

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

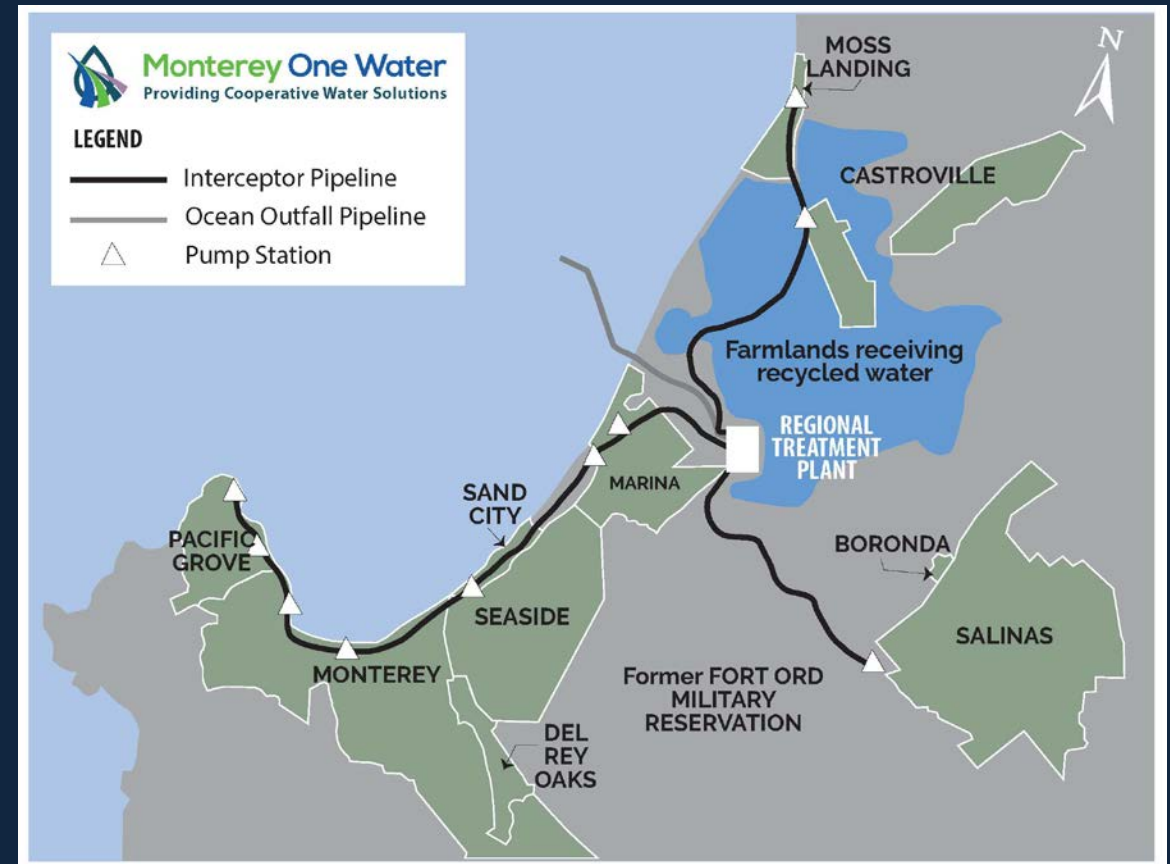
Joint Powers Authority



