South Bay Salt Pond Restoration Project

Technical Ratings Workshop

Thursday, November 17, 2005

10:00 am to 12:00 noon

San Jose/Santa Clara Water Pollution Control Plant, San Jose

1

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Workshop Overview

1. Reaffirmation of alternatives “bookends”;
2. Detailed briefing and dialogue on approach to technical rating of the proposed range of alternatives; and
3. Update on approach to finalizing the alternatives, including public access and recreation.

2

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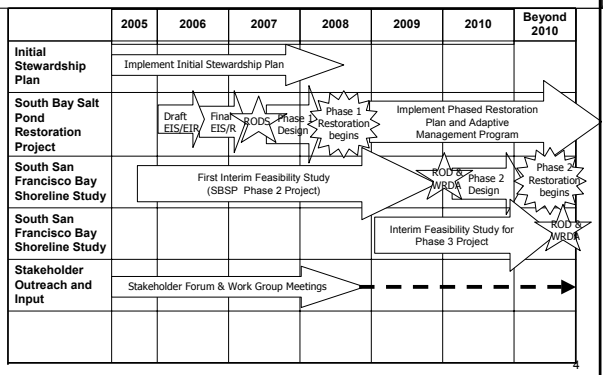
Workshop Agenda

Time	Agenda Item	Lead
10:00	Welcome and Agenda Review	Steve Ritchie, Executive Program Manager
10:20	Comments on the Bookends and Key Uncertainties	Steve Ritchie
10:40	Introductory Briefing on Development of Rationale and Ratings of the Biological Evaluation Criteria	Steve Rottenborn, HT Harvey
11:10	Discussion of Five Selected Biological Criteria	Steve Rottenborn
11:40	Other Ratings	Steve Ritchie
11:50	How Alternatives Will be Finalized	Steve Ritchie with Donna Plunkett, EDAW
12:00	Next Steps and Adjourn	Steve Ritchie

3

Draft SBSP/Shoreline Study Schedule



4

Nov 16, 2005

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Rationale for "Bookends"

- Maximize benefits of tidal restoration while maintaining pond-associated species (NSP "vision", Science Team "staircase")
- Recognize tradeoffs between tidal and pond-associated species
- Formulate "bookend" alternatives that will significantly enhance tidal conditions (at a minimum) while meeting other project objectives
- Lower bound of tidal restoration set by minimum restoration to achieve significant enhancement of tidal habitats
- Upper bound of tidal restoration set by minimum managed pond area required to meet certain pond-associated objectives

5

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Rationale for 50:50 Alternative

- Starting point – What restoration would be necessary to provide significant, large-scale tidal habitat and flood-control benefits?
  - Contiguous band of broad tidal marsh
  - Large (500+ acres) marsh complexes for complex channel development
  - Restoration along bay tributaries
- End result of mapping – approximately 50% tidal restoration

6

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Rationale for 50:50 Alternative

- With 50% conversion, pond-associated species maintained, with limited effects on abundance expected for most species
- Potential to change management of ponds to benefit pond-associated birds (reasonable to expect that management of ponds for birds, not salt, can at least double densities)

7

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Rationale for 90:10 Alternative

- Comes close to maximizing benefits of tidal restoration
- 10% is minimum pond area required for breeding pond-associated birds (Snowy Plover, stilts, avocets)
  - Based on nesting densities in managed ponds, existing populations of stilts and avocets, and contribution to recovery plan goal for Snowy Plovers (250 adults)
  - Shallow ponds with numerous islands, and possibly furrowed ponds, provide breeding and foraging habitat
  - Assumes management of water levels, predators, and vegetation

8

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Rationale for 90:10 Alternative

- Phase I experiments will target uncertainties in achieving required densities
  - Importance of salinity
  - Feasibility of management
  - Achievable densities of breeding birds and foraging migratory birds
  - Productivity
- Monitoring through Phase I and subsequent phases will allow predictions of changes in bird numbers as restoration progresses toward 90:10

9

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Ratings of Biological Evaluation Criteria

- Revisiting ratings for five criteria
- Compared predictions for Year 50 under each alternative (No Action, 50:50, and 90:10) with baseline (ISP implementation)
- Rated criteria on 1-9 scale
- Baseline score of 5, except 1 for tidal-dependent, federally-listed species
- If there is no project, assume "No Action" alternative – maintaining ISP conditions indefinitely is not an alternative
- This technique is being used to compare alternatives at this point; for impact assessment, more detailed analysis will be conducted

10

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Ratings of Biological Evaluation Criteria

