RWQCB Consideration of NPDES Permit Reissuance

Thursday, December 6, 2018
San Luis Obispo, California
Providing Cooperative Water Solutions

We treat the wastewater of our customers and member entities, to help:

- protect the environment and public health
- diversify the area’s water supply through recycled water production and groundwater recharge

Formed in 1972 and previously known as the Monterey Regional Water Pollution Control Agency, MRWPCA

250,000 people served in 10 service areas

18 million gallons, on average, of domestic wastewater processed each day
Joint Powers Authority
• 29.6 MGD secondary and tertiary treatment capacity
• 3 major interceptors and 10 pump stations
• 2 ½ mile outfall to Monterey Bay outside zone of prohibition
• ~60% of wastewater recycled now
  ~70% with Pure Water Monterey
• Contract water / wastewater services for member entities
One Regional Treatment Plant

Regulated Ocean Discharge
Predominantly Wintertime

Non-Potable Reuse
Agriculture Irrigation

Indirect Potable Reuse
Groundwater Replenishment
Regional Conditions Affecting Water Supplies

- 109,000 Residents
- 9 Million Visitors per Year
- 22,000 Hospitality Jobs
- $2.8 Billion Hospitality Economy
Monterey Peninsula Water Supplies
Pure Water
Monterey Benefits

- Seaside Groundwater Basin Water Quality Improvement
- Monterey Bay Protection--Reduces Pollutants to Bay
- Energy Conservation and Renewable Energy Use
- Salinas Groundwater Basin Reduced Pumping & Seawater Intrusion
- Reduced Pollution to Salinas River and Sloughs
- Carmel River Increased Flows
- Salinas & Carmel Rivers Habitat Enhancement
Source Waters to Regional Treatment Plant

- Wastewater – 67%
- Industrial/Wash Water – 16% *
- Blanco Drain – 13%
- Rec Ditch – 4%

Maximum needed, if MCWRA participates in source water use *
Source Water Facilities and Benefits

- Recycled water demand increasing; municipal wastewater flows down
- Takes advantage of unused infrastructure capacity; thus, saves money and limits const. impacts
- Conveying and treating impaired waters and reducing pollutant loads to Monterey Bay
Reduced Nitrogen Loading to Monterey Bay

• Considered nitrogen loading to the Monterey Bay:
  • Photic Zone (sunlight is required for algae to utilize nutrients)
  • M1W’s deep ocean outfall

• Summary of change in nitrogen loading to Bay with PWM.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Change in Nitrogen Load</th>
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<tbody>
<tr>
<td>Nitrogen load to photic zone</td>
<td>Decreases by diverting tile drain water, stormwater</td>
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<tr>
<td>Nitrogen load to deep ocean outfall</td>
<td>May increase due to RO concentrate</td>
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<tr>
<td>Total nitrogen load to Bay</td>
<td>Decreases with PWM due to removal through the RTP</td>
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Bottom Line – The PWM Project will decrease both the nitrogen load to the photic zone and the total nitrogen load to the Bay.