2.0 PROJECT DESCRIPTION

2.1 PROJECT PROPONENT/LEAD AGENCY

County of San Luis Obispo
976 Osos Street
San Luis Obispo, California 93408

2.2 BACKGROUND

San Luis Obispo County is in the midst of an "exceptional drought" that has lowered water levels in groundwater basins and surface lakes and reservoirs throughout the County.[1] The Board of Supervisors has declared three groundwater basins, Nipomo Mesa (part of Santa Maria Groundwater Basin), the Los Osos Groundwater Basin, and the Paso Robles Groundwater Basin, at Level of Severity (LOS) III, which indicates that groundwater demand has met or exceeded the dependable supply. Further information on the LOS certification and how it is applied is explained below.

The programs under review within this document were authorized by the Board of Supervisors on March 4, 2014. The programs of Water Neutral New Development and Water Waste Prevention are meant to address issues not only related to groundwater basins certified at LOS III, but also continuing issues faced by the current drought. To implement these programs and achieve water savings as envisioned, a number of measures would enable the County to verify and track meaningful progress. These measures may include, but are not limited to, ordinances, voluntary programs, policies, and verified best management practices.

2.2.1 San Luis Obispo County Resource Management System and Level of Severity Certifications

The San Luis Obispo County Resource Management System (RMS) uses three alert levels to identify differing levels of resource deficiencies. The 2012-2014 Resource Summary Report defines the three levels of severity as follows:

- Level I is the first alert level and occurs when sufficient lead time exists either to expand the capacity of the resource, or to decrease the rate at which the resource is being depleted.
- Level II identifies the crucial point at which some moderation of the rate of resource use must occur to prevent exceeding the resource capacity.
- Level III occurs when the demand for the resource equals or exceeds its supply and is the most critical level of concern. LOS III is the highest level of severity that can be declared for a resource. In the case of water supply, Level III occurs when the demand for the resource equals or exceeds its supply in 15 years.

[1] "Exceptional drought" is characterized by the United States Department of Agriculture (USDA) and the National Drought Mitigation center as having exceptional and widespread crop and pasture losses, shortages of water in reservoirs, streams and wells creating water emergencies.

The RMS defines levels of severity for each resource. The criteria used to determine levels of severity for water supply are as follows:

- **LOS I.** When projected water demand projected over the next twenty years equals or exceeds the estimated dependable supply.
- **LOS II.** When projected water demand projected over the next fifteen to twenty years equals or exceeds the estimated dependable supply.
- **LOS III.** When projected water demand projected over the next fifteen years equals or exceeds the estimated dependable supply or the time required to correct the problem is longer than the time available before the dependable supply is reached.

When the Planning and Building Department determines that a level of severity should be established, or modified as a consequence of a Land Use Element update, the RMS monitoring program, a Water Resource Advisory Committee (WRAC) recommendation, or the Biennial Resource Summary Report, it sends a memorandum to the Board of Supervisors advising it of the need to establish or modify a level of severity.

The Board of Supervisors will conduct a public hearing to review the data received from the Department of Planning and Building. After the initial advisory memorandum, it may be necessary to continue to issue status reports to the Board in order to keep it advised of the situation. Implementation of a program (i.e., a public works project, management techniques, etc.) would then occur only after public hearings on the resource information being used, preparation of a resource capacity study, and action by the Board, including the possibility of adopting of ordinances to address specific community resource problems.

If an affected resource is not under County jurisdiction (e.g., a community service), the Department of Planning and Building sends a copy of the advisory memorandum to the responsible agency advising that a potential problem may exist, based upon data available to the County, and to urge that the agency prepare a resource capacity study. Staff contacts and recommendations to the agency should occur in advance of the agency's budget preparation process so the necessary work can be included in its financial considerations.

