

Clean Estuary Partnership Project 4.26

Multi-Box Contaminant Transport Model and Multi-Year Sediment Sampling Strategy

Progress Report

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Project Objectives:

- Develop better tool for predicting future contaminant concentrations and testing potential management actions
- Clarify uncertainty of existing model predictions
- Develop model documentation
- Identify key areas where field work can be done to reduce uncertainties
- Conduct key field work

Model Overview

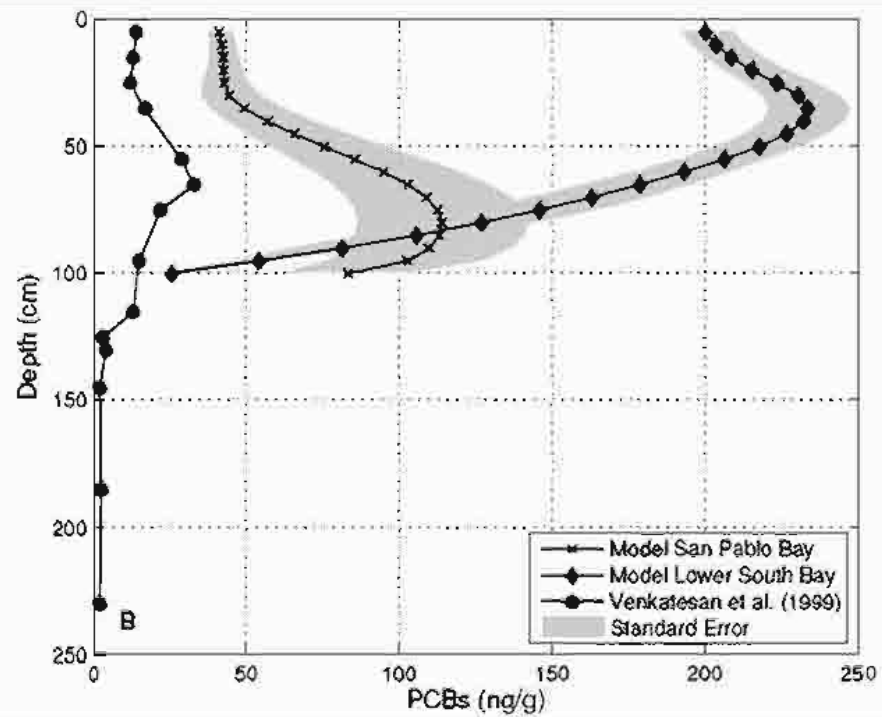
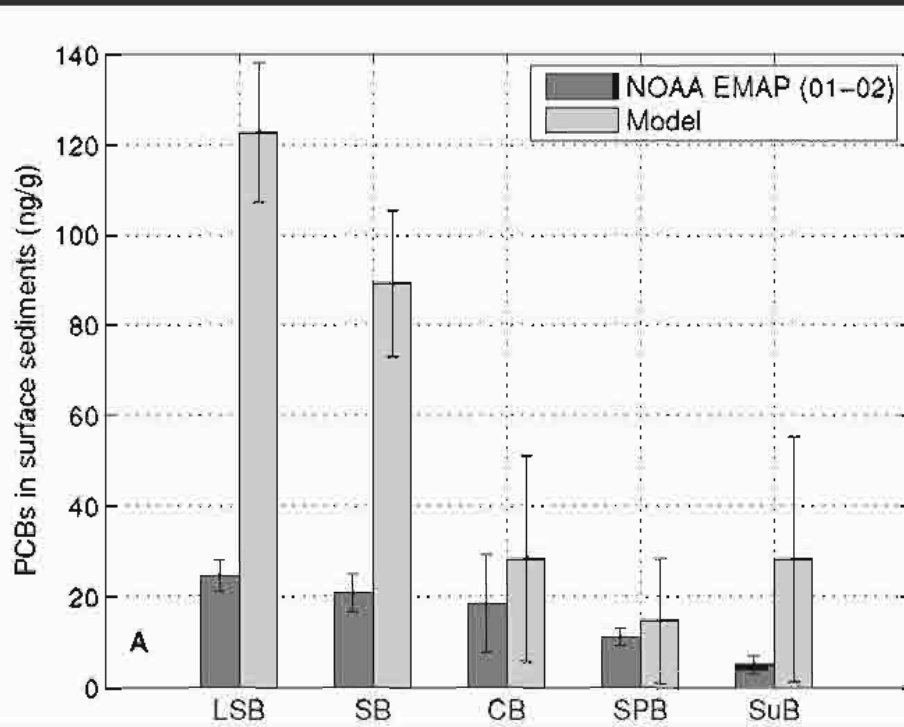
San Francisco Estuary Regional Monitoring Program for Trace Substances

