AGENDA
Thursday, May 21, 2015 6:30 p.m.
Pismo Beach City Hall

I. CALL TO ORDER AND ROLL CALL

II. PUBLIC COMMENT
This is an opportunity for members of the public to address the Committee on items that are not on the Agenda

III. Meeting minutes of March 19, 2015

IV. OPERATIONS REPORT
A. Water plant operations, dam storage & creek releases

V. INFORMATION ITEMS
A. Climate Update
B. Habitat Conservation Plan (HCP) Update
C. FY 14/15 Q3 Budget Update
D. Conflict of Interest Memo
E. Surplus Water Update

VI. CAPITAL PROJECTS UPDATE
A. Quarterly Update

VII. ACTION ITEMS (No Subsequent Board of Supervisors Action Required)
A. Implementation of Low Reservoir Response Plan (LRRP)

VIII. ACTION ITEMS (Board of Supervisors Action is Subsequently Required)

IX. FUTURE AGENDA ITEMS
A. Contract Renegotiation Discussions
B. Water Wheeling
C. Funding Groundwater Modeling

X. COMMITTEE MEMBER COMMENTS

Next Regular Meeting is Tentatively Scheduled for
Thursday, July 16, 2015 at 6:30 p.m. at the Oceano CSD
I. Call To Order/Roll Call

The Meeting was called to order at 6:30 pm at the Oceano Community Services District by Chairman Ed Waage. County Staff Member John Diodati called role. Members in attendance were:

Karen Bright, City of Grover Beach
Kristen Barneich, City of Arroyo Grande
Jim Garing, Member at Large
Paavo Ogren, Oceano Community Services District
Ed Waage, City of Pismo Beach
Brian Talley, Agriculture Member

Quorum was established and the meeting continued.

II. Public Comment – (none)

III. Meeting Minutes of Nov 20, 2014 and Jan 15, 2015 – The minutes of the previous meetings were approved upon a motion by Member Bright, a second by Member Garing, with a minor correction that Section 5c be edited to “HCP Update”. Member Ogren wanted to make clear that the whole department was recognized for achieving APWA accreditation. With a unanimous vote with one abstention the minutes are approved as amended.

IV. Operations Report – Mark Hutchinson explains that revised operations reports were printed that are more accurate than those from the original agenda packet. Lopez plant staff Member Joe Phillips reports on the current operations of the Lopez Water Treatment Plant.

A. Phillips states the Lopez Reservoir elevation is 479.59 ft. Lopez Storage is 19,499 AF and approximately 39% capacity. The plant production is
4.63 MGD. Filter turbidity range is .01-.02 NTU. Rainfall 9.29 in. Terminal Reservoir visibility is 23 feet. Downstream releases are 1.73 MGD to the creek with 1.5 MGD in state water production.

Member Ogren revisits the revisions of the operations reports stating that the reports in the original agenda packet are the correct water accounting and the revised information is incorrect in regards to Oceano CSD.

V. Information Items
A. Climate Update – John Diodati reports that the time series of the drought mapped over the state of California shows that the drought started in San Luis Obispo and expanded out, which means that it will most likely recede back to San Luis Obispo once rain occurs.

Temperature forecasts have increased to cover the entire region of the Sierras. Precipitation forecasts have decreased since the January meeting. Now there is an equal chance of precipitation for March, April, and May. Diodati explains we haven’t seen the precipitation expected from an El Nino year and the drought persists.

B. Habitat Conservation Plan (HCP) Update – Hutchinson says that E-Corp, the hydrogeologic consultant, received their formal notice to proceed on February 19th 2015. They are moving forward aggressively and intend to complete an updated model to produce a water availability analysis and a new downstream release program by October 30th 2015. A renewed contract with HT-Harvey was signed after the previous contract expired and will be back to the board by April or May as time permits.

Hutchinson mapped out the plan for staying focused on the hydrogeologic model reviewed and updated to develop the ideal downstream release program so that in October the next steps can be taken.

C. FY 14/15 Q2 Budget – County Staff Member Jennifer Colvard reports that Zone 3 is under budget by 15% for the second quarter of the fiscal year. Operations and maintenance is slightly over budget by 5% but it is anticipated to be at budget by the end of the year. Non-routine O&M is under budget due to HCP efforts. Capital outlay is under budget by 39%.

VI. Capital Projects Update
A. Quarterly Update – County Staff Member Jeff Lee presents an update on the four capital projects currently underway. Two of the four are complete, the perimeter security fence (first phase) and the 6th rack equipment replacement program at the plant. The sixth rack addition is expected to
be delivered in late April or mid-May. The panel design is complete on the turnout SCADA project to be out for bidding as early as next week. Cannon is under contract to install the panels and this project is expected to be operational by the end of the fiscal year.

Member Bright asks about the Rodriguez bridge project. Lee and Hutchinson explain that the project is about the waterline rather than the bridge itself.

Member Bright questions if Member Wallace (absent) has a conflict of interest with Wallace Group’s involvement in the 6th rack project as Member Wallace is the CSA 12 representative. Member Ogren explains that he did not think it to be a prohibitive transaction. It was requested that County Staff provide a memo on conflicts of interest for the Advisory Committee at the next meeting.

VII. Action Items (No Subsequent Board of Supervisors Action Required)

(none)

VIII. Action Items (Board of Supervisors Action is Subsequently Required)

A. Endorsement of Proposed FY 15-16 Budget – Colvard presents the budget review to be processed and approved by June 2015. Overall expenditures increased 2.8%. O&M increased 6.3% due to labor costs, water quality testing, and Arroyo Grande and Pismo Beach meter replacements. Capital Outlay decreased 7.7%. The FY 15/16 billings are higher than projected on the 5 Year Billing Estimates which have been updated. Jennifer asks for the endorsement of the budget by the committee.

Upon questioning by Member Garing, Colvard explains how reserves were moved from the designated reserves to operating reserves to keep at 50% of the working capital. Member Bright asks about the increase in labor hour costs and Jennifer clarifies that the labor hours include direct public works staff and other hours are billed through operations and maintenance or the costs of the project. Member Bright motions to endorse the FY 15-16 Budget. A second by Member Barneich and the vote passes unanimously to endorse the budget.

Member Ogren opens a discussion on improving groundwater modeling and monitoring efforts and the possibility of having district funded reserves to aid with the costs of these efforts. A future agenda item on this topic is recommended by Member Waage.
Public comment: City of Arroyo Grande Public Works Director Geoff English announces NCMA was having a joint meeting with NMMA on April 17th in the afternoon in Arroyo Grande.

B. **Declaration of Surplus Water** – Hutchinson reminds the committee that the Safe Yield for Project water is 8,730 AF from Lopez. Hutchinson explains that “surplus” water does not mean that there is extra water around rather it means that there is water “available”. After 2014-2015 water year deliveries, it is projected that there will be 1,231 AF of surplus water for 2015-2016. It is recommended that the Board of Supervisors offer that 1,231 AF of surplus water to the agencies weighted by Entitlement percent.

The Low Reservoir Response Plan has an initially prescribed action against the allocation of this 1,231 AF of surplus water. The downstream releases are projected to be 750 AF less than the maximum. Hutchinson explains the calculations for determining the allocation of water available to each agency for the 15-16 water year. It is then recommended that the Board of Supervisors declare 1,231 AF of Surplus Water. It is also recommended to continue to implement the Low Reservoir Release Plan. Each agency would continue to follow the resolutions adopted based on the LRRP. A letter exchange will create a record for everyone to show the districts understanding of these resolutions.

Hutchinson shows on a graph the projections for the Lopez Reservoir Storage. These projections show that if we have average rainfall the reservoir will not drop to 15,000 AF and there will not be a 10% cut in entitlements, but if we don’t get the rain by September 2015 the reservoir will hit 15,000 AF and halfway through the water year there will be that 10% cut to the entitlements. If the TAC identifies a need for adaptive management strategy the Advisory Committee will review this strategy prior to its implementation. Example models show projections for Lopez Storage based on different scenarios of rainfall. These hydrologic scenarios project Lopez dropping to minimum pool (5,000 AF) by 2017 if inflow and rainfall continue at levels based on the 13/14 water year.

Member Ogren explains concerns over the accurate numbers of water deliveries for Oceano CSD in the 14/15 water year. He thinks the process and approach to surplus water and the LRRP is good but he cannot support the allocation of 1,231 AF to surplus water because the number is based on water deliveries of 364 AF which don’t agree with the numbers Oceano CSD believes to be true. Oceano CSD and the County will work to make sure water deliveries are correct.
Member Bright motions with a second to recommend the declaration surplus water of 1231 AF. The vote passes 5 votes yes to 1 vote no from Member Ogren. Member Ogren motions with a second to recommend the continuation of the Low Reservoir Release Plan, which passes unanimously.

IX. Future Agenda Items – Diodati mentions these are just a place holder and these items will be moved forward when appropriate
   A. Contract Negotiations – Place Holder
   B. Water Wheeling – Place Holder
   C. Memo on Conflict of Interest – Member Bright wants to clarify with Mr. Wallace on the possible conflict of interest with the Wallace Group’s participation in the drafting of plans for Zone 3.
   D. 15/16 Water Allocations – Discussion needed on 15/16 allocations based on the clarification of 14/15 water deliveries for Oceano CSD and surplus water declaration.

X. Committee Member Comments

Diodati comments that this March is the year anniversary of the declaration of the drought from the Board of Supervisors. March 24th is the next update.

Member Garing comments that everyone should read The West Without Water, which suggests the past 150 years of climate have been a wet period and this dry period could continue for hundreds of years.

XI. Next Regularly Scheduled Meeting will be held Thursday May 21, 2015 at 6:30pm at Pismo Beach City Hall. The meeting was adjourned at 8:30pm.