Levels of severity are recommended by the Planning and Building Department and certified by the Board of Supervisors through the procedures in Chapter 3 of the Framework for Planning. County staff may recommend to the Board of Supervisors or the Board may initiate specific actions to respond to levels of severity, such as special water conservation ordinances and special land use and growth limitation measures. However, such measures can only be implemented following specific approval by the Board at a public hearing.

2.3 PROPOSED COUNTYWIDE WATER CONSERVATION PROGRAM

The Countywide Water Conservation Program (Program) includes amendments to the County General Plan and County Code that will affect water use in both new and existing development, as well as agricultural operations, and is comprised of two separate components.

The first major component of the Program is Water Neutral New Development (WNND). WNND would require that all new development offset new water use at a minimum 1:1 ratio in all groundwater basins certified at LOS III by the Board of Supervisors. WNND also requires that, in the Paso Robles Groundwater Basin, all new or more intensively irrigated agriculture offset new water use at a minimum 1:1 ratio. The proposed Agricultural Offset program is an implementation tool for the WNND irrigated agriculture offset requirement, and is intended to substantially reduce groundwater extraction and lowering of groundwater levels in the Paso Robles Groundwater Basin only. The proposed Agricultural Offset program would have a sunset provision upon adoption of a Groundwater Sustainability Plan prepared pursuant to the Sustainable Groundwater Management Act.

The second major component of the overall Program is the Water Waste Prevention (WWP) program. The WWP program would apply to all existing and proposed urban and rural development within the unincorporated areas of the county where a water purveyor does not already have a similar ordinance (or other comparable program) in place. Provisions to reduce agricultural water waste would be limited to clarifications of policies and implementation measures found in the Agriculture Element of the General Plan, which would include best management practices as well as implementation of an educational outreach program.

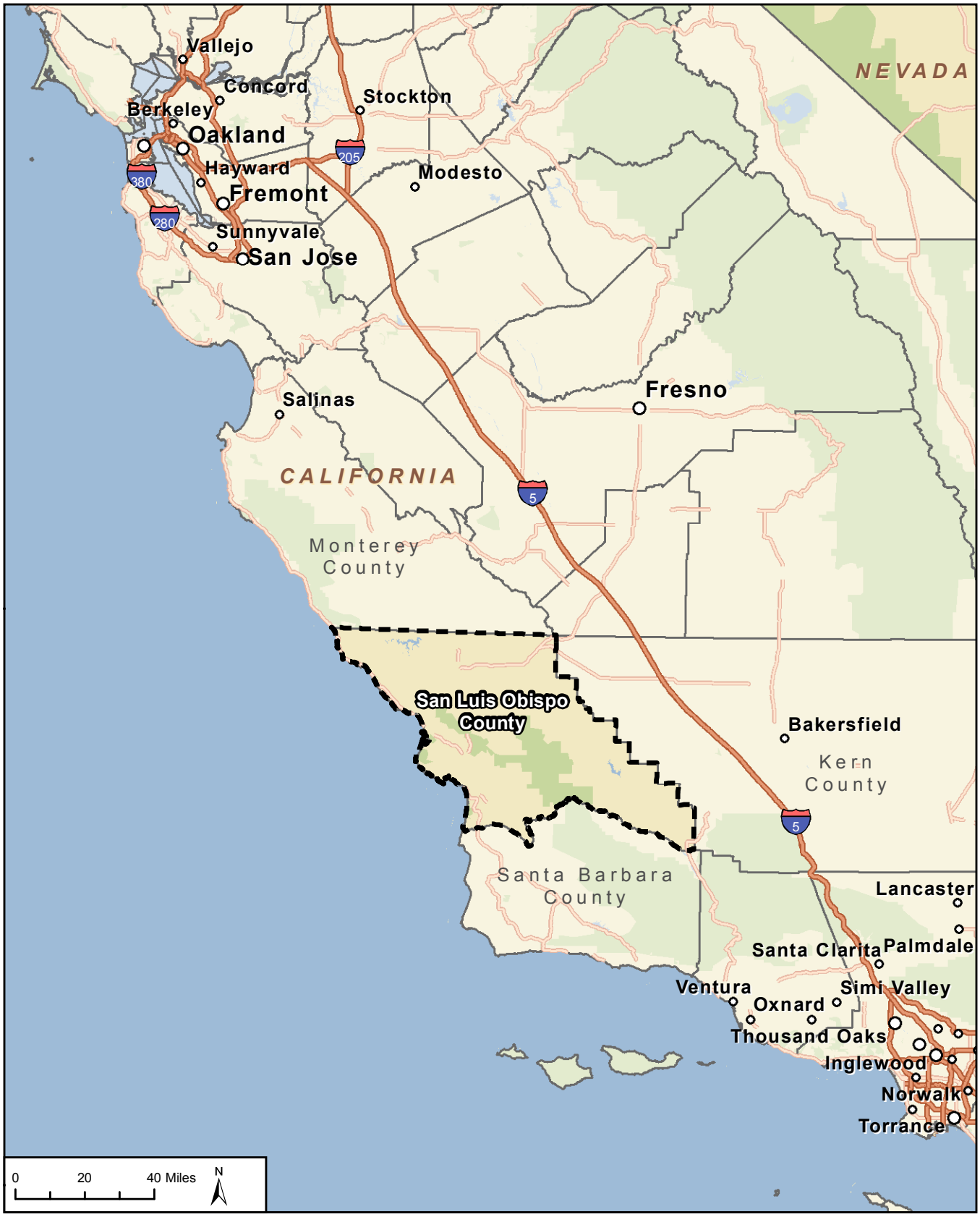
For more information about the individual Program components, as well as the locations where they would apply, see Sections 2.3.1 and 2.3.2, below. See Figure 2-1 for the location of the Program area within its regional context. See Figure 2-2 for the location of the current LOS III-designated areas within the county.

