

# **Semi-Annual Water Quality Report**

Planning Committee  
October 13, 2015

# District's Water Quality Goals



- Meet Federal and State Drinking Water Standards
  - KPI – Meet 100% of Federal and State Drinking Water Standards
  - Met all Federal and State Standards
- Strive to meet the District's Water Quality Goals
  - KPI – Meet 100% of District's Water Quality Goals
  - 2015 met 96% of Water Quality Goals

# Disinfection By-Products



- TTHM
  - Exceeded WQG in 5 of 32 compliance calculations (16%)
  - Source water quality, drought operations and supplemental supply
- HAA5
  - Exceeded WQG in 1 of 32 samples (3%)
  - Source water quality, drought operations and supplemental supply

# Total Coliform and Chlorate



- Total Coliform
  - WQG 0.5% positive
  - Exceeded WQG in March ( 2/353) and April (3/356)
  - All repeat samples were negative
- Chlorate
  - WQG: 400  $\mu\text{g/L}$
  - Exceeded in 1 of 14 samples
  - Manage inventory to reduce storage time

# Taste and Smell



- Taste & Smell Complaints
  - WQG 30 or less Consumer Complaints per Month
  - March; 75 complaints
    - Pardee gate change
  - June; 67 complaints
    - San Pablo Reservoir algal bloom
  - Taste & Smell compounds (MIB and geosmin) not toxic

# Fluoridation



- US Health and Human Services
  - May 2015
  - Optimal fluoride dose: 0.7 mg/L
- District decision to reduce optimal dose
- All plants lowered to 0.7 - 0.75 mg/L
  - 6 water treatment plants
  - Different source water quality
  - Calculated dose (WTP) versus measured concentration (Dist System)

# Fluoridation (cont.)



- January to August 2015
  - 0.34 to 0.93 mg/L
  - Average 0.82 mg/L
- September 2015
  - 0.62 to 0.88 mg/L
  - Average 0.72 mg/L

# Lead/Copper Rule (LCR)



- National Drinking Water Advisory Committee (NDWAC)
- Potential changes to LCR
  - Copper
  - Lead service lines
  - Local health authorities



# Cyanotoxins

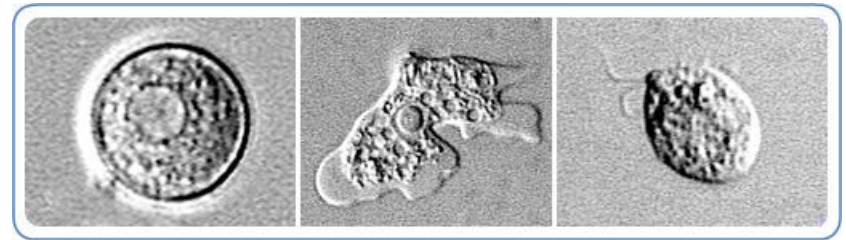


- USEPA 10-day Health Advisories
  - Microcystins
  - Cylindrospermopsin
- Two advisory levels
  - Six years and younger
  - Over six
- District Monitoring and Response Plan

Cyanotoxin	10-day Health Advisory $\leq$ six years old ( $\mu\text{g/L}$ )	10-day Health Advisory $>$ six years old ( $\mu\text{g/L}$ )
Microcystins	0.3	1.6
Cylindrospermopsin	0.7	3

# *Naegleria fowleri*

- Etiologic agent for primary amoebic meningoencephalitis (PAM)
- Enters through nasal passage
  - Diving into warm recreational water
  - Neti pot
  - Abulation
- CDC guidelines for the preparation of water



From: CDC Website

# Naegleria (cont.)



- AWWA workshop on distribution system disinfection issues
  - SWTR detectable residual
  - *N. fowleri* found in drinking water distribution systems in southeast
  - Maintain disinfectant residual
  - No reported cases in District's service area

# Legionnaire's Disease



- 1989 Surface Water Treatment Rule
- Institutional plumbing issue
  - Medical campus
  - College campus
  - High tech campus (Google, Apple, ...)
  - Prisons
  - High rise office buildings
- No reported cases in District service area

# Questions



- Thank you for your attention.
- Questions

# **Semi-Annual Regulatory Compliance Update**

Planning Committee

October 13, 2015

# Agenda



- FY15 enforcement actions
- Glen Echo Creek cellular concrete spill
- Cal/OSHA activities
- Safety program results
- Upcoming Activities

# Enforcement Review



- Strategic Plan KPI = Zero NPDES and Waste Discharge Requirement (WDR) permit Notices of Violation (NOVs) received
- FY15 – 6 NOVs



# Notices of Violation



- August 2014 missed sample at Clay Station RWPP
  - New Compliance Calendar system
- August 2014 no sample at CANS WTP
  - No flow to sample
- February 2015 discharge from FSCC pipeline exceeded settleable solids and TSS
  - Did not reach receiving waters