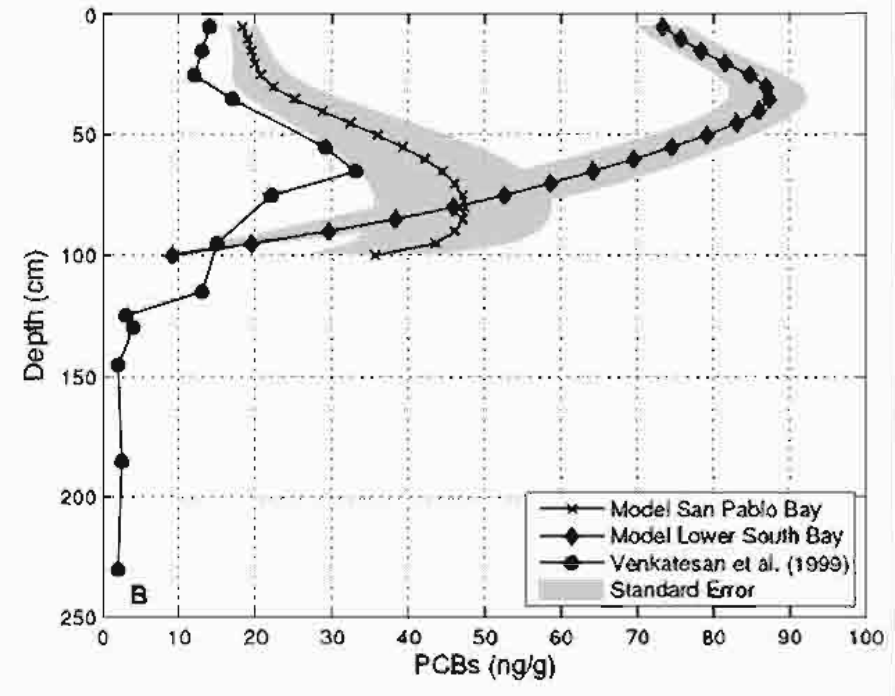
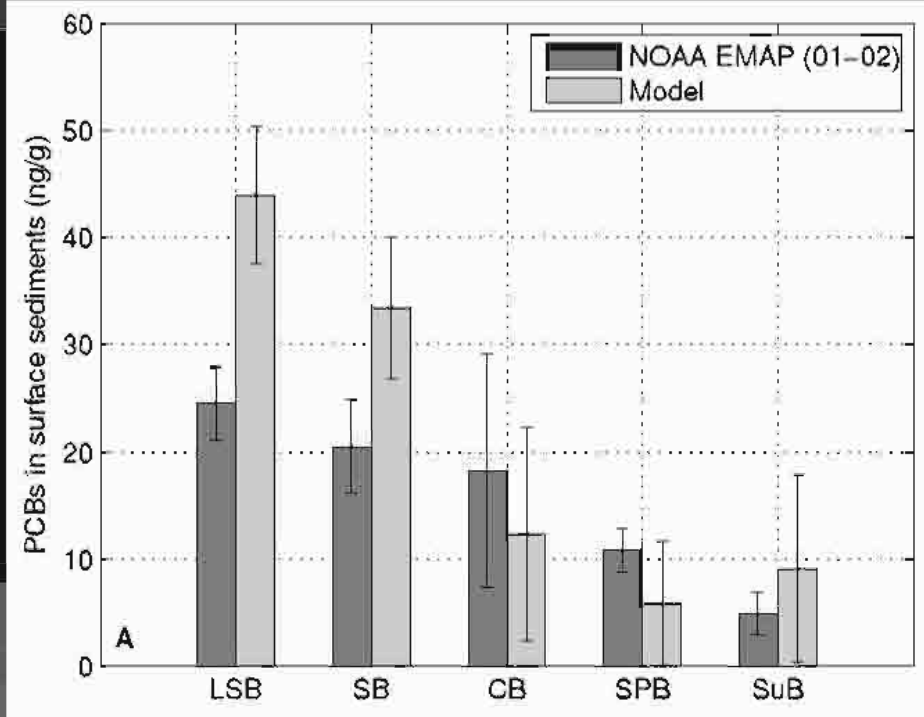
**Multi-box PCB Model
Documentation
v2.0b**