Respectfully Submitted,

John Diodati
San Luis Obispo County Flood Control and Water District
Zone 3 - Lopez Project - Monthly Operations Report
March, 2015

### Lopez Water Deliveries

<table>
<thead>
<tr>
<th>Contractor</th>
<th>Total Usage This Month</th>
<th>Usage April to Present Total</th>
<th>Total Water Deliveries This Month</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Entl.</td>
<td>Surplus</td>
<td>Total</td>
</tr>
<tr>
<td>Arroyo Grand</td>
<td>2290</td>
<td>1176.00</td>
<td>3466.00</td>
</tr>
<tr>
<td>Oceano CSD</td>
<td>303</td>
<td>156.00</td>
<td>459.00</td>
</tr>
<tr>
<td>Grover Beach</td>
<td>800</td>
<td>411.00</td>
<td>1211.00</td>
</tr>
<tr>
<td>Pismo Beach</td>
<td>892</td>
<td>458.20</td>
<td>1350.20</td>
</tr>
<tr>
<td>CSA 12</td>
<td>245</td>
<td>125.80</td>
<td>370.80</td>
</tr>
<tr>
<td>San Miguelito</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>4530</td>
<td>2327.00</td>
<td>6857.00</td>
</tr>
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</table>

#### April to Present Lopez Entitlement+Surplus Water Usage

<table>
<thead>
<tr>
<th>Month</th>
<th>April '14</th>
<th>May '14</th>
<th>Jun '14</th>
<th>Jul '14</th>
<th>Aug '14</th>
<th>Sep '14</th>
<th>Oct '14</th>
<th>Nov '14</th>
<th>Dec '14</th>
<th>Jan '15</th>
<th>Feb '15</th>
<th>Mar '15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acct</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

#### January to Present State Water Usage

<table>
<thead>
<tr>
<th>Month</th>
<th>April '14</th>
<th>May '14</th>
<th>Jun '14</th>
<th>Jul '14</th>
<th>Aug '14</th>
<th>Sep '14</th>
<th>Oct '14</th>
<th>Nov '14</th>
<th>Dec '14</th>
<th>Jan '15</th>
<th>Feb '15</th>
<th>Mar '15</th>
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<tbody>
<tr>
<td>Acct</td>
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<td>0</td>
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<td>0</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

#### Lopez Dam Operations

<table>
<thead>
<tr>
<th>Operation</th>
<th>This Month</th>
<th>Year to Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lake Elevation (full at 522.37 feet)</td>
<td>479.21</td>
<td>Difference (feet) -43.6</td>
</tr>
<tr>
<td>Storage (full at 49200 acre feet)</td>
<td>19321</td>
<td>% Full 39.3%</td>
</tr>
<tr>
<td>Rainfall</td>
<td>0.31</td>
<td>9.29</td>
</tr>
<tr>
<td>Downstream Release (4200 acre feet/year)</td>
<td>166.48</td>
<td>3087.43</td>
</tr>
<tr>
<td>Spillage (acre feet)</td>
<td>0</td>
<td>0.00</td>
</tr>
</tbody>
</table>

#### Comments:

1) Oceano State Water to Canyon Crest via Arroyo Grande's Edna turn out. A total of 2.39 AF delivered to Canyon Crest was added to Oceano's State Water usage this month and 2.39 AF was subtracted from Arroyo Grande's usage this month.

Note: Deliveries are in acre feet. One acre foot = 325,850 gallons or 43,560 cubic feet. Safe yield is 8,730 acre feet. *Year to Date* is January to present for State water, April to present for Lopez deliveries, and July to present for rainfall.

Wednesday, May 06, 2015  
Data entered by: J. Phillips  
Report printed by: Admin
San Luis Obispo County Flood Control and Water District
Zone 3 - Lopez Project - Monthly Operations Report
April, 2015

### Lopez Water Deliveries

<table>
<thead>
<tr>
<th>Contractor</th>
<th>Entl.</th>
<th>Surplus</th>
<th>Total</th>
<th>Usage This Month</th>
<th>Usage April to Present</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Entl.</td>
<td>Enl. %</td>
</tr>
<tr>
<td>Arroyo Grand</td>
<td>2290</td>
<td>881.00</td>
<td>3171.00</td>
<td>181.17</td>
<td>7.9%</td>
</tr>
<tr>
<td>Oceano CSD</td>
<td>303</td>
<td>132.60</td>
<td>435.60</td>
<td>0.00</td>
<td>0.0%</td>
</tr>
<tr>
<td>Grover Beach</td>
<td>800</td>
<td>394.00</td>
<td>1194.00</td>
<td>39.68</td>
<td>7.5%</td>
</tr>
<tr>
<td>Pismo Beach</td>
<td>892</td>
<td>0.00</td>
<td>892.00</td>
<td>50.47</td>
<td>5.7%</td>
</tr>
<tr>
<td>CSA 12</td>
<td>245</td>
<td>240.00</td>
<td>485.00</td>
<td>12.11</td>
<td>4.9%</td>
</tr>
<tr>
<td>San Miguelito</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>4530</td>
<td>1647.00</td>
<td>6177.00</td>
<td>303.43</td>
<td>6.7%</td>
</tr>
</tbody>
</table>

### State Water Deliveries

<table>
<thead>
<tr>
<th>Requested</th>
<th>This Month</th>
<th>January to Present</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual</td>
<td>Month</td>
<td>Usage</td>
</tr>
<tr>
<td>750</td>
<td>70</td>
<td>36.31</td>
</tr>
<tr>
<td>900</td>
<td>70</td>
<td>70.00</td>
</tr>
<tr>
<td>57</td>
<td>1.58</td>
<td>1.25</td>
</tr>
<tr>
<td>130</td>
<td>12</td>
<td>9.60</td>
</tr>
<tr>
<td>1837</td>
<td>153.58</td>
<td>117.16</td>
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</table>

### Total Water Deliveries This Month

| 181.17 |

### April to Present Lopez Entitlement+Surplus Water Usage

<table>
<thead>
<tr>
<th>Month</th>
<th>Usage (Acre Feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jul '14</td>
<td>50</td>
</tr>
<tr>
<td>Aug '14</td>
<td>100</td>
</tr>
<tr>
<td>Sep '14</td>
<td>150</td>
</tr>
<tr>
<td>Oct '14</td>
<td>200</td>
</tr>
<tr>
<td>Nov '14</td>
<td>150</td>
</tr>
<tr>
<td>Dec '14</td>
<td>100</td>
</tr>
<tr>
<td>Jan '15</td>
<td>50</td>
</tr>
<tr>
<td>Feb '15</td>
<td>100</td>
</tr>
<tr>
<td>Mar '15</td>
<td>150</td>
</tr>
<tr>
<td>Apr '15</td>
<td>200</td>
</tr>
</tbody>
</table>

### January to Present State Water Usage

<table>
<thead>
<tr>
<th>Month</th>
<th>Usage (Acre Feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jul '14</td>
<td>50</td>
</tr>
<tr>
<td>Aug '14</td>
<td>100</td>
</tr>
<tr>
<td>Sep '14</td>
<td>150</td>
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<tr>
<td>Oct '14</td>
<td>200</td>
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<tr>
<td>Nov '14</td>
<td>150</td>
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<tr>
<td>Dec '14</td>
<td>100</td>
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<tr>
<td>Jan '15</td>
<td>50</td>
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<tr>
<td>Feb '15</td>
<td>100</td>
</tr>
<tr>
<td>Mar '15</td>
<td>150</td>
</tr>
<tr>
<td>Apr '15</td>
<td>200</td>
</tr>
</tbody>
</table>

### Lopez Dam Operations

<table>
<thead>
<tr>
<th>Operation</th>
<th>This Month</th>
<th>Year to Date</th>
<th>Difference (feet)</th>
<th>% Full</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lake Elevation (full at 522.37 feet)</td>
<td>478.18</td>
<td>-44.19</td>
<td></td>
<td>38.3%</td>
<td></td>
</tr>
<tr>
<td>Storage (full at 49200 acre feet)</td>
<td>18845</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rainfall</td>
<td>1.01</td>
<td>10.30</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Downstream Release (4200 acre feet/year)</td>
<td>198.45</td>
<td>198.45</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spillage (acre feet)</td>
<td>0</td>
<td>0.00</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Comments:

Lopez Water Deliveries are now operated under the Low Reservoir Response Plan (LRRP).

Surplus water shown is actually "Carry Over" water as designated in the LRRP.

1) Oceano State Water to Canyon Crest via Arroyo Grande's Edna turn out. A total of 2.43 AF delivered to Canyon Crest was added to Oceano's State Water usage this month and 2.43 AF was subtracted from Arroyo Grande's usage this month.

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Wednesday, May 06, 2015
Data entered by: J. Ogren
Report printed by: Admin
NOAA TEMPERATURE FORECAST

March, April, May

June, July August

Temp increase
Spans entire Sierras

March Meeting

May Meeting
NOAA PRECIPITATION FORECAST

End of the "El Nino" forecast

March Meeting

March, April, May

June, July, August

May Meeting

NOAA PRECIPITATION FORECAST
TO: Zone 3 Advisory Committee  
FROM: Katie Drexhage, Environmental Resource Specialist  
DATE: May 21, 2015  
SUBJECT: Lopez Water Project HCP Status Updates

ECORP’s Preparation of the Water Availability Analysis
ECORP and their subconsultant Cleath-Harris have continued their technical review & data development prepping, and have begun putting together the operational computer model. The model is anticipated to be ready for District review by May 18.

Next steps include:

- May 18: ECORP’s baseline model to District for review
- May 22: District meeting with ECORP and H.T. Harvey to discuss Baseline Model
- June/July: Present model to TAC

NMFS
The District, ECORP, and H.T. Harvey participated in a conference call with Anthony Spina and Matthew McGoogan of the National Marine Fisheries Service (NMFS) on April 27, 2015. The purpose of the call was to touch base, re-energize the HCP effort, and summarize the current process and timeline. During the call, Anthony informed the participants that he has taken a managerial position with NMFS and that Matthew will be the primary point of contact at NMFS for the project. Anthony will remain available for questions and review of the model and final documents.

