $\frac{1}{4}$ Arroyo Grande Quad. 12/6/52, 9.5; 3/27/53, 7.9; 11/24/53, 7.2; 3/9/54, 6.8; 11/19/54, 9.8.

32S/13E-15P1--Reference point--top concrete slab, elevation 200 feet. 0.2 mile north of Carpenter Canyon road along Poorman Canyon road, south of road. NE $\frac{1}{4}$ Arroyo Grande Quad. 12/6/52, 6.7; 3/27/53, 4.5.

32S/13E-15P2--Reference point--top of pipe in pump base, elevation 200 feet. 0.2 mile north of Carpenter Canyon road on Poorman Canyon road, southeast of road. NE $\frac{1}{4}$ Arroyo Grande Quad. 4/10/53, 11.4.

32S/13E-16D2--Reference point--top of planking over well, elevation 150 feet. 0.2 mile east and 0.2 mile south of northwest corner of section, northwest of road. NE $\frac{1}{4}$ Arroyo Grande Quad. 10/8/52, 1.4; 3/24/53, 7.0 P; 11/24/53, 4.3; 3/9/54, 2.1; 11/19/54, 3.2.

32S/13E-20A1--Reference point--top of casing, elevation 90 feet. 0.2 mile west and 0.1 mile south of northeast corner of section, 0.4 mile north of U.S. Highway 101. NE $\frac{1}{4}$ Arroyo Grande Quad. 11/8/52, 7.1; 3/25/53, 7.5.

32S/13E-20P1--Reference point--top of casing, elevation 80 feet. In Grover City, southwest corner of Grand Avenue and 18th Street. SE $\frac{1}{4}$ Arroyo Grande Quad. 11/22/52, 92.8; 3/24/53, 82.2; 11/18/54, 61.0.

32S/13E-21M1--Reference point--top of wooden planking over casing, elevation 138.6 feet. 0.3 mile north and 0.3 mile east of southwest corner of section, 350 feet northwest along U.S. Highway 101 from Halcyon Road, 350 feet north of highway. SE $\frac{1}{4}$ Arroyo Grande Quad. 3/25/53, 78.9; 11/24/53, 55.1; 3/9/54, 68.0; 11/18/54, 60.1.

32S/13E-22C1--Reference point--top of concrete wall, elevation 150 feet. 0.5 mile east and 0.1 mile south of northwest corner of section, southeast side of Corbett Canyon road. NE $\frac{1}{4}$ Arroyo Grande Quad. 11/28/52, 0.0; 3/26/53, 8.0.

32S/13E-22C2--Reference point--top of casing, elevation 140 feet. 0.4 mile east and 0.1 mile south of northwest corner of section, northwest side of Corbett Canyon road. NE $\frac{1}{4}$ Arroyo Grande Quad. 11/28/53, 0.0; 3/26/53, 0.0.

TABLE E-2 (continued)

DEPTHES TO GROUND WATER AT MEASUREMENT WELLS
IN COASTAL HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

32S/13E-22J1--Reference point--hole in corner of pump base, elevation 132 feet. 0.3 mile north and 200 feet west of southeast corner of section, south side of creek. SE 1/4 Arroyo Grande Quad.

11/10/50, 29.0	4/ 7/52, 12.5	11/23/53, 23.0
4/ 3/51, 27.3	3/25/53, 23.3	3/ 9/54, 21.7
11/20/51, 29.4	9/23/53, 20.3	11/18/54, 24.4

32S/13E-22P1--Reference point--hole in pump base, elevation 114.7 feet. South side of Arroyo Grande, 0.2 mile northeast of U.S. Highway 101 along Leedham Lane, south side of Leedham Lane. SE 1/4 Arroyo Grande Quad.

1/10/50, 41.8	4/ 7/52, 25.0	11/24/53, 30.4
4/ 3/51, 38.7	3/25/53, 33.4 P	3/ 9/54, 27.9
11/20/51, 45.1	9/23/53, 33.6	11/18/54, 37.0

32S/13E-22P2--Reference point--hole in pump base, elevation 110 feet. South side of Arroyo Grande, 0.2 mile northeast of U.S. Highway 101 on Leedham Lane and 10 feet north of Leedham Lane. SE 1/4 Arroyo Grande Quad. 3/25/53, 34.5; 9/23/53, 32.5.

32S/13E-22Q1--Reference point--hole in pump base, elevation 128.5 feet. 0.4 mile west and 0.1 mile north of southeast corner of section, on west side of south valley road. SE 1/4 Arroyo Grande Quad. 11/10/50, 36.6; 4/3/51, 32.8; 11/20/51, 37.1; 4/6/52, 28.0; 7/26/53, 78.0 P (Owner).

32S/13E-22Q2--Reference point--top of casing, elevation 127.5 feet. East of Arroyo Grande on southwest side of south valley road, 0.4 mile west and 0.1 mile north of the southeast corner of section. SE 1/4 Arroyo Grande Quad.

4/21/53, 25.5	8/15/53, 30.4	7/ 3/54, 31.9
4/27/53, 24.6	8/24/53, 29.8	9/30/54, 34.6
5/25/53, 26.3	8/31/53, 31.1	10/30/54, 30.0
6/27/53, 28.2	9/ 8/53, 31.8	11/18/54, 32.8
7/13/53, 31.2	11/24/53, 29.8	1/ 3/55, 30.0
7/21/53, 29.2	3/ 9/54, 27.9	1/31/55, 29.0
7/27/53, 30.5	6/ 1/54, 30.8	3/ 8/55, 27.7
8/ 3/53, 32.7	7/ 1/54, 30.8	11/19/55, 40.9
8/10/53, 30.5		

32S/13E-23A1--Reference point--top of concrete pipe, elevation 185 feet. 0.1 mile south and 0.2 mile west of northeast corner of section, 0.2 mile west of Tar Springs road. NE 1/4 Arroyo Grande Quad. 11/9/50, 3.5; 4/3/51, 1.3; 11/19/51, 6.5; 4/7/52, 0.3; 3/25/53, flowing.

TABLE E-2 (continued)

DEPTHS TO GROUND WATER AT MEASUREMENT WELLS
IN COASTAL HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

32S/13E-23F1--Reference point--slot in west side of casing, elevation 161.8 feet. South side of Arroyo Grande Creek, north of Arroyo Grande, 0.4 mile south and 0.4 mile east of northwest corner of section. NE $\frac{1}{4}$ Arroyo Grande Quad.

11/19/50, 19.8	8/24/53, 25.6	9/1/54, 25.0
11/19/51, 20.4	8/31/53, 25.1	9/30/54, 17.7
4/7/52, 12.8	11/23/53, 16.8	10/30/54, 44.0 P
9/17/52, 22.4	2/5/54, 15.9	11/18/54, 25.2
3/25/53, 22.1	3/9/54, 62.0 P	1/3/55, 18.0
4/28/53, 17.6	6/1/54, 23.2	1/31/55, 16.7
5/25/53, 22.9	7/1/54, 17.5	11/19/55, 21.2
6/22/53, 32.9 P	7/31/54, 18.2	11/27/56, 20.7
7/27/53, 40.1 P		

32S/13E-23F2--Reference point--top of casing, elevation 160 feet. 1.0 mile southwest along south valley road from Tar Springs road, 600 feet northwest of road on dirt road. NE $\frac{1}{4}$ Arroyo Grande Quad. 9/17/52, 10.6.

32S/13E-23M1--Reference point--top of casing, elevation 140 feet. South side of Arroyo Grande Creek, 0.2 mile northwest along road intersecting south valley road, 0.1 mile north of Newsom Springs Road, 100 feet south of road. NE $\frac{1}{4}$ Arroyo Grande Quad. 9/22/52, 17.5; 3/25/53, 17.0.

32S/13E-23M2--Reference point--two-inch pipe in concrete pump base, elevation 140 feet. 1.3 miles southwest along south valley road from Tar Springs road, thence 0.2 mile northwesterly, 100 feet south of road. NE $\frac{1}{4}$ Arroyo Grande Quad. 9/17/52, 20.8; 3/25/53, 19.2.

32S/13E-23M3--Reference point--top of concrete pit wall, elevation 142.2 feet. 0.6 mile south and 0.2 mile east of northwest corner of section, southeast of creek, south of Arroyo Grande Creek, 0.2 mile northwest along road intersecting south valley road, 0.1 mile north of Newsom Spring Road, north side of road. NE $\frac{1}{4}$ Arroyo Grande Quad.

11/9/50, 23.6	4/17/52, 14.6	11/23/53, 20.0
4/3/51, 22.3	9/23/52, 18.8	3/9/54, 19.4
11/19/51, 22.7	3/25/53, 18.7	11/18/54, 27.7

32S/13E-23M4--Reference point--top of galvanized tin enclosing well, elevation 140 feet. 0.4 mile north and 0.2 mile east of southwest corner of section, 300 feet northwest of south valley road. SE $\frac{1}{4}$ Arroyo Grande Quad. 9/23/52, 12.6; 3/25/53, 12.0.

32S/13E-23M5--Reference point--top of casing, elevation 140 feet. 0.2 mile east and 0.3 mile north of southwest corner of section, 500 feet north of Newsom Springs Road and south valley road. SE $\frac{1}{4}$ Arroyo Grande Quad. 9/23/52, 16.4; 3/25/53, 13.2.

TABLE E-2 (continued)

DEPTH TO GROUND WATER AT MEASUREMENT WELLS
IN COASTAL HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

32S/13E-23N1--Reference point--top of casing, elevation 142.3 feet. 60 feet northwest and 40 feet northeast of junction of Newsom Springs Road and south valley road. SE $\frac{1}{4}$ Arroyo Grande Quad. 4/23/52, 18.4; 3/25/53, 14.0; 11/23/53, 21.0; 3/9/54, 16.1; 11/18/54, 24.0.

32S/13E-23N2--Reference point--top of casing, elevation 140 feet. 0.2 mile southeast of Newsom Springs Road, on south valley road, 0.1 mile west on dirt road and 500 feet north in field. SE $\frac{1}{4}$ Arroyo Grande Quad. 3/25/53, 54.0 P.

32S/13E-23N3--Reference point--crack between 2-inch blocks under northeast side of pump, elevation 140 feet. 60 feet north of south valley road and Newsom Springs Road junction, north of three houses. SE $\frac{1}{4}$ Arroyo Grande Quad. 9/23/52, 18.2; 9/25/53, 13.2.

32S/13E-23N4--Reference point--crack between pump and pump base on southeast side, elevation 140 feet. 0.2 mile southwest of Newsom Springs Road on south valley road, 500 feet west on dirt road, 5 feet north of dirt road. SE $\frac{1}{4}$ Arroyo Grande Quad. 3/25/53, 33.2 P.

32S/13E-24A1--Reference point--slot in top casing, elevation 260 feet. South of Tar Springs Creek, 0.5 mile south of Tar Springs road, 1.5 miles east of south valley road. NE $\frac{1}{4}$ Arroyo Grande Quad. 9/16/52, 7.9; 3/25/53, 6.0.

32S/13E-24A2--Reference point--hole, top of casing, elevation 270 feet. 0.2 mile south and 0.2 mile west of northeast corner of section, south side of Tar Springs Creek. NE $\frac{1}{4}$ Arroyo Grande Quad.
 11/10/50, 12.3 4/ 7/52, 2.0 11/23/53, 0.0
 4/ 3/51, 14.3 9/16/52, 1.9 3/ 9/54, 2.2
 11/19/51, 30.6 3/25/53, 0.8 11/18/54, 3.0

32S/13E-27D1--Reference point--1.5-inch pipe in concrete base, elevation 100.1 feet. In Arroyo Grande, 35 feet south of the center line on Cherry Avenue, halfway between Arroyo Avenue and Orchard Avenue. SE $\frac{1}{4}$ Arroyo Grande Quad. 9/24/52, 35.0; 3/25/53, 29.0; 11/24/53, 34.5; 3/9/54, 31.8; 11/18/54, 37.4.

32S/13E-27D2--Reference point--top of 4 by 4 foot concrete retaining wall, elevation 110 feet. In Arroyo Grande, 0.1 mile east of U.S. Highway 101 on Leedham Lane 75 feet west of road. SE $\frac{1}{4}$ Arroyo Grande Quad. 9/23/52, 26.1.

32S/13E-27E1--Reference point--top of casing, elevation 100 feet. In Arroyo Grande, 0.1 mile south of Union Elementary School along Orchard Avenue, 30 feet west of center line of Orchard Avenue. SE $\frac{1}{4}$ Arroyo Grande Quad. 9/24/52, 30.8; 3/25/53, 23.0.

TABLE E-2 (continued)

DEPTHS TO GROUND WATER AT MEASUREMENT WELLS
IN COASTAL HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

32S/13E-28A1--Reference point--top of casing, elevation 102 feet. 0.1 mile west of U.S. Highway 101, 290 feet west and 290 feet south of northeast corner of section. SE 1/4 Arroyo Grande Quad.

9/ 1/33, 25.0	4/ 3/51, 38.0	3/25/53, 30.8
6/ 2/37, 28.1	11/20/51, 44.4	11/24/53, 33.8
8/ 5/41, 28.4	4/ 7/52, 29.4	3/10/54, 33.3
8/12/43, 33.9	9/23/52, 38.6	11/17/54, 36.8
11/11/50, 41.6		

32S/13E-28A2--Reference point--hole in pump base, elevation 100 feet. 0.3 mile southwest of U.S. Highway 101 along road to Oceano, 500 feet north of road. SE 1/4 Arroyo Grande Quad. 9/23/52, 35.1.

32S/13E-28E2--Reference point--base of pump at slot in concrete pedestal, elevation 97.3 feet. 0.4 mile south and 0.1 mile east of northwest corner of section, in Arroyo Grande (Fair Oaks District). SE 1/4 Arroyo Grande Quad. 6/25/53, 91.5; 11/24/53, 90.5; 3/10/53, 87.4; 11/12/54, 95.2.

32S/13E-28F2--Reference point--top of six-inch by six-inch timbers, elevation 100 feet. 0.5 mile south along Halcyon Road from U.S. Highway 101, 0.6 mile west and 0.7 mile north of southeast corner of section. SE 1/4 Arroyo Grande Quad. 11/11/50, 31.3; 4/3/51, 28.7.

32S/13E-28G1--Reference point--edge of pump base, elevation 86.9 feet. Southwest side of Arroyo Grande, 0.4 mile southwest of U.S. Highway 101, on south valley road, on west side of road at 90° turn in valley road. SE 1/4 Arroyo Grande Quad.

6/26/35, 31.3 P	9/13/50, 48.2 P	3/10/54, 20.1
8/16/37, 32.5 P	9/13/50, 31.0	6/ 1/54, 52.0 P
8/16/37, 9.9	11/ 9/51, 49.3 P	7/ 1/54, 30.0
8/ 6/41, 51.0 P	11/20/51, 34.1	7/31/54, 32.2
10/28/42, 32.8 P	4/ 7/52, 20.2	8/31/54, 33.5
10/28/42, 21.0	9/23/52, 27.5	9/30/54, 33.7
5/18/43, 36.8 P	4/27/53, 33.3	10/30/54, 32.4
5/18/43, 18.8	5/23/53, 45.6 P	11/17/54, 29.8
5/18/44, 33.5 P	6/22/53, 51.6 P	1/ 3/55, 27.3
5/18/44, 19.3	7/27/53, 31.1	1/31/55, 26.4
1/11/45, 34.4 P	8/24/53, 26.2	3/ 8/55, 25.0
1/11/45, 19.5	8/31/53, 28.0	11/19/55, 41.3
6/27/45, 45.0 P	11/23/53, 26.5	11/27/56, 34.4
6/20/46, 51.4 P	2/ 5/54, 26.2	

32S/13E-28G2--Reference point--top of casing, elevation 90 feet. Southwest side of Arroyo Grande, 0.6 mile south from U.S. Highway 101 along south valley road, 30 feet west of valley road. SE 1/4 Arroyo Grande Quad. 9/24/52, 29.6.

TABLE E-2 (continued)

DEPTHES TO GROUND WATER AT MEASUREMENT WELLS
IN COASTAL HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

32S/13E-28Q3-- Reference point--top of casing, elevation 90 feet. Southwest side of Arroyo Grande, 0.5 mile south of U.S. Highway 101, along south valley road, 15 feet west of road. SE 1/4 Arroyo Grande Quad. 9/23/52, 29.7; 3/25/53, 24.9.

32S/13E-28J1--Reference point--top of casing, elevation 90 feet. 0.1 mile west and 0.4 mile north of southeast corner of section, 0.2 mile east and 0.3 mile south of new high school, on south side of Arroyo Grande. SE 1/4 Arroyo Grande Quad. 9/24/52, 12.2; 3/25/53, 12.8.

32S/13E-28K1--Reference point--top of casing, elevation 81.9 feet. Southwest side of Arroyo Grande, 0.8 mile south along south valley road from U.S. Highway 101, 0.2 mile west of valley road. SE 1/4 Arroyo Grande Quad.

8/13/52, 28.4	9/13/52, 39.3	3/25/53, 32.0
11/ 4/52, 26.4	11/ 8/52, 58.0 P	11/24/53, 38.8
6/27/52, 33.0 P	9/24/52, 36.4	3/10/54, 34.1
6/19/52, 35.0	10/30/52, 47.0 P	

32S/13E-28Q1--Reference point--crack between 2-inch boards under pump, elevation 80 feet. On west side of south valley road, 1.0 mile from intersection of valley road and U.S. Highway 101 in Arroyo Grande. SE 1/4 Arroyo Grande Quad. 9/25/52, 32.4; 3/25/53, 30.7.

32S/13E-28Q2--Reference point--slot in pump casing, elevation 73.4 feet. Southwest of Arroyo Grande, 1.1 miles south of U.S. Highway 101 along south valley road, 0.2 mile west of road. SE 1/4 Arroyo Grande Quad.

11/11/52, 41.6	4/ 7/52, 25.9	11/24/53, 38.5
4/ 3/52, 34.4	9/25/52, 35.8	3/10/54, 33.0
11/20/52, 43.9	3/25/53, 47.9 P	11/17/54, 42.2

32S/13E-28Q3--Reference point--hole through wooden base, elevation 80 feet. Southwest of Arroyo Grande, 1.1 miles southwest from U.S. Highway 101 on south valley road, 250 feet west of valley road. SE 1/4 Arroyo Grande Quad. 9/25/52, 35.1; 3/25/53, 40.3 P.

32S/13E-29C1--Reference point--slit on top of wooden plank, elevation 70 feet. 400 feet south and 100 feet east of intersection of Grand Avenue and 18th Street in Grover City. SE 1/4 Arroyo Grande Quad. 3/24/53, 32.8.

32S/13E-29D2--Reference point--2-inch pipe, elevation 62.3 feet. 0.1 mile south and 80 feet east of intersection of Grand Avenue and 14th Street in Grover City. SE 1/4 Arroyo Grande Quad.

11/ 6/52, 53.7	4/ 7/52, 56.1	11/24/53, 58.0
11/12/52, 58.8	3/24/53, 62.0 P	3/11/54, 55.9
4/ 3/52, 56.7	3/24/53, 56.2	11/18/54, 65.0 P
11/20/52, 60.5		

TABLE E-2 (continued)

DEPTH TO GROUND WATER AT MEASUREMENT WELLS
IN COASTAL HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

32S/13E-29NL--Reference point--hole in pump base, elevation 62.8 feet.

North of Oceano, 1.2 miles west from Halcyon Road on Pike Road, 0.1 mile north of Pike Road. SE $\frac{1}{4}$ Arroyo Grande Quad.

11/12/50, 75.4	7/27/53, 89.2 P	9/ 2/54, 83.0
4/ 3/51, 73.7	8/24/53, 80.4	9/30/54, 77.3
11/20/51, 77.1	8/31/53, 88.9 P	10/30/54, 82.0
4/ 7/52, 62.7	11/24/53, 74.7	11/18/54, 82.9
10/17/52, 84.5	2/ 5/54, 73.3	1/ 3/55, 74.0
3/25/53, 79.5 P	3/11/54, 73.4	1/31/55, 73.2
4/27/53, 77.2	6/ 1/54, 86.0	3/ 8/55, 86.0 P
5/25/53, 73.6	7/31/54, 84.0	11/19/55, 98.1
6/22/53, 76.1		

32S/13E-29RL--Reference point--hole in wood blocking beneath pump, elevation 89.6 feet. 300 feet north of Pike Road and 3.4 miles west of Halcyon Road. SE $\frac{1}{4}$ Arroyo Grande Quad. 3/25/53, 65.6 P; 11/24/53, 65.0; 3/11/54, 69.7; 11/18/54, 69.4.32S/13E-30J2--Reference point--hole in cap on abandoned casing, elevation 60 feet. 75 feet east of 10th Street and 300 feet north of Pike Road. SE $\frac{1}{4}$ Arroyo Grande Quad. 11/18/54, 35.6; 11/25/54, 37.0.32S/13E-30K3--Reference point--top of casing, elevation 30 feet. 60 feet south of Farrel Road and $\frac{1}{2}$ block east of 10th Street. SE $\frac{1}{4}$ Arroyo Grande Quad. 3/25/53, 34.7; 11/24/53, 36.9; 3/11/54, 34.8; 11/18/54, 39.0.32S/13E-30K5--Reference point--at ground, elevation 30 feet. In city well yard between Farrel Road and Pike Road, 500 feet south of 4th Street. SE $\frac{1}{4}$ Arroyo Grande Quad. 8/26/51, 20.1.32S/13E-30K6--Reference point--at ground surface, elevation 30 feet. In city well yard between Farrel Road and Pike Road, 500 feet south of 4th Street. SE $\frac{1}{4}$ Arroyo Grande Quad. 8/26/51, 19.6.32S/13E-30L1--Reference point--top of casing, elevation 17.4 feet. Northeast of Old Pismo Road, 0.2 mile from intersection of Farrel Road and Old Pismo Road. SE $\frac{1}{4}$ Arroyo Grande Quad. 3/24/53, 10.8; 11/24/53, 12.1; 3/11/54, 10.0; 11/18/54, 12.2.32S/13E-30P2--Reference point--top of casing, elevation 29.3 feet. 0.2 mile west of 13th Street and 0.1 mile south of Pike Road in Oceano. SE $\frac{1}{4}$ Arroyo Grande Quad. 3/24/53, 29.0; 11/24/53, 22.9; 3/11/54, 23.3; 11/18/54, 24.9.

TABLE E-2 (continued)

DEPTH TO GROUND WATER AT MEASUREMENT WELLS
IN COASTAL HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

32S/13E-31A1--Reference point--top of casing, elevation 29.4 feet. 300 feet north of S.P.R.R. and State Highway 1 overpass. SE $\frac{1}{4}$ Arroyo Grande Quad. 3/11/54, 21.9; 11/18/54, 23.6.

32S/13E-31A2--Reference point--hole in pump base, elevation 55 feet. West of 10th Street, north of intersection of Wilmar, 10th and 11th Streets, 0.1 mile west and 80 feet south of northeast corner of section. SE $\frac{1}{4}$ Arroyo Grande Quad. 11/12/50, 47.8; 3/25/53, 45.4; 11/23/53, 43.0; 11/15/54, 48.7.

32S/13E-31G1--Reference point--top of casing, elevation 20 feet. 0.2 mile west along road that intersects State Highway 1 at ice plant, 50 feet northeast of road. SE $\frac{1}{4}$ Arroyo Grande Quad. 11/18/52, 6.3; 3/-/53, 5.5.

32S/13E-31G2--Reference point--top of casing, elevation 19.9 feet. On south edge of town of Oceano, in ice plant yard, 10 feet southwest of Well

32S/13E-31G3. SE $\frac{1}{4}$ Arroyo Grande Quad.

4/23/53, 11.5	7/20/53, 12.3	7/ 1/54, 13.0
4/27/53, 11.5	7/27/53, 12.4	7/ 3/54, 12.8
5/ 4/53, 11.5	8/ 3/53, 12.4	9/ 2/54, 13.5
5/11/53, 11.6	8/10/53, 12.4	9/30/54, 13.3
5/18/53, 11.5	8/17/53, 12.7	10/30/54, 13.5
5/25/53, 11.7	8/24/53, 12.7	11/18/54, 14.6
6/ 1/53, 11.7	8/31/53, 12.8	1/ 3/55, 12.6
6/ 8/53, 11.7	9/ 8/53, 12.9	1/31/55, 12.2
6/15/53, 11.9	11/23/53, 12.4	3/ 8/55, 11.6
6/22/53, 11.9	2/ 5/54, 11.5	11/19/55, 13.9
6/29/53, 12.1	3/ 1/54, 11.5	11/27/56, 13.7
7/ 6/53, 12.1	6/ 1/54, 11.9	

32S/13E-31G3--Reference point--top of casing, elevation 20.2 feet. On south edge of town of Oceano, in ice plant yard, 10 feet northeast of Well

32S/13E-31G2. SE $\frac{1}{4}$ Arroyo Grande Quad.

11/12/50, 12.1	6/15/53, 8.8	3/ 1/54, 4.1
4/ 3/51, 8.6	6/22/53, 8.0	6/ 1/54, 7.4
11/20/51, 14.0	6/29/53, 9.3	7/ 1/54, 9.4
4/ 7/52, 7.6	7/ 6/53, 9.0	7/31/54, 10.9
10/11/52, 6.9	7/20/53, 10.0	9/ 2/54, 12.0
3/25/53, 4.6	7/27/53, 9.4	9/30/54, 11.5
4/23/53, 5.6	8/ 3/53, 10.2	10/30/54, 12.2
4/27/53, 5.4	8/10/53, 11.1	11/18/54, 8.2
5/ 4/53, 4.4	8/17/53, 11.9	1/ 3/55, 7.7
5/11/53, 8.1	8/24/53, 12.8	1/31/55, 4.4
5/18/53, 6.2	8/31/53, 12.4	3/ 8/55, 4.8
5/25/53, 6.8	9/ 8/53, 11.1	11/19/55, 11.1
6/ 1/53, 7.0	11/27/53, 5.9	11/27/56, 10.6
6/ 8/53, 9.1	2/ 5/54, 4.1	

TABLE E-2 (continued)

DEPTH TO GROUND WATER AT MEASUREMENT WELLS
IN COASTAL HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

32S/13E-31H1--Reference point--top of casing, elevation 20 feet. West side of Oceano, 20 feet south of spur track, south of S.P.R.R. loading shed. SE $\frac{1}{4}$ Arroyo Grande Quad. 3/25/53, 8.6.

32S/13E-21H2--Reference point--crack in casing, elevation 20 feet. West side of Oceano, 26 feet south of spur track, south of S.P.R.R. loading shed. SE $\frac{1}{4}$ Arroyo Grande Quad. 3/25/53, 11.4.

32S/13E-31J1--Reference point--top of casing, elevation 19.5 feet. 0.3 mile south of Southern Pacific Milling Company shed, on north side of Arroyo Grande Creek. SE $\frac{1}{4}$ Arroyo Grande Quad.

11/11/50, 11.9	4/ 7/52, 8.8	11/23/53, 11.9
4/ 3/51, 10.7	10/11/52, 8.6	3/14/54, 10.0
11/20/51, 12.2	3/25/53, 9.7	11/18/54, 11.2

32S/13E-32D1--Reference point--top of casing, elevation 70 feet. On southwest corner of 8th Street and Wilmar Street in Oceano. SE $\frac{1}{4}$ Arroyo Grande Quad. 11/12/50, 73.7; 4/3/51, 73.0; 11/50/51, 47.1; 4/7/52, 48.0.

32S/13E-32D2--Reference point--plug in pump base, elevation 68 feet. In Oceano 400 feet north of intersection of 4th Street and Wilmar Street, east side of 7th Street. SE $\frac{1}{4}$ Arroyo Grande Quad.

10/14/53, 80.5 (owner)	3/14/54, 78.5 (owner)	8/15/54, 81.3 (owner)
11/15/53, 81.3 (owner)	4/11/54, 76.7 (owner)	9/ 9/54, 81.0
12/18/53, 80.3 (owner)	5/16/54, 78.3 (owner)	10/14/54, 80.2
1/12/54, 80.7 (owner)	6/13/54, 79.5 (owner)	11/17/54, 78.6
2/13/54, 79.3 (owner)	7/18/54, 80.7 (owner)	

32S/13E-32D3--Reference point--plug on concrete pump base, elevation 68 feet. In Oceano 420 feet north of Wilmar Street on 7th Street, 60 feet east of 7th Street. SE $\frac{1}{4}$ Arroyo Grande Quad. 9/9/54, 89.0; 11/18/54, 86.9.

32S/13E-32D4--Reference point--top of casing, elevation 68 feet. In Oceano 400 feet north of Wilmar Street on 7th Street, 70 feet east of 7th Street. SE $\frac{1}{4}$ Arroyo Grande Quad. 9/10/54, 85.0; 11/18/54, 77.2.

32S/13E-32E1--Reference point--top of casing, elevation 40 feet. In Oceano north side of alley between 7th Street and 8th Street, south of Paso Robles Street. SE $\frac{1}{4}$ Arroyo Grande Quad. 11/28/52, 22.8.

32S/13E-32J1--Reference point--top of pipe, elevation 53.0 feet. 0.3 mile west of Arroyo Grande Creek, 0.1 mile south of State Highway 1. SE $\frac{1}{4}$ Arroyo Grande Quad.

11/1/50, 38.0	4/ 7/52, 25.9	3/11/54, 29.8
4/ 3/51, 32.7	11/23/53, 22.6	11/18/54, 33.7
11/20/51, 38.3		

TABLE E-2 (continued)

DEPTH TO GROUND WATER AT MEASUREMENT WELLS
IN COASTAL HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

32S/13E-32K1--Reference point--top of pipe in base, elevation 39.5 feet. In Oceano, 0.6 mile west of Arroyo Grande Creek, on south side of State Highway 1. SE $\frac{1}{4}$ Arroyo Grande Quad.

11/11/50, 26.8	10/11/52, 22.2	3/11/54, 18.2 P
11/20/51, 27.7	3/25/53, 21.0	11/18/54, 21.8
4/ 7/52, 16.1	11/23/53, 20.6	

32S/13E-32L2--Reference point--top of casing, elevation 20 feet. 0.8 mile west of Arroyo Grande Creek, 15 feet south of State Highway 1. SE $\frac{1}{4}$ Arroyo Grande Quad. 10/11/52, 10.9; 3/25/53, 8.7.

32S/13E-32L3--Reference point--top of casing, elevation 20 feet. In Oceano, between 5th and 6th Streets, one block south of State Highway 1. SE $\frac{1}{4}$ Arroyo Grande Quad. 11/22/51, 14.1; 3/25/53, 12.3

32S/13E-32L5--Reference point--top of casing, elevation 20 feet. In Oceano, south of Arroyo Grande Creek, 0.1 mile west of 5th Street and 0.1 mile north of Garden Street. SE $\frac{1}{4}$ Arroyo Grande Quad. 9/27/52, 8.8; 3/25/53, 5.2.

32S/13E-32L6--Reference point--top of concrete wall, elevation 20 feet. 0.9 mile west of Arroyo Grande Creek on State Highway 1, 0.2 mile south from highway on dirt road, west of road. SE $\frac{1}{4}$ Arroyo Grande Quad. 3/25/53, 7.4.

32S/13E-32M1--Reference point--top of casing, elevation 21.7 feet. In Oceano, south of Arroyo Grande Creek, 0.2 mile west of 5th Street and 0.1 mile north of Garden Street. SE $\frac{1}{4}$ Arroyo Grande Quad.

11/11/50, 10.3	4/ 7/52, 3.4	11/23/53, 4.3
4/ 3/51, 6.9	10/ 4/52, 8.9	3/11/54, 2.0
11/20/51, 12.2	3/25/53, 28.4 P	11/18/54, 6.8

32S/13E-32P2--Reference point--hole in concrete base, elevation 20 feet. 0.2 mile south and 0.2 mile east of intersection of State Highway 1 and 5th Street. SE $\frac{1}{4}$ Arroyo Grande Quad. 11/28/52, 10.0; 3/26/53, 10.1.

32S/13E-32P3--Reference point--top of casing, elevation 21.8 feet. In Oceano, 0.5 mile south of State Highway 1, 0.4 mile east of southwest corner of section. SE $\frac{1}{4}$ Arroyo Grande Quad.

11/11/50, 10.5	4/ 7/52, 3.2	3/11/54, 5.4
4/ 3/51, 7.3	9/27/52, 11.8	11/18/54, 7.5
11/20/51, 9.9	3/25/53, 4.6	

32S/13E-32Q1--Reference point--cut in casing, elevation 30 feet. Southeast of Oceano, 0.3 mile west and 0.2 mile north of southeast corner of section. SE $\frac{1}{4}$ Arroyo Grande Quad. 9/27/52, 8.0; 3/25/53, 8.6.

TABLE E-2 (continued)

DEPTHS TO GROUND WATER AT MEASUREMENT WELLS
IN COASTAL HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

32S/13E-33A2--Reference point--top of casing, elevation 66 feet. 0.3 mile north and 0.1 mile east of State Highway 1 bridge at Los Berros Creek. SE 1/4 Arroyo Grande Quad. 9/25/52, 8.5; 3/25/53, 9.4; 11/24/53, 14.5; 3/10/54, 7.8; 11/17/54, 13.4.

32S/13E-33A3--Reference point--hole in pump base, elevation 66.7 feet. 0.4 mile north of State Highway 1 at Los Berros Creek, east of road. SE 1/4 Arroyo Grande Quad.

9/25/52, 30.5	8/12/53, 22.0	3/10/54, 28.3
3/25/53, 26.3	11/24/53, 33.0	11/17/54, 35.0

32S/13E-33A4--Reference point--slot in casing under pump, elevation 70 feet. 0.5 mile north of State Highway 1 bridge at Los Berros Creek, east of road. SE 1/4 Arroyo Grande Quad. 9/25/52, 32.2; 3/25/53, 27.6.

32S/13E-33B1--Reference point--hole in pump base, elevation 70 feet. East of Arroyo Grande Creek, 0.5 mile north of State Highway 1 bridge at Los Berros Creek, 100 feet west of road. SE 1/4 Arroyo Grande Quad. 11/20/51, 40.1; 4/7/52, 22.8; 9/25/52, 33.1; 3/25/53, 28.8.

32S/13E-33C1--Reference point--hole in pump base, elevation 64.7 feet. 1.4 miles south of U.S. Highway 101 on Halcyon Drive, 0.2 mile east of Halcyon Drive to well on west bank of Arroyo Grande Creek. SE 1/4 Arroyo Grande Quad.

11/10/50, 41.3	4/7/52, 18.2	3/11/54, 20.8
4/3/51, 25.7	3/25/53, 24.0	11/17/54, 35.5
11/20/51, 45.7	11/24/53, 21.9	

32S/13E-33C2--Reference point--top of casing of old well 9 feet north, elevation 65 feet north and 300 feet east of Halcyon Post Office on Halcyon Road. SE 1/4 Arroyo Grande Quad. 3/25/53, 25.1.

32S/13E-33D2--Reference point--hole in pump base, elevation 80 feet. 0.3 mile west of Halcyon Temple on Halcyon Road. SE 1/4 Arroyo Grande Quad. 3/26/53, 60.2.

32S/13E-33K1--Reference point--top of casing, elevation 50 feet. 0.3 mile west from Arroyo Grande Creek bridge on State Highway 1, 600 feet north of highway on dirt road. SE 1/4 Arroyo Grande Quad. 10/11/52, 8.2; 3/25/53, 15.7.

32S/13E-33E2--Reference point--top of wall, elevation 50 feet. 0.3 mile west on State Highway 1 from Arroyo Grande Creek bridge, 500 feet north of highway on dirt road. SE 1/4 Arroyo Grande Quad. 10/11/52, 7.0; 3/25/53, 6.4.

TABLE E-3 (continued)

DEPTHS TO GROUND WATER AT MEASUREMENT WELLS
IN COASTAL HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

32S/13E-33E3--Reference point--hole in pump base, elevation 53.7 feet. West side of Arroyo Grande Creek, 20 feet west of Halcyon Drive, 1.6 miles south of U.S. Highway 101. SE $\frac{1}{4}$ Arroyo Grande Quad.

10/17/52, 13.9	6/15/53, 22.0 P	11/24/53, 14.0
3/25/53, 13.7	6/22/53, 16.2	3/10/54, 12.0
4/ 3/53, 14.2	6/29/53, 24.6 P	6/ 1/54, 12.8
4/ 6/53, 14.3	7/ 6/53, 17.4	7/ 1/54, 15.1
4/13/53, 14.4	7/13/53, 24.1	7/31/54, 31.0
4/20/53, 15.7	7/21/53, 29.7 P	9/ 1/54, 34.5 P
4/27/53, 14.1	7/27/53, 30.1 P	9/30/54, 37.5 P
5/ 4/53, 13.8	8/ 3/53, 24.1	10/30/54, 34.4
5/11/53, 16.8	8/10/53, 31.9 P	11/17/54, 28.7
5/18/53, 14.8	8/17/53, 27.3	1/ 3/55, 13.9
5/25/53, 20.1 P	8/24/53, 33.9 P	1/31/55, 12.8
6/ 1/53, 20.6 P	8/31/53, 36.3 P	3/ 8/55, 13.4
6/ 8/53, 21.5 P	9/ 8/53, 29.8	11/19/55, 38.3

32S/13E-33G1--Reference point--bottom edge of pump base, elevation 62.3 feet. 0.5 mile east of Halcyon, 0.2 mile north of State Highway 1 bridge at Los Berros Creek, 20 feet west of road. SE $\frac{1}{4}$ Arroyo Grande Quad. 4/3/51, 26.9; 11/20/51, 35.2.

32S/13E-33K1--Reference point--bottom of pump base, elevation 52.3 feet. 0.1 mile west of State Highway 1 from bridge at Los Berros Creek, south of highway. SE $\frac{1}{4}$ Arroyo Grande Quad.

4/ 3/51, 25.1	6/ 8/53, 33.6 P	11/24/53, 27.5
11/20/51, 30.9	6/15/53, 33.8 P	2/ 5/54, 26.6 P
3/ 9/53, 24.9	6/22/53, 30.7 P	3/10/54, 23.3
3/17/53, 26.6	6/29/53, 39.8 P	6/ 1/54, 22.0
3/23/53, 30.2 P	7/ 6/53, 31.1 P	7/ 1/54, 39.6 P
3/30/53, 29.8 P	7/13/53, 39.4 P	9/ 1/54, 37.0
4/ 6/53, 22.6	7/21/53, 28.1 P	9/30/54, 35.5
4/13/53, 30.2 P	7/27/53, 30.3 P	8/30/54, 36.7
4/20/53, 24.4	8/ 3/53, 29.7 P	11/17/54, 33.5 P
4/27/53, 23.5	8/10/53, 41.2 P	1/ 3/55, 26.0
5/ 4/53, 34.9 P	8/17/53, 32.8 P	1/31/55, 23.8
5/11/53, 40.1 P	8/24/53, 32.9 P	3/ 8/55, 21.0
5/18/53, 26.6	8/31/53, 44.1 P	11/19/55, 36.1
5/25/53, 35.7 P	9/ 8/53, 35.4 P	11/27/56, 41.7
6/ 1/53, 33.3 P		

TABLE E-2 (continued)

DEPTH TO GROUND WATER AT MEASUREMENT WELLS
IN COASTAL HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

32S/13E-33L2--Reference point--top of concrete slab, elevation 42.1 feet. 0.3 mile south of State Highway 1 and 0.1 mile east of north-south road joining State Highway 1 at Arroyo Grande Creek bridge. SE $\frac{1}{4}$ Arroyo Grande Quad.		
4/ 3/51, 18.7	6/ 1/53, 16.9	8/31/53, 39.7 P
11/20/51, 22.3	6/ 8/53, 28.3	9/ 8/53, 31.7
4/ 7/52, 20.3	6/15/53, 17.8	11/23/53, 18.1
9/27/52, 22.3	6/22/53, 27.2	3/10/54, 13.5
4/ 3/53, 18.6	6/29/53, 26.7	6/ 1/54, 15.9
4/ 6/53, 14.4	7/ 6/53, 18.8	9/30/54, 26.5
4/13/53, 15.5	7/13/53, 24.3	10/30/54, 26.7
4/20/53, 14.8	7/21/53, 29.1	11/18/54, 21.0
4/29/53, 12.9	7/27/53, 21.0	1/31/55, 14.2
5/ 4/53, 19.6	8/ 3/53, 27.1	3/ 8/55, 18.0
5/11/53, 21.8	8/10/53, 26.0	11/19/55, 25.0
5/18/53, 17.5	8/17/53, 27.2	11/27/56, 27.8
5/25/53, 24.4	8/24/53, 38.5 P	

32S/13E-33M2--Reference point--hole in casing, elevation 40 feet. East of
Oceano, 0.3 mile south of State Highway 1 at Arroyo Grande Creek bridge, on
west side of road. SE $\frac{1}{4}$ Arroyo Grande Quad. 9/27/52, 22.4; 3/25/53, 24.8 P.32S/13E-33P1--Reference point--concrete base, elevation 45 feet. 0.6 mile
southeast of Halcyon, 0.5 mile west and 0.2 mile north of southeast corner
of section. SE $\frac{1}{4}$ Arroyo Grande Quad. 3/26/53, 31.3; 3/10/54, 15.0.32S/13E-33P2--Reference point--pipe in pump base, elevation 40 feet. 0.7 mile
southeast of Oceano, 0.5 mile west and 0.1 mile north of southeast corner
of section. SE $\frac{1}{4}$ Arroyo Grande Quad. 9/27/52, 24.2; 3/25/53, 17.7.32S/13E-33Q1--Reference point--notch in side of concrete base, elevation 44.7
feet. 0.8 mile east, thence south on State Highway 1 from Arroyo Grande
Creek bridge, 500 feet west on dirt road. SE $\frac{1}{4}$ Arroyo Grande Quad.
9/26/40, 16.1 3/26/53, 29.5 P 3/10/54, 18.5
10/23/40, 17.8 11/23/53, 19.4 11/17/54, 22.8
9/27/52, 24.232S/13E-34D1--Reference point--notch in concrete slab, elevation 70.9 feet.
0.3 mile north and 0.5 mile east of State Highway 1 bridge and Los Berros
Creek, 300 feet north of road. SE $\frac{1}{4}$ Arroyo Grande Quad.

11/13/50, 16.8	11/24/53, 8.4	9/ 1/54, 20.0 P
4/ 3/51, 3.4	3/10/54, 1.3	11/ 1/54, 16.0
11/20/51, 18.7	4/ 7/54, 1.6	11/17/54, 13.2
4/ 7/52, 1.1	6/ 1/54, 2.9	1/ 2/55, 12.2
9/25/52, 1.5	7/ 1/54, 7.5	1/31/55, 9.2
3/24/53, 1.8	8/ 3/54, 29.0 P	3/ 8/55, 2.4

TABLE E-2 (continued)

DEPTHS TO GROUND WATER AT MEASUREMENT WELLS
IN COASTAL HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

32S/13E-34G1--Reference point--slot in casing, elevation 88.1 feet. 2.1 miles northwest of Berros, 300 feet north of Berros Canyon road, near southwest bank of Los Berros Creek. SE $\frac{1}{4}$ Arroyo Grande Quad.

9/11/50, 13.0	4/7/52, 4.2	11/23/53, 4.4
11/3/50, 5.4	9/25/52, 5.9	3/10/54, 3.8
4/3/51, 4.4	3/24/53, 3.9	11/17/54, 7.0
11/24/51, 7.0		

32S/13E-34J1--Reference point--hole in pump base, elevation 96.8 feet. 1.7 miles northwest of Berros, 150 feet north of Berros Canyon road. SE $\frac{1}{4}$ Arroyo Grande Quad.

11/13/50, 8.7	4/7/52, 6.1	11/23/53, 6.3
4/3/51, 7.6	9/25/52, 7.2	3/10/54, 6.3
11/20/51, 22.3	3/24/53, 7.0	11/17/54, 13.3

32S/13E-34J2--Reference point--top of casing, elevation 90 feet. 1.8 miles northwest of Berros, 150 feet north of Berros Canyon road. SE $\frac{1}{4}$ Arroyo Grande Quad. 9/25/52, 4.3; 3/24/53, 4.4.

32S/13E-34R1--Reference point--top of casing, elevation 100 feet. 1.6 miles northwest of Berros, west of Los Berros Creek bridge. SE $\frac{1}{4}$ Arroyo Grande Quad. 9/25/52, 7.6; 3/24/53, 7.8; 11/24/53, 6.2; 3/10/54, 6.7; 11/17/54, 14.8.

32S/13E-34R3--Reference point--top of casing, elevation 170 feet. 1.7 miles northwest of Berros, 0.3 mile west and 0.1 mile north of the southeast corner of section. SE $\frac{1}{4}$ Arroyo Grande Quad. 4/7/54, 5.5.

32S/14E-7J1--Reference point--pipe in pump base, elevation 345 feet. 1 mile up Los Alisos Canyon road from junction with Tar Springs road, 0.3 mile north of road. NE $\frac{1}{4}$ Arroyo Grande Quad. 3/25/53, 22.7; 3/9/54, 36.2.

32S/14E-17N1--Reference point--hole in pump base, elevation 305 feet. 0.7 mile southeast along Tar Springs road from junction with Los Alisos Canyon road, 0.1 mile north of road. NE $\frac{1}{4}$ Arroyo Grande Quad.

11/10/50, 32.6	4/7/52, 14.2	11/24/53, 22.0
4/3/51, 32.3	9/16/52, 19.6	3/9/54, 22.1
11/19/51, 34.0	3/25/53, 15.9	11/18/54, 20.1

32S/14E-17N2--Reference point--top of casing, elevation 300 feet. 0.6 mile southeast along Tar Springs road from junction with Los Alisos Canyon road, 0.1 mile north of road. NE $\frac{1}{4}$ Arroyo Grande Quad. 9/16/52, 17.0; 3/25/53, 25.4 P.

TABLE E-2 (continued)

DEPTHS TO GROUND WATER AT MEASUREMENT WELLS
IN COASTAL HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

32S/14E-18F1--Reference point--hole in pump base, elevation 295 feet. 0.4 mile north along Los Alisos Canyon road from junction with Tar Springs road, 200 feet west of road. NE $\frac{1}{4}$ Arroyo Grande Quad.

11/10/50, 22.1	4/ 7/52, 16.4	3/ 9/54, 10.0
4/ 3/51, 19.7	9/16/52, 12.4	11/18/54, 15.0
11/19/51, 22.2	3/25/53, 9.0	

32S/14E-18P1--Reference point--under steel cap at ground, elevation 280.4 feet. 200 feet southwest of junction of Tar Springs road, and Los Alisos Canyon road. NE $\frac{1}{4}$ Arroyo Grande Quad. 11/24/53, 8.4; 3/9/54, 7.9; 11/18/54, 9.0.

32S/14E-19A1--Reference point--top of casing, elevation 290.9 feet. 2.5 miles up Tar Springs road from north valley road and 0.2 mile south of Tar Springs road. NE $\frac{1}{4}$ Arroyo Grande Quad.

1/10/50, 18.3	8/24/53, 8.5	9/30/54, 12.7
4/ 3/51, 19.0	8/31/53, 24.7 P	10/30/54, 25.5 P
11/19/51, 20.1	11/24/53, 10.5	11/18/54, 13.9
3/25/53, 28.1 P	3/ 9/54, 11.6	1/ 3/55, 13.2
4/28/53, 6.6	6/ 1/54, 23.0 P	3/ 8/55, 12.8
5/25/53, 7.8	7/ 1/54, 12.8	11/19/55, 20.9
6/22/53, 24.0 P	7/31/54, 25.7 P	11/27/56, 10.5
7/27/53, 24.8 P	9/ 7/54, 17.0	

32S/14E-19D1--Reference point--hole in side of casing, elevation 275 feet. 0.4 mile south and 0.2 mile west of junction of Tar Springs road and Los Alisos Canyon road. NE $\frac{1}{4}$ Arroyo Grande Quad. 3/25/53, 3.3; 11/24/53, 3.4; 3/9/54, 4.6; 11/18/54, 8.8.

32S/14E-19H1--Reference point--hole in casing, elevation 290 feet. 0.3 mile southeast along Tar Springs road from junction with Los Alisos Canyon road. 0.3 mile south of road. NE $\frac{1}{4}$ Arroyo Grande Quad. 9/16/52, 2.8; 3/25/53, 3.2; 11/24/53, 7.5; 3/9/54, 8.9; 11/18/54, 10.2.

11N/34W-19F1--Reference point--hole in top of casing, elevation 325 feet. 1.1 mile southwest of U.S. Highway 101 in Nipomo on road to Nipomo Dumps, 0.2 mile east and 0.4 mile south of northwest corner of section. SE $\frac{1}{4}$ Arroyo Grande Quad. 4/11/53, 196.4; 11/17/54, 190.3.

