

4.12 RECREATION RESOURCES

4.12.1 Summary of Environmental Consequences

Recreation is inextricably linked with the quality and physical character of the Sea. The abundance and diversity of aquatic and terrestrial species, the quality of the water, the aesthetic character of the surrounding area, the physical and visual accessibility of the Sea and the quality of the recreation facilities all directly affect the recreational experience. Because of the integral connection between natural resources and recreation values, each alternative has both positive and negative impacts on the existing and potential recreational use of the Sea and surrounding regional recreation.

4.12.2 Significance Criteria

Significance criteria for impacts to recreation uses and/or facilities are defined as:

1. The direct physical degradation of either recreation uses and/or recreation facilities caused by or immediately attributable to the Project. For water related recreation uses, all actions that appear to dramatically reduce the existing extent and quality of the water-related experience are assumed to be significant. Minor reductions to extent and quality which appear to be able to be mitigated are assumed to be moderate impacts.
2. The physical degradation to either recreation uses and/or recreation facilities not immediately related to the project but caused indirectly by the Project.
3. An indirect negative impact to either recreation uses and/or recreation facilities that is "reasonably foreseeable" as a result of actions by the Project.
4. The achievement of short-term improvements for recreation uses and facilities but to the sacrifice of long-term recreation-related interests and goals.
5. A collection of impacts on recreation that individually are limited but cumulatively are considerable.

4.12.3 Assessment Methods

The recreation impact assessment establishes whether the proposed alternatives are compatible with the existing recreation activities and facilities. This analysis examines the impacts proposed alternatives may have on recreational access, facilities and use both on and surrounding the Sea. Impacts are defined as any activity or facility that detracts from the quality of experience or eliminates the use of an existing recreational activity and/or facility.

The methodology utilized to establish potential impacts to recreation began with establishing the existing condition of recreational activities and facilities. This was accomplished by evaluating existing visitor attendance data, interviews with facility operators and on-site evaluations of facilities and their relationship to the Sea. The assessment then combined the proposed alternatives and actions with the existing recreation information to determine if the proposed alternative would impact existing recreation and if so to what level. Critical to this evaluation is the quality of the

experience by the public engaged in the specific recreation activity, a recreation opportunity may still exist but the experience may be considerably diminished.

4.12.4 No Action Alternative

Under the No Action Alternative, the quality of the recreational resources would decline. Both the current flow and reduced flow scenarios for this alternative would lead to similar impacts. Without actions to halt the Sea's building salinity levels the recreational resources would continue to be impacted to a point when the in-sea resources present today would no longer exist. Without measures to ensure sea elevation stability, existing and potential future recreation facilities are significantly jeopardized.

Effect of No Action with Continuation of Current Inflow Conditions

The recreation amenities currently associated with the Salton Sea are specifically linked with both the physical configuration of the Sea in terms of the existing shoreline and the aesthetic and biotic qualities supported by the Sea, including the abundance and diversity of biotic systems, its water, and visual quality. Assuming a continuing increase in salinity and water nutrient levels, the long-term consequences of the No Action Alternative on all aspects of recreation uses and facilities within and surrounding the Sea would be severe. The looming stigma of an environment in decline with aquatic and terrestrial species die-off, deteriorating water quality and aesthetic depreciation would overshadow the specific features or resources that attract people to the sea.

This alternative would lead to the eventual decline of the sport fishery due to increasing salinity. The projected shoreline shift would likely impact associated recreation, including camping, boating and other water sports. However, environmental changes could lead to different recreation patterns. The following is a summary of the impacts associated with this alternative on recreation uses and recreation facilities.

- Unstable water elevations would adversely impact all water access facilities. Without certainty of a stabilized elevation, needed improvements for access facilities would likely not occur.
- The sports fishing activities would decline with deteriorating water quality and fish die-off.
- Hunting & bird/wildlife viewing would diminish as the Sea attracts fewer and fewer migratory species.
- Land-based recreation such as camping would experience indirect negative impacts resulting from aesthetic degradation.
- Increasing water salinity could initiate some new recreation options for the Salton Sea. Combined with the thermal springs located east of Bombay Beach, the Sea could possibly attract a growing "health recreation" oriented group similar to the Calistoga Springs facilities in Napa County or the Dead Sea health facilities in Israel.