H.T. HARVEY
As ECORP moves forward with developing the baseline model, Kate Ballantyne and Katie Drexhage will work with H.T. Harvey to revisit topics outlined in the HCP. H.T. Harvey drafted some sections shortly after being hired in 2011/2012. Such topics include the baseline, environmental setting, conservation program, and biological goals and objectives. The District and H.T. Harvey will work together to determine if these sections require updates or revisions as a result of ECORP’s model and/or any potential new information or developments since 2012.
### Zone 3 Budget Status
3rd Quarter FY14/15

#### Routine Operation and Maintenance

**Graph:**
- **Green Line:** Budgeted
- **Blue Line:** Actual

<table>
<thead>
<tr>
<th>O&amp;M Routine Category</th>
<th>Total Budget</th>
<th>1st Quarter</th>
<th>2nd Quarter</th>
<th>3rd Quarter</th>
<th>4th Quarter</th>
<th>Total</th>
<th>Under/Over Total Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labor and Overhead</td>
<td>1,929,964</td>
<td>450,000</td>
<td>559,196</td>
<td>404,043</td>
<td>-</td>
<td>1,422,109</td>
<td>26.35%</td>
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<tr>
<td>Chemicals - Water Treatment Plant</td>
<td>295,565</td>
<td>89,080</td>
<td>92,745</td>
<td>88,680</td>
<td>-</td>
<td>269,405</td>
<td>8.21%</td>
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<tr>
<td>Insecticides - Water Treatment Plant</td>
<td>291,658</td>
<td>78,479</td>
<td>65,241</td>
<td>40,510</td>
<td>-</td>
<td>168,230</td>
<td>6.64%</td>
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<tr>
<td>Vendors - Water Treatment Plant</td>
<td>261,626</td>
<td>65,680</td>
<td>100,854</td>
<td>101,469</td>
<td>-</td>
<td>268,019</td>
<td>-2.48%</td>
</tr>
<tr>
<td>Terminal</td>
<td>44,265</td>
<td>10,961</td>
<td>12,012</td>
<td>5,672</td>
<td>-</td>
<td>42,277</td>
<td>4.47%</td>
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<tr>
<td>Main Items</td>
<td>90,083</td>
<td>10,005</td>
<td>10,314</td>
<td>11,050</td>
<td>-</td>
<td>44,062</td>
<td>9.66%</td>
</tr>
<tr>
<td>Other</td>
<td>312,192</td>
<td>35,309</td>
<td>36,292</td>
<td>34,407</td>
<td>-</td>
<td>105,567</td>
<td>66.85%</td>
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<tr>
<td>Totals O&amp;M</td>
<td>3,233,862</td>
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<td>885,484</td>
<td>696,423</td>
<td>-</td>
<td>2,141,498</td>
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<td>5,133,262</td>
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</tr>
<tr>
<td>Variance (over)/under Cumulative</td>
<td>23,279</td>
<td>(7943)</td>
<td>(7943)</td>
<td>(7943)</td>
<td>-</td>
<td>8,452</td>
<td>0.00%</td>
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<tr>
<td>% Variance (over)/under Cumulative</td>
<td>0%</td>
<td>-0%</td>
<td>-0%</td>
<td>-0%</td>
<td>-</td>
<td>0%</td>
<td>0%</td>
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</table>

---

13 of 47 Item V
Non-Routine Operation and Maintenance

<table>
<thead>
<tr>
<th>Non Routine Category</th>
<th>Total Budget</th>
<th>1st Quarter</th>
<th>2nd Quarter</th>
<th>3rd Quarter</th>
<th>4th Quarter</th>
<th>Total</th>
<th>% Under/Budget</th>
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<td>Labor and Overhead</td>
<td>62,793</td>
<td>-</td>
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<td>62,793</td>
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<td>Lopez Water/Water Rights - WCP</td>
<td>174,586</td>
<td>(-)</td>
<td>55</td>
<td>22,852</td>
<td>5,740</td>
<td>203,180</td>
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<td>Environmental Monitoring</td>
<td>-</td>
<td>(0)</td>
<td>105</td>
<td>445</td>
<td>-</td>
<td>550</td>
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<td>DBP Rule</td>
<td>36,340</td>
<td>1,000</td>
<td>1,400</td>
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<td>Entitlement</td>
<td>195,836</td>
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<td>WQ Efforts - Non Schedule</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<td>WQ Efforts - Special Projects</td>
<td>-</td>
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<td>-</td>
<td>-</td>
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<td>Other</td>
<td>584</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>584</td>
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<tr>
<td>Total Non Routine</td>
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<td>33,836</td>
<td>15,773</td>
<td>-</td>
<td>-</td>
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<tr>
<td>Total Budget</td>
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<td>114,854</td>
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<td>Variance (over/under) Cumulative</td>
<td>100.081</td>
<td>182,836</td>
<td>281,457</td>
<td>-</td>
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<tr>
<td>% Variance (over/under) Cumulative</td>
<td>100%</td>
<td>79%</td>
<td>62%</td>
<td>-</td>
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### Capital Outlay/Reserves

#### 3rd Quarter FY14/15

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<th>Capital Outlay Project</th>
<th>Total Budget</th>
<th>1st Quarter</th>
<th>2nd Quarter</th>
<th>3rd Quarter</th>
<th>4th Quarter</th>
<th>Total</th>
<th>% Under/(Over) Total Budget</th>
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<td>Perimeter Fencing</td>
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<td>8,083</td>
<td>63,448</td>
<td>91,443</td>
<td>161,574</td>
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<tr>
<td>Lopez Turnouts SCADA System</td>
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<td>13,245</td>
<td>13,126</td>
<td>13,336</td>
<td>39,759</td>
<td>39,759</td>
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<td>WTP Membrane Filtration Module Addition</td>
<td>833,619</td>
<td>9,023</td>
<td>329,736</td>
<td>22,842</td>
<td>362,261</td>
<td>362,261</td>
<td>56.97%</td>
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<td>Computer Replacement Project</td>
<td>75,066</td>
<td>287</td>
<td>50,181</td>
<td>-</td>
<td>66,466</td>
<td>66,466</td>
<td>32.71%</td>
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<td>Other Capital Projects</td>
<td>36,123</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<tr>
<td><strong>Total Capital Outlay</strong></td>
<td>1,415,734</td>
<td>29,745</td>
<td>406,599</td>
<td>177,602</td>
<td>-</td>
<td>614,164</td>
<td>-</td>
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<td><strong>Total Budget</strong></td>
<td>1,415,734</td>
<td>354,548.50</td>
<td>354,548.50</td>
<td>354,548</td>
<td>354,548</td>
<td>1,419,754</td>
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<tr>
<td><strong>Variance (over)/under Cumulative</strong></td>
<td>325,205</td>
<td>233,555</td>
<td>406,651,50</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<tr>
<td><strong>% Variance (over)/under Cumulative</strong></td>
<td>92%</td>
<td>39%</td>
<td>42%</td>
<td>-</td>
<td>-</td>
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</tr>
</tbody>
</table>
May 21, 2015

MEMORANDUM

TO: Flood Control Zone 3 Advisory Committee

FROM: Jennifer Colvard, Accountant

VIA: John Diodati, Public Works Department Administrator

SUBJECT: Flood Control Zone 3 Third Quarter Budget Status FY14/15

Recommendation

The item to be received and filed.

Discussion

Attached please find the Third quarter budget versus actual results for the fiscal year 2014/15. Overall, expenditures are under budgeted levels by $740,000 or roughly a 20% savings.

Routine O&M shows expenditures under budget by 0.4% or $8,000, which is right on budget at the third quarter. Staff anticipate O&M will continue to be within budgeted levels at year end.

Non Routine O&M has savings of 82% or $281,000. This is primarily in the Lopez Water Rights/Habitat Conservation Plan (HCP) expenditures and Pipeline Valve Replacement/Pigging Entitlement. An estimated $50,000 will be spent on HCP by year end, the remaining encumbered amounts will roll over into FY 15/16. Work is anticipated to be done by year end. Preliminary pigging design will begin FY15-16 with construction efforts scheduled through FY17-18.

Capital Outlay experienced a savings of 42% or $450,000 from budgeted levels mainly in the following projects:

1. Perimeter Fencing – Project is complete
2. Lopez Turn-out SCADA
3. 6th Rack Filtration Module Addition
4. Lopez Computer Replacement Project

Other Agency Involvement/Impact

The agencies involved are City of Arroyo Grande, City of Grover Beach, City of Pismo Beach, Oceano Community Services District, County Service Area 12, subcontractors of CSA 12 including Port San Luis Harbor District and Avila Beach Community Services District.

Financial Consideration

All agencies are current on their payments.
TO: Zone 3 Advisory Committee

FROM: Mark Hutchinson, Deputy Director

DATE: May 21, 2015

SUBJECT: Conflict of Interest

Introduction
At your March 19, 2015 meeting your Committee requested an overview of potential Conflict of Interest issues that the Advisory Committee members should be aware of, specifically on capital projects. The following information was developed in conjunction with County Counsel. It is important to note that there is no overarching rule regarding conflicts of interest. Each Advisory Committee member has the responsibility to determine if they have a conflict of interest on any particular matter which may come before the Advisory Committee.

Background
Pursuant to the terms of the Zone 3 Water Supply Contracts, the Advisory Committee is an “advisory committee” comprised of representatives from the Flood Control & Water Conservation District (FCWCD) and a representative from each of the Zone 3 Contractors (Grover Beach, Pismo Beach, CSA 12 and Oceano CSD), all appointed by the FCWCD “to advise the District” on matters relating to the Zone 3 Project and the Water Supply Contracts (see Article 1 of the Water Supply Contracts) (underline added). The FCWCD is contractually required to present certain enumerated items (e.g. the annual budget) to the Advisory Committee “for advice and comment” prior to final presentation to the Board of the FCWCD (see Article 24 of the Water Supply Contracts). The Advisory Committee may at times “advise” the FCWCD on other matters.

Capital Projects Process
Typically, capital projects are not considered individually by the Advisory Committee but are included as one of many items in the annual Fiscal Year Budgets that are presented to the Advisory Committee for review and comment. The Advisory Committee reviews and makes
recommendations to approve the entire budget. Budgets are subsequently approved by the Board of Supervisors.