Facilities and Services



- 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

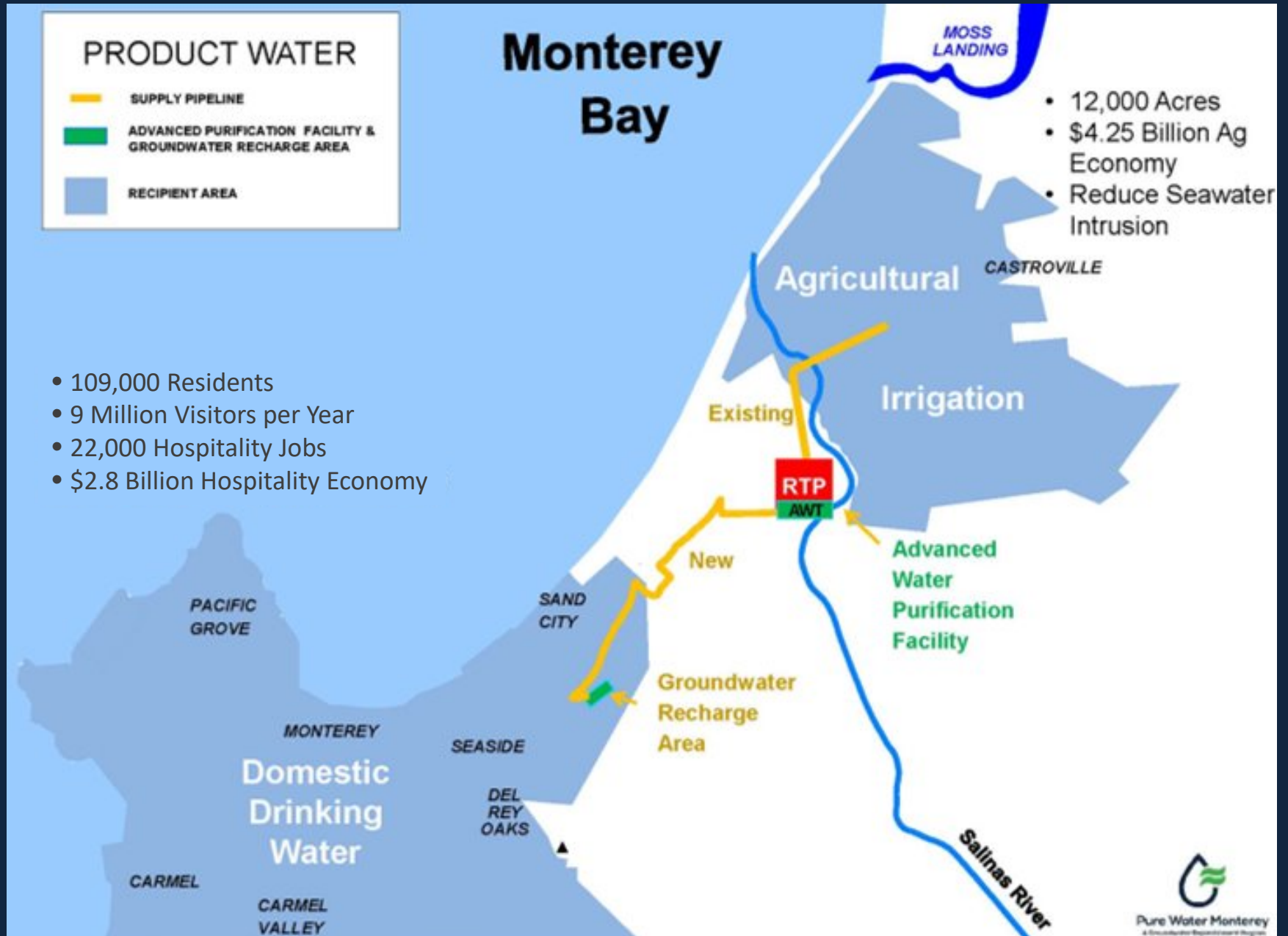


