MEMORANDUM

TO: CITY COUNCIL

FROM: BILL ROBESON, PUBLIC WORKS DIRECTOR

BY: SHANE TAYLOR, UTILITIES MANAGER

SUBJECT: CALENDAR YEAR 2019 WATER SUPPLY AND DEMAND UPDATE

DATE: JANUARY 28, 2020

SUMMARY OF ACTION:
The update reports the water supply and demand for Calendar Year 2019. 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 report.

RECOMMENDATION:
It is recommended the City Council receive and file the Calendar Year 2019 Water Supply and Demand Report.

BACKGROUND:
On April 25, 2017, the City Council, by Resolution, rescinded the Stage 1 Water Shortage Emergency along with related emergency water conservation measures and restrictions.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 urged citizens to continue to practice everyday water saving measures, and reiterated that the previously adopted water conservation measures were to remain in effect.

In 2019, the City’s water use was 2,137.8 acre-feet with a per capita use of 108 gallons per day/per person. There was a total of 22.1 inches of rainfall in the City in 2019.

ANALYSIS OF ISSUES:
The United States Drought Monitor, as of January 16, 2020 shows San Luis Obispo County as normal. Rainfall to date (July 1, 2019 to December 31, 2019) is 6.5 inches at the Corporation Yard rain gauge. Lopez Lake, as of January 16, 2020, is at 51.8% capacity (25,605 acre-feet of storage).
The new water year began on April 1, 2019 and the City’s current total available supply from Lopez is 2,290 acre-feet. 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. The projected water use for water year 2019/20 is 2,200 acre-feet if the City receives average rainfall.

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.

Attachments:

1.a. Lopez Monthly Operations Report for March 2019
2. Lopez Reservoir Storage Projection
3. Yearly Water Use Comparison
San Luis Obispo County Flood Control and Water District  
Zone 3 - Lopez Project - Monthly Operations Report  
December, 2019

### Lopez Water Deliveries

<table>
<thead>
<tr>
<th>Contractor</th>
<th>Total Available Water</th>
<th>This Month</th>
<th>Entitlement</th>
<th>Surplus</th>
<th>April to Present</th>
<th>Total</th>
<th>Amended Request</th>
<th>% of Annual</th>
<th>Surplus Requested</th>
<th>% of Annual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arroyo Grande</td>
<td>2295</td>
<td>178.00</td>
<td>0.00</td>
<td>266.00</td>
<td>123.57</td>
<td>5.4%</td>
<td>0.00</td>
<td>0.0%</td>
<td>1671.27</td>
<td>73.11%</td>
</tr>
<tr>
<td>Oceano CSD</td>
<td>303</td>
<td>50.00</td>
<td>0.00</td>
<td>353.00</td>
<td>100.00</td>
<td>43.13</td>
<td>10.8%</td>
<td>1671.27</td>
<td>50.00</td>
<td>2668.00</td>
</tr>
<tr>
<td>Grover Beach</td>
<td>800</td>
<td>132.00</td>
<td>0.00</td>
<td>932.00</td>
<td>73.83</td>
<td>0.00</td>
<td>0.0%</td>
<td>0.0%</td>
<td>590.30</td>
<td>72.0%</td>
</tr>
<tr>
<td>Pismo Beach</td>
<td>852</td>
<td>147.00</td>
<td>0.00</td>
<td>1039.00</td>
<td>100.00</td>
<td>43.13</td>
<td>10.8%</td>
<td>43.13</td>
<td>430.00</td>
<td>189.23</td>
</tr>
<tr>
<td>CSA 12</td>
<td>245</td>
<td>40.00</td>
<td>0.00</td>
<td>285.00</td>
<td>4.10</td>
<td>17.1%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>59.82</td>
<td>24.4%</td>
</tr>
<tr>
<td>San Miguelito</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total: 4510  747.00  620.00  5277.00  189.32  4.2%  136.41  22.0%  1399.51  74.66%