# Notices of Violation (cont)



- March 2015 missed samples at CANS WTP
  - No discharges occurring
- June 2015 unreported flow volume at CASS WTP
  - Reporting error
- June 2015 chlorine residual at Pardee WTP
  - Did not reach receiving waters

# Glen Echo Creek Summary



- Wednesday, April 8, at approximately 11:30am
- Dingee pipeline replacement project
- Estimated 170 cubic yards of cellular concrete
- Rockridge Branch of Glen Echo Creek in Oakland Hills
- Spill extended approximately one mile
- Series of culverts & open creek





4/12/2015  
72.5 FT

Cam Dir: Downstream









# Root Cause Findings



- Drawings are not 100% accurate
- Visual and physical inspections of buried valves are inadequate
- Developed a physical integrity test or inspection via CCTV



# Next Steps



- Continue water quality monitoring
- Finalize restoration plan
- Obtain permits
- Implement restoration plan
- Enforcement/Fine negotiation with SWRCB, RWQCB, and CDFW

# Cal/OSHA Investigations



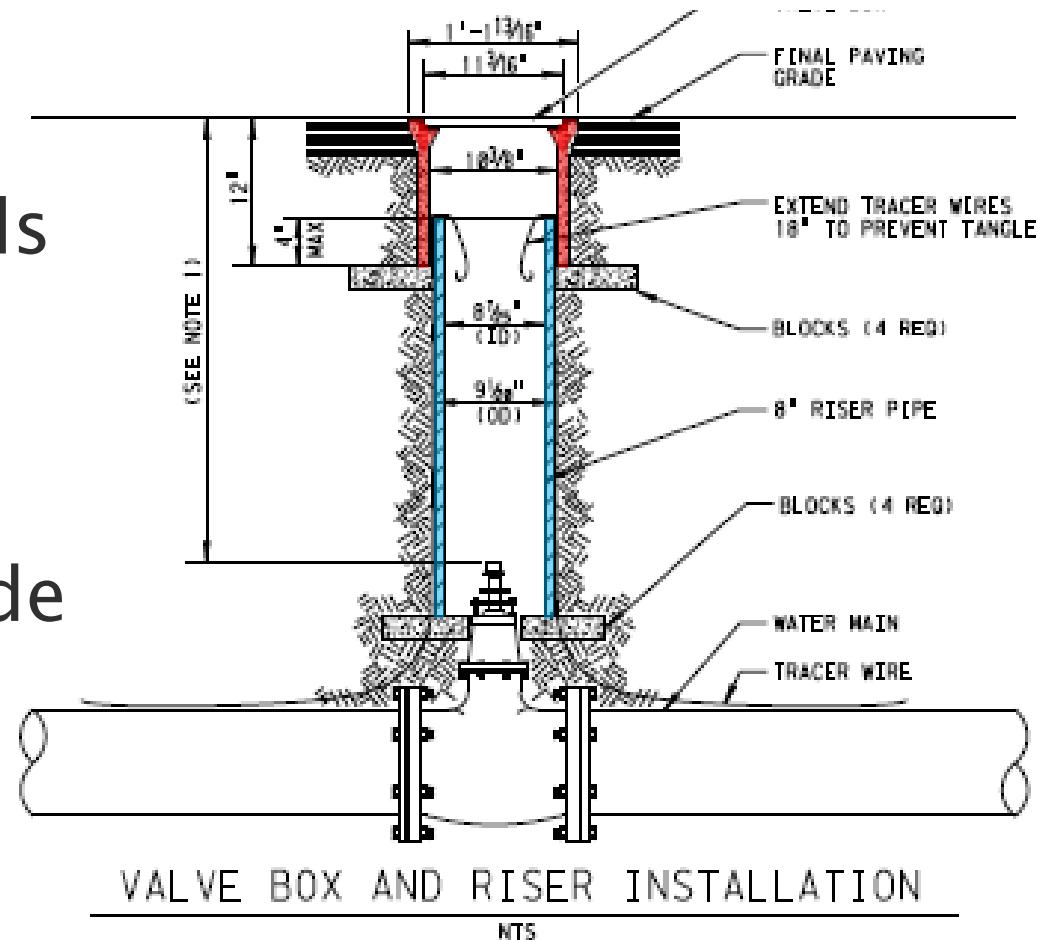
- Plumber injury on 2/25/15
  - Loss of very tip of finger
  - General Citation
    - Failed to identify, evaluate, and correct hazards associated with gate valve box installation
  - Fine of \$340



# Corrective Actions



- Job Hazard Analysis
  - Review all hazards including pinch points
  - Revised standard drawing to provide clearance



# Cal/OSHA Investigations



- Employee complaint on 3/10/15
  - Asbestos removal at South Reservoir
  - Notice of No Violation