2.3.1 Water Neutral New Development

a. Current Requirements. Both the community of Los Osos and the area overlying the Paso Robles Groundwater Basin, excluding cities, currently have water neutral new development requirements in place for residential and commercial development. In Los Osos, a Retrofit-to-Build requirement in Title 19 of the County Code requires developers to retrofit plumbing fixtures in existing homes in order to save twice the amount of water that their proposed new development will use. Developers submit verification by licensed contractors to the County that the retrofits have been completed.

The Paso Robles Groundwater Basin Urgency Ordinance, adopted on August 27, 2013 and which expires on August 27, 2015, requires new development overlying the basin to offset new water use at a 1:1 ratio. Applicants for new development comply with this requirement by purchasing offset credits from a County-run program, which retrofits plumbing fixtures in existing homes. Los Osos and the Paso Robles Groundwater Basin, through the temporary Paso Robles Groundwater Basin Urgency Ordinance, have standard water offset amounts based on the type of development proposed, current Cal Green standards, and the average household size for the area. Retrofit requirements for existing plumbing fixtures in areas overlying the Paso Robles Groundwater Basin, as per Resolution No. 2014-56, are as follows:

1) All toilets greater than 1.6 gallons per flush (gpf) shall be replaced with toilets that use no more than 1.28 gpf;



Imagery provided by ESRI and its licensors © 2014.

Regional Location

Figure 2-1

Source: *County of San Luis Obispo, 2014.*

Certified Level of Severity III Groundwater Basins

Figure 2-2

2) Existing showerheads shall be replaced with showerheads that use no more than 1.5 gallons per minute (gpm);
3) Existing aerators shall be replaced with aerators that use no more than 1.0 gpm; and
4) Fixtures with lower flow rates will result in additional prorated water savings.

