2018

SALTON SEA PROJECT

WORK PLAN

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Release

An Effort to Determine the Feasibility of Preserving, Maintaining, and Enhancing the Values of the Salton Sea and to Document the Environmental Implications of the Action Alternative

June 1998

Salton Sea Authority

and

Bureau of Reclamation
Lower Colorado Region
Boulder City, Nevada

SALTON SEA PROJECT
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INTRODUCTION

This Work Plan describes the process to be used and the work to be done to complete environmental compliance and feasibility planning for improving conditions at the Salton Sea, California. Because of the uncertainty associated with the planning effort, including the formulation of plans and unknown requirements for biological studies, this document should be considered dynamic. As contractors and specialists are brought on board to complete various tasks, more specific work plans will be developed for those tasks or subtasks. Work orders for these specialists/contractors will include the scope and methodology used to accomplish the task, help ensure that the specialist/contractor understands the issues involved and has the right focus for analysis, and help identify problem areas early. This process should minimize schedule disruptions.

Objective of The Plan

This effort includes the formulation of a plan to address proposed project objectives through scoping and evaluations; to analyze the technical, economic, environmental, and institutional feasibility of project implementation; and to complete all requirements for compliance with the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). Proposed project objectives include:

- maintaining the Sea as a repository of agricultural drainage from the Imperial and Coachella Valleys
- providing a safe, productive environment for resident and migratory birds and endangered species
- restoring recreational uses
- maintaining a viable sport fishery
- providing opportunities for economic development along the shoreline

This feasibility study is a joint effort between the Salton Sea Authority and the Bureau of Reclamation and will meet the requirements of both agencies.

A combined planning report/environmental statement and appropriate appendixes will be prepared and document work performed under this plan.

Project Setting

The project is located in the southeastern desert of California and spans Riverside and Imperial Counties. The closest cities include Palm Springs, Indio, and Brawley. The area is agricultural in nature, although the Sea offers opportunity for recreation and temporary residence of winter visitors.

The Sea, having a surface elevation of approximately 227 feet below sea level, is situated in a closed basin. It is sustained by inflow of drainage from irrigated agriculture in both the Coachella Valley to the north and the Imperial Valley to the south and by flows from Mexico, which consist mostly of agricultural drainage and some municipal and industrial wastewater.

General Project Plan

Because the Sea is located in a closed basin with evaporation as the only discharge, constituents in the inflow tend to become concentrated over time. Accumulation and concentration of salt, nutrients, organic compounds, and other constituents that can be toxic at higher concentrations has had deleterious effects on the ecosystem and recreational use of the Sea. Because the Sea has no outlet, halting or reversing the accumulation and concentration of these constituents will require a surrogate or artificial outlet. Improving the quality of in flowing water will reduce nutrient and contaminant loading, but by itself will not change the requirement for actual removal of constituents from the Sea.

The plan will include formulating alternative methods—under the NEPA/CEQA process—for improving conditions at the Sea. It is anticipated that scoping, evaluation, and public comment will form the basis for narrowing a broad array of alternatives down to a few that will be selected for evaluation at the feasibility level. Environmental considerations, cost, operational conditions, and public acceptance will be major factors in this evaluation. Environmental mitigation will be included as a project feature, if required. The entire planning/environmental compliance process will be open for review and input by the public and all agencies with an interest in the Sea.

Authority

Public Law 102-575, 1992, directs the Secretary of the Interior to "conduct a research project for the development of a method or combination of methods to reduce and control salinity, provide endangered species habitat, enhance fisheries, and protect human recreational values . . . in the area of the Salton Sea. . ." The Secretary of the Interior is also authorized to engage in a feasibility investigation of the Salton Sea Project by the Act of August 10, 1971 (P.L. 92-76).

The Salton Sea Authority is a public agency formed under the provisions of Articles I and II, Chapter 5, Division 7, Title 1 of the Government Code of the State of California for the purpose of "directing and coordinating actions relating to improvement of water quality and stabilization of water elevation and to enhance recreational and economic development potential of the Salton Sea and other beneficial uses, recognizing the importance of the Salton Sea for the continuation of the dynamic agricultural economy of Imperial and Riverside Counties."

Previous Studies

Studies directed toward managing the salinity of the Sea date back to the 1960's when the Bureau of Reclamation and the California Department of Water Resources performed a joint appraisal evaluation of possible alternatives (Interior, 1969). Positive results from that study led to a joint feasibility study completed in 1974 (Interior, 1974). After passage of Public Law 102-575 in 1992 and the formation of the Salton Sea Authority in 1993, Reclamation, the Authority, and the Department of Water Resources again engaged in studies of the Sea. In addition to some characteristic studies (Reclamation, 1997; Reclamation, Authority, 1995; University of California, 1997), a preliminary study of alternatives was completed (Reclamation, Authority, Department of Water Resources, 1997). This effort concluded that forming an in-Sea impoundment through construction of dikes was the most promising method of reducing salinity in the Sea.

