

# **Cease and Desist Order**

## **Item # 10**

**Order No. R3-2014-0047**

- **Applies to Surface Impoundment Only**
- **Two Major Design Flaws Identified During January Storms**
- **Flooding Began on January 8, 2017**
  - **Flooding reported to Water Board on January 9, 2017**
  - **Flooding not reported by CCSD until January 11, 2017**



01/11/2017



01/11/2017



02/17/2017



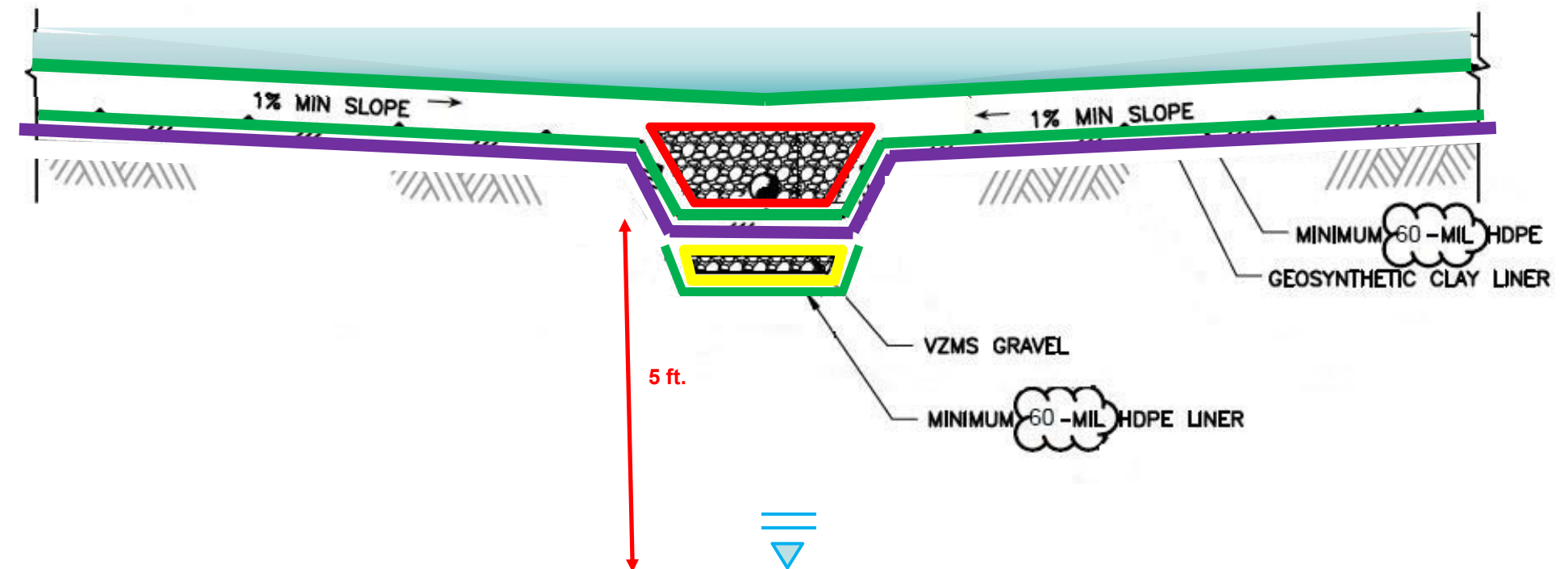
03/20/2017

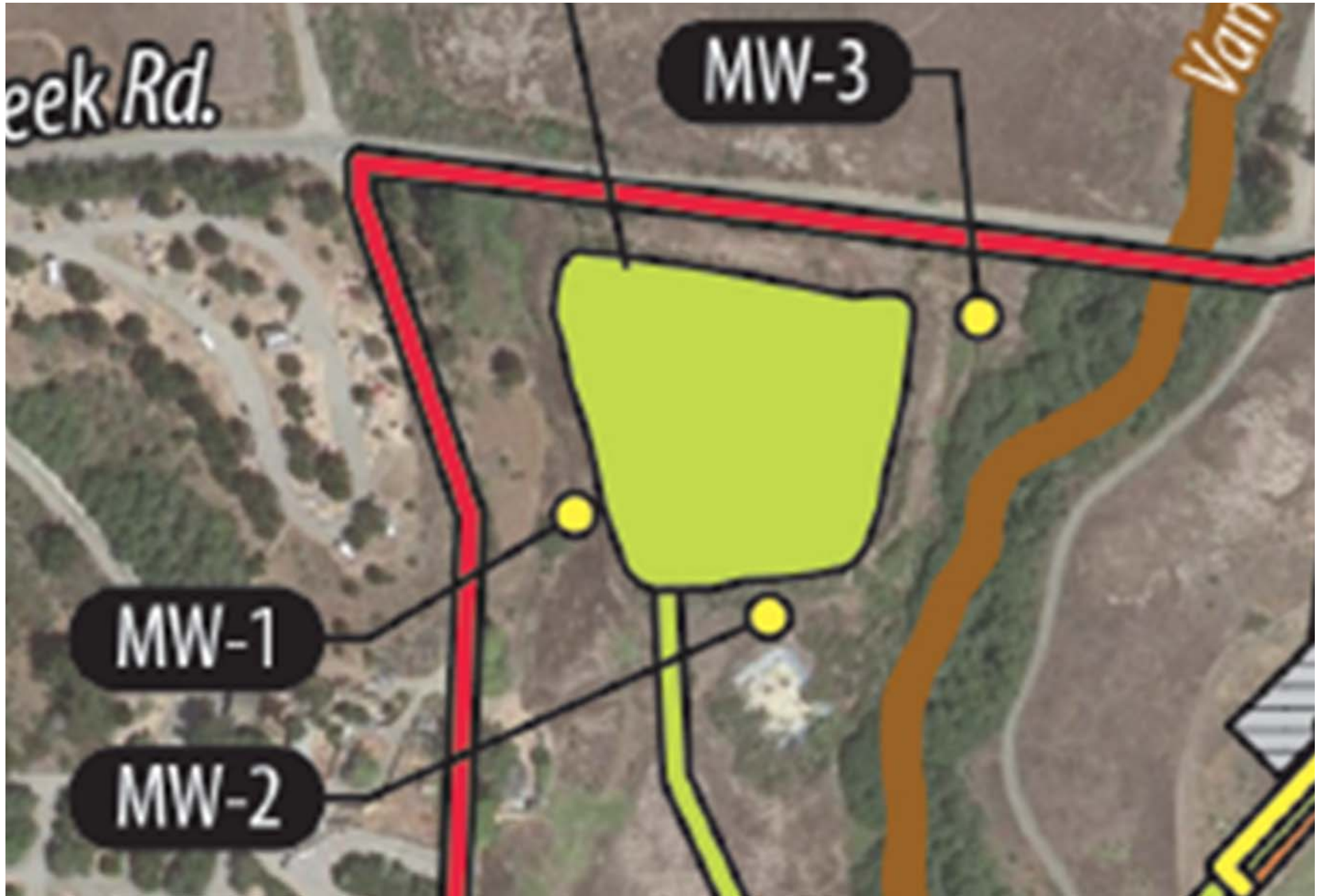
# Impoundment Design Flaw #1

- **Liquid in the Vadose Zone Monitoring System (VZMS)**
  - **Water detected in VZMS on January 24 through March 7, 2017**