The Paso Robles Groundwater Basin Urgency Ordinance also requires new or more intensively irrigated agriculture in the Paso Robles Groundwater Basin to offset water use at a 1:1 ratio. Currently, the County Planning Director is approving offset requests, by issuing Agricultural Offset Clearances, on a case-by-case basis as they are submitted. To date requests for offsets have primarily been limited to changes in irrigation on the same property or an immediately adjacent property where the source of water is the same well. For example, a farmer growing a high water-using crop such as alfalfa has requested receipt of an offset by replacing the high water using crop with a lower water-using crop such as vineyards on the same property.

In addition, the Nipomo Mesa portion of the Santa Maria Groundwater Basin (known as the Nipomo Mesa Management Area; NMMA) is certified at LOS III and a retrofit-on-sale program is currently in place. If a structure was built before 1994 or if all toilets are rated more than 1.6 gpf, the property seller must remove older, high water-using toilets and showerheads in all of the property's structures and replace them with 1.28 gpf or less toilets and 2.5 or less gallons per minute showerheads. New development pays into a water conservation fund managed by the Nipomo Community Services District (NCSD) to conserve water within the NMMA. A result of the adjudication of the larger Santa Maria Groundwater Basin, the Nipomo Community Services District (with some financial assistance from three other larger water providers) is required to bring 2,500 acre-feet of supplemental water into the NMMA. That project is a pipeline from Santa Maria that is being developed in several phases; however, it is not anticipated to provide water for new development.

b. Proposed Water Neutral New Development.

i. Urban/Rural Water Offset. Proposed WNND requires that new development offset water use at a minimum 1:1 ratio in the three groundwater basins certified at LOS III. The Urban/Rural Water Offset would be implemented through two primary methods to generate offset credits: plumbing retrofits and a turf removal incentive program. Retrofitting plumbing fixtures in existing buildings results in measurable water savings. Specifically, replacing older, higher water-using toilets and showerheads with more efficient fixtures will save specific amounts of water each day. For example, replacing a 3.5 gallon-per-flush (gpf) toilet with a 1.28 gpf toilet will save 2.22 gallons with every flush. Replacing toilets and showerheads is the most reliable way to achieve water savings. Additional measures, such as water pressure adjustments and installing hot water recirculation systems also save water, but savings from these measures are more difficult to quantify.

As described previously, plumbing retrofit requirements are currently in place for all three certified LOS III groundwater basins, though the requirements applicable in the Paso Robles Groundwater Basin will expire on August 27, 2015. In effect, the proposed amendments would enhance, alter and extend the plumbing retrofit programs already in place as follows:

- No change will be made to the existing plumbing retrofit program in the area overlying the Los Osos Groundwater Basin;
- The retrofit-on-sale program would remain in effect in the NMMA. Since new development in the NMMA will have to be water neutral, the requirement for new development to pay into a water conservation fund would become optional at the discretion of the NCSD, in addition to a requirement to verify that new water use has been offset at a 1:1 ratio, either through plumbing retrofits, participation in a turf removal incentive programs, or participation in an approved program or project administered by the NCSD.
- The existing residential plumbing retrofit program in the area subject to the Paso Robles Groundwater Basin Urgency Ordinance would be extended beyond the expiration date of the Urgency Ordinance, which is August 27, 2015. Water savings will also be able to be achieved through a turf removal incentive program.

The turf removal incentive program is another implementation tool included in the proposed Urban/Rural Water Offset component of WNND requirements. In some areas of the county, such as in the Paso Robles Groundwater Basin and the NMMA, outdoor water use accounts for the majority of residential water use. Removing turf or other water intensive landscaping can save water.

The proposed turf removal incentive program would offset the water use associated with urban/rural new development by offering cash incentives for property owners to replace existing turf with low-water demand landscaping. Although many water providers administer similar turf removal incentive programs throughout the state, this program would be unique in that the County would use the generated water savings as an offset credit that could be purchased by developers to comply with offset requirements associated with their proposed new development within specific urban/rural areas. Verifying that water savings are achieved would be accomplished through use of standard water savings calculations for landscaping and by inspections at the time of new landscaping installation to verify turf removal and replacement with low-water use landscaping. The turf removal incentive program component of WNND would apply in the NMMA, Los Osos Groundwater Basin and Paso Robles Groundwater Basin, i.e. all basins currently certified at LOS III for water supply.