For individual capital projects, the Department of General Services assists County departments in obtaining contractual services. For contractual services less than $24,999, the Department of General Services requests proposals from consulting firms on the FCWCD’s established consultant list(s) for various services. Proposals are ranked according to pre-established criteria by FCWCD staff, and the top-ranked consultant is engaged via a Purchase Order. Because this process is directed by adopted County/District purchasing policies, neither the Advisory Committee nor the Technical Advisory Committee is consulted regarding the Proposals submitted or the award of the Purchase Order.

For services costing over $25,000, the Department of General Services may require a more detailed Request for Proposals or Statement of Qualifications. For services over $50,000, the contract must be approved by the Board of Supervisors. For contracts over $50,000, the Advisory Committee is often consulted. A most recent example is the execution of the Habitat Conservation Plan contract which went through a detailed process and was brought to the Advisory Committee for review and recommendation (“advice”).

**Conflict of Interest Statutes**
There are several statutes and accompanying regulations that govern conflicts of interest. As noted above, it is the responsibility of each Advisory Committee member to determine if they have a conflict of interest on any particular matter which may come before your committee.

**Financial Conflict of Interest (Political Reform Act, Government Code §§ 87100 et seq.):**

The Political Reform Act (PRA) disqualifies “public officials” from participating in “government decisions” in which they have a “financial interest” (see Government Code § 87100). The PRA defines a “public official” as “every member, officer, employee or consultant of a state or local government agency” (emphasis added) (see Government Code § 82048).

Regulations promulgated by the Fair Political Practices Commission (FPPC) interpret “members” to mean members of all boards or commissions with “decision-making authority” (see FPPC Regulation § 18701) (emphasis added). The FPPC regulations further provide that a board or commission has decision-making authority if:

i. it may make a final governmental decision;
ii. it may compel or prevent a governmental decision or,
iii. it makes substantive recommendations that are, and over an extended period of time have been, regularly approved without significant amendment or modification by another official or governmental agency.

The FPPC regulations interpret “consultants” to mean individuals delegated specified decision-making authority or individuals acting in a “staff capacity” while participating in the making of a
decision or performing the duties of an officer or employee of a government agency. Examples of the type of delegated decision-making authority that may make a consultant a “public official” include the power to approve a rule or regulation or to issue, deny or suspend a permit. Factors to consider in determining whether a person is working in a staff capacity include whether the duties involve general advice or assistance, as opposed to a single or limited number of projects.

As members of the Advisory Committee, you are neither an officer nor an employee of the FCWCD. Advisory Committee members are unlikely to be a “member” because the Zone 3 Advisory Committee does not have decision-making authority unless the Board of the FCWCD has regularly approved the Committee’s recommendations without amendment. Advisory Committee members should be aware of the definition of a “consultant” and determine if they meet this definition.

**Financial Interests in Contracts (Government Code §§ 1090 et seq.):**
Section 1090 prohibits members of the Legislature, state, county, district, judicial district and city officers and employees from being financially interested in any contract made by them in their official capacity or by any body or board of which they are members.

The section 1090 prohibition applies to persons in advisory positions to contracting agencies if they participate in the making of a contract through their advisory function (see Schaefer v. Berinstein (1955) 140 Cal.App.2d 278; City Council v. McKinley (1978) 80 Cal.App.3d 204). Although Section 1090 refers to a contract “made” by the officer or employee, the word “made” is not used in the statute in its narrower and technical contract sense but is used in the broad sense to encompass such embodiments in the making of a contract as preliminary discussions, negotiations, compromises, reasoning, planning, drawing of plans and specifications and solicitation for bids (see Millbrae Assn. for Residential Survival v. City of Millbrae (1968) 262 Cal.App.2d 222). Advisory committee members (unlike Board members) with a financial interest in a contract may avoid a conflict by disqualifying themselves from any participation in connection with the contract (see 82 Ops.Cal.Atty.Gen. 126).

Based on the above, participating at all in the making of a contract would violate Section 1090. Any participation in discussions that constituted “preliminary discussions, negotiations, reasoning, planning, drawing of plans and specifications or solicitation for bids,” would violate Section 1090. It is noted that any contract made in violation of Section 1090 is void and unenforceable and that any payments made to the contracting party must be returned. In addition, a person who willfully aids or abets an officer or person in violating the Section 1090 prohibition is punishable by a fine of not more than $1,000 or by imprisonment and is forever disqualified from holding any office in the state (see Government Code § 1097).

**Appearance of Financial Conflict of Interest (Common Law):**
The common law doctrine requires a public officer “to exercise the powers conferred on him with disinterested skill, zeal, and diligence and primarily for the benefit of the public.”
The above analysis with respect to Section 1090 applies here as well and the existence of a conflict depends on the nature of an Advisory Committee member’s involvement in the consideration of the project.

**Incompatible Activities (Government Code §§ 1125 et seq.):**
Section 1126 prohibits a local agency officer or employee from engaging in any employment activity that is inconsistent or incompatible with his duties as a local agency officer or employee. Section 1126 is not self-executing and the agency determines which outside activities fall within the prohibition.

**Conclusion**
Advisory Committee member participation on the Zone 3 Advisory Committee is unlikely to render that member an “officer” or “employee” of the FCWCD for purposes of Section 1126. In addition, the FCWCD has not adopted an incompatible activities statement for Advisory Committee members.

Additional information for Advisory Committee members regarding conflict of interest issues is available from the California Attorney General at: http://ag.ca.gov/publications/coi.pdf and/or the California Fair Political Practices Commission at: http://www.fppc.ca.gov/

Advisory Committee members may also wish to consult their individual agency counsels for advice on specific projects or matters that may come before the Committee.
TO: Zone 3 Advisory Committee

FROM: Mark Hutchinson, Deputy Director

DATE: May 21, 2015

SUBJECT: Surplus Water Update

Recommendation

- Support efforts by Zone 3 Contractors to recharacterize 2014 water from “Lopez Water” to “State Water” in order to maximize water management opportunities.

Discussion

At your March 19, 2015 meeting your Committee adopted recommendations that the Board of Supervisors:

1. Declare Surplus Water as described in Article 4 Sections (C) and (D) of the Water Supply Contracts, in the amount of 1,231 acre feet, or as adjusted by final year-end water accounting, and (Vote was 5-1 with the Oceano Community Services District dissenting)

2. Continue to implement the Low Reservoir Response Plan pursuant to the Board’s Resolution 2014-377 adopted on December 16, 2014. (Vote was 6-0 in favor)

At the time of your March meeting an April Board of Supervisors meeting was anticipated. However, extra time is being taken to fully consider a request that was identified by the Oceano Community Services District at the March meeting.
The Oceano Community Services District (OCSD) did not support recommendation #1 above because the Surplus Water calculations did not reflect a December 31, 2014 request by OCSD to recharacterize 364 acre feet of State Water in lieu of Zone 3 Water already delivered to OCSD between April 1, 2014 and December 31, 2014. County staff had reviewed OCSD’s request and determined that although the water supply contracts for Lopez Water and State Water allow revisions in an agency’s annual water supply requests, both contracts specify that such revisions be made “…before the desired change is to become effective” (State Water) and “…prior to the date the desired change is to become effective” (Lopez Water). Therefore, such an after-the-fact exchange is inconsistent with the language of both contracts.

However, because the State Water that is the subject of OCSD’s request is currently stored in Lopez Reservoir, the proposed water accounting change is possible, provided that all parties to the contract agree. Because the contracts with each of the Lopez and State Water subcontractors connected to the Zone 3 distribution system are “like contracts”, all of the subcontractors must agree. After consideration of OCSD’s proposal by the Technical Advisory Committee, County staff is currently seeking such agreement, and has extended the same option to all of the subcontractors in the same position; that is, subcontractors that receive both Lopez and State Water through the Lopez distribution system. This includes the Oceano Community Services District, City of Pismo Beach, Avila Community Services District, Avila Valley Mutual Water Company, and San Luis Coastal Unified School District.

The proposed water accounting change would allow any participating agency to “carry over” an additional amount of Lopez Water into WY 15-16, pursuant to the LRRP. Participating agencies would also need to pay the variable costs of State Water (The majority of costs of both Lopez and State Water are paid whether water is delivered or not, as these costs are independent of water pumping and treatment costs). In as much as the requested water accounting change assists Zone 3 agencies in managing their water portfolio as best suits the agency, staff has identified no reason to object to the change given contractual obligations are satisfied.

**Status**

As of the date of this report, three eligible agencies have indicated their participation in the recharacterization (Oceano CSD, City of Pismo Beach, and Avila CSD). Several agencies have expressed support, but need time to place the issue on their respective governing body agendas. We expect these actions will occur before the end of May. Since water supply amounts are as established by the Low Reservoir Release Plan, most agencies have the information necessary to manage their water supplies for the coming year and are therefore not dependent on the declaration of Surplus Water as in past years.

**Attachments**

April 7, 2015 State Water / Lopez Water Management Opportunities Letter
May 6, 2015 Request for Agreement not to Object to One-Time Extension of Time Letter
April 7, 2015

Oceano Community Services District
1655 Front Street
Oceano, CA 93445

SUBJECT: State Water/ Lopez Water Management Opportunities

Dear Mr. Ogren,

This letter is to notify you of a potential water management opportunity regarding your agency’s entitlements to State Water and Lopez Water, both delivered through the Zone 3 distribution system, subject to the limitations set forth below. With the implementation of the Low Reservoir Response Plan for the Lopez system, agencies now have the opportunity to “carry over” unused Lopez water in an agency specific water account. Consequently, some agencies have inquired about the ability to implement a retroactive water accounting change to effectively exchange Lopez water used in 2014 for a like amount of unused State Water. This potential exchange is possible in part due to the Emergency Drought Declaration by the State and the County in which the Flood Control District deemed it prudent during the spring of 2014 to move State Water into the Lopez Reservoir for the benefit of State Water subcontractors connected to the Lopez turnout. Therefore, this potential exchange could be accommodated up to a certain limit, using the stored State Water in the Lopez Reservoir.