11N/34W-19Q1--Reference point--top of casing, elevation 305 feet. 2.8 miles from U.S. Highway 101 in Nipomo along Santa Maria Valley road. 0.3 mile west and 0.1 mile north of southeast corner of section. SW $\frac{1}{4}$ Nipomo Quad. 4/11/53, 256.7 P; 11/17/54, 255.3.

TABLE E-2 (continued)

DEPTHS TO GROUND WATER AT MEASUREMENT WELLS
IN COASTAL HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

11N/35W-7A1--Reference point--air gage, elevation 105 feet. On west side of State Highway 1, 0.1 mile due south of northeast corner of section. SE $\frac{1}{4}$ Arroyo Grande Quad. 10/29/53, 81.2; 3/9/54, 70.0; 11/17/54, 76.0.

11N/35W-7R1--Reference point--hole in casing, elevation 145 feet. On east side of S.P.R.R. tracks, 200 feet west and 550 feet north of southeast corner of section. SE $\frac{1}{4}$ Arroyo Grande Quad. 3/9/54, 52.3; 11/17/54, 59.3; 11/29/55, 48.0 (owner); 11/27/56, 62.5.

11N/35W-9P1--Reference point--2-inch capped pipe in concrete, elevation 150 feet. 0.1 mile west of State Highway 1, 0.4 mile east and 0.1 mile north of southwest corner of section. SE $\frac{1}{4}$ Arroyo Grande Quad. 10/28/53, 90.0; 3/9/54, 4.2; 11/17/54, 113.3 P.

12N/35W-27N1--Reference point--hole in casing, elevation 158 feet. 0.9 mile northwest of Berros along Los Berros Canyon road, 250 feet southwest of road. SE $\frac{1}{4}$ Arroyo Grande Quad. 11/24/53, 8.0; 3/9/54, 5.0; 11/17/54, 25.4.

12N/35W-29L2--Reference point--notch in casing, elevation 40 feet. 0.3 mile south along paved road from State Highway 1 bridge at Arroyo Grande Creek, 0.1 mile east of paved road. SE $\frac{1}{4}$ Arroyo Grande Quad. 9/27/52, 20.4; 3/26/53, 13.1; 11/23/53, 9.3; 3/9/54, 9.5; 11/18/54, 14.0.

12N/35W-29N1--Reference point--bottom of cut in casing, elevation 35 feet. 0.8 mile south of State Highway 1 along road which joins highway just east of Arroyo Grande Creek bridge, 200 feet west of road. SE $\frac{1}{4}$ Arroyo Grande Quad.

11/11/50, 11.7	4/ 7/52, 1.9	3/ 9/54, 0.8
4/ 3/51, 6.2	3/26/53, 9.7 P	11/18/54, 8.0
11/20/51, 9.6	11/23/53, 5.0	

12N/35W-29R1--Reference point--top of casing, elevation 230 feet. 1.8 miles south of Oceano on State Highway 1, 0.2 mile east of highway. SE $\frac{1}{4}$ Arroyo Grande Quad. 10/28/53, 101.8; 3/9/54, 101.9; 11/17/54, 105.8.

12N/35W-30K2--Reference point--top of casing, elevation 28 feet. On north side of S.P.R.R. tracks, 0.6 mile south and 0.5 mile west of State Highway 1 bridge at Arroyo Grande Creek. SE $\frac{1}{4}$ Arroyo Grande Quad.

11/11/50, 12.7	9/27/52, 13.3	3/ 9/54, 7.6
11/20/51, 14.8	3/26/53, 7.8	11/18/54, 12.5
4/ 7/52, 5.5	11/23/53, 11.4	

TABLE E-2 (continued)

DEPTHS TO GROUND WATER AT MEASUREMENT WELLS
IN COASTAL HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

12N/35W-30LL--Reference point--cut in casing, elevation 30 feet. In field south of Oceano, 0.2 mile south and 0.6 mile west of northeast corner of section. SE $\frac{1}{4}$ Arroyo Grande Quad.

4/ 3/51, 7.5	9/27/52, 10.3	3/ 9/54, 4.4
11/20/51, 10.2	3/26/53, 6.0	11/18/54, 7.8
4/ 7/51, 3.0	11/23/53, 5.7	

12N/35W-30Pl--Reference point--top of casing, elevation 26 feet. 0.5 mile south of State Highway 1 on road joining highway at east end of Arroyo Grande Creek bridge, 0.2 mile north and 0.1 mile west of southeast corner of section. SE $\frac{1}{4}$ Arroyo Grande Quad.

11/11/50, 8.8	3/26/53, 3.4	3/ 9/54, 1.0
11/29/51, 6.8	11/23/53, 1.5	11/18/54, 4.0
4/ 7/52, 1.9		

12N/35W-32C2--Reference point--top of casing, elevation 52 feet. 0.9 mile south and 0.3 mile southeast of State Highway 1 on road joining highway at east side of Arroyo Grande Creek bridge, southwest of road. SE $\frac{1}{4}$ Arroyo Grande Quad. 10/28/53, 20.4; 3/9/54, 15.7; 11/17/54, 18.7.

12N/35W-32D2--Reference point--hole in casing, elevation 26 feet. 100 feet west of S.P.R.R. tracks and 0.2 mile north of underpass to Dune Lakes, 100 feet south and 100 feet east of northwest corner of section. SE $\frac{1}{4}$ Arroyo Grande Quad.

4/ 3/51, 2.6	10/11/52, 3.4	3/ 9/54, flowing
11/20/51, 6.9	3/25/53, 5.7	11/17/54, 4.8
4/ 7/52, flowing	11/23/53, 2.3	

12N/35W-33J1--Reference point--top of casing, elevation 295 feet. Southwest of Berros on south side of dirt road, 0.3 mile north and 0.1 mile west of the southeast corner of section. SE $\frac{1}{4}$ Arroyo Grande Quad. 10/28/53, 107.0; 3/9/54, 107.6; 11/17/54, 112.9.

12N/35W-34G1--Reference point--north edge of base plate, elevation 190 feet. In Berros, 0.4 mile south and 0.3 mile west of northeast corner of section. SE $\frac{1}{4}$ Arroyo Grande Quad. 3/29/53, 28.6.

12N/35W-34G3--Reference point--top of casing, elevation 187.9 feet. 0.4 mile west of Berros on Los Berros Canyon road, 0.1 mile south of road. SE $\frac{1}{4}$ Arroyo Grande Quad.

11/12/50, 36.8	9/25/52, 28.5	3/ 9/54, 29.9
11/20/51, 44.0	3/24/53, 24.7	11/17/54, 53.8
4/ 7/52, 20.6	11/24/53, 35.7	

TABLE E-2 (continued)

DEPTHS TO GROUND WATER AT MEASUREMENT WELLS
IN COASTAL HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

12N/35W-34H1--Reference point--edge of pump base above notch in concrete slab, elevation 201.7 feet. In Berros, 300 feet south of Los Berros Canyon road, 0.4 mile south and 0.1 mile west of northeast corner of section. SE $\frac{1}{4}$ Arroyo Grande Quad.

11/12/50, 46.7	3/24/53, 37.1	11/12/54, 48.1
11/20/51, 50.0	11/24/53, 47.0	11/19/55, 59.0
4/ 7/52, 28.4	3/ 9/54, 42.7	11/27/56, 50.8
9/25/52, 42.4		

12N/35W-34K1--Reference point--top of casing, elevation 200 feet. 0.2 mile south of Los Berros Canyon road, 0.3 mile west of Berros. SE $\frac{1}{4}$ Arroyo Grande Quad. 9/27/52, 28.3; 3/24/53, 28.3; 11/24/53, 35.9; 3/9/54, 28.8; 11/17/54, 40.6.

12N/35W-34N1--Reference point--hole between wood blocks, elevation 305 feet. On north side of dirt road 0.1 mile east and 0.3 mile north of southwest corner of section. SE $\frac{1}{4}$ Arroyo Grande Quad. 10/28/53, 114.8.

12N/35W-35F1--Reference point--hole in casing, elevation 217.3 feet. 0.4 mile east of Berros, 35 feet south of Berros Canyon road. SE $\frac{1}{4}$ Arroyo Grande Quad. 9/25/52, 43.3; 3/24/52, 44.1 P; 11/24/53, 46.0; 3/8/54, 43.5; 11/17/54, 46.2.

12S/35W-35F2--Reference point--crack under pump base, elevation 220 feet. East of Berros, 0.3 mile east on Berros Canyon road from crossing of abandoned Pacific Coast Railroad right of way, 130 feet south of road. SE $\frac{1}{4}$ Arroyo Grande Quad. 9/25/52, 36.4; 3/24/53, 36.6.

12N/35W-35G1--Reference point--top of casing, elevation 230 feet. 0.8 mile east of Berros, 100 feet south of Los Berros Canyon road. SE $\frac{1}{4}$ Arroyo Grande Quad. 9/25/52, 47.0; 3/24/53, 49.0; 11/27/56, 49.4.

12N/35W-35K1--Reference point--top of casing, elevation 232.9 feet. 0.9 mile east of Berros, 120 feet south of Los Berros Canyon road. SE $\frac{1}{4}$ Arroyo Grande Quad.

11/13/50, 47.4	4/ 7/54, 43.1	1/ 3/55, 47.9
4/ 3/51, 46.9	5/ 3/54, 44.3	1/31/55, 46.5
11/20/51, 49.0	9/ 1/54, 47.6	3/ 8/55, 45.2
4/ 7/52, 31.3	9/30/54, 53.5	11/19/55, 64.0
3/24/53, 42.1 P	11/ 1/54, 57.5	
11/24/53, 47.0	11/12/54, 66.9	

APPENDIX E

TABLE E-3

DEPTHS TO GROUND WATER MEASUREMENT WELLS
IN CARRIZO PLAIN HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

28S/18E-20C1--Reference point--top of casing, elevation 2,350 feet. 4.0 miles west and 8.0 miles north of Simmler. NE $\frac{1}{4}$ La Panza Quad. 4/20/54, 48.7.

28S/18E-28H1--Reference point--hole in casing, elevation 2,430 feet. 2.7 miles west and 7.8 miles north of Simmler. NE $\frac{1}{4}$ La Panza Quad. 4/22/54, 24.7; 11/21/54, 25.5.

29S/17E-13R1--Reference point--hole in pump base, elevation 2,038 feet. 6.0 miles west and 3.2 miles north of Simmler. NE $\frac{1}{4}$ La Panza Quad. 10/21/53, 73.5 P; 3/12/54, 26.3; 11/21/54, 37.9.

29S/17E-25J1--Reference point--cement block beneath pump, elevation 2,053 feet. At junction of State Highway 178 and Cholame Road. SE $\frac{1}{4}$ La Panza Quad. 10/21/53, 58.8; 3/12/54, 58.5.

29S/18E-16M1--Reference point--top of casing, elevation 2,080 feet. 4.1 miles west and 2.5 miles north of Simmler. NE $\frac{1}{4}$ La Panza Quad. 10/21/53, 37.1; 11/21/54, 36.5.

29S/18E-20E1--Reference point--hole in tin cover, elevation 2,034 feet. 4.9 miles west and 2.6 miles north of Simmler. NE $\frac{1}{4}$ La Panza Quad. 10/21/53, 17.0; 3/12/54, 17.8; 11/21/54, 18.6.

29S/18E-21P1--Reference point--hole between wood blocks, elevation 2,040 feet. 3.6 miles west and 2.1 miles north of Simmler. NE $\frac{1}{4}$ La Panza Quad. 10/21/53, 32.8; 3/12/54, 34.0; 11/21/54, 34.8.

29S/18E-28K1--Reference point--top of concrete beneath pump base, elevation 2,020 feet. 3.5 miles west and 1.4 miles north of Simmler. SE $\frac{1}{4}$ La Panza Quad. 3/12/54, 36.5; 11/21/54, 38.6.

29S/18E-28L1--Reference point--top of wood blocks beneath pump, elevation 2,020 feet. 3.7 miles west and 1.4 miles north of Simmler. SE $\frac{1}{4}$ La Panza Quad. 10/13/53, 27.2; 3/12/54, 27.1; 11/21/54, 29.6.

29S/18E-29E1--Reference point--top of casing, elevation 2,020 feet. 5.0 miles west and 1.6 miles north of Simmler. SE $\frac{1}{4}$ La Panza Quad. 10/21/53, 24.0; 3/12/54, 19.4; 11/21/54, 25.2.

29S/19E-31F1--Reference point--top of wood boards, elevation 2,100 feet. 0.5 mile east and 0.7 mile north of Simmler. SW $\frac{1}{4}$ Simmler Quad. 9/21/54, 10.0.

TABLE E-3 (continued)

DEPTH TO GROUND WATER AT MEASUREMENT WELLS
IN CARRIZO PLAIN HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

30S/18E-1DL--Reference point--top of casing, elevation 2,005 feet. 0.9 mile west of Simmler, 100 feet south of State Highway 178. SE $\frac{1}{4}$ La Panza Quad. 10/20/53, 33.4; 3/12/54, 32.2; 11/21/54, 33.6.

30S/18E-1L1--Reference point--top of casing, elevation 1,995 feet. 0.6 mile west and 0.6 mile south of Simmler. SW $\frac{1}{4}$ Simmler Quad. 10/20/53, 141.0 P; 3/12/54, 21.1; 11/21/54, 21.3.

30S/18E-2DL--Reference point--top of casing, elevation 1,997 feet. 2.0 miles west of Simmler, 50 feet south of State Highway 178. SE $\frac{1}{4}$ La Panza Quad. 10/21/53, 19.2; 3/12/54, 19.0; 11/21/54, 19.0.

30S/18E-2NL--Reference point--top of casing, elevation 1,035 feet. 2.1 miles west and 0.8 mile south of Simmler. SE $\frac{1}{4}$ La Panza Quad. 10/21/53, 17.9; 3/12/54, 40.0 P; 11/21/54, 17.9.

30S/18E-3DL--Reference point--top of casing, elevation 2,000 feet. 2.9 miles west of Simmler, 30 feet south of State Highway 178. SE $\frac{1}{4}$ La Panza Quad. 10/21/53, 30.6; 3/12/54, 16.7; 11/21/54, 21.5.

30S/18E-13M1--Reference point--hole in casing, elevation 1,980 feet. 1.1 miles west and 2.8 miles south of Simmler. SE $\frac{1}{4}$ La Panza Quad. 10/20/53, 13.5; 11/21/54, 12.2.

30S/18E-14A2--Reference point--top of casing, elevation 1,980 feet. 1.2 miles west and 2.1 miles south of Simmler. SE $\frac{1}{4}$ La Panza Quad. 10/20/53, 12.2; 11/21/54, 12.2.

30S/19E-29M2--Reference point--hole in pump base, elevation 1,943 feet. 1.1 miles east and 4.4 miles south of Simmler. SE $\frac{1}{4}$ Simmler Quad. 10/13/53, 12.4; 3/12/54, 12.3; 11/21/54, 13.5.

31S/19E-24H1--Reference point--top of casing, elevation 1,970 feet. 1.1 miles west and 1.7 miles north of Painted Rock Ranch. NW $\frac{1}{4}$ Caliente Mountain Quad. 3/20/53, 20.8; 3/12/54, 19.8; 11/21/54, 19.9.

31S/20E-4H1--Reference point--crack between wood blocks, elevation 1,975 feet. 1.9 miles east and 1.3 miles south of Painted Rock Ranch. NE $\frac{1}{4}$ Caliente Mountain Quad. 10/13/53, 9.0; 3/12/54, 12.8; 11/21/54, 12.8.

32S/21E/18A1--Reference point--top of casing, elevation 1,955 feet. 6.1 miles east and 3.3 miles south of Painted Rock Ranch. NW $\frac{1}{4}$ Caliente Mountain Quad. 3/30/53, 33.5; 3/12/54, 33.3; 11/21/54, 33.6.

TABLE E-3 (continued)

DEPTHS TO GROUND WATER AT MEASUREMENT WELLS
IN CARRIZO PLAIN HYDROLOGIC UNIT

(Depths to water in feet measured from reference point)

32S/22E-32L1--Reference point--top of casing, elevation 2,035 feet. 1.0 mile east and 1.6 miles west of Traver Ranch. Midway Peak, SW Quad. 10/13/53, 63.3; 3/12/54, 58.1; 11/21/54, 58.4.

APPENDIX F

RECORDS OF MINERAL ANALYSES
OF SURFACE AND GROUND WATER SUPPLIES
IN SAN LUIS OBISPO COUNTY AND VICINITY

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RECORDS OF MINERAL ANALYSES
OF SURFACE AND GROUND WATER SUPPLIES
IN SAN LUIS OBISPO COUNTY AND VICINITY

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TABLE F-1

MINERAL ANALYSES OF SURFACE WATERS
IN SAN LUIS OBISPO COUNTY² AND VICINITY

Sample Name	Station and map reference number	Date at Time feet	Dis- charge second/ feet	Expo ⁶ at 25°C	pH	Mineral constituents in equivalents per million	parts per million equivalents per million	Total : hard- solved solids ppm : ppm :									
								Ca ²⁺	Mg ²⁺	K ⁺	CO ₃ ²⁻	HCO ₃ ⁻	Total				
UPPER SALINAS UNIT																	
Atascadero Creek	At State Hwy. Bridge 49-49, U.S. Rt. #466 SLO-24	2-13-54 1705	65.4	233	8.15	26 1.03	10 0.85	2 0.40	0 0.03	0 0	110 0.53	25 0.05	4 0.07	0.2 0.00	18 1.07	16	
Cholame Creek	At County Bridge, 1 Mi. So. of Park- field M-3	4-1-54 0930	2+	957	8.3	49 2.45	56 4.65	116 5.06	2 0.07	0 0	362 6.05	184 3.83	82 2.35	0.3 0.04	0.92 683	355	41
Cholame Creek	At County Bridge Above Cholame SLO-23	10-31-53 1035	0.5	2,810	8.3	84 4.2	120 9.90	380 16.50	11 0.28	0 0	464 7.6	588 12.22	393 11.1	0.8 0.03	3.10 645	705	53
Cholame Creek	At State Hwy. Bridge, 3 1/4 Mi., NE of Shandon SLO-21	2-14-54 1230	100	972	7.9	49 2.05	30 2.15	115 5.00	8 0.21	0 0	214 3.05	124 2.58	7 3.5	0.3 0.12	0.60 645	245	50
Comastri Canyon Creek	At Creston- Sunrise Rd. Bridge SLO-18	3-21-54 1350	14	410	7.8	31 1.57	16 1.28	21 1.35	2 0.07	0 0	148 2.43	40 0.83	24 0.96	0.3 0.08	0.05 235	142	32
Estreila Creek	At Hillman Ranch Crossing, 2 Mi. Below River Grove SLO-27	10-31-54 1210	5d	1,327	8.2	84 4.2	68 5.65	242 10.5	9 0.23	0 0	570 9.35	286 6.16	156 4.4	0.7 0.03	0.95 1,171	493	51
Estreila Creek	At Estrella County Bridge SLO-3	10-31-53 1140	1-	1,350	8.25	74 3.7	59 4.9	163 7.10	2 0.23	0 0	293 6.45	217 4.52	138 3.9	0.7 0.05	0.53 902	430	45

TABLE F-1 (continued)

MINERAL ANALYSES OF SURFACE WATERS
IN SAN LUIS OBISPO COUNTY AND VICINITY

Stream name	Station and map reference number	Date	Dis- charge at second/ feet	$\text{EC} \times 10^6$	pH	Mineral constituents in equivalents per million						F ppm	B ppm	B solved solids ppm	Total hard- ness as CaCO ₃ ppm	Total dis- solved solids ppm	Total per cent		
						Ca ⁺	Mg ²⁺	K ⁺	Na ⁺	CaO	MgO								
Ettrella Creek	At State Hwy. #41 Bridge at River Grove 2-30	10-31-53	3d	1,490	8.2	70 3.05	54 4.045	196 8.50	9 0.23	0	570 9.35	181 3.03	117 0.03	0.7	0.84	832	397	51	
Fernandez Creek	At Creston- Simler Rd. Bridge SLO-17	3-21-54 1345	8d	354	7.8	30 1.048	14 1.11	29 1.24	0	137 2.025	14 0.90	28 0.78	Tr. Tr.	0.3	0.0	223	130	32	
Huerhuero Creek	At county bridge NW of Genesee School SLO-2	3-23-54 1430	1.5d	944	8.25	72 3.06	39 3.25	108 4.68	3 0.08	0	323 5.3	104 2.16	128 3.09	9 0.14	0.85	667	342	40	
East Br. Huerhuero Creek	At Galf Canyon Rd. Bridge SLO-16	3-21-54 ^c 1310	5d	153	7.5	14 0.22	9 0.75	14 0.59	2 0.05	0	66 1.09	0 0	18 0.51	2 0.04	0.10	83	48	27	
Middle Br., Huerhuero Creek	At Calf Canyon Rd. Bridge SLO-15	3-23-54 ^c 1300	2d	300	7.9	27 1.35	2 0.75	24 1.04	2 0.08	0	114 1.07	16 0.87	30 0.94	4 0.06	0.1	170	105	32	
Nacimiento River	At S.L.O.- Monterey County Line M-1	2-15-54 1130	562	175	7.9	16 0.88	9 0.75	5 0.21	0.6 0.015	0	85 1.4	2 0.18	4 0.1	0.9 0.014	0.1	0.00	104	78	12
Nacimiento River	At staff gag ^a S.L.O.- Monterey County Line M-2	6-23-54 1200	2.5	380	8.4	43 2.63	16 1.33	16 0.68	1 0.03	2	173 2.84	34 0.70	12 0.34	11 0.18	0.0	0.10	215	168	17
Nacimiento	Near San River	2-14-54 1550	5,000	146	7.35	17 0.85	6 0.52	4 0.18	1 0.03	0	70 1.15	16 0.33	2 0.05	0.2	0.00	135	68	12	

TABLE F-1 (continued)

**MINERAL ANALYSES OF SURFACE WATERS
IN SAN LUIS OBISPO COUNTY^a AND VICINITY**

Station b Name	Latitude and app- earance Number	Altitude in feet	Dis- charge in sec- onds	Elec- tric charge in milli- volts	Mineral constituents in equivalents per million	Parts per million				Total dissolved solids ppm	Total solids ppm	Total hard- ness ppm
						Mg ²⁺	K	CO ₃	Ca ²⁺			
Paso Robles 1-5 Creek	2°10'54" 1430	0.1	1,086	7.07	50 2.92	25 6.37	147 0.08	2 0	0 0	326 5.35	193 3.97	109 0.02
Passo Robles Creek	At U.S. Hwy. #101 Bridge SL0-22	200	185	7.06	22 1.01	8 0.62	6 0.28	2 0.04	0 0	85 1.4	21 0.44	205 0.05
Paso Robles Creek	At State Hwy. #178 Bridge SL0-11	—	825	8.00	74 2.70	42 2.45	50 2.18	— —	0 0	222 3.65	148 1.24	202 0.10
Rincon Creek	At State Hwy. #178 Bridge SL0-12	1515	639	7.09	62 2.01	36 2.35	25 1.08	2 0.06	0 0	299 4.9	193 1.46	202 0.05
Salinas River	Near Bradley M-2	3-17-54 1600	—	234	7.08	36 1.3	10 0.85	3 0.03	0 0	197 1.75	19 0.29	146 0.06
Salinas River	At San Miguel Bridge SL0-26	2-12-54 1500	29 ^d	2,150	8.03	28 2.9	32 3.25	127 5.50	4 0.09	342 5.06	189 3.75	182 0.04
Salinas River	At San Miguel Bridge SL0-28	2-14-54 1445	353	435	7.06	50 2.05	11 0.95	16 0.69	2 0.03	168 2.75	27 2.02	175 0.03
Salinas River	At Paso Robles 3-29	4-13-51	—	85 ^e	7.06	— —	— —	— —	— —	215 5.16	— —	— —
Salinas River	At Paso Robles 3-29	5-7-51	—	758	8.02	29 2.94	120 1.88	— —	19 0.64	259 4.24	105 1.24	102 0.02
Salinas River	At Paso Robles 3-29	6-6-51 1500	1,012	7.04	— —	— —	— —	— —	— —	244 5.64	— —	— —
Salinas River	At Paso Robles 3-29	12-19-51 1300	617	7.06	— —	— —	— —	— —	— —	223 3.82	25 0.99	— —

^a See section 2.^b See section 2.^c See section 2.^d See section 2.^e See section 2.^f See section 2.^g See section 2.^h See section 2.ⁱ See section 2.^j See section 2.^k See section 2.^l See section 2.^m See section 2.ⁿ See section 2.^o See section 2.^p See section 2.^q See section 2.^r See section 2.^s See section 2.^t See section 2.^u See section 2.^v See section 2.^w See section 2.^x See section 2.^y See section 2.^z See section 2.

TABLE F-1 (continued)

MINERAL ANALYSES OF SURFACE WATERS
IN SAN LUIS OBISPO COUNTY AND VICINITY

Station number	Date and time	Dis- charge at 25°C	pH	Mineral constituents in equivalents per million						Total solids ppm	Total hard- ness ppm	Total dissolved solids ppm	Total per cent		
				Ca ⁺	Mg ⁺	Na ⁺	K ⁺	CO ₃ ²⁻	HCO ₃ ⁻						
Salinas River 3-29	At Paso Robles 1-7-52 1430	—	8.3	7.6	—	—	—	—	—	174 2.86	—	—	—	211	
Salinas River 3-29	At Paso Robles 2-13-52 1245	—	56.3	7.3	—	—	—	—	—	243 3.98	—	—	—	282	
Salinas River 3-29	At Paso Robles 3-4-52 0920	—	714	8.0	—	—	—	—	—	266 4.96	—	—	—	305	
Salinas River 3-29	At Paso Robles 4-1-52 0915	400d	556	8.0	—	—	—	—	—	237 3.88	—	—	—	280	
Salinas River 3-29	At Paso Robles 5-13-52 0900	—	673	7.5	83 4.24	22 2.98	22 1.70	1 0.02	0 0	263 4.64	185 2.39	40 1.13	5 0.97	326	
Salinas River 3-29	At Paso Robles 1-5-53 1200	50d	536	7.4	—	—	—	—	—	239 3.92	—	32 0.90	—	272	
Salinas River 3-29	At Paso Robles 2-16-53 1100	15d	804	7.6	—	—	—	—	—	290 4.76	—	39 1.07	—	233	
Salinas River 3-29	At Paso Robles 3-9-53 1230	10d	707	7.64	—	—	—	—	—	305 5.0	—	42 1.18	—	360	
Salinas River 3-29	At Paso Robles 3-21-53 1245	—	693	7.6	—	—	—	—	—	22 0.72	251 4.12	40 1.13	—	321	
Salinas River 3-29	At Paso Robles 5-4-53 1730	30	640	7.6	72 3.59	28 2.30	26 1.65	2 0.05	10 0.32	261 4.28	105 2.18	44 0.96	0.4 0.03	225	
Salinas River 3-29	At Paso Robles 2-13-54 1545	35.5	725	7.8	82 4.1	31 2.53	26 1.58	3 0.04	0 0	265 4.35	129 2.68	45 1.00	0.3 0.06	315	
Salinas River 3-29	At Paso Robles 2-8-54 1330	20	734	2.0	—	—	—	—	—	212 —	—	42 —	—	254	
													0.16	—	25

TABLE F-1 (continued)

MINERAL ANALYSES OF SURFACE WATERS
IN SAN LUIS OBISPO COUNTY^a AND VICINITY

Stream name	Station number	Date	Dis- charge at second- feet	$\text{EC} \times 10^6$	pH	Mineral constituents in equivalents per million						Total ppm	Total ppm	Per cent dissolved solids	Hard- ness ppm	Per cent CaCO ₃ Na ppm		
						Ca ²⁺	Mg ²⁺	K	Na	CO ₃ ²⁻	HCO ₃ ⁻	SO ₄ ²⁻	Cl ⁻	NO ₃ ⁻				
Salinas River	At Paso Robles 3-29	3-22-54 1300	—	450	8.0	—	—	—	—	0	205	—	15	—	0.06	—	192	21
Salinas River	At Paso Robles 3-29	4-13-54 1130	1404	664	8.0	—	—	—	—	7	254	—	22	—	0.14	—	296	22
Salinas River	At Paso Robles 3-29	5-4-54 1130	10	711	8.0	77 3.84	20 1.07	—	—	—	—	—	—	—	—	—	433	23
Salinas River	At Templeton Bridge SLO-26	2-13-54 —	300 ^d	227	7.4	24 1.20	8 0.70	7 0.33	1 0.03	0	272 4.48	32 0.90	4 0.06	6.5	0.12	433	315	
Salinas River	At Eureka Bridge Atascadero SLO-28	10-23-53 1015	10	617	7.95	60 3.0	23 2.60	22 1.25	2 0.01	0	250 4.10	76 1.59	22 0.9	4.5	0.03	386	280	
Salinas River	At Eureka Bridge Near Atascadero SLO-28	2-14-54 1200	316	228	7.25	24 1.02	15 1.22	22 0.53	2 0.05	0	107 1.75	37 0.78	11 0.3	5 0.06	0.2	6.00	213	18
Salinas River	At Calf Canyon Br. Near Santa Margarita 3-25	2-14-54 1015	250 ^d	232	7.4	20 1.0	16 1.03	8 0.36	2 0.05	0	28 1.6	27 0.61	7 0.2	5 0.08	0.3	0.03	213	13
Salinas River	Near Pozo 3-23	10-22-53 1545	24	555	8.2	48 2.04	28 2.35	27 1.59	1 0.03	0	180 2.95	114 2.37	18 0.5	2 0.04	0.4	0.04	374	237
San Juan Creek	At State Hwy. #41 Bridge Near Shandon SLO-20	10-31-54 1300	0.5	1,298	8.1	104 5.02	37 3.05	172 7.50	5 0.12	0	418 6.85	278 5.79	110 3.1	2 0.02	0.6	0.26	848	412

TABLE F-1 (continued)

**MINERAL ANALYSES OF SURFACE WATERS
IN SAN LUIS OBISPO COUNTY AND VICINITY**

Stream name	Station and map reference number	Date	Dis- charge at second- feet	pH	EC ^a /06 ^b	Mineral constituents in equivalents per million	parts per million	Total										
								Ca ^c	Mg ^c	Na ^c	K ^c	HCO ₃ ^d	SO ₄ ^d	Cl ^d	NO ₃ ^d	P ^e	B ^e	Dissolved solids ^f	Hard- water^{g}	Total^{h}
San Juan Creek	At State Hwy. #178 Bridge SL0-19	1-28-54 1600	2d	976	8.1	104 5.2	40 3.30	66 2.89	2 0.06	0 0	238 3.9	300 6.25	20 0.85	2 0.04	0.6 0.13	757	425	25
San Juan Creek	At State Hwy. #178 Bridge SL0-19	3-21-54 1410	50d	318	7.8	26 1.40	12 0.97	18 0.80	2 0.03	0 0	94 1.54	66 1.38	12 0.33	1 0.01	0.1 0.10	222	116	25
San Marcos Creek	At Oak Flat Rd. Bridge SL0-29	2-14-54 1425	--	562	7.9	62 2.1	25 1.21	28 1.21	4 0.09	0 0	128 2.1	162 2.38	25 0.7	6 0.10	0.15 0.10	425	260	19
San Marcos Creek	At Oak Flat Rd. Bridge SL0-29	3-25-54 0935	0.4d	1,820	8.1	162 8.15	100 8.30	92 4.30	3 0.07	0 0	324 5.31	656 13.40	87 2.48	0 0	0.5 0.20	1,226	822	21
Santa Margarita Creek	At U.S. Hwy. #101 Bridge Stream mile 1.9 SL0-14	2-13-53 1720	70	277	7.6	20 1.10	13 1.10	13 0.58	2 0.04	0 0	95 1.55	32 0.89	21 0.67	5 0.08	0.2 0.01	285	105	21
Trout Creek	At State Hwy. #178 Bridge SL0-13	10-22-53	1.6	604	8.5	20 3.05	36 2.95	12 0.54	2 0.06	0 0	287 4.7	71 1.47	12 0.35	1 0.02	0.1 0.01	386	322	8
COASTAL UNIT																		
<u>Cambria Subunit</u>																		
Arroyo De la Cruz Creek	At State Hwy. #1 Bridge SL0-32	2-16-54 1630	Storm runoff	153	7.4	15 0.76	10 0.84	5 0.22	2 0.05	0 0	84 1.38	11 0.23	8 0.21	1 0.01	0.1 0.05	90	80	32
Arroyo De la Cruz Creek	Near San Simeon SL0-6	5-25-54 1340	Storm runoff	139	7.6	18 0.90	10 0.80	3 0.14	1 0.04	0 0	110 1.8	14 0.29	5 0.05	0.1 0.08	138	85	7	

TABLE F-1 (continued)

**MINERAL ANALYSES OF SURFACE WATERS
IN SAN LUIS OBISPO COUNTY^a AND VICINITY**

Stream name	Station and map reference number	Date	Discharge	pH	Mineral constituents in equivalents per million						Total dissolved solids ppm	Total hardness ppm	
					CeO	MgO	K	Na	HCO ₃	SO ₄	Cl	NO ₃	
<u>Cambrian Shale</u>													
Arcos De La Cruz Creek	Near San Simeon SLO-6	7-28-54f	0.5d	4.95	7.0	50	23	12	252	27	18	0.0	0.15
Burnett Creek	At Upper Burnett Cr. Dam Site SLO-33	7-29-54f	0.2	505	8.1	39	40	12	4.24	0.51	0.0	0.0	0.15
Cayucos Creek	At State Hwy. #1 Bridge SLO-37	3-22-54f	15d	577	8.3	36	40	20	5.03	0.03	25	0.02	0.10
Old Creek	At State Hwy. #1 Bridge SLO-38	3-22-54f	20d	648	8.3	67	33	30	5.23	0.03	80	0.05	0.05
San Carpinteria Creek	1 mi. above State Hwy. #1 SLO-31	7-28-54	5	473	8.0	68	20	15	4.45	0.02	47	0.02	0.10
San Simeon Creek	At State Hwy. #1 SLO-24	7-10-54f	1	610	8.1	54	29	19	4.82	0.03	41	0.02	0.15
San Simeon Creek	At State Hwy. #1 SLO-24	3-16-54	175d	218	7.9	12	12	7	0.29	0.03	110	0.10	0.20
San Simeon Creek	2.8 mi. upstr. from State Hwy. #1 Bridge SLO-25	3-16-54	175d	200	8.1	12	12	7	0.30	0.04	110	0.10	0.13

TABLE F-1 (continued)

MINERAL ANALYSES OF SURFACE WATERS
IN SAN LUIS OBISPO COUNTY^a AND VICINITY

Stream name	Station b and map reference number	Date	Dis- charge second- feet	pH	ECX10 ⁶	Mineral constituents in equivalents per million	parts per million	F	B	Total solids	hard- ness	dis- solved solids	NaCl	CaCO ₃	Na ₂ SO ₄	Pb			
Cambria Subunit (continued)																			
Santa Rosa At Cambria Creek SL0-7																			
Santa Rosa	At Cambria Creek SL0-7	8-27-53 1410	4-5d	899	8.2	29 3.94	64 5.26	30 1.30	2 0.05	430 7.05	121 2.73	27 0.76	0.2	0.22	567	460	12		
Santa Rosa	At Cambria Creek SL0-7	2-13-54 1600	270	533	7.5	25 1.75	20 1.67	15 0.65	2 0.05	127 2.9	27 0.56	16 0.45	0.3	0.03	253	171	16		
Santa Rosa	At Cambria Creek SL0-7	7-18-54 1250	2d	866	8.1	63 3.15	62 5.08	32 1.40	2 0.05	0 0	292 6.04	118 2.41	30 0.85	0.1	0.12	588	430	24	
Santa Rosa	Above Santa Rosa School SL0-36	7-18-54f 1230	1	830	7.9	72 3.60	51 4.22	25 1.09	2 0.04	0 0	271 6.07	113 2.30	21 0.58	0.1	0.10	563	391	12	
Toro Creek	1/2 mi. above State Hwy. #1 SL0-8	8-27-53g 1320	2	901	8.3	60 2.99	56 5.43	40 1.74	1 0.03	10 0.33	388 1.25	60 2.14	16 0.00	0.1	0.10	534	421	17	
Toro Creek	1/2 mi. above State Hwy. #1 SL0-8	3-22-54f 1130	18.7	577	8.0	45 2.25	28 2.14	21 0.92	1 0.03	0 0	275 4.50	55 1.24	27 0.75	0.1	0.05	324	220	10	
San Luis Obispo Subunit																			
Chorro Creek	At Baywood Park Rd., Bridge SL0-42	3-10-54 1330	150d	356	7.9	18 0.9	30 2.5	18 0.79	2 0.06	0 0	192 3.15	21 0.25	8 0.6	0.2	0.08	253	170	19	
Chorro Creek	At foot near Banning Sch. SL0-42	8-27-53g 1130	--	1,080	8.3	27 1.85	102 6.39	48 2.09	4 0.11	12 0.40	516 8.49	56 1.27	77 0.17	10 0.16	0.3	0.11	627	512	17

TABLE F-1 (continued)

MINERAL ANALYSES OF SURFACE WATERS
IN SAN LUIS OBISPO COUNTY AND VICINITY

Station name	Reference number	Date	Dis- charge at second foot	EC at 25°C foot	pH	Mineral constituents in equivalents per million	Parts per million	Total	Total
								F	B
<u>San Luis Obispo Subunit</u> <u>(continued)</u>									
Laguna Lake ^a	At City of SL-O Pumping Pl., SL-O-48	9-28-54 ^f 1120	—	730	7.4	21 1.54	53 4.39	48 2.10	2 0.05
Lake Osos Creek	At Los Osos Valley Rd., Br. SL-O-45	3-30-54 ^f 1445	30d	344	8.0	28 1.39	22 1.05	16 0.71	3 0.07
Morro Creek	At State Hwy. #1 Bridge SL-O-39	3-30-54 ^f 1420	200d	325	7.7	28 1.39	17 1.38	15 0.64	1 0.04
Morro Creek	At State Hwy. #1 Bridge SL-O-39	7-18-54 ^f 1130	0.1	1,520	8.0	72 3.60	116 9.55	78 3.40	1 0.02
Morro Break	At Corte Alto Dam Site SL-O-40	3-30-54	100d	276	8.1	27 1.35	11 0.49	1 0.02	0 0
Morro Creek	At Corte Alto Dam Site SL-O-40	7-18-54 ^f 1115	0.4	496	8.2	50 2.48	26 2.13	19 0.81	1 0.02
Pismo Creek	Near Hadley Tower SL-O-52	11-24-52 1530	1 ^d	1,127	8.2	105 5.25	81 6.65	46 2.00	2 0.06
Pismo Creek	Near Hadley Tower SL-O-52	3-24-53 1200	2+	1,127	8.1	97 4.84	88 7.23	32 1.70	1 0.02

TABLE F-1 (continued)

MINERAL ANALYSES OF SURFACE WATERS
IN SAN LUIS OBISPO COUNTY AND VICINITY

Stream name	Station ^b and map reference number	Date	Discharge at 25°C	ECx10 ⁶	pH	Mineral constituents in equivalents per million						F	B	ppm	Total : dissolved solids : CaCO ₃ : Na : ppm		
						Ca ^c	Mg ^c	Na	K	CO ₃	HCO ₃	Cl	SO ₄	NO ₃			
San Luis Obispo Subunit (continued)																	
Pismo Creek	Near Hadley Tower SL0-52	7-14-53 0930	1-	1,122	8.3	60 2.99	110 9.04	22 0.2	29 0.01	505 0.96	8.28	153 3.19	471 10.33	11 0.18	0.14 --	771 602	14
Pismo Creek	Near Hadley Tower SL0-52	2-12-54 1715	2.05 ^d	1,215	8.15	110 5.5	52 7.45	2.07 2.25	2.07 0.07	520 9.35	3.70	176 1.5	52 0.29	0.6 0.11	851 647	15	
Pismo Creek	Near Hadley Tower SL0-52	2-13-54 1400	5+ ^d	984	7.5	90 4.5	75 2.40	17 0.45	17 0.45	46.9 7.7	16.9 2.8	64 3.53	52 0.08	0.4 0.05	778 534	18	
Pismo Creek	Near Hadley Tower SL0-52	3-30-54 ^f 0905	150 ^d	321	7.6	26 1.32	18 0.58	13 0.58	4 0.10	28 0.59	28 0.59	13 0.36	5 0.08	0.1 0.1	162 143	16	
Pismo Creek	Near Hadley Tower SL0-52	5-12-54 1400	6	1,070	8.4	107 5.35	81 6.72	2.15 0.04	1 0.04	228 8.67	170 3.55	16 1.3	18 0.29	0.35 0.09	772 604	15	
Pismo Creek	Near Hadley Tower SL0-52	8-28-54 1220	0.5	1,170	8.2	88 4.39	88 7.23	2.18 0.04	2 0.04	228 7.91	175 3.64	40 1.13	12 0.28	0.12 0.09	740 604	15	
Pismo Creek	Near Hadley Tower SL0-52	9-26-54 ^f 1655	0.5	1,220	8.15	92 4.95	90 7.04	2.20 0.04	1 0.04	574 9.40	173 2.61	52 1.50	11 0.18	0.4 0.18	774 607	15	
Pismo Creek	Near Hadley Tower SL0-52	10-29-54 1355	1.0	1,064	8.2	103 5.14	85 6.99	2.18 0.04	2 0.04	34 0.46	532 8.72	152 3.17	42 0.18	0.16 0.16	745 607	15	

TABLE F-1 (continued)

MINERAL ANALYSES OF SURFACE WATERS
IN SAN LUIS OBISPO COUNTY AND VICINITY

Stream name	Station b end map reference number	Date	Dis- charge : Time : feet :	Excl- at : second- feet :	pH	Mineral constituents in equivalents per million	parts per million			Total : Total : hard- : dis- solved : solids : CaCO ₃ : Na- ppm : ppm : ppm : ppm								
							Ca ^c	Mg ^c	Na	K	CO ₃	HCO ₃	Cl	SO ₄	NO ₃			
San Luis Obispo Subunit (continued)																		
Pismo Creek	At Lower SPRR Bridge SL0-56	2-12-54 1700	3 ^d	1,353	7.9	106 5.3	82 6.8	29 4.32	3 0.08	0 0	576 9.45	149 2.11	111 3.1	5 0.08	0.5 0.28	915 915	606 26	
Pismo Creek	At Lower SPRR Bridge SL0-56	2-13-54 1430	30 ^d	787	7.2	50 2.5	26 3.0	86 3.74	9 0.23	0 0	271 4.45	62 1.30	112 3.2	3 0.05	0.4 0.17	586 586	275 40	
Pismo Creek	At Lower SPRR Bridge SL0-56	3-20-54f 0925	200 ^d	324	7.5	25 1.26	12 1.09	23 1.02	2 0.06	0 0	131 2.15	17 0.36	29 0.81	4 0.06	0.2 0.05	202 202	118 30	
Pismo Creek	At Lower SPRR Bridge SL0-56	5-12-54 1510	2 ^d	1,042	7.9	101 5.05	76 6.3	83 3.62	2 0.06	0 0	562 9.2	151 3.14	87 2.45	11 0.18	0.35 0.26	812 812	568 24	
Pismo Creek	At Lower SPRR Bridge SL0-56	7-28-54 1235	0.2 ^d	1,250	8.3	103 5.14	79 6.49	104 4.52	2 0.06	51 1.69	129 8.37	29 2.90	96 2.71	4 0.06	0.30 0.30	870 870	582 28	
Pismo Creek	At Lower SPRR Bridge SL0-56	9-28-54f 1010	0.3 ^d	1,400	7.8	99 4.95	81 6.70	22 4.30	2 0.06	0 0	610 10.00	139 2.89	108 3.03	2 0.04	0.4 0.50	868 868	582 27	
Pismo Creek	At Lower SPRR Bridge SL0-56	10-29-54 1405	0.7	1,316	8.5	101 5.04	77 6.33	103 4.48	3 0.07	62 2.07	487 7.99	122 2.75	100 2.82	2 0.03	— —	815 815	— —	
Pismo Creek	Below Hadley Tower SL0-53	3-24-53 1120	3+	1,187	8.2	94 4.69	79 6.49	56 2.04	2 0.05	19 0.64	423 8.08	147 3.06	77 2.17	7 0.11	— —	0.22 0.22	762 762	559 18

TABLE F-1 (continued)

MINERAL ANALYSES OF SURFACE WATERS
IN SAN LUIS OBISPO COUNTY^a AND VICINITY

Stream name	Station b and map reference number	Date of sample	Dis- charge time feet	Expt. st.	pH	Mineral constituents in equivalents per million	parts per million	F ppm	B ppm	S ppm	Total dis- solved solids ppm	hard- ness as cent.								
<u>San Luis Obispo Subunit</u> <u>(continued)</u>																				
Pismo Creek	Near Tibor RR Siding SLO-54	11-24-52 1545	1+	1,403	8.3	27 4.85	76 0.25	25 4.13	3 0.08	14 0.48	542 8.88	122 2.75	125 3.24	0.5	0.54	842	555	27		
Pismo Creek	Near Tibor RR Siding SLO-54	3-24-53 1100	3d	1,221	7.8	26 4.79	80 6.58	100 4.35	2 0.06	0 0	583 9.56	141 2.94	117 2.30	8 0.14	--	0.48	858	568	28	
Pismo Creek	Near Tibor RR Siding SLO-54	7-14-53 0940	1d	1,383	8.1	87 4.34	90 7.40	105 4.57	1 0.08	0 0	620 10.16	126 2.63	109 2.37	6 0.09	--	--	887	587	28	
F 12	Unnamed Tributary to Pismo Creek	3-30-54 0920	50d	404	7.2	22 1.17	13 1.10	27 1.62	2 1.07	9 0	114 1.87	31 0.64	50 1.41	5 0.08	0.2	0.15	300	214	42	
	At Price Canyon Road Bridge SLO-55																			
	Unnamed Tributary to Pismo Creek	5-12-54 1500	0.3d	920	8.5	68 3.4	44 3.57	120 5.20	3 0.07	6 0.2	223 5.3	155 2.23	110 3.01	5 0.08	0.4	0.52	729	353	42	
	San Ben- nards Creek	Near Banning School SLO-41	5-30-54 1320	5d	470	8.1	26 1.9	29 3.2	18 0.78	2 0.08	0 0	244 4.0	27 0.57	21 0.6	10 0.17	0.15	0.05	300	225	15
	San Luis Obispo Creek	At San Luis Obispo below Marsh Street Bridge SLO-47	7-18-54 0845	1	970	8.2	64 3.20	75 6.17	36 1.58	2 0.05	0 0	468 7.68	82 1.68	47 1.33	14 0.22	0.1	0.15	627	468	14

TABLE F-1 (continued)

MINERAL ANALYSES OF SURFACE WATERS
IN SAN LUIS OBISPO COUNTY, AND VICINITY

Stream name	Station ^b and map reference number	Date	Dis- charge Time	EC ^c 106 at second- feet	pH	Mineral constituents in equivalents per million	Parts per million						Total : hard- dis- solids : ppm : ppm : ppm : ppm
							parts per million						
<u>San Luis Obispo Subunit</u> (continued)													
San Luis Obispo Creek	Below Old U.S. Hwy. #101 0905	12-24-53	--	1,224	7.7	26 3.8	88 7.25	82 3.62	4 0.10	474 0	20 7.85	156 4.4	40 0.64
San Luis Obispo Creek	1.0 mi. below jet. of U.S. Hwy. #101 with Old Hwy. #101 SLO-49	12-24-53 0925	--	1,261	7.4	76 3.8	20 7.45	84 3.64	4 0.11	0 0	485 7.95	160 4.5	28 0.62
San Luis Obispo Creek	At U.S. Hwy. #101 Bridge Near Avila SLO-50	8-27-53 ^e	2.5d	1,400	8.2	81 4.04	102 8.47	77 3.35	2 0.06	0 0	582 9.54	88 1.83	154 4.34
San Luis Obispo Creek	At U.S. Hwy. #101 Bridge Near Avila SLO-51	12-24-53 0940	--	1,261	7.95	80 4.0	23 7.73	82 3.62	3 0.08	0 0	522 8.75	81 1.69	160 4.5
San Luis Obispo Creek	At U.S. Hwy. #101 Bridge Near Avila SLO-51	7-18-54 ^f	1.5d	1,420	8.2	85 4.23	104 8.56	72 3.10	2 0.04	Tr. Tr.	625 10.41	84 1.71	2.5 0.41
San Luis Obispo Creek	At State Hwy. #1 Near Banning School SLO-44	3-30-54 1315	26d	381	8.0	24 1.2	28 2.3	16 0.71	2 0.06	0 0	198 9.25	18 0.38	8 0.13
San Luis Obispo Creek	At State Hwy. #1 Near Banning School SLO-44	7-18-54 ^f 1020	0.1	778	8.4	28 4.90	25 2.89	25 1.07	1 0.03	6 0.20	419 6.87	23 0.68	12 0.19

TABLE F-1 (continued)

MINERAL ANALYSES OF SURFACE WATERS
IN SAN LUIS OBISPO COUNTY AND VICINITY

Station name	Station and map number	Date	Dis- charge	at	ph	Mineral constituents in parts per million equivalents per million						F	B	Total	dis- solved solids ppm									
						Ca ^a	Mg ^a	K ^a	HCO ₃ ^a	SO ₄ ^a	Cl ^a	NO ₃ ^a												
<u>San Luis Obispo Subunit^b</u>																								
(continued)																								
Stinner Creek	1.0 mi. Below SPRR Crossing SLO-46	6-18-51 1530	0.25	661	8.0	24 1.70	62 0.89	--	0 0.23	21 0.59	29 0.61	0 0	--	0.0	426	340								
<u>Arroyo Grande Subunit^b</u>																								
Arroyo 073 Grande Greek	At SPRR Bridge SLO-58	4-12-54 1720	19	935	8.1	110 5.5	50 4.1	42 1.89	4 0.11	0 0	275 2.15	180 2.76	29 1.1	0.5	0.08	684	480							
Arroyo Grande Greek	At Santa Manuela School SLO-59	2-13-54 1525	Storm runoff	624	7.4	108 5.4	25 2.0	50 2.77	40.5 0.11	9 0	205 3.04	165 1.0	25 0.07	0.4	0.05	607	375							
Arroyo Grande Greek	At Santa Manuela School SLO-59	2-20-54 ^c 1210	99	514	7.9	52 2.96	26 1.98	20 0.85	2 0.05	0 0	218 2.57	80 1.63	17 0.48	0.2	0.05	342	247							
Oso Flaco Lake	At Access Rd. SLO-61	11-7-53 1100	Lake	1,960	7.8	186 9.3	112 6.60	152 0.24	12 0.24	0 0	418 6.85	670 13.95	128 0.17	0.5	0.27	1,476	927							
White Lake	50' out from North shore SLO-60	2-29-54 0415	Lake	2,200	7.7	58 2.92	89 16.70	420 0.50	20 0	717 11.75	148 3.09	437 0.60	0.6	1.4	2,211	513								
<u>SANTA MARIA UNIT</u>																								
Santa Maria River	At Santa Maria SLO-67	1906 Mean	--	--	--	302 --	123 --	200 ^d --	--	0 --	254 --	1,253 --	105 --	--	--	2,412	--							
Santa Maria River	At Guadalupe SLO-68	2-18-53 ^j	--	--	--	230 --	87 --	120 --	52 --	0 --	420 --	680 --	86 --	--	--	1,600	932							

TABLE F-1 (continued)

MINERAL ANALYSIS OF SURFACE WATERS
IN SAN LUIS OBISPO COUNTY AND VICINITY

Stream name	Station ^b and map reference number	Date	Discharge	ECX10 ^c	pH	Mineral constituents in parts per million equivalents per million	F	B	Total : Total dissolved solids	
Cuyama Unit	At U.S. Hwy. #399 Bridge SB-1	6-19-51	==	1,745	7.9	223 11.15	57% 2.49	222 16.52	2 0.48	0.07 0.04
Cuyama River	At Wheatley's Ranch, 2 mi. E. of State Hwy. #399 SB-2	4-27-52 ^d 1145	40 ^d	427	8.2	51 2.57	15% 0.64	174 1.33	222 16.52	0.07 0.04
Cuyama River	4 mi. W. Jet. State Hwy. #399 and #166 SL0-65	3-30-53 1355	10d	2,750	7.9	223 16.47	172 14.24	140 6.09	6 0.17	0 0
F 11	Cuyama River	11-29-52 0915	2 ^d	2,488	7.5	254 17.70	142 11.70	115 5.00	6 0.14	0 0
Cuyama River	Near Cuyama Ranch Hqrs. SL0-64	7-14-53 1300	1d	2,936	8.1	288 14.37	152 12.49	118 5.13	5 0.14	213 3.49
Cuyama River	Near Cuyama Ranch Hqrs. SL0-64	7-14-53 1300	1d	2,967	7.8	296 14.8	152 12.6	230 10.0	8 0.20	213 3.49
Cuyama River	At State Hwy. #166 Bridge SL0-63	11-29-52 1000	15 ^d	2,967	7.8	296 14.8	152 12.6	230 10.0	8 0.20	213 3.49
Cuyama River	Below Cottonwood Canyon SL0-62	7-14-53 1210	==	3,164	7.9	272 13.62	162 13.31	240 14.79	6 0.16	190 3.12
Cuyama River	At State Hwy. #166 Bridge 3-42	3-4-52 ^e 0912	700	1,770	8.3	174 8.69	95 7.80	150 5.76	238 5.76	220 5.34
Cuyama River	At State Hwy. #166 Bridge 3-42	3-30-53 ^f 1030	15 ^d	2,750	7.8	239 11.93	152 12.55	238 10.37	6 0.17	246 4.03

TABLE F-1 (continued)

MINERAL ANALYSES OF SURFACE WATERS
IN SAN LUIS OBISPO COUNTY^a AND VICINITY

Stream name	Station ^b and map reference ^c	Date	Discharge ^d	pH	Mineral constituents in parts per million						Total dissolved solids : CaCO ₃ : PPM : PPM : ppm	Total hardness : mg-equiv. per million : mg-equiv. per million	
					Mg ^e	Na	K	Cl	SO ₄	HCO ₃			
					Cac	%	%	%	%	%			
CARRIZO PLAIN UNIT													
Soda Lake	1 Mi. N. of Verling Ranch	9-24-54 ^f	--	150,000	7.8	428	6,360	65,700	176	0	2,000	72,200	60,600
		1435											
	Gooding Ranch												
	SL0-66												

^a Analyzed by Division of Water Resources unless otherwise noted.^b MR# is Map Reference Number. Major streams and tributaries listed north to south within the county.^c These constituents in all analyses by Division of Water Resources and Pacific Chemical Consultants determined by titration.
^d Indicates estimate flow.^e Na + K.^f Analyzed by Pacific Chemical Consultants, Van Nuys, California.^g United States Geological Survey, Quality of Water Laboratory, Sacramento.^h United States Geological Survey Professional Paper 135.^j United States Geological Survey Water Supply Paper 1000, 1951.

