

Continued Development of Screening Criteria and Initial Application of Criteria



Advisory Committee
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Sacramento, California

Overview of Discussion

- ◆ **Review of Goals/Screening Criteria
previously discussed**
- ◆ **Discussion of Habitat Screening Criteria**
- ◆ **Consideration of Initial Configurations**
- ◆ **Initial Application of Screening Criteria**
- ◆ **Next Steps**

Review of Goals/Screening Criteria from September Meeting

◆ **Stable Salinity for Open Sea**

- Support sustainable marine fish populations
 - ◆ Proposed objective = 30,000 to 40,000 mg/L

◆ **Coordination with Local Land Use**

- Integrate with Current Land Use Plans
- Assume that historical types of recreation will re-occur

◆ **Reduction of Eco- and Human Health Risks**

- Comply with water quality goals to protect beneficial uses

◆ **Elimination of Air Quality Impacts of restoration**

- Manage exposed playa to avoid air quality impacts

◆ **These criteria will be used for all alternatives**

Habitat Working Group Considered Draft Habitat Goals and Objectives

◆ **Restoration of the Salton Sea ecosystem and permanent protection of the wildlife dependent on that ecosystem**

- Restore long-term stable aquatic and shoreline habitat for the historic levels and diversity of fish and wildlife that depend upon the Salton Sea
- Promote habitat diversity by maintaining a mosaic of habitat types within and adjacent to the Salton Sea
- Enhance quality of existing habitats through improvement in water quality and management

Draft Habitat Goals and Objectives - continued

- Promote effective use of available water resources to create habitats that provide for species diversity and abundance
- Incorporate flexibility in the facility and habitat designs to address current uncertainties through adaptive management and ability to respond to future changes in conditions and status of individual species
- Develop a monitoring and adaptive management plan to generate data that will reduce uncertainty and build scientific basis for future management

Draft Screening Criteria were Developed based on Goals

- ◆ **Initial discussions with Habitat Working Group - will continue to be discussed on November 30, 2005**
- ◆ **Provided for discussion purposes, only, for the Advisory Committee**
- ◆ **Screening Criteria defined as a requirement for all alternatives considered in the PEIR and Ecosystem Restoration Study**

Draft Habitat Screening Criteria

Proposed Criterion:

- ◆ *Alternative must support a self-sustaining fish population that will provide an adequate forage base for fish-eating birds and a recreational fishery*

Unresolved Issues:

- ◆ Should a recreational fishery be included as a screening criterion?
- ◆ Are marine fish required components of “historic diversity” as defined in the legislation?

Draft Habitat Screening Criteria

Proposed Criterion:

- ◆ *Alternative must provide habitat that is sustainable and permanently protected*

Unresolved Issues:

- ◆ None

Draft Habitat Screening Criteria

Proposed Criterion:

- ◆ *Alternative must use water to create or enhance shallow water habitats that would not increase ecological risk to unacceptable levels*

Unresolved Issues:

- ◆ None

Draft Habitat Screening Criteria

Proposed Criterion:

- ◆ *Alternative must achieve habitat goals of the project without creating significant habitat effects (such as a loss of habitat) within or outside the Salton Sea Basin that cannot be adequately or feasibly mitigated*

Unresolved Issues:

- ◆ None

Draft Habitat Screening Criteria

Proposed Criterion:

- ◆ *Alternative must provide connectivity for desert pupfish that use the agricultural drains on both the south side of the Salton Sea and on the north side of the Salton Sea while not precluding pupfish movement to and from San Felipe and/or Salt Creek during flood flows. (Includes development of a genetic exchange plan.)*

Unresolved Issues:

- ◆ None

Draft Habitat Screening Criteria

Proposed Criterion:

- ◆ *Alternative must retain the function and value of habitats historically available at the Salton Sea*

Unresolved Issues:

- ◆ Is criterion too broad to be effective screening tool?
- ◆ Clarification of “habitats historically available”
- ◆ Should criterion also include retention of the current amounts of all but deep, open water habitat?

Draft Habitat Screening Criteria

Proposed Criterion:

- ◆ *Alternative must replace the function and values of the river delta habitat and retain the characteristics of at least some of the existing delta habitats*

Unresolved Issues:

- ◆ Is it necessary to retain at least one of the existing deltas, or is it sufficient to replace the functions, values, and characteristics of the delta habitats?