Non-Potable Reuse
Agriculture Irrigation

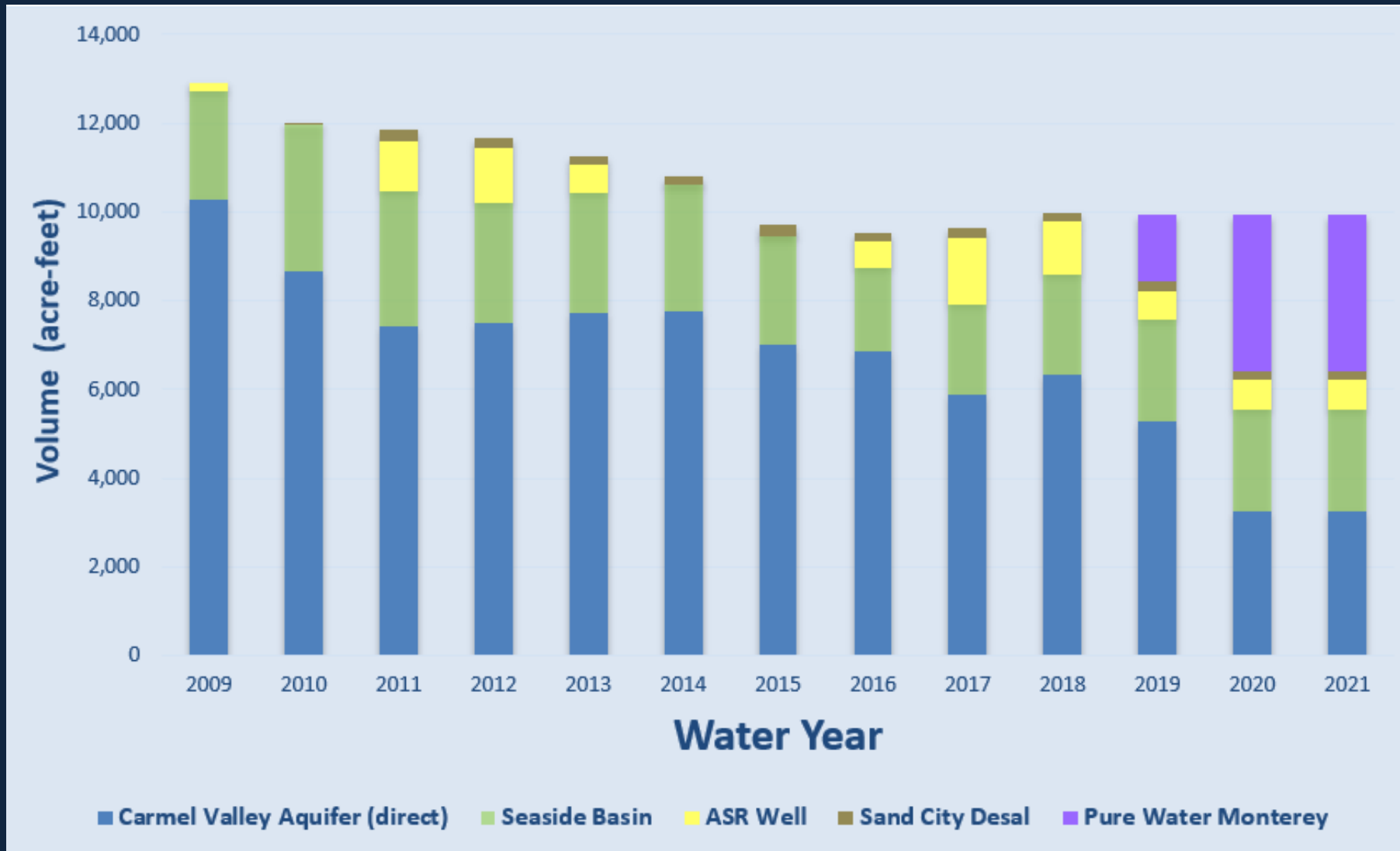


Indirect Potable Reuse
