Cambria Emergency Water Supply Project

Cambria Community Services District





Regional Water
Board Title 22
& Title 27
Permit
Presentation

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November 14, 2014

Project need: CCSD in "exceptional drought area"

- Rainfall this year is only 80% of minimum amount required to recharge local aquifers
- If drought continues then Community will run out of water
- Imperative to provide enough water for public health, safety, sanitation, and fire protection
- State OES is monitoring the situation closely
- Emergency measures are in place by CCSD with > 40% conservation occurring over past several months



July 8, 2014
US Drought Monitor



Project Need

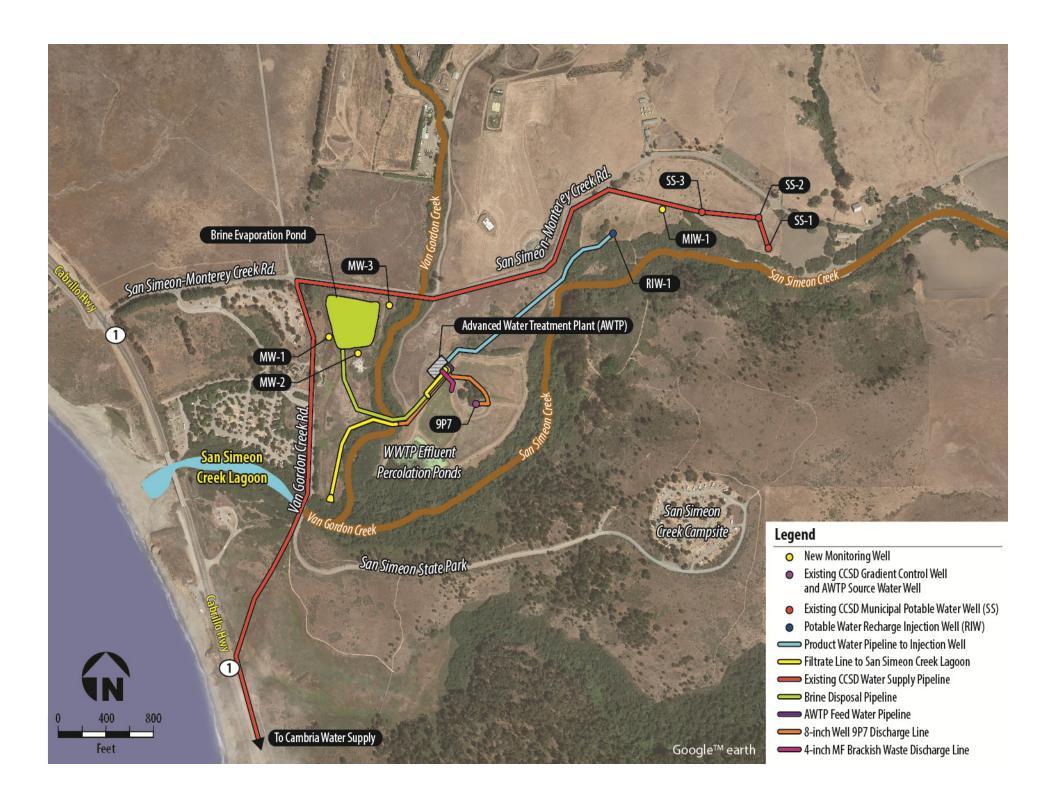
- CCSD has maintained an inventory of water supplies of less than six months for the past two years
- Governor declared a drought emergency
- CCSD declared a drought emergency & banned outdoor watering
- Cambrians are one of the lowest water users in the State
- Without the emergency project the customers in Cambria will run out of water

