

Central Valley Clean Water Association
**CEC Pilot Study Proposal for
Central Valley**

May 2, 2017

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Background

- Special Panel Report – *Monitoring Strategy for CECs in CA Aquatic Ecosystems* (April 2012)
- SWRCB Staff Report (Sept 2012)
- SCCWRP – Pilot Study Guidance (2015)
- SWRCB – CEC Statewide Pilot Monitoring Plan (2016)
- CVCWA Pilot Study Proposal (Sept 2016- May 2017)

List of CECs to be Monitored

- Bisphenol A
- Estrone
- Ibuprofen
- 17-beta estradiol
- Galaxolide
- Dichlofenac
- Triclosan
- PBDE – 47 and -99
- PFOS

Questions to be Addressed

- **Derived from SWRCB 2016 Statewide Pilot Monitoring Plan**
 - Which CECs are detected?
 - Do CECs originate from inland POTWs?
 - Are CECs present in background samples?
 - How quickly do CECs attenuate after discharge?
 - What are the concentrations and loadings in dry versus wet weather?
 - Will observed levels change Monitoring Trigger Quotients?
 - What CECs accumulate in sediment and tissue?

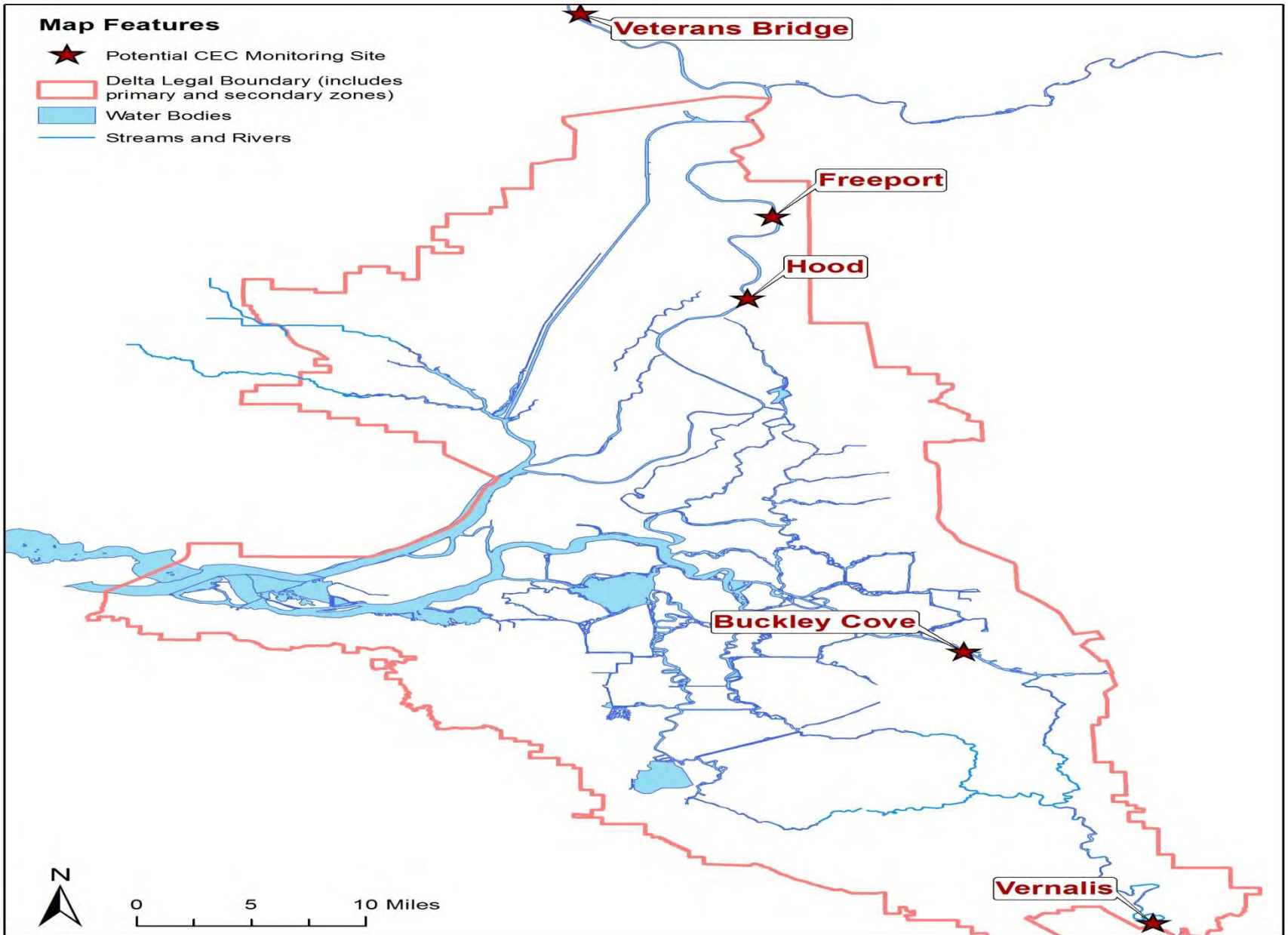
Overview of Proposal

- Follows 2016 SWRCB CEC Statewide Pilot Monitoring Plan
- Focus on Delta and on POTW discharge(s) to EDW(s)
- Targeted Monitoring - water, sediment and tissue
- Monitoring over three (3) years
- Logistical Coordination with bioanalytical work by SWRCB
- Communication plan and data report after first year of monitoring

Year 1 Monitoring

- Emphasis on Ambient Monitoring - Targeted
 - Water – Bimonthly
 - Sediment - Quarterly
 - Tissue - Opportunistic
- Delta Integrator sites (1 min, 4 max)
- Delta Boundary/Background Sites (2)
- Effluent Gradient sites (1 min, 2 max)

Proposed CEC Pilot Study



Year 2 Monitoring

- Continued ambient monitoring - Targeted
 - Water – Quarterly
 - Sediment – semiannual
 - Tissue - Opportunistic
- POTW effluent monitoring (1 or more) - Bimonthly

Year 3 Monitoring

- Continued ambient monitoring (detected analytes)
 - Water – semiannual
 - Sediment – annual
 - Tissue - Opportunistic
- POTW and Gradient monitoring (detected analytes)
 - Water - bimonthly

Questions to be Answered

- Agreement on Analyte list
- Match between Analytes and Matrices
- Analytical methods and detection limits
- Sampling and handling methods
- QA/QC methods
- Other Lessons Learned
- POTW selection criteria

POTW Selection Criteria

- Community characteristics
- Source of Water supply
- Treatment type
 - UV vs chlorine disinfection
 - NDN + filtration?
- Flow Ratio – effluent: receiving water
- Length of Downstream Gradient
- Aquatic species/Habitat

Q&A

- Other Topics?