Groundwater Replenishment

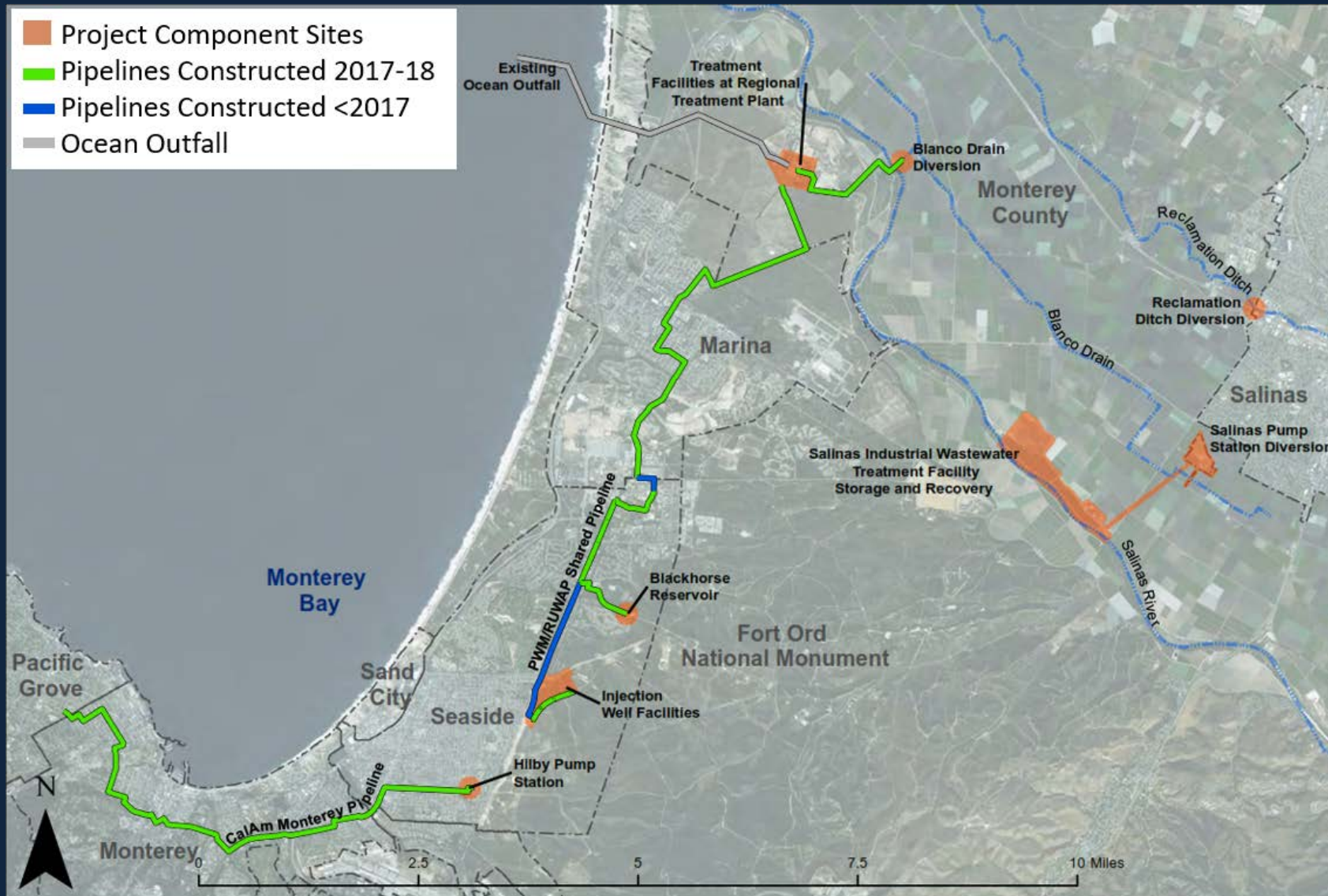
Regional Conditions Affecting Water Supplies