In order to affect any requested water accounting changes, a key process needs to occur:

Both the Water Supply Contracts for Lopez Water and the Water Supply Agreements for State Water expressly prohibit after-the-fact changes in water deliveries. Article 8 paragraph (c) (3) of the State Water agreement states “The water delivery schedule may be amended by the District upon the District’s initiative or upon the Contractor’s written request. Proposed amendments shall be submitted by the Contractor within a reasonable time before the desired change is to become effective, and shall be subject to review and modification by the District in like manner as the schedule itself” [underline added]. Article 9 paragraph (C) of the Lopez contract states “Proposed amendments to such schedules shall be submitted by the Agency within a reasonable time prior to the date the desired change is to become effective, and they shall be subject to review and modification by the District in the same manner as the preliminary water schedule described in paragraph (B) above” [underline added]. However, parties to a contract can choose to “waive” a contractual requirement. Given that the Lopez Contract is a “like contract” with the contracts of the other Lopez contractors,
any such waiver must be fair and equitable to all parties. Therefore, we are prepared to seek written concurrence from all of the other Lopez contractors in order to meet any water accounting exchange requests. Further, since the State Water contracts are also “like contracts”, we are prepared to make the same request for written concurrence from the District’s State Water subcontractors.

If you have any questions about this potential opportunity or would like to discuss the option further, please contact Deputy Director Mark Hutchinson at mhutchinson@co.slo.ca.us. In order to coordinate any potential exchanges with the various entities involved in managing water accounts all exchange processes will need to be completed before the end of May 2015.

Sincerely,

WADE HORTON
Director of Public Works

C  Mark Hutchinson, Deputy Director

File:  CF 970.01.01

L:\MANAGMNT\APR15\Notification to Z3 State Water Contractors ltr.docx.MH.mj
May 6, 2015

City of Pismo Beach
Oceano Community Services District
City of Grover Beach
City of Arroyo Grande
County Service Area 12

Subject: Request for Agreement not to Object to One-Time Extension of Time

Dear Zone 3 Water Contractor:

Last month Zone 3 contractors were notified of a water management opportunity regarding entitlements of State Water and Lopez Water, both delivered through the Zone 3 distribution system. With the implementation of the Low Reservoir Response Plan for the Lopez system agencies now have the opportunity to “carryover” unused Lopez water in an agency specific water account. Consequently, agencies that are subscribed to both Zone 3 and State Water have inquired about the ability to implement a retroactive water accounting change to effectively exchange Lopez water used in 2014 for a like amount of unused State Water. This exchange is possible because during the spring of 2014 State Water was moved into Lopez Reservoir for the benefit of State Water subcontractors connected to the Lopez turnout. Therefore, this exchange could be accommodated using the stored State Water in Lopez Reservoir.

In order to affect any requested water accounting changes, a key process needs to occur, because it requires the Flood Control District to extend the period of time within which an agency can request an amendment to its water delivery schedule for the water year ending on March 31, 2015:

Both the Water Supply Contracts for Lopez Water and the Water Supply Agreements for State Water do not permit after-the-fact changes in water deliveries at the request of the agency. Article 8 paragraph (c) (3) of the State Water agreement states “The water delivery schedule may be amended by the District upon the District’s initiative or upon the Contractor’s written request. Proposed amendments shall be submitted by the Contractor within a reasonable time before the desired change is to become effective, and shall be subject to review and modification by the District in like manner as the schedule itself” [underline added]. Article 9 paragraph (C) of the Lopez contract states “Proposed amendments to such schedules shall be submitted by the Agency within a reasonable time prior to the date the desired change is to become effective, and they shall be subject to review and modification by the District in the same manner as the preliminary water schedule described in paragraph (B) above” [underline
added]. However, the Flood Control District can extend the time period within which each agency can request an amendment to the water delivery schedules pursuant to Article 8 paragraph (c) (3) of the State Water agreement and Article 9 paragraph (C) of the Lopez contract provided that none of the agencies object to said extension. In addition, Article 23 (C) of the Lopez contracts state that any amendment to said contracts must be approved by the unanimous written consent of all agencies.

Therefore, this letter seeks your written agreement not to object to the one time extension of the time period within which each agency can request an amendment to its water delivery schedule for the water year ending on March 31, 2015 (see attached). Your response by May 19 would be greatly appreciated, however, if you need more time to process an official response please let us know.

If you have any questions about this opportunity or would like to discuss this process further, please contact me at (805) 781-5458 or mhutchinson@co.slo.ca.us.

Sincerely,

MARK HUTCHINSON
Director of Public Works

c Wade Horton, Director of Public Works

File: CF 970.01.01
MEMORANDUM

TO: Zone 3 Advisory Committee

FROM: Jeff Lee, PE
Capital Project Manager

DATE: May 7, 2015

SUBJECT: Capital Projects Update

Project Updates:

- 6th Rack Addition
  - Fabrication by Pall: delivery is tentatively scheduled for week of May 22, 2015
  - Rack installation and improvements
    - To be bid through County Purchasing for installation in late June/July

- Turnout SCADA Project
  - Panel fabrication bids closed on May 6, 2015 with Energy Systems Engineering (ESE) as the apparent low-bidder
  - District will be executing a contract through County Purchasing
  - Cannon is under contract to install the panels after fabrication
    - Installation anticipated to be completed in June/July

- Equipment Replacement Program
  - VFD and other Plant System Audits
    - Audit budget has been expended for this fiscal year
    - Audit and discussion of equipment purchases are included in the FY15-16 budget
TO: Zone 3 Advisory Committee

FROM: Mark Hutchinson, Deputy Director

DATE: May 21, 2015

SUBJECT: Low Reservoir Response Plan Update and Action

Recommendation

- Reduce Municipal Water Deliveries by 10% by Implementing the Adaptive Management Component of the Low Reservoir Response Plan.

Discussion

The Low Reservoir Response Plan (LRRP), adopted by the Board of Supervisors on December 16, 2014 after the endorsement of all of the Zone 3 agencies, contains an Adaptive Management component that allows the initial prescribed actions to be modified and adapted to specific drought conditions (see page 3 of the attached LRRP). On April 28, 2015 the Technical Advisory Committee (TAC) held a special meeting to consider the most recent reservoir storage projection (attached). The storage projection shows that the reservoir will drop to below the 15,000 acre foot storage level sometime around October 1st. Pursuant to the LRRP, municipal deliveries are reduced by 10% at that level (see page 4 of the attached LRRP). This reduction would occur approximately ½ way through the Lopez Water Year (April 1 – March 31) and is retroactive, that is, it applies to the entire water supply for the current water year.

In order to ensure that agencies are able to accurately plan for the available water supply, the TAC voted to recommend that your Committee invoke Adaptive Management and reduce Municipal Deliveries at this time. The TAC’s recommendation is based on current drought
conditions and the need to fully inform the community regarding needed conservation in order to preserve both surface and groundwater supplies.

If your Committee determines to reduce municipal deliveries by 10% that water will remain in the reservoir and available for use in later years should the drought persist. It should be noted that if the reservoir climbs above 15,000 acre feet in storage the LRRP would call for the restoration of the 10% reduction; the TAC has considered this potential and expects to make recommendations to your Committee based on the results of winter rainfall and resultant inflows to the reservoir.

**Attachments**

Lopez Reservoir Storage Projections – 5/05/2015  
Lopez Water Supplies Table (See Note 1)  
Low Reservoir Response Plan

NOTE 1: Table does not show the 2014 Zone 3 / State Water Recharacterization amounts. If that project is approved carryover amounts for Pismo beach, Ocean CSD, and Avila CSD will increase)
Lopez Reservoir Storage Projections  - Revised: 5/5/2015
(precipitation scenario source: www.LongRangeWeather.com)

Notes:
- For "Dry Months", projected increases and/or decreases in storage estimated to mimic 2013 conditions.
- For "Wet Months", projected storage declines assume annual downstream release of 4,200 AFY and deliveries of 4,530 AFY.
- For "Wet Months, projected storage increases based on historic trends from actual storm data for the period of 12/1993 through 6/2011.
- Storage projection for "Wet Months" assume that unsaturated conditions exist.
- Monthly rainfall projections assumed to occur during the first week of each month.
- Assumed rainfall: 100% of average rainfall.
<table>
<thead>
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<th>Entitlement</th>
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<th>Actual Deliveries</th>
<th>Total Deliveries</th>
<th>Surplus by Contract</th>
<th>LRRP Water Accounts for Water Year 15-16</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Entitlement</td>
<td>Surplus</td>
<td>Total Available</td>
<td>April 2014-Mar 2015</td>
<td>WY 2014/15</td>
<td>(Superceded by LRRP)</td>
<td></td>
</tr>
<tr>
<td>Arroyo Grande</td>
<td>2,290</td>
<td>1,176</td>
<td>3,466</td>
<td>2,290</td>
<td>295</td>
<td>0</td>
<td>620</td>
</tr>
<tr>
<td>Oceano CSD</td>
<td>303</td>
<td>156</td>
<td>459</td>
<td>303</td>
<td>24</td>
<td>327</td>
<td>0</td>
</tr>
<tr>
<td>Grover Beach</td>
<td>800</td>
<td>411</td>
<td>1,211</td>
<td>800</td>
<td>17</td>
<td>817</td>
<td>0</td>
</tr>
<tr>
<td>Pismo Beach (1)</td>
<td>892</td>
<td>458</td>
<td>1,350</td>
<td>892</td>
<td>458</td>
<td>1,350</td>
<td>0</td>
</tr>
<tr>
<td>CSA 12</td>
<td>245</td>
<td>126</td>
<td>371</td>
<td>131</td>
<td>0</td>
<td>131</td>
<td>114</td>
</tr>
<tr>
<td>Sub Totals</td>
<td>4,530</td>
<td>2,327</td>
<td>6,857</td>
<td>4,416</td>
<td>794</td>
<td>5,210</td>
<td>114</td>
</tr>
<tr>
<td>Downstream</td>
<td>4,200</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>8,730</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NOTES**
1. Includes subcontract for 92 AF from CSA12