TABLE F-2

MINERAL ANALYSES OF GROUND WATERS IN SAN LUIS OBISPO COUNTY

Well number, ^b M.D.B.&M.	Date at 25° C.	pH d Ca Mg Na K CO ₃ HCO ₃ SO ₄ Cl NO ₃	Mineral constituents in equivalents per million			F ppm pm	B ppm pm	S10 ₂ ppm pm	Fe ppm pm	Total hardness as solids CaCO ₃ Na ppm pm	Total hardness as solids CaCO ₃ Na ppm pm	Total hardness as solids CaCO ₃ Na ppm pm
			parts per million	parts per million	parts per million							
UPPER SALINAS UNIT												
24S/10E-9A1	7-27-54 ^f	6.02 7.07	6.8 3.42	21 1.73	22 4.02	0 0	245 4.02	19 0.39	28 1.39	0.3 0.45	---	---
24S/11E-23J1	10-30-45 ^g	--- 7.04	4.2 ---	4.1 ---	--- ---	--- ---	--- ---	132 ---	219 ---	1- ---	---	1,577 273
24S/11E-25N1	10-30-45 ^h	--- 7.04	38 ---	52 ---	--- ---	--- ---	--- ---	227 ---	120 ---	1- ---	---	1,120 308
24S/11E-25N1	6- 3-54 ^h	1,740 7.04	57 2.07	39 3.20	267 11.60	3.9 0.10	315 5.17	398 8.13	166 4.67	0.1 0.11	---	1,126 304
F												66 304
24S/11E-26G1	11-28-45 ^h	--- 7.06	26 ---	12 ---	--- ---	--- ---	--- ---	294 ---	220 ---	1- ---	36 0.4	1,196 148
24S/11E-26N1	10-30-45 ^h	--- 7.04	30 ---	11 ---	--- ---	--- ---	--- ---	149 ---	89 ---	1- ---	47 0.3	638 123
24S/11E-26Q1	10-30-45 ^h	--- 7.02	50 ---	46 ---	--- ---	--- ---	--- ---	205 ---	180 ---	1- ---	43 0.5	1,013 214
24S/11E-33R1	10-30-45 ^h	--- 7.04	40 ---	35 ---	--- ---	--- ---	--- ---	72 ---	27 ---	1- ---	33 0.8	319 244
24S/11E-34P1	6- 3-54 ^f	1,890 8.0	15 0.76	8 0.67	428 18.60	2 0.05	415 6.88	175 3.57	326 9.18	6 0.09	0.2 2.65	--- 1,213
24S/11E-35D1	10-30-45 ^h	--- 7.06	26 ---	19 ---	--- ---	--- ---	--- ---	135 ---	135 ---	1- ---	32 0.5	917 168
24S/11E-35E1	6- 3-54 ^f	1,205 7.08	21 1.57	15 1.24	223 9.70	12 0.05	239 5.59	209 4.27	23 2.63	0.3 0.04	1- ---	762 140
												77 975

TABLE F-2 (continued)

MINERAL ANALYSES OF GROUND WATERS IN SAN LUIS OBISPO COUNTY

Well number ^b M.D.B.&M.	Date sampled	ECx10 ⁶	at : pH 25° C	Mineral constituents in equivalents per million						F : ppm ppm : ppm	B : ppm ppm : ppm	S1O ₂ : ppm solids : CaCO ₃	Fe : ppm as : cent : salin- ity : ppm	Total : hard- ness : Per : tive dissolved : as solids : Na : ppm	Effect- ive : ppm	
				Ca ^d	Mg ^d	Na	K	CO ₃	HCO ₃							
24S/12E-17L1	6- 8-54 ^f	1,300	7.08	107	69	85	3.70	1	0	282	450	34	8.1	0.2	0.40	--
24S/12E-27M1	6- 8-54 ^f	735	7.06	40	48	44	1.90	2	0	276	9.18	32	0.55	0.3	0.32	--
24S/12E-33B1 ^j	10-23-53	991	8.4	90	65	62	2.70	4	0	530	1.87	67	5	0.55	0.22	--
24S/12E-33H1	10-19-53	768	7.05	58	49	53	2.3	4	0	251	1.94	81	32	16.4	0.4	0.24
24S/14E-12A1	6- 8-54 ^f	2,122	8.0	92	112	225	9.20	4	0	561	1.69	210	3	0.1	1.90	--
24S/15E-17F1	8- 7-53 ^f	1,493	7.07	50	88	157	2.60	3	0	464	9.20	273	10	0.1	1.2	--
24S/15E-33C1	6- 7-54 ^f	1,280	7.09	32	64	24	5.28	2	0	277	6.17	114	2	0.3	0.40	--
25S/11E-1A1	10-30-45 ^k	---	7.06	24	18	--	--	--	0	107	0.42	3.22	0.03	--	--	--
25S/11E-19B1	10- 8-53	730	8.03	64	39	35	1.53	0.4	0	228	3.9	31	92	16	0.5	0.06
25S/12E-6C1	10-30-45 ^k	---	7.04	24	21	--	--	--	0	107	0.65	2.6	0.27	1-	--	--
25S/12E-16N1	4- 8-53 ^k	---	7.08	24	31	52	--	2	0	228	50	42	2	0.2	--	--
25S/12E-17J1	4- 8-53 ^k	---	8.05	20	61	22	--	22	0	207	42	23	3	0.3	--	--

F-18

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TABLE F-2 (continued)

MINERAL ANALYSES OF GROUND WATERS IN SAN LUIS OBISPO COUNTY^a

Well number ^b M.D.B.&M.	Date sampled	ECx10 ⁶ at 25° C	pH Ca ^d :	Mineral constituents in equivalents per million						F ppm :	B ppm :	S1O ₂ ppm :	Fe ppm :	Total hardness as solids:Caco ₃ ppm :	Total hardness as CaCO ₃ ppm :	Effect- ive salinity Na: Cl ppm :		
				K :	CO ₃ :	HCO ₃ :	SO ₄ :	Cl :	NO ₃ :									
25S/12E-17R1	4- 8-53 ^k	---	8.2	48	45	98	0.7	0	239	141	21	2	0.35	--	--	720	306	
25S/12E-17R1	7-15-54 ^f	672	8.05	36	28	64	2.30	0.05	0	285	46	42	0.28	--	--	379	205	
25S/12E-21L1	5-31-54 ^f	1,220	7.9	50	42	156	6.80	0.06	0	239	192	116	4	0.4	0.76	776	302	
25S/12E-26K1	5-31-54 ^f	493	7.8	31	21	48	2.08	0.04	0	238	22	32	6	0.2	0.37	289	165	
25S/12E-28M1 ^j	6- 9-54 ^f	1,890	7.8	112	74	200	0.07	0	456	281	200	7	0.2	0.78	--	1,307	604	
25S/12E-32A1	10- 2-53	893	8.0	36	24	127	5.51	0.03	0	296	166	53	4	0.2	0.50	--	615	232
25S/13E-19R1	6- 9-54 ^f	528	8.0	35	28	34	1.46	0.05	0	223	11	40	28	0.6	0.20	--	316	203
25S/13E-35D1	7-22-54 ^f	710	8.1	49	27	62	2.71	0.08	0	327	41	42	4	0.4	0.32	--	412	233
25S/13E-35E1	7-22-54 ^f	710	7.9	48	28	63	2.75	0.06	0	332	44	42	1	0.4	0.32	--	508	235
25S/14E-33Q1	6- 9-54 ^f	620	7.9	30	21	78	3.40	0.06	0	292	44	27	9	0.4	0.45	--	398	161
25S/15E-2B1	8- 7-53 ^f	1,664	8.0	62	96	180	7.82	0.10	Tr ^e	595	230	148	13	0.0	1.35	--	1,060	550
25S/16E-17L1	8- 7-53 ^f	2,202	7.7	64	129	238	10.34	0.05	0	429	508	238	7	0.4	1.75	--	1,426	694
																	43	17.17

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TABLE F-2 (continued)

MINERAL ANALYSES OF GROUND WATERS IN SAN LUIS OBISPO COUNTY^a

Well number ^b M.D.B.&M.	Date	ECx10 ⁶	Mineral constituents in equivalents per million										parts per million										Effect-
			P.H. at 25° C	Ca ^d :	Mg ^d :	Na :	K :	CO ₃ :	HCO ₃ :	SO ₄ :	Cl :	NO ₃ :	F :	B :	SiO ₂ :	Fe :	ppm : ppm						
25S/16E-30M1	6- 7-54 ^f	4,890	7.66	328	240	722	10	0	287	928	1,060	12	0.2	1.05	--	--	--	3,666	1,829	31	36.87		
26S/12E-22P2	6- 9-54 ^f	710	7.7	39	26	69	.2	0	277	26	65	16	0.2	0.35	--	--	--	425	206	42	3.05		
26S/13E-4F1	9- 4-53 ^f	843	8.0	45	17	115	2	0	289	20	69	14	0.5	0.65	--	--	--	540	183	57	5.92		
26S/13E-4K1	9- 2-53 ^f	1,680	7.95	82	61	191	2.1	0	215	210	203	22	0.6	0.65	--	--	--	1,186	467	47	12.24		
26S/13E-10E1	5- 31-54 ^f	717	8.2	18	15	127	2	Tr. 0.05	204	72	44	0	0.3	0.90	--	--	--	456	105	72	5.59		
26S/13E-11C1	9- 4-53 ^f	1,905	7.7	112	73	202	6	0	565	250	217	1	0.4	0.90	--	--	--	1,189	584	43	11.20		
26S/13E-11F2	9- 4-53 ^f	1,520	7.5	95	60	145	3	0	217	219	168	9	0.4	1.05	--	--	--	1,034	485	39	10.88		
26S/13E-28J1	6- 9-54 ^f	584	8.1	27	19	75	2	0	259	26	29	6	0.3	0.45	--	--	--	356	148	52	2.20		
26S/13E-28J1	7-27-54 ^f	594	8.1	32	17	72	2	0	262	38	42	3	0.2	0.45	--	--	--	326	150	51	3.21		
26S/14E-14R1	10- 21-53	549	8.15	20	5	94	3	0	232	10	25	13	0.4	0.0	--	--	--	503	72	73	4.15		
26S/14E-25L1	8-27-53 ^f	473	8.4	49	8	40	3	4	169	18	42	20	0.2	0.10	--	--	--	334	154	36	2.12		
26S/14E-35D1	6- 7-54 ^f	448	8.1	40	9	35	3	0	153	19	42	17	0.5	0.10	--	--	--	289	137	35	1.82		

TABLE F-2 (continued)

MINERAL ANALYSES OF GROUND WATERS IN SAN LUIS OBISPO COUNTY^a

Well number ^b M.D.B.&M.	Date at 25° C	pH	Ca ^d	Mg ^d	Na	K	CO ₃	HCO ₃	SO ₄	Cl	NO ₃	parts per million		F	B	SiO ₂	Fe	ppm	disolved	Total	hardness	Effect
												equivalents per million										
26S/15E-2N1	6- 7-54f	2,150	7.9	38	6	424	2	0	0	337	525	176	5.6	0.1	2.05	--	--	1,355	122	88	18.46	
26S/15E-15C1	8- 7-53f	2,470	7.6	201	233	220	7	0	204	525	294	18	0.09	0.0	0.85	--	--	1,645	647	49	15.53	
26S/15E-20N1	6- 8-54f	359	8.1	41	4	50	2	0	138	32	20	12	0.1	0.15	0.0	--	--	232	118	32	1.29	
26S/15E-29D1	6- 9-54f	359	7.9	38	7	26	3	0	141	5	21	40	0.1	0.0	0.0	--	--	242	124	31	1.34	
26S/16E-28M1	8- 6-54f	952	8.5	48	15	149	5	0	244	88	89	6	0.10	0.6	0.75	--	--	525	179	63	6.58	
26S/16E-31B1	6- 8-54f	1,580	8.2	27	19	288	2	0	316	248	106	57	0.9	2.37	0.0	--	--	1,042	172	78	12.55	
27S/12E-2D1	9-26-51k	---	---	33	19	---	---	0	293	44	67	9	0.15	--	--	4.1	1.4	551	158	--	--	
27S/12E-3C1	6- 9-54f	1,412	8.0	114	62	59	2	0	257	10	309	14	0.2	0.15	0.0	--	--	1,376	540	19	8.98	
27S/12E-4B1	8-19-53f	1,100	7.5	41	14	198	2	0	289	131	90	3	0.9	0.75	0.0	--	--	725	158	73	8.66	
27S/12E-4F1	10-15-50m	---	7.3	20	28	108	2	0	421	128	98	2	0	--	0.35	22	4.4 (+Ae)	729	384	38	--	
27S/12E-4F3	3-19-48k	1,740	7.8	10	5	248k	2	0	593	100	151	0	0	0.07	47	0.07	952	47	93	15.13		
27S/12E-4F3	4-18-51k	1,200	--	9	4	0.36	--	0	439	97	116	4	1.3	--	58	0.35	780	40	--	--		

TABLE F-2 (continued)

MINERAL ANALYSES OF GROUND WATERS IN SAN LUIS OBISPO COUNTY^a

Well number ^b M.D.B.&M.	Date sampled	ECx10 ⁶ pH	Mineral constituents in equivalents per million						F ppm	B ppm	Fe ppm	Total : hard- ness : Per : tive dis- : ness : Per : tive solids :CaCO ₃ : Na : ity : ppm : ppm : ppm	Total								
			Ce ^d at : 25° C	Mg ^d : : : :	K Na : : : :	CO ₃ : : : :	HCO ₃ : : : :	Cl SO ₄ NO ₃ : : : :													
27S/12E-4F3	6- 1-53 ^f	1,439	7.7	10 0.49	0.4 0.03	340 14.77	7 0.18	0 0	476 7.80	152 3.16	147 4.14	11 0.17	1.4	2.0	--	--	908	26	95	14.95	
27S/12E-4K5	9-23-53	715	7.5	68 3.4	40 3.3	35 1.53	2 0.05	0 0	284 4.5	46 0.95	74 2.1	13 0.20	0.3	0.20	--	--	468	336	19	3.73	
27S/12E-11E1	11-25-53	505	7.7	50 2.5	22 1.86	33 1.45	1 0.03	0 0	250 4.1	9 0.19	46 1.3	21 0.34	0.75	0.00	--	--	336	218	24	1.89	
27S/12E-14A1	1-15-52 ⁿ	---	8.1	0.3 0.2	0.2 0.2	11.0 11.0	0.2 0.2	0.8 0.8	0.8 0.8	6.3 1.9	6.3 1.9	3.0 3.0	--	1.12	--	--	--	25	96	11.00	
27S/12E-14A1	9-24-53 ^k	1,070	7.7	4 0.2	1 0.1	264 11.5	4 0.10	0 0	390 6.4	121 2.52	99 2.8	1 0.01	1.1	1.25	--	--	722	15	96	11.60	
F-22	27S/12E-15G1 ^h	12-21-53	1,282	8.2	4 0.2	1 0.1	314 13.65	3 0.08	0 0	451 7.4	147 3.06	136 3.85	1.5 0.05	1.4	1.25	--	--	873	15	97	13.73
27S/12E-21N1	5-31-54 ^f	983	7.3	110 5.52	48 3.91	39 1.68	1 0.04	0 0	241 5.59	186 3.89	57 1.61	2 0.04	0.2	0.12	--	--	664	471	15	5.56	
27S/12E-32E1	5-31-54 ^f	800	7.9	29 4.94	24 2.76	27 1.16	1 0.04	0 0	216 5.18	138 2.87	34 0.96	0 0	0.2	0.10	--	--	534	435	13	3.72	
27S/13E-9K1	3-23-54 ^f	908	8.2	7 0.36	1 0.04	206 8.92	2 0.05	0 0	364 5.98	87 1.81	53 1.50	6 0.10	1.4	3.40	--	--	557	20	95	8.97	
27S/13E-9P1	6- 9-54 ^f	711	7.9	14 0.72	9 0.71	129 5.60	2 0.05	0 0	259 5.88	21 0.42	24 0.69	8 0.13	0.1	0.90	--	--	438	71	79	5.65	
27S/13E-13Q1	9-24-53	770	7.6	53 2.65	26 2.95	70 3.05	4 0.11	0 0	247 4.05	28 0.79	113 3.2	9 0.14	0.5	0.12	--	--	475	280	36	4.60	
27S/13E-17Q1	9-25-53	1,111	7.3	100 5.0	37 4.05	93 0.08	3 0	302 4.95	53 1.10	188 5.3	5 0.08	0.2	0.04	--	--	725	405	33	7.15		

TABLE F-2 (continued)

MINERAL ANALYSES OF GROUND WATERS IN SAN LUIS OBISPO COUNTY^a

Well number ^b M.D.-B.g.M.	Date at : 25° C :	pH Ca ^d : Mg ^d :	Na ^d : K :	CO ₃ : HCO ₃ :	SO ₄ : Cl :	NO ₃ :	F : ppm : ppm : ppm : ppm : ppm :	B : ppm : ppm : ppm : ppm : ppm :	S102 : Fe : dis- solved : solids : CaCO ₃ :	Total : hard- ness : salt : CaCO ₃ : Na : ppm : ppm :	Effect : five as solids : CaCO ₃ : Na : ppm : ppm :	
							Mineral constituents in equivalents per million		parts per million			
27S/13E-20R1	3-12-54	500 7.6	50 2.49	28 1.35	3 0.08	0	205 5.00	14 0.29	31 0.21	0.2 0.04	- - - 338 239 22 1.43	
27S/13E-24N1	9-11-53 ^f	548 7.8	58 2.92	17 1.39	2 0.05	0	229 3.76	22 0.47	46 1.29	0.3 0.25	- - - 356 205 24 1.99	
27S/13E-26R1	6-9-54 ^f	509 8.0	60 3.01	8 0.67	27 1.18	2 0.05	0	178 2.92	16 0.32	46 1.29	0.3 0.10	- - - 300 184 24 1.90
27S/14E-2C1	6-9-54 ^f	499 7.9	50 2.52	6 0.49	25 1.08	2 0.06	0	156 2.56	15 0.30	32 0.90	0.3 0.15	- - - 300 150 26 1.59
27S/15E-13A1	3-23-54	4,274 7.6	132 6.59	71 5.84	775 33.7	8 0.19	0	437 7.16	1,030 21.4	670 18.9	2 0.03	- - - 3,000 622 73 39.14
27S/15E-14W1	8-7-53	460 7.3	60 2.99	8 0.66	25 1.09	2 0.05	0	220 3.60	18 0.36	14 0.23	0.5 0.04	- - - 289 182 23 1.19
27S/15E-35F1	6-8-54 ^f	317 7.8	23 1.66	6 0.49	22 0.96	2 0.05	0	121 1.99	28 0.58	19 0.54	3 0.05	- - - 200 105 30 1.17
27S/16E-7P1	7-31-54 ^f	2,930 7.8	92 4.58	38 3.15	484 21.00	4 0.10	0	251 4.21	548 11.20	451 12.72	27 0.44	- - - 1,747 386 74 24.25
27S/16E-17Q1	2-7-54	1,835 7.7	86 4.29	24 1.97	310 13.5	6 0.141	0	232 3.80	232 6.79	325 9.16	21 0.50	- - - 1,258 313 68 15.61
27S/16E-21E1	6-8-54 ^f	1,100 7.8	44 2.20	3 0.27	183 7.95	3 0.07	0	161 2.72	179 3.66	130 3.66	25 0.57	- - - 642 124 76 8.02
27S/16E-22N1J	6-9-54 ^f	708 7.7	21 1.57	8 0.67	113 4.94	4 0.10	0	264 4.32	64 1.31	53 1.50	14 0.23	- - - 432 112 68 5.04
28S/12E-10B1	5-31-54 ^f	620 7.5	59 2.96	29 2.40	29 1.30	1 0.03	0	255 4.18	78 1.59	33 0.93	4 0.07	- - - 408 218 19 2.51

TABLE F-2 (continued)

MINERAL ANALYSES OF GROUND WATERS IN SAN LUIS OBISPO COUNTY^a

Well number ^b M.D.B. & M.	Date	ECx10 ⁶	pH	Mineral constituents in equivalents per million						F ppm	B ppm	SiO ₂ ppm	Fe ppm	Total hardness as ppm	Effect- ness				
				Ca ^d	Mg ^d	Na	K	CO ₃	HCO ₃										
28S/13-10R2	6-10-54f	700	7.4	66 3.32	26 2.98	28 1.24	1 0.04	0 0	270 4.42	104 2.16	29 1.09	2 0.04	0.2	0.12	--	408	315	16	3.16
28S/12E-14K1	6-10-54f	615	7.3	55 2.74	34 2.80	2 1.17	1.4 0.04	0 0	235 2.85	87 1.82	34 0.96	7 0.11	0.2	0.10	--	353	277	17	2.86
28S/12E-14G1	6-10-53f	603	7.7	51 2.54	28 2.28	34 1.48	2 0.04	0 0	244 4.00	71 1.47	33 0.93	4 0.06	0.1	0.1	--	367	241	23	2.34
28S/13E-14K2	10-23-53	682	8.0	56 2.08	33 2.72	56 2.45	2 0.08	0 0	332 5.35	11 0.22	64 1.8	8 0.12	0.3	0.18	--	419	286	30	2.70
28S/13E-14K2	10-23-53	781	7.9	82 4.1	38 3.15	43 1.85	2 0.05	0 0	236 5.5	24 0.47	90 2.55	9 0.15	0.3	0.15	--	401	362	20	3.65
28S/15E-11B1	6-8-54f	281	8.0	21 1.53	5 0.43	20 0.85	1 0.04	0 0	279 1.70	27 0.56	18 0.51	9 0.14	0.2	0.10	--	155	98	30	1.15
28S/16E-14N1	12-2-54	790	7.2	105 5.25	28 2.3	44 1.89	2 0.04	0 0	245 5.65	112 2.48	32 0.9	19 0.304	0.3	0.09	--	563	377	20	3.83
28S/11E-33P1	6-11-54f	1,330	7.6	42 2.11	102 9.19	57 2.46	0.4 0.01	0 0	613 10.06	42 0.86	88 2.49	27 0.44	0.0	0.15	--	770	565	18	3.71
29S/12E-5K3	6-10-54f	797	7.0	79 3.98	43 3.51	35 1.52	1 0.02	0 0	294 4.82	128 2.67	45 1.27	7 0.11	0.3	0.12	--	452	373	17	4.19
29S/13E-17C1	6-10-54f	1,000	7.5	150 7.50	21 1.69	21 0.92	4 0.09	0 0	405 6.64	17 0.35	102 2.88	20 0.32	0.0	0.20	--	806	459	9	3.21
29S/15E-25H1	6-16-51k	519	7.4	40 2.00	15 1.23	411 1.79	-- --	0 0	250 4.10	24 0.67	19 0.40	2 0.03	--	0.03	--	286	162	36	1.79
30S/16E-33P	6-16-51k	454	8.2	45 2.25	23 1.89	24k 1.04	-- --	0 0	261 4.28	14 0.39	21 0.43	1 0.01	--	0.01	--	259	207	20	1.04

TABLE F-2 (continued)

MINERAL ANALYSES OF GROUND WATERS IN SAN LUIS OBISPO COUNTY^a

Well number ^b M.D.B. & M.	Date sampled	ECx10 ⁶ at : 25° C	Mineral constituents in equivalents per million						F : ppm :	B : SiO ₂ : ppm :	Fe : dis- solved : solids: solids: solids: solids: solids: solids: solids: solids: solids: solids: solids: solids: solids: solids: solids:	Effect- ive per- tive : Total hard- ness : Per- cent:salin- ity : ppm :			
			pH	Mg ^d Ca ^d	K	CO ₃	HCO ₃	SO ₄	Cl	NO ₃					
30S/15E-10G2	6-10-54f	813 7.8	53 2.65	15 1.20	110 4.80	4 0.10	0 0	270 1.29	166 3.45	24 0.96	0.6 0.03	--	--	447 192 55 4.90	
30S/15E-13F1	9-9-54f	540 7.2	58 2.92	14 1.18	32 1.38	3 0.08	0 0	130 2.13	122 2.55	30 0.83	0.5 0.06	--	--	349 205 25 2.64	
30S/16E-21SW ₄ J	6-16-51k	800 8.1	80 4.00	40 3.29	311 1.35	-- --	0 0	283 4.63	160 3.33	20 0.56	2 0.03	--	0.0	--	551 364 36 4.01
31S/16E-4SW ₄ J	6-16-51k	704 7.6	83 4.15	32 2.63	201 0.85	-- --	0 0	206 5.02	20 1.87	15 0.42	0 0	--	0.0	--	451 339 11 2.61
F	6-16-21k	646 7.7	71 3.55	21 1.73	301 1.29	-- --	0 0	239 3.92	72 1.50	39 1.10	3 0.05	--	0.0	--	432 264 20 2.65
COASTAL UNIT															
Cambria Subunit															
25S/6E-3N1	5-29-54f	450 7.5	40 2.02	29 2.36	12 0.54	1 0.02	0 6	240 3.94	19 0.38	17 0.48	7 0.11	0.0 0.22	--	--	194 218 11 1.00
27S/8E-9P2	5-29-54f	588 7.7	44 2.20	37 3.08	17 0.74	1 0.02	0 0	287 4.70	35 0.71	21 0.60	4 0.06	0.1 0.20	--	--	163 264 12 1.34
27S/8E-10A2	5-29-54f	588 7.6	54 2.69	38 3.11	17 0.72	1 0.03	0 0	307 5.03	42 0.85	19 0.54	6 0.09	0.1 0.21	--	--	396 290 11 1.52
27S/9E-19M	5-29-54f	1,245 7.5	106 5.29	86 7.08	43 1.08	1 0.02	0 0	674 11.06	74 1.57	56 0.22	14 0.41	0.2 0.20	--	--	816 668 13 3.19
27S/9E-20M1	8-7-53	941 7.4	73 5.64	66 5.43	43 1.87	1 0.02	0 0	549 9.00	11 0.22	50 1.41	0 0	0.6 0.32	--	--	547 453 17 1.96

TABLE F-2 (continued)

MINERAL ANALYSES OF GROUND WATERS IN SAN LUIS OBISPO COUNTY^a

Well number ^b M.D.B.&M.	Date sampled at 25° C	ECx10 ⁶ pH	Mineral constituents in equivalents per million						F ppm	B ppm	S1O ₂ ppm	Fe ppm	Total hardness as solids	Per cent: salin- ity	Total hard- ness	Effect-
			Ca ^d	Mg ^d	Na	K	C ₀ ₃	HCO ₃								
27S/9E-34L1	8-7-53	636 7.0	54 2.69	32 6.03	25 1.09	1 0.01	0 0	242 5.60	17 0.35	25 0.71	11 0.18	0.7	0.08	--	--	361 295 16 3.40
28S/9E-8Q1	8-7-53 ^f	1,890 7.6	88 4.41	73 6.03	191 8.31	1 0.03	0 0	452 7.40	31 0.64	272 10.47	18 0.29	0.2	1.40	--	--	1,278 522 44 11.38
29S/10E-11H1	5-29-54 ^f	1,042 7.9	72 3.59	77 6.30	39 1.70	1 0.02	0 0	435 7.13	53 1.09	119 3.36	6 0.10	0.0	0.10	--	--	778 494 15 4.48
<u>San Luis Obispo Subunit</u>																
29S/11E-9J1	5-29-54 ^f	1,000 7.8	66 3.28	81 6.70	31 1.36	1 0.02	0 0	573 9.40	39 0.79	38 0.08	6 0.20	0.0	0.18	--	--	566 499 12 3.96
29S/11E-32M3	12-18-51 ^k	4,540 8.2	149 7.44	286 23.52	390 16.96	6 0.17	0 0	620 10.16	198 4.12	190 32.56	2 0.04	0.0	0.09	--	--	2,560 1,550 35 37.93
29S/11E-32M3	7-23-52 ^k	3,290 8.0	-- (22)	-- .80	250 10.87	-- --	0 0	649 10.64	-- --	628 17.71	-- --	0.09	--	--	--	1,140 32 23.03
29S/11E-32M2	6-11-51 ^k	2,200 7.6	77 3.86	131 10.82	202 8.80	6 0.15	0 0	672 11.02	102 2.13	272 10.50	0 --	0.0	0.12	--	--	1,410 734 37 12.01
29S/11E-32M3	6-30-52 ^k	3,522 7.8	-- --	-- --	-- --	-- --	-- --	666 10.92	-- --	1,110 31.30	-- --	--	--	--	--	1,520 -- --
30S/10E-13P1	10-2-54 ^f	244 7.2	10 0.49	6 0.49	27 1.19	0.8 0.02	0 0	44 0.72	7 0.14	24 0.97	22 0.35	0.1	0.0	--	--	171 49 54 1.47
30S/11E-6F1	6-11-54 ^k	2,342 7.8	50 2.49	142 11.68	198 8.60	6 0.14	0 0	667 10.96	349 2.05	0 0.84	0 0	0.0	0.55	--	--	1,460 708 38 11.95
30S/11E-7N1	10-2-54 ^f	298 7.4	17 0.84	11 1.04	24 0.94	1 0.03	0 0	26 1.57	4 0.08	41 1.16	4 0.07	0.0	0.0	--	--	201 89 30 1.28

TABLE F-2 (continued)

MINERAL ANALYSES OF GROUND WATERS IN SAN LUIS OBISPO COUNTY^a

Well number ^b M.D.B.&M.	Date sampled	at 25° C	pH	ECx10 ⁶	Mineral constituents in equivalents per million						F : ppm	B : ppm	SiO ₂ : ppm	Fe : ppm	disolve ^c as solids:CaCO ₃	Total hard- ness: Fer : ppm	Total: hard- ness: Fer : ppm				
					Mg ^d	Ca ^d	K	Na	CO ₃	SO ₄											
30S/11E-18Q1	6-11-54f	210	7.1	6	8	23	1.01	0	0	44	32	0.0	0.1	0	0.0	125	46	52	1.22		
30S/11E-22L1	6-11-54f	1,380	8.2	36	82	24	4.10	0.12	0	0.73	280	32	0.3	0.25	0	0.0	884	429	32	6.57	
31S/12E-1N3	6-11-54f	1,270	7.6	44	122	48	0.4	0.01	0	546	65	106	67	0.1	0.10	0	0.0	521	610	25	5.35
31S/12E-10G2	6-11-54f	1,305	7.6	51	102	28	1.64	0.02	0	475	29	133	35	0.0	0.15	0	0.0	836	545	13	5.82
31S/12E-12N1	6-21-53	2,024	7.5	102	105	2	0.07	0	0	162	22	520	18	0.6	0.08	0	0.0	1,770	702	25	15.94
31S/12E-12Q2	6-11-54f	1,522	7.8	76	27	63	0.04	0	0	259	15	341	25	0.1	0.25	0	0.0	1,354	588	19	6.45
31S/12E-16R1	10-12-53	1,250	8.8	90	67	122	1.21	0.30	561	75	133	1	0.25	0.25	0	0.0	844	502	34	6.45	
31S/13E-19H2	9-30-54f	1,135	7.9	102	74	36	0.4	0	0	523	74	57	61	0.2	0.20	0	0.0	766	560	12	4.20
31S/13E-29E1	9-29-54k	1,570	7.9	118	124	63	0.4	0.01	0	697	26 ₁ ₄	550	67	0.4	0.28	0	0.0	977	804	15	7.37
31S/13E-29E1	10-29-54	1,493	7.9	125	121	65	0.15	0	0	691	271	63	0	0.5	0.30	0	0.0	965	809	14	7.70
31S/13E-29F1	5-12-54	840	7.5	72	54	21	0.34	0	0	403	82	25	16	0.3	0.15	0	0.0	633	405	14	2.84
32S/12E-13A1	9-28-54f	2,900	8.0	152	157	285	11	0.29	0	508	740	314	42	0.6	9.05	0	0.0	2,132	1,045	36	22.25
32S/12E-13A1	10-29-54	2,740	7.4	162	158	272	1.3	0.33	0	515	737	207	39	0.6	0.72	0	0.0	2,055	1,053	36	24.78

F
N₂

TABLE F-2 (continued)

MINERAL ANALYSES OF GROUND WATERS IN SAN LUIS OBISPO COUNTY^a

Well number ^b M.D.B.&M.	Date sampled	ECx10 ⁶ at 25° C	pH Ca ^d :	Mineral constituents in equivalents per million	parts per million equivalents per million	F ppm :	B ppm :	S1O ₂ ppm :	Fe ppm :	Total hardness as cent:salts solids:CaCO ₃ :Na: ppm : ppm :	Effectiveness of dissolved solids:CaCO ₃ :Na: ppm : ppm :	Total : hard- ness : Per : tive : solved: as : cent:salts : ppm : ppm :	Total : hard- ness : Per : tive : solved: as : cent:salts : ppm : ppm :					
32S/12E-13J1	10-29-54f	2,985	7.9	127 6.34	140 11.51	344 14.96	18 0.46	0 0	797 13.06	252 5.26	504 14.21	7 0.112	0.2 0.62	0.2 0.62	0 0	1,830 892	45 45	20.21
Arroyo Grande Subunit																		
32S/13E-1G1	9-30-54f	865	8.2	92 4.61	46 3.80	28 1.21	2 0.05	Tr. Tr.	382 6.26	132 2.75	24 0.67	5 0.08	0.2 0.0	0.0 0.0	0 0	556 220	13 13	3,411
32S/13E-11M1	6-11-54f	267	7.3	9 0.15	3 0.22	30 1.28	1 0.04	0 0	49 0.81	8 0.16	35 0.99	0 0	1.0 0.1	0.1 0.1	0 0	207 34	64 64	1,321
32S/13E-12C1	7-1-54f	1,190	7.4	135 6.75	62 5.10	23 1.04	2 0.06	0 0	462 7.57	239 4.88	37 1.03	5 0.08	0.1 0.1	0.1 0.1	0 0	938 593	11 11	5,778
32S/13E-12Q2	6-11-54f	950	7.5	106 3.82	37 3.02	44 1.95	1 0.03	0 0	341 5.59	83 1.70	57 1.62	3 0.05	0.4 0.15	0.15 0.15	0 0	550 344	22 22	3,223
32S/13E-14R2	9-30-54f	1,110	7.7	82 4.11	64 5.28	73 3.16	4 0.16	0 0	573 9.40	73 1.52	53 1.50	5 0.08	0.0 0.68	0.0 0.68	0 0	678 470	25 25	3,226
32S/13E-19N3	9-29-54f	454	6.9	23 1.14	9 0.71	47 2.06	1 0.03	0 0	22 0.36	41 0.85	57 1.60	75 1.21	0.1 0.1	0.03 0.03	0 0	292 94	52 52	2,860
32S/13E-28E1	9-29-54f	1,020	7.4	105 5.24	58 4.74	47 2.02	2 0.05	0 0	422 6.91	177 3.68	51 1.43	14 0.22	0.1 0.1	0.0 0.0	0 0	692 499	17 17	5,144
32S/13E-29D1	9-29-54f	934	7.8	97 4.85	48 3.99	44 1.90	3 0.08	0 0	412 6.75	144 2.99	21 0.87	2 0.04	0.1 0.1	0.05 0.05	0 0	583 442	17 17	4,077
32S/13E-30L2	9-29-54f	761	7.5	92 4.35	41 1.74	40 0.06	2 0.06	0 0	253 5.78	124 2.58	43 1.21	20 0.32	0.1 0.1	0.20 0.20	0 0	580 398	18 18	3,988
32S/13E-31B1	6-3-53f	1,114	7.3	107 5.37	27 3.08	73 3.16	4 0.09	0 0	258 4.17	183 3.80	91 2.57	90 1.45	0.0 0.1	0.1 0.1	0 0	795 422	27 27	7,533
32S/13E-32A1	6-11-54f	868	7.4	77 3.86	38 3.16	39 1.70	1 0.04	0 0	243 3.98	117 2.40	53 1.50	63 1.02	0.2 0.0	0.0 0.0	0 0	704 352	19 19	4,788

TABLE F-2 (continued)

MINERAL ANALYSES OF GROUND WATERS IN SAN LUIS OBISPO COUNTY^a

Well number ^b M.D.B.&M.	Date sampled	ECx10 ⁶ at : 25° C	Mineral constituents in equivalents per million						F ppm : ppm :	B : ppm : NO ₃ : C ₁ : SO ₄ : HCO ₃ : CO ₃ : K : Na : Mg ^d : Ca ^d : pH	SiO ₂ : ppm : as : solids : Na : CaCO ₃ : Mg : Ca : ECx10 ⁶	Fe : ppm : as : solids : Na : Ca : ECx10 ⁶	Total : hard : dis- solved : as : solids : Na : CaCO ₃ : Mg : Ca : ECx10 ⁶						
			Na	K	CO ₃	HCO ₃	SO ₄	C ₁											
32S/12E-32D2	9-19-54f	813	7.6	87	28	2	0	214	111	32	24	0.2	0.0	--	494	376	15	3.75	
32S/13E-33F1	10-21-53	1,106	8.4	136	68	46	0	464	231	35	6	0.3	0.12	--	821	622	24	6.83	
11N/35W-7A1 ^c	7-27-51 ^d	---	7.6	114	45	59	--	225	360	27	--	--	37	--	858	470	20	--	
11N/35W-7A1 ^c	10-29-53	1,070	7.8	212	46	62	4	0	223	360	46	0.2	0.32	--	858	492	21	6.50	
11N/35W-9P1 ^c	10-28-53	236	7.3	6	5	40	2	0	43	7	50	8	0.1	0.07	--	198	38	68	1.82
11N/35W-12E1 ^c	10-29-53	236	7.3	6	7	32	1	0	52	6	44	3	0.3	0.0	--	173	42	61	1.67
SANTA MARIA UNIT																			
10N/36W-12P1 ^c	7-1-46q	995	--	--	--	--	--	--	--	--	--	--	--	--	--	440	--	--	
11N/34W-19R1 ^c	7-1-46q	549	--	--	--	--	--	--	--	--	--	--	--	--	--	150	--	--	
11N/34W-29P2 ^c	4-15-42q	1,170	--	--	--	--	--	--	--	--	--	--	--	--	--	516	--	--	
11N/35W-18M1 ^c	10-19-27q	---	---	123	51	65	2.0	0	215	368	68	1.6	--	38	1.1	863	516	--	
11N/35W-19E1 ^c	8-27-42q	1,360	--	--	--	--	--	--	--	--	--	--	--	--	--	315	--	--	
11N/35W-22C2 ^c	7-1-46q	1,200	--	--	--	--	--	--	--	--	--	--	--	--	--	550	--	--	

TABLE F-2 (continued)

MINERAL ANALYSES OF GROUND WATERS IN SAN LUIS OBISPO COUNTY^a

Well number ^b S.B.B.&M.	Date	ECx10 ⁶	pH	Mineral constituents in equivalents per million						F ppm	B ppm	S10 ₂ ppm	Fe ppm	Total hardness per cent solids:CaCO ₃	Total Na : ppm : equiv	
				Cd	Mg ^d	Ca	K	CO ₃	HCO ₃							
11N/35W-25P ₁	8-27-42 ^q	1,010	8.0	—	—	—	—	—	—	50	—	—	—	—	400	—
11N/35W-27H ₁	6-1-42 ^q	773	8.0	—	—	—	—	—	—	—	—	—	—	—	—	—
11N/35W-28H ₁	6-29-42 ^q	1,240	8.0	—	—	—	—	—	—	41	—	—	—	—	—	315
11N/35W-28Q ₁	10-19-27 ^q	—	—	162	56	94	—	—	—	—	—	—	—	—	—	—
11N/35W-33E ₁	10-1-41 ^q	1,180	8.0	—	—	—	—	—	—	—	—	—	—	—	—	525
11N/35W-35A ₂	6-16-42 ^q	1,060	8.0	—	—	—	—	—	—	—	—	—	—	—	—	465
11N/36W-13R ₁	8-27-42 ^q	1,190	8.0	—	—	—	—	—	—	—	—	—	—	—	—	490
CUYAMA UNIT																
10N/24W-19F ₁	12-8-45 ^r	—	—	—	—	—	—	—	—	0	232	240	252	—	12.0	—
10/24W-20M ₁	1942 or 43	—	—	212	86	420	—	—	—	—	222	605	669	—	14.0	—
10N/25W-8P ₁	6-17-42 ^r	2,050	8.0	—	—	—	—	—	—	—	—	—	—	—	—	885
10N/25W-15Q ₁	4-23-47 ^r	2,010	8.0	—	—	—	—	—	—	—	—	—	—	—	—	1,075
10N/25W-18K ₁	4-23-47 ^r	1,880	8.0	—	—	—	—	—	—	—	—	—	—	—	—	550
				—	—	—	—	—	—	—	—	—	—	—	—	900

TABLE F-2 (continued)

MINERAL ANALYSES OF GROUND WATERS IN SAN LUIS OBISPO COUNTY^a

Well number ^b S.B.B.&M.	Date	EC×10 ⁶	Mineral constituents in equivalents per million						F ppm	B ppm	B ppm	B ppm	Total hardness as solids:CaCO ₃	Total Fe ppm	Total disolved solids:Na ppm	Total hardness as solids:CaCO ₃	Total Fe ppm	
			pH	at	Ca ^d	Mg ^d	K	Na										
10N/25W-22H1	8-4-45r	.....	.....	.....	.....	.....	.....	.....	0	175	762	23	.....	0.16	.....	896	7.6
10N/25W-25M1	4-23-47r	1,670	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,050	.....	.....
10N/25W-26E1	7-14-42r	1,640	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	975	.....	.....
10N/25W-27R1	7-14-42r	1,670	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	950	.....	.....
10N/25W-29A1 or 2	8-12-42r	1,650	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	950	.....	.....
10N/25W-29A2	1942 or 43r	.....	21.1	84	50	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....
10N/25W-35C1	7-14-42r	1,720	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,100	.....	.....
10N/25W-35F1	7-14-42r	1,780	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,150	.....	.....
10N/26W-13G1	4-23-47r	1,690	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	800	.....	.....
10N/26W-14C1	2-13-24r	242	50	184	10	810
10N/26W-14C1	7-9-40r	242	70	72	17	892
10N/26W-14C3	4-23-47r	1,720	14	875

TABLE F-2 (continued)

MINERAL ANALYSES OF GROUND WATERS IN SAN LUIS OBISPO COUNTY

Well number ^b M.D., B.&M.	Date	EC ^c 10 ^d	Mineral constituents in equivalents per million	parts per million					F : ppm : ppm : ppm : ppm	B : SiO ₂ : Fe : dis- solved : as solids:CaCO ₃ : Na : ppm : ppm : ppm : ppm	Total : hardness : per cent : salinity : ppm : ppm								
				pH	Mg ^d	Ca ^d	Na ^d	K											
CARRIZO PLAIN UNIT																			
29S/17E-13R ₁	10-21-53	335	8.4	4.9	15	144	0.4	0	165	74	38	0.85	0.58	--	619	185	63	7.24	
29S/18E-29E ₁	10-21-53	885	8.3	4.7	15	125	0.4	0	186	166	34	0.7	0.60	--	635	177	62	6.37	
29S/19E-31F ₁	9-21-54 ^e	2,770	8.1	115	5.74	62	405	2.1	0	187	768	276	0.6	1.07	--	1,944	570	60	23.32
30S/18E-1D ₁	10-21-53	2,580	8.05	176	67	252	2	0	134	888	252	0.65	1.20	--	2,004	616	52	20.83	
30S/18E-2N ₁	3-12-54	602	7.7	52	14	60	1	0	185	72	29	45	0.4	0.38	--	396	182	41	3.35
30S/19E-29M ₁	3-12-54 ^f	2,130	8.3	83	44	323	2	4	252	614	172	1.05	2.95	--	1,477	390	64	17.82	
31N/26W-2G ₁ ^g	10-19-53	3,070	8.1	58	21	632	4	0	241	808	283	0.7	1.58	--	2,076	279	84	29.12	

a. Analyzed by Division of Water Resources unless otherwise noted.

b. See Plate 9 for map location.

c. San Bernardino Base Line and Meridian.

d. These constituents in all analyses by Division of Water Resources and Pacific Chemical Consultants determined by titration.

e. Analyzed by United States Geological Survey Laboratory, Quality of Water Branch, Sacramento, California.

f. Analyzed by Pacific Chemical Consultants, Van Nuys, California.

g. Analyzed by Letterman General Hospital.

h. Analyzed by United States Army, Presidio of Monterey.

j. Spring.

k. Origin of analysis unknown.

l. Na + K.

m. Analyzed by Twining Laboratory.

n. Analyzed by University of California Laboratory.

o. Analyzed by Curtis Laboratory.

p. United States Geological Survey, Water Supply Paper 1000, 1951.

q. United States Geological Survey, Water Supply Paper 1110-B, 1951.

r. United States Geological Survey, Water Supply Paper 1110-B, 1951.