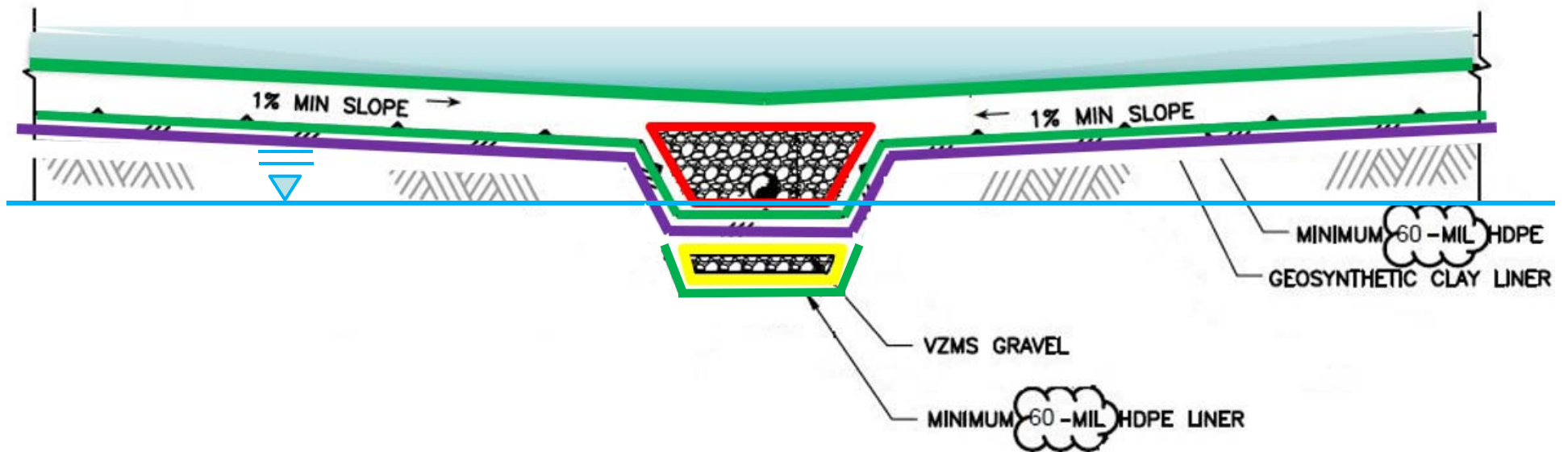
# Surface Impoundment Liner System







# Liner System Separation from Groundwater



# Impoundment Design Flaw #1

**The presence of liquid in the VZMS means either:**

- 1) The liner is leaking; or**
- 2) Groundwater has infiltrated into VZMS**



# Impoundment Design Flaw #2

- **Surface Impoundment designed to contain a 1,000-year 24-hour storm event**
  - **Exceeded minimum freeboard on February 5, 2017 (34.2 inches required)**
  - **Design Report states:**  
**“...there is no anticipated stormwater flow into the evaporation pond.”**



Culvert

State Parks Owned Property

Approximate low spot in San Simeon Creek Road

Van Gordon Creek Road

San Simeon Creek Road

Van Gordon Creek

North

# Daily Rainfall Data

(SLOCountyWater.org)

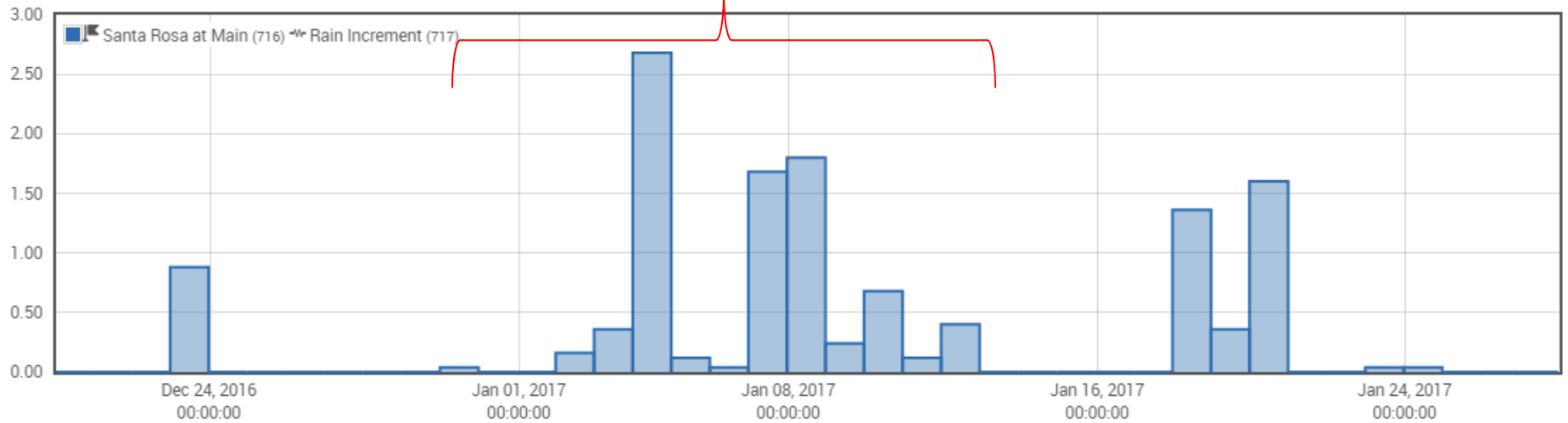
📍 Santa Rosa at Main (716)

📅 December 20, 2016 - January 27, 2017 ▾

☁️ 0.00 in 🕒 about 7 hours ago

● Markers | 📖 Legend | ↔ Daily ▾

8.32 inches



**Culvert**



02/17/2017



02/17/2017



02/17/2017





02/17/2017

# Overview of CDO

- **Two options for Surface Impoundment:**
  1. **Rehabilitate**
  2. **Discontinue use**
- **CCSD is not contesting the CDO as proposed**
- **CCSD plans to discontinue use**
- **CDO requires workplan within 30 days of adoption**



# Removing Waste

- **Allowing liquids to evaporate is problematic**
  - Design evaporation rates predict approximately 11 years for liquid removal
  - Pollutant concentrations will increase over time
  - Wildlife attracted to increasingly polluted water
  - Facility would be continuously out of compliance with Title 27

# On the Bottom



# Comments

- **Many claim it will be prohibitively expensive to remove liquids other than evaporation**
  - **CCSD has not submitted their proposed work plan yet**
  - **Staff expects to work with CCSD to come up with the most effective methodology**
  - **Timing range of removal options**
    - **50 days to 10+ years**