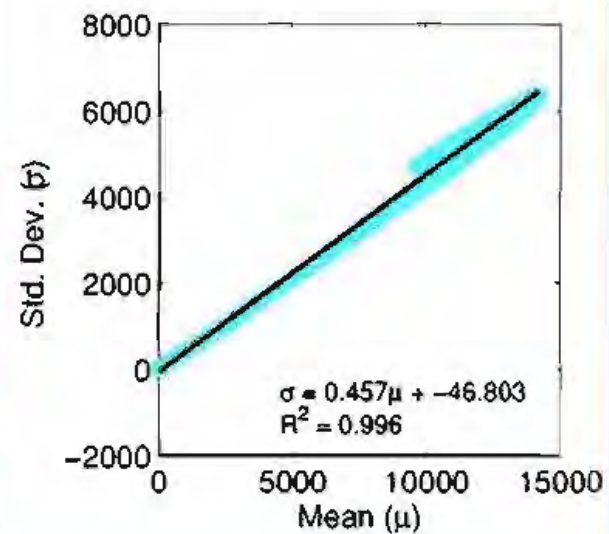
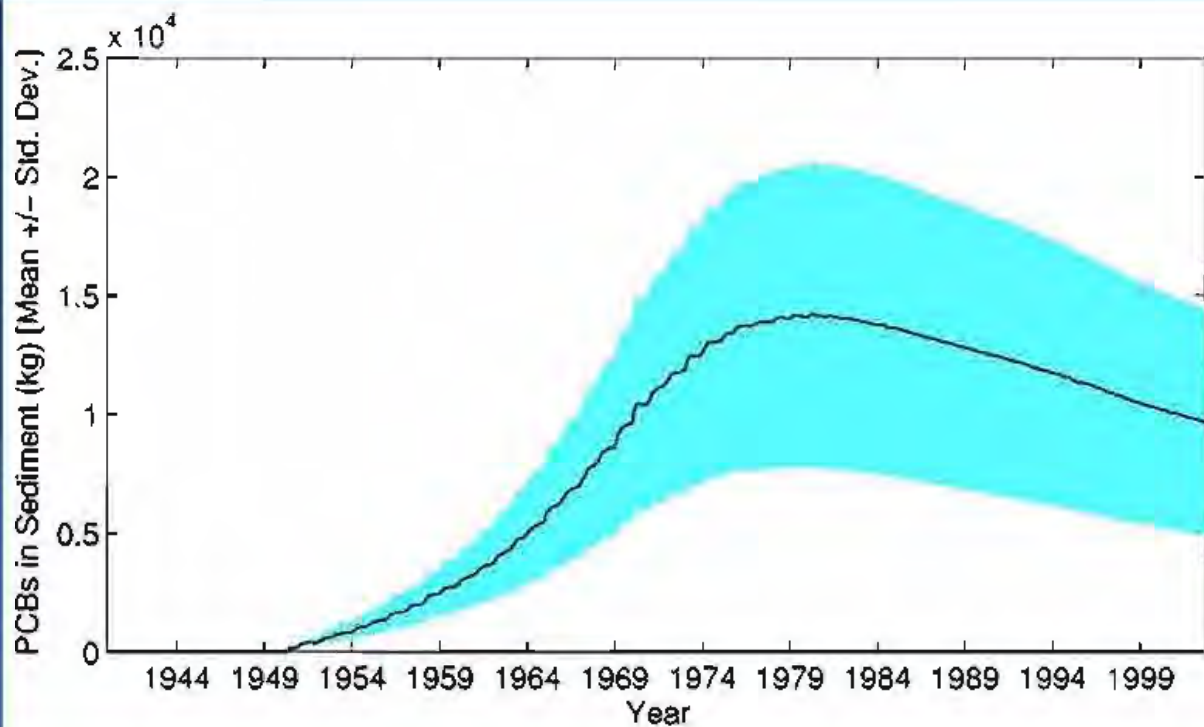
John J. Oram, Jon E. Leatherbarrow, and Jay A. Davis
San Francisco Estuary Institute, Oakland, CA