As stated above, the three groundwater basins within the county that are currently certified at LOS III are the Paso Robles Groundwater Basin, the Los Osos Groundwater Basin and the NMMA. Also as noted previously, if WNND requirements are approved, the new development offset provisions could also apply to any areas certified as being at LOS III for water supply in the future. Currently, the Cuyama Valley, Morro-Chorro, and North Coast groundwater basins are all recommended in the 2010-2012 Resource Summary Report as LOS III but have not been certified by the Board of Supervisors.

Figure 2-3 shows the individual components of the WNND in relation to the rest of the Program.

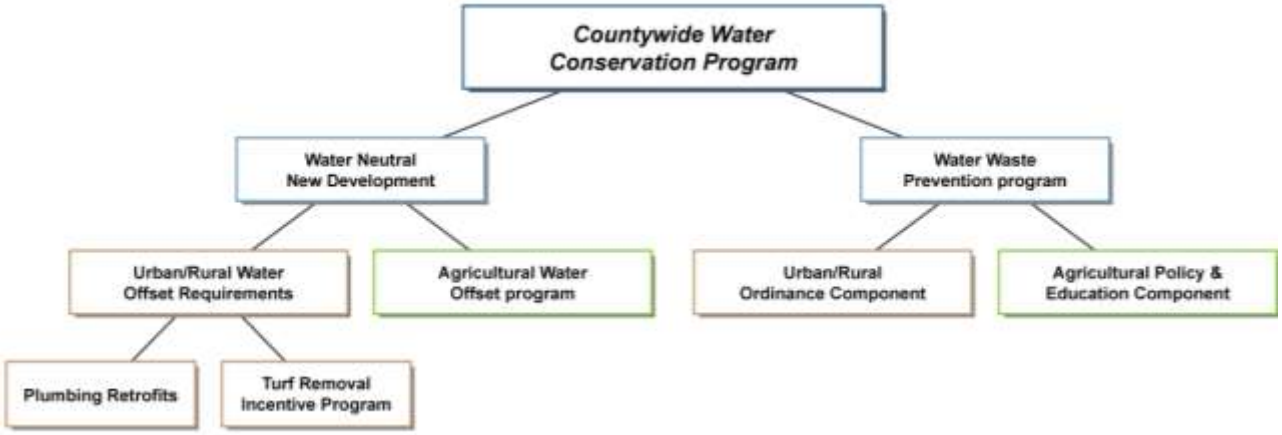


Figure 2-3 Illustration of Countywide Water Conservation Program

ii. Agricultural Offset program. As described below, the County worked with the Upper Salinas – Las Tablas Resource Conservation District to develop an agricultural water offset program for the Paso Robles Groundwater Basin. The proposed Agricultural Offset program is a simplified version of the originally proposed program and would provide a formal framework for the transfer of offset credits to/from agricultural operations within the basin. See Figure 2-3 for the Agricultural Offset program's context with in the WNND and the wider Program.

The Final Report on the *Agricultural Water Offset Program, Paso Robles Groundwater Basin* was published in October 2014 and is included as Appendix B of this document**.** As noted above, the proposed Agricultural Offset program is a simplified version of the program originally considered in that document and is described below.

Credits for the Agricultural Offset program may come from the following potential sources available from current documented practices:

- Fallowing of irrigated land resulting in less pumping; and
- Crop conversion(s) to less water intensive crops as designated by the adopted program water use charts (e.g. alfalfa to olives, irrigated pasture to dryland range, water intensive deciduous crops to less intensive deciduous, grain or vegetable crops, etc.).

