

Cost Estimation Overview

Bay Delta Conservation Plan
August 31, 2009

David Mitchell - M.Cubed
Paul Cylinder - SAIC

SAIC Cost Analysis Team

Task Leader

- David Mitchell

Lead Analysts

- David Mitchell, M.Cubed
- Steve Hatchett, CH2M Hill
- Wendy Illingworth, Economic Insights

SAIC Research Assistance

- Monica Hood
- Vanessa Emerzian

DHCCP Coordination

- Jim Watson, *Asst. Program Mgr., Environmental Integration*

Team Assignments

Habitat Restoration

- Lead: David Mitchell

Other Stressors

- Lead: Wendy Illingworth

Water Facilities &
Operations

- Lead: Steve Hatchett
- Cost Development: DHCCP

Program Entity,
Monitoring/Adaptive
Mgt, Remedial

- Lead: David Mitchell

Anticipated Schedule

- September 10 Steering Committee
 - Chapter 8 Outline
 - Approach to Cost Analysis
- October 22 Steering Committee
 - 1st Draft Cost Estimates (partial)
- December 3 Steering Committee
 - 2nd Draft Cost Estimates (chapter 8)

Chapter 8 Outline

- Three Primary Sections
 - Introduction/Overview
 - Cost Estimation Methodology & Results
 - Funding & Assurances
- Technical Appendix
- Handout: Draft Chapter Outline

Chapter Development Sequence

Step 1: Cost Estimation/Documentation

Step 2: Funding Sources/Assurances

- Funding Sources/Assurances Follows Cost Estimation
- Cost Analysis Team Tasked with Cost Estimation
- Will NOT be developing Funding Sources/Assurances

Data Model Design Considerations

No Black Boxes

- Data, assumptions, and models must be transparent and well documented

Estimation Consistency

- Use standardized cost accounts to ensure consistency and facilitate comparison and aggregation

Roll Up/Drill Down Capability

- Must be easy to logically aggregate or disaggregate cost data

Ripple Through Updating

- Updated data and assumptions should automatically ripple through all related data tables and summaries

Cost Incidence

- Need to show when costs expected to occur over 50 year plan

Proposed Data Model



Cost Data Tags

CI_ID	Cost_Item_Name
1	Salary/Benefits
2	Overhead
3	Design/Engineering
4	Permitting/Environmental
5	Legal
6	Land Purchases
7	Land Easements/Leases
8	Facility Rental
9	Equipment Purchases
10	Grading/Landscaping
11	Construction
12	OM&R
13	Funded Studies
14	Grants/Other Financial Support

CC_ID	COST_CAT_NAME
1	Program Administration
2	Environmental Compliance
3	Planning, Design, and Engineering
4	ROA Habitat Land Acquisition
5	ROA Habitat Creation
6	ROA Habitat Management
7	Water Facilities Land Acquisition
8	Water Facilities Construction
9	Water Facilities O&M
10	Toxic Contaminants
11	Non-Native Predators
12	Illegal Harvest

CG_ID	COST_GROUP_NAME
1	Program Administration
2	Monitoring, Research, and Adaptive Management
3	Habitat Restoration
4	Water Operations
5	Other Stressors
6	Remedial Measures

Example Summary Tables

	Program Years										
BDCP Expenditure	01-05	06-10	11-15	16-20	21-25	26-30	31-35	36-40	41-45	46-50	Grand Total
Program Administration	\$XXX,XXX	\$XXX,XXX	\$XXX,XXX	\$XXX,XXX	\$XXX,XXX	\$XXX,XXX	\$XXX,XXX	\$XXX,XXX	\$XXX,XXX	\$XXX,XXX	\$XXX,XXX
Water Operations	\$XXX,XXX	\$XXX,XXX	\$XXX,XXX	\$XXX,XXX	\$XXX,XXX	\$XXX,XXX	\$XXX,XXX	\$XXX,XXX	\$XXX,XXX	\$XXX,XXX	\$XXX,XXX
Habitat Restoration	\$XXX,XXX	\$XXX,XXX									\$XXX,XXX
Grand Total	\$XXX,XXX	\$XXX,XXX	\$XXX,XXX	\$XXX,XXX	\$XXX,XXX	\$XXX,XXX	\$XXX,XXX	\$XXX,XXX	\$XXX,XXX	\$XXX,XXX	\$XXX,XXX

	Program Years										
BDCP Expenditure	01-05	06-10	11-15	16-20	21-25	26-30	31-35	36-40	41-45	46-50	Grand Total
Program Administration											
ADMIN											
Program Administration											
Salary/Benefits	\$XXX,XXX	\$XXX,XXX	\$XXX,XXX	\$XXX,XXX	\$XXX,XXX	\$XXX,XXX	\$XXX,XXX	\$XXX,XXX	\$XXX,XXX	\$XXX,XXX	\$XXX,XXX
Water Operations											
WOCML02											
Water Facilities Land Acquisition											
Land Purchases	\$XXX,XXX										\$XXX,XXX
Planning, Design, and Engineering											
Design/Engineering	\$XXX,XXX										\$XXX,XXX
Water Facilities Construction											
Construction		\$XXX,XXX									\$XXX,XXX
Water Facilities O&M											
OM&R			\$XXX,XXX	\$XXX,XXX	\$XXX,XXX	\$XXX,XXX	\$XXX,XXX	\$XXX,XXX	\$XXX,XXX	\$XXX,XXX	\$XXX,XXX
Habitat Restoration											
HRCM03											
ROA Habitat Land Acquisition											
Land Purchases	\$XXX,XXX										\$XXX,XXX
HRCM04											
ROA Habitat Land Acquisition											
Land Easements/Leases		\$XXX,XXX									\$XXX,XXX
Grand Total	\$XXX,XXX	\$XXX,XXX	\$XXX,XXX	\$XXX,XXX	\$XXX,XXX	\$XXX,XXX	\$XXX,XXX	\$XXX,XXX	\$XXX,XXX	\$XXX,XXX	\$XXX,XXX

9/14/2009



Questions & Discussion

9/14/2009