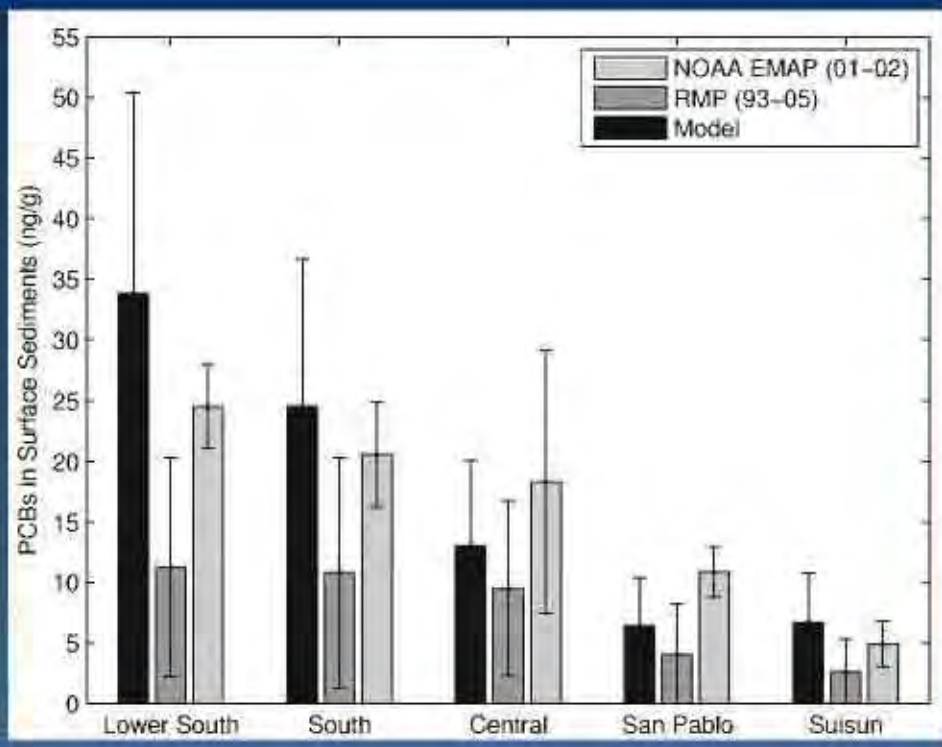
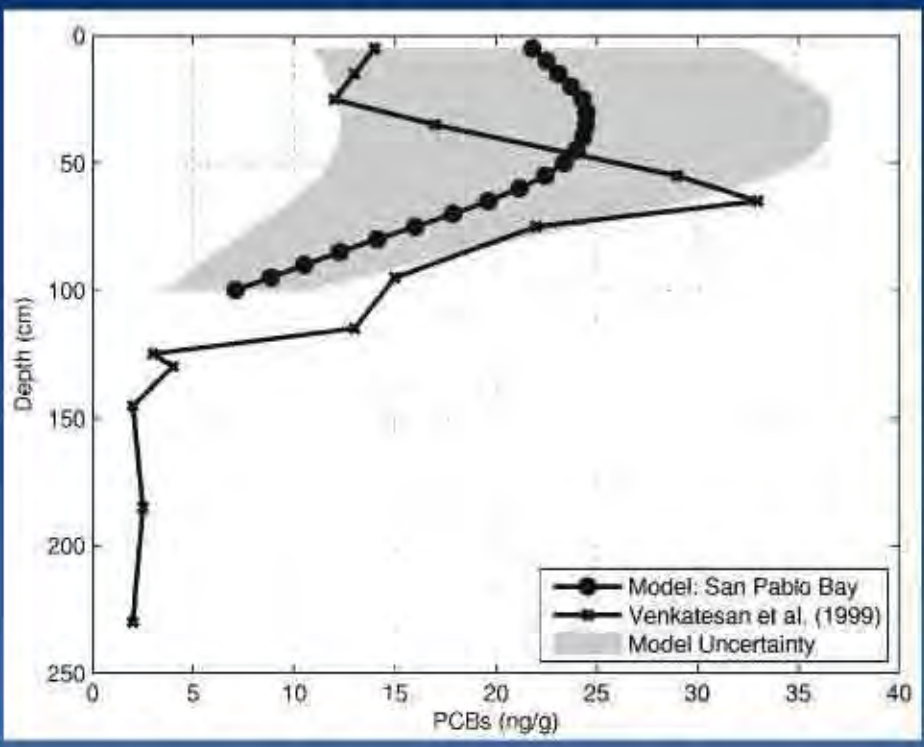
February 2006