This program applies to new or expanded irrigated agricultural development overlying the Paso Robles Groundwater Basin only. New or expanded irrigated agricultural development is defined as including the following:

a. Irrigated agricultural crop conversions;
b. New irrigated agricultural development on previously un-irrigated land;
c. Replanting of existing irrigated crops (of the same crop type) where the replanting results in an increase of crop density or other modification that leads to increased water use (e.g. change in irrigation system or cropping patterns); and
d. Hobby agriculture for rural residential users.

Categories of Agricultural Offset Clearances. Both on-site modifications to existing agricultural operations that increase water use along with new irrigated agriculture and/or crop conversions on different properties would be able to take advantage of the Agricultural Offset program to allow new agricultural plantings. Agricultural Offset Clearance applications for new irrigated agriculture are divided into two categories based on the characteristics of the application. A brief definition of what would be included in the two categories is provided below.

- **Category I - On-site Offset.** This type of Agricultural Offset Clearance includes the following operational changes on a single site:
  a. A crop conversion from a higher water using crop to a lower water using crop.
  b. Increased density of existing crop type with no net increase in water use per acre.
  c. Operational changes with no net increase in applied water such as modifications to irrigation techniques (e.g. sprinkler to drip).

- **Category II - Off-site Offset.** This type of Agricultural Offset Clearance includes the following operational changes:
  a. A crop conversion from a higher water using crop to a lower water using crop on a sending site to provide credits for agricultural plantings on a receiving site.
  b. Fallowing of a sending site to provide credits for plantings on a receiving site.
  c. Operational changes that may result in a decrease in applied water on a sending site to provide credits for agricultural plantings on a receiving site.

A site is defined under the County's Land Use Ordinance as any single or adjoining legal parcel(s) under the same ownership or operated as such (see County Code 22.80.030.S.). For Off-site Offsets, a sending site would be decreasing agricultural water use, while a receiving site would show an increase in agricultural water use not to be exceeded by the amount conserved from the sending site as specified within each application. Each Agricultural Offset Clearance application would be reviewed for compliance with the requirements of the Agricultural Offset program.

Offset Approval Criteria. Program requirements for each category regarding offset approval differ between these two categories. The individual offset requirements for each category are shown in Table 2-1. Each of these criteria is defined in the following sections.

Table 2-1
Agricultural Offset Clearance Approval Criteria

	Category I On-site Offsets	**Category II Off-site Offsets**
Determination of Maximum Net Acreage	✓	✓
Determination of Applied Agricultural Water	✓	✓
Landowner Agreements	✓	✓
Deed Covenants[1]	✓	✓
Installation of Well Meter(s)	✓	✓

1. The necessity of deed covenants for on-site offsets will be determined on a case by case basis.

In addition to the basic program standards listed in Table 2-1, all applications for an Agricultural Offset Clearance shall include verification that the proposed crop, irrigation, and/or management modifications can stay within the maximum applied water amount as calculated per the Agricultural Offset program.

Determination of maximum net acreage and applied agricultural water. For the purposes of the Agricultural Offset program, the crop categories and water use values presented in Tables 2-2 and 2-3 would be used to determine the potential credit and/or amount of credit needed to satisfy the requirements of the offset program. Water credits for new agricultural uses are calculated by taking the total net acres of previously irrigated crops and multiplying it by the medium applied water value listed in Table 2-3. The total acres of new irrigated crop(s) is calculated by taking the water credit amount and dividing it by the medium applied water value for the new crop as listed in Table 2-3. Likewise, this calculation can be done in reverse to determine the amount of water credits needed for a particular proposal for new irrigated crops.

This section also applies to On-Site Offset applications where acreage is not increased but modifications to on-site crop patterns or management strategies that increase overall applied water use are proposed. For these types of applications, the maximum applied water amount rather than acreage becomes the qualifying factor for issuance of an offset.