Monterey Peninsula Water Supplies



Integrated Regional Water Project



Pure Water Monterey Benefits

*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*

*Seaside Groundwater
Basin Water Quality
Improvement*



*Salinas & Carmel Rivers
Habitat Enhancement*

*Carmel River
Increased Flows*



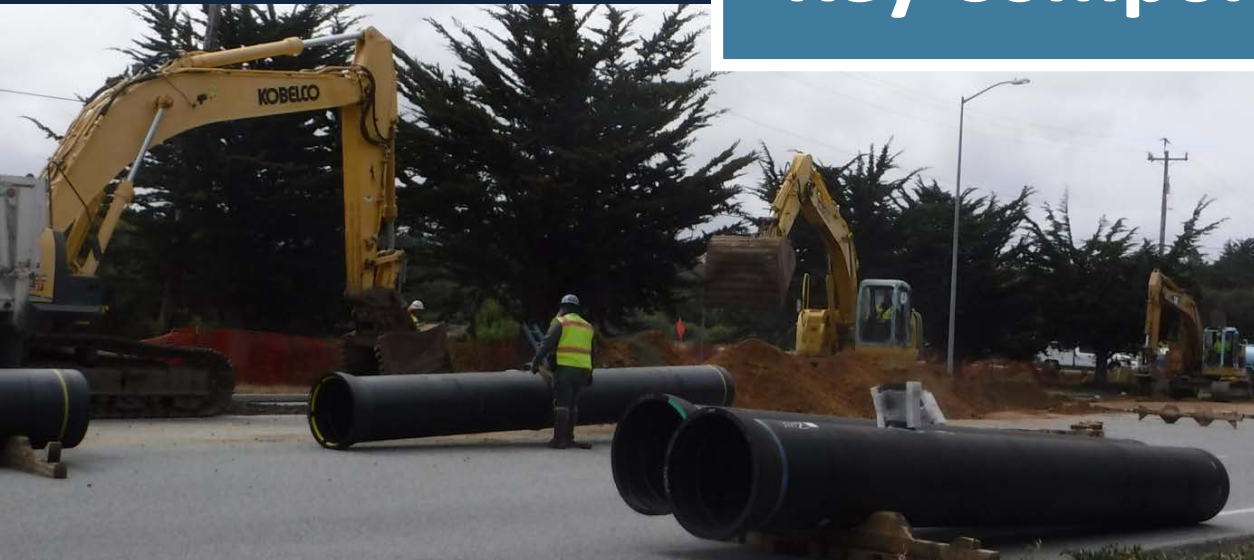
Source Water Diversion/Conveyance



Advanced Water Purification Facility



Key Components of PWM



Conveyance Pipeline



Injection Wells & Appurtenances

Agricultural Drainage Water



Agricultural Wash Water



PWM Source Waters

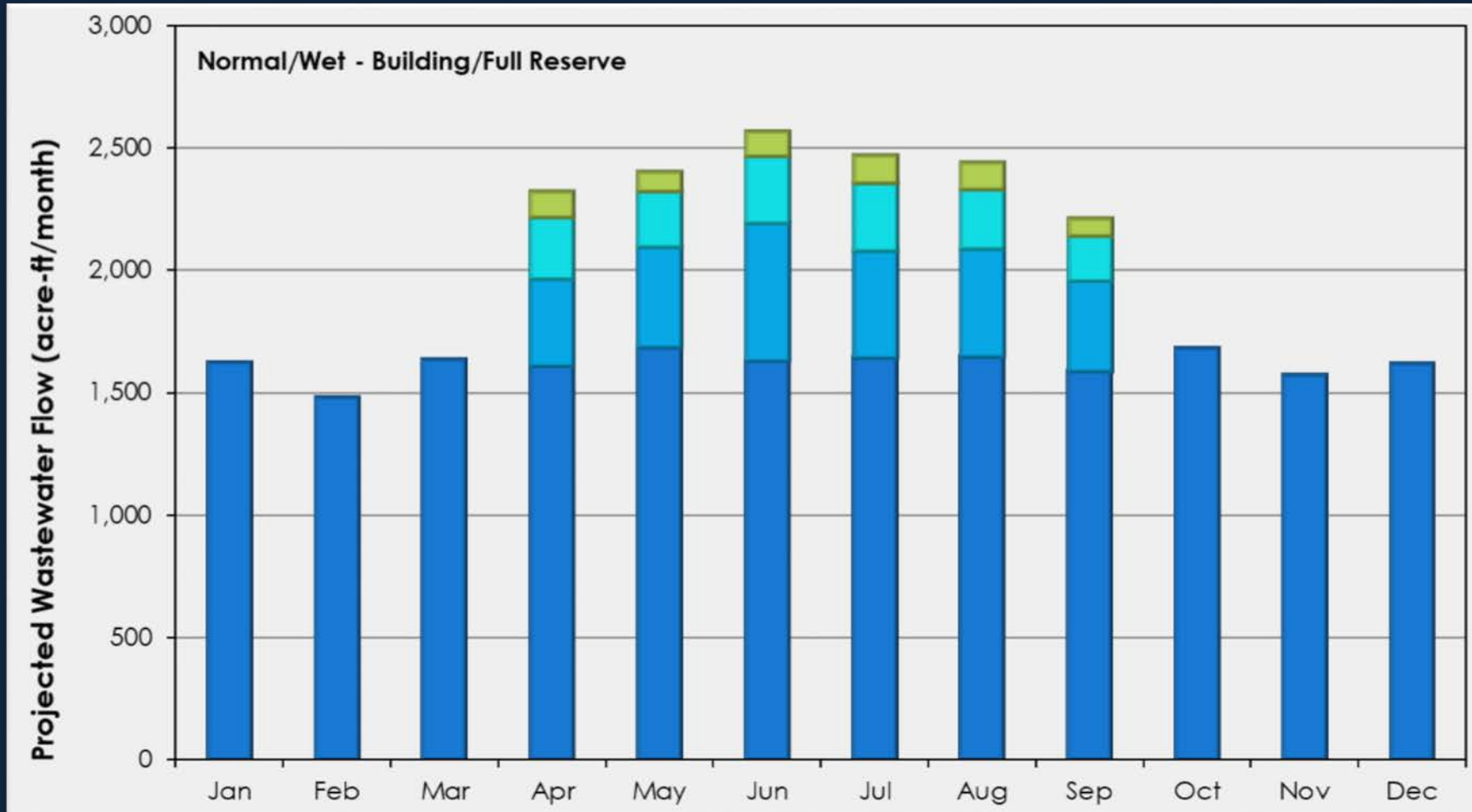


Secondary Treated Wastewater