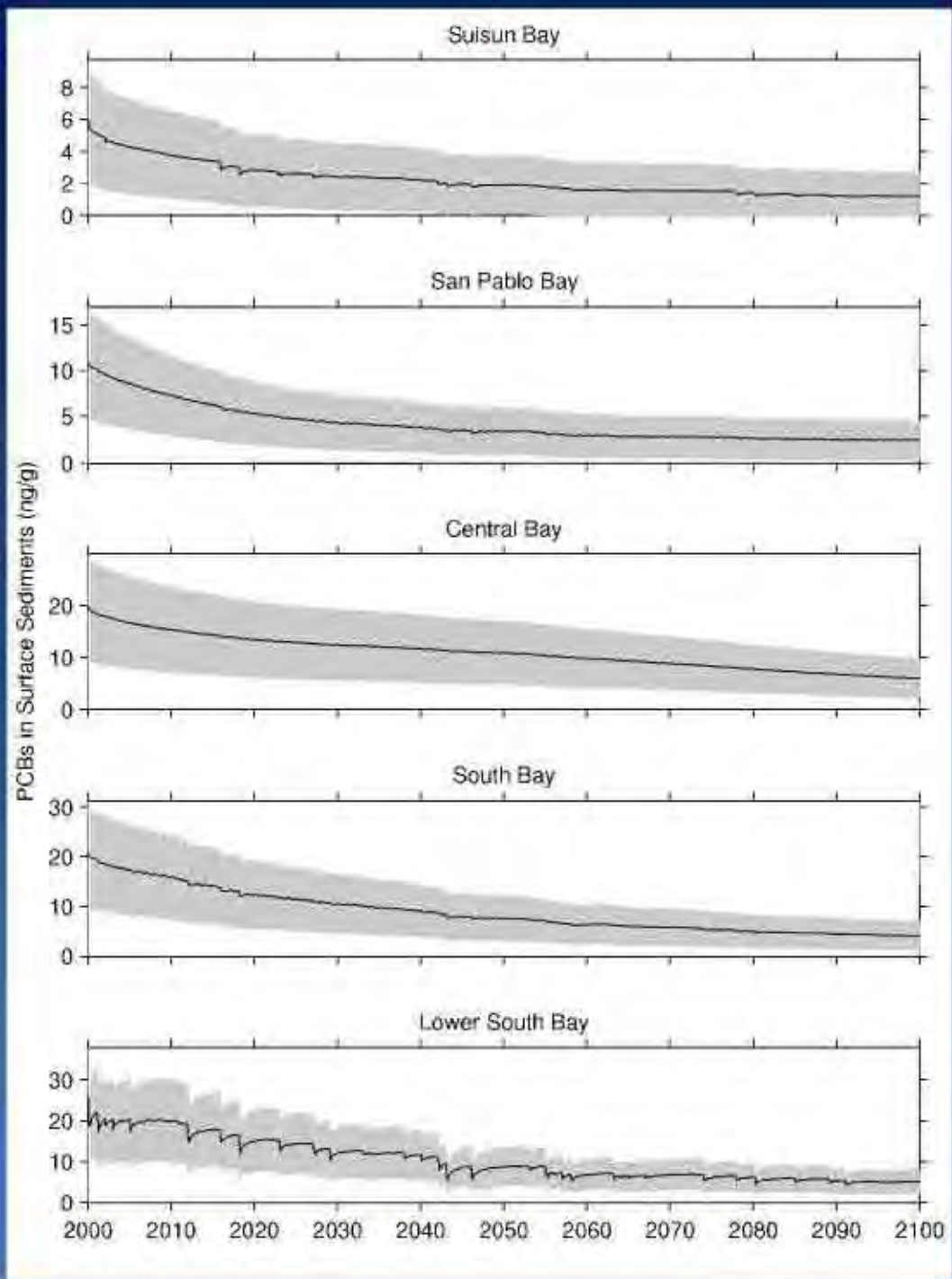












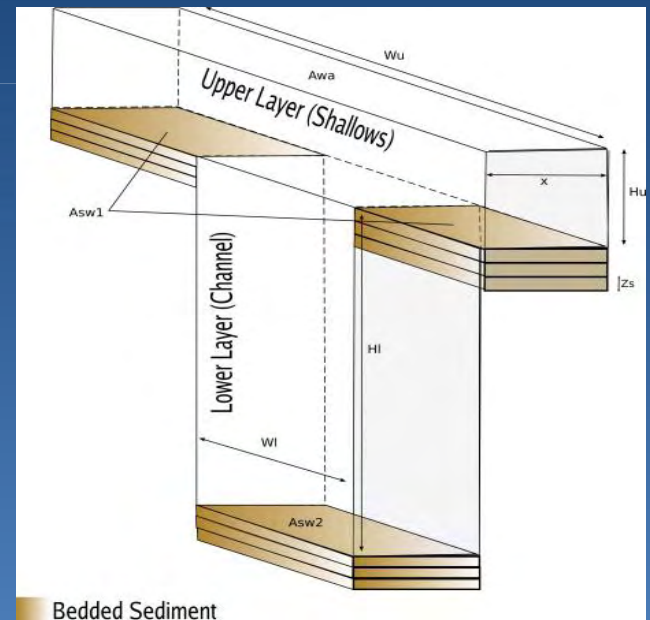
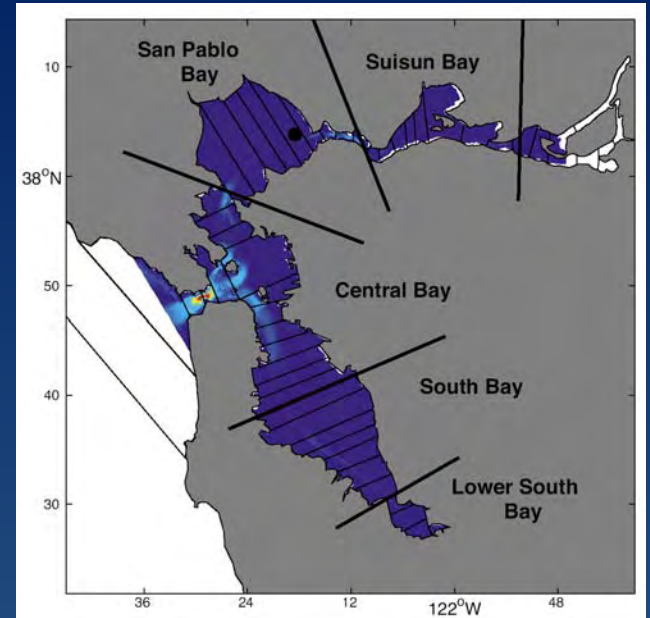
Key Accomplishments:

1. Document model

- ✓ Contract signed April 2007
- Reports underway (Draft September 2007; Final March 2008)

2. Calibrate model and improve model performance

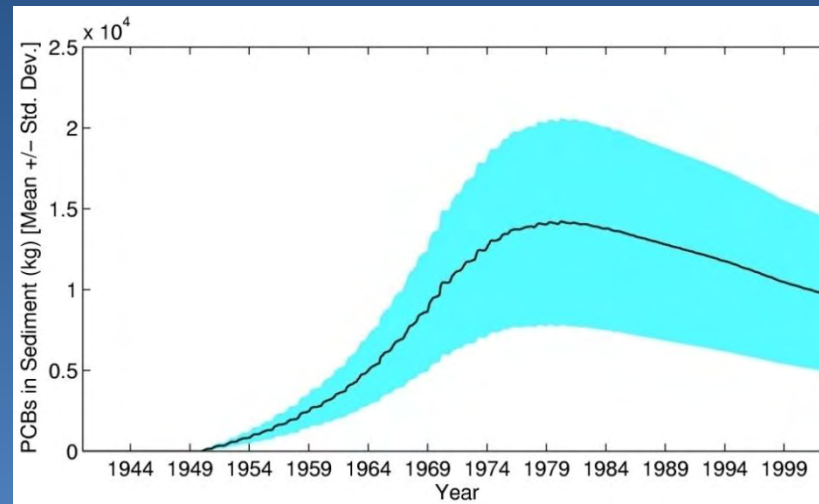
- ✓ Additional model calibration completed



Key Accomplishments (*continued*):

3. *Test model and conduct uncertainty analyses*

- ✓ Model Version 2.0b produced
- ✓ Independent model review and testing completed
- ✓ Sensitivity/uncertainty analyses completed
- Documentation reports underway (Draft May 2007; Final August 2007)



