CITY OF TRACY NPDES Permit Appeal Hearing

5/19/09

Use the Tosco Approach

- Final Limits in the Findings
- Interim Performance-Based Mass Limits
- Tracy already has mass limit for TDS:

  This Order includes an interim annual mass loading effluent limitation for TDS and requires the Discharger to implement measures to reduce the salinity in its discharge to Old River. The interim effluent limitation is based on current treatment plant performance and will ensure that the mass loading of salinity does not increase as the effluent flow rate increases.

Order No. R5-2007-0036 at pg. F-48.

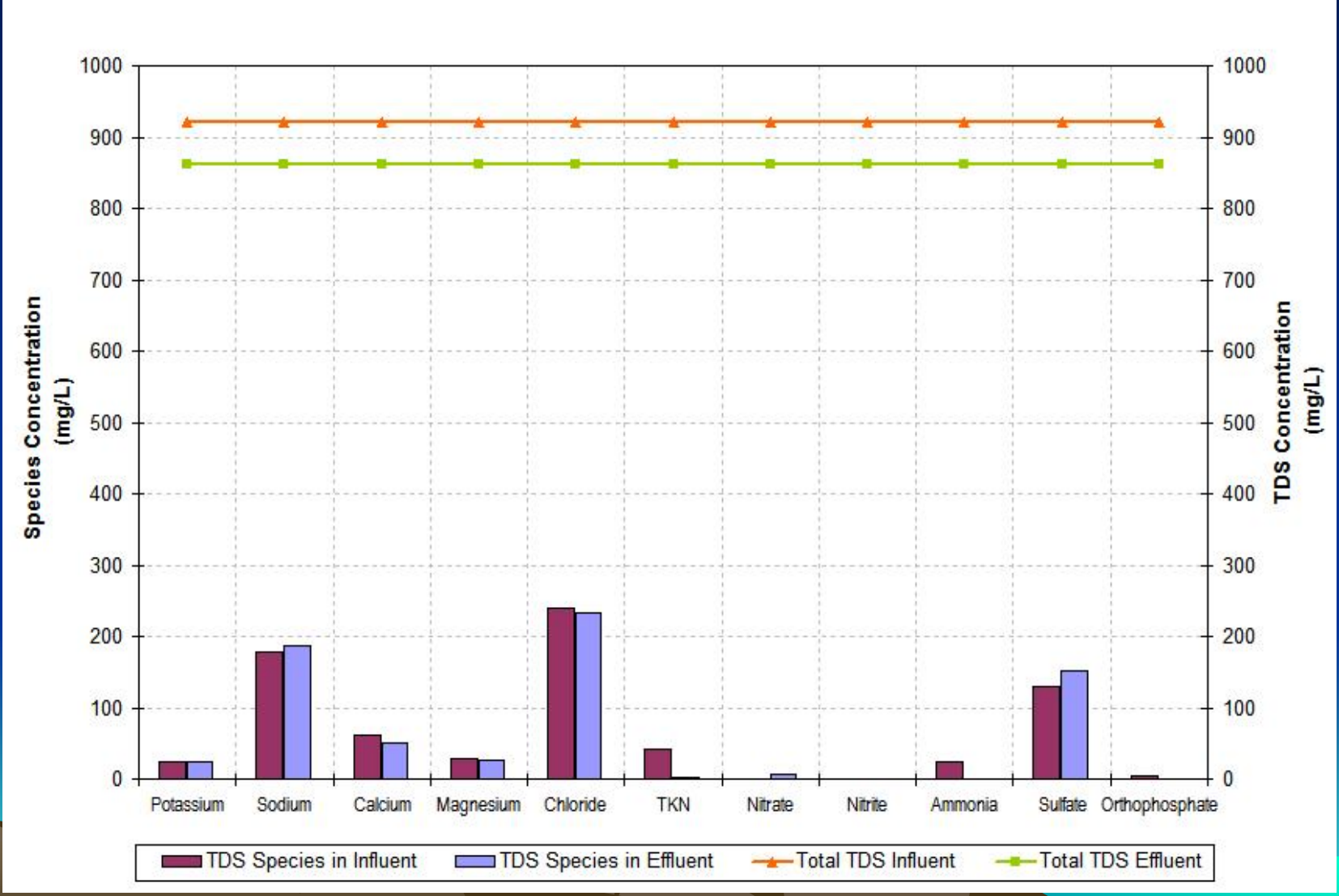
Planning Processes

- TMDL for salinity in Southern Delta
- CV-Salts programs
- More importantly, modifications to the salinity objectives for the South Delta