Effect of No Action with Reduced Inflows (1.06 maf/yr)

If the current inflow is reduced to 1.06 maf, the salinity of the Sea would increase even more under the No Action Alternative. The impacts would be the same as those for the No Action Alternative with current inflow conditions, but to a somewhat greater extent.

4.12.5 Alternative 1

This alternative could result in a short-term increase in Sea elevation. This increase could impact recreational facilities to a greater degree than reduced elevations because of the need to entirely replace the flooded facilities. Modeling for this alternative suggests that with current flow rates, sea levels may increase by up to three feet in the first fifteen years and then tapering and gradually dropping in the following fifteen year period. The lack of certainty related to the quantity and regularity of flood flows leave analysis of impacts related to this alternative is speculative at best. If a constant Sea elevation and reduced salinity levels can be obtained, this alternative would have significant positive impacts on the recreational resources at the Sea.

Effect of Alternative 1 with Current Inflow Conditions

If the evaporation ponds lower salinity levels and stabilize the Sea elevation, the impacts to the recreation resources would be positive in the long term. However, there would be some minor adverse impacts due to construction and reduced access to the Sea. The following is a summary of the impacts associated with Alternative 1.

- Compared with the No Action Baseline conditions, to the extent that these actions are successful in stabilizing Sea water elevations, they would be considered extremely beneficial for boating and water access facilities and the recreation experience in general.
- If these actions are successful in reducing Sea water salinity, resulting impacts would be beneficial for recreation interests especially those uses linked with fishing and wildlife resources.
- There would be new potential recreation benefits associated with this alternative action from an educational interpretive perspective. Environmental restoration measures elsewhere in California have been exploited for recreation/education values and with additional interpretive components, the restoration actions for the Salton Sea could serve that purpose as well.
- The reduced water surface area, approximately 50 square miles, would create a moderate impact to recreational boaters and anglers by removing recreational use area.
- The construction of the dikes would moderately impact wildlife viewing opportunity including both land-side (Naval Test Base lands) and USFWS preserve areas on the Sea.
- Construction period impacts to land-and water-based recreation uses and facilities on the west shore including Salton City and Salton Sea Beach would occur. Significant impacts may include noise, hauling related traffic, and dust disturbances which may detract from the recreation experience.

- Reduced water-based accessibility resulting from the North wetland habitat action is considered a moderate impact in that it would remove a relatively small area of presently accessible water area. However, this area is typically habitat-rich which may be preferred by boating and wildlife enthusiasts.

Effect of Alternative 1 with Reduced Inflow Conditions (1.06 maf/yr)

If the existing flows are reduced to 1.06 maf, it is anticipated that there would be a greater reduction in the Sea elevation, yielding a significant impact in the existing recreational facilities. The reduced pond size (to 283 square miles) would significantly impact existing recreational facilities and likely require channelization from boating facilities to the lowered shoreline if these facilities were to remain operational. The Displacement Dike that would be implemented with the reduced flow scenario would further reduce the usable Sea surface area, preventing boating access to the U.S.F.W.S. Refuge waterside area and moderately impacting the aesthetic experience in that vicinity.

4.12.6 Alternative 2

This alternative, although located away from the actual shore of the Sea, could have some impacts on recreation. Major impacts would occur from the reduction in shore elevation to approximately 5 feet below existing conditions. Horizontal distance off-set from the present-227 foot elevation would vary depending on the shore gradient and typical off-sets would thus vary from a quarter mile to two miles. This reduction in Sea elevation would be significant to existing recreational facilities use patterns. Another impact could result from aesthetic degradation resulting from significant visual contrast of the evaporation facility with the natural landscape. However, if reduced salinity levels are achieved, this alternative would have significant positive impacts on the recreational resources at the Sea.

Effect of Alternative 2 with Current Inflow Conditions

The following impact assessment assumes that with current flows maintained, the elevation and salinity of the Sea would be reduced. The following is a summary of the impacts associated with Alternative 2.

- Because of the facility's proximity to the most intensely used portion of the Sea shoreline and State Park recreation areas, there are indirect negative impacts to the recreation experience resulting from aesthetic of views to the Sea from Dos Palmas Reserve and the State park facilities. Water intake infrastructure may also impact boating use in its vicinity.
- If actions are successful in stabilizing Sea water elevations, this alternative would be considered extremely beneficial for boating and water access facilities.
- If actions are successful in reducing Sea water salinity, this alternative would be considered beneficial for recreation interests, especially those uses linked with fishing and wildlife resources.
- There would be new potential recreation benefits associated with this alternative action from an educational interpretive perspective. Environmental restoration measures elsewhere in California have been exploited for

recreation/education values and with additional interpretive components, the restoration actions for the Salton Sea could serve that purpose as well.