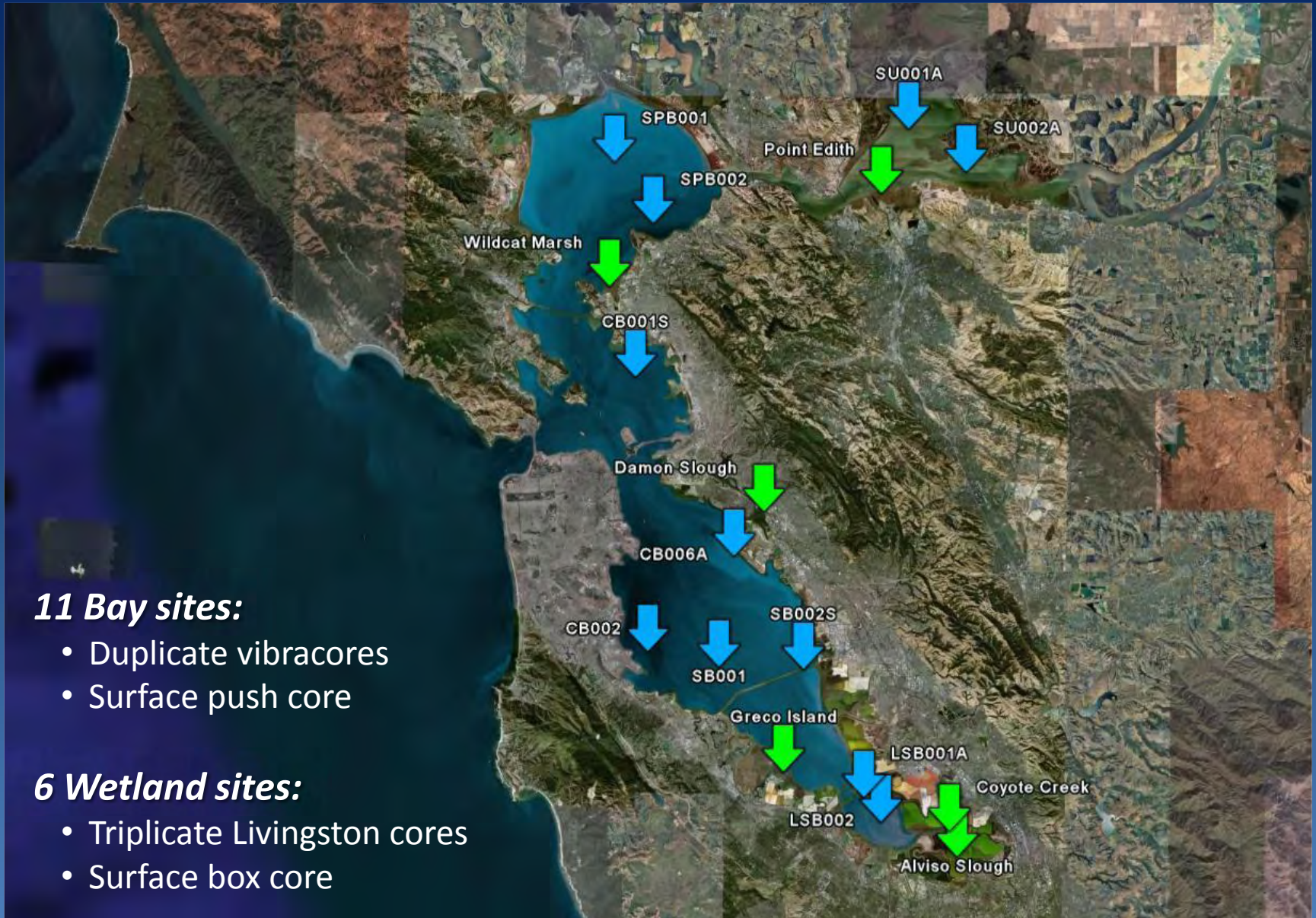
Key Accomplishments (*continued*):

4. *Conduct sediment sampling and testing*

- ✓ Sediment sampling design completed
- ✓ All field sampling completed
- Radiodating underway with chemical analyses to follow
- Reports expected next year (Draft October 2008; Final December 2008)