**CALCULATIONS**
- Columns A-D from 8.19.2014 surplus and emergency drought relief water
- Columns E-H actual water deliveries for water year 14/15
- Columns I-J surplus water calculations using 8.19.2014 method
- Columns K-N = LRRP method used by Board of Supervisors on 12.16.2014
- Column K (Carryover) is the difference between column D (total available) and column H (Estimated total deliveries)
- Column M (Total available at 20,000) is the sum of the agency’s entitlement plus carryover (column K)
- Column N (Total available at 15,000) is the sum of 90% of the agency’s entitlement plus carryover (column K)
Low Reservoir Response Plan

for the

San Luis Obispo County Flood Control and Water Conservation District
Zone 3

December 16, 2014
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1 INTRODUCTION, PURPOSE AND PLAN ADOPTION

The Low Reservoir Response Plan (LRRP) describes a set of actions that the San Luis Obispo County Flood Control and Water Conservation District (District) Zone 3 will implement when the amount of water in storage within the Lopez Reservoir drops below 20,000 Acre-Feet (AF) provided that the District’s Board of Supervisors has declared an emergency related to Zone 3. The purpose of the LRRP is to limit downstream releases and municipal diversions from Lopez Reservoir during periods of low reservoir storage (i.e. less than 20,000 AF) to preserve water within the reservoir, above the minimum pool level, for a minimum of 3 to 4 years under continuing drought conditions. The criteria for reducing municipal diversions and downstream releases are summarized in Section 3.

Droughts have unpredictable impacts on water supplies. The duration of droughts and the actual amount of rainfall and run-off during droughts can differ significantly. As a result, the LRRP has been developed to provide an initial set of prescribed actions combined with an adaptive management approach. The purpose of the LRRP is to act as the guiding document during drought emergencies, as outlined in the Interim Downstream Release Schedule (IDRS). The initial prescribed actions establish baseline actions, and several adaptive management scenarios are included so that actual hydrological conditions can be evaluated during a drought. In summary, ongoing evaluation of actual hydrological conditions is needed during a drought, and through the adaptive management approach, prescribed actions can be modified, if needed, so that the 3-4 year target can be achieved.

The District’s Board of Supervisors (BOS) is responsible for final adoption of the LRRP. Prior to adoption by the Board of Supervisors, the following steps are necessary:

1. Development of the draft LRRP guided by the Zone 3 Technical Advisory Committee (TAC).
2. Review of the draft LRRP with Zone 3 agricultural stakeholders.
3. Consideration of policy direction that may be provided by any of the governing boards of the Zone 3 agencies as the draft LRRP is being developed.
4. Review and approval by the Zone 3 Advisory Committee (AC).
5. Formal approval by the governing boards of the Zone 3 member agencies, by resolution, with appropriate findings to address the following:
   a. The California Environmental Quality Act (CEQA).
   b. Emergency provisions that are unique and necessary to the LRRP, but which may differ from contract provisions that control Zone 3 operations and deliveries during normal operating conditions.
6. Final approval by the BOS.
7. Enacting the LRRP as described in this document and outlined in Appendix A.

2 BACKGROUND

Since completion of its construction in 1969, the Lopez reservoir has experienced extended periods of low reservoir inflow that have led to decreased storage levels within the lake. Analysis of historical storage data from Lopez Reservoir identified that the lowest storage water level (16,455 AF) within the reservoir
occurred in November of 1992. Figure 1 shows monthly storage levels within Lopez Reservoir since April 1969. Since 1992, there have been significant changes in dam operations, (e.g. Interim Downstream Release Schedule (IDRS) implementation) that affect the amount of water that is released and diverted from the reservoir on an annual basis. Modified operations and historic drought conditions have highlighted the need for evaluation of LRRP reduction scenarios.

![Lopez Reservoir Storage](image)

**Figure 1. Lopez Reservoir Storage**

### 3 LRRP ELEMENTS

#### 3.1 ENACTING THE LRRP AND INITIAL PRESCRIBED ACTIONS

The LRRP is automatically enacted if the total volume of water in the Lopez Reservoir falls below 20,000 AF and the BOS has declared an emergency related to Zone 3. The initial prescribed actions, once the LRRP is enacted, are as follows:

- Reductions in entitlement water deliveries as set forth in Table 1; and
- Reductions in downstream releases as set forth in Table 2, with actual releases timed to best meet the needs of agricultural stakeholders and to address environmental requirements; and
- No new allocations of Surplus Water from unreleased downstream releases; and
• Extension of time that agencies can take delivery of existing unused water; throughout the duration that the Drought Emergency is in effect, subject to evaporation losses if the water is not used in the year originally allocated.

3.2 ADAPTIVE MANAGEMENT
To provide the District, the Zone 3 agencies and agricultural stakeholders with sufficient flexibility to adapt to changing drought conditions and to address the environmental requirements, the LRRP includes an adaptive management component that allows the initial prescribed actions to be modified and adapted to the specific drought conditions. The steps for modifying the initial prescribed actions are outlined below and are show in Appendix A.

1. The TAC will review several factors including the time of year that the LRRP is enacted, when the reservoir level drops to lower triggers, and Hydrologic Conditions including but not limited to: predicted climatic conditions; anticipated reservoir inflow; and the availability of the Zone 3 agencies’ other water supplies.

2. If determined to be necessary, the TAC will make a recommendation to the AC on a strategy for modifying the initial prescribed actions, hereafter referred to as an Adaptive Management Strategy.

3. Upon review of the TAC’s recommendation, the AC will vote to approve, deny, modify or continue consideration of the Adaptive Management Strategy for a period not to exceed 30 days, at which time the AC will act to approve, deny or modify. If approved by the AC, the Adaptive Management Strategy will be implemented 14 days following its approval. If the Adaptive Management Strategy is approved, denied, or modified by the AC, AC members, Zone 3 member agencies, and other 3rd parties in interest may appeal to the BOS, within 14 days. If no appeal is made to the BOS, the AC action will be final.

4. If appealed to the BOS, the BOS action shall be final.

3.3 REDUCTION & RECOVERY TRIGGERS
To provide the District, Zone 3 agencies and the agricultural stakeholders with an initial framework for water supply planning, Reduction & Recovery Triggers, tied to the amount of water within the reservoir, were developed for the LRRP. Under the initial prescribed actions the Reduction & Recovery Triggers were set for the following storage levels: 20,000; 15,000; 10,000; 5,000; and 4,000 AF. As the amount of water in the reservoir drops below or rises above these triggers, the TAC will review the hydrologic condition and if necessary, utilize adaptive management to modify municipal diversions and downstream releases to meet the objectives of the LRRP.

Example scenarios provided in Appendix B show how the reservoir would respond to the implementation of the initial prescribed actions and an alternate reduction strategy under various historical hydrological patterns.
3.4 MUNICIPAL DIVERSION REDUCTIONS
Upon enactment of the LRRP, the initial prescribed actions dictate that municipal diversions are to be reduced according to the reduction strategy described in Table 1, which includes Reduction Triggers, reduction percentages and resulting municipal diversions. This municipal diversion reduction strategy may be modified through adaptive management, following the protocol outlined in Section 3.2.

Table 1. Initial Prescribed Municipal Diversion Reduction Strategy

<table>
<thead>
<tr>
<th>Amount of Water In Storage (AF)</th>
<th>Municipal Diversion Reduction</th>
<th>Municipal Diversion (AFY)1</th>
</tr>
</thead>
<tbody>
<tr>
<td>20,000</td>
<td>0%</td>
<td>4,530</td>
</tr>
<tr>
<td>15,000</td>
<td>10%</td>
<td>4,077</td>
</tr>
<tr>
<td>10,000</td>
<td>20%</td>
<td>3,624</td>
</tr>
<tr>
<td>5,000</td>
<td>35%2</td>
<td>2,941</td>
</tr>
<tr>
<td>4,000</td>
<td>100%</td>
<td>0</td>
</tr>
</tbody>
</table>

3.5 DOWNSTREAM RELEASE REDUCTIONS
Upon enactment of the LRRP, the initial prescribed actions dictate that downstream releases are to be reduced according to the reduction strategy described in Table 2, which includes Reduction Triggers, reduction percentages and resulting downstream releases. The Initial Prescribed Downstream Release Reduction Strategy was developed through a collaborative process that included input from the District and agriculture and municipal stakeholders. The resulting downstream releases represent the maximum amount of water that can be released. The District will control the timing of the reduced releases to meet the needs of the agricultural stakeholders and to address environmental requirements. This downstream release reduction strategy may be modified through adaptive management, following the protocol outlined in Section 3.2.

---

1 The actual amount of water diverted may vary as agencies extend the delivery of their Lopez Entitlement, as described in Section 3.6.

2 The 35% reduction provides sufficient water to supply 55 gallons per capita per day (GPCD) for the estimated population of the Zone 3 agencies (47,696 in 2010 per the 2010 Zone 3 UWMP). 55 GPCD is the target residential indoor water usage standard used in California Department of Water Resource’s 2010 UWMP Method 4 Guidelines.
### Table 2. Initial Prescribed Downstream Release Reduction Strategy

<table>
<thead>
<tr>
<th>Amount of Water In Storage (AF)</th>
<th>Downstream Release Reduction</th>
<th>Downstream Releases (AFY)³</th>
</tr>
</thead>
<tbody>
<tr>
<td>20,000</td>
<td>9.5%</td>
<td>3,800</td>
</tr>
<tr>
<td>15,000</td>
<td>9.5%</td>
<td>3,800</td>
</tr>
<tr>
<td>10,000</td>
<td>75.6%</td>
<td>1,026</td>
</tr>
<tr>
<td>5,000</td>
<td>92.9%</td>
<td>300</td>
</tr>
<tr>
<td>4,000</td>
<td>100.0%</td>
<td>0</td>
</tr>
</tbody>
</table>

### 3.5.1 HCP Reduction Strategy

An alternate downstream reduction strategy that could be implemented through adaptive management includes the Habitat Conservation Plan (HCP) Reduction Strategy. Under the HCP Reduction Strategy, downstream releases would be reduced according to criteria outlined in the proposed HCP Water Release Program for consecutive low inflow years. Under this strategy, downstream releases would be either 3 cfs or equal to the average inflow over the previous 14-day period, whichever is less.