Effect of Alternative 2 with Reduced Inflow Conditions (1.06 maf/yr)

Similar to the Current Flow scenario, the impacts from the reduced flow scenario combined with Alternative 2 would have the potential to reduce the elevation of the Sea 10 feet below current levels. As with Alternative 1, the displacement dikes associated with this alternative would further reduce the usable Sea area. All other issues addressed in the previous Current Flow Conditions for this alternative also apply to this scenario.

4.12.7 Alternative 3

This alternative differs from Alternative 2 in location and land acquisition only. The following impact assessment assumes that under current flow conditions, Sea elevation could be maintained at or near existing levels with the added inflow of the Flood Flow Common Action. The location of the EES Test Base site is shown on Figure 2.5-8.

Effect of Alternative 3 with Current Inflow Conditions

The following impact assessment assumes that with current flows maintained, the elevation and salinity of the Sea would be reduced. The following is a summary of the impacts associated with Alternative 3.

- This alternative would significantly impact potential land-based recreation uses that would be precluded by the construction of the EES facility at the decommissioned Naval Test Base, including wildlife observation associated uses or the construction of new active recreation facilities.
- Indirect moderate impact to recreation experience would result from aesthetic degradation along State Route 86.
- In comparison with Alternative 2, this alternative is anticipated to have a lesser impact on general recreation use including both water and land-based activities, due to the relative remoteness of the proposed facility site.
- Construction period activities would cause significant impacts to land-based recreation uses and facilities on the west shore including Salton City and Salton Sea Beach.
- If actions are successful in stabilizing Sea water elevations, this alternative would be considered extremely beneficial for boating and water access facilities.
- If actions are successful in reducing Sea salinity levels, this alternative would be considered beneficial for boating and water access facilities, fishing and other land and water associated recreation uses.
- There would be new potential recreation benefits associated with this alternative action from an educational interpretive perspective. Environmental restoration measures elsewhere in California have been exploited for

recreation/education values and with additional interpretive components, the restoration actions for the Salton Sea could serve that purpose as well.

Effect of Alternative 3 with Reduced Inflow Conditions (1.06 maf/yr)

The impacts of this alternative scenario would be the same as those the impacts identified in the Reduced Flow Conditions for Alternative 2.

4.12.8 Alternative 4

The combination of the concentration ponds and the EES at the Naval Test Base could contribute from moderate to significant impacts to recreation use, depending on the inflow scenario proposed. There could be negative impacts associated with construction activities and reduced access as well as positive impacts associated with increased water quality.

Effect of Alternative 4 with Current Inflow Conditions

Combining concentration ponds with the EES facility would impact the shoreline facilities as mentioned in Alternatives 1 and 3. However, the beneficial impact of greatly reduced salinity levels could assist in bringing new recreational opportunities and facilities to the Sea. If the shoreline can be maintained at or near its present level, the net impact to recreation would be substantially positive. Following are the impacts associated with this scenario.

- The reduced water surface area, approximately 40 square miles, would create a moderate to significant impact to recreational boaters and anglers by removing a substantial recreational use area.
- Similar to Alternatives 1, the construction of the dikes would moderately impact wildlife viewing opportunity including both land-side (Naval Test Base lands) and USFWS preserve areas on the Sea.
- Construction period impacts to land-based recreation uses and facilities on the west shore including Salton City and Salton Sea Beach would be significant for the term of construction. The visual degradation following construction would constitute a moderate impact.
- Possible indirect moderate impact to recreation experience would result from aesthetic degradation especially in the vicinity of the EES facilities along State Route 86 south of Salton City.
- If actions are successful in reducing Sea water elevations, actions would be considered extremely beneficial for long-term boating uses and water access facilities.
- If actions are successful in stabilizing Sea water salinity, actions would be considered beneficial for long-term recreation interests especially those uses linked with fishing and wildlife resources.
- There would be new potential recreation benefits associated with this alternative action from an educational interpretive perspective. Environmental

restoration measures elsewhere in California have been exploited for recreation/education values and with additional interpretive components, the restoration actions for the Salton Sea could serve that purpose as well.