Common Constituents of EC

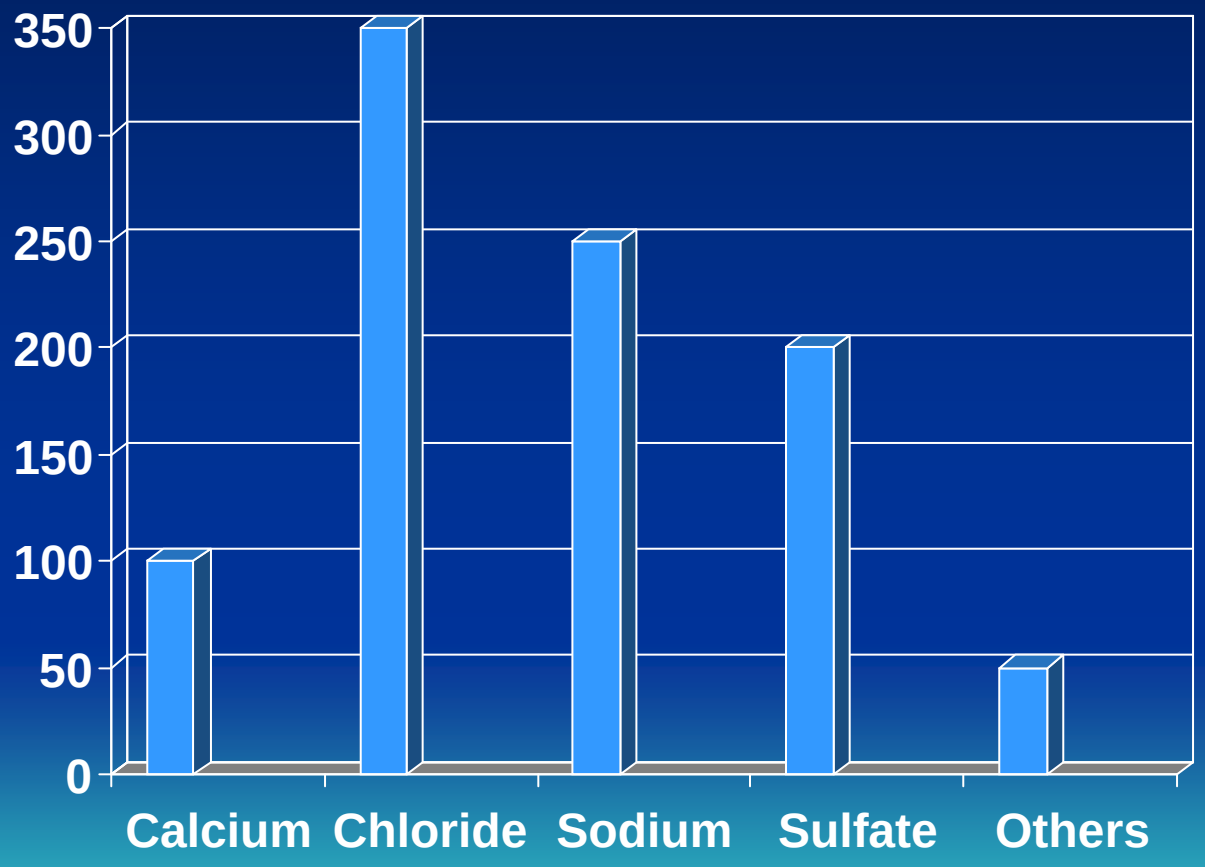
EC Contribution	Name	EC Contribution	Name
$5.0E^{-24}$ 10^{6}/cm	Sulfur	0.21 10^{6}/cm	Sodium
0.0288 10^{6}/cm	Antimony	0.298 10^{6}/cm	Calcium
0.0481 10^{6}/cm	Lead	0.313 10^{6}/cm	Beryllium
0.0993 10^{6}/cm	Iron	0.377 10^{6}/cm	Aluminum
0.143 10^{6}/cm	Nickel	0.452 10^{6}/cm	Gold
0.166 10^{6}/cm	Zinc	0.596 10^{6}/cm	Copper
0.172 10^{6}/cm	Cobalt	0.63 10^{6}/cm	Silver
0.187 10^{6}/cm	Molybdenum		
http://environmentalchemistry.com/yogi/periodic/electrical.html			

