MEMORANDUM

TO: CITY COUNCIL

FROM: BILL ROBESON, PUBLIC WORKS DIRECTOR

BY: SHANE TAYLOR, UTILITIES MANAGER

SUBJECT: MONTHLY WATER SUPPLY AND DEMAND UPDATE

DATE: FEBRUARY 25, 2020

SUMMARY OF ACTION:
The update reports the water supply and demand for January 2020. 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 monthly 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On April 25, 2017, the City Council, by resolution, rescinded the Stage 1 Water Shortage Emergency along with related emergency water conservation measures and restrictions.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 every day water saving measures, and reiterated that the previously adopted water saving measures were to remain in effect.

In January 2020, the City’s water use was 135.9 acre-feet with a per capita use of 81 gallons per day/per person. There was a total of 0.6” of rainfall in January 2020. The water use for the current “rolling” water year from February 2019 to January 2020 was 2,146 acre-feet, which equates to a per capita use of 109 gallons per day/per person. There was a total of 18.0” of rain fall for this period.

ANALYSIS OF ISSUES:
The United States Drought Monitor, as of February 13, 2020 shows San Luis Obispo County in an abnormally dry condition. Rainfall to date (July 1, 2018 to January 31, 2020) is 7.1 inches at the Corporation Yard rain gauge. Lopez Lake, as of February 13, 2020 is at 51.5% capacity (25,417 acre-feet of storage).
The new water year began on April 1, 2019 and the current total available supply from Lopez is 2,290 acre-feet, our normal entitlement. In addition, we have 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 2019/20 is 2,200 acre-feet. In conclusion, based on average rainfall for the next two years, the current supply will meet the projected demand.

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:

1a. Lopez Monthly Operations Report for August 2019
2. Lopez Reservoir Storage Projection
3. Monthly Water Use Comparison
San Luis Obispo County Flood Control and Water District  
Zone 3 - Lopez Project - Monthly Operations Report  
January, 2020

### Lopez Water Deliveries

<table>
<thead>
<tr>
<th>Contractor</th>
<th>Entitlement</th>
<th>Surplus Water Declared</th>
<th>Surplus Available Water</th>
<th>This Month</th>
<th>April to Present</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arroyo Grande</td>
<td>2290</td>
<td>378.00</td>
<td>0.00</td>
<td>2668.00</td>
<td>135.90</td>
</tr>
<tr>
<td>Oceano CSD</td>
<td>303</td>
<td>50.00</td>
<td>400.00</td>
<td>353.00</td>
<td>50.54</td>
</tr>
<tr>
<td>Grover Beach</td>
<td>800</td>
<td>132.00</td>
<td>20.00</td>
<td>932.00</td>
<td>65.59</td>
</tr>
<tr>
<td>Pismo Beach</td>
<td>892</td>
<td>147.00</td>
<td>200.00</td>
<td>1039.00</td>
<td>100.22</td>
</tr>
<tr>
<td>CSA 12</td>
<td>245</td>
<td>40.00</td>
<td>0.00</td>
<td>285.00</td>
<td>8.57</td>
</tr>
<tr>
<td>San Miguelito</td>
<td>Total</td>
<td>4530</td>
<td>747.00</td>
<td>620.00</td>
<td>210.06</td>
</tr>
</tbody>
</table>