Draft Habitat Screening Criteria

Proposed Criterion:

- ◆ *Alternative must not result in any irreversible fish and wildlife population impacts during construction and project implementation*

Unresolved Issues:

- ◆ Is this feasible to not have irreversible impacts?

Other Considerations for Screening Criteria

- ◆ **Support of Salton Sea Communities**
 - Maximize water along existing shoreline
- ◆ **Acceptable Commitment of Non-renewable Resources (such as Energy)**
- ◆ **Institutional Feasibility**
 - Approvals by multiple agencies within reasonable time period = 5 years??
- ◆ **Flexibility over and beyond 75 years**
 - Changes in flows and other conditions
 - Changes in species needs

Example 1: Application of Screening Criteria to Import/Export to Ocean

- ◆ **Water is imported from Ocean and salts/water are exported to Ocean**
- ◆ **Water Quality**
 - Treatment of all imported and exported flows to remove chemicals and exotic species
 - Discharges need to meet Ocean Plan standards
- ◆ **Project would involve extensive conveyance facilities and use of energy**
- ◆ **Example: Gulf of California**
 - Habitat disturbance along 180-mile corridor (60,000 acres) - Restoration area could be up to 180,000 acres
 - New energy load 600 to 700 MW (about 2% of California's electric generation capacity)

Would Import/Export Meet Draft Screening Criteria?

- ◆ **Stable Salinity of 30,000 to 40,000 mg/L - YES**
- ◆ **Coordinate with local land use - YES**
- ◆ **Reduce eco-risk and human health risk at the Salton Sea - YES**
- ◆ **Elimination of air quality impacts - YES**
- ◆ **Meets all Habitat Goals/Objectives and Screening Criteria - NO??**
 - Meets all except "must achieve habitat goals..without creating significant habitat effects..within or outside the Salton Sea basin that cannot be adequately or feasibly mitigated"

Would Import/Export Meet Draft Screening Criteria? - continued

- ◆ **Support of Salton Sea communities - YES**
- ◆ **Acceptable commitment of non-renewable resources - NO??**
 - 1-2 percent of California generating capacity
- ◆ **Institutional Feasibility - NO**
 - Not consistent with Biosphere or Ocean Plan regulations
- ◆ **Flexibility over and beyond 75 years - YES**
 - Flexible with respect to flows
 - Not flexible - may not allow changes in habitat to accommodate changes in the species needs

Would Import/Export Meet Draft Screening Criteria? - continued

◆ **Potentially high adverse impacts**

- Biological impacts along conveyance corridor
- Highest energy requirements of configurations
- Lengthy approval process - may require multi-national legislation
- Limited flexibility with changing species needs

◆ **Therefore, the Import/Export configurations would not be included in the Range of Final Alternatives**

Example 2: Would North Sea/South Sea Meet Draft Screening Criteria?

- ◆ **Stable Salinity of 30,000 to 40,000 mg/L - YES**
- ◆ **Coordinate with local land use - NO**
- ◆ **Reduce eco-risk and human health risk at the Salton Sea - YES**
- ◆ **Elimination of air quality impacts - YES**
- ◆ **Meets all Habitat Goals/Objectives and Screening Criteria - NO??**
 - Meets all except "must provide connectivity for desert pupfish..."
 - Connectivity could be provided but may cause adverse impacts to pupfish

Would North Sea/South Sea Meet Draft Screening Criteria? - cont.

- ◆ **Support of Salton Sea communities - NO**
 - Does not provide water along most of existing shoreline
- ◆ **Acceptable commitment of non-renewable resources - YES**
 - Energy needs are not as high as other configurations
- ◆ **Institutional Feasibility - YES??**
- ◆ **Flexibility over and beyond 75 years - YES**
 - Flexible with respect to flows - changes in brine sink
 - Flexible with respect to species needs

Would North Sea/South Sea Meet Draft Screening Criteria? - cont.

- ◆ **These limitations were previously considered**
- ◆ **Therefore, these configurations were modified to become**
 - North Sea Combined
 - South Sea Combined
- ◆ **The North Sea and South Sea configurations would not be included in the Range of Final Alternatives**

Next Steps

- ◆ **Continue to apply screening criteria to identify alternatives for evaluation**
- ◆ **Develop costs and construction phasing on a preliminary basis**
- ◆ **Provide information to the Advisory Committee prior to the December 8, 2005 meeting**
- ◆ **Define Range of Final Alternatives in December**