# Comments

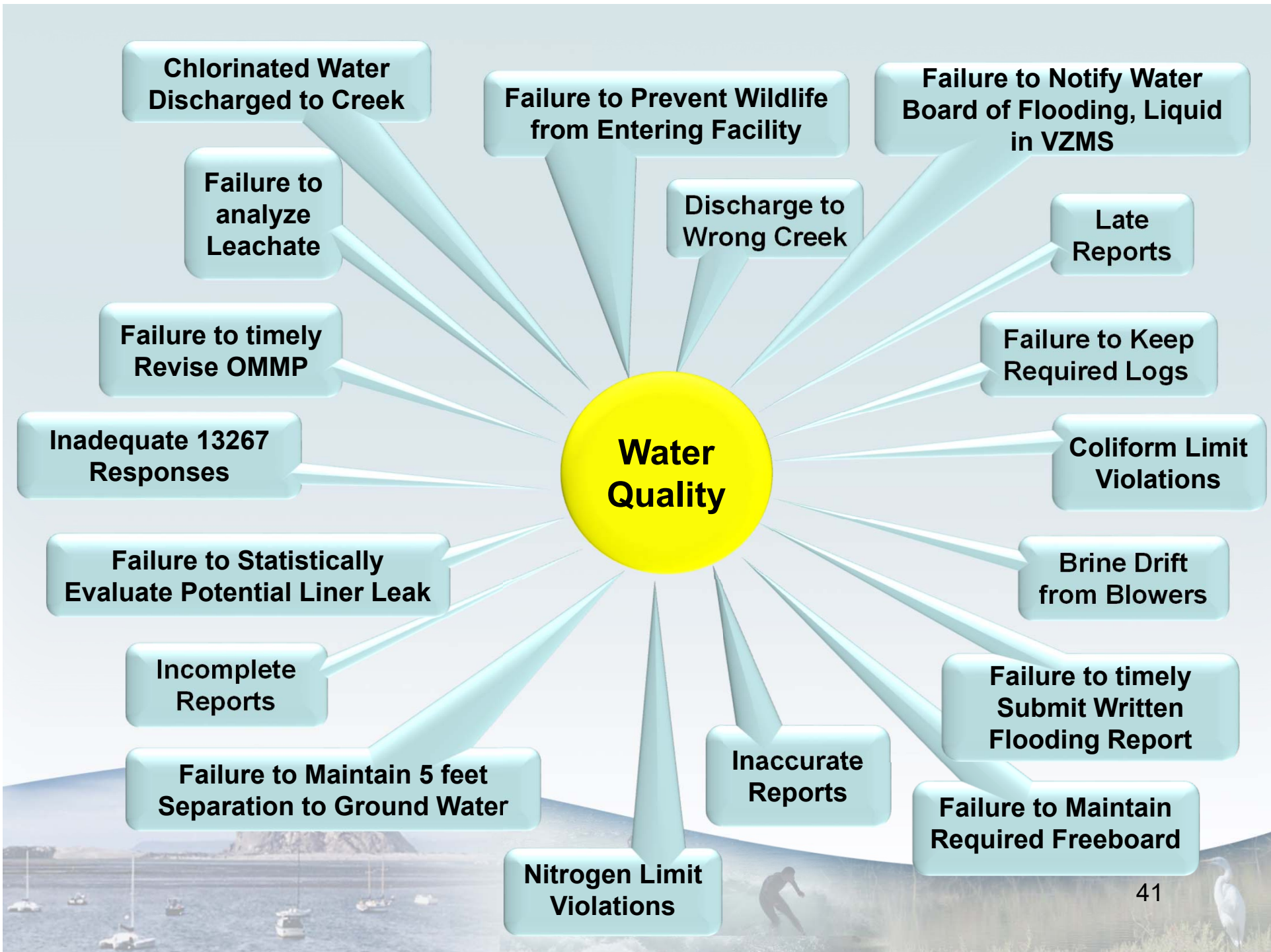
- **Comments stating impoundment presents no threat to the environment or public health**
  - **Current impoundment contents exceed basin plan concentration limit for Boron**
  - **Selenium and other constituents have exceeded MCLs in the past**
  - **Attractive nuisance for wildlife**



# Comments

- **Comments stating that the proposed CDO is designed to punish CCSD and that previous violations were only for late reports**







# Staff Time Spent on CCSD Facilities Oversight

- **CCSD has consumed  $\cong$  25 - 30% of my time since December 2015**
  - 255 hours/year
- **Typical Facility**
  - 8.25 hours/year/WDR



# Conclusion

- **The Surface Impoundment is out of compliance with Title 27 requirements**
  - We now know that separation between the liner and groundwater will be less than 5 feet under certain conditions.
  - We should not allow CCSD to operate the impoundment in violation of the WDR.



# **Staff Recommends Adoption of Cease and Desist Order R3-2017-0016**

## **QUESTIONS?**