Sediment Sampling Sites



11 Bay sites:

- Duplicate vibracores
- Surface push core

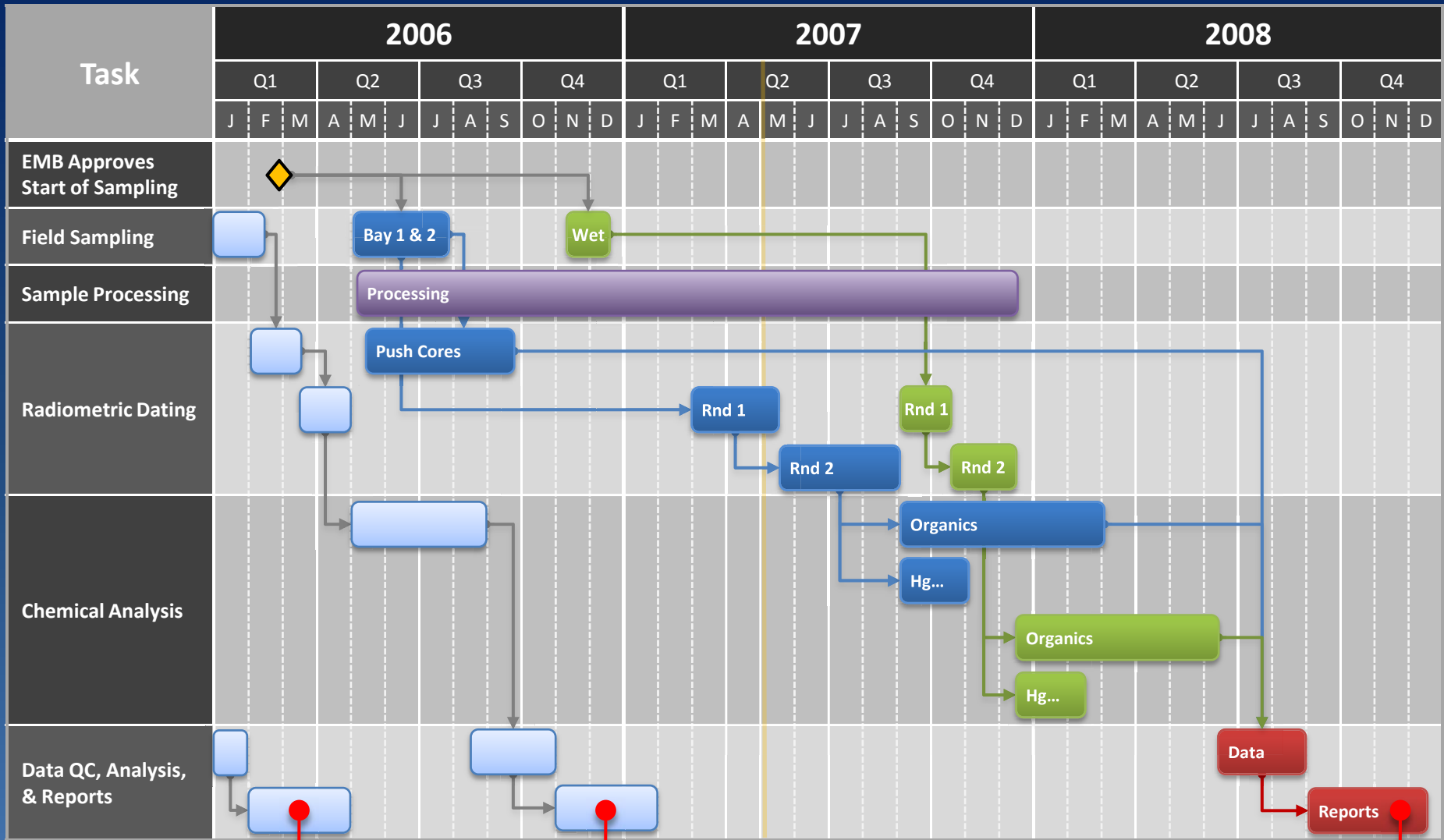
6 Wetland sites:

- Triplicate Livingston cores
- Surface box core





Revised Schedule for Sediment Sampling



May 2006
(2/05 SOW)

Jan 2007
(12/05 SAP)

Dec 2008
(Current)

Project Delays and Effect on Cost:

- Second Bay coring cruise (equipment failures and illness of captain)
- Addition of push cores (additional sampling and handling required)
- Limited analytical capacity at labs (increased labor associated with sending multiple batches)
- Adaptation to project complexity
- Delay in project completion date increases:
 - Cold storage fees
 - Coordination with labs