APPENDIX G

APPLICATIONS TO APPROPRIATE WATER IN SAN LUIS OBISPO COUNTY

(Filed with the Division of Water Resources and its predecessors
through June 30, 1956, under provisions of
Water Code, State of California)

APPENDIX G

APPLICATIONS TO APPROPRIATE WATER IN SAN LUIS OBISPO COUNTY

Applicant :	Date :	Source :	Location of point of diversion :	Amount :	Purpose :	Status :
number :	filed :	Applicant :	Sec. : Town-:	Merid-: applied for; Range: 1an. or licensed :		
231	1-12-16	Atascadero Mutual Water Company	Salinas River	S E S E 31 and 3 other points within the J. H. Henry Ranch	28S 12E MD 7.0 cfs	Irrigation, domestic and municipal
2499	8-15-21	Mary and Ernest F. Shuey	Vineyard Spring	N E SW 4	25S 12E MD 0.25 cfs	Irrigation, domestic and stock water
3022	9- 2-22	Charles and Anita S. Johnson	San Luis Obispo Creek	E $\frac{1}{2}$ SW 21	31S 12E MD 0.25 cfs	Irrigation and stock water
3039	9-16-22	A. W. Burt	Unnamed spring tributary to Paso Robles Creek	S W NE 15	27S 10E MD 0.036 cfs	Irrigation, domestic and stock
3591	8-16-23	Kathleen Burke Hale	Atascadero Creek	S W SW 10	29S 12E MD 74 af	Irrigation, domestic and stock
4421	1-15-25	Duane R. Hall	Salinas River	S E SW 4	27S 12E MD 0.055 cfs	Irrigation
5918	5-19-28	Paso Robles Beach Water Association	Old Creek	S W SW 3	29S 10E MD 28,800 gpd	Domestic
6150	1- 5-29	Henry J. Coventry	Tassajera Creek	S W SW 22	29S 12E MD 0.125 cfs	Irrigation, domestic and fish culture
7934	5-17-34	United States, Los Padres National Forest	Branch of East Fork Morro Creek	S E NE 12	29S 11E MD 300 gpd	Domestic and recreation
8276	3- 8-35	Maude and Clarence E. Blinn	Salinas River (underflow)	N W NE 19S	30S 15E MD 1.78 cfs	Irrigation
8572	3- 6-36	United States, Los Padres National Forest	Unnamed spring tributary to San Juan Creek	N E NE 3	30S 16E MD 1,950 gpd	Domestic, stock and recreation
10071	11-22-40	Gene E. Brendlin	Unnamed spring tributary to East Fork Morro Creek	N W NE 12	29S 11E MD 75 gpd	Domestic

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APPLICATIONS TO APPROPRIATE WATER IN SAN LUIS OBISPO COUNTY
(continued)

Appli- cation number:	Date filed:	Applicant:	Source:	Location of point of diversion:	Amount:	Purpose:	Status
10072	11-22-40	William G. and Carolyn R. Peck	Unnamed spring tributary to East Fork Morro Creek	N W N E 12 29S 11E MD 75 gpd	Domestic	License	
10202	5- 8-41	C. W. Clarke Company	Estrella River	S W N E 24 26S 14E MD 0.47 cfs	Irrigation	License	
10211	5-27-41	United States Army	Salinas River	N W N W 8 30S 14E MD 12.4 cfs and 45,000 af	Domestic and municipal	Permit	
10216	6- 4-41	City of San Luis Obispo	Salinas River	N W N W 8 30S 14E MD 12.4 cfs and 45,000 af	Municipal	Permit	
10279	9- 2-41	Frank Machado	Los Osos Creek	S W N E 20 30S 10E MD 140 gpm	Irrigation end domestic	License	
10294	10-10-41	City of El Paso de Robles	Salinas River	Movable	26S 12E MD 8.0 cfs	Domestic and municipal	
10803	4-21-44	J. F. Goodwin Company	Four unnamed springs tributary to an unnamed stream thence Pozo Creek	N W N E 10 30S 15E MD) 2.53 cfs	Irrigation, Domestic and stock	Permit	
11343	3-25-46	United States Bureau of Reclamation	Cuyama River	N E S W 35 11N 33W SB)	214,000 af	Irrigation, domestic and salinity control	Permit
11344	3-25-46	United States Bureau of Reclamation	Cuyama River	N E S W 35 11N 33W SB)			
11459	7- 5-46	Harry Kyle	East Fork Morro Creek	N W N E 12 29S 11E MD 75 gpd	Domestic	License	
11732	2-17-47	City of El Paso de Robles	Salinas River	N W N W 8 30S 14E MD 2,400 af	Domestic and municipal	Permit	
11745	2-26-47	San Luis Obispo County Waterworks District No. 6	Salinas River	N W N W 8 30S 14E MD 1.5 cfs and 200 af	Domestic and Municipal	Permit	
12285	1-20-48	Charles William Hunter	Salinas River	N W S E 9 27S 12E MD 0.5 cfs	Irrigation	Permit	

APPLICATIONS TO APPROPRIATE WATER IN SAN LUIS OBISPO COUNTY

(continued)

Application number:	Date filed:	Applicant:	Source:	Location of diversion:	Point of diversion:	Amount applied for:	Purpose:	Status:
				: Sec- tion :	: Town- ship :	: Merid- ian : Ran- ge : Tan :	: or licensed :	
12526	5-28-46	San Luis Obispo County Waterworks District No. 5	Salinas River	E. W. N.W.	8	30S 14E	MD 1.5 cfs and 200 af	Domestic and municipal Permit
12559	6-24-48	United States, Los Padres National Forest	Lyda Spring	S.W. S.E.	33	29S 16E	MD 130 gpd	Domestic License
12560	6-24-48	United States, Los Padres National Forest	Pine Spring	N.W. N.E.	25	30S 16E	MD 1,940 gpd	Domestic and stock license
12561	6-24-48	United States, Los Padres National Forest	Fry's Spring	N.W. S.W.	23	29S 15E	MD 0.002 cfs	Stock water Permit
12562	6-24-48	United States, Los Padres National Forest	Navajo Spring	S.E. N.E.	25	29S 15E	MD 700 gpd	Domestic and stock license
12566	7-7-48	Carl F. Slaten	Steiner Creek	N.W. S.W.	11	30S 12E	MD 0.329 cfs	Fish Culture License
12609	7-22-48	United States, Los Padres National Forest	Aqua Escondido Spring	S.E. S.E.	35	31S 16E	MD 600 gpd	Domestic and stock license
12610	7-22-48	United States, Los Padres National Forest	Unnamed spring tributary to Stony Creek	N.E. N.E.	28	31S 16E	MD 1,900 gpd	Fire protection license
12668	5-2-49	California State Polytechnic College	Brizziclar Creek	S.E. S.E.	14	30S 12E	MD 0.06 cfs (23 af)	Irrigation license
12690	4-14-50	Jack M. Greer, Jr.	Paso Robles Creek	S.E. N.W.	35	27S 11E	MD 0.42 cfs	Irrigation Permit
15393	6-29-53	P. G. and E. Company	Toro Creek	N.W. N.W.	12	29S 10E	MD 1.79 cfs and 5,000 af	Industrial and domestic Permit
15788	3-22-54	County of San Luis Obispo	Atascadero Creek	S.E. S.W.	28	28S 12E	MD 140 af	Recreation Permit
15855	4-30-54	Rancho Las Yeagles	Bitterwater Creek	S.W. S.E.	22	28S 18E	MD 44 af	Stock Water Permit
15900	6-9-54	Charles W. Hunter	Salinas River (underflow)	N.W. S.E.	9	27S 12E	MD 0.86 cfs	Irrigation Permit

APPLICATIONS TO APPROPRIATE WATER IN SAN LUIS OBISPO COUNTY
(continued)

Application number :	Date filed :	Applicant :	Source :	Location of point of diversion :			Amount : Merit-applied for; or licensed :	Purpose :	Status :
				Sect. : 1/4	: Town : Range :	Sec. : 1/4			
16124	11-4-54	Monterey County Flood Control and Water Conservation District	Nacimiento River	N W	15	25S	10E	MD 350,000 af	Irrigation, domestic, municipal, industrial, recreation and incidental flood control
16567	8-31-55	J. F. Mac Gillivray	Unnamed stream tributary to Las Tablas Creek, Nacimiento River	N E	S W	19	26S	11E	MD 15 af Stock water Pending
16568	8-31-55	J. F. Mac Gillivray	Unnamed stream tributary to Las Tablas Creek, Nacimiento River	S W	N E	25	26S	10E	MD 40 af Irrigation and stock water Pending
16569	8-31-55	J. F. Mac Gillivray	Unnamed stream tributary to Las Tablas Creek, Nacimiento River	N W	N E	25	26S	10E	MD 20 af Irrigation and stock water Pending
16570	8-31-55	Arthur and Bernice Forrester	Unnamed stream tributary to Las Tablas Creek, Nacimiento River	S E	N E	7	26S	10E	MD 5.12 af Stock water Permit
16571	8-31-55	Arthur and Bernice Forrester	Unnamed stream tributary to Las Tablas Creek, Nacimiento River	S E	N W	18	26S	10E	MD 25 af Stock water Permit
16587	9-6-55	Joe Trigueliro	Unnamed stream tributary to Las Nacimiento River	S W	S W	19	25S	10E	MD 3.8 af Stock water Pending
16588	9-6-55	Frank Trigueiro	Unnamed stream tributary to Las Tablas Creek	N W	S W	30	25S	10E	MD 4.8 af Stock water Permit

APPLICATIONS TO APPROPRIATE WATER IN SAN LUIS OBISPO COUNTY
(continued)

Application number	Date filed	Applicant	Source	Location of point of diversion:	Amount:	Purpose:	Permit status
16601	9-14-55	Dona Bonneheim	Unnamed stream tributary to Las Tables Creek	N E NW NE SE 20 26S 10E MD 30 af) 15 af)	Stock water	Permit	
16603	9-14-55	Anson Lisk	Unnamed stream tributary to Salinas River	N E NE 24 30S 15E MD 17 af	Stock water	Perm. ^a ,	
16609	9-19-55	Roland T. Abbey	Unnamed stream tributary to Nacimiento River	N W SW 32 25S 11E MD 25 af	Stock water	Pending	
16621	9-26-55	Anson Lisk	Unnamed stream tributary to Salinas River	S E SE 22 30S 15E MD 5 af	Stock water	Permit	
16630	9-28-55	Gage H. Irving	Unnamed stream tributary to Las Tables Creek	S E SW 6 26S 10E MD 15 af	Stock water	Permit	
16631	9-28-55	William Gerst	Unnamed stream tributary to Las Tables Creek	S E SW 14 26S 10E MD 20 af	Irrigation and stock water	Permit	
16632	9-28-55	Arian Ramage	Las Tables Creek	N W NE 35 26S 10E MD 45 af	Irrigation, stock and recreation	Permit	
16633	9-28-55	L. V. Hughes	Unnamed stream tributary to Nacimiento River	N E NE 18 25S 10E MD 15 af	Stock water	Pending	
16634	9-28-55	L. V. Hughes	Unnamed stream tributary to Nacimiento River	N W SW 17 25S 10E MD 6 af	Stock water	Pending	
16635	10-13-55	Achilles F. Franscion	Morro Creek	N E NE 2 29S 11E MD .075 cfs	Irrigation, domestic, stock and fire protection	Pending	
16747	11-25-55	Louis Bergman	Jack Creek	N W NE 14 27S 10E MD 48 af	Irrigation	Pending	

APPLICATIONS TO APPROPRIATE WATER IN SAN LUIS OBISPO COUNTY
(continued)

Application number:	Date filed:	Applicant:	Source:	Location of point of diversion:	Amount:	Purpose:	Status:
				: Merit: applied for; or licensed:			
16757	11-30-55	California National Guard	El Chorro Creek	N E N E 9 30S 12E MD 1.5 af ^s and 220 sf	Irrigation and domestic	Incomplete	
16779	12- 9-55	San Luis Obispo County Flood Control and Water Conservation District	Nacimiento River	9 26S 10E MD 265,000 af	Irrigation, domestic, industrial, recreation, municipal and flood control	Incomplete	
16811	12-27-55	Dona Bonnheim	Dip Creek	S E S W 2 26S 10E MD 8 af } 20 af }	Stock water	Pending	
16812	12-27-55	Dona Bonnheim	Unnamed stream tributary to Dip Creek	S W S E 3 NW NW 9 26S 10E MD 10 af } 10 af } 25 af)	Stock water Stock water Stock water	Pending	
16827	1-12-56	Arthur W. Burt	Unnamed stream tributary to Jack Creek	S E N E 15 27S 10E MD 20 af	Irrigation, domestic and stock water	Pending	
16829	1-12-56	A. B. and J. M. McKinley	San Marcos Creek	N $\frac{1}{2}$ N W SE N E 8 26S 11E MD 250 af	Irrigation and stock water	Pending	
16911	2-29-56	Ernest F. Shuey	Unnamed stream tributary to Nacimiento River	S W N E 17 25S 9E MD 2 af	Stock water	Pending	
16912	2-29-56	Ernest F. Shuey	Unnamed stream tributary to Nacimiento River	S E N E 17 25S 9E MD 2 af	Stock water	Pending	
16921	3- 8-56	William H. Luther	Jack Creek	S W N W 28 27S 11E MD 0.25 af	Irrigation and stock water	Pending	
16930	3-12-56	C. H. Evans	Unnamed stream tributary to Pozo Creek	N E N E 15 30S 15E MD 30 af	Stock water	Pending	

APPLICATIONS TO APPROPRIATE WATER IN SAN LUIS OBISPO COUNTY
(continued)

Application number	Date filed	Applicant	Source	Location of point of diversion	Amount applied for, or licensed:	Purpose:	Status
16948	3-19-56	C. E. Palmer	Unnamed stream tributary to Las Tablas Creek	SE NW 19	26S 11E MD 6 af	Stock water	Pending
16990	4- 5-56	John B. Wineman	Unnamed stream tributary to Nipomo Creek	Lot 62	25 11N 33W SB 15 af	Stock water and fish culture	Pending
17060	4-30-56	Avenales Cattle Company	Unnamed stream tributary to Salinas River	SW SE 32	30S 16E MD 20 af	Stock water	Pending
17077	5- 8-56	J. A. and Pearl L. Weishar	Estrella Creek (underflow)	7 wells within NE 27	25S 12E MD 1.0 cfs	Irrigation, domestic and stock water	Pending
17088	5-14-56	Walter C. Rietz	Toro Creek	W½ NE	27 28S 11E MD 0.166 cfs and ¼ af	Irrigation, domestic and stock water	Incomplete
17114	6- 7-56	City of San Luis Obispo	Old Creek	NW NE 3	29S 10E MD 16 cfs and 22,040 af	Municipal	Incomplete
17115	6- 7-56	California Men's Colony Department of Corrections	Old Creek	NW NE 3	29S 10E MD 16 cfs and 4,480 af	Domestic	Pending
17116	6- 7-56	California State Polytechnic College	Old Creek	NW NE 3	29S 10E MD 16 cfs and 4,480 af	Irrigation	Incomplete
17123	6-12-56	City of El Paso de Robles	Passo Robles Creek	36	27S 11E MD 20,000 af	Municipal	Incomplete

APPENDIX H

**SOIL MOISTURE DEPLETION
AND APPLIED WATER STUDIES**

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PLATE

<u>Plate No.</u>		
H-1	Soil Moisture Depletion and Accretion, Plot No. 1, Alfalfa, San Luis Obispo County	Following Page H-21

APPENDIX H

SOIL MOISTURE DEPLETION AND APPLIED WATER STUDIES

Introduction

Soil moisture depletion and applied water studies were conducted in San Luis Obispo County during the 1953 and 1954 irrigation seasons for the purpose of determining unit values of consumptive use of water and applied water for various prevailing irrigated crops. In connection with the study, data were also obtained with regard to consumptive use of water by certain classes of nonirrigated agriculture and native vegetation. Information developed and evaluated in connection with the soil moisture depletion and applied water studies were used to derive estimates of consumptive use of applied water and total applied water as described in Chapter III.

Successful completion of the soil moisture depletion and applied water studies was due in large part to the valuable assistance furnished by the several federal, state, county, and private agencies working in cooperation with the Division of Water Resources, together with the cooperation furnished by irrigators who assisted in the establishment of study plots and maintenance of records. Special mention is made of the helpful cooperation of the Soil Science Department, California State Polytechnic College, and the San Luis Obispo County Farm Advisor, who made available their laboratory facilities and field sampling equipment. Basic soil moisture relationships were established from the results of office and laboratory studies by personnel of the Western Soil and Water Management Section, Agricultural Research Service,

U. S. Department of Agriculture. Valuable power consumption and pump test data were supplied by the Pacific Gas and Electric Company.

In connection with this appendix, the following terms are used as defined:

Consumptive Use of Water--Water consumed by vegetative growth in transpiration and building of plant tissue, and water evaporated from adjacent soil and from foliage. Also termed evapo-transpiration.

Applied Water--The water delivered to a farmer's headgate for irrigation use. It does not include direct precipitation. Also termed duty.

Volume Weight--The ratio of the oven-dry weight of a given volume of undisturbed soil to the weight of an equal volume of water. Also termed apparent specific gravity or bulk density.

Field Capacity--The soil moisture remaining when rapid gravitational movement of water ceases following an irrigation, generally expressed as a percentage of the oven-dry weight of the soil.

Moisture Equivalent--The soil moisture retained by a soil sample when the saturated sample is subjected to a force of one thousand times the force of gravity by centrifuge for a period of thirty minutes. For most soils of medium texture, the moisture equivalent is a fairly satisfactory measure of field capacity. In coarse-textured soils the moisture equivalent is lower than field capacity, and in fine-textured soils the moisture equivalent could be higher than field capacity.

Permanent Wilting Point--The soil moisture below which plants cannot readily obtain water necessary for their growth. Generally expressed as a percentage of the oven-dry weight of the soil.

Available Soil Moisture--Water contained in the pore spaces between soil particles which is available for evapo-transpirational use. It is defined by the difference between field capacity and permanent wilting point of the soil. It is commonly expressed as a percentage of the oven-dry weight of the soil, but may be expressed as equivalent inches of depth of water as in the following equation:

$$Pv = \frac{(Pwf - Pwp) \times D \times Vw}{100}$$

where Pv = Available soil moisture, in inches

Pwf = Per cent soil moisture at field capacity

Pwp = Per cent soil moisture at permanent wilting point

D = Depth of soil column, in inches

Vw = Volume weight

Soil Moisture Depletion Study

Field and laboratory work conducted during the soil moisture depletion study included the collection of soil samples from representative irrigated plots at regular intervals of time prior to and following irrigations, determination of both field and oven-dry weights of the soil samples, reduction of resultant values of contained moisture to equivalent inches of depth of water, and determination of rates of consumptive use of water during intervals of time between successive samplings. Results of the soil moisture depletion study formed the principal bases for the derivation of long-time mean units of consumptive use of water described in Chapter III.

Location of Study Plots

Care was exercised in the selection of study plots so that they would be as nearly representative of the prevailing crop pattern as possible. Consideration was also given to a possible change in the crop pattern under ultimate conditions of development. Within certain crop groupings, as for example alfalfa and permanent pasture, considerable variation was noted throughout San Luis Obispo County with regard to soil types and depths, topography, and method of irrigation. In the case of sugar beets, variations occur in methods of cultivation and harvesting as well as in soil types and methods of irrigation. Within reasonable limits, an attempt was made to resolve these variables in the group of plots selected for study. Care was also taken to select plots with adequate drainage. Plots were not fenced or otherwise disturbed so as to interfere with normal cultivation, irrigation and harvesting.

A total of 13 plots were selected for study during the 1953 irrigation season, of which four were later dropped because of high water table condiditons or the presence of excessive rock in the sampling zone. Of the nine plots at which studies were completed, two were alfalfa, two were pasture, four were truck and one was sugar beets. In addition to the nine plots at which continuous soil moisture depletion studies were conducted, intermittent studies were conducted at 15 other irrigated and non-irrigated plots for the purpose of checking data and assumptions obtained from similar studies in other areas, as well as for the purpose of providing support data for the current study.

Presented in Table H-1 are descriptions of the 13 base plots selected for the 1953 soil moisture depletion study. Data developed at the plots listed in Table H-1 formed the principal bases for the determination of units of

consumptive use of water in San Luis Obispo County. Map reference numbers listed in Table H-1 refer to plot locations shown on Plate 11, "Present and Probable Ultimate Land Use, 1953".

Table H-1

LOCATION AND DESCRIPTION OF SOIL MOISTURE DEPLETION STUDY PLOTS

Map reference: number:	Owner:	Crop:	Method of irrigation:	Location referred to Mt. Diablo:	Soil description:	Average soil depth:	Sampling period:	Remarks
<u>Upper Salinas Unit</u>								
1	Jespersen	Alfalfa	Sprinkler	SW ₄ , S13, T28S, R12E	Lockwood gravelly sandy loam	72	4/ 9/53	10/18/53
2	Van Horn	Alfalfa	Sprinkler	SE ₄ , S 5, T29S, R12E	Yolo loam	72	4/17/53	10/ 5/53
3	Heilmann Bros.	Pasture	Border check	NW ₄ , S14, T28S, R12E	Huerhuero sandy loam	72	4/ 7/53	3/ 4/54 Inconclusive results, excessive drainage
4	Van Horn	Pasture	Sprinkler	SW ₄ , S31, T28S, R12E	Metz or Aguaia gravelly sandy loam	72	4/17/53	10/27/53
5	Giergi Bros.	Pasture	Sprinkler	NW ₄ , S24, T28S, R12E	Lockwood gravelly sandy loam	72	4/ 6/53	-- Dropped-excessive rock and gravel in root zone
<u>Coastal Unit</u>								
6	Maino	Pasture	Sprinkler	SE ₄ , S16, T21S, R12E	Metz loam	72	4/15/53	6/10/53
7	Nagan Corp.	Sugar beets	Sprinkler	SW ₄ , S19, T29S, R11E	Dublin clay	48	4/ 1/53	9/12/53
8	Nagan Corp.	Artichokes	Sprinkler	SW ₄ , S19, T29S, R11E	Yolo clay loam	72	8/ 3/53	11/ 9/53
9	Phelan	Lettuce	Furrow	SE ₄ , S30, T22N, R25W*	Dublin fine sandy loam	36	9/ 5/53	10/26/53
10	Fukuhara	Broccoli	Furrow	NW ₄ , S33, T32S, R12E	Dublin clay	48	9/ 6/54	2/ 1/54
11	Phelan	Celery	Furrow	SW ₄ , S29, T22N, R25W*	Clay loam	48	8/ 4/53	11/30/53 Poor drainage-perched water
12	Taylor	Celery	Furrow	SW ₄ , S33, T32S, R12E	Dublin clay loam	36	5/24/53	7/23/53 Dropped-perched water
13	Taylor	Celery	Furrow	NW ₄ , S33, T32S, R12E	Dublin clay	36	5/28/53	9/ 8/53 Dropped-perched water

Methods and Procedures

Routine work accomplished in connection with the soil moisture depletion study included a coordinated program of field collection and laboratory processing of soil samples conducted concurrently with office compilation and reduction of data to usable form. Special field and laboratory work included the collection of undisturbed soil samples for the determination of basic soil moisture relationships including volume weights, field capacities, and wilting percentages.

Routine soil sampling was accomplished using a modified Veihmeyer soil tube which took soil cores having a diameter of about 25/32 inches. The tube was forced into the soil by blows from a 15- or 25-pound drop hammer and was removed by hand or by a specially designed jack. Soil samples were taken from two to five days following each irrigation, and again immediately prior to the next irrigation. Samples were also taken prior to and following infrequent rain storms. With work schedule permitting, additional samples were taken between irrigations to provide further data on loss of soil moisture between irrigations. Soil moisture in samples taken following an irrigation was found to be generally at or near field capacity whereas soil moisture in preirrigation samples taken near the ground surface was generally near the wilting percentage with soil moisture increasing with depth.

Sampling depths varied at different plots. With deeper rooted crops such as alfalfa, pasture, certain field crops, and native vegetation, samples were taken by one-foot depth increments to six feet at most plots. On shallower rooted crops, samples were taken at six-inch depth increments to a depth of two feet. Below two feet, samples were taken at one-foot depth

increments to depths of three, four, or six feet. Depending upon the cropping practice, from three to nine cores were taken from each plot at each sampling. At truck crop plots, cores were taken at quarter points along runs at the tops and bottoms of the furrows. In the case of pasture irrigated by the border check method, three evenly spaced cores were taken at quarter points along the runs. For sprinkler irrigated plots, cores were taken in a pattern radiating out from sprinkler heads.

Soil samples were placed in covered cans upon removal from the soil tube and then taken to the laboratory to be weighed and dried.

Volume weights of soils in test plots were determined from soil samples collected with either specially designed coring devices or the Veihmeyer soil tube. Undisturbed cores were taken with either a three inch Uhland coring device or a two-inch diameter Pomona soil sampling device in one to three inch depth increments. The number of increments and total length of each core taken depended upon the depth of the principal root zone and the degree of stratification encountered. Cores were retained in protective cylinders and transported to the laboratory for processing. Routine soil samples collected with the Veihmeyer soil tube were also used to check volume weights by a method discussed in a later section of this appendix. In some instances, grab samples were also obtained for field capacity and wilting percentage determinations where it was impossible to obtain undisturbed cores with the special coring devices.

Laboratory processing of routine soil samples included initial weight determination of soil samples brought in from the field, controlled drying of samples to remove all moisture, and final weight determinations of dry samples.

Soil samples were brought directly to the laboratory following their collection. As moisture losses during transportation from field to laboratory were negligible, the initial moisture content determined in the laboratory was assumed to be equal to the field moisture content of the soil at the time of sampling. Soil samples were then dried while still in cans in thermostatically controlled electric ovens at 105°C for a period of 24 to 48 hours depending upon the soil. A temperature of 105°C was used to avoid the possibility of burning organic matter contained in the samples. Following drying, samples were again weighed to determine their net or dry weight.

Presented as Table H-2 is a reproduction of a typical field and laboratory data sheet which shows actual data obtained from a pre-irrigation sampling at Plot No. 1 near Atascadero. It will be noted that samples were weighed to the nearest tenth of a gram before and after oven drying. As all cans had been brought to a uniform weight, a counter balance made it possible to eliminate the can weight from computations. Data obtained from Plot No. 1 are considered representative and are cited hereinafter for illustrative purposes.

TABLE H-2

FIELD AND LABORATORY DATA SHEET
FOR SOIL MOISTURE SAMPLES

Date Sampled: 8/18/53 Purpose: Post-irrigation Crop: Alfalfa
 Date Previous Sampling: 8/12/53 Property: Jespersen Sampled by: R. E. M.

Hole No. 1

Depth	0-1	1-2	2-3	3-4	4-5	5-6
Can number	117	118	119	120	122	123
Wet weight	100.4	97.4	103.0	130.0	143.5	121.2
Dry weight	82.4	80.7	87.1	113.0	125.0	107.3
Loss	18.0	16.7	15.9	17.0	18.5	13.9
Per cent water*	21.9	20.7	18.3	15.1	14.8	12.9

Hole No. 2

Depth	0-1	1-2	2-3	3-4	4-5	5-6
Can number	124	127	128	130	131	132
Wet weight	118.9	109.4	94.5	116.7	136.0	149.5
Dry weight	97.6	92.1	79.6	100.1	117.0	127.0
Loss	21.3	17.3	14.9	16.6	19.0	22.5
Per cent water*	22.1	18.8	18.7	16.6	16.3	17.7

Hole No. 3

Depth	0-1	1-2	2-3	3-4	4-5	5-6
Can number	133	134	135	136	137	138
Wet weight	117.6	104.4	105.8	149.6	108.3	145.8
Dry weight	96.4	86.4	86.7	128.2	92.5	123.6
Loss	21.2	18.0	19.1	21.4	15.8	22.2
Per cent water*	22.0	20.9	22.0	16.7	17.1	18.0

Hole No. 4

Depth	0-1	1-2	2-3	3-4	4-5	5-6
Can number	143	146	147	148	149	150
Wet weight	83.4	669	116.9	125.4	151.3	148.7
Dry weight	68.3	55.9	97.9	107.1	129.8	126.7
Loss	15.1	11.0	19.0	18.3	21.5	22.0
Per cent water*	22.1	19.7	19.4	17.1	16.6	17.4

* Per cent water on a dry weight basis.

FIELD AND LABORATORY DATA SHEET
FOR SOIL MOISTURE SAMPLES
(continued)

Hole No. 5

Depth	0-1	1-2	2-3	3-4	4-5	5-6
Can number	151	152	154	155	156	157
Wet weight	108.3	83.9	107.8	80.3	142.0	144.7
Dry weight	87.7	69.3	88.7	69.0	121.2	126.4
Loss	20.6	14.6	19.1	11.3	20.8	18.3
Per cent water*	23.5	21.1	21.5	16.4	17.1	14.5

* Per cent water on a dry weight basis.

Soil samples collected with the Uhland coring device and Pomona soil sampling device were processed in a more elaborate manner than were the routine samples collected for moisture determinations. The soil cores were first saturated by partial immersion in water for 48 hours. They were then placed on a Leamer-Shaw blotter tension table with a tension of 60 centimeters of water. Samples remained on this table until moisture equilibrium was reached. Samples were then weighed and placed on ceramic plates. Subsequent tensions of 100, 200, and 330 centimeters of water were applied. Samples were weighed between each tension run. At the end of the run, samples were oven dried. The soil was then removed from the cores, broken down, and passed through a 20 mesh screen. The 15,000 centimeter tension was run on this material, using the standard Richards' type pressure plate technique.

Disturbed samples were processed in similar fashion except the air dried soil sample was packed uniformly into small soil cans two inches in diameter and one inch deep. All 15,000 centimeters tension observations were replicated three times. Many of the undisturbed cores were replicated and all disturbed samples were replicated three times.

Presented as Table H-3 is a reproduction of laboratory test results from undisturbed cores obtained at Plot No. 1.

TABLE H-3

**SUMMARY OF TYPICAL LABORATORY DETERMINATION
OF BASIC SOIL MOISTURE RELATIONSHIPS**

Map reference No. 1

Owner: Jespersen

Crop: Alfalfa

Profile Description:			Laboratory:	Depth, in:	Color:	sample number:	inches:	Texture:	Volume weight:	Per cent soil moisture for 60, 100, 200, and 15,000 centimeters of water tension:
0-36	Loam	Dark brown	367	12-18	1.07				20.6	17.6 15.8 14.6 8.5
36-72	Sandy loam	Brown	368	30-36	1.34				20.4	18.7 15.9 13.4 8.7
			369	40-60	1.34				21.9	19.3 14.8 12.3 5.4

Volume weights or apparent specific gravities of soils were derived as described in the previous section and were checked by comparison of the average dry weight of a number of soil samples obtained from a selected group of stations with the weight of an equal volume of water. Volume weights determined in this manner checked closely with the results of laboratory determinations.

Data obtained from routine sampling of plots were summarized by averaging the per cent moisture content at equal depths. Loss of soil moisture between samplings was derived as the difference in moisture content measured after each sampling. For the short periods immediately before, during, and after irrigations, when no measurements of moisture depletion could be made, depletion rates were estimated using the rates measured prior to and after irrigations. In a few cases, it was necessary to eliminate certain plots from the study program due to the presence of a perched water table and in one case due to the presence of excessive rock and gravel in the sampling zone. Results from one plot proved to be inconclusive apparently because of excessive drainage which occurred after the soil had reached its field capacity, with a resultant depletion rate in excess of what actually occurred due to transpiration and evaporation alone.

Summary of Results

Results of soil moisture depletion determinations expressed in equivalent inches of depth of water are summarized in Table H-4 for all plots at which studies could be completed and evaluated. Soil moisture depletion and accretion rates at Plot No. 1 as measured during the 1953 study season are depicted graphically on Plate H-1, "Soil Moisture Depletion and Accretion". Vertical lines shown on Plate H-1 indicate times precipitation

occurred or irrigation water was applied. Rates of consumptive use are indicated by the slopes of lines between irrigations, and the sum of the ordinates of the sloping lines for any period represents the total amount of water consumptively used for that period. Soil moisture depletion curves as shown on Plate H-1 are normally straight lines since the rate of depletion is relatively independent of the level of soil moisture as long as the moisture content is maintained between the moisture equivalent and the permanent wilting point.

TABLE H-4

OBSERVED CONSUMPTIVE USE OF WATER
AT SOIL MOISTURE DEPLETION STUDY PLOTS, 1953 AND 1954
(In inches of depth)

Map reference: Number:	Crop	Number of irrigations:	1953			1954			Total					
			April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Total
<u>Upper Salinas Unit</u>														
1	Alfalfa	6	4.94	4.93	4.90	5.18	5.93	5.47	4.68	--	--	--	35.43	
2	Alfalfa	9	--	2.53	5.15	5.10	4.42	4.98	5.15	--	--	--	27.33	
3	Pasture	14	3.03	8.96	11.13	11.32	7.72	5.55	--	--	--	--	52.14a	
4	Pasture	14	--	4.14	7.82	4.56	6.70	2.64	2.72	--	--	--	28.58	
<u>Coastal Unit</u>														
7	Sugar Beets ^b	4	1.83	2.13	2.13	2.25	2.10	2.05	--	--	--	--	12.49	
8	Artichokes	3	--	--	--	--	2.58	2.52	2.21	--	--	--	7.31	
9	Lettuce	3	--	--	--	--	--	3.77	3.21	--	--	--	7.08	
10	Broccoli	6	--	--	--	--	--	4.22	3.03	2.21	4.22	3.07	2.97	19.82
11	Celery	8	--	--	--	--	0.97	0.95	0.83	0.72	--	--	3.47b	

a. Observed soil moisture depletion greater than actual consumptive use apparently due to continued drainage after soil had reached field capacity.

b. Observed soil moisture depletion less than actual consumptive use due to presence of perched water.

Applied Water Study

A study of current practice in the application of water to irrigated crops was conducted in San Luis Obispo County during the 1953 and 1954 irrigation seasons in conjunction with the soil moisture depletion study. In addition to providing a basis for the determination of units of applied water, the study furnished a considerable amount of data on irrigation methods and frequencies and local crop management. From the combined results of the soil moisture depletion and applied water studies, sufficient data were available to provide a basis for estimating irrigation efficiencies.

Field and office work in connection with the applied water study included the maintenance of records of power consumption at wells serving 27 study plots and the computations of total applied water for various desired units of time based on the quotient of measured kilowatt-hours and a conversion factor of kilowatt-hours per acre-foot of water pumped. Conversion factors were obtained from the results of pump tests performed during the periods for which power consumption was measured and for which units of applied water were desired.

As in the case of the soil moisture depletion study, efforts were directed towards securing a representative group of test plots for the applied water study. Care was taken to include typical plots with regard to crop type and variety, soil type, slope, method of irrigation and method of cultivation. In the case of the applied water study, however, entire fields or cropped areas were used, with units of water application being expressed in acre-feet per acre per unit of time. Areas of study plots were determined from field surveys and by planimetering from base maps.

Summarized in Table H-5 are descriptions of the 27 plots studied during the 1953 and 1954 irrigation seasons together with measured monthly quantities of applied water. Locations of study plots are shown on Plate 11, "Present and Probable Ultimate Land Use, 1953".

APPLICATION OF WATER TO REPRESENTATIVE CROPS IN SAN LUIS OBISPO COUNTY
IN 1953 AND 1954

Crop	Seasons performed	Well numbers	Method	Soil description	Depth of applied water, in inches						
					Area ^a	In	in	in	in	in	in
<u>Under Standard Units</u>											
Agriculture	1953	14	28S/12E-10G1	Border check	Yolo fine sandy loam	16.0	1.8	2.9	2.9	3.4	3.5
	1953	1	28S/12E-13N1	Sprinkler	Lockwood gravelly sandy loam	22.0	6.1	4.6	7.4	8.3	5.5
	1953	15	26S/12E-14L1	Sprinkler	Huerhuero gravelly sandy loam	20.0	5.2	8.3	9.0	9.7	9.1
	1953	2	29S/13E-5K2	Sprinkler	Yolo loam	9.2	4.9	8.5	8.3	12.6	13.9
	1954	15	26S/12E-14L1	Sprinkler	Huerhuero gravelly loam	30.0	2.0	4.2	6.8	8.2	4.9
	1954	16	26S/12E-26D1 26S/12E-27H2	Sprinkler	Ramsey sandy loam	86.0	4.0	4.8	5.2	5.8	4.4
Pasture	1953	5	28S/12E-24C1	Sprinkler	Lockwood gravelly sandy loam	20.7	4.6	5.0	10.0	10.9	10.3
	1953	3	28S/12E-14G1	Border check	Huerhuero sandy loam	88.0	3.1	3.2	10.2	9.1	10.2
	1953	27	26S/12E-14L1	Sprinkler	Huerhuero gravelly sandy loam	32.0	4.8	7.8	8.4	9.1	8.5
	1953	4	28S/13E-3IK1	Sprinkler	Metz or Agde gravelly sand loam	27.6	3.4	3.2	6.4	12.6	11.9
	1954	5	28S/12E-24C1	Sprinkler	Lockwood gravelly sandy loam	20.7	0.1	3.2	13.8	7.0	10.1
	1954	3	28S/12E-14G1	Border check	Huerhuero sandy loam	88.0	(=7.9--)	15.0	6.7	10.3	9.4
	1954	18	25S/12E-21L1	Sprinkler	Haines sandy loam	26.0	1.6	3.8	5.0	5.6	5.5

TABLE H-5 (continued)

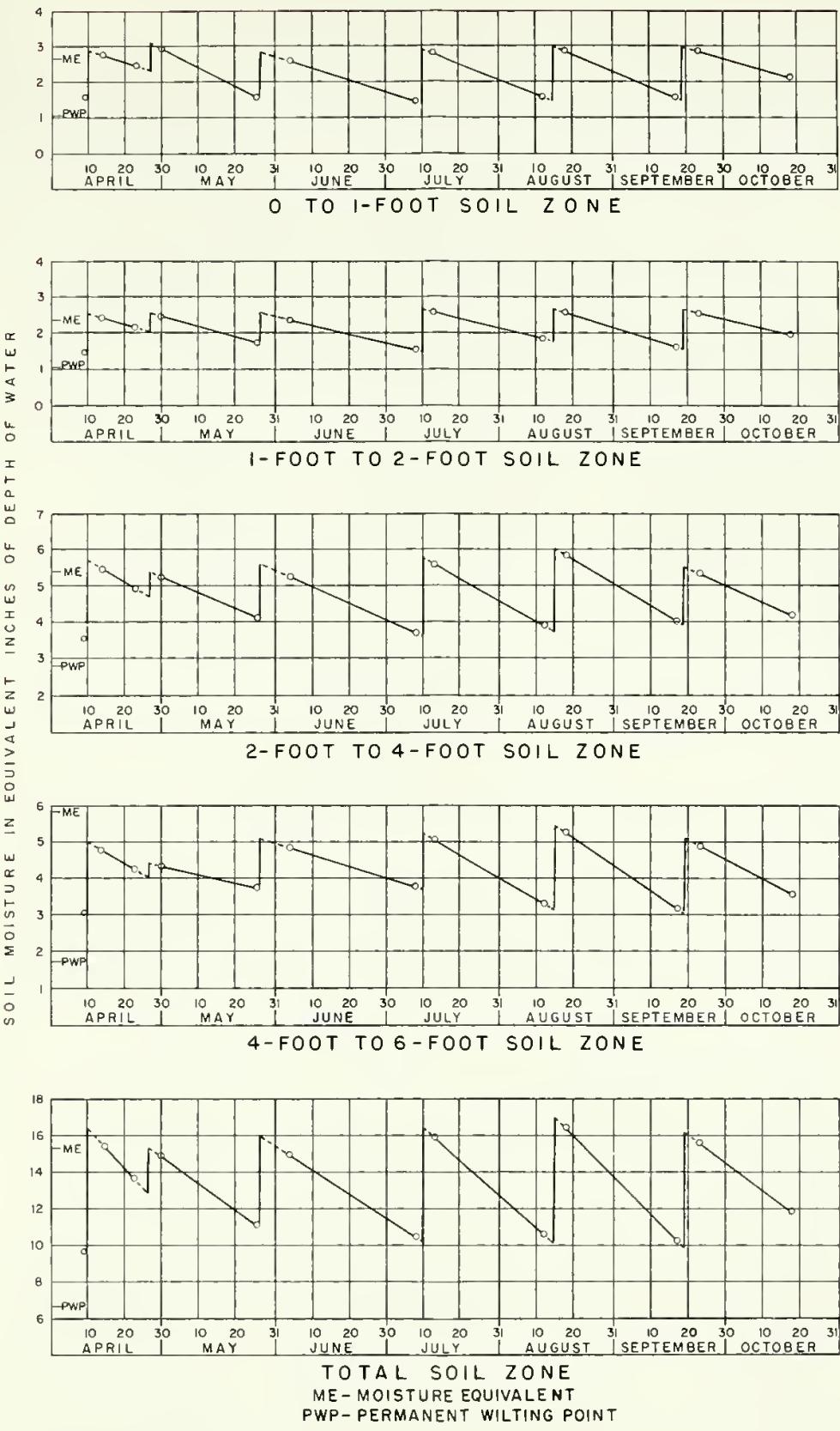
APPLICATION OF WATER TO REPRESENTATIVE CROPS IN SAN LUIS OBISPO COUNTY
IN 1953 AND 1954

Crop	Map	Season: reference number:	Well number	Method of irrigation:	Soil description	Area, in acres:	Depth of applied water, in inches					Total depth, in inches
							Apr. : May	June : July	Aug. : Sept.	Oct. : Nov.		
1954	17	26S/12E-14L1	Sprinkler	Huerhuero gravelly sandy loam	32.0	2.9	4.0	6.4	7.7	4.7	5.5	0.7
Field corn	1954	4	28S/13E-31K1	Furrow	Metz or Agueda gravelly sandy loam	27.6	--	3.6	5.2	(= 9.4 = = =)	2.2	2.9
<u>Cosatol Unit</u>												
Affalfa	1954	19	30S/11E-20K2	Sprinkler	Metz loam	47.0	--	5.6	5.9	5.2	5.4	5.9
Pasture	1954	20	32S/13E-34D1	Sprinkler	Dublin loam	20.5	--	2.8	5.3	7.2	5.5	5.4
Walnuts	1954	21	31S/13E-19H1	Furrow	Botella clay loam	25.5	--	0.1	1.9	7.7	8.4	0.2
Sugar beets	1953	7	29S/11E-19P1	Sprinkler	Dublin clay	86.0	2.2	3.0	3.0	3.7	--	--
			19L1									11.9
			19K1									
			19K2									
			30D1									
1954	7	29S/11E-19P1	Sprinkler	Dublin clay	86.0	--	3.1	4.3	3.7	2.3	--	--
		19L1										13.4
		19K1										
		19K2										
		30D2										
Celery	1953	11	32S/13E-34R3	Furrow	Dublin clay loam	7.9	--	--	--	--	6.1	8.2
	1953	12	32S/13E-33L2	Furrow	Dublin clay loam	4.2	16.0	9.0	27.0	5.0	--	--
	1953	13	32S/13E-33E3	Furrow	Yolo sandy loam	16.0	--	4.0	21.6	29.7	24.3	--
Lettuce	1953	9	32S/13E-34R3	Furrow	Dublin fine sandy loam	9.7	--	--	--	1.4	3.8	2.6
Artichokes	1953	8	29S/11E-19P1	Sprinkler	Dublin sandy loam	43.7	--	--	1.0	4.8	2.9	1.6
		19L1										13.2
		19K1										
		19K2										
		30D1										

TABLE H-5 (continued)

APPLICATION OF WATER TO REPRESENTATIVE CROPS IN SAN LUIS OBISPO COUNTY
IN 1953 AND 1954

Crop	Season of reference: Well number	Map number	Method of irrigation	Soil description	Depth of applied water, in inches					Total depth, in inches		
					April	May	June	July	Sept.			
Artichokes	1954	22	29S/11E-19P1	Sprinkler	Dublin sandy loam	32.8	—	—	2.6	3.0	—	36.2
		19J1				—	—	—	—	—		
		19K2				—	—	—	—	—		
		30D1				—	—	—	—	—		
	1954	8	29S/11E-19P1	Sprinkler	Dublin sandy loam	43.7	—	—	—	2.3	2.5	2.4
		19J1				—	—	—	—	—		
		19K1				—	—	—	—	—		
		19K2				—	—	—	—	—		
		30D1				—	—	—	—	—		



SOIL MOISTURE DEPLETION AND ACCRETION
PLOT NO. 1 ALFALFA SAN LUIS OPISPO COUNTY
1953

APPENDIX I

PLANS FOR THE PROTECTION AND DEVELOPMENT
OF RECREATIONAL RESOURCES IN
SAN LUIS OBISPO COUNTY

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Prepared in Cooperation with the
California Department of Water Resources
Division of Resources Planning

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PLATES

Plate No.

- I-1 Major Existing and Proposed Recreational Areas

PLANS FOR THE PROTECTION AND DEVELOPMENT
OF RECREATIONAL RESOURCES IN SAN LUIS OBISPO COUNTY

Introduction

The recreational resources of San Luis Obispo County are concentrated along the coast, and are largely ocean-associated. Prominent are such activities as fishing, clam digging, hunting, abalone fishing, swimming, and boating. The coastal area enjoys cool summer weather and, as is typical along all of California's coast, recreational seekers from the warm interior areas find it attractive.

The interior portions of San Luis Obispo County, although adapted to fewer types of outdoor recreation, are by no means devoid of these resources. The activities in inland areas are largely devoted to hunting and fishing, and to the large category of general highway use and outdoor enjoyment.

It is expected that recreational activities in California will increase in the future, and that the rate of this increase will be more rapid than the rate of population increase. In that most types of outdoor recreation are directly associated with water, it follows that a plan for the future development of water resources must include provisions for the recreational use of the water resources. The water requirements of many types of recreation are nonconsumptive in nature, and can frequently be met without interfering with other uses. In instances where recreational use of water conflicts with its other beneficial uses, a decision must be reached regarding the higher use in that particular case.