Constituents of EC/TDS



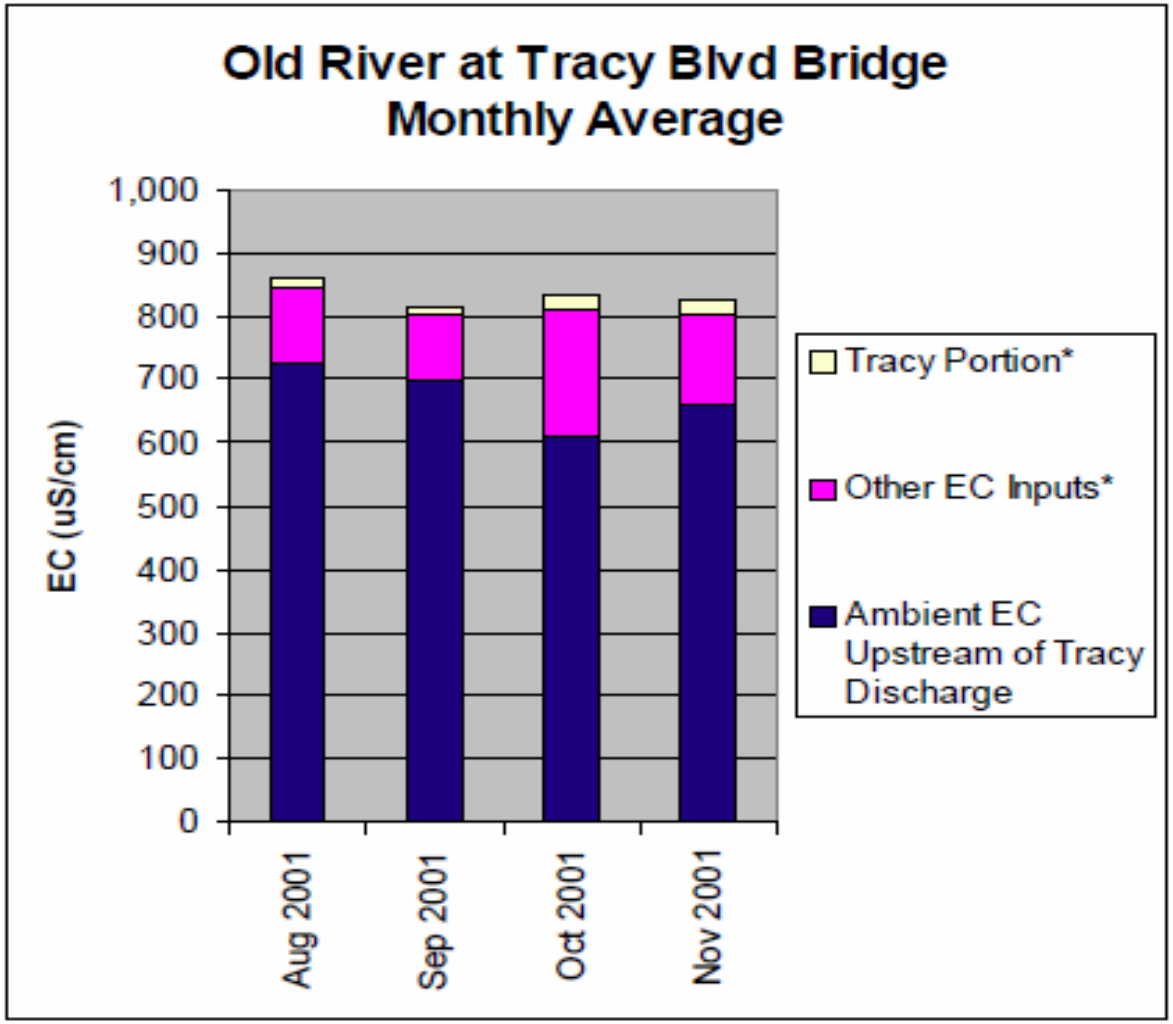
Wastewater Analysis

mg/l



Tracy's Discharge Represents Only A Small Contribution of Total EC

Figure F-3: Modeled Salinity Impacts



* The Tracy Portion is DSM2 model predictions using a reasonable worst-case scenario as described in Attachment H. The Other EC Inputs were calculated based on the measured EC at Tracy Blvd Bridge – Tracy Portion – measured ambient EC upstream of Tracy discharge.

Conclusion

- Tosco approach approved for bioaccumulative toxics, so should be acceptable for salt
- Avoid requiring unnecessary and costly treatment for salt when there may not be a real impairment of beneficial uses.
- Make suggested changes to the Bis-2 section of Order.