

Timeline of Ammonia Issues in the Delta

CWEMF Briefing:

Delta Ammonia/Nutrient Issues

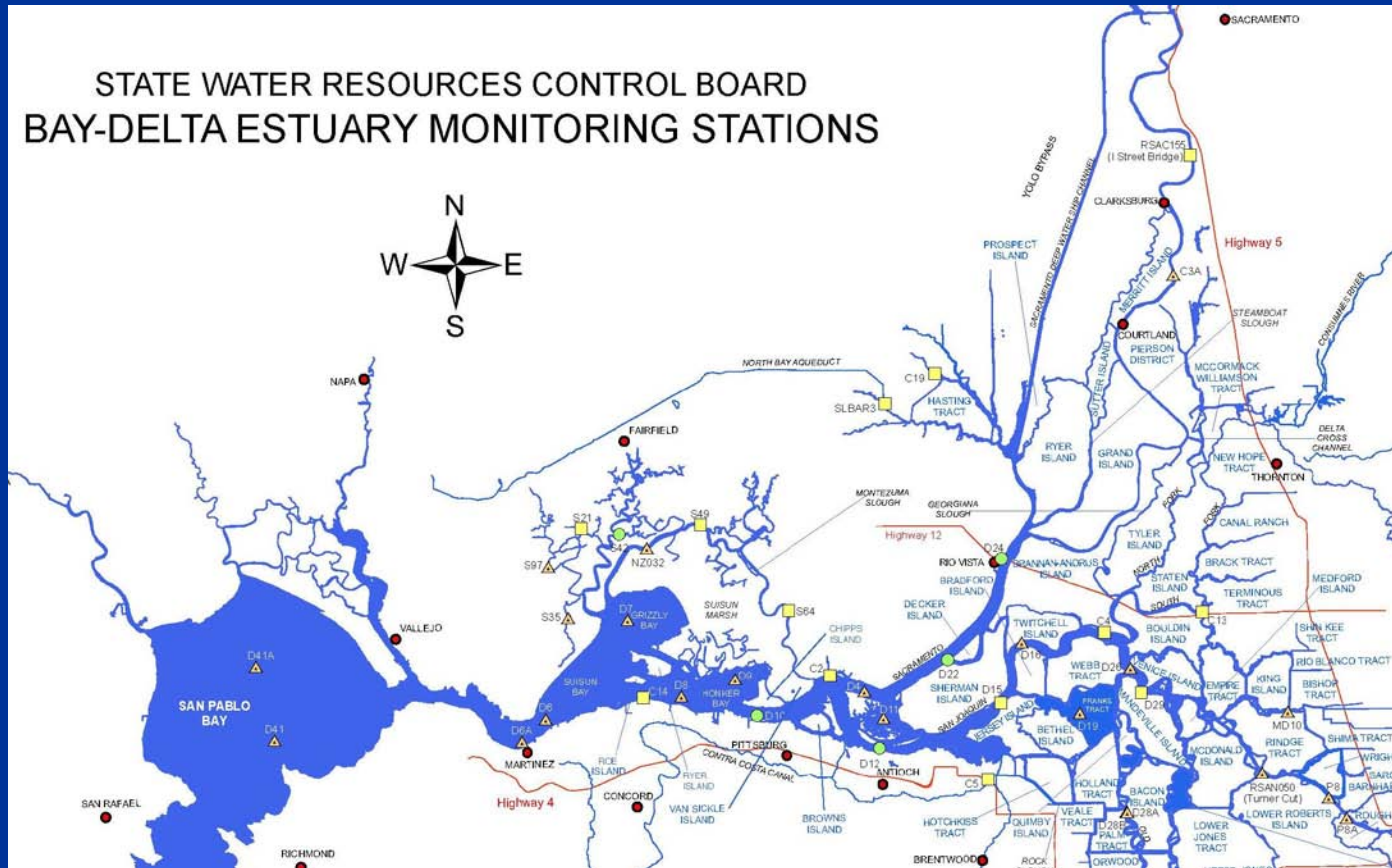
October 28, 2011

Mark Gowdy

State Water Resources Control Board



STATE WATER RESOURCES CONTROL BOARD BAY-DELTA ESTUARY MONITORING STATIONS



Timeline

- Fall 2007 –Initial DWR Analysis
 - Dugdale research indicated > 0.056 mg N/L ammonium inhibiting algae in SF estuary
 - Ambient ammonium concentrations often exceed this threshold
 - Sac Regional WWTP a steadily increasing significant source.
 - Inconclusive evidence of impact on delta smelt survival at ambient unionized ammonia levels₃

Timeline (con't)

- Summer 2008 – Strategic Workplan for the Bay-Delta
 - Coordinated effort across programs and regions
 - Address multiple potential contributions to POD
 - Included initial algae and smelt studies
 - Adopted by State and Regional Boards
 - <http://www.waterboards.ca.gov/waterrights/>

Timeline (con't)

- March 2009 – CALFED Science Workshop Research Framework Development
 - Planning committee with representatives from CALFED, DWR, RB5, SRCSD, and SWC
 - Panel of 4 national experts receiving input from local experts and stakeholders
 - <http://www.science.calwater.ca.gov>

Timeline (con't)

- August 2009 – Ammonia Summit
 - Coordinated by IEP and Region 5
 - 18 presentations covering:
 - Sources, concentrations, fate & transport
 - Food web dynamics
 - Toxicology
 - <http://www.swrcb.ca.gov/rwqcb5/>
(under Water Issues / Delta Water Quality)

Other Important Contributors

- State Water Contractors
- SF Bay Regional Board
- Sacramento Regional County SD
- Interagency Ecological Program
- CALFED Science

Timeline (con't)

- December 2010 – SRCSD NPDES Permit
 - Aquatic Toxicity Issue Paper in April 2010
 - Extensive public process
 - Petitions to State Board under review
 - <http://www.swrcb.ca.gov/rwqcb5/>
(under Water Issues / NPDES Program)

Questions?

Contact Information:

mgowdy@waterboards.ca.gov

(916) 341-5432