### State Water Deliveries

<table>
<thead>
<tr>
<th>Contractor</th>
<th>This Month</th>
<th>Jan to Present</th>
<th>% of Annual</th>
<th>SWP Deliveries Change in Storage</th>
<th>Usage</th>
<th>% of Annual</th>
<th>Surplus Requested</th>
<th>% of Annual</th>
<th>SWP Deliveries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arroyo Grande</td>
<td>227</td>
<td>0.00</td>
<td>0.0%</td>
<td>10.98</td>
<td>43.13</td>
<td>43.13</td>
<td>4.8%</td>
<td>43.13</td>
<td>43.13</td>
</tr>
<tr>
<td>Oceano CSD</td>
<td>1120</td>
<td>0.00</td>
<td>0.0%</td>
<td>555.55</td>
<td>49.9%</td>
<td>49.9%</td>
<td>4.8%</td>
<td>49.9%</td>
<td>49.9%</td>
</tr>
<tr>
<td>Grover Beach</td>
<td>27</td>
<td>5.75</td>
<td>21.3%</td>
<td>89.37</td>
<td>331.0%</td>
<td>331.0%</td>
<td>4.8%</td>
<td>331.0%</td>
<td>331.0%</td>
</tr>
<tr>
<td>Pismo Beach</td>
<td>127</td>
<td>6.51</td>
<td>5.1%</td>
<td>123.37</td>
<td>97.7%</td>
<td>97.7%</td>
<td>4.8%</td>
<td>97.7%</td>
<td>97.7%</td>
</tr>
<tr>
<td>CSA 12</td>
<td>1501</td>
<td>12.26</td>
<td>0.8%</td>
<td>799.27</td>
<td>53.8%</td>
<td>53.8%</td>
<td>4.8%</td>
<td>53.8%</td>
<td>53.8%</td>
</tr>
<tr>
<td>San Miguelito</td>
<td></td>
<td></td>
<td></td>
<td>1456.25</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Note:
Deliveries are in acre feet. One acre foot = 325,850 gallons or 43,560 cubic feet. Safe yield is 5,730 acre feet.

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

- **Lopez Dam Openings:**
  - **Lake Elevation (full at 522.37 feet):** 491.37
  - **Storage (full at 492.00 acre feet):** 25708
  - **Rainfall:** 5.77, 8.26
  - **Downstream Release (4200 acre feet/year):** 86.6, 1886.19
  - **Spillage (acre feet):** 0, 0.00

Note: Deliveries are in acre feet. One acre foot = 325,850 gallons or 43,560 cubic feet. Safe yield is 5,730 acre feet.

### January to Present State Water Usage

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

### Comments:
- Available Surplus Water is shown and as designated per BOS May 14, 2019 Declaration of Surplus Water. Beginning with July report, Surplus water shown will be amount purchased by each agency.

  1. Oceano supplied water to Canyon Crest via Arroyo Grande’s Edna line turn out. A total of 0.94 AF delivered to Canyon Crest was added to Oceano’s water usage this month and 0.94 AF was subtracted from Arroyo Grande’s usage this month.

  Surplus water calculations are based on “Surplus Requested” not “Surplus Water Declared.”
San Luis Obispo County Flood Control and Water District
Zone 3 - Lopez Project - Monthly Operations Report
March, 2019

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.

Comments:
1) Oceano supplied State Water to Canyon Crest via Arroyo Grande's Edna turn out. A total of 1.1 AF delivered to Canyon Crest was added to Oceano's State Water usage this month and 1.1 AF was subtracted from Arroyo Grande's usage this month.

2) Surplus water shown is as designated per BOS May 15, 2018 Declaration of Surplus Water.
1. Storage projection is based on predicted rainfall from longrangeweather.com, historic inflow based on predicted rainfall, 18-19 downstream release requests, and municipal usage.
Yearly Water Use Comparison

<table>
<thead>
<tr>
<th>Year</th>
<th>Acre Feet</th>
<th>Usage (gpcd)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>2,213</td>
<td>112</td>
</tr>
<tr>
<td>2019</td>
<td>2,138</td>
<td>108</td>
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</tbody>
</table>