- Ratings based primarily on habitat acreage, not abundance of each species; assumes that habitat is limiting
- Habitat acreages based primarily on preliminary geomorphic assessment by PWA and assumptions regarding habitats in managed ponds
- Many uncertainties and assumptions – some will be addressed via more detailed analyses prior to impact assessment, others through Phase I studies and monitoring
- In face of uncertainty, took conservative approach to rating

11

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Five Selected Biological Criteria for Additional Review

- **Diving Ducks**
- **Foraging Shorebirds**
- **High Salinity Species**
- **Snowy Plover**
- **Vector Management**

12

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Maintain or Enhance Populations of Diving Ducks Currently Using the Bay

No Action	50:50	90:10
4	4	3

- No Action – Increase in subtidal habitat in bay more than offset by uncontrolled breaching and conversion of some managed ponds to seasonal wetlands
- 50:50 and 90:10 – Reduction in foraging habitat in ponds due to restoration offset somewhat by increase in subtidal habitat in bay and at mouths of larger restored channels

13

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Maintain or Enhance Populations of Diving Ducks Currently Using the Bay

No Action	50:50	90:10
4	4	3

- The degree to which a reduction in habitat in ponds will be offset by increases in habitat in the bay and in restored sloughs is unknown
- Ruddy Duck will be the main species affected by pond conversion

14

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Maintain Current Population Levels for Foraging Shorebirds

No Action	50:50	90:10
4	4	3

- No Action – Decrease in suitable foraging habitat due to reduction in bay mudflats and increased vegetation in seasonal wetlands
- 50:50 and 90:10 – Because long-term extent of intertidal mudflat will likely differ little between alternatives, rated according to extent of shallow-water foraging habitat in managed ponds and marsh ponds

15

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Foraging Shorebirds

No Action	50:50	90:10
4	4	3

- Assumes that high-tide roosting habitat is not limiting
- Uncertainties:
  - Extent to which various shorebird species require ponds for foraging
  - Effects of marsh restoration on mudflat productivity and foraging efficiency on mudflats
  - Magnitude of increase in shorebird densities achievable through pond management
  - Extent of shallow-water habitat that can be maintained at any given time within managed ponds

16

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Maintain Habitat for Salt Pond Specialized Birds

No Action	50:50	90:10
~~6~~ 4	4	2

- No Action – Reduction in habitat due to breaching and vegetation establishment in unmanaged seasonal wetlands
- 50:50 and 90:10 – Rated according to extent of high-salinity managed ponds, with slight increase in salt pan habitat in restored marshes

17

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Maintain Habitat for Salt Pond Specialized Birds

No Action	50:50	90:10
~~6~~ 4	4	2

- Extent of high-salinity ponds in each alternative, densities achievable in those ponds, and use of lower-salinity ponds by species such as phalaropes are all uncertain
- Actual abundance achievable will be determined by Phase I studies (which will include studies of the importance of salinity to foraging birds) and monitoring

18

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Contribute to Recovery of the Western Snowy Plover

No Action	50:50	90:10
4	7	5

- No Action – Increased tidal habitat, establishment of vegetation in unmanaged seasonal wetlands
- 50:50 – Enhanced breeding habitat (islands, furrowed ponds) in reconfigured ponds augments managed seasonal ponds
- 90:10 – Enhanced breeding habitat (islands, furrowed ponds) in reconfigured ponds, but lacks extent of seasonal pond habitat of 50:50

19

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Contribute to Recovery of the Western Snowy Plover

No Action	50:50	90:10
4	7	5

- Management of avian predators, water levels, and vegetation assumed to be much more active for 50:50 and 90:10 than No Action
- If nesting densities reported elsewhere (with predator, water, and vegetation management) can be achieved, even 90:10 alternative would meet SBSP Project's share of recovery plan goal
- Productivity important
- Actual densities/productivity achievable will be determined by Phase I studies and monitoring

20

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Maintain or Improve Current Levels of Vector Management

No Action	50:50	90:10
~~3~~ 2	~~4~~ 3	~~3~~ 4

- Met with representatives of Santa Clara, San Mateo, and Alameda County vector control agencies to revisit/refine ratings
- No Action – Significant increase in need for management due to increase in vegetated seasonal wetlands and potential for poor drainage in tidal areas created by unplanned breaches
- 50:50 and 90:10 – Anticipate some increase in need for management with tidal restoration, but more in low-salinity managed (especially seasonal) ponds

21

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Coastal Conservancy

Next Steps

- **Draft Final Alternatives Report: 12/16/05**
- **Stakeholder Forum Meeting: 1/12/06**
- **Shoreline Study Kick-Off: tentatively 1/25/06**

22