This report describes the present recreational resources of San Luis Obispo County, the areas that are believed to be susceptible to future

recreational development, and the effect that the proposed water development plans would have upon them.

Present Recreational Resources

Fisheries

The rainbow trout is the only native species of game fish presently found in numbers in inland waters of San Luis Obispo County. It is found in its resident form in the headwaters of several streams in the County, while its anadromous form, the steelhead rainbow trout, runs into the larger coastal streams. During extremely wet years in the past, large numbers of steelhead have been known to reach the upper Salinas River to a point several miles above the present site of Salinas Dam. However, runs into the Salinas River have been small or nonexistent during recent dry years. Future water developments in the Salinas River Basin are expected to almost entirely prevent steelhead from using its streams.

Several of the coastal streams in San Luis Obispo County have sufficient flows to support significant populations of steelhead. Typical of such streams are San Carpoforo, Arroyo de la Cruz, San Simeon, Santa Rosa, and San Luis Obispo Creeks. All of them presently provide some steelhead angling in tidewater.

Trout fishing in the County is supported largely by catchable-size rainbow trout planted by the State Department of Fish and Game. The waters and the numbers of trout planted during the 1955 season are shown in Table I-1. Some of the trout taken in the County result from natural reproduction and some are yearling or older steelhead, but with heavy fishing pressure and limited trout habitat, most of the fishing is provided by planted fish.

TABLE I-1
NUMBER OF TROUT PLANTED IN
SAN LUIS OBISPO COUNTY WATERS DURING 1955

Water	:	Number of trout planted
Arroyo de la Cruz Lagoon	:	14,000
San Simeon Lagoon	:	14,000
San Simeon Creek	:	6,000
Arroyo Grande Creek	:	4,000
Lopez Creek	:	19,000
Santa Rosa Creek	:	4,000
Morro Creek	:	1,000
Chorro Reservoir	:	5,000
Reservoir Canyon Lake	:	<u>10,000</u>
TOTAL		78,000

Warm-water game fishes, including largemouth black bass, sunfish, crappie, and catfish, have been introduced into suitable waters in San Luis Obispo County and support a limited amount of angling. These fish are best adapted to lakes, and are found in Salinas Reservoir, Atascadero, and Oso Flaco Lakes, and some of the small, privately-owned reservoirs and farm ponds in the County. Oso Flaco and Atascadero Lakes and Oceano Lagoon are the only warm-water fishing areas generally available to the public at the present time. It is expected that Salinas Reservoir will be opened to controlled public fishing for the first time during the early part of 1957.

Marine sport fishing is available along the entire coast line of San Luis Obispo County, and surf and rock fishing are popular sports. Party boats are available at Cayucos, Morro Bay, and Avila, and moorage for private pleasure boats is also available at the latter two harbors. Table I-2 gives the reported 1955 party boat landings. Clamming is very popular in the Morro Bay and Pismo

Beach areas. The area from Shell Beach to Oso Flaco Lake is the most important and productive clamping area in the State. Abalone and mussels are also sought by sportsmen along the rocky portions of the coast.

TABLE I-2

NUMBER OF FISH REPORTED
BY MARINE PARTY BOAT OPERATORS
IN SAN LUIS OBISPO COUNTY DURING 1955

Species	:	Number of fish
Rockfish		260,797
Lingcod		5,673
Jack mackerel		3,038
Miscellaneous flatfish		2,982
Cabezon		2,791
Pacific mackerel		1,259
White croaker		84
Salmon		64
California halibut		27
Sablefish		25
Albacore		9
Kelp or sand bass		5
Sculpin		2
Others		441
TOTAL		277,197
No. Angler Days		21,590

Although it has no recreational value, commercial fishing deserves mention in this report. It is a significant industry in San Luis Obispo County, providing a large portion of income to several coastal towns. Some of the commercial species are taken immediately adjacent to the coast, while others are taken at sea some distance from the ports of landing. The 1954 commercial fish landings in San Luis Obispo County are shown in Table I-3. These fish had a value of approximately \$586,500 to the commercial fishermen.

TABLE I-3
COMMERCIAL FISH LANDINGS AT
SAN LUIS OBISPO COUNTY PORTS DURING 1954

In Pounds

Species	Port of landing		
	: Port San Luis :	Morro Bay	: San Simeon
Abalone	89,897	178,189	432,350
Albacore	121,200	666,783	
Anchovy	1,193,000		
Sardine	1,552,250	147,160	
Salmon	213,867	92,710	
Sole	283,509	397,608	
Rockfish	95,475	405,526	
Pacific mackerel	261,850	267,993	
Crab	23,800	24,218	
Shark	306,632		
Bigeye tuna	68,951		
Yellowfin tuna	50,000		
California halibut	33,739		
Pacific oyster		311,519	
All other	90,593	69,600	
 TOTALS	 4,384,763	 2,561,306	 432,350

Wildlife

Numerous hunting opportunities exist throughout much of San Luis Obispo County. Big game, waterfowl, and upland game species are all present in the County and are taken in significant numbers. Table I-4 gives estimates of the numbers of various wildlife species taken in the County during 1955.

TABLE I-4
ESTIMATED 1955 WILDLIFE KILL
IN SAN LUIS OBISPO COUNTY

Species	:	Per cent of
	: Number taken :	State total
Black-tailed deer	1,933	2.7
Ducks	31,000	0.9
Geese	1,700	0.5
Valley quail	36,900	2.8
Mourning dove	58,400	2.3
Band-tailed pigeon	18,800	13.9
Brush and cottontail rabbits	5,400	1.2
Jack rabbit	8,700	0.7
Coot	3,100	0.5

In addition to the species listed in Table I-4, elk, wild turkeys, chukar partridges, and beaver are present, the latter three species having been planted by the Department of Fish and Game. A controlled hunting season for chukar partridges was opened for the first time in 1954, and some birds were taken. As yet no hunting has been allowed for wild turkeys.

Several areas in the County are subject to intensive use by hunters. Most of these areas are shown on Plate 1. The Morro Bay area is a favorite for black sea brant. Quail and doves are found in large concentrations in the upper Salinas Basin, and the Dune Lakes area supports large populations of doves, quail, and waterfowl. Big game hunting is important in the Santa Lucia Range and the La Panza Range east of Pozo. Chukars and quail are found in the Temblor Range and the upper Salinas Basin. Pigeons are numerous in Lopez Canyon and the Adelaida area.

The Department of Fish and Game and local groups have made various improvements to benefit wildlife in San Luis Obispo County. Some 80 "gallinaceous guzzlers", watering devices for upland game, have been installed,

and cover crops have been planted in several areas to increase the quality of game habitat.

Allied Outdoor Recreation

Facilities for outdoor recreation in San Luis Obispo County are considered to be above average for California as a whole. The many miles of coast line have contributed largely to this development. Present developments consist of State Parks, which are listed in Table I-5 and shown on Plate I-1 entitled "Major Existing and Proposed Recreational Areas", County Parks, listed in Table I-6 and shown on Plate I-1, facilities provided by the United States Forest Service within Los Padres National Forest, and developments by private individuals. State Highway No. 1, which parallels the coast in the northern portion of the County, is considered a major recreational facility. It is used mainly by people enjoying the scenic and recreational features of the area. In addition to the developments mentioned above, portions of beaches and coast line are owned by the State and County but have been left largely undeveloped. The acquisition of more coast line for recreational purposes is to be encouraged.

Of considerable importance to ocean sport fishermen are the four public fishing piers located in the County. These piers are located at Cayucos, Avila (2), and Pismo Beach, where they were developed by local interests. The Board of Supervisors is currently considering a plan to provide a public fishing pier at San Simeon. Boating and water skiing enthusiasts as well as sport fishermen are benefited by boat harbors at Morro Bay and Avila.

TABLE I-5

STATE PARKS LOCATED IN SAN LUIS OBISPO COUNTY

Map reference: number :	Name	Area in acres	Facilities
1	San Simeon Beach	42	Day use
2	Cayucos Beach	25	Day use
3	Morro Strand Beach	15	Day use
4	Morro Bay	1,529	Camping, golf course, boat basin
5	Avila Beach	9	Day use
6	Pismo Beach	311	Camping, day use

TABLE I-6

SAN LUIS OBISPO COUNTY PARKS

Map reference: number :	Name	Area in acres	Facilities
7	La Grande Beach	850	Day use
8	Morro Bay	1	Day use
9	Atascadero Beach	--	Day use
10	Cambria	2	Day use
11	San Simeon	4	Day use
12	San Miguel	1½	Day use, sports
13	Shandon	5	Day use, sports
14	Templeton	5	Day use, sports
15	Atascadero Lake	40	Day use
16	Atascadero Memorial	--	None
17	Guesta Canyon	5	Day use, sports
18	Routzahn	30	Day use, sports
19	Oceano Memorial	7	Day use
20	Grover City	4½	Day use, sports

Development of summer and weekend cottages has taken place in Lopez Canyon, and to a lesser degree in such areas as the canyon of the East Fork of Morro Creek.

Salinas Reservoir is presently open to the public, and provides facilities for fishing, boating, picnicking, as well as associated types of recreation. It is anticipated that Nacimiento Reservoir will also be opened to the public for similar uses. Vaquero Reservoir is presently under construction.

Water Conservation Plans

The water conservation plans discussed in Chapter IV of this bulletin comprise several storage reservoirs on streams tributary to the Salinas River and on the major coastal streams. These reservoirs would impound water during the winter rainy season to be released later for irrigation, domestic, and municipal use and to replenish ground water basins. The reservoirs considered and their sizes are listed in Table I-7. They are also shown on Plate I-1.

TABLE I-7

MAJOR RESERVOIRS CONSIDERED FOR DEVELOPMENT
IN SAN LUIS OBISPO COUNTY AND VICINITY

River and site	:Depth of water at: dam in : feet	:Water surface elevation, maximum pool	:Capacity of reservoir, in acre-feet	:Maximum surface area, in acres	:Reservation for silt, in acre-feet
<u>Santa Rita Creek</u>					
<u>Santa Rita</u>	138	1,143	15,000	340	500
<u>Jack Creek</u>					
<u>Lower Jack</u>	140	1,130	25,000	500	500
<u>Nacimiento River</u>					
<u>San Miguelito</u>	158	1,268	130,000	3,060	1,000
<u>Jarrett Shut-In</u>	214	1,114	110,000	1,960	1,000
<u>San Carpoforo Creek</u>					
<u>Bald Top</u>	175	845	20,000	250	500
<u>Upper Ragged Point</u>	230	300	30,000	255	500
<u>Arroyo de la Cruz</u>					
<u>Yellow Hill</u>	190	220	80,000	790	1,000
<u>San Simeon Creek</u>					
<u>San Simeon</u>	170	25	60,000	740	500
<u>Santa Rosa Creek</u>					
<u>Santa Rosa</u>	198	438	35,000	420	500
<u>Old Creek</u>					
<u>Whale Rock</u>	163	203	40,000	610	500
<u>Arroyo Grande Creek</u>					
<u>Lopez</u>	143	518	50,000	940	1,000

San Miguelito and Jarrett Shut-In Reservoirs, on the Nacimiento River, could release water downstream to Nacimiento Reservoir, thence by conduit to various water service areas in the Upper Salinas Unit.

Lower Jack and Santa Rita Reservoirs could be constructed to replenish ground water supplies and for municipal and domestic supplies in the Paso Robles-Atascadero area.

Lopez Reservoir could recharge ground water basins and could also provide municipal water supplies to the Arroyo Grande area by a pipe line. In addition, its operation would result in certain flood control benefits for the Arroyo Grande Valley.

The remaining reservoirs on the coastal streams could release water downstream or into conduits for use along the coast for irrigation, domestic, and municipal purposes.

Effect of the Water Conservation Plans on Recreational Resources

Fisheries

Many of the water conservation developments considered in this bulletin would be detrimental to steelhead populations in the streams concerned insofar as they exist at the present time. The dams would prevent steelhead from ascending the streams to spawning gravels in the upper reaches. There would be little possibility of providing adequate spawning grounds below the dams in most streams, due to the proximity of the dams to the ocean. At none of the dams would a fish ladder seem to be a feasible remedial measure. The dams are for the most part rather high, and with widely fluctuating water levels fish ladders would be quite costly. Furthermore, the major spawning areas would be flooded by the reservoir in most cases. It is possible, however, that if a development were located far enough upstream and a satisfactory flow were released to the stream below, the steelhead fishery could be maintained in that stream. Such releases, however, would reduce the amount of water available from the reservoir for water conservation purposes.

The reservoirs considered in this report could also be operated to produce new lake fisheries of considerable value. It is probable that most of them would be of the warm-water type. The limiting factors in these reservoirs would be water level fluctuation and size of minimum pools. While fluctuation of these reservoirs is a necessary feature in the operation of the project and cannot be curtailed, a warm-water fishery could not be maintained without a minimum pool reservation. These reservoirs would not produce optimum populations of game fish due to fluctuation, but they could be made to produce numbers commensurate with the size of the minimum pools. The reservoirs could provide more opportunities for angling and support heavier angling pressure than is now present if public access were permitted at each reservoir.

Wildlife

The wildlife species in the County would probably not be affected to any great degree by water conservation plans considered herein. Limited areas now occupied by game would be inundated by reservoirs, but it is expected that the shore lines of the reservoirs would compensate for this loss. Since no open canals are included in the projects discussed in this bulletin, the hazard of these structures to deer is not a consideration. The reservoirs considered in this bulletin could also serve as resting areas for waterfowl. It is doubtful, however, that they would produce much food, since extreme fluctuation of water levels would prevent the establishment of rooted aquatic vegetation.

Allied Outdoor Recreation

Other outdoor recreational pursuits should be enhanced by the water development plan. Picnicking, boating, and camping, as well as fishing, may become popular at the reservoirs considered, if permitted.

Routzahn Park, located at the junction of Lopez and Arroyo Grande Creeks, would be inundated by Lopez Reservoir. However, the reservoir area could become a major recreational attraction of far greater value after construction.

Of the utmost importance to recreation at all of the projects is the matter of public access. This should be an integral part of the planning, and should be secured for each reservoir to be constructed, providing adequate public health safeguards are maintained. Since public use of these areas would in no way interfere with the operation or yield of the reservoirs, it would be a relatively simple matter to supply the few developments needed for public use.

Plans for Recreational Resources

Fisheries

As stated in the previous section, the construction of dams on the coastal streams would have the effect of reducing the populations of steelhead in these streams. Yet, the reservoirs impounded by the dams would provide habitat for populations of game fishes. It is simply a matter of removing a stream fishery and replacing it with a reservoir fishery. In some parts of California, particularly the large salmon and steelhead streams in the north, this would seriously reduce the total amount of fishing available. In the San Luis Obispo County streams under consideration, however, the value of the reservoir fisheries should be sufficient to offset the lost stream fisheries, provided the reservoirs are operated in a manner compatible with fish production.

The reservoirs included in the considered water development plans could be provided with dead storage pools suitable for the protection of fish populations during periods of maximum drawdown. Suggestions for minimum pool elevations are given in Table I-8. These suggestions are considered the minimum required to provide suitable fish populations. If larger minimum pools were to be reserved, larger fish populations would result. As previously discussed, however, maintenance of minimum pools suggested in Table I-8 would result in less water conservation yield from the several reservoirs considered. During the build-up period prior to full utilization of the yield of each reservoir, minimum pools could be maintained, however, with very satisfactory results.

TABLE I-8

MINIMUM POOL SUGGESTIONS FOR FISHERY PROTECTION
IN POTENTIAL SAN LUIS OBISPO COUNTY RESERVOIRS

River and site	:Water surface: : elevation, : : minimum : : pool	Minimum pool	: Minimum :pool surface capacity, in: area, in acre-feet* : acres
<u>Santa Rita Creek</u>			
<u>Santa Rita</u>	1,070	1,020	66
<u>Jack Creek</u>			
<u>Lower Jack</u>	1,040	1,200	98
<u>Nacimiento River</u>			
<u>San Miguelito</u>	1,200	8,860	540
<u>Jarrett Shut-In</u>	1,000	9,200	320
<u>San Carpoforo Creek</u>			
<u>Bald Top</u>	730	790	58
<u>Upper Ragged Point</u>	110	660	62
<u>Arroyo de la Cruz</u>			
<u>Yellow Hill</u>	70	2,680	180
<u>San Simeon Creek</u>			
<u>San Simeon</u>	90	2,090	150
<u>Santa Rosa Creek</u>			
<u>Santa Rosa</u>	290	970	71
<u>Old Creek</u>			
<u>Whale Rock</u>	100	1,860	130
<u>Arroyo Grande Creek</u>			
<u>Lopez</u>	420	1,490	160

* Exclusive of silt reservation.

Table I-9 lists the minimum flows that are considered necessary to maintain resident or anadromous fish populations in streams below dams. Releases from storage at the expense of water conservation yield would be required to supplement natural flows to maintain the flows listed in Table I-9. In some instances, this water would be available for later downstream use.

TABLE I-9
SUGGESTED STREAM FLOW RELEASES BELOW
POTENTIAL RESERVOIRS IN SAN LUIS OBISPO COUNTY

Reservoir	:	flow to stream
Santa Rita		5 c.f.s.
Lower Jack		5 c.f.s.
Jarrett Shut-In		50 c.f.s.
Bald Top		5 c.f.s.
Santa Rosa		5 c.f.s. (May-November) 10 c.f.s. (December-April)

Several lakes in the County are susceptible of developments to provide fishing and allied recreation. Foremost of these are the Dune Lakes, several small lakes located along the coast near the town of Arroyo Grande. These lakes appear to be quite similar to Oso Flaco Lake, located several miles to the south, which provides good warm-water angling. The main expenditure on these lakes would be to acquire access, since few developments would be required.

Laguna Lake located near San Luis Obispo is also considered as having possibilities for recreational development. This lake is relatively shallow at the present time, and would perhaps require dredging in some parts to provide a suitable habitat for fish. Because of its proximity to San Luis Obispo, it would probably have considerable fishing and recreational value if developed for these purposes.

Chorro Reservoir located in Camp San Luis Obispo and part of the water supply for that facility possesses potentiality as a trout water. If public access were made available and adequate public health safeguards were maintained, Chorro Reservoir would be a valuable addition to the fishing resources of the County. It is not anticipated that any expenditure would be necessary for this project, except that for planting catchable-sized trout.

Possibilities exist for the erection of stream flow maintenance dams on streams that will contain no water conservation developments, such as San Luis Obispo Creek. No specific recommendations are made for this type of development in this report, but as recreational needs become greater they should receive consideration.

Wildlife

No specific recommendations will be made for wildlife species in San Luis Obispo County. It is possible that additional watering devices and more cover crops would increase the carrying capacity for upland game. Further study is required before it can be determined how much more development is needed.

The acquisition of the Dune Lakes and Laguna Lake for public use would increase public hunting opportunities in the County, especially for upland game and waterfowl. Both of these areas are presently under private control and exclude public use.

Allied Outdoor Recreation

The portions of San Luis Obispo County that are presently used for recreational purposes, or are believed to be susceptible to future recreational development, are shown on Plate I-1. The classification of a land or water area as recreational does not necessarily preclude other types of use on the same land or water. It is intended to delineate the areas which recreational use should be encouraged. There are undoubtedly areas in which recreation is or will be important that have been omitted from this classification. These may have been omitted due to their small area, their

relatively minor recreational importance, or through an oversight. For the purpose of this investigation, it is believed that all major areas have been included, with the exception of the hunting areas. Deer and upland game species are hunted throughout most of the County, but since this type of recreation is of relatively short duration and covers extensive areas, they are not shown on Plate I-1, although they are of major importance.

An examination of Plate I-1 will show that the entire coast line is considered a potential recreational area. It is believed that in the future, with the expected increase in population and resulting recreational needs, this use will far outweigh any other. This section is admirably suited to recreation, being composed of long stretches of wide, sandy beaches and rugged, rocky coast lines. It is expected that large numbers of summer cottages and suburban developments will be constructed in this area in the future, as more leisure time becomes available and population increases. One-fourth of the shore line in the County is now public property, County, State, or Federal, and it has been proposed by the County that an additional 38 miles of ocean frontage be acquired. Even though some 30 per cent would remain in private ownership, this does not alter the fact that most of it should be considered recreational, if for no other reason than its scenic value for motorists.

To further recreational uses along the coast, several harbors could be improved for small craft and fishing boats. At present, only Morro Bay and Avila are safe harbors for these types of vessels. Both of these harbors could be improved and enlarged to accommodate more use. State funds were recently expended on the improvement of a small boat basin at Morro Bay State Park. Additional dredging of Morro Bay could greatly increase its usable area.

Its breakwaters also need repairs. Such activities as fishing, sailboating, water skiing and swimming would be enhanced. The harbor at Avila could be expanded by developing an inner boat basin in the lagoon of San Luis Obispo Creek. This would increase facilities for boat storage and use in the area. San Simeon Bay could be improved by the addition of a breakwater to further protect the bay, and a wharf for landing boats. All of these ports have been recommended for further development or study by the U. S. Corps of Engineers or local interests.

Several lagoons, such as those of the Arroyo de la Cruz and San Carpoforo and Villa Creeks, could possibly be enlarged by dredging and should certainly be opened for public use, especially fishing and camping.

Several of the better trout fishing streams, including Lopez, Morro, Tassajara, and Atascadero Creeks, are classified as recreational, primarily because of angler use. The construction of cottages in these areas should not be discouraged, but public access to the streams should be assured.

In addition, all present and potential reservoirs are included in the recreational classification. The large recreational potential of these areas is obvious.

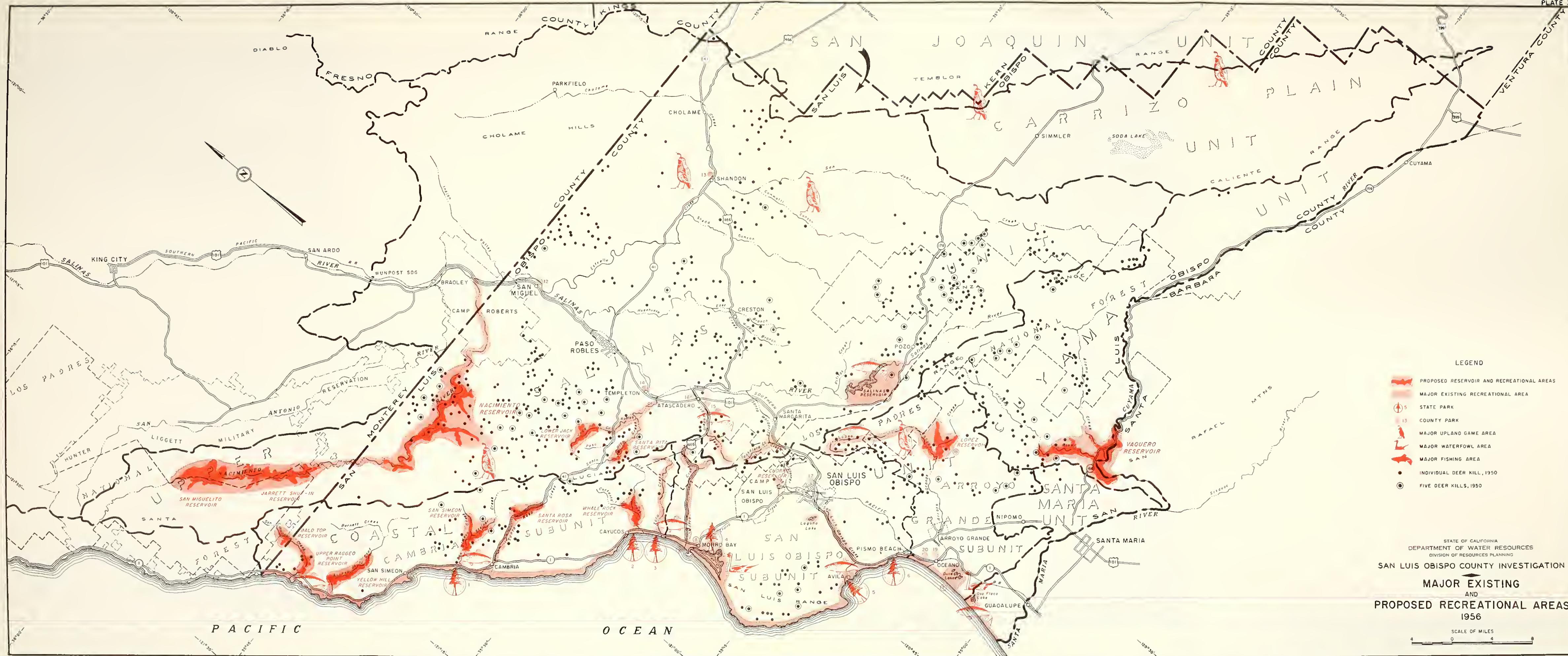
Summary

San Luis Obispo County contains many recreational resources. Marine and fresh water angling are popular sports, especially along the coastal area. Hunting, mainly for deer and upland game, is conducted throughout the County. Numerous State and County parks are present, mostly along the coast. Commercial fishing is a significant industry.

The water conservation plans considered herein for the County would include several storage reservoirs on streams in the Upper Salinas Unit, and others in the Coastal Unit. The dams on most of the coastal streams would prevent steelhead from using these streams; however, the reservoir fisheries created may be expected to more than compensate for this loss. It is not expected that any of the plans would have an adverse effect on hunting, and other outdoor recreational pursuits should be substantially benefited by it.

Suggestions are given for minimum pools which could be reserved in the reservoirs for fisheries, and for stream flow releases from several reservoirs, if desired.

Major recreational areas now present, as well as additional proposed recreational areas, are shown on a map of the County, Plate I-1.



APPENDIX J

RECORDED AND ESTIMATED MONTHLY RUNOFF AT SELECTED STATIONS
IN SAN LUIS OBISPO COUNTY AND VICINITY DURING
16-YEAR BASE PERIOD 1935-36 THROUGH 1950-51

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ESTIMATED MONTHLY INFLOW TO SALINAS RESERVOIR

In Acre-Feet

	Season : Oct. :	Nov. :	Dec. :	Jan. :	Feb. :	Mar. :	Apr. :	May :	June :	July :	Aug. :	Sept. :	Total
1935-36	0	20	50	130	23,000	2,150	4,300	360	230	80	0	0	30,330
37	50	90	930	7,300	23,000	16,200	3,200	700	180	30	0	0	51,680
38	0	50	3,600	400	30,000	29,800	2,900	930	180	80	10	0	67,950
39	110	230	340	520	440	520	250	120	0	0	0	0	2,530
40	0	0	210	2,250	3,650	1,900	1,140	180	30	0	0	0	9,360
1940-41	0	0	4,100	7,000	30,100	30,000	23,000	1,900	500	190	40	60	96,890
41	150	160	3,850	2,930	1,930	3,480	5,220	850	310	170	140	130	19,320
42	140	380	350	24,840	3,800	21,200	1,970	570	290	200	150	140	54,030
43	180	250	460	110	9,680	5,150	700	430	160	280	110	100	17,910
44	130	400	330	310	7,600	4,440	880	250	170	90	60	70	14,730
45	90	90	840	240	420	4,570	1,390	190	100	70	50	30	8,080
46	60	2,080	860	430	350	360	210	120	60	30	30	30	4,620
47	40	60	110	100	210	450	480	90	50	20	10	10	1,630
48	20	30	200	160	310	3,230	280	120	70	30	20	20	4,490
49	30	70	410	760	4,330	630	1,230	160	80	40	30	20	7,790
50	90	240	190	770	230	240	180	60	50	20	10	10	2,090
													24,590
													AVERAGE

ESTIMATED MONTHLY RUNOFF OF JACK CREEK AT LOWER JACK CREEK DAM SITE

In Acre-Feet

ESTIMATED MONTHLY RUNOFF OF SANTA RITA CREEK AT SANTA RITA DAM SITE

In Acre-Feet

Season	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Total
1935-36	0	0	120	910	6,190	1,230	760	200	70	20	0	0	9,500
37	0	0	290	420	5,140	3,880	900	260	90	20	0	0	11,000
38	0	0	2,100	710	14,180	7,960	910	310	100	30	0	0	26,200
39	0	0	150	230	430	870	160	60	0	0	0	0	1,900
40	0	0	0	4,750	6,060	1,990	800	210	70	20	0	0	13,900
41	0	0	1,940	3,620	8,980	6,650	5,450	490	170	60	20	20	27,400
42	0	0	2,620	2,940	1,600	1,520	1,860	460	150	40	10	0	11,200
43	0	0	230	430	5,100	1,550	5,670	580	210	80	20	10	13,900
44	0	0	110	390	3,550	2,880	390	250	90	30	10	0	7,700
45	0	0	230	360	210	4,600	1,930	540	160	60	10	0	8,100
46	0	0	3,090	510	450	770	610	130	40	0	0	0	5,600
47	0	1,080	350	230	690	410	280	60	0	0	0	0	3,100
48	0	0	0	0	0	540	1,260	240	60	0	0	0	2,100
49	0	0	150	370	840	3,690	310	120	20	0	0	0	5,500
50	0	0	0	1,000	2,080	660	250	70	30	10	0	0	4,100
1950-51	0	1,200	1,410	1,250	410	630	140	110	40	10	0	0	5,200
												AVERAGE	9,780

ESTIMATED MONTHLY RUNOFF OF NACIMIENTO RIVER AT SAN MIGUELITO DAM SITE

In Acre-Feet

Season :	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Total
1935-36	0	0	0	370	4,980	33,330	7,030	3,990	700	170	30	0	50,600
37	0	0	1,100	1,870	27,130	21,390	4,800	970	220	20	0	0	57,500
38	0	0	11,340	3,510	64,310	38,790	4,790	1,240	270	50	0	0	124,300
39	0	0	500	890	2,030	4,840	530	110	0	0	0	0	8,900
40	0	0	0	25,500	31,660	11,330	4,100	750	150	10	0	0	73,500
<hr/>													
1940-41	0	0	10,600	19,080	42,940	33,240	27,650	2,180	570	110	20	10	136,400
42	10	0	14,760	16,440	8,970	8,560	10,390	2,140	460	60	10	0	61,800
43	10	840	1,930	26,650	8,510	29,640	2,800	780	190	30	10	10	71,400
44	0	0	290	1,680	19,820	16,230	1,740	970	220	40	10	0	41,000
45	0	820	1,570	740	24,940	11,160	2,600	540	120	10	0	0	42,500
<hr/>													
1945-46	0	0	18,150	2,540	2,130	4,170	3,120	430	60	0	0	0	30,600
47	0	6,330	1,580	860	3,570	1,890	1,120	150	0	0	0	0	15,500
48	0	0	0	0	0	0	2,960	8,010	970	160	0	0	12,100
49	0	0	500	1,670	4,560	21,150	1,280	320	20	0	0	0	29,500
50	0	0	490	5,960	15,000	2,630	2,410	470	40	0	0	0	27,000
1950-51	0	9,080	8,570	5,630	1,890	3,260	800	720	50	0	0	0	30,000
<hr/>													
												AVERAGE	50,790

ESTIMATED MONTHLY RUNOFF OF NACIMENTO RIVER AT JARRETT SHUT-IN DAM SITE

In Acre-Feet

Season	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Total
1935-36	0	0	700	9,320	62,310	13,140	7,450	1,310	320	50	0	0	94,600
37	0	0	2,060	3,510	50,800	40,060	8,990	1,820	410	50	0	0	107,700
38	0	0	21,390	6,610	121,330	73,190	9,030	2,350	510	90	0	0	234,500
39	0	0	930	1,660	3,790	9,030	990	200	0	0	0	0	16,600
40	0	0	0	47,820	59,340	21,230	7,690	1,400	290	30	0	0	137,800
41	0	0	20,010	36,040	81,090	62,780	52,210	4,120	1,080	210	40	20	257,600
42	10	0	27,620	30,750	16,780	16,010	19,440	4,010	870	100	10	0	115,600
43	10	1,580	3,610	49,900	15,940	55,500	5,240	1,460	350	70	30	10	133,700
44	10	10	540	3,140	36,980	30,290	3,240	1,800	410	70	10	0	76,500
45	0	1,520	2,930	1,390	46,540	20,820	4,860	1,000	220	20	0	0	79,300
46	0	0	33,880	4,740	3,970	7,780	5,810	800	120	0	0	0	57,100
47	0	11,770	2,930	1,610	6,630	3,520	2,060	280	0	0	0	0	28,800
48	0	0	0	0	0	5,400	14,630	1,770	300	0	0	0	22,100
49	0	0	930	3,120	8,510	39,520	2,370	610	40	0	0	0	55,100
50	0	0	910	11,090	27,890	4,880	4,480	880	70	0	0	0	50,200
1950-51	0	16,870	15,920	10,450	3,500	6,040	1,490	1,330	100	0	0	0	55,700
												AVERAGE	95,180

ESTIMATED MONTHLY INFLOW TO NACIMIENTO RESERVOIR

In Acre-Feet

Season : Oct. : Nov. :	Dec. :	Jan. :	Feb. :	Mar. :	Apr. :	May :	June :	July :	Aug. :	Sept. :	Total
1935-36	0	0	1,470	19,660	131,400	27,710	15,720	2,750	690	100	0
37	0	0	4,420	7,560	109,320	86,240	19,350	3,930	880	100	0
38	0	0	48,600	15,030	275,720	166,310	20,500	5,370	1,170	200	0
39	0	0	1,780	3,170	7,230	17,240	1,880	400	0	0	31,700
40	0	0	0	103,430	128,330	45,900	16,620	3,040	620	60	0
											298,000
1940-41	0	0	45,740	82,380	185,330	143,510	119,330	9,420	2,460	490	90
42	30	10	59,510	66,300	36,200	34,380	41,890	8,650	1,870	220	30
43	10	3,440	7,840	108,630	34,700	120,780	11,410	3,180	770	150	60
44	20	20	1,130	6,550	77,340	63,350	6,780	3,770	860	160	20
45	0	3,190	6,150	2,910	97,720	43,710	10,210	2,110	470	30	0
											166,500
1945-46	0	0	69,590	9,740	8,160	15,980	11,930	1,650	250	0	0
47	0	23,450	5,850	3,200	13,220	7,020	4,110	550	0	0	0
48	0	0	0	0	0	10,780	29,200	3,530	590	0	0
49	0	0	1,910	6,420	17,500	81,170	4,870	1,240	90	0	0
50	0	0	1,850	22,500	56,560	9,890	9,070	1,780	150	0	0
											101,800
1950-51	0	34,520	32,580	21,400	7,170	12,360	3,050	2,720	200	0	0
											114,000
										AVERAGE	206,100

ESTIMATED MONTHLY RUNOFF OF SAN CARPOFORO CREEK AT BALD TOP DAM SITE

In Acre-Feet

Season :	Oct. :	Nov. :	Dec. :	Jan. :	Feb. :	Mar. :	Apr. :	May :	June :	July :	Aug. :	Sept. :	Total
1935-36	0	0	100	1,740	11,770	2,570	1,370	210	40	0	0	0	17,800
37	0	0	340	610	9,760	7,780	1,660	300	50	0	0	0	20,500
38	0	0	3,780	1,100	18,230	12,730	1,520	360	70	10	0	0	37,800
39	0	0	160	300	740	1,900	170	30	0	0	0	0	3,300
40	0	0	0	8,960	11,100	4,050	1,350	210	30	0	0	0	25,700
41	0	0	3,700	6,560	14,010	11,000	9,570	680	150	30	0	0	45,700
42	0	0	6,270	6,270	3,460	3,330	4,060	760	140	10	0	0	24,300
43	0	250	630	9,570	3,010	10,550	940	190	50	10	0	0	25,200
44	0	0	80	570	7,650	6,230	590	310	60	10	0	0	15,500
45	0	240	510	220	9,450	4,210	900	150	20	0	0	0	15,700
46	0	0	7,220	930	760	1,570	1,180	130	10	0	0	0	11,800
47	0	2,610	610	310	1,450	860	520	40	0	0	0	0	6,400
48	0	0	0	0	0	1,170	3,250	340	40	0	0	0	4,800
49	0	0	150	570	1,670	8,120	420	70	0	0	0	0	11,000
50	0	0	150	2,270	5,970	980	880	140	10	0	0	0	10,400
1950-51	0	3,760	3,950	2,310	610	980	230	250	10	0	0	0	12,100
													18,000

AVERAGE

ESTIMATED MONTHLY RUNOFF OF SAN CARPOFORO CREEK AT RAGGED POINT DAM SITE

In Acre-FEet

ESTIMATED MONTHLY RUNOFF OF ARROYO DE LA CRUZ AT YELLOW HILL DAM SITE

In Acre-Feet

Season	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Total
In Acre-Feet													
1935-36	0	0	240	4,200	28,450	6,200	3,300	500	100	10	0	0	43,000
37	0	0	840	1,530	24,500	19,500	4,150	740	130	10	0	0	51,400
38	0	0	11,000	3,210	53,000	37,000	4,410	1,060	200	20	0	0	109,900
39	0	0	300	570	1,420	3,640	320	50	0	0	0	0	6,300
40	0	0	0	23,000	28,500	10,400	3,470	540	80	10	0	0	66,000
C ₁													
1940-41	0	0	10,440	18,500	39,500	31,000	27,000	1,930	430	80	10	10	128,900
42	0	0	14,500	14,500	8,000	7,700	9,400	1,750	320	30	0	0	56,200
43	0	650	1,600	24,500	7,700	27,000	2,410	490	120	20	10	0	64,500
44	0	0	180	1,300	17,600	14,300	1,360	710	130	20	0	0	35,600
45	0	570	1,200	520	22,000	9,800	2,100	360	50	0	0	0	36,600
C ₂													
1945-46	0	0	15,600	2,000	1,640	3,400	2,550	280	30	0	0	0	25,500
47	0	4,950	1,150	580	2,750	1,620	980	70	0	0	0	0	12,100
48	0	0	0	0	0	2,200	6,100	630	70	0	0	0	9,000
49	0	0	330	1,270	3,700	18,000	940	150	10	0	0	0	24,400
50	0	0	320	4,760	12,500	2,050	1,850	300	20	0	0	0	21,800
AVERAGE													
1950-51	0*	7,700*	8,090*	4,740*	1,250*	2,000*	480*	520*	20*	0*	0*	0*	24,800*
													44,750

*Recorded.

ESTIMATED MONTHLY RUNOFF OF SAN SIMEON CREEK AT SAN SIMEON DAM SITE

In Acre-Feet

ESTIMATED MONTHLY RUNOFF OF SANTA ROSA CREEK AT SANTA ROSA DAM SITE

FIG. 1. ESTIMATED MONTHLY RUNOFF OF OLD CREEK AT WHALE ROCK DAM SITE

In Acre-Feet

ESTIMATED MONTHLY RUNOFF OF ARROYO GRANDE CREEK AT LOPEZ DAM SITE

In Acre-Feet

Season	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Total
1935-36	60	100	100	100	140-	15,850	1,440	1,380	210	80	60	40	19,500
37	70	70	200+	1,540	21,030	8,200	2,300	550	170	70	70	30	34,300
38	40	80	850-	160	18,820	17,090	1,850	810	280	200	80	40	40,300
39	420	520	700	910	1,430	1,180	780	300	120	40	0	0	6,400
40	30	110	210	2,180	4,560	3,760	1,920	360	130	70	30	40	13,400
1940-41	210	210	540	1,610	13,100	17,720	13,750	3,010	1,240	970	700	640	53,700
42	620	580	2,540	2,510	1,850	2,170	2,740	1,320	800	570	480	520	16,700
43	510	510	580	6,880	2,950	17,180	3,640	1,460	870	800	510	510	36,400
44	650	630	750	890	3,040	3,970	1,140	1,030	580	470	400	350	13,900
45	400-	520	620	610	2,450	2,970	1,390	880	530	350	320	260	11,300
1945-46	460-	550	810	960	1,000	1,510	1,690	980	480	310	270	280	9,300
47	400	640	960	1,000	990	940	630	420	240	100	110	170	6,600
48	440	480	590	390	600	850	950	700	670	190	160	80	6,100
49	210	240	570	650	800	1,580	1,340	1,020	410	120	20	40	7,000
50	110	140	440	560	2,910	1,400	1,280	940	610	370	80	160	9,000
1950-51	230	640	840	1,270	1,380	1,310	1,220	870	520	150	140	130	8,700

AVERAGE

J-13

APPENDIX K
YIELD STUDIES

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SEMIANNUAL SUMMARY OF MONTHLY YIELD STUDY,
SALINAS RESERVOIR ON SALINAS RIVER

Gross Storage Capacity: 26,045 Acre-Feet
Silt Reservation: 1,000 Acre-Feet

In Acre-Feet

Season	Runoff and Rainfall:	October to March			April to September			Storage end of March : rainfall :	Gross : evapo- ration : September
		Inflow	Spill	Draft	Inflow	Spill	Draft		
In Acre-Feet									
1934-35									0
1935-36	25,360	2,390	000	240	24,760*	4,970	3,410	2,345	2,525
37	47,570	2,390	39,805	780	26,045	4,110	3,410	2,530	2,565
38	63,850	2,390	56,265	800	26,045	4,100	3,410	2,230	2,555
39	2,160	2,390	000	730	20,990	370	3,410	000	1,990
40	8,010	2,390	000	670	20,910	1,350	3,410	000	2,080
1940-41	71,200	2,390	58,765	770	26,045	25,690	3,410	23,270	2,555
42	12,500	2,390	5,735	830	26,045	6,820	3,410	4,540	2,555
43	50,710	2,390	43,955	680	26,045	3,320	3,410	1,410	22,360
44	16,130	2,390	8,945	850	26,045	1,780	3,410	20	2,445
45	13,210	2,390	5,965	740	26,045	1,520	3,410	150	2,445
1945-46	6,250	2,390	000	770	24,480	1,830	3,410	000	2,520
47	4,140	2,390	000	730	21,400	180	3,410	000	2,330
48	970	2,390	000	670	14,050	660	3,410	000	1,560
49	3,950	2,390	000	420	10,880	540	3,410	000	1,340
50	6,230	2,390	000	370	10,140	1,560	3,410	000	1,340
1950-51	1,760	2,390	000	370	5,950	330	3,410	000	840
GROSS SAFE SEASONAL YIELD									
									5,800 Acre-Feet

* Conservation storage would have been entirely evacuated in December, 1935.

TABLE K-2

SEMIANNUAL SUMMARY OF MONTHLY YIELD STUDY,
LOWER JACK RESERVOIR ON JACK CREEK

Gross Storage Capacity: 25,000 Acre-Feet
Silt Reservation: 500 Acre-Feet

In Acre-Feet

Season	Inflow	Draft	Spill	Net	Storage end of March	October to March		April to September		Net evapo- ration	Storage end of September
						Inflow	Draft	Spill	Net		
In Acre-Feet											
1934-35											0
1935-36	9,520	1,010		-60	10,110*	1,180	5,790		790		4,710
37	10,980	1,010		-300	14,980	1,420	5,790		940		9,670
38	29,020	1,010	13,680	-1,000	25,000	1,580	5,790		380		18,940
39	1,770	1,010		20	19,680	230	5,790		---		12,830
40	11,160	1,010	1,680	-400	25,000	1,240	5,790		250		18,710
1940-41	24,750	1,010	18,840	-1,390	25,000	7,250	5,790		5,880		19,280
42	9,770	1,010	3,450	-410	25,000	2,830	5,790		1,590		1,340
43	14,650	1,010	8,310	-560	25,000	1,050	5,790		---		1,530
44	7,670	1,010	690	-300	25,000	850	5,790		---		1,460
45	8,100	1,010	970	-280	25,000	860	5,790		---		1,550
1945-46	5,370	1,010		-340	23,220	870	5,790		---		1,470
47	2,980	1,010		-100	18,900	370	5,790		---		1,250
48	620	1,010		60	11,780	1,780	5,790		---		12,230
49	5,590	1,010		-110	11,720	490	5,790		700		7,030
50	4,090	1,010		-30	8,680	390	5,790		---		5,570
1950-51	5,410	1,010		-30	7,060	320	5,790		---		6,630
GROSS SAFE SEASONAL YIELD											
									540		1,050
											6,800 Acre-Feet

* Conservation storage would have been entirely evacuated in October, 1935.

SEMIANNUAL SUMMARY OF MONTHLY YIELD STUDY,
SANTA RITA RESERVOIR ON SANTA RITA CREEK

Gross Storage Capacity: 15,000 Acre-Feet
Silt Reservation: 500 Acre-Feet

In Acre-Feet

Season	Inflow	Draft	Spill	Net	Storage	October to March			April to September			Net	Storage
						evapo-	end of	Inflow	Draft	Spill	evapo-		
1934-35													
1935-36	8,480	770	000	-50	9,020*	1,050	4,430	000	000	000	750	4,890	
37	9,730	770	000	-290	14,140	1,270	4,430	000	000	000	1,100	9,880	
38	24,950	770	19,930	-870	15,000	1,350	4,430	410	1,010	1,010	1,010	10,500	
39	1,680	770	000	20	11,390	220	4,430	000	000	000	870	6,310	
40	12,800	770	3,630	-290	15,000	1,100	4,430	310	1,070	1,070	1,070	10,290	
1940-41													
41	21,190	770	16,690	-980	15,000	6,210	4,430	5,070	5,070	930	930	10,730	
42	8,680	770	3,970	-280	15,000	2,520	4,430	1,480	1,480	940	940	10,670	
43	12,980	770	8,280	-400	15,000	920	4,430	40	1,100	1,100	1,100	10,350	
44	6,930	770	4,710	-200	15,000	770	4,430	000	1,060	1,060	1,060	10,280	
45	7,330	770	2,030	-190	15,000	770	4,430	000	1,120	1,120	1,120	10,220	
1945-46													
46	4,820	770	000	-230	14,500	780	4,430	000	000	000	1,110	9,740	
47	2,760	770	000	-20	11,750	340	4,430	000	000	000	920	6,740	
48	540	770	000	40	6,470	1,560	4,430	000	000	000	490	3,210	
49	5,050	770	000	-70	7,460	450	4,430	000	000	000	610	2,870	
50	3,740	770	000	-20	5,860	360	4,430	000	000	000	450	1,340	
1950-51													
	4,900	770	000	-10	5,480	300	4,430	000	000	000	430	920	
GROSS SAFE SEASONAL YIELD													
													5,200 Acre-Feet

* Conservation storage would have been entirely evacuated in October, 1935.

TABLE K-4

SEMIANNUAL SUMMARY OF MONTHLY YIELD STUDY,
NACIMIENTO RESERVOIR ON NACIMIENTO RIVER

Gross Conservation Storage Capacity: 200,000 Acre-Feet
Silt Reservation: 4,000 Acre-Feet

In Acre-Feet

Season	Inflow	Draft	Spill	Net	Storage	October to March		April to September		Net	Evapo-	Storage
						Inflow	Draft	Spill	Net			
In Acre-Feet												
1934-35												
1935-36	180,240	25,840	---	-360	189,030	19,260	71,660	---	11,920	124,710		
37	207,540	25,840	109,740	-2,330	200,900	24,260	71,660	9,180	12,580	130,810		
38	505,660	25,840	418,560	-7,900	200,000	27,240	71,660	10,600	11,900	133,080		
39	29,420	25,840	---	770	135,890	2,280	71,660	---	9,080	57,430		
40	277,660	25,840	110,930	-1,680	200,000	20,340	71,660	6,880	12,130	129,670		
0												
1940-41	456,960	25,840	369,080	-8,290	200,000	131,840	71,660	110,670	10,820	138,690		
42	196,430	25,840	111,070	-1,790	200,000	52,670	71,660	33,150	11,090	136,770		
43	275,400	25,840	189,130	-2,800	200,000	15,600	71,660	1,240	12,230	130,470		
44	148,410	25,840	54,100	-1,060	200,000	11,590	71,660	---	11,730	128,200		
45	153,680	25,840	57,070	-1,030	200,000	12,820	71,660	---	12,430	128,730		
K												
1945-46	103,470	25,840	7,800	-1,440	200,000	13,830	71,660	1,610	12,470	128,090		
47	52,710	25,840	---	30	154,760	4,660	71,660	---	10,260	77,680		
48	10,780	25,840	---	920	61,690	33,320	71,660	---	4,990	18,360		
49	107,000	25,840	---	-70	99,590*	6,200	71,660	---	6,910	27,220		
50	90,800	25,840	---	250	91,930	11,000	71,660	---	6,500	24,770		
1950-51	108,030	25,840	---	-180	107,140	5,970	71,660	---	7,180	34,270		
GROSS SAFE SEASONAL YIELD												
												97,500 Acre-Feet

* Conservation storage would have been entirely evacuated in December, 1948.