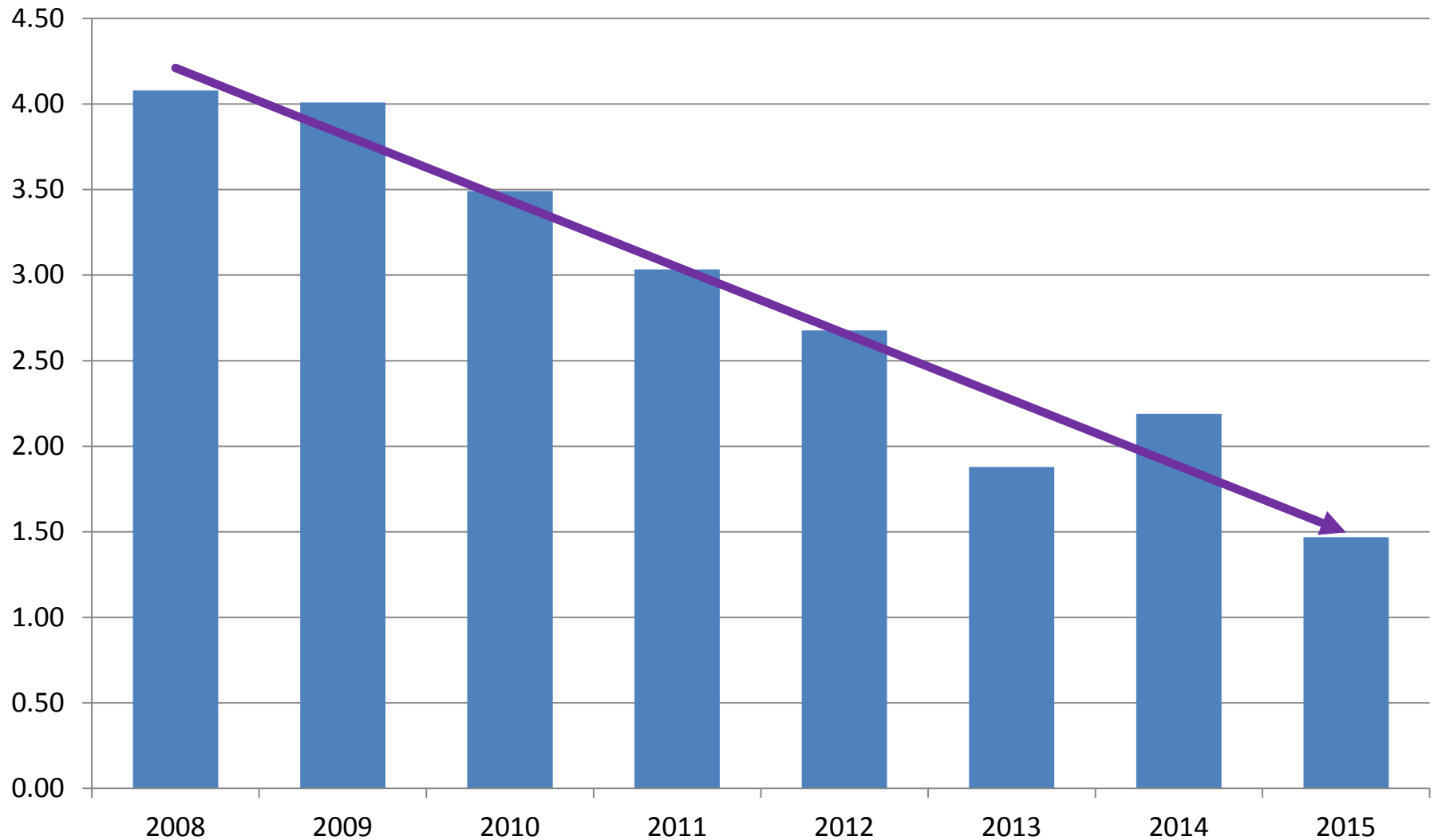


# Safety Program Review



- Strategic Plan KPI for employee wellness
  - Employee injury & illness lost time incidence rate  $\leq 3.0$

# District Lost Time Injury Rate



# Lost Time Hours



YEAR	LOST TIME HOURS	FTE*
2008	41,887	23.3
2009	34,260	19
2010	35,213	19.5
2011	29,736	16.5
2012	33,077	18.4
2013	23,887	13.3
2014	21,026	11.7
2015 (thru August)	10,884	6

2008 – 62 Lost Time Cases

2015 – 15 Lost Time Cases (thru September)



# Upcoming Activities



- Implement new statewide discharge permit
- Monitor Penn Mine landfill for water intrusion
- Close out remediation activities at Lake Chabot Machine Gun Range
- Negotiate cost sharing with BLM for mine tailings pond remediation