MEMORANDUM

TO: CITY COUNCIL

FROM: SHANE TAYLOR, UTILITIES MANAGER

SUBJECT: MONTHLY WATER SUPPLY AND DEMAND UPDATE

DATE: AUGUST 22, 2017

RECOMMENDATION:
It is recommended the City Council receive and file the monthly Water Supply and Demand Report.

SUMMARY OF ACTION:
This update reports the water supply and demand for July 2017. Current Lopez Reservoir level and projected levels are provided in the attachments.

IMPACT ON FINANCIAL AND PERSONNEL RESOURCES:
Approximately two (2) hours of staff time is required to prepare the monthly report.

BACKGROUND:
On April 25, 2017, the City Council, by resolution, rescinded the Stage 1 Water Shortage Emergency and related water conservation measures and restrictions. During the public hearing the City Council requested staff to continue preparing the monthly water supply and demand updates. The Council also urged citizens to remain cognizant of how they use water, and that the previously adopted water saving measures are still in effect.

In July, the City’s water use was 25% below June 2013. There is currently no required reduction imposed by the State Water Resources Control Board. The City however, is still required to report monthly statistics to the State. As a comparison for a single month, water usage statistics were 15% higher in July 2017 than July 2016.

ANALYSIS OF ISSUES:
The United States Department of Agriculture (USDA) Drought Monitor, as of August 8, 2017 shows San Luis Obispo County as abnormally dry. Rainfall to date (July 1, 2017 to July 31, 2017) is 0 inches at the Corporation Yard gauge. Lopez Lake, as of August 11, 2017 is at 58% capacity (28,879 acre-feet of storage).

At the County of San Luis Obispo Board of Supervisors meeting on May 23, 2017, the Board rescinded the drought emergency proclamation. However, as recommended by...
the Zone 3 Advisory Board, the Board of Supervisors kept the Low Reservoir Response Plan in place. This will allow carryover water to be available until March 30, 2018 to all contractors. The new water year began on April 1, 2017 and the current total available supply from Lopez is 2,290 acre-feet, the City’s normal entitlement, plus 1,249 acre-feet of carryover. In addition the City has 1,323 acre-feet of ground water entitlement from the Santa Maria Basin and 200 acre-feet from the Pismo Formation.

Based on the projected water use of 2,500 acre-feet, the City will meet the demand in water year 2017/18, using only 50% of current supply.

ADVANTAGES:
No advantages noted at this time.

DISADVANTAGES:
No disadvantages noted at this time.

ALTERNATIVES:
Not applicable at this time.

ENVIRONMENTAL REVIEW:
No environmental review is required for this item.

PUBLIC NOTIFICATION AND COMMENTS:
The Agenda was posted at City Hall and on the City’s website in accordance with Government Code Section 54954.2.

Attachment:

1. Lopez Reservoir Storage Projections
2. Lopez Reservoir Storage Projections based on 16/17 Hydrology
3. LRRP Projection
Lopez Reservoir Storage Projections

(precipitation scenario source: www.LongRangeWeather.com)

Notes:
• For "Dry Months" (April - October), projected increases and/or decreases in storage estimated to mimic conditions from 2015.
• For "Wet Months" (November - March), projected storage declines assume LRRP annual downstream release of 3,800 AFY and deliveries of 4,077 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.
• Past 3 Year Avg. Projection uses historic daily capacity changes averaged from 2014, 2015, 2016
• Actual precipitation is the total of the previous month.
• Actual precipitation is the rainfall measured by FRM at Lopez Rec Area.
Lopez Storage Projection based on 16/17 Hydrology

Note: Storage Projection is based on Water Year 16/17 municipal and downstream releases, rainfall, and evaporation.
Note: Storage Projection is based on Water Years 14/15 and 15/16 municipal and downstream releases, rainfall, and evaporation.
San Luis Obispo County Flood Control and Water District  
Zone 3 - Lopez Project - Monthly Operations Report  
July, 2017

<table>
<thead>
<tr>
<th>Contractor</th>
<th>Entitlement This Month</th>
<th>Entitlement April to Present</th>
<th>Annual Request</th>
<th>Usage % of Annual Request</th>
<th>SWP Deliveries</th>
<th>Change in Storage</th>
<th>Usage % of SWP Deliveries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arroyo Grande</td>
<td>2290</td>
<td>3539.20</td>
<td>21.87</td>
<td>9.6%</td>
<td>758.31</td>
<td>31.1%</td>
<td>758.31</td>
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<tr>
<td>Oceano CSD</td>
<td>303</td>
<td>1143.30</td>
<td>57.37</td>
<td>18.9%</td>
<td>196.63</td>
<td>64.9%</td>
<td>196.63</td>
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<tr>
<td>Grover Beach</td>
<td>800</td>
<td>1040.20</td>
<td>66.94</td>
<td>8.4%</td>
<td>255.73</td>
<td>12.0%</td>
<td>255.73</td>
</tr>
<tr>
<td>Pismo Beach</td>
<td>896</td>
<td>2730.20</td>
<td>180.06</td>
<td>20.1%</td>
<td>326.68</td>
<td>12.0%</td>
<td>326.68</td>
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<tr>
<td>CSA 12</td>
<td>241</td>
<td>740.60</td>
<td>12.45</td>
<td>5.2%</td>
<td>33.32</td>
<td>9.0%</td>
<td>33.32</td>
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<tr>
<td>San Miguelito</td>
<td>58.41</td>
<td>13.41</td>
<td>0.00</td>
<td>0.0%</td>
<td>556.41</td>
<td>17.1%</td>
<td>556.41</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>4530</strong></td>
<td><strong>9193.70</strong></td>
<td><strong>536.69</strong></td>
<td><strong>11.8%</strong></td>
<td><strong>1570.67</strong></td>
<td><strong>17.1%</strong></td>
<td><strong>1570.67</strong></td>
</tr>
</tbody>
</table>

Note: Deliveries are in acre feet. One acre foot = 325, 850 gallons or 43, 560 cubic feet. Safe yield is 8,730 acre feet.

**Lopez Dam Operations**

<table>
<thead>
<tr>
<th>Operation</th>
<th>This Month</th>
<th>Year to Date</th>
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<tbody>
<tr>
<td>Lake Elevation</td>
<td>436.71</td>
<td>Difference</td>
</tr>
<tr>
<td>Storage</td>
<td>290.65</td>
<td>% Full</td>
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<tr>
<td>Rainfall</td>
<td>0</td>
<td>0.00</td>
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<tr>
<td>Downstream Release</td>
<td>387.29</td>
<td>981.43</td>
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<tr>
<td>Spillage</td>
<td>0</td>
<td>0.00</td>
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</tbody>
</table>

"Year to Date" is January to present for State water, April to present for Lopez deliveries, and July to present for rainfall.

**Comments:**
Reservoir is currently operated under the Low Reservoir Response Plan. Reservoir is above 20,000 AF therefore no reduction in entitlements.

Surplus water shown is actually "Carry Over" water as designated in the LRRP and updated per BOS May 2, 2017 Declaration of Surplus.

1) Oceano supplied State Water to Canyon Crest via Arroyo Grande's Edna turn out. A total of 2.58 AF delivered to Canyon Crest was added to Oceano's State Water usage this month and 2.58 AF was subtracted from Arroyo Grande's usage this month.