Note: It is understood from statements of officials of the Monterey County Flood Control and Water Conservation District that approximately 200,000 acre-feet of storage capacity in Nacimiento River

TABLE K-5
SEMIANNUAL SUMMARY OF MONTHLY YIELD STUDY
COORDINATED OPERATION OF SAN MIGUELITO AND NACIMIENTO RESERVOIRS ON NACIMENTO RIVER

In Acre-Feet

Season	San Miguelito Reservoir			Nacimiento Reservoir			Silt Reservation: 200,000 Acre-Feet		
	Gross Storage Capacity: 130,000 Acre-Feet			Gross Conservation Storage Capacity: 200,000 Acre-Feet			Silt Reservation: 200,000 Acre-Feet		
	October to March			October to March			April to September		
	Release:	Storage:	Net:	Release:	Storage:	Net:	Inflow:	below:	Inflow:
	to:	end of:	Net:	to:	end of:	Net:	below:	San:	below:
	Inflow:	Nacimiento:	Spill:	Inflow:	Nacimiento:	Spill:	San:	Draft:	San:
	Reservoir:	evapo-	March:	Reservoir:	evapo-	March:	evapo-	Draft:	March:
	Reservoir:	ration:	March:	Reservoir:	ration:	March:	ration:	Miguelito:	Miguelito:
1934-35				0					0
1935-36	45,710	18,460	—	—	6,080	134,530	28,370	—	—
37	52,690	—	—	—	9,610	95,280	28,370	127,780	8,510
38	117,950	—	—	4,050	10,230	122,070	387,710	—	11,370
39	8,260	—	—	—	10,890	119,330	21,160	28,370	11,650
40	68,690	3,560	56,560	—	3,180	10,530	209,170	28,370	710
K	105,860	—	103,870	—	28,570	9,270	352,100	28,370	61,090
42	48,710	—	43,260	7,010	20,510	—	—	—	—
43	67,580	—	62,280	130,000	13,060	11,170	9,550	122,340	—
44	38,020	—	30,890	130,000	3,820	1,840	10,660	121,380	—
45	39,230	—	31,900	-1,490	10,290	1,000	110,390	28,370	—
1945-46	26,990	—	19,250	-1,320	130,000	3,610	—	28,370	—
47	14,230	—	—	—	2,040	10,860	120,710	76,480	—
48	2,960	7,700	—	—	10	10,220	121,010	38,510	—
49	27,880	18,110	—	—	—	1,220	115,080	9,310	—
50	24,060	18,210	—	—	—	68,150	58,150	7,520	—
1950-51	28,530	12,220	—	110	39,410	1,570	21,770	—	—
					5,130	11,080	79,600	28,370	20
								66,430	4,400
								86,130	—
								—	3,470
									3,000
									144,500 Acre-Feet

* Conservation storage would have been entirely evacuated in November, 1935.

Note: It is understood from statements of officials of the Monterey County Flood Control and Water Conservation District that approximately 200,000 acre-feet of storage capacity in Nacimiento Reservoir will be used for water conservation purposes.

TABLE K-6
SEMIANNUAL SUMMARY OF MONTHLY YIELD STUDY
COORDINATED OPERATION OF JARRETT SHUT-IN AND NACIMENTO RESERVOIRS ON NACIMENTO RIVER

In Acre-Feet

Season	Jarrett Shut-In Reservoir			Silt Reservation: 2,000 Acre-Feet			Gross Conservation Storage Capacity: 200,000 Acre-Feet			Hacimiento Reservoir Capacity: 200,000 Acre-Feet			Silt Reservation: 2,000 Acre-Feet	
	October to March			April to September			October to March			April to September				
	Release	Inflow	Storage	Release	Inflow	Storage	Inflow	Storage	Net	Inflow	Storage	Net		
1934-35	16,870	10	84,910*	9,130	---	5,810	88,230	94,770	26,460	---	-2,000	89,180	0	
1935-36	85,170	-1,640	63,880	11,270	---	9,180	6,850	105,210	111,110	28,460	-1,260	167,100	---	
1936-37	96,430	-1,370	222,130	11,930	---	9,930	6,460	105,590	283,210	28,460	-6,790	207,000	---	
1937-38	222,520	10,520	110,000	1,190	290	6,880	104,020	14,010	28,460	119,270	1,13,610	1,090	8,630	
1938-39	15,110	10,560	123,190	9,410	7,100	6,560	105,150	119,270	28,460	67,640	-1,000	86,640	7,270	
1939-40	128,390	780	---	---	---	---	---	---	---	209,000	10,930	86,640	5,280	
1940-41	199,820	-1,420	110,000	57,680	---	55,530	5,850	106,300	257,040	28,460	351,030	71,160	109,330	
1941-42	91,170	-1,150	110,000	21,470	---	22,590	6,020	105,820	105,260	28,460	89,920	1,610	28,240	
1942-43	126,540	-1,700	110,000	7,160	---	5,030	6,690	105,440	148,860	28,460	168,680	2,640	8,440	
1943-44	70,700	-790	110,000	5,530	3,590	6,210	105,430	7,140	28,460	7,140	32,10	6,060	86,640	
1944-45	73,200	-640	110,000	6,100	---	6,840	105,050	80,480	28,460	34,010	-890	200,000	6,720	
1945-46	50,370	46,250	-830	110,000	6,730	5,120	6,860	104,750	53,100	28,460	1,260	184,580	7,100	
1946-47	26,160	21,220	10	110,000	2,310	1,350	6,900	101,090	26,280	28,460	100	118,510	2,320	
1947-48	5,400	---	---	720	108,710	14,510	5,030	52,050	5,380	28,460	470	16,620	86,640	
1948-49	52,860	18,660	-100	89,570	3,020	5,130	5,130	14,040	54,920	28,460	-120	17,240	3,160	
1949-50	14,770	18,700	140	66,960	5,430	3,960	23,950	16,030	28,460	30	36,240	5,570	86,640	
1950-51	52,780	12,300	---	70	61,360	2,920	45,890	---	3,470	17,920	55,540	28,460	3,090	
COMBINED GROSS SAFE SEASONAL YIELD, JARRETT SHUT-IN AND NACIMENTO RESERVOIRS													0	
Note: It is understood from statements of officials of the Monterey County Flood Control and Water Conservation District that approximately 200,000 acre-feet of storage capacity in Hacimiento Reservoir will be used for water conservation purposes.													115,100 Acre-Feet	

* Conservation storage would have been entirely evacuated in November, 1935.

Note: It is understood from statements of officials of the Monterey County Flood Control and Water Conservation District that approximately 200,000 acre-feet of storage capacity in Hacimiento Reservoir will be used for water conservation purposes.

TABLE I-7
SEMIANNUAL SUMMARY OF MONTHLY YIELD STUDY
COORDINATED OPERATION OF SAN MIGUELITO, JARETT SHUT-IN,
AND NACIMIENTO RESERVOIRS ON NACIMENTO RIVER

In Acre-Feet

San Miguelito and Jarrett Shut-In Reservoirs										Nacimiento Reservoir										Silt Reservation: 2,000 Acre-Feet															
Combined Gross Storage Capacity: 200,000 Acre-Feet					Silt Reservation: 2,000 Acre-Feet					Gross Conservation Capacity: 200,000 Acre-Feet					Nacimiento Reservoir					Silt Reservation: 2,000 Acre-Feet															
October to March		April to September		October to March		April to September		October to March		April to September		Inflow		Storage		Inflow		Storage		Inflow		Storage		Inflow		Storage									
Season	Inflow	Release	Net	Storage	Inflow	Release	Net	Inflow	Spill	Inflow	Storage	Inflow	Draft	Inflow	Spill	Inflow	Storage	Inflow	Draft	Inflow	Spill	Inflow	Storage	Inflow	Draft	Inflow	Spill	Inflow	Storage						
	Inflow	to	Spill	end of	Inflow	to	Net	Inflow	Spill	Inflow	Storage	Inflow	Draft	Inflow	Spill	Inflow	Storage	Inflow	Draft	Inflow	Spill	Inflow	Storage	Inflow	Draft	Inflow	Spill	Inflow	Storage						
1934-35																													0						
1935-36	92,920	20,600	---	130	84,920*	1,680	6,380	---	8,610	79,960	94,770	30,190	---	---	---	90	87,270	10,120	96,510	---	5,270	2,000	---	6,220	31,690	---	5,270	2,000							
37	96,430	18,070	---	-2,410	159,860	11,270	---	13,920	157,210	132,310	30,190	---	-1,440	123,630	12,990	96,510	---	6,220	31,690	---	6,220	31,690	---	6,220	31,690	---	6,220	31,690							
38	222,520	---	149,710	-10,010	240,000	11,980	10,090	7,810	16,870	227,300	283,210	30,190	238,520	-3,490	200,200	15,260	96,510	11,420	108,210	6,900	11,420	108,210	6,900	11,420	108,210	6,900	11,420	108,210	6,900	11,420	108,210				
39	15,110	---	1,480	1,230	240,000	1,190	9,410	6,670	17,910	213,160	14,010	30,190	1,090	96,510	710	92,830	1,090	96,510	5,500	5,500	2,000	5,500	5,500	2,000	5,500	5,500	2,000	5,500	5,500	2,000					
40	128,390	21,380	63,750	-3,580	240,000	9,410	---	17,320	225,270	16,910	30,190	26,880	670	200,000	10,930	96,510	3,280	11,730	105,960	3,280	11,730	105,960	3,280	11,730	105,960	3,280	11,730	105,960	3,280	11,730	105,960				
K-7																																			
1940-41	199,920	---	196,890	-11,550	240,000	57,680	---	54,210	15,250	228,190	257,940	30,190	335,750	-6,030	209,000	74,160	96,510	10,360	112,930	10,360	112,930	10,360	112,930	10,360	112,930	10,360	112,930	10,360	112,930	10,360	112,930	10,360	112,930	10,360	
42	91,170	---	62,330	-2,970	240,000	21,430	---	21,200	15,700	227,530	105,260	30,190	71,820	-1,420	200,000	28,240	96,510	10,540	111,620	10,540	111,620	10,540	111,620	10,540	111,620	10,540	111,620	10,540	111,620	10,540	111,620	10,540	111,620	10,540	
43	126,540	---	118,410	-2,410	310	7,160	240,000	7,160	3,660	17,440	226,060	118,860	30,190	151,020	-2,520	200,000	8,440	96,510	11,720	103,870	11,720	103,870	11,720	103,870	11,720	103,870	11,720	103,870	11,720	103,870	11,720	103,870	11,720	103,870	11,720
44	70,970	---	59,060	-2,030	240,000	5,530	---	1,320	17,150	227,060	77,940	30,190	10,980	800	200,000	6,060	96,510	11,180	29,690	11,180	29,690	11,180	29,690	11,180	29,690	11,180	29,690	11,180	29,690	11,180	29,690	11,180	29,690	11,180	
45	73,200	---	61,870	-1,610	240,000	6,100	---	3,070	17,770	225,260	80,480	30,190	12,620	770	200,000	6,720	96,510	11,780	101,500	11,780	101,500	11,780	101,500	11,780	101,500	11,780	101,500	11,780	101,500	11,780	101,500	11,780	101,500	11,780	
46	50,370	---	37,810	-2,180	240,000	6,730	---	4,020	17,860	228,850	53,100	30,190	7,100	96,510	---	1,130	163,350	10,200	67,760	10,200	67,760	10,200	67,760	10,200	67,760	10,200	67,760	10,200	67,760	10,200	67,760	10,200	67,760	10,200	
47	29,460	---	11,300	1,10	240,000	2,340	26,140	220	17,990	197,990	26,280	30,190	2,320	96,510	---	1,320	128,350	1,320	4,000	1,320	4,000	1,320	4,000	1,320	4,000	1,320	4,000	1,320	4,000	1,320	4,000	1,320	4,000	1,320	
48	5,400	27,360	1,810	1,741	1,700	77,960	---	5,400	101,750	5,380	30,190	6,490	16,620	60	1,490	96,510	---	5,60	5,60	5,60	5,60	5,60	5,60	5,60	5,60	5,60	5,60	5,60	5,60	5,60	5,60	5,60	5,60	5,60	
49	52,080	20,320	-	470	133,910	3,020	50,210	---	10,920	75,890	51,920	30,190	-120	47,240	3,180	96,510	2,120	2,000	2,120	2,000	2,120	2,000	2,120	2,000	2,120	2,000	2,120	2,000	2,120	2,000	2,120	2,000	2,120	2,000	
50	44,770	20,430	-	290	99,850	5,430	56,260	---	8,170	40,550	46,030	30,190	30	38,240	5,570	96,510	1,560	1,560	1,560	1,560	1,560	1,560	1,560	1,560	1,560	1,560	1,560	1,560	1,560	1,560	1,560	1,560	1,560		
1950-51	52,780	14,030	---	120	79,180	2,920	55,570	---	6,930	19,600	55,540	30,190	-70	44,450	3,060	96,510	1,570	2,000	1,570	2,000	1,570	2,000	1,570	2,000	1,570	2,000	1,570	2,000	1,570	2,000	1,570	2,000	1,570	2,000	
COMBINED GROSS SEASONAL YIELD, SAN MIGUELITO, JARETT SHUT-IN, AND NACIMENTO RESERVOIRS																				126,700 Acre-Feet															

Note: It is understood from statements of officials of the Monterey County Flood Control and Water Conservation District, that approximately 200,000 acre-feet of storage capacity in Nacimiento Reservoir will be used for water conservation purposes.

* Conservation storage would have been entirely evacuated in November, 1935.

TABLE K-8

SEMIANNUAL SUMMARY OF MONTHLY YIELD STUDY,
BALD TOP RESERVOIR ON SAN CARPOFORO CREEK

Gross Storage Capacity: 20,000 Acre-Feet
Silt Reservation: 500 Acre-Feet

In Acre-Feet

Season	October to March			April to September			Net	Storage at end of September
	Inflow	Draft	Spill	Net	Storage at end of March	Draft	Spill	Evapo- ration
1934-35								0
1935-36	16,180	2,210	7,080	-40	17,720	1,620	8,190	10,730
37	18,190	2,210	26,210	-70	20,000	2,010	8,190	12,500
38	35,840	2,210	2,210	-80	20,000	1,960	8,190	12,590
39	3,100	2,210	---	-80	13,560	200	8,190	5,220
40	24,110	2,210	7,200	-80	20,000	1,590	8,190	12,390
1940-41	35,270	2,210	25,540	-90	20,000	10,430	8,190	8,770
42	19,330	2,210	10,230	-100	20,000	4,970	8,190	3,260
43	24,010	2,210	14,950	-90	20,000	1,190	8,190	140
44	24,530	2,210	4,800	-80	20,000	970	8,190	100
45	14,630	2,210	4,820	-80	20,000	1,070	8,190	460
X-48								
1945-46	10,480	2,210	690	-100	20,000	1,320	8,190	380
47	5,840	2,210	---	-80	16,000	560	8,190	400
48	1,170	2,210	---	-60	6,990	3,630	8,190	---
49	10,510	2,210	---	-30	10,480*	490	8,190	280
50	9,370	2,210	---	-40	9,680	1,030	8,190	300
1950-51	11,610	2,210	---	-100	11,730	490	8,190	290
								320
								10,400 Acre-Feet

GROSS SAFE SEASONAL YIELD

* Conservation storage would have been entirely evacuated in December, 1948.

SEMIANNUAL SUMMARY OF MONTHLY YIELD STUDY,
UPPER RAGGED POINT RESERVOIR ON SAN CARPOFORO CREEK

Gross Storage Capacity: 30,000 Acre-Feet
Silt Reservation: 500 Acre-Feet

In Acre-Feet

Season	Inflow	Draft	Spill	October to March			April to September		
				Net evapo- ration	Storage end of March	Inflow	Draft	Spill	Net evapo- ration
1934-35									
31,910	3,690	13,200	-70	30,000	3,190	13,810	1,360	460	17,560
37,490	3,690	21,440	-80	30,000	4,080	13,810	2,030	460	17,780
73,300	3,690	57,480	-90	30,000	4,000	13,810	1,770	470	17,950
6,120	3,690	---	-70	20,450	380	13,810	---	330	6,690
48,590	3,690	21,660	-70	30,000	3,210	13,810	1,390	460	17,550
1940-41									
72,510	3,690	56,560	-90	30,000	21,490	13,810	18,360	470	18,850
38,970	3,690	24,230	-100	30,000	10,030	13,810	6,860	470	18,890
48,390	3,690	33,680	-90	30,000	2,410	13,810	570	460	17,570
28,590	3,690	12,550	-80	30,000	1,910	13,810	---	460	17,640
28,690	3,690	12,720	-80	30,000	2,110	13,810	440	450	17,410
1945-46									
20,420	3,690	4,240	-100	30,000	2,580	13,810	970	440	17,360
11,050	3,690	---	-80	24,800	1,050	13,810	---	390	11,650
2,220	3,690	---	-60	10,240	6,880	13,810	---	270	3,040
20,530	3,690	---	-10*	19,890	970	13,810	---	330	6,720
18,280	3,690	---	-60	21,370	2,020	13,810	---	360	9,220
1950-51									
22,540	3,690	---	-110	28,180	960	13,810	---	420	14,910

GROSS SAFE SEASONAL YIELD

17,500 Acre-Feet

* Conservation storage would have been entirely evacuated in December, 1948.

TABLE K-10
SEMIANNUAL SUMMARY OF MONTHLY YIELD STUDY
COORDINATED OPERATION OF BALD TOP AND UPPER RAGGED POINT RESERVOIRS ON CARPOFORO CREEK

In Acre-Feet

Season	Bald Top Reservoir		Silt Reservation: 500 Acre-Feet		Upper Ragged Point Reservoir		Silt Reservation: 500 Acre-Feet	
	Gross Storage Capacity: 20,000 Acre-Feet		October to March		October to March		April to September	
	Release	Inflow	Net	Storage	Inflow	Net	Storage	Inflow
1934-35	16,180	3,590	—	16,890*	1,620	1,820	—	—
37	18,190	3,380	11,460	-70	20,000	2,010	—	470
38	35,840	—	35,660	-100	20,000	1,960	—	1,850
39	3100	—	2,900	-100	20,000	2,100	—	1,770
40	21,110	3,690	17,670	-80	20,000	1,590	—	110
1940-41	35,270	—	35,020	-100	20,000	10,430	—	10,190
41	19,330	—	19,180	-100	20,000	1,970	—	1,970
42	21,010	—	23,840	-100	20,000	1,190	—	1,020
43	11,530	—	11,310	-100	20,000	970	—	790
44	11,630	—	11,420	-100	20,000	1,070	—	940
45	—	—	—	—	—	—	—	490
1945-46	10,480	—	10,220	-100	20,000	1,320	—	1,200
46	5,810	—	5,570	-100	20,000	5,560	—	1,190
47	1,170	2,320	—	-100	18,530	3,630	11,920	2,010
48	10,510	3,560	—	-60	11,790	490	8,990	—
49	9,370	3,540	—	-50	12,160	1,030	9,180	—
1950-51	11,610	2,260	—	-10	13,100	490	8,940	—
					380	4,270	10,930	4,750
						—	—	—
						-70	9,010	470
							470	17,750
							—	—
								22,500 Acre-Feet

COMBINED GROSS SAFE SEASONAL YIELD, BALD TOP AND UPPER RAGGED POINT RESERVOIRS

* Conservation storage would have been entirely evacuated in December, 1935.

SEMIANNUAL SUMMARY OF MONTHLY YIELD STUDY,
YELLOW HILL RESERVOIR ON ARROYO DE LA CRUZ

Gross Storage Capacity: 80,000 Acre-Feet
Silt Reservation: 1,000 Acre-Feet

In Acre-Feet

Season	Inflow	Draft	October to March			April to September			Net Storage
			Spill	evapo- ration	Storage end of March	Inflow	Draft	Spill	
1934-35	39,090	5,840	000	-90	38,900*	3,910	21,860	000	1,040
35	46,370	5,840	000	-250	60,020	5,030	21,860	000	19,910
37	104,210	5,840	60,570	-280	80,000	5,690	21,860	2,270	41,920
38	5,930	5,840	000	-270	60,470	370	21,860	000	1,450
39	62,900	5,840	14,080	-260	80,000	4,100	21,860	1,330	1,450
40									0
1940-41	99,440	5,840	73,400	-340	80,000	29,460	21,860	24,860	1,470
42	44,700	5,840	20,450	-320	80,000	11,500	21,860	7,260	1,460
43	61,450	5,840	36,840	-310	80,000	3,050	21,860	120	1,600
44	33,380	5,840	7,280	-270	80,000	2,220	21,860	000	1,600
45	34,090	5,840	7,290	-280	80,000	2,510	21,860	000	1,450
									58,760
									59,200
1945-46	22,640	5,840	000	-310	76,310	2,860	21,860	000	1,420
47	11,050	5,840	000	-270	61,370	1,050	21,860	000	1,240
48	2,200	5,840	000	-220	35,900	6,800	21,860	000	39,320
49	23,300	5,840	000	-150	37,410	1,100	21,860	000	1,040
50	19,630	5,840	000	-160	29,610	2,170	21,860	000	19,800
									9,040
1950-51	23,780	5,840	000	-230	27,210	1,020	21,860	000	990
									15,660
									880
									9,010
									27,700 Acre-Feet
									810
									5,560

GROSS SAFE SEASONAL YIELD

* Conservation storage would have been entirely evacuated in December, 1935.

TABLE K-12

SEMIANNUAL SUMMARY OF MONTHLY YIELD STUDY,
SAN SIMEON RESERVOIR ON SAN SIMEON CREEK

Gross Storage Capacity: 60,000 Acre-Feet
Silt Reservoir: 500 Acre-Feet

In Acre-Feet

Season	Inflow	Draft	Spill	Net	Storage	October to March		April to September		Net	Storage
						end of	Inflow	Draft	Spill	evapo-	ration
1934-35											
1935-36	21,640	3,950	000	-20	20,840*	2,160	14,750	000	000	630	7,620
37	25,350	3,950	000	-90	29,110	2,750	14,750	000	000	800	16,310
38	49,700	3,950	2,220	-160	60,000	2,700	14,750	640	1,270	46,040	46,040
39	4,050	3,950	000	-210	46,380	250	14,750	000	1,330	30,850	30,850
40	32,800	3,950	000	-220	59,920	2,200	14,750	310	1,270	45,790	45,790
1940-41											
41	49,200	3,950	31,310	-270	60,000	14,600	14,750	11,900	1,280	46,670	46,670
42	26,330	3,950	9,330	-280	60,000	6,770	14,750	4,070	1,280	46,670	46,670
43	32,780	3,950	15,770	-270	60,000	1,620	14,750	000	1,440	45,430	45,430
44	19,310	3,950	1,020	-230	60,000	1,290	14,750	000	1,260	45,280	45,280
45	19,370	3,950	950	-250	60,000	1,430	14,750	000	1,260	45,420	45,420
1945-46											
46	13,760	3,950	000	-260	55,490	1,740	14,750	000	000	1,210	41,270
47	7,490	3,950	000	-240	45,050	710	14,750	000	000	1,030	29,980
48	7,490	3,950	000	-170	27,690	4,610	14,750	000	000	820	16,730
49	13,850	3,950	000	-110	26,740	650	14,750	000	000	740	11,900
50	12,250	3,950	000	-110	20,310	1,350	14,750	000	000	590	6,320
1950-51											
	15,250	3,950	000	-140	11,760	650	14,750	000	000	530	3,130
GROSS SAFE SEASONAL YIELD											
											18,500 Acre-Feet

* Conservation storage would have been entirely evacuated in December, 1935.

SEMIANNUAL SUMMARY OF MONTHLY YIELD STUDY,
SANTA ROSA RESERVOIR ON SANTA ROSA CREEK

Gross Storage Capacity: 35,000 Acre-Feet
Silt Reservation: 500 Acre-Feet

Season	Inflow	Draft	Spill	Net	Storage	April to September	Net	Storage
October to March								
1935-36	13,720	2,470	-----	14,290	3,080	9,230	-----	420
37	16,830	2,470	-----	22,100	3,570	9,230	-----	580
38	32,070	2,470	10,490	35,000	3,930	9,230	1,290	790
39	3,310	2,470	-----	28,500	490	9,230	-----	660
40	20,950	2,470	2,620	35,000	3,450	9,230	1,400	790
1940-41	31,340	2,470	20,950	50	35,000	7,660	9,230	3,640
42	15,360	2,470	6,930	50	35,000	7,540	9,230	3,960
43	16,050	2,470	7,180	50	35,000	2,550	9,230	600
44	11,050	2,470	560	40	35,000	1,950	9,230	20
45	16,050	2,470	5,560	50	35,000	2,550	9,230	600
1945-46	9,880	2,470	-----	50	34,400	1,820	9,230	-----
47	14,230	2,470	-----	40	28,020	870	9,230	-----
48	12,170	2,470	-----	30	17,730	2,430	9,230	-----
49	7,010	2,470	-----	10	15,000	1,190	9,230	-----
50	6,030	2,470	-----	10	10,110	1,370	9,230	-----
1950-51	12,180	2,470	-----	40	11,680*	920	9,230	-----
GROSS SAFE SEASONAL YIELD								
							330	3,040
							11,700	Acre-Feet

* Conservation storage would have been entirely evacuated in October, 1950.

TABLE K-14

SEMIANNUAL SUMMARY OF MONTHLY YIELD STUDY,
WHALE ROCK RESERVOIR ON OLD CREEK.

Gross Storage Capacity: 40,000 Acre-Feet
Silt Reservation: 500 Acre-Feet

In Acre-Feet

Season	October to March						April to September					
	Inflow	Draft	Spill	Net	Storage end of March	Inflow	Draft	Spill	Net	Storage end of September		
1934-35												
1935-36	12,730	1,920	---	70	13,180*	1,270	7,180	---	820	6,450		
37	16,690	1,920	---	70	21,150	1,810	7,180	---	1,100	14,680		
38	29,780	1,920	2,400	140	40,000	1,620	7,180	460	1,580	32,400		
39	2,540	1,920	---	180	32,840	1,160	7,180	---	1,380	24,440		
40	15,460	1,920	---	170	37,810	1,040	7,180	---	1,530	30,140		
1940-41												
41	28,920	1,920	16,950	190	40,000	8,580	7,180	7,050	1,590	32,760		
42	14,320	1,920	4,980	180	40,000	3,680	7,180	2,210	1,590	32,700		
43	19,440	1,920	10,040	180	40,000	960	7,180	---	1,570	32,210		
44	10,600	1,920	710	180	40,000	700	7,180	---	1,570	31,950		
45	10,240	1,920	90	180	40,000	760	7,180	---	1,570	32,010		
1945-46												
46	6,570	1,920	---	180	36,480	830	7,180	---	1,490	28,640		
47	3,290	1,920	---	180	29,830	210	7,180	---	1,300	21,660		
48	610	1,920	---	160	20,190	1,890	7,180	---	1,060	13,840		
49	5,160	1,920	---	130	16,950	240	7,180	---	920	9,090		
50	5,130	1,920	---	100	12,200	570	7,180	---	750	4,840		
1950-51												
	7,100	1,920	---	70	9,950	300	7,180	---	630	2,440		
GROSS SAFE SEASONAL YIELD												
										9,200	Acre-Feet	

K-14

* Conservation storage would have been entirely evacuated in December, 1935.

SEMIANNUAL SUMMARY OF MONTHLY YIELD STUDY,
LOPEZ RESERVOIR ON ARROYO GRANDE CREEK

Gross Storage Capacity: 50,000 Acre-Feet
Silt Reservation: 1,000 Acre-Feet

In Acre-Feet

Season	Inflow	Draft	Spill	Net	Storage : end of	October to March		April to September		Storage : end of
						March	March	Draft	Spill	
1934-35	17,690	2,640	000	20*	17,900*	1,810	9,870	000	920	8,920
37	31,110	2,640	000	10	37,380	3,190	9,870	000	1,720	28,980
38	37,040	2,640	13,370	10	50,000	3,260	9,870	780	2,120	40,490
39	5,160	2,640	000	40	42,970	1,240	9,870	000	1,860	32,480
40	10,850	2,640	000	30	40,660	2,550	9,870	000	1,830	31,510
1940-41	33,390	2,640	12,240	20	50,000	20,310	9,870	13,730	2,180	44,530
42	10,270	2,640	2,140	20	50,000	6,430	9,870	1,670	2,160	42,730
43	28,610	2,640	18,680	20	50,000	7,790	9,870	2,570	2,160	43,190
44	9,930	2,640	450	30	50,000	3,970	9,870	70	2,140	41,890
45	7,570	2,640	000	40	46,780	3,730	9,870	000	2,020	38,620
1945-46	5,290	2,640	000	30	41,240	4,010	9,870	000	1,850	33,530
47	4,930	2,640	000	20	35,800	1,670	9,870	000	1,610	25,990
48	3,350	2,640	000	30	26,670	2,750	9,870	000	1,280	18,270
49	4,050	2,640	000	20	19,660	2,950	9,870	000	1,000	11,740
50	5,560	2,640	000	10	14,650	3,440	9,870	000	830	7,390
1950-51	5,670	2,640	000	10	10,410	3,030	9,870	000	700	2,870

GROSS SAFE SEASONAL YIELD

* Conservation storage would have been entirely evacuated in January, 1936.

APPENDIX L
ESTIMATES OF COST

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**ESTIMATED COST OF RINCONADA DAM AND RESERVOIR
WITH STORAGE CAPACITY OF 35,000 ACRE-FEET**

(Based on prices prevailing in 1954)

Elevation of crest of dam:	1,195 feet,	Capacity of reservoir to crest of
U.S.G.S. datum		spillway: 35,000 acre-feet
Elevation of crest of spillway:	1,179 feet	Capacity of spillway with 5-foot
Height of dam to spillway crest, above		freeboard: 10,000 second-feet
stream bed:	99 feet	

Item	Quantity	Unit	Cost
CAPITAL COSTS			
Dam			
Exploration		Lump sum	\$ 15,000
Diversion of stream and dewatering of foundation		Lump sum	8,000
Stripping topsoil	13,100 cu.yd.	\$ 0.35	4,600
Excavation for embankment			
Foundation	23,000 cu.yd.	1.50	34,500
From borrow pits	173,800 cu.yd.	0.40	69,500
From stream bed	114,100 cu.yd.	0.35	39,900
Embankment			
Impervious	147,700 cu.yd.	0.16	23,600
Pervious	114,100 cu.yd.	0.12	13,700
Pervious, salvage	73,300 cu.yd.	0.20	14,700
Rock riprap	9,500 cu.yd.	2.50	23,800
Drilling grout holes	2,500 lin.ft.	3.00	7,500
Pressure grouting	1,600 cu.ft.	4.00	6,400
			<u>\$ 261,200</u>
Auxiliary Dam			
Stripping	9,000 cu.yd.	0.90	8,100
Excavation for embankment	74,200 cu.yd.	0.35	26,000
Embankment, impervious	63,100 cu.yd.	0.20	12,600
Rock riprap	5,900 cu.yd.	2.50	14,800
			<u>61,500</u>
Spillway			
Excavation, rock	70,100 cu.yd.	1.50	105,200
Concrete			
Weir and cutoff	510 cu.yd.	35.00	17,900
Flcor	620 cu.yd.	30.00	18,600
Walls	410 cu.yd.	40.00	16,400
Reinforcing steel	126,800 lbs.	0.15	19,000
			<u>177,100</u>
Outlet Works			
Excavation			
Inlet and outlet structures	1,000 cu.yd.	2.00	2,000
Conduit	3,670 cu.yd.	2.50	9,200
Backfill	1,520 cu.yd.	1.50	2,300

ESTIMATED COST OF RINCONADA DAM AND RESERVOIR
WITH STORAGE CAPACITY OF 35,000 ACRE-FEET
(continued)

Item	Quantity	Unit	Cost
		price	
CAPITAL COSTS			
Outlet Works (continued)			
Concrete		:	
Conduit and collars	890 cu.yd.	\$50.00	\$ 44,500
Inlet structure	200 cu.yd.	60.00	12,000
Gate chamber and valve		:	
house	340 cu.yd.	50.00	17,000
Reinforcing steel	142,700 lbs.	0.15	21,400
Miscellaneous metalwork	11,600 lbs.	0.40	4,600
Steel pipe, 48-inch dia.	43,400 lbs.	0.25	10,800
High pressure slide gate	32,000 lbs.	0.50	16,000
Howell-Bunger valve,			
42-inch dia.		lump sum	<u>11,800</u>
			\$ 151,600
Reservoir		:	
Land and improvements		lump sum	175,000
Clearing reservoir lands	1,840 ac.	50.00	92,000
Relocation of utilities		lump sum	10,000
Road relocation		lump sum	<u>682,000</u>
			<u>962,000</u>
Subtotal			\$1,613,400
Administration and engineering, 10%			\$ 161,300
Contingencies, 15%			242,000
Interest during construction			<u>40,300</u>
TOTAL			\$2,057,000
ANNUAL COSTS			
Interest, 3.5%			\$ 72,000
Amortization, 40-year sinking fund at 3.5%			24,300
Operation and maintenance			<u>7,500</u>
TOTAL			\$ 103,800

ESTIMATED COST OF RINCONADA DAM AND RESERVOIR
WITH STORAGE CAPACITY OF 50,000 ACRE-FEET

(Based on prices prevailing in 1954)

Elevation of crest of dam:	1,204 feet,	Capacity of reservoir to crest of
U.S.G.S. datum		spillway: 50,000 acre-feet
Elevation of crest of spillway:	1,189 feet	Capacity of spillway with 5-foot
Height of dam to spillway crest, above		freeboard: 6,600 second-feet
stream bed:	109 feet	

Item	:	Quantity	:	Unit	:	Cost
	:		:	price	:	

CAPITAL COSTS

Dam

Exploration		lump sum	\$ 20,000
Diversion of stream and dewatering of foundation		lump sum	10,000
Stripping topsoil	15,300 cu.yd.	\$ 0.35	5,400
Excavation for embankment			
Foundation	29,100 cu.yd.	1.50	43,600
From borrow pits	217,000 cu.yd.	0.40	86,800
From stream bed	180,500 cu.yd.	0.35	63,200
Embankment			
Impervious	184,500 cu.yd.	0.16	29,500
Pervious	180,500 cu.yd.	0.12	21,700
Pervious, salvage	48,300 cu.yd.	0.20	9,700
Rock riprap	11,100 cu.yd.	2.50	27,800
Drilling grout holes	2,600 lin.ft.	3.00	7,800
Pressure grouting	1,800 cu.ft.	4.00	<u>7,200</u>
			\$ 332,700

Auxiliary Dam

Stripping	18,800 cu.yd.	0.90	16,900
Excavation for embankment	137,200 cu.yd.	0.35	48,000
Embankment	116,600 cu.yd.	0.20	23,300
Rock riprap	8,700 cu.yd.	2.50	<u>21,800</u>
			110,000

Spillway

Excavation, rock	33,100 cu.yd.	1.50	49,600
Concrete			
Weir and cutoff	320 cu.yd.	35.00	1,1200
Floor	390 cu.yd.	30.00	11,700
Walls	410 cu.yd.	40.00	16,400
Reinforcing steel	95,000 lbs.	0.15	<u>14,200</u>
			103,100

Outlet Works

Excavation			
Inlet and outlet structures	1,000 cu.yd.	2.00	2,000
Conduit	4,330 cu.yd.	2.50	10,800
Backfill	1,770 cu.yd.	1.50	2,700

ESTIMATED COST OF RINCONADA DAM AND RESERVOIR
WITH STORAGE CAPACITY OF 50,000 ACRE-FEET
(continued)

Item	Quantity	Unit	price	Cost
CAPITAL COSTS				
Outlet Works (continued)				
Concrete				
Conduit and collars	1,070 cu.yd.	\$50.00	\$ 53,500	
Inlet structure	200 cu.yd.	60.00	12,000	
Gate chamber and valve house	340 cu.yd.	50.00	17,000	
Reinforcing steel	161,000 lbs.	0.15	24,200	
Miscellaneous metalwork	12,100 lbs.	0.40	4,800	
Steel pipe, 48-inch dia.	51,800 lbs.	0.25	12,900	
High pressure slide gate	41,000 lbs.	0.50	20,500	
Howell-Bunger valve, 42-inch dia.		lump sum	<u>11,800</u>	\$ 172,200
Reservoir				
Land and improvements		lump sum	205,000	
Clearing reservoir lands	2,160 ac.	50.00	108,000	
Relocation of utilities		lump sum	10,000	
Road relocation		lump sum	<u>682,000</u>	<u>1,008,000</u>
Subtotal				\$1,726,000
Administration and engineering, 10%				
Contingencies, 15%				
Interest during construction				
TOTAL				\$2,200,700
ANNUAL COSTS				
Interest, 3.5%			\$ 77,000	
Amortization, 40-year sinking fund at 3.5%			26,000	
Operation and maintenance			<u>7,500</u>	
TOTAL				\$ 110,500

**ESTIMATED COST OF CANTERA DAM AND RESERVOIR
WITH STORAGE CAPACITY OF 35,000 ACRE-FEET**

(Based on prices prevailing in 1954)

Elevation of crest of dam: 1,065 feet,
U.S.G.S. datum

Capacity of reservoir to top of
gates: 35,000 acre-feet

Elevation of top of gates: 1,054 feet
Height to top of gates, above stream
bed: 114 feet

Capacity of spillway with 8-foot
freeboard: 17,100 second-feet

Item	Quantity	Unit price	Cost
------	----------	------------	------

CAPITAL COSTS

Main Dam

Exploration		lump sum	\$ 15,000
Diversion of stream and dewatering of foundation		lump sum	20,000
Stripping	34,000 cu.yd.	\$ 3.00	102,000
Mass concrete	81,600 cu.yd.	19.00	1,550,400
Cooling concrete	81,600 cu.yd.	0.50	40,800
Parapet wall concrete	170 cu.yd.	40.00	6,800
Drilling grout holes	2,500 lin.ft.	4.00	10,000
Pressure grouting	1,800 cu.ft.	3.00	5,400
Miscellaneous metalwork	62,000 lbs.	0.40	24,800
Reinforcing steel	94,000 lbs.	0.15	<u>14,100</u>
			\$1,789,300

Spillway

Reinforced concrete			
Walls	630 cu.yd.	35.00	22,000
Piers	300 cu.yd.	40.00	12,000
Gates and hoists	136,000 lbs.	0.50	68,000
Reinforcing steel	93,400 lbs.	0.15	14,000
Bridge		lump sum	<u>7,500</u>
			123,500

Outlet Works (Main Dam)

Concrete outlet structure	10 cu.yd.	65.00	600
High pressure slide gate and hoist	40,000 lbs.	0.50	20,000
Needle valve, 42-inch dia.		lump sum	21,000
Steel pipe, 48-inch dia.	43,400 lbs.	0.25	10,800
Trash rack steel	12,000 lbs.	0.40	4,800
Reinforcing steel	1,000 lbs.	0.15	<u>200</u>
			57,400

Auxiliary Dam

Foundation excavation	49,500 cu.yd.	0.90	44,600
Embankment			
Impervious	105,000 cu.yd.	0.45	47,200
Pervious	129,500 cu.yd.	0.42	54,400
Rock riprap	114,600 cu.yd.	2.00	<u>29,200</u>
			175,400

ESTIMATED COST OF CANTERA DAM AND RESERVOIR
WITH STORAGE CAPACITY OF 35,000 ACRE-FEET
(continued)

Item	Quantity	Unit	Cost
		price	
CAPITAL COSTS			
Outlet Works (Auxiliary Dam)			
Excavation	26,000 cu.yd.	\$ 1.00	\$ 26,000
Backfill	13,000 cu.yd.	1.50	19,500
Concrete			
Structure	35 cu.yd.	65.00	2,300
Conduit encasement	200 cu.yd.	45.00	9,000
Reinforcing steel	13,500 lbs.	0.15	2,000
Trash rack steel	2,000 lbs.	0.40	800
Steel pipe, 36-inch dia.	31,200 lbs.	0.25	7,800
Gate valve, 36-inch dia., gate lift, and appurte- nances		lump sum	3,000
Gate valve, 30-inch dia.		lump sum	<u>1,600</u>
			\$ 72,000
Reservoir			
Land and improvements		lump sum	38,100
Clearing reservoir lands	750 ac.	50.00	37,500
Relocation of utilities		lump sum	200,000
Road relocation		lump sum	<u>450,000</u>
			<u>725,600</u>
Subtotal			\$2,943,200
Administration and engineering, 10%			\$ 294,300
Contingencies, 15%			<u>441,500</u>
Interest during construction			<u>147,200</u>
TOTAL			\$3,826,200
ANNUAL COSTS			
Interest, 3.5%			\$ 133,900
Amortization, 40-year sinking fund at 3.5%			<u>45,300</u>
Operation and maintenance			<u>7,000</u>
TOTAL			\$ 186,200

ESTIMATED COST OF LOWER ATASCADERO DAM AND RESERVOIR
WITH STORAGE CAPACITY OF 10,000 ACRE-FEET

(Based on prices prevailing in 1954)

Elevation of crest of dam: 1,145 feet, Capacity of reservoir to crest of
U.S.G.S. datum spillway: 10,000 acre-feet
Elevation of crest of spillway: 1,127 feet Capacity of spillway with 5-foot
Height of dam to spillway crest, above freeboard: 15,000 second-feet
stream bed: 152 feet

Item	:	Quantity	:	Unit	:	Cost
	:		:	price	:	

CAPITAL COSTS

Dam

Exploration			lump sum	\$ 10,000
Diversion of stream and dewatering of foundation			lump sum	5,000
Stripping topsoil	17,000 cu.yd.		\$ 0.35	6,000
Excavation for embankment				
Foundation	63,000 cu.yd.		0.90	56,700
From borrow pits	283,000 cu.yd.		0.60	169,800
From stream bed	307,000 cu.yd.		0.50	153,500
Embankment				
Impervious	246,000 cu.yd.		0.16	39,400
Random	267,000 cu.yd.		0.12	32,000
Random, salvage	136,000 cu.yd.		0.20	27,200
Rock riprap	15,500 cu.yd.		3.00	46,500
Drilling grout holes	2,880 lin.ft.		3.00	8,600
Pressure grouting	1,920 cu.ft.		4.00	7,700
Gravel drains	7,720 cu.yd.		2.00	<u>15,400</u>
				\$ 577,800

Spillway

Excavation, unclassified	125,000 cu.yd.		1.00	125,000
Concrete				
Weir and cutoff	570 cu.yd.		35.00	20,000
Floor	740 cu.yd.		30.00	22,200
Walls	550 cu.yd.		40.00	22,000
Reinforcing steel	145,400 lbs.		0.15	<u>21,800</u>
				211,000

Outlet Works

Excavation	1,600 cu.yd.		2.00	3,200
Backfill	1,000 cu.yd.		1.50	1,500
Concrete				
Inlet structure	70 cu.yd.		60.00	4,200
Pipe encasement	380 cu.yd.		40.00	15,200
Reinforcing steel	45,000 lbs.		0.15	6,800
Miscellaneous metalwork	4,000 lbs.		0.40	1,600
Steel pipe, 30- and 36-inch dia.	78,500 lbs.		0.25	19,600
Howell-Bunger valve, 24-inch dia.			lump sum	7,800

ESTIMATED COST OF LOWER ATASCADERO DAM AND RESERVOIR
WITH STORAGE CAPACITY OF 10,000 ACRE-FEET
(continued)

Item	Quantity	Unit price	Cost
CAPITAL COSTS			
Outlet Works (continued)			
Gate valve, 18-inch dia.			
and actuators	3 each	\$2,000.00	\$ 6,000
Control house		lump sum	<u>2,000</u>
			<u>67,900</u>
Reservoir			
Land and improvements		lump sum	48,600
Relocation of utilities		lump sum	5,000
Clearing reservoir lands	190 ac.	50.00	9,500
Road relocation		lump sum	<u>300,000</u>
			<u>363,100</u>
Subtotal			<u>\$1,219,800</u>
Administration and engineering, 10%			\$ 122,000
Contingencies, 15%			183,000
Interest during construction			<u>30,500</u>
TOTAL			<u>\$1,555,300</u>
ANNUAL COSTS			
Interest, 3.5%			\$ 54,400
Amortization, 40-year sinking fund at 3.5%			18,400
Operation and maintenance			<u>5,000</u>
TOTAL			<u>\$ 77,800</u>

**ESTIMATED COST OF LOWER ATASCADERO DAM AND RESERVOIR
WITH STORAGE CAPACITY OF 15,000 ACRE-FEET**

(Based on prices prevailing in 1954)

Elevation of crest of dam:	1,168 feet,	Capacity of reservoir to crest of
U.S.G.S. datum		spillway: 15,000 acre-feet
Elevation of crest of spillway:	1,150 feet	Capacity of spillway with 5-foot
Height of dam to spillway crest, above		freeboard: 15,000 second-feet
stream bed:	175 feet	

Item	Quantity	Unit price	Cost
CAPITAL COSTS			
Dam			
Exploration		lump sum	\$ 15,000
Diversions of stream and dewatering of foundation		lump sum	7,500
Stripping topsoil	23,000 cu.yd.	\$ 0.35	8,000
Excavation for embankment			
Foundation	82,800 cu.yd.	0.90	74,500
From borrow pits	388,000 cu.yd.	0.60	232,800
From stream bed	524,000 cu.yd.	0.50	262,000
Embankment			
Impervious	338,000 cu.yd.	0.16	54,100
Random	456,000 cu.yd.	0.12	54,700
Random, salvage	162,000 cu.yd.	0.20	32,400
Rock riprap	20,200 cu.yd.	3.00	60,600
Drilling grout holes	3,360 lin.ft.	3.00	10,100
Pressure grouting	2,240 cu.ft.	4.00	9,000
Gravel drains	8,450 cu.yd.	2.00	<u>16,900</u>
			\$ 837,600
Spillway			
Excavation, unclassified	138,000 cu.yd.	1.00	138,000
Concrete			
Weir and cutoff	1,020 cu.yd.	35.00	35,700
Floor	860 cu.yd.	30.00	25,800
Walls	630 cu.yd.	40.00	25,200
Reinforcing steel	162,400 lbs.	0.15	<u>24,400</u>
			249,100
Outlet Works			
Excavation	1,990 cu.yd.	2.00	4,000
Backfill	1,200 cu.yd.	1.50	1,800
Concrete			
Inlet structure	110 cu.yd.	60.00	6,600
Pipe encasement	500 cu.yd.	40.00	20,000
Reinforcing steel	60,000 lbs.	0.15	9,000
Miscellaneous metalwork	4,000 lbs.	0.40	1,600
Steel pipe 36- and 40-inch dia.	106,700 lbs.	0.25	26,700
Howell-Bunger valve, 30-inch dia.		lump sum	9,200

ESTIMATED COST OF LOWER ATASCADERO DAM AND RESERVOIR
WITH STORAGE CAPACITY OF 15,000 ACRE-FEET
(continued)

Item	Quantity	Unit price	Cost
CAPITAL COSTS			
Outlet Works (continued)			
Gate valve, 18-inch dia. and actuators	4 each	\$2,000.00	\$ 8,000
Control house		lump sum	<u>2,000</u>
			\$ 88,900
Reservoir			
Land and improvements		lump sum	51,900
Relocation of utilities		lump sum	5,000
Clearing reservoir lands	240 ac.	60.00	14,400
Road relocation		lump sum	<u>300,000</u>
			<u>371,300</u>
Subtotal			\$1,546,900
Administration and engineering, 10%			\$ 154,700
Contingencies, 15%			232,000
Interest during construction			<u>38,700</u>
TOTAL			\$1,972,300
ANNUAL COSTS			
Interest, 3.5%			\$ 69,000
Amortization, 40-year sinking fund at 3.5%			23,300
Operation and maintenance			<u>5,000</u>
TOTAL			\$ 97,300

ESTIMATED COST OF DOVER DAM AND RESERVOIR
WITH STORAGE CAPACITY OF 7,000 ACRE-FEET

(Based on prices prevailing in 1954)

Elevation of crest of dam:	1,215 feet,	Capacity of reservoir to crest of
U.S.G.S. datum		spillway: 7,000 acre-feet
Elevation of crest of spillway:	1,201 feet	Capacity of spillway with 4-foot
Height of dam to spillway crest, above		freeboard: 25,000 second-feet
stream bed:	101 feet	

Item	:	Quantity	:	Unit	:	Cost
	:		:	price	:	

