Why is the Delta so important – and why can’t we “fix” it?

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June 5, 2019
Overview of today’s talk

• What is the Delta?

• How have human policy choices shaped the Delta?

• Why is the Delta so important to California?

• What are the major challenges facing the Delta?

• How is the Delta managed? Council's role?

• Looking ahead and things to think about on the tour
What is the Delta?

- The Delta is...
  - Home to more than 515,000 people
  - Home to 750 plant and animal species
  - Hub of California’s water supply
Delta legacy communities

- Bethel Island
- Clarksburg
- Courtland
- Freeport
- Hood
- Isleton
- Knightsen
- Locke
- Rio Vista
- Ryde
- Walnut Grove
How has the Delta changed over time?

Change in Delta land cover, early 1800s to early 2000s. Graphic by SFEI-ASC
How has the Delta changed over time? cont.

**Evolution of California’s water storage and delivery systems**

1. Local surface water and groundwater supplies, conservation

2. San Francisco Public Utilities Commission Hetch Hetchy System 1913 - Raker Act

3. East Bay Municipal Utility District Mokelumne River Aqueduct 1929

4. U.S. Bureau of Reclamation Central Valley Project, 1940 first water delivered (Contra Costa Canal)

Why is the Delta so important to California?

Population per County
- 0 - 255,602
- 255,603 - 948,816
- 948,817 - 1,709,434
- 1,709,435 - 2,846,289
- 2,846,290 - 9,519,336
Source: U.S. Census Bureau

Precipitation per County

Legend (in inches):
- Under 5
- 5 to 10
- 10 to 15
- 15 to 20
- 20 to 30
- Above 120

Source: U.S. Census Bureau
How is water moved across the Delta?

1. Sacramento River
2. San Joaquin River

San Francisco Bay

State Water Project Pumps

Central Valley Project Pumps
Water from the Delta supplies California’s cities and farms.
Major challenges

- Fishery Declines
  - Delta smelt

- Seismic Risk
  - Bay Area Faults

- Land Subsidence

- Sea Level Rise
Complex, chaotic or simply cantankerous?
How are we moving forward in the face of these challenges?
The Delta Stewardship Council

- CA Delta Reform Act of 2009 created the Council
- Charged with providing direction for the long-term future and management of the Delta and achieving the coequal goals:
  - Long-term reliable water supply
  - Protect and restore Delta ecosystems
  - ....all while protecting the Delta as a place
What is the Delta Plan?

Recommendations, regulations, and performance measures for:

- Water conservation and efficiency
- Flood risk reduction
- Ecosystem restoration
- Water supply reliability and water storage
- Protect the Delta as a unique place
- Ensure best available science and adaptive management

*Implementation of the Delta Plan is an interagency effort led by the Delta Stewardship Council*
Who we work with

200 + other state, federal & local agencies
Council’s key roles and activities

Implementing the Delta Plan

- Covered action authority
- Delta Plan Interagency Implementation Committee
- Measuring performance

Connecting decision-makers with the best science

- Synthesis, peer review, identifying and funding high-priority science

Amending the Delta Plan

- Setting priorities for state investment in Delta levees
- Promoting options for conveyance, storage, operations
- Weaving together a plan for ecosystem enhancement
Today’s takeaways

• Delta’s challenges are direct and indirect results of past policy decisions

• Looking ahead: Much work to do

• Any proposal will require tradeoffs – and trust

• The Council’s comprehensive approach
  ◦ Use science to increase likelihood of success
  ◦ Landscape scale restoration and planning
  ◦ Reduce reliance on the Delta
  ◦ ‘Portfolio’ approach to water management
Questions?

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