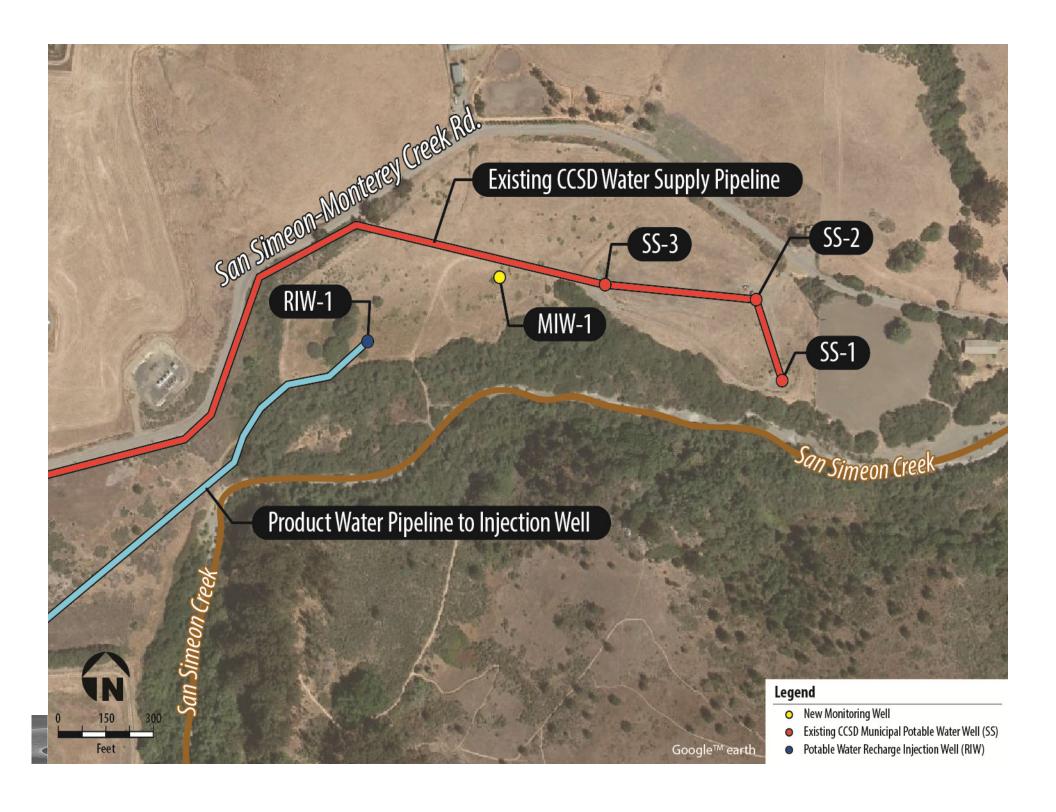


Without a sustainable supply of water

- Cannot protect public health
- Fire protection is threatened
- Loss of economic viability
- Impacts to the environment and the quality of life

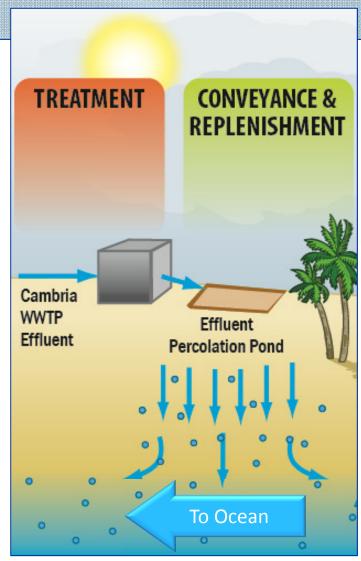






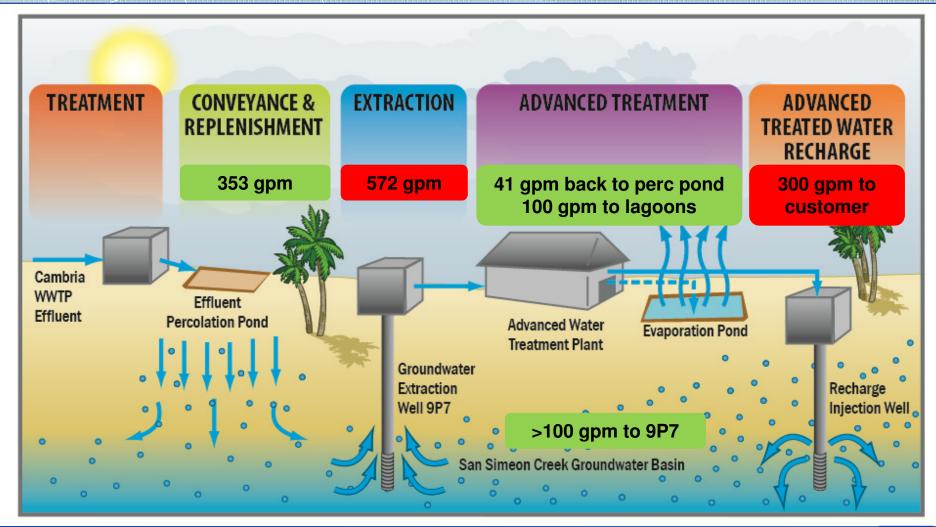
The emergency water supply project optimizes existing resources

- Emergency project will recover and recirculate a portion of the water that currently flows to the ocean
- 48% of the water used to supply the emergency project will remain in the basin





Groundwater Replenishment





Emergency water supply facility operational parameters

- Emergency coastal development permit requires CCSD be in a Stage 3 drought to operate the facility
- Facility will operate a maximum of 6 months a year
- Quality of the lagoon mitigation water will be enhanced through blending with the reverse osmosis water
- The treatment process provides three barriers of protection:
 - Microfiltration
 - 2. Reverse Osmosis, and
 - 3. Advanced Oxidation (UV combined with hydrogen peroxide)



Evaporation Pond

- Mechanical blowers will only operate when winds are less than 6 mph and when wind direction is from west to the east
- If all the water were to evaporate and there were 100% dry solids:
 No constituents in the brine solids will reach hazardous waste levels
- No selenium or mercury detected in the supply well
- Monitoring program for air quality



What happens without the emergency project?

- CCSD's San Simeon wells will not be able to operate in an extended drought
- Lagoons cease to exist
- Saltwater intrusion will begin
- Percolation pond water will reverse it's gradient and begin to migrate toward the basin underflow (fresh water supply)



Conclusion

- Project provides a sustainable supply of water during droughts
- Project has a beneficial impact to the environment through protection of the lagoons
- Project protects from saltwater intrusion
- Project balances all the requirements of the area:
 - Protection of public health with a sustainable supply of water
 - Fire Protection
 - Protects the environment in a drought



PLEASE AWARD THE PERMITS THAT WILL ALLOW THE EMERGENCY FACILITY TO OPERATE

THANK YOU 14