Table 2-2
Crop Group and Commodities Used for the Agricultural Demand Analysis

Crop Group	Primary Commodities
Alfalfa	Alfalfa
Nursery	Christmas trees, miscellaneous nursery plants, flowers
Pasture	Miscellaneous grasses, mixed pastures, sod/turf, sudangrass
Small Grains	Oats, barley, wheat
Citrus	Avocados, grapefruits, lemons, oranges, olives, kiwis, pomegranates (non-deciduous)
Deciduous	Apples, apricots, berries, peaches, nectarines, plums, figs, pistachios, persimmons, pears, quinces, strawberries
Strawberries	Strawberries
Vegetables	Artichokes, beans, miscellaneous vegetables, mushrooms, onions, peas, peppers, tomatoes
Vineyard	Wine grapes, table grapes

Source: Table 1 of the Final Report on the Agricultural Water Offset Program, Paso Robles Groundwater Basin, October 2014.

Table 2-3
Crop-Specific Applied Water (af/ac/yr) by Crop and Water Planning Area

	Applied Water Ranges Salinas/Estrella WPA		
Crop	Low	Medium	High
Alfalfa	3.8	4.5	5.2
Citrus	1.9	2.3	2.7
Deciduous[2]	3.0	3.5	4.1

Table 2-3
Crop-Specific Applied Water (af/ac/yr) by Crop and Water Planning Area

Crop	Applied Water Ranges Salinas/Estrella WPA		
	Low	Medium	High
Strawberries[3]	2.0	2.3	2.6
Small Grains[3]	1.0	1.2	1.4
Nursery	2.0	2.5	2.9
Pasture[2]	4.2	4.8	5.5
Vegetables[1]	1.6	1.9	2.2
Vineyard	1.4	1.7	2.1

Source: Table 2 of the Final Report on the Agricultural Water Offset Program, Paso Robles Groundwater Basin, October 2014.
1 Assumes two vegetable crops planted per acre per year.
2 Values for Deciduous crops and Pasture are modified from the values presented in the County's Master Water Report and are calculated based on original data used to prepare the County's Master Water Report.
3 Information obtained from Current Cost and Return Studies, UCCE, UC Davis (Small grains 2013 data, Strawberries 2011 data)

Off-Site Offset Landowner agreements. Submittal to the County of a notarized signed copy of the agreement for transfer of offset credits between participating private landowners would be required. The County would then ensure that participating landowners list the credit amount and agree to supply the credits in perpetuity, or until the Agricultural Offset program sunsets.

Deed Covenants. All properties included in an Agricultural Offset Clearance application for either sending sites or receiving sites shall include a deed covenant recorded against the properties, regardless of whether or not the properties are owned by the same entity or person. Deed covenants would be required to be in a form approved by the County and the County would be entitled to enforce the agreement. The Covenants would automatically expire upon the sunset date of the Agricultural Offset program.

Installation of well meters. All approved Agricultural Offset Clearance applications would require that a well meter be installed on all sending and receiving wells.

Timeframe for Agricultural Offset program. The Agricultural Offset program would expire upon the adoption of a Groundwater Sustainability Plan (GSP). It is currently estimated that the timeframe for development and adoption of a GSP could be 5 to 7 years, and implementation of a GSP could take 20 years.

c. Ordinance and Policy Document Revisions. Implementation of WNND consists of revisions to Title 19 of the County Code for new structural development and Title 22 of the County Code for new irrigated agriculture. The Program also proposes revisions to the Agriculture Element and the Conservation and Open Space Element (COSE) of the General Plan. These will include revisions to Ag Goal 1d, Ag policies 10 and 11 and COSE policies WR 1.7 and WR 1.14.