Effect of Alternative 4 with Reduced Inflow Conditions (1.06 maf/yr)

As with previous alternatives, reduced flows would negatively impact existing shoreline recreation facilities primarily due to its effect of reducing Sea elevations. Additional contrasts resulting from reduced inflow conditions include the accelerated construction of the north wetland habitat and the pupfish pond. As with the other alternatives, the construction of a displacement dike would further reduce the usable Sea area.

4.12.9 Alternative 5

The combination of the EES unit within the proposed evaporation pond offers a concise footprint and a low profile form for the salt removal elements of the restoration effort. From a recreation perspective this alternative would be less obtrusive and consequently result in lesser impacts to the recreation experience.

Effect of Alternative 5 with Current Inflow Conditions

The effects attributable to Alternative 5 are similar to those described in alternatives 1 and 3. Positive attributes of this alternative include demanding less physical area, avoiding the landside evaporation elements, and offering a potentially less obtrusive profile as an element within the concentration ponds. The following is a summary of the impacts associated with Alternative 5.

- Short term impacts to recreation would be associated with construction activities on both waterside and landside areas including the development of evaporation ponds and the EES facility north of the former Salton Sea Test Base near Salton City. These construction related impacts are assumed to be unavoidable; however, because of their short-term nature, they are considered less than significant.
- Recreation impacts associated with operating the evaporation ponds combined with the EES system north of the former Salton Sea Test Base are anticipated to be low to moderate since they would impede physical access to portions of the Sea and would visually impact shoreline and boat use in the vicinity of Salton City
- If actions are successful in reducing Sea water elevations, actions would be considered extremely beneficial for long-term boating uses and water access facilities.
- If actions are successful in stabilizing Sea water salinity, actions would be considered beneficial for long-term recreation interests especially those uses linked with fishing and wildlife resources.
- There would be new potential recreation benefits associated with this alternative action from an educational interpretive perspective. Environmental restoration measures elsewhere in California have been exploited for

recreation/education values and with additional interpretive components, the restoration actions for the Salton Sea could serve that purpose as well.

Effect of Alternative 5 with Reduced Inflow Conditions (1.06 maf/yr)

- Compared to the current flow scenario, the effect of reduced inflows in combination with Alternative 5 is estimated to lower the elevation of the Salton Sea approximately 4 feet. The surface area of the sea would be reduced to a greater extent than under current flow conditions. As with the other alternatives, a displacement dike would be required which would further reduce the usable Sea area.

4.12.10 Cumulative Effects

The proposed and current projects underway within the Salton Sea watershed in general would be beneficial to the recreation resources. Projects such as wetland habitat restoration and enhancements, wastewater treatment and water quality improvement projects would enhance recreation by improving water quality. The California 4.4 and Imperial Irrigation District Water Transfer Program could impact recreation significantly due to the reduction of inflow volumes. General water conservation measures resulting in reduced flows into the Sea could, when combined with other reduction programs, create significant impacts to recreation due to reduced inflows.

4.12.11 Mitigation Measures

The following measures are suggested as the minimum actions required to reduce significant impacts associated with the proposed alternatives and actions to less than significant levels as they affect recreation uses and facilities. These suggested mitigation measures do not address those impacts resulting from reduced flow conditions brought on by actions not associated with the proposed alternatives.

- Mitigate visual degradation of EES facilities by implementing extensive vegetative screening with native plant materials.
- For any recreation facilities lost as water elevation rises, replace with in-kind facilities.
- Mitigation for reduction in Sea levels due to project alternatives will include the ability of existing public facilities to operate under varying pond elevation conditions.

4.12.12 Potentially Significant Unavoidable Impacts

Assuming a continuing increase in salinity and water nutrient levels, the long-term consequences of the No Action Alternative on all aspects of recreation uses and facilities within and surrounding the Sea would be severe. To the extent that these trends of declining Sea elevations and diminishing water quality can be abated, the most severe impacts to recreation uses and facilities can be avoided. The majority of actions proposed among the alternatives considered do not cause significant unavoidable impacts to recreation uses or facilities. Even the potential loss of 41 square miles of Sea area does not constitute a significant impact from a recreation use perspective.