### 3.6 EXTENDED DELIVERY PROVISIONS

Once the LRRP is enacted, and in order to promote conservation and a reduction in the demand on Zone 3 water, Zone 3 member agencies will be provided the ability to extend the time that they may have water delivered, while the BOS drought emergency is in effect. The following is how water allocations to Zone 3 member agencies will be determined at the beginning of each water year while the LRRP is in effect. It is important to note that during a water year, increases and decreases in allocations are possible as a result of adaptive management strategies.

1. At the end of each Water Year (WY) (March 31st), the amount of unused Lopez water from the previous WY will be calculated and documented for each member agency for later use.
2. On April 1st, the quantity of Entitlement Water for the new WY will be documented for each agency in accordance with the LRRP determinations. Unused water from the prior WY is subject to evaporation losses, which are further described in Section 3.6.1.

³ These downstream releases represent the maximum amount of water that can be released. Actual releases may be less if releases can be reduced while still meeting the needs of the agricultural stakeholders and addressing the environmental requirements.
3.6.1 Evaporation Losses
While unused water from the prior WY is retained within the Lopez Reservoir, it is subject to evaporation losses. Evaporation losses are to be calculated quarterly and applied to the total amount of unused prior WY water retained by each agency at the end of the quarter. Evaporation losses will be calculated by comparing the surface area of the reservoir with the unused water against what the surface area would be if there were no unused water retained in the reservoir. Evaporation estimates from the District’s weather station would then be applied to the difference in surface area to calculate the increased evaporation losses due to the storage of the unused water. The unused water evaporation losses will be subtracted from each agency’s unused water at a rate proportional to the amount of unused water retained by each individual agency.
APPENDIX A. LRRP ENACTMENT & ADAPTIVE MANAGEMENT FLOW CHART
LRRP Enactment & Adaptive Management Flow Chart

Legend

- [green] → Approved/Yes/Proceed
- [red] → Rejected/No
- [purple] → Appeal

- Reservoir Storage Less than 20,000 Acre Feet
  - Has BOS Declared Emergency?
    - LRRP Enacted
      - Continue Implementation of IDRS
        - Initial Prescribed Actions Implemented
          - TAC Reviews Hydrologic Conditions
            - TAC Identifies need for Adaptive Management Strategy
              - TAC Recommends Adaptive Management Strategy
                - AC Reviews Adaptive Management Strategy
                  - BOS Reviews Adaptive Management Strategy
                    - Adaptive Management Strategy Implemented

- Appeal Process
APPENDIX B. REDUCTION STRATEGY EVALUATION
### Scenario A-1-Water

**Year 1989/90 Inflow & Rainfall**

<table>
<thead>
<tr>
<th>Year</th>
<th>Inflow</th>
<th>Rainfall</th>
<th>Evap.</th>
<th>Municipal Reduction</th>
<th>Municipal Diversions</th>
<th>Downstream Releases</th>
<th>Change in Storage</th>
<th>Total Storage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>20,000</td>
</tr>
<tr>
<td>1</td>
<td>3,440</td>
<td>465</td>
<td>2,240</td>
<td>0%</td>
<td>4,530</td>
<td>3,800</td>
<td>-6,666</td>
<td>13,334</td>
</tr>
<tr>
<td>2</td>
<td>3,440</td>
<td>465</td>
<td>1,691</td>
<td>10%</td>
<td>4,077</td>
<td>3,800</td>
<td>-5,664</td>
<td>7,671</td>
</tr>
<tr>
<td>3</td>
<td>3,440</td>
<td>465</td>
<td>1,260</td>
<td>20%</td>
<td>3,624</td>
<td>1,026</td>
<td>-2,006</td>
<td>5,665</td>
</tr>
<tr>
<td>4</td>
<td>3,440</td>
<td>465</td>
<td>1,077</td>
<td>20%</td>
<td>3,624</td>
<td>1,026</td>
<td>-1,823</td>
<td>3,842</td>
</tr>
</tbody>
</table>

1. Value assumed to be same as Water Year 1989/90 measurement.

2. Evaporation assumed to equal the maximum historical value between April 1970 and March 2014 (76.25 in/yr in WY 1971-72) applied to the previous year’s total lake surface area. Lake surface area estimated based on a lookup table provided by the County, which uses a 2002 survey to correlate reservoir elevation, storage, and surface area.

3. Municipal diversions are assumed to be the same as the contract amount for the duration of the first year. Years following are dependent upon the storage at the end of the water year and municipal reduction assumptions.

4. Release volumes are controlled by the Initial Prescribed Downstream Release Reduction Strategy, which was developed through a collaborative effort by the District and agriculture and municipal stakeholders.

### Scenario A-2-Water

**Year 1989/90 Inflow & Rainfall**

<table>
<thead>
<tr>
<th>Year</th>
<th>Inflow</th>
<th>Rainfall</th>
<th>Evap.</th>
<th>Municipal Reduction</th>
<th>Municipal Diversions</th>
<th>Downstream Releases</th>
<th>Change in Storage</th>
<th>Total Storage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3,440</td>
<td>465</td>
<td>2,240</td>
<td>0%</td>
<td>4,530</td>
<td>2,060</td>
<td>-4,926</td>
<td>15,074</td>
</tr>
<tr>
<td>2</td>
<td>3,440</td>
<td>465</td>
<td>1,808</td>
<td>0%</td>
<td>4,530</td>
<td>2,060</td>
<td>-4,939</td>
<td>10,582</td>
</tr>
<tr>
<td>3</td>
<td>3,440</td>
<td>465</td>
<td>1,494</td>
<td>10%</td>
<td>4,077</td>
<td>2,060</td>
<td>-3,726</td>
<td>6,856</td>
</tr>
<tr>
<td>4</td>
<td>3,440</td>
<td>465</td>
<td>1,188</td>
<td>20%</td>
<td>3,624</td>
<td>2,060</td>
<td>-2,968</td>
<td>3,888</td>
</tr>
</tbody>
</table>

1. Value assumed to be same as Water Year 1989/90 measurement.

2. Evaporation assumed to equal the maximum historical value between April 1970 and March 2014 (76.25 in/yr in WY 1971-72) applied to the previous year’s total lake surface area. Lake surface area estimated based on a lookup table provided by the County, which uses a 2002 survey to correlate reservoir elevation, storage, and surface area.

3. Municipal diversions are assumed to be the same as the contract amount for the duration of the first year. Years following are dependent upon the amount of water in storage at the end of the water year and municipal reduction assumptions.

4. Release volumes are assumed to be equivalent to a release rate of 3 cfs or 181 AF/Month or equal to the amount of inflow to the reservoir for that month, whichever is less. This scenario is based on the HCP Hydrologic Analyses report recommended release program provision that sets the maximum release at 3 cfs or the average inflow to the reservoir over the previous 14-day period, when the 3-year running average inflow to Lopez Reservoir is less than 26,190 AFY.
### Scenario B-1: Water Year 2013/14

#### Initial Prescribed Reduction Strategy

<table>
<thead>
<tr>
<th>Year</th>
<th>Inflow</th>
<th>Rainfall</th>
<th>Evap.</th>
<th>Municipal Reduction</th>
<th>Municipal Diversions</th>
<th>Downstream Releases</th>
<th>Change in Storage</th>
<th>Total Storage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>337</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>1,519</td>
<td>337</td>
<td>2,240</td>
<td>0</td>
<td>4,530</td>
<td>3,800</td>
<td>-8,714</td>
<td>11,286</td>
</tr>
<tr>
<td>2</td>
<td>1,519</td>
<td>337</td>
<td>1,546</td>
<td>10%</td>
<td>4,077</td>
<td>3,800</td>
<td>-7,567</td>
<td>3,719</td>
</tr>
<tr>
<td>3</td>
<td>1,519</td>
<td>337</td>
<td>870</td>
<td>100%</td>
<td>0</td>
<td>0</td>
<td>986</td>
<td>4,705</td>
</tr>
<tr>
<td>4</td>
<td>1,519</td>
<td>337</td>
<td>980</td>
<td>35%</td>
<td>2,941</td>
<td>300</td>
<td>-2,364</td>
<td>2,340</td>
</tr>
</tbody>
</table>

1. Value assumed to be the same as Water Year 2013/2014 measurement.

2. Evaporation assumed to equal the maximum historical value between April 1970 and March 2014 (76.25 in/yr in WY 1971-72) applied to the previous year’s total lake surface area. Lake surface area estimated based on a lookup table provided by the County, which uses a 2002 survey to correlate reservoir elevation, storage, and surface area.

3. Municipal diversions are assumed to be the same as the contract amount for the duration of the first year. Years following are dependent upon the storage at the end of the water year and municipal reduction assumptions.

4. Release volumes are controlled by the Initial Prescribed Downstream Release Reduction Strategy, which was developed through a collaborative effort by the District and agriculture and municipal stakeholders.