CAPITAL COSTS

Dam

Exploration			lump sum	\$ 10,000
Diversion of stream and dewatering of foundation			lump sum	5,000
Stripping topsoil	12,000 cu.yd.		\$ 0.35	4,200
Excavation for embankment				
Foundation	40,000 cu.yd.		0.90	36,000
From borrow pits	121,000 cu.yd.		0.50	60,500
From stream bed	208,000 cu.yd.		0.45	93,600
Embankment				
Impervious	105,000 cu.yd.		0.16	16,800
Pervious	181,000 cu.yd.		0.12	21,700
Pervious, salvage	64,000 cu.yd.		0.20	12,800
Rock riprap	13,000 cu.yd.		3.00	39,000
Drilling grout holes	7,680 lin.ft.		3.00	23,000
Pressure grouting	5,100 cu.ft.		4.00	<u>20,400</u>
				<u>\$343,000</u>

Spillway

Excavation, unclassified	35,000 cu.yd.		1.00	35,000
Concrete				
Weir and cutoff	700 cu.yd.		35.00	24,500
Floor	1,360 cu.yd.		30.00	40,800
Walls	260 cu.yd.		40.00	10,400
Reinforcing steel	169,000 lbs.		0.15	<u>25,400</u>
				<u>136,100</u>

Outlet Works

Excavation	2,090 cu.yd.		2.00	4,200
Backfill	1,700 cu.yd.		1.50	2,600
Concrete				
Inlet structure	60 cu.yd.		60.00	3,600
Pipe encasement	290 cu.yd.		40.00	11,600
Reinforcing steel	34,500 lbs.		0.15	5,200
Miscellaneous metalwork	4,000 lbs.		0.40	1,600
Steel pipe, 30-inch dia.	51,000 lbs.		0.25	12,800
Howell-Bunger valve, 24-inch dia.			lump sum	7,800
Gate valve, 12-inch dia. and actuators	3 each		1,500.00	4,500
Control house			lump sum	<u>1,000</u>
				<u>54,900</u>

ESTIMATED COST OF DOVER DAM AND RESERVOIR
WITH STORAGE CAPACITY OF 7,000 ACRE-FEET
(continued)

Item	:	Quantity	:	Unit Price	:	Cost
CAPITAL COSTS						
Reservoir						
Land and improvements				lump sum	\$ 38,300	
Clearing reservoir lands		220 ac.		\$ 150.00	33,000	
Relocation of utilities				lump sum	60,000	
Road relocation				lump sum	<u>50,000</u>	<u>\$181,300</u>
Subtotal						\$715,300
Administration and engineering, 10%					\$ 71,500	
Contingencies, 15%					107,300	
Interest during construction					<u>17,900</u>	<u></u>
TOTAL						\$912,000
ANNUAL COSTS						
Interest, 3.5%					\$ 31,900	
Amortization, 40-year sinking fund at 3.5%					10,800	
Operation and maintenance					<u>5,000</u>	<u></u>
TOTAL						\$ 47,700

ESTIMATED COST OF LOWER JACK DAM AND RESERVOIR
WITH STORAGE CAPACITY OF 15,000 ACRE-FEET

(Based on prices prevailing in 1954)

Elevation of crest of dam: 1,125 feet, U.S.G.S. datum	Capacity of reservoir to crest of spillway: 15,000 acre-feet
Elevation of crest of spillway: 1,105 feet	Capacity of spillway with 5-foot freeboard: 25,000 second-feet
Height of dam to spillway crest, above stream bed: 115 feet	

Item	:	Quantity	:	Unit	:	Cost
	:		:	price	:	

CAPITAL COSTS

Dam

Exploration		lump sum	\$ 10,000
Diversion of stream and dewatering of foundation		lump sum	3,000
Stripping topsoil	15,600 cu.yd.	\$ 0.40	6,200
Excavation			
Foundation	43,800 cu.yd.	0.90	39,400
From borrow pits	539,800 cu.yd.	0.41	221,300
Embankment			
Impervious	211,500 cu.yd.	0.16	33,800
Pervious	396,000 cu.yd.	0.12	47,500
Rock riprap	18,800 cu.yd.	2.00	37,600
Drilling grout holes	1,650 lin.ft.	3.00	5,000
Pressure grouting	1,100 cu.ft.	4.00	<u>4,400</u>
			\$ 408,200

Spillway

Excavation, unclassified	124,800 cu.yd.	1.50	187,200
Concrete			
Weir and cutoff	740 cu.yd.	35.00	25,900
Floor	940 cu.yd.	30.00	28,200
Walls	410 cu.yd.	40.00	16,400
Reinforcing steel	163,000 lbs.	0.15	<u>24,500</u>
			282,200

Outlet Works

Excavation			
Inlet and outlet structures	2,000 cu.yd.	1.50	3,000
Conduit	4,100 cu.yd.	2.00	8,200
Backfill	2,600 cu.yd.	1.50	3,900
Concrete			
Conduit and collars	1,265 cu.yd.	50.00	63,200
Inlet structure	100 cu.yd.	65.00	6,500
Gate chamber and valve house	140 cu.yd.	50.00	7,000
Reinforcing steel	79,000 lbs.	0.15	11,800
Miscellaneous metalwork	9,000 lbs.	0.40	3,600
Steel pipe, 36-inch dia.	41,000 lbs.	0.25	10,200
Gate valve, 24-inch dia.		lump sum	2,400

ESTIMATED COST OF LOWER JACK DAM AND RESERVOIR
WITH STORAGE CAPACITY OF 15,000 ACRE-FEET
(continued)

Item	:	Quantity	:	Unit price	:	Cost
CAPITAL COSTS						
Outlet Works (continued)						
High pressure slide gates				lump sum	\$ 23,500	
Howell-Bunger valve, 30-inch dia.				lump sum	<u>7,500</u>	\$ 150,800
Reservoir						
Land and improvements				lump sum	73,400	
Clearing reservoir lands				lump sum	37,500	
Relocation of utilities				lump sum	5,000	
Road relocation				lump sum	56,000	
Access road				lump sum	<u>10,000</u>	<u>181,900</u>
Subtotal						\$1,023,100
Administration and engineering, 10%					\$ 102,300	
Contingencies, 15%					153,500	
Interest during construction					<u>25,600</u>	
TOTAL						\$1,304,500
ANNUAL COSTS						
Interest, 3.5%					\$ 45,700	
Amortization, 40-year sinking fund at 3.5%					15,400	
Operation and maintenance					<u>5,000</u>	
TOTAL						\$ 66,100

**ESTIMATED COST OF LOWER JACK DAM AND RESERVOIR
WITH STORAGE CAPACITY OF 25,000 ACRE-FEET**

(Based on prices prevailing in 1954)

Elevation of crest of dam: 1,150 feet	Capacity of reservoir to crest of
U.S.G.S. datum	spillway: 25,000 acre-feet
Elevation of crest of spillway: 1,130 feet	Capacity of spillway with 5-foot
Height of dam to spillway crest, above stream bed: 140 feet	freeboard: 25,000 second-feet

Item	:	Quantity	:	Unit	:	Cost
	:		:	price	:	

CAPITAL COSTS

Dam

Exploration		lump sum	\$ 10,000
Diversion of stream and dewatering of foundation		lump sum	3,000
Stripping topsoil	21,700 cu.yd.	\$ 0.40	8,700
Excavation			
Foundation	63,400 cu.yd.	0.90	57,100
From borrow pits	953,000 cu.yd.	0.45	428,800
Embankment			
Impervious	331,000 cu.yd.	0.16	53,000
Pervious	645,000 cu.yd.	0.12	77,400
Rock riprap	24,900 cu.yd.	2.00	49,800
Drilling grout holes	2,000 lin.ft.	3.00	6,000
Pressure grouting	1,340 cu.ft.	4.00	<u>5,400</u>
			\$ 699,200

Spillway

Excavation, unclassified	131,100 cu.yd.	1.50	196,600
Concrete			
Weir and cutoff	750 cu.yd.	35.00	26,200
Floor	1,070 cu.yd.	30.00	32,100
Walls	500 cu.yd.	40.00	20,000
Reinforcing steel	182,000 lbs.	0.15	<u>27,300</u>
			302,200

Outlet Works

Excavation			
Inlet and outlet structures	2,000 cu.yd.	1.50	3,000
Conduit	4,400 cu.yd.	2.00	8,800
Backfill	3,000 cu.yd.	1.50	4,500
Concrete			
Conduit and collars	1,510 cu.yd.	50.00	75,500
Inlet structure	100 cu.yd.	65.00	6,500
Gate chamber and valve house	150 cu.yd.	50.00	7,500
Reinforcing steel	88,500 lbs.	0.15	13,300
Miscellaneous metalwork	9,600 lbs.	0.40	3,800
Steel pipe, 42-inch dia.	50,400 lbs.	0.25	12,600
Gate valve, 24-inch dia.		lump sum	2,400

**ESTIMATED COST OF LOWER JACK DAM AND RESERVOIR
WITH STORAGE CAPACITY OF 25,000 ACRE-FEET
(continued)**

Item	:	Quantity	:	Unit	:	Cost
CAPITAL COSTS						
Outlet Works (continued)						
High pressure slide gates				lump sum		\$ 23,500
Howell-Bunger valve, 36-inch dia.				lump sum		<u>9,000</u> \$ 170,400
Reservoir						
Land and improvements				lump sum		81,500
Clearing reservoir lands				lump sum		48,800
Relocation of utilities				lump sum		5,000
Road relocation				lump sum		56,000
Access road				lump sum		<u>10,000</u> <u>201,300</u>
Subtotal						\$1,373,100
Administration and engineering, 10%						\$ 137,300
Contingencies, 15%						206,000
Interest during construction						<u>34,300</u>
TOTAL						\$1,750,700
ANNUAL COSTS						
Interest, 3.5%						\$ 61,300
Amortization, 40-year sinking fund at 3.5%						20,700
Operation and maintenance						<u>5,000</u>
TOTAL						\$ 87,000

**ESTIMATED COST OF SANTA RITA DAM AND RESERVOIR
WITH STORAGE CAPACITY OF 10,000 ACRE-FEET**

(Based on prices prevailing in 1954)

Elevation of crest of dam: 1,144 feet, Capacity of reservoir to crest of
U.S.G.S. datum spillway: 10,000 acre-feet
Elevation of crest of spillway: 1,129 feet Capacity of spillway with 5-foot
Height of dam to spillway crest, above freeboard: 20,000 second-feet
stream bed: 124 feet

Item	:	Quantity	:	Unit	:	Cost
	:		:	price	:	

CAPITAL COSTS

Dam

Exploration			lump sum	\$ 10,000
Diversion of stream and dewatering of foundation			lump sum	5,000
Stripping topsoil	4,800 cu.yd.		\$ 0.35	1,700
Excavation for embankment				
Foundation	52,000 cu.yd.		0.90	46,800
From borrow pits	174,000 cu.yd.		0.53	92,200
From stream bed	84,000 cu.yd.		0.45	37,800
Embankment				
Impervious	151,000 cu.yd.		0.16	24,200
Random	73,000 cu.yd.		0.12	8,800
Random, salvage	198,000 cu.yd.		0.20	39,600
Rock riprap	9,800 cu.yd.		3.00	29,400
Drilling grout holes	2,580 lin.ft.		3.00	7,700
Pressure grouting	1,720 cu.ft.		4.00	6,900
Gravel drains	6,720 cu.yd.		2.00	<u>13,400</u>
				\$ 323,500

Spillway

Excavation, unclassified	181,000 cu.yd.		1.00	181,000
Concrete				
Weir and cutoff	710 cu.yd.		35.00	24,800
Floor	1,630 cu.yd.		30.00	48,900
Walls	460 cu.yd.		40.00	18,400
Reinforcing steel	223,900 lbs.		0.15	<u>33,600</u>
				306,700

Outlet Works

Excavation	1,560 cu.yd.		2.00	3,100
Backfill	900 cu.yd.		1.50	1,400
Concrete				
Outlet structure	70 cu.yd.		60.00	4,200
Pipe encasement	270 cu.yd.		40.00	10,800
Reinforcing steel	34,000 lbs.		0.15	5,100
Miscellaneous metalwork	4,000 lbs.		0.40	1,600
Steel pipe, 30- and 36-inch dia.	59,800 lbs.		0.25	15,000
Howell-Bunger valve, 24-inch dia.			lump sum	7,800

ESTIMATED COST OF SANTA RITA DAM AND RESERVOIR
WITH STORAGE CAPACITY OF 10,000 ACRE-FEET
(continued)

Item	Quantity	Unit	Price	Cost
CAPITAL COSTS				
Outlet Works (continued)				
Gate valve, 18-inch dia.				
and actuators	3 each	\$2,000.00	\$ 6,000	
Control house		lump sum	<u>2,000</u>	<u>\$ 57,000</u>
Reservoir				
Land and improvements		lump sum	22,100	
Clearing reservoir lands	260 ac.	150.00	39,000	
Road relocation		lump sum	<u>120,000</u>	<u>181,100</u>
Subtotal				\$ 868,300
Administration and engineering, 10%				\$ 86,800
Contingencies, 15%				136,200
Interest during construction				<u>21,700</u>
TOTAL				\$1,107,000
ANNUAL COSTS				
Interest, 3.5%				\$ 38,700
Amortization, 40-year sinking fund at 3.5%				13,100
Operation and maintenance				<u>5,000</u>
TOTAL				\$ 56,800

ESTIMATED COST OF SANTA RITA DAM AND RESERVOIR
WITH STORAGE CAPACITY OF 15,000 ACRE-FEET

(Based on prices prevailing in 1954)

Elevation of crest of dam:	1,158 feet,	Capacity of reservoir to crest of
U.S.G.S. datum		spillway: 15,000 acre-feet
Elevation of crest of spillway:	1,143 feet	Capacity of spillway with 5-foot
Height of dam to spillway crest, above		freeboard: 20,000 second-feet
stream bed:	138 feet	

Item	:	Quantity	:	Unit price	:	Cost
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CAPITAL COSTS

Dam

Exploration		lump sum	\$ 15,000
Diversion of stream and dewatering of foundation		lump sum	7,500
Stripping topsoil	9,000 cu.yd.	\$ 0.35	3,200
Excavation for embankment			
Foundation	69,000 cu.yd.	0.90	62,100
From borrow pits	286,000 cu.yd.	0.53	151,600
From stream bed	332,000 cu.yd.	0.53	176,000
Embankment			
Impervious	249,000 cu.yd.	0.16	39,800
Random	288,000 cu.yd.	0.12	34,600
Random, salvage	129,000 cu.yd.	0.20	25,800
Rock riprap	14,500 cu.yd.	3.00	43,500
Drilling grout holes	3,100 lin.ft.	3.00	9,300
Pressure grouting	2,100 cu.ft.	4.00	8,400
Gravel drains	8,500 cu.yd.	2.00	<u>17,000</u>
			\$ 593,800

Spillway

Excavation, unclassified	82,500 cu.yd.	1.00	82,500
Concrete			
Weir and cutoff	710 cu.yd.	35.00	24,800
Floor	1,340 cu.yd.	30.00	40,200
Walls	350 cu.yd.	40.00	14,000
Reinforcing steel	189,900 lbs.	0.15	<u>28,500</u>
			190,000

Outlet Works

Excavation	2,310 cu.yd.	2.00	4,600
Backfill	1,500 cu.yd.	1.50	2,200
Concrete			
Inlet structure	120 cu.yd.	60.00	7,200
Pipe encasement	480 cu.yd.	40.00	19,200
Reinforcing steel	54,000 lbs.	0.15	8,100
Miscellaneous metalwork	4,000 lbs.	0.40	1,600
Steel pipe, 36- and 40-inch dia.	104,700 lbs.	0.25	26,200
Howell-Bunger valve, 30-inch dia.		lump sum	9,200

ESTIMATED COST OF SANTA RITA DAM AND RESERVOIR
WITH STORAGE CAPACITY OF 15,000 ACRE-FEET
(continued)

Item	Quantity	Unit price	Cost
CAPITAL COSTS			
Outlet Works (continued)			
Gate valve, 18-inch dia. and actuators	4 each	\$2,000.00	\$ 8,000
Control house		lump sum	<u>2,000</u> \$ 88,300.
Reservoir			
Land and improvements		lump sum	27,700
Clearing reservoir lands	340 ac.	150.00	51,000
Road relocation		lump sum	<u>150,000</u> 228,700
Subtotal			\$1,100,800
Administration and engineering, 10%			\$ 110,100
Contingencies, 15%			165,100
Interest during construction			<u>27,500</u>
TOTAL			\$1,403,500
ANNUAL COSTS			
Interest, 3.5%			\$ 49,100
Amortization, 40-year sinking fund at 3.5%			16,600
Operation and maintenance			<u>5,000</u>
TOTAL			\$ 70,700

ESTIMATED COST OF SAN MIGUELITO DAM AND RESERVOIR
WITH STORAGE CAPACITY OF 50,000 ACRE-FEET

(Based on prices prevailing in 1954)

Elevation of crest of dam: 1,250 feet, U.S.G.S. datum	Capacity of reservoir to crest of spillway: 50,000 acre-feet
Elevation of crest of spillway: 1,236 feet	Capacity of spillway with 4.5-foot
Height of dam to spillway crest, above stream bed: 126 feet	freeboard: 49,000 second-feet

Item	:	Quantity	:	Unit price	:	Cost
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CAPITAL COSTS

Dam

Exploration		lump sum	\$ 25,000
Diversion of stream and dewatering of foundation		lump sum	20,000
Stripping topsoil	71,300 cu.yd.	\$ 0.90	64,200
Excavation for embankment			
Foundation	103,600 cu.yd.	1.30	134,700
From borrow pits	305,300 cu.yd.	0.75	229,000
From stream bed	226,100 cu.yd.	0.45	101,700
Embankment			
Impervious	259,500 cu.yd.	0.16	41,500
Pervious	226,100 cu.yd.	0.12	27,100
Pervious, salvage	139,900 cu.yd.	0.20	28,000
Rock riprap	12,700 cu.yd.	2.50	31,800
Drilling grout holes	6,360 lin.ft.	3.00	19,100
Pressure grouting	4,240 cu.ft.	4.00	<u>17,000</u>
			\$ 739,100

Spillway

Excavation, unclassified	125,000 cu.yd.	1.00	125,000
Concrete			
Weir and cutoff	2,020 cu.yd.	35.00	70,700
Floor	330 cu.yd.	30.00	9,900
Walls	120 cu.yd.	40.00	4,800
Reinforcing steel	169,600 lbs.	0.15	<u>25,400</u>
			235,800

Outlet Works

Excavation			
Inlet and outlet structures	1,000 cu.yd.	2.00	2,000
Conduit	3,110 cu.yd.	3.00	9,300
Backfill	610 cu.yd.	1.50	900
Concrete			
Conduit and collars	1,080 cu.yd.	50.00	54,000
Inlet structures	150 cu.yd.	60.00	9,000
Gate chamber and valve house	300 cu.yd.	50.00	15,000
Reinforcing steel	153,000 lbs.	0.15	23,000
Miscellaneous metalwork	11,200 lbs.	0.40	4,500
Steel pipe, 30-inch dia.	45,400 lbs.	0.25	11,400

ESTIMATED COST OF SAN MIGUELITO DAM AND RESERVOIR
WITH STORAGE CAPACITY OF 50,000 ACRE-FEET
(continued)

Item	Quantity	Unit price	Cost
CAPITAL COSTS			
Outlet Works (continued)			
High pressure slide gate	20,000 lbs.	\$ 0.50	\$ 10,000
Howell-Bunger valve, 2½-inch dia.		lump sum	<u>7,800</u> \$ 146,900
Reservoir			
Land and improvements		lump sum	23,000
Clearing reservoir lands	2,190 ac.	80.00	175,200
Access road		lump sum	<u>40,000</u> 238,200
Subtotal			\$1,360,000
Administration and engineering, 10%			\$ 136,000
Contingencies, 15%			204,000
Interest during construction			<u>34,000</u>
TOTAL			\$1,734,000
ANNUAL COSTS			
Interest, 3.5%		\$	60,700
Amortization, 40-year sinking fund at 3.5%			20,500
Operation and maintenance			<u>7,500</u>
TOTAL			\$ 88,700

**ESTIMATED COST OF SAN MIGUELITO DAM AND RESERVOIR
WITH STORAGE CAPACITY OF 130,000 ACRE-FEET**

(Based on prices prevailing in 1954)

Elevation of crest of dam: 1,285 feet, U.S.G.S. datum	Capacity of reservoir to crest of spillway: 130,000 acre-feet
Elevation of crest of spillway: 1,268 feet	Capacity of spillway with 5-foot freeboard: 38,600 second-feet
Height of dam to spillway crest, above stream bed: 158 feet	

Item	Quantity	Unit price	Cost
CAPITAL COSTS			
Dam			
Exploration		lump sum	\$ 35,000
Diversion of stream and dewatering of foundation	125,900 cu.yd.	lump sum	25,000
Stripping topsoil		\$ 0.90	113,300
Excavation for embankment			
Foundation	134,700 cu.yd.	1.30	175,100
From borrow pits	497,600 cu.yd.	0.75	373,200
From stream bed	642,000 cu.yd.	0.50	321,000
Embankment			
Impervious	423,000 cu.yd.	0.16	67,700
Pervious	642,000 cu.yd.	0.12	77,000
Pervious, salvage	208,500 cu.yd.	0.20	41,700
Rock riprap	24,800 cu.yd.	2.50	62,000
Drilling grout holes	7,560 lin.ft.	3.00	22,700
Pressure grouting	5,040 cu.ft.	4.00	<u>20,200</u>
			<u>\$1,333,900</u>
Auxiliary Dam			
Stripping	118,700 cu.yd.	0.90	106,800
Excavation for embankment	475,000 cu.yd.	0.30	142,500
Embankment	403,800 cu.yd.	0.20	80,800
Rock riprap	26,900 cu.yd.	2.50	<u>67,200</u>
			<u>397,300</u>
Spillway			
Excavation, unclassified	68,900 cu.yd.	1.00	68,900
Concrete			
Weir and cutoff	1,120 cu.yd.	35.00	39,200
Floor	180 cu.yd.	30.00	5,400
Walls	260 cu.yd.	40.00	10,400
Reinforcing steel	110,200 lbs.	0.15	<u>16,500</u>
			<u>140,400</u>
Outlet Works			
Excavation			
Inlet and outlet structures	2,000 cu.yd.	2.00	4,000
Conduit	5,440 cu.yd.	3.00	16,300
Backfill	870 cu.yd.	1.50	1,300

**ESTIMATED COST OF SAN MIGUELITO DAM AND RESERVOIR
WITH STORAGE CAPACITY OF 130,000 ACRE-FEET**
(continued)

Item	Quantity	Unit price	Cost
CAPITAL COSTS			
Outlet Works (continued)			
Concrete			
Conduit and collars	1,670 cu.yd.	\$50.00	\$ 83,500
Inlet structure	150 cu.yd.	60.00	9,000
Gate chamber and valve house	300 cu.yd.	50.00	15,000
Reinforcing steel	212,000 lbs.	0.15	31,800
Miscellaneous metalwork	14,000 lbs.	0.40	5,600
Steel pipe, 36-inch dia.	78,000 lbs.	0.25	19,500
High pressure slide gate	30,000 lbs.	0.50	15,000
Howell-Bunger valve, 30-inch dia.		lump sum	<u>9,200</u> \$ 210,200
Reservoir			
Land and improvements		lump sum	38,000
Clearing reservoir lands	3,440 ac.	60.00	206,400
Access road		lump sum	<u>40,000</u> <u>284,400</u>
Subtotal			\$2,366,200
Administration and engineering, 10%			\$ 236,600
Contingencies, 15%			354,900
Interest during construction			<u>59,200</u>
TOTAL			\$3,016,900
ANNUAL COSTS			
Interest, 3.5%			\$ 105,600
Amortization, 40-year sinking fund at 3.5%			35,700
Operation and maintenance			<u>14,300</u>
TOTAL			\$ 155,600

ESTIMATED COST OF JARRETT SHUT-IN DAM AND RESERVOIR
WITH STORAGE CAPACITY OF 30,000 ACRE-FEET

(Based on prices prevailing in 1954)

Elevation of crest of dam: 1,063 feet, U.S.G.S. datum	Capacity of reservoir to crest of spillway: 30,000 acre-feet
Elevation of crest of spillway: 1,044 feet	Capacity of spillway with 3-foot freeboard: 75,000 second-feet
Height of dam to spillway crest, above stream bed: 144 feet	

Item	:	Quantity	:	Unit price	:	Cost
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CAPITAL COSTS

Arch Dam

Exploration		lump sum	\$ 30,000
Diversion of stream and dewatering of foundation		lump sum	40,000
Excavation, rock			
Channel	2,600 cu.yd.	\$ 3.00	7,800
Abutments	6,500 cu.yd.	5.00	32,500
Concrete, arch	17,800 cu.yd.	20.00	356,000
Cooling concrete	17,800 cu.yd.	0.50	8,900
Drilling grout holes	4,800 lin.ft.	3.00	14,400
Pressure grouting	3,200 cu.ft.	4.00	<u>12,800</u>
			\$ 502,400

Auxiliary Slab and

Buttress Dam			
Excavation, rock	6,200 cu.yd.	4.00	24,800
Concrete	650 cu.yd.	45.00	29,200
Reinforcing steel	71,500 lbs.	0.15	<u>10,700</u>
			64,700

Spillway

Excavation, unclassified	80,000 cu.yd.	1.50	120,000
Concrete			
Weir and cutoff	3,770 cu.yd.	35.00	132,000
Floor	3,180 cu.yd.	30.00	95,400
Walls	940 cu.yd.	40.00	37,600
Reinforcing steel	591,000 lbs.	0.15	<u>88,600</u>
			473,600

Outlet Works

Miscellaneous metalwork	30,500 lbs.	0.40	12,200
Steel pipe, 36-inch dia.	3,900 lbs.	0.25	1,000
High pressure slide gate		lump sum	14,500
Howell-Bunger valve, 30-inch dia.		lump sum	<u>9,200</u>
			36,900

ESTIMATED COST OF JARRETT SHUT-IN DAM AND RESERVOIR
WITH STORAGE CAPACITY OF 30,000 ACRE-FEET
(continued)

Item	Quantity	Unit	Cost
		price	
CAPITAL COSTS			
Reservoir			
Land and improvements		lump sum	\$ 10,000
Clearing reservoir lands	760 ac.	\$180.00	136,800
Road relocation		lump sum	50,000
Access road		lump sum	87,500
			<u>\$ 284,300</u>
Subtotal			\$1,361,900
Administration and engineering, 10%			136,200
Contingencies, 15%			204,300
Interest during construction			<u>34,000</u>
TOTAL			\$1,736,400
ANNUAL COSTS			
Interest, 3.5%		\$	60,800
Amortization, 40-year sinking fund at 3.5%			20,500
Operation and maintenance			<u>5,500</u>
TOTAL		\$	86,800

**ESTIMATED COST OF JARRETT SHUT-IN DAM AND RESERVOIR
WITH STORAGE CAPACITY OF 75,000 ACRE-FEET**

(Based on prices prevailing in 1954)

Elevation of crest of arch dam: 1,113 feet, Capacity of reservoir to crest of U.S.G.S. datum spillway: 75,000 acre-feet
 Elevation of crest of spillway: 1,093 feet Capacity of spillway with freeboard Height of arch dam to spillway crest, above of 3 feet at arch and 5 feet at stream bed: 193 feet auxiliary dams: 71,600 sec.-feet

Item	:	Quantity	:	Unit price	:	Cost
CAPITAL COSTS						
Arch Dam						
Exploration				lump sum	\$ 40,000	
Diversions of stream and dewatering of foundation				lump sum	40,000	
Excavation, rock						
Channel		2,400 cu.yd.		\$ 3.00	7,200	
Abutments		13,500 cu.yd.		5.00	67,500	
Concrete, arch		45,000 cu.yd.		20.00	900,000	
Cooling concrete		45,000 cu.yd.		0.50	22,500	
Drilling grout holes		5,600 lin.ft.		3.00	16,800	
Pressure grouting		3,700 cu.ft.		4.00	<u>14,800</u>	<u>\$1,108,800</u>
Auxiliary Earthfill Dam						
Excavation for embankment						
Foundation		98,000 cu.ft.		0.60	58,800	
From borrow pits		301,000 cu.yd.		0.45	135,400	
From stream bed		151,800 cu.yd.		0.40	60,700	
Embankment						
Impervious		261,000 cu.yd.		0.16	41,800	
Pervious		132,000 cu.yd.		0.12	15,800	
Pervious, salvage		158,000 cu.yd.		0.20	31,600	
Rock riprap		25,000 cu.yd.		2.30	<u>57,500</u>	<u>401,600</u>
Auxiliary Gravity Dam						
Excavation, rock		2,100 cu.yd.		2.00	4,200	
Concrete		3,000 cu.yd.		20.00	<u>60,000</u>	<u>64,200</u>
Spillway						
Excavation, unclassified		138,000 cu.yd.		1.50	207,000	
Concrete						
Weir and cutoff		4,690 cu.yd.		35.00	164,200	
Floor		6,110 cu.yd.		30.00	183,300	
Walls		1,510 cu.yd.		40.00	60,400	
Reinforcing steel		952,000 lbs.		0.15	<u>142,800</u>	<u>757,700</u>

ESTIMATED COST OF JARRETT SHUT-IN DAM AND RESERVOIR
WITH STORAGE CAPACITY OF 75,000 ACRE-FEET
(continued)

Item	Quantity	Unit	Cost
		Quantity	Unit Price
CAPITAL COSTS			
Outlet Works			
Miscellaneous metalwork	69,000 lbs.	\$ 0.40	\$ 27,600
Steel pipe, 30-inch dia.	6,500 lbs.	0.25	1,600
High pressure slide gates		lump sum	23,500
Howell-Bunger valves, 24-inch dia.		lump sum	15,600
			\$ 68,300
Reservoir			
Land and improvements		lump sum	20,000
Clearing reservoir lands	1,850 ac.	160.00	296,000
Road relocation		lump sum	75,000
Access road		lump sum	<u>87,500</u>
			<u>478,500</u>
Subtotal			\$2,879,100
Administration and engineering, 10%			\$ 287,900
Contingencies, 15%			<u>431,900</u>
Interest during construction			<u>144,000</u>
TOTAL			\$3,742,900
ANNUAL COSTS			
Interest, 3.5%			\$ 131,000
Amortization, 40-year sinking fund at 3.5%			44,300
Operation and maintenance			<u>10,000</u>
TOTAL			\$ 185,300

**ESTIMATED COST OF JARRETT SHUT-IN DAM AND RESERVOIR
WITH STORAGE CAPACITY OF 110,000 ACRE-FEET**

(Based on prices prevailing in 1954)

Elevation of crest of arch dam: 1,113 feet, Capacity of reservoir to crest of
U.S.G.S. datum spillway: 110,000 acre-feet
Elevation of crest of spillway: 1,114 feet Capacity of spillway with freeboard
Height of arch dam to spillway crest, above of 3 feet at arch and 5 feet at
stream bed: 214 feet auxiliary dams: 70,000 sec.-feet

Item	:	Quantity	:	Unit price	:	Cost
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CAPITAL COSTS

Arch Dam

Exploration				lump sum	\$ 50,000
Diversion of stream and dewatering of foundation				lump sum	40,000
Excavation, rock					
Channel	3,200 cu.yd.		\$ 3.00	9,600	
Abutments	16,600 cu.yd.		5.00	83,000	
Concrete, arch	54,000 cu.yd.		20.00	1,080,000	
Cooling concrete	54,000 cu.yd.		0.50	27,000	
Drilling grout holes	6,200 lin.ft.		3.00	18,600	
Pressure grouting	4,200 cu.ft.		4.00	<u>16,800</u>	<u>\$1,325,000</u>

Auxiliary Earthfill Dam

Excavation for embankment					
Foundation	150,000 cu.yd.		0.60	90,000	
From borrow pits	535,000 cu.yd.		0.60	321,000	
From stream bed	550,800 cu.yd.		0.55	302,900	
Embankment					
Impervious	465,000 cu.yd.		0.16	74,400	
Pervious	479,000 cu.yd.		0.12	57,500	
Pervious, salvage	128,000 cu.yd.		0.20	25,600	
Rock riprap	30,000 cu.yd.		2.30	<u>69,000</u>	940,400

Spillway

Excavation, unclassified	66,000 cu.yd.		1:50	99,000	
Concrete					
Weir and cutoff	7,120 cu.yd.		35.00	249,200	
Floor	3,500 cu.yd.		30.00	105,000	
Walls	1,890 cu.yd.		45.00	85,000	
Reinforcing steel	509,000 lbs.		0.15	<u>76,400</u>	614,600

Outlet Works

Miscellaneous metalwork	75,000 lbs.		0.40	30,000	
Steel pipe, 30- and 36-inch dia.	7,200 lbs.		0.25	1,800	

ESTIMATED COST OF JARRETT SHUT-IN DAM AND RESERVOIR
WITH STORAGE CAPACITY OF 110,000 ACRE-FEET
(continued)

Item	:	Quantity	:	Unit	:	Price	:	Cost
CAPITAL COSTS								
Outlet Works (continued)								
High pressure slide gates				lump sum		\$ 28,500		
Howell-Bunger valves				lump sum				
24-inch dia.				lump sum		7,800		
30-inch dia.				lump sum		<u>9,200</u>		77,300
Reservoir								
Land and improvements				lump sum		30,000		
Clearing reservoir lands		2,610 ac.		lump sum		\$140.00		365,400
Road relocation				lump sum				100,000
Access road				lump sum				<u>87,500</u>
								\$ 582,900
Subtotal								\$3,540,200
Administration and engineering, 10%								\$ 354,000
Contingencies, 15%								531,000
Interest during construction								<u>265,500</u>
TOTAL								\$4,690,700
ANNUAL COSTS								
Interest, 3.5%								\$ 164,200
Amortization, 40-year sinking fund at 3.5%								55,500
Operation and maintenance								<u>13,000</u>
TOTAL								\$ 232,700

ESTIMATED COST OF BALD TOP DAM AND RESERVOIR
WITH STORAGE CAPACITY OF 20,000 ACRE-FEET

(Based on prices prevailing in 1954)

Elevation of crest of dam: 860 feet, U.S.G.S. datum	Capacity of reservoir to crest of spillway: 20,000 acre-feet
Elevation of crest of spillway: 845 feet	Capacity of spillway with 5-foot
Height of dam to spillway crest, above stream bed: 175 feet	freeboard: 7,600 second-feet

Item	:	Quantity	:	Unit price	:	Cost
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CAPITAL COSTS

Dam

Exploration		lump sum	\$ 15,000
Diversion of stream and dewatering of foundation		lump sum	10,000
Stripping topsoil	39,300 cu.yd.	0.40	15,700
Excavation for embankment			
Foundation	73,900 cu.yd.	\$ 0.80	59,100
From borrow pits	467,000 cu.yd.	0.45	210,200
From stream bed	1,130,200 cu.yd.	0.40	452,100
Embankment			
Impervious	406,100 cu.yd.	0.16	65,000
Random	982,800 cu.yd.	0.12	117,900
Random, salvage	83,000 cu.yd.	0.20	16,600
Rock riprap	43,200 cu.yd.	4.00	172,800
Drilling grout holes	5,760 lin.ft.	3.00	17,300
Pressure grouting	3,840 cu.ft.	4.00	15,400
Gravel drains	13,800 cu.yd.	3.00	<u>41,400</u>
			<u>\$1,208,500</u>

Spillway

Excavation, unclassified	37,000 cu.yd.	1.20	44,400
Concrete			
Weir and cutoff	200 cu.yd.	35.00	7,000
Floor	1,040 cu.yd.	30.00	31,200
Walls	690 cu.yd.	40.00	27,600
Reinforcing steel	160,000 lbs.	0.15	<u>24,000</u>
			<u>134,200</u>

Outlet Works

Excavation			
Inlet and outlet structures	300 cu.yd.	1.00	300
Conduit	6,100 cu.yd.	2.00	12,200
Backfill	1,000 cu.yd.	1.50	1,500
Concrete			
Conduit	1,720 cu.yd.	50.00	86,000
Inlet structure	50 cu.yd.	60.00	3,000
Gate chamber and valve house	50 cu.yd.	50.00	2,500

**ESTIMATED COST OF BALD TOP DAM AND RESERVOIR
WITH STORAGE CAPACITY OF 20,000 ACRE-FEET
(continued)**

Item	Quantity	Unit	Cost
		Quantity	Unit price
CAPITAL COSTS			
Outlet Works (continued)			
Reinforcing steel	182,000 lbs.	\$ 0.15	\$ 27,300
Miscellaneous metalwork	10,300 lbs.	0.40	4,100
Steel pipe, 30-inch dia.	75,600 lbs.	0.25	18,900
High pressure slide gate	16,000 lbs.	0.50	8,000
Howell-Bunger valve, 2½-inch dia.		lump sum	7,800
Needle valve, 30-inch dia.		lump sum	<u>9,600</u>
			<u>\$ 181,200</u>
Reservoir			
Land and improvements		lump sum	27,000
Clearing reservoir lands	250 ac.	240.00	60,000
Access road		lump sum	<u>153,000</u>
			<u>\$ 240,000</u>
Subtotal			\$1,763,900
Administration and engineering, 10%			\$ 176,400
Contingencies, 15%			264,600
Interest during construction			<u>44,100</u>
TOTAL			\$2,249,000
ANNUAL COSTS			
Interest, 3.5%			\$ 78,700
Amortization, 40-year sinking fund at 3.5%			26,600
Operation and maintenance			<u>6,000</u>
TOTAL			\$ 111,300

**ESTIMATED COST OF UPPER RAGGED POINT DAM AND RESERVOIR
WITH STORAGE CAPACITY OF 30,000 ACRE-FEET**

(Based on prices prevailing in 1954)

Elevation of crest of dam: 320 feet, U.S.G.S. datum	Capacity of reservoir to crest of spillway: 30,000 acre-feet
Elevation of crest of spillway: 300 feet	Capacity of spillway with 5-foot freeboard: 15,000 second-feet
Height of dam to spillway crest, above stream bed: 230 feet	

Item	:	Quantity	:	Unit price	:	Cost
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CAPITAL COSTS

Dam

Exploration		lump sum	\$ 15,000
Diversion of stream and dewatering of foundation		lump sum	200,000
Stripping topsoil	52,800 cu.yd.	\$ 0.40	21,100
Excavation for embankment			
Foundation	188,100 cu.yd.	0.70	131,700
From borrow pits	1,440,700 cu.yd.	0.67	965,300
From stream bed	2,855,100 cu.yd.	0.50	1,427,600
Embankment			
Impervious	1,252,800 cu.yd.	0.16	200,400
Pervious	2,482,700 cu.yd.	0.12	297,900
Pervious, salvage	206,000 cu.yd.	0.20	41,200
Rock riprap	65,000 cu.yd.	3.50	227,500
Drilling grout holes	6,060 lin.ft.	3.00	18,200
Pressure grouting	4,040 cu.ft.	4.00	<u>16,200</u>
			<u>\$3,562,100</u>

Spillway

Excavation, unclassified	80,900 cu.yd.	1.50	121,400
Concrete			
Weir and cutoff	200 cu.yd.	35.00	7,000
Floor	1,300 cu.yd.	30.00	39,000
Walls	960 cu.yd.	40.00	38,400
Reinforcing steel	205,000 lbs.	0.15	<u>30,800</u>
			<u>236,600</u>

Outlet Works

Excavation			
Inlet and outlet structures	1,000 cu.yd.	1.00	1,000
Conduit	10,080 cu.yd.	2.00	20,200
Backfill	9,960 cu.yd.	1.50	14,900
Concrete			
Conduit	2,620 cu.yd.	50.00	131,000
Inlet structure	150 cu.yd.	60.00	9,000
Gate chamber and valve house	280 cu.yd.	50.00	14,000

ESTIMATED COST OF UPPER RAGGED POINT DAM AND RESERVOIR
WITH STORAGE CAPACITY OF 30,000 ACRE-FEET
(continued)

Item	Quantity	Unit	Cost
		price	
CAPITAL COSTS			
Outlet Works (continued)			
Reinforcing steel	305,000 lbs.	\$ 0.15	\$ 45,800
Miscellaneous metalwork	20,000 lbs.	0.40	8,000
Steel pipe, 42-inch dia.	135,000 lbs.	0.25	33,800
High pressure slide gate	25,000 lbs.	0.50	12,500
Howell-Bunger valve, 36-inch dia.		lump sum	10,300
Needle valve, 30-inch dia.		lump sum	<u>9,600</u>
			\$ 310,100
Reservoir			
Land and improvements		lump sum	30,000
Clearing reservoir lands	255 ac	120.00	30,600
Relocation of utilities		lump sum	<u>60,600</u>
Subtotal			\$4,169,400
Administration and engineering, 10%			\$ 416,900
Contingencies, 15%			625,400
Interest during construction			<u>208,500</u>
TOTAL			\$5,420,200
ANNUAL COSTS			
Interest, 3.5%			\$ 189,700
Amortization, 40-year sinking fund at 3.5%			64,100
Operation and maintenance			<u>6,000</u>
TOTAL			\$ 259,800

**ESTIMATED COST OF UPPER YELLOW HILL DAM AND RESERVOIR
WITH STORAGE CAPACITY OF 20,000 ACRE-FEET**

(Based on prices prevailing in 1954)

Elevation of crest of dam: 150 feet, U.S.G.S. datum	Capacity of reservoir to crest of spillway: 20,000 acre feet
Elevation of crest of spillway: 135 feet	Capacity of spillway with 6-foot freeboard: 16,200 second-feet
Height of dam to spillway crest, above stream bed: 95 feet	

Item	:	Quantity	:	Unit price	:	Cost
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CAPITAL COSTS

Dam

Exploration		lump sum	\$ 10,000
Diversion of stream and dewatering of foundation		lump sum	5,000
Stripping topsoil	34,400 cu.yd.	\$ 0.40	13,800
Excavation for embankment			
Foundation	135,900 cu.yd.	0.70	95,100
From borrow pits	378,400 cu.yd.	0.45	170,300
From stream bed	450,700 cu.yd.	0.35	157,700
Embankment			
Impervious	329,000 cu.yd.	0.16	52,600
Random	391,900 cu.yd.	0.12	47,000
Random, salvage	104,700 cu.yd.	0.20	20,900
Rock riprap	24,200 cu.yd.	3.50	84,700
Drilling grout holes	11,760 lin.ft.	3.00	35,300
Pressure grouting	7,840 cu.ft.	4.00	31,400
Gravel drains	12,700 cu.yd.	2.50	<u>31,800</u>
Auxiliary Dam			\$ 755,600
Excavation for foundation	2,760 cu.yd.	0.70	1,900
Excavation for embankment	8,490 cu.yd.	0.45	3,800
Embankment impervious	7,380 cu.yd.	0.15	1,100
Rock riprap	750 cu.yd.	3.50	<u>2,600</u>
			9,400

Spillway

Excavation, unclassified	40,100 cu.yd.	0.90	36,100
Concrete			
Weir and cutoff	560 cu.yd.	35.00	19,600
Floor	1,130 cu.yd.	30.00	33,900
Walls	190 cu.yd.	40.00	7,600
Reinforcing steel	149,000 lbs.	0.15	<u>22,400</u>
			119,600

Outlet Works

Excavation			
Inlet and outlet structures	300 cu.yd.	1.00	300
Conduit	2,780 cu.yd.	2.00	5,600
Backfill	430 cu.yd.	1.50	600

**ESTIMATED COST OF UPPER YELLOW HILL DAM AND RESERVOIR
WITH STORAGE CAPACITY OF 20,000 ACRE-FEET**
(continued)

Item		Quantity	Unit	Cost
			price	
CAPITAL COSTS				
Outlet Works (continued)				
Concrete				
Conduit	780 cu.yd.	\$50.00	\$ 39,000	
Inlet structure	50 cu.yd.	60.00	3,000	
Gate chamber and valve house	50 cu.yd.	50.00	25,000	
Reinforcing steel	88,000 lbs.	0.15	13,200	
Miscellaneous metalwork	10,300 lbs.	0.40	4,100	
Steel pipe, 30-inch dia.	34,600 lbs.	0.25	8,600	
High pressure slide gate	12,000 lbs.	0.50	6,000	
Howell-Bunger valve, 24-inch dia.		lump sum	7,800	
Needle valve, 30-inch dia.		lump sum	<u>9,600</u>	<u>\$ 100,300</u>
Reservoir				
Land and improvements		lump sum	55,000	
Clearing reservoir lands	410 ac.	180.000	<u>73,800</u>	<u>128,800</u>
Subtotal				\$1,113,700
Administration and engineering, 10%			\$ 111,400	
Contingencies, 15%			167,100	
Interest during construction			<u>27,800</u>	
TOTAL				\$1,420,000
ANNUAL COSTS				
Interest, 3.5%			\$ 49,700	
Amortization, 40-year sinking fund at 3.5%			16,800	
Operation and maintenance			<u>5,000</u>	
TOTAL				\$ 71,500

**ESTIMATED COST OF YELLOW HILL DAM AND RESERVOIR
WITH STORAGE CAPACITY OF 50,000 ACRE-FEET**

(Based on prices prevailing in 1954)

Elevation of crest of dam: 192 feet, U.S.G.S. datum	Capacity of reservoir to crest of spillway: 50,000 acre-feet
Elevation of crest of spillway: 177 feet	Capacity of spillway with 5-foot freeboard: 13,900 second-feet
Height of dam to spillway crest, above stream beds: 147 feet	

Item	:	Quantity	:	Unit price	:	Cost
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CAPITAL COSTS

Dam

Exploration		lump sum	\$ 12,500
Diversions of stream and dewatering of foundation		lump sum	7,500
Stripping topsoil	56,600 cu.yd.	\$ 0.40	22,600
Excavation for embankment			
Foundation	235,900 cu.yd.	0.70	165,100
From borrow pits	808,300 cu.yd.	0.70	565,800
From stream bed	1,207,500 cu.yd.	0.60	724,500
Embankment			
Impervious	702,900 cu.yd.	0.16	112,500
Random	1,050,000 cu.yd.	0.12	126,000
Random, salvage	322,600 cu.yd.	0.20	64,500
Rock riprap	40,200 cu.yd.	3.50	140,700
Drilling grout holes	12,360 lin.ft.	3.00	37,100
Pressure grouting	8,240 cu.ft.	4.00	33,000
Gravel drains	26,800 cu.yd.	2.50	<u>67,000</u>
			<u>\$2,078,800</u>

Spillway

Excavation, unclassified	194,300 cu.yd.	1.20	233,200
Concrete			
Weir and cutoff	420 cu.yd.	35.00	14,700
Floor	1,160 cu.yd.	30.00	34,800
Walls	540 cu.yd.	40.00	21,600
Reinforcing steel	171,800 lbs.	0.15	<u>25,800</u>
			<u>330,100</u>

Outlet Works

Excavation			
Inlet and outlet structures	300 cu.yd.	1.00	300
Conduit	6,060 cu.yd.	2.00	12,100
Backfill	2,390 cu.yd.	1.50	3,600
Concrete			
Conduit	1,490 cu.yd.	50.00	74,500
Inlet structure	200 cu.yd.	60.00	12,000
Gate chamber and valve house	300 cu.yd.	50.00	16,500

ESTIMATED COST OF YELLOW HILL DAM AND RESERVOIR
WITH STORAGE CAPACITY OF 50,000 ACRE-FEET
(continued)

Item	Quantity	Unit price	Cost
CAPITAL COSTS			
Outlet Works (continued)			
Reinforcing steel	202,000 lbs.	\$ 0.15	\$ 30,300
Miscellaneous metalwork	23,100 lbs.	0.40	9,200
Steel pipe, 48-inch dia.	90,500 lbs.	0.25	22,600
High pressure slide gate	30,000 lbs.	0.50	15,000
Howell-Bunger valve, 36-inch dia.		lump sum	10,300
Needle valve, 42-inch dia.		lump sum	<u>21,000</u> \$ 227,400
Reservoir			
Land and improvements		lump sum	74,000
Clearing reservoir lands	625 ac.	180.00	<u>112,500</u> 186,500
Subtotal			\$2,822,800
Administration and engineering, 10%			\$ 282,300
Contingencies, 15%			423,400
Interest during construction			<u>70,600</u>
TOTAL			\$3,599,100
ANNUAL COSTS			
Interest, 3.5%			\$ 126,000
Amortization, 40-year sinking fund at 3.5%			42,600
Operation and maintenance			<u>7,500</u>
TOTAL			\$ 176,100

**ESTIMATED COST OF YELLOW HILL DAM AND RESERVOIR
WITH STORAGE CAPACITY OF 80,000 ACRE-FEET**

(Based on prices prevailing in 1954)

Elevation of crest of dam: 234 feet, U.S.G.S. datum	Capacity of reservoir to crest of spillway: 80,000 acre-feet
Elevation of crest of spillway: 220 feet	Capacity of spillway with 5-foot
Height of dam to spillway crest, above stream bed: 190 feet	freeboard: 11,900 second-feet

Item	:	Quantity	:	Unit price	:	Cost
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CAPITAL COSTS

