# ITEM 11 MASTER RECYCLING PERMIT REISSUANCE: SOUTHERN REGIONAL TERTIARY TREATMENT PLANT

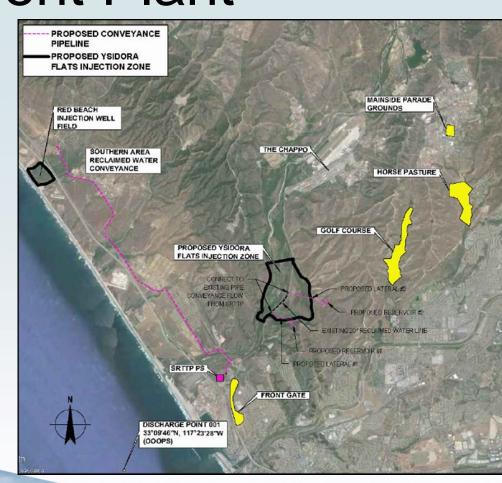
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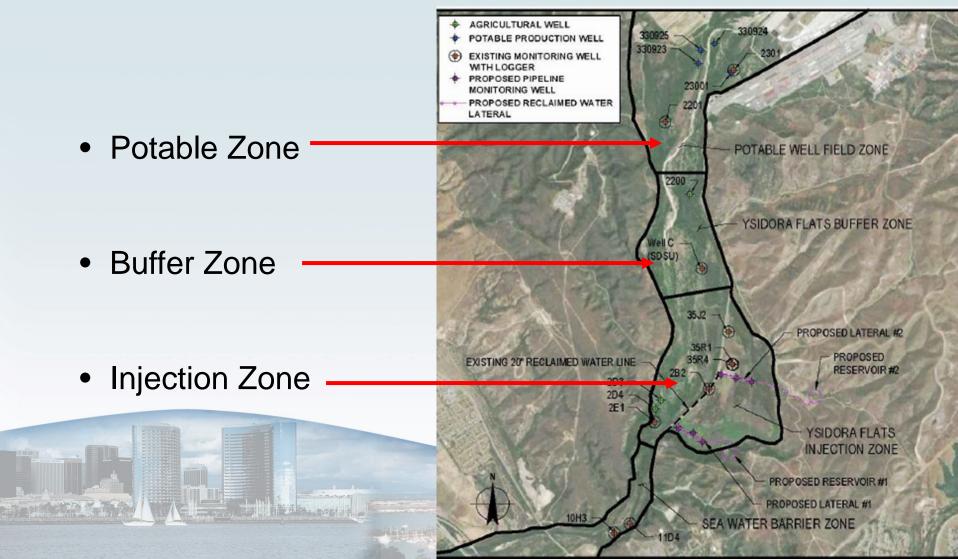


# Southern Regional Tertiary Treatment Plant

- Four Recycled Water Use Areas
- Red Beach Disposal Location
- Lower Ysidora Seawater
   Intrusion Barrier



## Lower Ysidora Proposed Monitoring Zones



# Lower Ysidora Seawater Intrusion Barrier



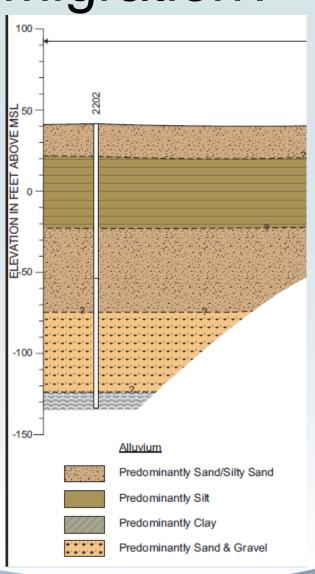
## What about vertical migration?

#### **Primary concern**

 Vertical migration to Santa Margarita River and Estuary

#### Deep aquifer separation

- Geologic borings
- Hydraulic pumping activities
- Water chemistry



# What about the Santa Margarita TMDL Project?

 TMDL Water Board staff asked to assess possible nutrient load added to Santa Margarita River and Estuary

#### Results

- More robust monitoring & reporting program
- Seawater Intrusion Barrier Monitoring
- Water quality chemistry comparison between the shallow aquifer, injection zone, and SRTTP effluent

## Revisions to Tentative Order No. R9-2018-0023

- Bicarbonate requested to be added to effluent and groundwater monitoring (Revisions on pages D-5 and D-6)
- Bicarbonate analysis required to perform the adjusted sodium adsorption ratio (SAR) analysis
- Comments were incorporated with the revised Tentative Order

### Summary

- Additions increased robustness of the MRP
- MCBCP's beneficial uses are protected
- Modeling demonstrates no migration toward potable well field or vertically to Santa Margarita River
- If the injection does the unexpected the Tentative Order requires the injection to cease or decrease
- In conclusion, recommend adoption of the revised Tentative Order No. R9-2018-0023

## Questions?