### Scenario B-2: Water Year 2013/14

#### Potential Adaptive Management Scenario-HCP Reduction Strategy

<table>
<thead>
<tr>
<th>Year</th>
<th>Inflow</th>
<th>Rainfall</th>
<th>Evap.</th>
<th>Municipal Reduction</th>
<th>Municipal Diversions</th>
<th>Downstream Releases</th>
<th>Change in Storage</th>
<th>Total Storage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>337</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>1,519</td>
<td>337</td>
<td>2,240</td>
<td>0</td>
<td>4,530</td>
<td>1,253</td>
<td>-6,167</td>
<td>13,833</td>
</tr>
<tr>
<td>2</td>
<td>1,519</td>
<td>337</td>
<td>1,725</td>
<td>10%</td>
<td>4,077</td>
<td>1,253</td>
<td>-5,199</td>
<td>8,633</td>
</tr>
<tr>
<td>3</td>
<td>1,519</td>
<td>337</td>
<td>1,341</td>
<td>20%</td>
<td>3,624</td>
<td>1,253</td>
<td>-4,362</td>
<td>4,272</td>
</tr>
<tr>
<td>4</td>
<td>1,519</td>
<td>337</td>
<td>933</td>
<td>35%</td>
<td>2,941</td>
<td>1,253</td>
<td>-3,271</td>
<td>1,001</td>
</tr>
</tbody>
</table>

1. Value assumed to be the same as Water Year 2013/2014 measurement.

2. Evaporation assumed to equal the maximum historical value between April 1970 and March 2014 (76.25 in/yr in WY 1971-72) applied to the previous year’s total lake surface area. Lake surface area estimated based on a lookup table provided by the County, which uses a 2002 survey to correlate reservoir elevation, storage, and surface area.

3. Municipal diversions are assumed to be the same as the contract amount for the duration of the first year. Years following are dependent upon the amount of water in storage at the end of the water year and municipal reduction assumptions.

4. Release volumes are assumed to be equivalent to a release rate of 3 cfs or 181 AF/Month or equal to the amount of inflow to the reservoir for that month, whichever is less. This scenario is based on the HCP Hydrologic Analyses report recommended release program provision that sets the maximum release at 3 cfs or the average inflow to the reservoir over the previous 14-day period, when the 3-year running average inflow to Lopez Reservoir is less than 26,190 AFY.
### Scenario C-1: Average of Water Years
#### 2012/13-2014/2015 Inflow & Rainfall

<table>
<thead>
<tr>
<th>Year</th>
<th>Inflow</th>
<th>Rainfall</th>
<th>Evap.</th>
<th>Municipal Reduction</th>
<th>Municipal Diversions</th>
<th>Downstream Releases</th>
<th>Change in Storage</th>
<th>Total Storage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>2,176</td>
<td>806</td>
<td>2,240</td>
<td>0%</td>
<td>4,530</td>
<td>3,800</td>
<td>-7,588</td>
<td>12,412</td>
</tr>
<tr>
<td>1</td>
<td>2,176</td>
<td>806</td>
<td>1,627</td>
<td>10%</td>
<td>4,077</td>
<td>3,800</td>
<td>-6,522</td>
<td>5,890</td>
</tr>
<tr>
<td>2</td>
<td>2,176</td>
<td>806</td>
<td>1,099</td>
<td>20%</td>
<td>3,624</td>
<td>1,026</td>
<td>-2,767</td>
<td>3,123</td>
</tr>
<tr>
<td>4</td>
<td>2,176</td>
<td>806</td>
<td>798</td>
<td>100%</td>
<td>0</td>
<td>0</td>
<td>2,184</td>
<td>5,307</td>
</tr>
</tbody>
</table>

1. Value assumed to be the same as 2 year average from Water Year 2012/13 through 2013/2014 measurement.
2. Evaporation assumed to equal the maximum historical value between April 1970 and March 2014 (76.25 in/yr in WY 1971-72) applied to the previous year’s total surface area. Lake surface area estimated based on a lookup table provided by the County, which uses a 2002 survey to correlate reservoir elevation, storage, and surface area.
3. Municipal diversions are assumed to be the same as the contract amount for the duration of the first year. Years following are dependent upon the storage at the end of the water year and municipal reduction assumptions.
4. Release volumes are controlled by the Initial Prescribed Downstream Release Reduction Strategy, which was developed through a collaborative effort by the District and agriculture and municipal stakeholders.

### Scenario C-2: Average of Water Years
#### 2012/13-2014/2015 Inflow & Rainfall

<table>
<thead>
<tr>
<th>Year</th>
<th>Inflow</th>
<th>Rainfall</th>
<th>Evap.</th>
<th>Municipal Reduction</th>
<th>Municipal Diversions</th>
<th>Downstream Releases</th>
<th>Change in Storage</th>
<th>Total Storage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>2,176</td>
<td>806</td>
<td>2,240</td>
<td>0%</td>
<td>4,530</td>
<td>1,435</td>
<td>-5,223</td>
<td>14,777</td>
</tr>
<tr>
<td>1</td>
<td>2,176</td>
<td>806</td>
<td>1,788</td>
<td>10%</td>
<td>4,077</td>
<td>1,435</td>
<td>-4,318</td>
<td>10,458</td>
</tr>
<tr>
<td>2</td>
<td>2,176</td>
<td>806</td>
<td>1,484</td>
<td>10%</td>
<td>4,077</td>
<td>1,435</td>
<td>-4,014</td>
<td>6,444</td>
</tr>
<tr>
<td>4</td>
<td>2,176</td>
<td>806</td>
<td>1,151</td>
<td>20%</td>
<td>3,624</td>
<td>1,435</td>
<td>-2,228</td>
<td>3,216</td>
</tr>
</tbody>
</table>

1. Value assumed to be the same as 2 year average from Water Year 2012/13 through 2013/2014 measurement.
2. Evaporation assumed to equal the maximum historical value between April 1970 and March 2014 (76.25 in/yr in WY 1971-72) applied to the previous year’s total surface area. Lake surface area estimated based on a lookup table provided by the County, which uses a 2002 survey to correlate reservoir elevation, storage, and surface area.
3. Municipal diversions are assumed to be the same as the contract amount for the duration of the first year. Years following are dependent upon the amount of water in storage at the end of the water year and municipal reduction assumptions.
4. Release volumes are assumed to be equivalent to a release rate of 3 cfs or 181 AF/ Month or equal to the amount of inflow to the reservoir for that month, whichever is less. This scenario is based on the HCP Hydrologic Analyses report recommended release program provision that sets the maximum release at 3 cfs or the average inflow to the reservoir over the previous 14-day period, when the 3-year running average inflow to Lopez Reservoir is less than 26,190 AFY.
### Scenario D-1: Average of Water Years

#### 2011/12-2013/14 Inflow & Rainfall

<table>
<thead>
<tr>
<th>Year</th>
<th>Inflow</th>
<th>Rainfall</th>
<th>Evap.</th>
<th>Municipal Reduction</th>
<th>Municipal Diversions</th>
<th>Downstream Releases</th>
<th>Change in Storage</th>
<th>Total Storage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>4,305</td>
<td>827</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>20,000</td>
</tr>
<tr>
<td>1</td>
<td>4,305</td>
<td>827</td>
<td>2,240</td>
<td>0%</td>
<td>4,530</td>
<td>3,800</td>
<td>-5,438</td>
<td>14,562</td>
</tr>
<tr>
<td>2</td>
<td>4,305</td>
<td>827</td>
<td>1,774</td>
<td>10%</td>
<td>4,077</td>
<td>3,800</td>
<td>-4,519</td>
<td>10,044</td>
</tr>
<tr>
<td>3</td>
<td>4,305</td>
<td>827</td>
<td>1,453</td>
<td>10%</td>
<td>4,077</td>
<td>3,800</td>
<td>-4,197</td>
<td>5,847</td>
</tr>
<tr>
<td>4</td>
<td>4,305</td>
<td>827</td>
<td>1,095</td>
<td>20%</td>
<td>3,624</td>
<td>1,026</td>
<td>-612</td>
<td>5,235</td>
</tr>
</tbody>
</table>

1 Value assumed to be same as 3 year average from Water Year 2011/12 through 2013/2014 measurement.

2 Evaporation assumed to equal the maximum historical value between April 1970 and March 2014 (76.25 in/yr in WY 1971-72) applied to the previous year’s total lake surface area. Lake surface area estimated based on a lookup table provided by the County, which uses a 2002 survey to correlate reservoir elevation, storage, and surface area.

3 Municipal diversions are assumed to be the same as the contract amount for the duration of the first year. Years following are dependent upon the storage at the end of the water year and municipal reduction assumptions.

4 Release volumes are controlled by the Initial Prescribed Downstream Release Reduction Strategy, which was developed through a collaborative effort by the District and agriculture and municipal stakeholders.

### Scenario D-2: Average of Water Years 2011/12-

#### 2013/14 Inflow & Rainfall

<table>
<thead>
<tr>
<th>Year</th>
<th>Inflow</th>
<th>Rainfall</th>
<th>Evap.</th>
<th>Municipal Reduction</th>
<th>Municipal Diversions</th>
<th>Downstream Releases</th>
<th>Change in Storage</th>
<th>Total Storage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>4,305</td>
<td>827</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>20,000</td>
</tr>
<tr>
<td>1</td>
<td>4,305</td>
<td>827</td>
<td>2,240</td>
<td>0%</td>
<td>4,530</td>
<td>1,681</td>
<td>-3,318</td>
<td>16,682</td>
</tr>
<tr>
<td>2</td>
<td>4,305</td>
<td>827</td>
<td>1,774</td>
<td>10%</td>
<td>4,077</td>
<td>1,681</td>
<td>-2,956</td>
<td>13,726</td>
</tr>
<tr>
<td>3</td>
<td>4,305</td>
<td>827</td>
<td>1,453</td>
<td>10%</td>
<td>4,077</td>
<td>1,681</td>
<td>-2,343</td>
<td>11,383</td>
</tr>
<tr>
<td>4</td>
<td>4,305</td>
<td>827</td>
<td>1,095</td>
<td>20%</td>
<td>3,624</td>
<td>1,026</td>
<td>-612</td>
<td>5,235</td>
</tr>
</tbody>
</table>

1 Value assumed to be same as 3 year average from Water Year 2011/12 through 2013/2014 measurement.

2 Evaporation assumed to equal the maximum historical value between April 1970 and March 2014 (76.25 in/yr in WY 1971-72) applied to the previous year’s total lake surface area. Lake surface area estimated based on a lookup table provided by the County, which uses a 2002 survey to correlate reservoir elevation, storage, and surface area.

3 Municipal diversions are assumed to be the same as the contract amount for the duration of the first year. Years following are dependent upon the amount of water in storage at the end of the water year and municipal reduction assumptions.

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