Urban Storm Water Runoff

Source Waters to Regional Treatment Plant

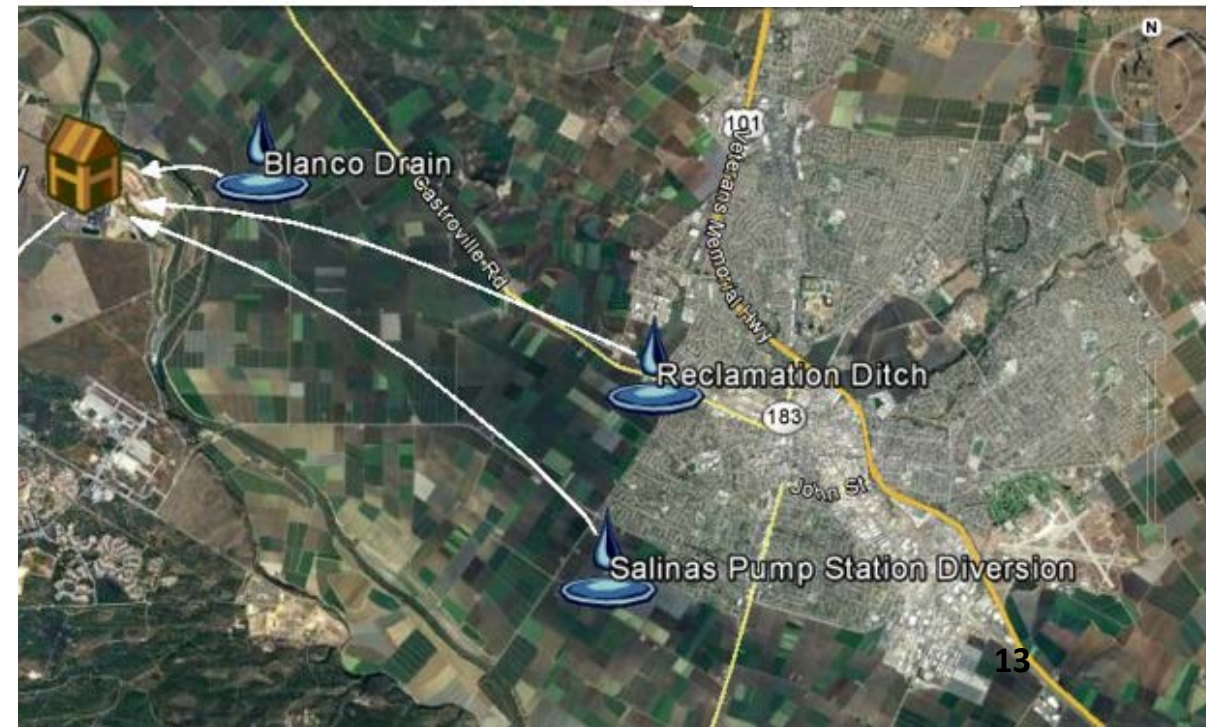


Wastewater – 67%
Industrial/Wash Water – 16% *
Blanco Drain – 13%
Rec Ditch – 4%

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.**

Parameter	Change in Nitrogen Load
Nitrogen load to photic zone	Decreases by diverting tile drain water, stormwater
Nitrogen load to deep ocean outfall	May increase due to RO concentrate
Total nitrogen load to Bay	Decreases with PWM due to removal through the RTP

Bottom Line – The PWM Project will decrease both the nitrogen load to the photic zone and the total nitrogen load to the Bay.



Questions