#### State Water Deliveries

<table>
<thead>
<tr>
<th>Contractor</th>
<th>Annual Request</th>
<th>This Month</th>
<th>Usage</th>
<th>% of Annual Request</th>
<th>SWP Deliveries</th>
<th>Change in Storage</th>
<th>Usage</th>
<th>% of Annual Request</th>
<th>SWP Deliveries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arroyo Grande</td>
<td></td>
<td></td>
<td>227</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Oceano CSD</td>
<td></td>
<td></td>
<td>1120</td>
<td>9.00</td>
<td>9.00</td>
<td>1148.09</td>
<td>105.15</td>
<td>0.8%</td>
<td></td>
</tr>
<tr>
<td>Grover Beach</td>
<td></td>
<td></td>
<td>27</td>
<td>1.82</td>
<td>1.82</td>
<td>68.39</td>
<td>27.9%</td>
<td>6.7%</td>
<td></td>
</tr>
<tr>
<td>Pismo Beach</td>
<td></td>
<td></td>
<td>127</td>
<td>7.91</td>
<td>7.91</td>
<td>655.89</td>
<td>80.0%</td>
<td>6.2%</td>
<td></td>
</tr>
<tr>
<td>CSA 12</td>
<td></td>
<td></td>
<td>135.9</td>
<td>10.39</td>
<td>10.39</td>
<td>3726.45</td>
<td>81.6%</td>
<td>12.6%</td>
<td></td>
</tr>
<tr>
<td>San Miguelito</td>
<td></td>
<td></td>
<td>65.59</td>
<td>65.59</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Lopez Dam Operations

- **Lake Elevation (full at 522.37 feet):** 490.96
- **Storage (full at 49200 acre feet):** 25525
- **Rainfall:** 0.58
- **Downstream Release (4200 acre feet/year):** 208.22
- **Spillage (acre feet):** 0

### State Water Deliveries

- **This Month:** 3726.45
- **April to Present:** 76.6%
- **Annual Request:** 82.3%
- **Change in Storage:** 474.89
- **Usage:** 76.6%
- **Total:** 4201.34

### Available Surplus Water

- **This Month:** 65.59
- **April to Present:** 109.22
- **San Miguelito:** 7.93

### 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.

- **Oceano supplied water to Canyon Crest via Arroyo Grande’s Edna turn out. A total of 1.3 AF delivered to Canyon Crest was added to Oceano’s water usage this month and 1.3 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.

### Lopez Dam Operations

<table>
<thead>
<tr>
<th>Component</th>
<th>This Month</th>
<th>Year to Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lake Elevation (full at 522.37 feet)</td>
<td>496.59</td>
<td>-25.78</td>
</tr>
<tr>
<td>Storage (full at 49200 acre feet)</td>
<td>29008</td>
<td>% Full 59.0%</td>
</tr>
<tr>
<td>Rainfall</td>
<td>5.19</td>
<td>26.11</td>
</tr>
<tr>
<td>Downstream Release (4200 acre feet/year)</td>
<td>196.41</td>
<td>3830.12</td>
</tr>
<tr>
<td>Spillage (acre feet)</td>
<td>0</td>
<td>0.00</td>
</tr>
</tbody>
</table>

**Comments:**
Surplus water shown is as designated per BOS May 15, 2018 Declaration of Surplus Water.

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.

### Lopez Water Deliveries

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<tr>
<th>Contractor</th>
<th>This Month</th>
<th>April to Present</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Entitlement</td>
<td>Surplus</td>
</tr>
</tbody>
</table>
| Arroyo Grande    | 2290       | 564.00  | 2854.00| 124.37     | 5.4%   | 0.00%
| Oceano CSD       | 303        | 75.00   | 378.00 | 285.44     | 75.35  | 100.00%
| Grover Beach     | 800        | 197.00  | 997.00 | 57.46      | 5.8%   | 0.00%
| Pismo Beach      | 892        | 220.00  | 1112.00| 57.46      | 5.2%   | 0.00%
| CSA 12           | 245        | 60.00   | 305.00 | 28.66      | 9.3%   | 0.00%
| San Miguelito    |            |         |       |            |        |       |
| Total            | 4530       | 1116.00 | 5646.00| 383.00     | 8.35   | 0.00%

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

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<td>122.80</td>
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<tr>
<td></td>
<td></td>
<td></td>
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### April to Present Lopez Entitlement+Surplus Water Usage

**Note:** Surplus water shown is as designated per BOS May 15, 2018 Declaration of Surplus Water.

**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.

### January to Present State Water Usage

**Note:** Surplus water shown is as designated per BOS May 15, 2018 Declaration of Surplus Water.

**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.
LOPEZ RESERVOIR STORAGE PROJECTION

Note:
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.
Monthly Water Use Comparison

Acre Feet

Usage (gpcd)

Jan-19

Jan-20

127.4

135.9

76

81

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