2.3.2 Water Waste Prevention Program

a. Overview. The Water Waste Prevention (WWP) program would be comprised of two elements; an ordinance prohibiting certain uses of water deemed to meet the definition of water wasting in urban and rural areas, as well as identification of a series of best management practices (BMPs) aimed at reducing water waste and increasing water use efficiency in agricultural operations. The County-proposed WWP program would be applicable within all areas of the unincorporated county, except where a water provider has already established an equivalent program.

b. Proposed Requirements. The proposed ordinance component of the WWP program would prohibit certain activities defined as water wasting. These activities, in urban and rural areas, include:

- Application of water to outdoor landscapes in a manner that causes runoff such that water flows off the site, into non-irrigated areas, public and private walkways, roadways, parking lots, structures or other hardscaped areas.
- Use of a hose to wash an automobile or other vehicle except where the hose is fitted with an automatic shut off nozzle or device attached to it that causes it to cease dispensing water when not in use.
- Application of water to hard surfaces, including but not limited to, driveways, sidewalks, unpaved walkways and any other hardscaped area.
- Use of potable water in a fountain or other decorative water feature.
- Application of water to outdoor landscape more than 3 times per week.

Property owners violating the terms of the ordinance would be subject to enforcement actions outlined in section 1.04.010 (Penalties for violation) of the County Code. The ordinance would include a provision for a system to report violations and to gain compliance when property owners are found to be in violation. This may include a warning system followed by fines for ongoing offenses.

The element of the WWP program aimed at reducing water waste in agricultural areas would include two parts: expansion/clarification of existing policy regarding increased water efficiency efforts, and an expanded educational outreach effort. Measures would be implemented which would describe best management practices and provide better resources for education of agricultural water application to both the agriculture industry and the P recognizes the progress made over the decades in agricultural water use efficiency, while also encouraging continued innovation, and is described further below.

1) **Best Management Practices.** Identify BMPs for efficient agricultural water use in different types of agricultural operations. BMPs would include the following:
   a. Increased adoption of crop water status monitoring, such as soil moisture monitoring technology;
   b. More precise irrigation scheduling;
   c. Enhanced irrigation monitoring practices;
   d. Use of tail water return systems for any surface water application;

e. Use of covers or other evaporation reducing systems for agricultural irrigation ponds; and
f. Use of wind machines for frost protection, rather than overhead sprinklers, where feasible.

To encourage application of these measures, the County proposes to establish new, and amend existing, policies in the Agriculture Element that incorporate these and other BMPs that reduce water use in agricultural practices.

2) **Education Program.** The County would institute an education program for interested parties on how agriculture uses water and the purpose behind certain practices. As an example, a website would be developed to educate the public on agricultural water use as well as to provide industry a clearinghouse of the newest water-efficient practices. Information on best management practices would also be provided to agriculturalists during the pesticide permit and operator identification number issuance process.

c. County Ordinances and Policy Documents. Title 8 of the County Code would be revised to include the proposed ordinance. Portions of the County General Plan including the Agriculture Element and COSE would be revised to reflect the policies for agriculture, rural and urban area water waste.

2.4 PROJECT OBJECTIVES

The following are the project objectives, as required by Section 15124(b) of the *CEQA Guidelines*:

- *Substantially reduce increases in groundwater extraction in basins that have been certified at Level of Severity III;*
- *Provide a mechanism to allow new development to proceed in certified LOS III groundwater basins subject to the requirements of the County General Plan and County Code, in a manner that fully offsets projected water use;*
- *Provide a mechanism to allow new or expanded irrigated agriculture to proceed in the Paso Robles Groundwater Basin, subject to the requirements of the County General Plan and County Code, in a manner that fully offsets projected water use; and*
- *Reduce the wasteful use of water in the county.*

2.5 REQUIRED APPROVALS

The Program will require the discretionary approval of the County of San Luis Obispo. It will be reviewed by the Planning Commission, which will make a recommendation to the Board of Supervisors. The Board of Supervisors will make decisions related to certification of the EIR and approval of the Program.

The approvals required from the County include:

- *Ordinance changes, including revisions of Titles 8, 19, and 22 of the County Code; and*
- *General Plan Amendments including the Agriculture Element and the Conservation and Open Space Element. These elements would be revised to reflect the policy basis for agricultural, rural, and urban area water waste and water neutral new development.*

This page intentionally left blank.