Dam

Exploration			lump sum	\$ 15,000
Diversion of stream and dewatering of foundation			lump sum	10,000
Stripping topsoil	107,200 cu.yd.		\$ 0.40	42,900
Excavation for embankment				
Foundation	368,200 cu.yd.	0.70	257,700	
From borrow pits	1,308,200 cu.yd.	0.70	915,700	
From stream bed	3,025,800 cu.yd.	0.60	1,815,500	
Embankment				
Impervious	1,137,600 cu.yd.	0.16	182,000	
Random	2,631,100 cu.yd.	0.12	315,700	
Random, salvage	346,500 cu.yd.	0.20	69,300	
Rock riprap	78,900 cu.yd.	3.50	276,200	
Drilling grout holes	13,560 lin.ft.	3.00	40,700	
Pressure grouting	9,040 cu.ft.	4.00	36,200	
Gravel drains	34,000 cu.yd.	2.50	85,000	\$4,061,900

Spillway

Excavation, unclassified	93,700 cu.yd.	1.20	112,400	
Concrete				
Weir and cutoff	410 cu.yd.	35.00	14,400	
Floor	1,270 cu.yd.	30.00	38,100	
Walls	510 cu.yd.	40.00	20,400	
Reinforcing steel	178,000 lbs.	0.15	26,700	212,000

Outlet Works

Excavation				
Inlet and outlet structures	500 cu.yd.	1.00	500	
Conduit	11,900 cu.yd.	2.00	23,800	
Backfill	6,020 cu.yd.	1.50	9,000	
Concrete				
Conduit	2,620 cu.yd.	50.00	131,000	
Inlet structure	320 cu.yd.	60.00	19,200	
Gate chamber and valve house	430 cu.yd.	50.00	21,500	

ESTIMATED COST OF YELLOW HILL DAM AND RESERVOIR
WITH STORAGE CAPACITY OF 80,000 ACRE-FEET
(continued)

Item	Quantity	Unit	Price	Cost
CAPITAL COSTS				
Outlet Works (continued)				
Reinforcing steel	337,000 lbs.		\$ 0.15	\$ 50,600
Miscellaneous metalwork	38,000 lbs.		0.40	15,200
Steel pipe, 60-inch dia.	178,500 lbs.		0.25	44,600
High pressure slide gate	62,000 lbs.		0.50	31,000
Howell-Bunger valve, 48-inch dia.		lump sum		13,500
Needle valve, 54-inch dia.		lump sum		<u>55,000</u>
				\$ 414,900
Reservoir				
Land and improvements		lump sum		93,000
Clearing reservoir lands	790 ac.		180.00	<u>142,200</u>
				<u>235,200</u>
Subtotal				\$4,924,000
Administration and engineering, 10%				\$ 492,400
Contingencies, 15%				738,600
Interest during construction				<u>246,200</u>
TOTAL				\$6,401,200
ANNUAL COSTS				
Interest, 3.5%				\$ 224,000
Amortization, 40-year sinking fund at 3.5%				75,700
Operation and maintenance				<u>10,500</u>
TOTAL				\$ 310,200

**ESTIMATED COST OF SAN SIMEON DAM AND RESERVOIR
WITH STORAGE CAPACITY OF 60,000 ACRE-FEET**

(Based on prices prevailing in 1954)

Elevation of crest of dam:	237 feet,	Capacity of reservoir to crest of
U.S.G.S. datum		spillway: 60,000 acre-feet
Elevation of crest of spillway:	224 feet	Capacity of spillway with 5-foot
Height of dam to spillway crest, above stream bed:	169 feet	freeboard: 6,900 second-feet

Item	Quantity	Unit price	Cost
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CAPITAL COSTS

Dam

Exploration		lump sum	\$ 20,000
Diversion of stream and dewatering of foundation		lump sum	10,000
Stripping topsoil	91,700 cu.yd.	\$ 0.40	36,700
Excavation of embankment			
Foundation	303,300 cu.yd.	0.70	212,300
From borrow pits	1,507,600 cu.yd.	0.55	829,200
From stream bed	2,887,000 cu.yd.	0.53	1,530,100
Embankment			
Impervious	1,311,000 cu.yd.	0.16	209,800
Random	2,510,400 cu.yd.	0.12	301,200
Random, salvage	272,000 cu.yd.	0.20	54,400
Rock riprap	88,300 cu.yd.	3.50	309,000
Drilling grout holes	14,040 lin.ft.	3.00	42,100
Pressure grouting	9,360 cu.ft.	4.00	37,400
Gravel drains	30,000 cu.yd.	2.50	<u>75,000</u>
			<u>\$3,667,200</u>

Spillway

Excavation, unclassified	89,400 cu.yd.	1.00	89,400
Concrete			
Weir and cutoff	240 cu.yd.	35.00	8,400
Floor	1,630 cu.yd.	30.00	48,900
Walls	780 cu.yd.	40.00	31,200
Reinforcing steel	220,000 lbs.	0.15	<u>33,000</u>
			210,900

Outlet Works

Excavation			
Inlet and outlet structures	700 cu.yd.	\$ 1.00	\$ 700
Conduit	7,900 cu.yd.	2.00	15,800
Backfill	3,000 cu.yd.	1.50	4,500
Concrete			
Conduit	1,950 cu.yd.	50.00	97,500
Inlet structure	200 cu.yd.	60.00	12,000
Gate chamber and valve house	330 cu.yd.	50.00	16,500

ESTIMATED COST OF SAN SIMEON DAM AND RESERVOIR
WITH STORAGE CAPACITY OF 60,000 ACRE-FEET
(continued)

Item	Quantity	Unit	Price	Cost
CAPITAL COSTS				
Outlet Works (continued)				
Reinforcing steel	248,000 lbs.	\$ 0.15	\$ 37,200	
Miscellaneous metalwork	29,000 lbs.	0.40	11,600	
Steel pipe, 48-inch dia.	108,600 lbs.	0.25	27,200	
High pressure slide gate	39,000 lbs.	0.50	19,500	
Howell-Bunger valve, 36-inch dia.		lump sum	10,300	
Needle valve, 36-inch dia.		lump sum	<u>14,000</u>	\$ 266,800
Reservoir				
Land and improvements		lump sum	302,000	
Clearing reservoir lands	750 ac.	100.00	75,000	
Relocation of utilities		lump sum	20,000	
Road relocation		lump sum	<u>315,000</u>	<u>712,000</u>
Subtotal				\$4,856,900
Administration and engineering, 10%				\$ 485,700
Contingencies, 15%				728,500
Interest during construction				<u>242,800</u>
TOTAL				\$6,313,900
ANNUAL COSTS				
Interest, 3.5%				\$ 221,000
Amortization, 40-year sinking fund at 3.5%				74,700
Operation and maintenance				<u>8,500</u>
TOTAL				\$ 304,200

**ESTIMATED COST OF SANTA ROSA DAM AND RESERVOIR
WITH STORAGE CAPACITY OF 15,000 ACRE-FEET**

(Based on prices prevailing in 1954)

Elevation of crest of dam:	393 feet,	Capacity of reservoir to crest of
U.S.G.S. datum		spillway: 15,000 acre-feet
Elevation of crest of spillway:	378 feet	Capacity of spillway with 6-foot
Height of dam to spillway crest, above stream bed:	138 feet	freeboard: 7,400 second-feet

Item	Quantity	Unit price	Cost
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CAPITAL COSTS

Dam

Exploration		lump sum	\$ 10,000
Diversions of stream and dewatering of foundation		lump sum	10,000
Stripping topsoil	23,000 cu.yd.	\$ 0.40	9,200
Excavation for embankment			
Foundation	50,600 cu.yd.	0.90	45,500
From borrow pits	222,000 cu.yd.	0.60	133,200
From stream bed	347,100 cu.yd.	0.50	173,600
Embankment			
Impervious	193,000 cu.yd.	0.15	30,900
Random	301,800 cu.yd.	0.12	36,200
Random, salvage	141,200 cu.yd.	0.20	28,200
Rock riprap	15,100 cu.yd.	3.50	52,800
Drilling grout holes	3,400 lin.ft.	3.00	10,200
Pressure grouting	2,300 cu.ft.	4.00	9,200
Gravel drains	8,000 cu.yd.	3.00	<u>24,000</u>
			\$ 573,000

Spillway

Excavation, unclassified	137,600 cu.yd.	1.20	165,100
Concrete			
Weir and cutoff	330 cu.yd.	35.00	11,600
Floor	400 cu.yd.	30.00	12,000
Walls	460 cu.yd.	40.00	18,400
Reinforcing steel	98,000 lbs.	0.15	<u>14,700</u>
			223,000

Outlet Works

Excavation			
Inlet and outlet structures	1,000 cu.yd.	1.00	1,000
Conduit	4,300 cu.yd.	2.00	8,600
Backfill	600 cu.yd.	1.50	900
Concrete			
Conduit	1,195 cu.yd.	50.00	59,800
Inlet structure	70 cu.yd.	60.00	4,200
Gate chamber and valve house	80 cu.yd.	50.00	4,000

ESTIMATED COST OF SANTA ROSA DAM AND RESERVOIR
WITH STORAGE CAPACITY OF 15,000 ACRE-FEET
(continued)

Item	Quantity	Unit	Price	Cost
CAPITAL COSTS				
Outlet Works (continued)				
Reinforcing steel	142,500 lbs.		\$ 0.15	\$ 21,400
Miscellaneous metalwork	12,800 lbs.		0.40	5,100
Steel pipe, 30-inch dia.	54,000 lbs.		0.25	13,500
High pressure slide gate	14,000 lbs.		0.50	7,000
Howell-Bunger valve, 24-inch dia.		lump sum		7,800
Needle valve, 30-inch dia.		lump sum		<u>9,600</u>
				\$ 142,900
Reservoir				
Land and improvements		lump sum		230,000
Clearing reservoir lands	250 ac.		50.00	12,500
Relocation of utilities		lump sum		25,000
Road relocation		lump sum		<u>400,000</u>
				667,500
Subtotal				
				\$1,606,400
Administration and engineering, 10%				
Contingencies, 15%				\$ 160,600
Interest during construction				<u>241,000</u>
				60,200
TOTAL				
				\$2,068,000
ANNUAL COSTS				
Interest, 3.5%				\$ 72,400
Amortization, 40-year sinking fund at 3.5%				24,500
Operation and maintenance				<u>5,000</u>
TOTAL				
				\$ 101,900

**ESTIMATED COST OF SANTA ROSA DAM AND RESERVOIR
WITH STORAGE CAPACITY OF 25,000 ACRE-FEET**

(Based on prices prevailing in 1954)

Elevation of crest of dam: 425 feet, U.S.G.S. datum	Capacity of reservoir to crest of spillway: 25,000 acre-feet
Elevation of crest of spillway: 412 feet	Capacity of spillway with 5-foot freeboard: 6,900 second-feet
Height of dam to spillway crest, above stream bed: 172 feet	

Item	Quantity	Unit price	Cost
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CAPITAL COSTS

Dam

Exploration		lump sum	\$ 15,000
Diversion of stream and dewatering of foundation		lump sum	10,000
Stripping topsoil	50,000 cu.yd.	\$ 0.40	20,000
Excavation for embankment			
Foundation	75,900 cu.yd.	0.90	68,300
From borrow pits	429,900 cu.yd.	0.70	300,900
From stream bed	938,900 cu.yd.	0.55	516,400
Embankment			
Impervious	373,800 cu.yd.	0.16	59,800
Random	816,400 cu.yd.	0.12	98,000
Random, salvage	140,300 cu.yd.	0.20	28,100
Rock riprap	36,700 cu.yd.	3.50	128,400
Drilling grout holes	4,800 lin.ft.	3.00	14,400
Pressure grouting	3,200 cu.ft.	4.00	12,800
Gravel drains	10,900 cu.yd.	3.00	<u>32,700</u>
			\$1,304,800

Spillway

Excavation, unclassified	111,200 cu.yd.	1.00	111,200
Concrete			
Weir and cutoff	210 cu.yd.	35.00	7,400
Floor	480 cu.yd.	30.00	14,400
Walls	160 cu.yd.	40.00	6,400
Reinforcing steel	68,000 lbs.	0.15	<u>10,200</u>
			149,600

Outlet Works

Excavation			
Inlet and outlet structures	1,100 cu.yd.	1.00	1,100
Conduit	6,500 cu.yd.	2.00	13,000
Backfill	1,100 cu.yd.	1.50	1,600
Concrete			
Conduit	1,770 cu.yd.	50.00	88,500
Inlet structure	100 cu.yd.	60.00	6,000
Gate chamber and valve house	150 cu.yd.	50.00	7,500

ESTIMATED COST OF SANTA ROSA DAM AND RESERVOIR
WITH STORAGE CAPACITY OF 25,000 ACRE-FEET
(continued)

Item	Quantity	Unit	Price	Cost
CAPITAL COSTS				
Outlet Works (continued)				
Reinforcing steel	212,000 lbs.		\$ 0.15	\$ 31,800
Miscellaneous metalwork	19,100 lbs.		0.40	7,600
Steel pipe, 36-inch dia.	106,000 lbs.		0.25	26,500
High pressure slide gate	21,000 lbs.		0.50	10,500
Howell-Bunger valve 24-inch dia.		lump sum		7,800
Needle valve, 30-inch dia.		lump sum		<u>9,600</u>
				\$ 211,500
Reservoir				
Land and improvements		lump sum		235,000
Clearing reservoir lands	340 ac.		50.00	17,000
Relocation of utilities		lump sum		26,000
Road relocation		lump sum		<u>425,000</u>
				<u>703,000</u>
Subtotal				\$2,368,900
Administration and engineering, 10%				\$ 236,900
Contingencies, 15%				355,300
Interest during construction				<u>118,400</u>
TOTAL				\$3,079,500
ANNUAL COSTS				
Interest, 3.5%				\$ 107,800
Amortization, 40-year sinking fund at 3.5%				36,400
Operation and maintenance				<u>5,000</u>
TOTAL				\$ 149,200

**ESTIMATED COST OF SANTA ROSA DAM AND RESERVOIR
WITH STORAGE CAPACITY OF 35,000 ACRE-FEET**

(Based on prices prevailing in 1954)

Elevation of crest of dam: 450 feet, U.S.G.S. datum	Capacity of reservoir to crest of spillway: 35,000 acre-feet
Elevation of crest of spillway: 438 feet	Capacity of spillway with 6-foot
Height of dam to spillway crest, above stream bed: 198 feet	freeboard: 3,800 second-feet

Item	:	Quantity	:	Unit price	:	Cost
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CAPITAL COSTS

Dam

Exploration			lump sum	\$ 15,000
Diversions of stream and dewatering of foundation			lump sum	15,000
Stripping topsoil	71,500 cu.yd.		\$ 0.40	28,600
Excavation for embankment				
Foundation	95,900 cu.yd.		0.90	86,300
From borrow pits	567,300 cu.yd.		0.75	425,500
From stream bed	1,673,300 cu.yd.		0.60	1,004,000
Embankment				
Impervious	493,300 cu.yd.		0.16	78,900
Random	1,455,100 cu.yd.		0.12	174,600
Random, salvage	71,900 cu.yd.		0.20	14,400
Rock riprap	48,900 cu.yd.		3.50	171,200
Drilling grout holes	5,800 lin.ft.		3.00	17,400
Pressure grouting	3,900 cu.ft.		4.00	15,600
Gravel drains	12,200 cu.yd.		3.00	36,600
				<u>\$2,083,100</u>

Spillway

Excavation, unclassified	35,700 cu.yd.		0.90	32,100
Concrete				
Weir and cutoff	210 cu.yd.		35.00	7,400
Floor	300 cu.yd.		30.00	9,000
Walls	80 cu.yd.		40.00	3,200
Reinforcing steel	46,000 lbs.		0.15	<u>6,900</u>
				58,600

Outlet Works

Excavation				
Inlet and outlet structures	1,200 cu.yd.		1.00	1,200
Conduit	9,170 cu.yd.		2.00	18,300
Backfill	2,610 cu.yd.		1.50	3,900
Concrete				
Conduit	2,375 cu.yd.		50.00	118,800
Inlet structure	150 cu.yd.		60.00	9,000
Gate chamber and valve house	280 cu.yd.		50.00	14,000

**ESTIMATED COST OF SANTA ROSA DAM AND RESERVOIR
WITH STORAGE CAPACITY OF 35,000 ACRE-FEET**
(continued)

Item	Quantity	Unit price	Cost
CAPITAL COSTS			
Outlet Works (continued)			
Reinforcing steel	305,000 lbs.	\$ 0.15	\$ 45,800
Miscellaneous metalwork	27,000 lbs.	0.40	10,800
Steel pipe, 42-inch dia.	166,000 lbs.	0.25	41,500
High pressure slide gate	25,000 lbs.	0.50	12,500
Howell-Bunger valve, 30-inch dia.		lump sum	9,200
Needle valve, 30-inch dia.		lump sum	<u>9,600</u>
			\$ 294,600
Reservoir			
Land and improvements		lump sum	235,000
Clearing reservoir lands	430 ac.	50.00	21,500
Relocation of utilities		lump sum	27,000
Road relocation		lump sum	<u>450,000</u>
			<u>733,500</u>
Subtotal			\$3,169,800
Administration and engineering, 10%			\$ 317,000
Contingencies, 15%			<u>475,500</u>
Interest during construction			<u>158,500</u>
TOTAL			\$4,120,800
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ANNUAL COSTS			
Interest, 3.5%			\$ 144,200
Amortization, 40-year sinking fund at 3.5%			<u>48,700</u>
Operation and maintenance			<u>6,000</u>
TOTAL			\$ 198,900

**ESTIMATED COST OF WHALE ROCK DAM AND RESERVOIR
WITH STORAGE CAPACITY OF 20,000 ACRE-FEET**

(Based on prices prevailing in 1954)

Elevation of crest of dam: 177 feet, U.S.G.S. datum	Capacity of reservoir to crest of spillway: 20,000 acre-feet
Elevation of crest of spillway: 164 feet	Capacity of spillway with 5-foot
Height of dam to spillway crest, above stream bed: 124 feet	freeboard: 8,600 second-feet

Item	:	Quantity	:	Unit	:	price	:	Cost
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CAPITAL COSTS

Dam

Exploration			lump sum	\$ 10,000
Diversions of stream and dewatering of foundation			lump sum	5,000
Stripping topsoil	.20,700 cu.yd.		\$ 0.40	8,300
Excavation for embankment				
Foundation	197,700 cu.yd.		0.80	78,200
From borrow pits	338,000 cu.yd.		0.40	135,200
From stream bed	113,000 cu.yd.		0.35	39,600
Embankment				
Impervious	293,400 cu.yd.		0.16	46,900
Random	98,800 cu.yd.		0.12	11,900
Random, salvage	215,000 cu.yd.		0.20	43,000
Rock riprap	15,500 cu.yd.		3.50	54,200
Drilling grout holes	3,440 lin.ft.		3.00	10,300
Pressure grouting	2,280 cu.ft.		4.00	9,100
Gravel drains	7,600 cu.yd.		3.00	<u>22,800</u>
				\$ 474,500

Spillway

Excavation, unclassified	187,800 cu.yd.		1.00	187,800
Concrete				
Weir and cutoff	260 cu.yd.		35.00	9,100
Floor	690 cu.yd.		30.00	20,700
Walls	900 cu.yd.		40.00	36,000
Reinforcing steel	152,000 lbs.		0.15	<u>22,800</u>
				276,400

Outlet Works

Excavation				
Inlet and outlet structures	500 cu.yd.		1.00	500
Conduit	4,000 cu.yd.		2.00	8,000
Backfill	2,000 cu.yd.		1.50	3,000
Concrete				
Conduit	1,055 cu.yd.		50.00	52,800
Intake structure	100 cu.yd.		60.00	6,000
Gate chamber and valve house	100 cu.yd.		50.00	5,000

ESTIMATED COST OF WHALE ROCK DAM AND RESERVOIR
WITH STORAGE CAPACITY OF 20,000 ACRE-FEET
(continued)

Item	Quantity	Unit	Cost
		: price	
CAPITAL COSTS			
Outlet Works (continued)			
Reinforcing steel	125,500 lbs.	\$ 0.15	\$ 18,800
Miscellaneous metalwork	8,800 lbs.	0.40	3,500
Steel pipe, 30-inch dia.	57,200 lbs.	0.25	14,300
High pressure slide gate	10,600 lbs.	0.50	5,300
Howell-Bunger valve, 24-inch dia.		lump sum	7,800
Needle valve, 30-inch dia.		lump sum	9,600
			\$ 134,600
Reservoir			
Land and improvements		lump sum	250,000
Clearing reservoir lands	420 ac.	25.00	10,500
Relocation of utilities		lump sum	60,000
Road relocation		lump sum	<u>318,000</u>
			<u>638,500</u>
Subtotal			\$1,524,000
Administration and engineering, 10%			\$ 152,400
Contingencies, 15%			228,600
Interest during construction			<u>38,100</u>
TOTAL			\$1,943,100
ANNUAL COSTS			
Interest, 3.5%			\$ 68,000
Amortization, 40-year sinking fund at 3.5%			23,000
Operation and maintenance			<u>5,000</u>
TOTAL			\$ 96,000

**ESTIMATED COST OF WHALE ROCK DAM AND RESERVOIR
WITH STORAGE CAPACITY OF 40,000 ACRE-FEET**

(Based on prices prevailing in 1954)

Elevation of crest of dam: 215 feet, U.S.G.S. datum	Capacity of reservoir to crest of spillway: 40,000 acre-feet
Elevation of crest of spillway: 203 feet	Capacity of spillway with 5-foot freeboard: 7,100 second-feet
Height of dam to spillway crest, above stream bed: 163 feet	

Item	:	Quantity	:	Unit	:	Price	:	Cost
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CAPITAL COSTS

Dam

Exploration			lump sum	\$ 15,000
Diversion of stream and dewatering of foundation			lump sum	5,000
Stripping topsoil	32,000 cu.yd.		\$ 0.40	12,800
Excavation for embankment				
Foundation	213,600 cu.yd		\$ 0.80	170,900
From borrow pits	729,100 cu.yd.		0.51	371,800
From stream bed	419,400 cu.yd.		0.42	176,100
Embankment				
Impervious	630,400 cu.yd.		0.16	100,900
Random	364,700 cu.yd.		0.12	43,800
Random, salvage	277,000 cu.yd.		0.20	55,400
Rock riprap	24,800 cu.yd.		3.50	86,800
Drilling grout holes	4,320 lin. ft.		3.00	13,000
Pressure grouting	2,880 cu.ft.		4.00	11,500
Gravel drains	16,300 cu.yd.		3.00	48,900
				<u>\$1,111,900</u>

Spillway

Excavation, unclassified	155,900 cu.yd.		1.00	155,900
Concrete				
Weir and cutoff	270 cu.yd.		35.00	9,400
Floor	750 cu.yd.		30.00	22,500
Walls	740 cu.yd.		40.00	29,600
Reinforcing steel	144,000 lbs.		0.15	21,600
				<u>239,000</u>

Outlet Works

Excavation				
Inlet and outlet structures	500 cu.yd.		1.00	500
Conduit	5,000 cu.yd.		2.00	10,000
Backfill	1,500 cu.yd.		1.50	2,200
Concrete				
Conduit	1,300 cu.yd.		50.00	65,000
Inlet structure	150 cu.yd.		60.00	9,000
Gate chamber and valve house	280 cu.yd.		50.00	14,000

ESTIMATED COST OF WHALE ROCK DAM AND RESERVOIR
WITH STORAGE CAPACITY OF 40,000 ACRE-FEET
(continued)

Item	Quantity	Unit	Cost
		price	
CAPITAL COST			
Outlet Works (continued)			
Reinforcing steel	173,000 lbs.	\$ 0.15	\$ 26,000
Miscellaneous metalwork	18,200 lbs.	0.40	7,300
Steel pipe, 42-inch dia.	63,000 lbs.	0.25	15,800
High pressure slide gate	26,500 lbs.	0.50	13,200
Howell-Bunger valve, 24-inch dia.		lump sum	7,800
Needle valve, 42-inch dia.		lump sum	<u>21,000</u>
			\$ 191,800
Reservoir			
Land and improvements		lump sum	270,000
Clearing reservoir lands	620 ac.	25.00	15,500
Relocation of utilities		lump sum	70,000
Road relocation		lump sum	<u>364,000</u>
			<u>719,500</u>
Subtotal			\$2,262,200
Administration and engineering, 10%			\$ 226,200
Contingencies, 15%			<u>339,300</u>
Interest during construction			<u>56,600</u>
TOTAL			\$2,884,300
ANNUAL COSTS			
Interest, 3.5%			\$ 101,000
Amortization, 40-year sinking fund at 3.5%			<u>34,100</u>
Operation and maintenance			<u>6,500</u>
TOTAL			\$ 141,600

ESTIMATED COST OF WITTENBERG DAM AND RESERVOIR
WITH STORAGE CAPACITY OF 20,000 ACRE-FEET

(Based on prices prevailing in 1954)

Elevation of crest of dam: 550 feet, U.S.G.S. datum	Capacity of reservoir to crest of spillway: 20,000 acre-feet
Elevation of crest of spillway: 535 feet	Capacity of spillway with 5-foot
Height of dam to spillway crest, above stream bed: 111 feet	freeboard: 9,600 second-feet

Item	:	Quantity	:	Unit price	:	Cost
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CAPITAL COSTS

Dam

Exploration		lump sum	\$ 15,000
Diversion of stream and dewatering of foundation		lump sum	5,000
Stripping topsoil	22,100 cu.yd.	\$ 0.40	8,800
Excavation for embankment			
Foundation	82,400 cu.yd.	0.70	57,700
From borrow pits	341,200 cu.yd.	0.45	153,500
From stream bed	307,700 cu.yd.	0.40	123,100
Embankment			
Impervious	296,700 cu.yd.	0.16	47,500
Random	267,600 cu.yd.	0.12	32,100
Rock riprap	18,300 cu.yd.	3.50	64,000
Drilling grout holes	7,900 lin.ft.	3.00	23,700
Pressure grouting	5,300 cu.ft.	4.00	21,200
Gravel drains	10,800 cu.yd.	2.50	<u>27,000</u>
			<u>\$ 578,600</u>

Spillway

Excavation, unclassified	104,700 cu.yd.	0.90	94,200
Concrete			
Weir and cutoff	160 cu.yd.	35.00	5,600
Floor	590 cu.yd.	30.00	17,700
Walls	650 cu.yd.	40.00	26,000
Reinforcing steel	115,800 lbs.	0.15	<u>17,400</u>
			160,900

Outlet Works

Excavation			
Inlet and outlet structures	1,000 cu.yd.	1.00	1,000
Conduit	3,800 cu.yd.	2.00	7,600
Backfill	900 cu.yd.	1.50	1,400
Concrete			
Conduit	1,010 cu.yd.	50.00	50,500
Inlet structure	100 cu.yd.	60.00	6,000
Gate chamber and valve house	150 cu.yd.	50.00	7,500

ESTIMATED COST OF WITTENBERG DAM AND RESERVOIR
WITH STORAGE CAPACITY OF 20,000 ACRE-FEET
(continued)

Item	Quantity	Unit	Cost
		price	
CAPITAL COSTS			
Outlet Works (continued)			
Reinforcing steel	126,000 lbs.	\$ 0.15	\$ 18,900
Miscellaneous metalwork	14,400 lbs.	0.40	5,800
Steel pipe, 36-inch dia.	41,600 lbs.	0.25	10,400
High pressure slide gate	18,000 lbs.	0.50	9,000
Howell-Bunger valve 24-inch dia.		lump sum	7,800
Needle valve, 30-inch dia.		lump sum	<u>9,600</u>
			\$ 135,500
Reservoir			
Land and improvements		lump sum	100,000
Clearing reservoir lands	540 ac.	100.00	54,000
Relocation of utilities		lump sum	1,500
Road relocation		lump sum	<u>360,000</u>
			<u>515,500</u>
Subtotal			\$1,390,500
Administration and engineering, 10%		\$ 139,000	
Contingencies, 15%		208,600	
Interest during construction		<u>34,800</u>	
TOTAL			\$1,772,900
ANNUAL COSTS			
Interest, 3.5%		\$ 62,000	
Amortization, 40-year sinking fund at 3.5%		21,000	
Operation and maintenance		<u>5,000</u>	
TOTAL			\$ 88,000

ESTIMATED COST OF WITTENBERG DAM AND RESERVOIR
WITH STORAGE CAPACITY OF 36,000 ACRE-FEET

(Based on prices prevailing in 1954)

Elevation of crest of dam:	575 feet,	Capacity of reservoir to crest of
U.S.G.S. datum		spillway:
Elevation of crest of spillway:	560 feet	36,000 acre-feet
Height of dam to spillway crest, above		Capacity of spillway with 5-foot
stream bed:	136 feet	freeboard:
		8,800 second-feet

Item	:	Quantity	:	Unit price	:	Cost
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CAPITAL COSTS

Dam

Exploration			lump sum	\$ 15,000
Diversions of stream and dewatering of foundation			lump sum	5,000
Stripping topsoil	30,000 cu.yd.		\$ 0.40	12,000
Excavation for embankment				
Foundation	110,700 cu.yd.		0.70	77,500
From borrow pits	555,000 cu.yd.		0.53	294,200
From stream bed	660,000 cu.yd.		0.45	297,000
Embankment				
Impervious	485,700 cu.yd.		0.16	77,700
Random	576,300 cu.yd.		0.12	69,200
Rock riprap	23,800 cu.yd.		3.50	83,300
Drilling grout holes	10,200 lin.ft.		3.00	30,600
Pressure grouting	6,800 cu.ft.		4.00	27,200
Gravel drains	15,700 cu.yd.		2.50	<u>39,200</u>
				<u>\$1,027,900</u>

Spillway

Excavation, unclassified	74,800 cu.yd.		0.90	67,300
Concrete				
Weir and cutoff	160 cu.yd.		35.00	5,600
Floor	480 cu.yd.		30.00	14,400
Walls	625 cu.yd.		40.00	25,000
Reinforcing steel	104,000 lbs.		0.15	<u>15,600</u>
				127,900

Outlet Works

Excavation

Inlet and outlet structures	1,000 cu.yd.		1.00	1,000
Conduit	5,100 cu.yd.		2.00	10,200
Backfill	1,500 cu.yd.		1.50	2,200
Concrete				
Conduit	1,320 cu.yd.		50.00	66,000
Inlet structure	150 cu.yd.		60.00	9,000
Gate chamber and valve house	275 cu.yd.		50.00	13,800

ESTIMATED COST OF WITTENBERG DAM AND RESERVOIR
WITH STORAGE CAPACITY OF 36,000 ACRE-FEET
(continued)

Item	Quantity	Unit price	Cost
CAPITAL COSTS			
Outlet Works (continued)			
Reinforcing steel	174,500 lbs.	\$ 0.15	\$ 26,200
Miscellaneous metalwork	19,400 lbs.	0.40	7,800
Steel pipe, 42-inch dia.	58,200 lbs.	0.25	14,600
High pressure slide gate	26,000 lbs.	0.50	13,000
Howell-Bunger valve, 24-inch dia.		lump sum	7,800
Needle valve, 30-inch dia.		lump sum	<u>9,600</u>
			\$ 181,200
Reservoir			
Land and improvements		lump sum	134,000
Clearing reservoir lands	760 ac.	100.00	76,000
Relocation of utilities		lump sum	1,600
Road relocation		lump sum	<u>390,000</u>
			<u>601,600</u>
Subtotal			\$1,938,600
Administration and engineering, 10%			\$ 193,900
Contingencies, 15%			290,800
Interest during construction			<u>48,500</u>
TOTAL			\$2,471,800
ANNUAL COSTS			
Interest, 3.5%			\$ 86,500
Amortization, 40-year sinking fund at 3.5%			29,200
Operation and maintenance			<u>6,600</u>
TOTAL			\$ 122,300

ESTIMATED COST OF LOPEZ DAM AND RESERVOIR
WITH STORAGE CAPACITY OF 25,000 ACRE-FEET

(Based on prices prevailing in 1954)

Elevation of crest of dam: 505 feet, U.S.G.S. datum	Capacity of reservoir to crest of spillway: 25,000 acre-feet
Elevation of crest of spillway: 485 feet	Capacity of spillway with 5-foot freeboard: 17,700 second-feet
Height of dam to spillway crest, above stream bed: 110 feet	

Item	:	Quantity	:	Unit	:	Cost
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CAPITAL COSTS

Dam

Exploration			lump sum	\$ 20,000
Diversion of stream and dewatering of foundation			lump sum	7,500
Stripping topsoil	31,200 cu.yd.		\$ 0.40	12,500
Excavation for embankment				
Foundation	247,800 cu.yd.		0.70	173,500
From borrow pits	687,600 cu.yd.		0.53	364,400
From stream bed	337,900 cu.yd.		0.45	152,100
Embankment				
Impervious	597,900 cu.yd.		0.16	95,700
Random	293,800 cu.yd.		0.12	35,300
Random, salvage	236,300 cu.yd.		0.20	47,300
Rock riprap	26,100 cu.yd.		3.00	78,300
Drilling grout holes	10,400 lin.ft.		3.00	31,200
Pressure grouting	6,920 cu.ft.		4.00	27,700
Gravel drains	15,700 cu.yd.		2.50	<u>39,200</u>
				\$1,084,700

Spillway

Excavation, unclassified	67,400 cu.yd.		0.90	60,700
Concrete				
Weir and cutoff	160 cu.yd.		35.00	5,600
Floor	850 cu.yd.		30.00	25,500
Walls	520 cu.yd.		40.00	20,800
Reinforcing steel	127,000 lbs.		0.15	<u>19,000</u>
				131,600

Outlet Works

Excavation				
Inlet and outlet structures	500 cu.yd.		1.00	500
Conduit	3,640 cu.yd.		2.00	7,300
Backfill	780 cu.yd.		1.50	1,200
Concrete				
Conduit	970 cu.yd.		50.00	48,500
Intake structure	100 cu.yd.		60.00	6,000
Gate chamber and valve house	150 cu.yd.		50.00	7,500

ESTIMATED COST OF LOPEZ DAM AND RESERVOIR
WITH STORAGE CAPACITY OF 25,000 ACRE-FEET
(continued)

Item	:	Quantity	:	Unit	:	Cost
	:		:	price	:	
CAPITAL COSTS						
Outlet Works (continued)						
Reinforcing steel		122,000 lbs.	\$	0.15	\$	18,300
Miscellaneous metalwork		13,900 lbs.		0.40		5,600
Steel pipe, 36-inch dia.		57,700 lbs.		0.25		14,400
High pressure slide gate		16,000 lbs.		0.50		8,000
Howell-Bunger valve, 24-inch dia.				lump sum		7,800
Needle valve, 30-inch dia.				lump sum		<u>9,600</u>
						\$ 134,700
Reservoir						
Land and improvements				lump sum		180,000
Clearing reservoir lands	570 ac.			150.00		88,500
Relocation of utilities				lump sum		25,000
Road relocation				lump sum		<u>763,000</u>
						<u>1,056,500</u>
Subtotal						\$2,407,500
Administration and engineering, 10%						\$ 240,800
Contingencies, 15%						361,100
Interest during construction						<u>60,200</u>
TOTAL						\$3,069,600
ANNUAL COSTS						
Interest, 3.5%						\$ 107,400
Amortization, 40-year sinking fund at 3.5%						36,300
Operation and maintenance						<u>5,000</u>
TOTAL						\$ 148,700

**ESTIMATED COST OF LOPEZ DAM AND RESERVOIR
WITH STORAGE CAPACITY OF 50,000 ACRE-FEET**

(Based on prices prevailing in 1954)

Elevation of crest of dam:	534 feet,	Capacity of reservoir to crest of
U.S.G.S. datum		spillway: 50,000 acre-feet
Elevation of crest of spillway:	518 feet	Capacity of spillway with 5-foot
Height of dam to spillway crest, above		freeboard: 13,800 second-feet
stream bed:	143 feet	

Item	:	Quantity	:	Unit	:	Cost
	:		:	price	:	

CAPITAL COSTS

Dam

Exploration			lump sum	\$ 15,000
Diversion of stream and dewatering of foundation			lump sum	10,000
Stripping topsoil	45,600 cu.yd.		\$ 0.40	18,200
Excavation for embankment				
Foundation	314,800 cu.yd.		0.70	220,400
From borrow pits	1,002,500 cu.yd.		0.60	601,500
From stream bed	632,000 cu.yd.		0.51	322,300
Embankment				
Impervious	871,800 cu.yd.		0.16	139,500
Random	549,600 cu.yd.		0.12	66,000
Random, salvage	349,000 cu.yd.		0.20	69,800
Rock riprap	37,100 cu.yd.		3.00	111,300
Drilling grout holes	11,800 lin.ft.		3.00	35,400
Pressure grouting	7,900 cu.ft.		4.00	31,600
Gravel drains	20,900 cu.yd.		2.50	<u>52,200</u>
				<u>\$1,693,200</u>

Spillway

Excavation, unclassified	151,800 cu.yd.		0.70	106,300
Concrete				
Weir and cutoff	200 cu.yd.		35.00	7,000
Floor	1,030 cu.yd.		30.00	30,900
Walls	520 cu.yd.		40.00	20,800
Reinforcing steel	145,600 lbs.		0.15	<u>21,800</u>
				<u>186,800</u>

Outlet Works

Excavation				
Inlet and outlet structures	500 cu.yd.		1.00	500
Conduit	5,600 cu.yd.		2.00	11,200
Backfill	2,100 cu.yd.		1.50	3,200
Concrete				
Conduit	1,380 cu.yd.		50.00	69,000
Intake structure	200 cu.yd.		60.00	12,000
Gate chamber and valve house	320 cu.yd.		50.00	16,000

ESTIMATED COST OF LOPEZ DAM AND RESERVOIR
WITH STORAGE CAPACITY OF 50,000 ACRE-FEET
(continued)

Item	:	Quantity	:	Unit	:	Cost
	:		:	price	:	
CAPITAL COSTS						
Outlet Works (continued)						
Reinforcing steel		239,600 lbs.		\$ 0.15		\$ 35,900
Miscellaneous metalwork		23,800 lbs.		0.40		9,500
Steel pipe, 48-inch dia.		94,500 lbs.		0.25		23,600
High pressure slide gate		43,000 lbs.		0.50		21,500
Howell-Bunger valve, 30-inch dia.				lump sum		9,200
Needle valve, 30-inch dia.				lump sum		<u>9,600</u>
						\$ 221,200
Reservoir						
Land and improvements				lump sum		188,000
Clearing reservoir lands		940 ac.		150.00		141,000
Relocation of utilities				lump sum		35,000
Road relocation				lump sum		<u>851,000</u>
						<u>1,215,000</u>
Subtotal						\$3,316,200
Administration and engineering, 10%						\$ 331,600
Contingencies, 15%						497,400
Interest during construction						<u>82,900</u>
TOTAL						\$4,228,100
ANNUAL COSTS						
Interest, 3.5%						\$ 148,000
Amortization, 40-year sinking fund at 3.5%						50,000
Operation and maintenance						<u>7,500</u>
TOTAL						\$ 205,500

ESTIMATED COST OF WHALE ROCK CONDUIT
WHALE ROCK DAM TO MORRO BAY

Capacity of conduit: 16 second-feet Length of conduit: 37,000 lineal feet
Annual yield: 8,900 acre-feet

Item	Quantity	Unit	Cost
		price	
CAPITAL COSTS			
Excavation	40,200 cu.yd.	\$ 1.50	\$ 60,300
Backfill	36,500 cu.yd.	0.75	27,400
Pipe, reinforced concrete, furnish and install 27-inch diameter	37,000 lin.ft.	10.20	377,400
Valves, furnish and install Air-release, 4-inch dia.	4 each	365.00	1,500
Blowoff, 6-inch dia.	4 each	1,450.00	5,800
Gate, 24-inch dia.	2 each	2,200.00	4,400
Meter and equipment	1 each	7,500.00	7,500
Fittings		lump sum	18,900
Road resurfacing	2,000 tons	5.00	10,000
River crossings	440 lin.ft.	20.00	8,800
Pumping plant and equipment	1 each	21,600.00	21,600
Right of way		lump sum	<u>2,000</u>
Subtotal			\$545,600
Administration and engineering, 10%			\$ 54,600
Contingencies, 15%			81,800
Interest during construction			<u>13,600</u>
TOTAL			\$695,600

ANNUAL COSTS

Interest, 3.5%	\$ 24,300
Amortization, 40-year sinking fund at 3.5%	8,200
Replacement	300
Electrical energy	12,300
Operation and maintenance	<u>3,500</u>
TOTAL	\$ 48,600

**ESTIMATED COST OF WHALE ROCK CONDUIT
MORRO BAY TO SAN LUIS OBISPO**

Capacity of conduit: 11.5 second-feet Length of conduit: 57,000 lineal feet
 Annual yield: 6,000 acre-feet

Item	Quantity	Unit	Cost
CAPITAL COSTS			
Excavation	56,700 cu.yd.	\$ 1.50	\$ 85,000
Backfill	51,000 cu.yd.	0.75	38,200
Pipe, reinforced concrete, furnish and install 24-inch diameter	57,000 lin.ft.	9.10	518,700
Valves, furnish and install			
Air-release, 2-inch dia.	8 each	200.00	1,600
Blowoff, 4-inch dia.	8 each	1,200.00	9,600
Gate, 18-inch dia.	2 each	1,500.00	3,000
Meter and equipment	1 each	7,500.00	7,500
Fittings		lump sum	25,900
River crossings	320 lin.ft.	19.00	6,100
Pumping plants and equipment	2 each	25,500.00	51,000
Regulating reservoir		lump sum	25,000
Right of way		lump sum	<u>4,000</u>
Subtotal			\$775,600
Administration and engineering, 10%			\$ 77,600
Contingencies, 15%			116,300
Interest during construction			<u>19,400</u>
TOTAL			\$988,900
ANNUAL COSTS			
Interest, 3.5%			\$ 34,600
Amortization, 40-year sinking fund at 3.5%			11,700
Replacement			600
Electrical energy			34,000
Operation and maintenance			<u>4,900</u>
TOTAL			\$ 85,800

ESTIMATED COST OF WHALE ROCK CONDUIT
MORRO BAY TO LOS OSOS

Capacity of conduit: 5 second-feet Length of conduit: 26,400 lineal feet
 Annual yield: 2,900 acre-feet

Item	Quantity	Unit	Cost
		price	
CAPITAL COSTS			
Excavation	20,600 cu.yd.	\$ 1.20	\$ 24,700
Backfill	18,100 cu.yd.	0.60	10,900
Pipe, reinforced concrete, furnish and install 18-inch diameter	26,400 lin.ft.	6.80	179,500
Valves, furnish and install Air-release, 2-inch dia.	4 each	200.00	800
Blowoff, 4-inch dia.	5 each	1,200.00	6,000
Gate, 18-inch dia.	2 each	1,500.00	3,000
Meter and equipment	1 each	4,000.00	4,000
Fittings		lump sum	9,000
Road resurfacing	1,000 tons	4.00	4,000
River crossings	600 lin.ft.	15.00	9,000
Pumping plant and equipment	1 each	5,700.00	5,700
Regulating reservoir		lump sum	10,000
Right of way		lump sum	<u>5,000</u>
Subtotal			\$271,600
Administration and engineering, 10%			\$ 27,200
Contingencies, 15%			40,700
Interest during construction			<u>6,800</u>
TOTAL			\$346,300

ANNUAL COSTS

Interest, 3.5%	\$ 12,100
Amortization, 40-year sinking fund at 3.5%	4,100
Replacement	100
Electrical energy	2,100
Operation and maintenance	<u>1,700</u>
TOTAL	\$ 20,100

APPENDIX M

ALTERNATIVE PLAN OF DEVELOPMENT FOR
NACIMENTO AND SAN ANTONIO RIVERS
PROPOSED BY SAN LUIS OBISPO COUNTY

APPENDIX M

ALTERNATIVE PLAN OF DEVELOPMENT FOR NACIMIENTO AND SAN ANTONIO RIVERS PROPOSED BY SAN LUIS OBISPO COUNTY

Subsequent to the completion of this investigation, the Board of Supervisors of San Luis Obispo County, acting in the capacity of Board of Directors of the San Luis Obispo County Flood Control and Water Conservation District, retained Mr. Charles H. Lee, Consulting Engineer, to study possible developments to provide supplemental water supplies for the County. Mr. Lee has developed a plan for a reservoir project on San Antonio River to conserve jointly waters of the San Antonio and Nacimiento Rivers and to convey controlled flows to potential areas of use in the Upper Salinas River Valley. Since the plan developed by Mr. Lee does not coincide with any of the water supply developments studied during this investigation and reported upon herein, the County of San Luis Obispo has requested that a description of Mr. Lee's proposed development be included in this bulletin.

The foregoing plan consists of (1) San Antonio Reservoir, with a storage capacity of 467,000 acre-feet, located on the San Antonio River, to be created by a dam about seven miles upstream from its confluence with the Salinas River at a site known to this Department as the Pleyto "A" site; (2) a tunnel about two miles in length, with a conveyance capacity of 5,000 second-feet, diverting from the existing Nacimiento Reservoir on Nacimiento River and discharging into San Antonio Reservoir; and (3) a conduit leading from San Antonio Reservoir to a connection with the possible

Nacimiento-Shandon Conduit described earlier in this bulletin. As described by Mr. Lee, the operation of the foregoing plan would consist of diversion of flood waters from Nacimiento Reservoir at rates up to 5,000 second-feet, only at times when water would be spilling from that reservoir or being released for flood control purposes, and storage in San Antonio River of these diverted flows as well as the flows of San Antonio River at times when the flow of the latter river is less than the flow of Salinas River at Spreckels.

Mr. Lee prepared estimates of the safe yield of the proposed plan from mass curves of seasonal runoff of the San Antonio and Nacimiento Rivers for the period 1894-95 to 1955-56 based upon two different assumptions with regard to the existing Nacimiento Reservoir; (1) diversion of floodwaters of Nacimiento Reservoir during periods when the 350,000 acre-foot reservoir is full and spilling; and (2) diversion of floodwaters of Nacimiento River during periods when the reservoir is filled to 200,000 acre-feet of storage and spilling in order to maintain a flood control storage reservation of 150,000 acre-feet. Mr. Lee estimated the safe yield for assumption (1) to be 53,000 acre-feet per season and for assumption (2) 63,000 acre-feet per season.

Mr. Lee estimates the capital cost of the proposed works to be \$9,665,900. A detailed breakdown of this cost estimate was not made available to this Department.

Applications to the State Division of Water Resources (succeeded by the State Water Rights Board) for appropriation of unappropriated water were filed on the San Antonio River by the Monterey County Flood Control and Water Conservation District and the San Luis Obispo County Flood Control and Water Conservation District. On December 2, 1955, Monterey County Flood Control and Water Conservation District filed Application No. 16761 for "irrigation and related domestic, municipal, industrial, and recreational uses with

incidental flood control" for a water conservation development at Pleyto "B" site. On December 9, 1955, the San Luis Obispo County Flood Control and Water Conservation District filed Application No. 16778 for "irrigation and related domestic, municipal, industrial, and recreational uses with incidental flood control" and conservation of the waters of the San Antonio River, and on the same date filed Application No. 16779 for diversion of flood waters from Nacimiento River to San Antonio Reservoir. No permits have been issued by the State Water Rights Board in connection with any of these filings.

During the course of the investigation of San Luis Obispo County, no consideration was given to water supply developments on the San Antonio River because, with the exception of three small tributaries, that stream is located outside the boundaries of the county. However, in the state-wide water resources investigation leading to the preparation of The California Water Plan, reported upon in Bulletin No. 3 of the Department of Water Resources, consideration was given to plans for conservation of the waters of the San Antonio River. Bulletin No. 3 describes two storage developments on the San Antonio River and estimates of cost thereof are set forth in the following tabulation:

<u>Dam and reservoir</u>	Storage capacity, in acre-feet		Net safe seasonal yield, in acre- feet	Capital cost at 1955 price levels
	<u>Gross</u>	<u>Net</u>		
Milpitas "B"	175,000	174,000	18,500	\$8,139,000
Pleyto "B"	200,000	197,000	21,000	4,667,000

The Milpitas "B" site is located on the San Antonio River at a point about 40 miles upstream from its confluence with the Salinas River and could provide supplemental water for the lands in Lockwood Valley which

extend along the San Antonio River downstream to the Pleyto "B" Site. The Pleyto "B" dam site is located about one mile upstream from the site selected by Mr. Lee, designated Pleyto "A" Site. As indicated in Bulletin No. 3, water conserved by these developments could be made available to Lockwood and Hames Valley and to other portions of the Salinas River Valley area.

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