



The RMP Mercury Strategy

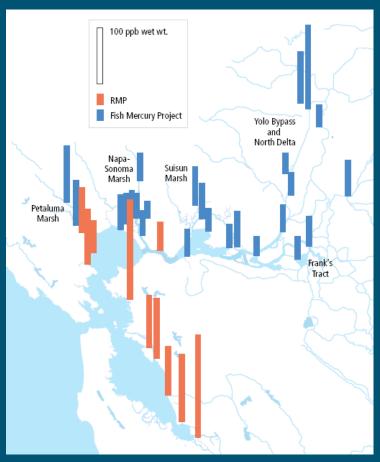
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Presented at:
RMP TRC
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Q1: Patterns in Uptake



- Major focus for 2008 2010
- Spatial and temporal
- RMP small fish
- RMP S&T: sport fish, bird eggs, water, sediment
- Other studies
 - FMP
 - SBMP
 - USGS





Q2: High Leverage Pathways

- Ideally follows Q1
- Some work now, greater focus after 2010
- RFP in 2007
- Two potentially very valuable but somewhat risky studies
 - Blum isotopes
 - Hintelman DGTs
- Other studies
 - Mason WERF









Q3: Opportunities for Intervention

- Ideally follows Q2
- RMP focus on internal sources
- Other programs on external sources, ecosystems
 - McKee Prop 13 Study
 - Drury Guadalupe
 - Suisun Marsh (Siegel, Stephenson et al.)
 - Yolo Bypass (Stephenson et al.)

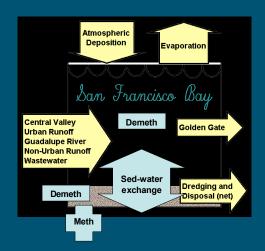




Q4: Effects of Management Actions

- Management actions including remediation, restoration, etc.
- Models continual development
 - MeHg mass budget
- Monitoring
 - Regional monitoring
 - Local monitoring as actions are taken







Q5: Effect of Total Mercury Reductions

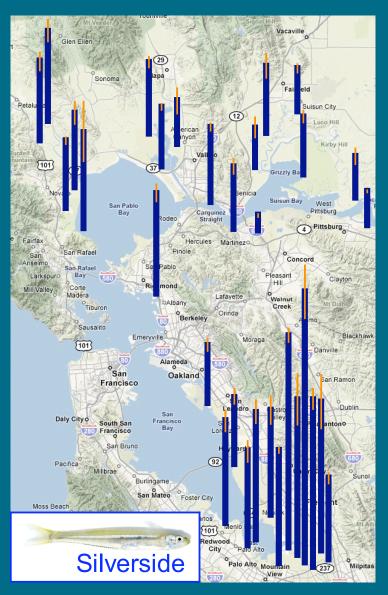
- Not part of the 1-4 sequence
- No specific studies currently planned





Uptake Patterns in Small Fish

- \$450K, 2008-2010
- Yielding information
 - Regional pattern
 - High and low leverage pathways
 - Seasonal patterns
 - Piggyback projects
- Report due in Dec 2010



High Leverage Pathways: Isotopes

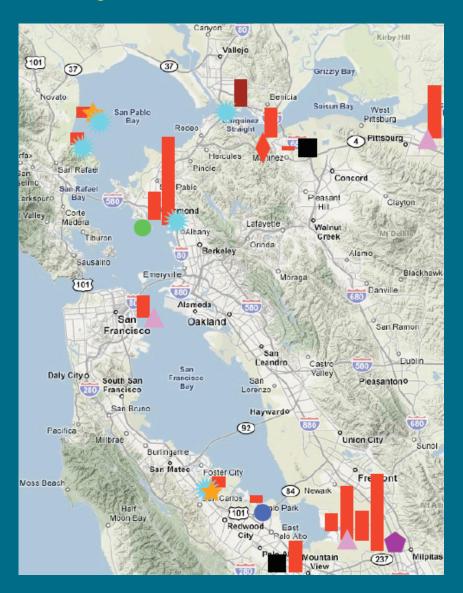
- \$115K, 2009-2010
- Haven't really seen data yet
 - Hints that it might have worked
- Update at CFWG, Mercury Meeting in January
- Report due in May 2010



d²⁰²Hg (‰)

High Leverage Pathways: DGTs

- \$80K, 2009-2010
- First year data didn't match small fish
- Adjustments made in year 2
- Update at CFWG, Mercury Meeting in January
- Report due in May 2010



Mercury Strategy Five Year Plan

Element	Questions	2008	2009	2010	2011	2012
Food Web Uptake (Small Fish)	Mercury 1	150	150	150	100? ^a	100? ^a
High Leverage Pathways and	Mercury 2	100	100		150? ^f	150? ^f
Processes						
Methylmercury Model Development	Mercury 3, 4		25		?	
Methylmercury Bioaccumulation					?	?
Model?						
Sediment Cores (THg)					?	?
Small Tributary Loading (THg)		100 ^b	170 ^b	255 ^b	260 ^b	260 ^b
River Loading (THg)				100 ^b		
Guadalupe Loading (THg)				40 ^b		
Guadalupe Model (THg)		75	75			
Small Tributary Load Monitoring				220	350	350
Dynamic Watershed Modeling						150
Atmospheric Deposition?						
Surface Sediments (THg, MeHg)	Mercury 1	160 ^b	160 ^b	160 ^b	160 ^b	160 ^b
Water (THg, MeHg)	Mercury 1	140 ^b	140 ^b	140 ^b	140 ^b	140 ^b
Sport Fish	Mercury 1		240 ^b			218 ^b
Avian Eggs	Mercury 1		120 ^b		120 ^b	
Effects on Birds		70°	50 ^b			
		(34) ^d	(20) ^d			

Planning Effort Needed in 2010

- Decision point in June what studies to recommend for 2011?
- Take a break on small fish for 2011?
- Reconvene Strategy Team (joint with CFWG?)
- Need to evaluate progress
- Strategy update needed