At about that time, however, it was realized that salinity may not be the only condition contributing to the failing ecosystem and decreased recreational use of the Sea. In August of 1997 Reclamation and the U.S. Fish and Wildlife Service hosted a workshop that focused on the biological and related problems that were occurring with increased frequency and severity. The workshop resulted in the identification of a broad range of biological, physical, cultural, chemical, and pathogenic research proposals that could provide some answers to questions concerning the diseases that have effected birds and fish and other biological issues (Fish and Wildlife Service, 1997).

PLAN OBJECTIVES

"Saving the Sea" is the description most often heard when the needs of the Sea are discussed. That term, however, may mean different things to different people. In the past there has been more or less a general assumption that "Saving the Sea" meant reducing salinity and managing elevation. Some effects of saline water on wildlife are fairly well known, while other, perhaps more subtle, impacts are indirect or uncertain. There is certainly a correlation between salinity concentrations and the survivability of certain species of fish. Less certain is the relationship between salinity and diseases afflicting the bird population. In any case, there is now the realization that a reduced salinity level may not achieve the desired improvement of all the amenities of the Sea. For example, there is no certainty that decreasing salinity concentrations to ocean levels will eliminate or reduce the diseases that have been afflicting the bird populations. Nor is there certainty that decreasing salinity will result in a significant change in the attractiveness of the Sea for recreational activities. Still, prevailing models indicate that the Sea's fishery will collapse within 15 years because of the hyper-saline environment. The affects of a fishery collapse will be felt by some bird species and by many local communities. While reducing salinity is not an objective, or end, in itself, it is an acknowledged urgency action that must be addressed by this restoration effort.

There may be actions evaluated which address other issues and other actions will be sought to address the other issues affecting fish and bird populations in the Sea. Such actions will need to work in tandem with salinity reduction efforts. However, each major restoration alternative must and foremost, reduce the Seas's salinity.

Agricultural drainage repository: Agriculture constitutes the major economic base in Imperial

County and a significant economy in Riverside County. The Imperial and Coachella Valley's provide an important source of vegetables and other produce to the nation, particularly in the winter. Because of the importance of drainage to maintenance of the agricultural economy and the lack of an alternative disposal site, the Sea has served as the repository for agricultural drainage. In 1924 and again in 1928, President Coolidge issued Executive Orders setting aside federal land under the Sea as a public water reserve for irrigation drainage. In 1968, the State of California declared by statute that the primary use of the Sea is for the collection of agricultural drainwater, seepage, leaching, and control waters. Agriculture in its present form relies upon the ability to discharge drainage into the Sea.

Safe, productive environment for resident and migratory birds and endangered species: The Salton Sea is located on the Pacific Flyway and provides a winter destination or stop-over site for large bird populations and a wide distribution of species. Loss of habitat for migratory birds in other parts of southern California make the Sea that much more important. Several migratory bird species breed in the Salton Sea ecosystem. These species utilize a variety of prey species, and they may be more vulnerable to the effects of contaminants (many of which are manifested in reproductive impacts) when exposed during the breeding season than are birds wintering at the Sea. Some contaminants, particularly selenium and DDE, are known to biomagnify in the Salton Sea ecosystem, increasing exposure of species feeding on higher trophic level prey. The Sea is also home to a great number of resident birds. Both resident and migratory species have experienced disease outbreaks in recent years. These outbreaks may be associated with nutrient loads, contaminant concentrations, and/or salinity increases and warrant consideration in developing a recovery solution of the Sea. The ideal goal is to maintain the abundance, variety, and seasonal distribution of birds using the Salton Sea.

The five endangered species known to use the Salton Sea ecosystem are: brown pelican, Yuma clapper rail, desert pupfish, peregrine falcon, and bald eagle. These species represent several different trophic levels and have a broad range of habitat needs. Another consideration during project planning is to assure that the Sea habitats are capable of playing the appropriate role in providing for the recovery of these endangered species.

Maintenance of a viable sport fishery: The fishery of the Sea has been a significant resource. Sargo, corvina, and tilapia have been the most important species for sport fishers. While there is some uncertainty on salinity concentrations at which these fish will cease to reproduce, it is generally accepted that the Sea is reaching the level at which at least some species will be adversely effected and there is some fear that the fishery is on the verge of collapse (Service, 1997, pg. 1).

Restoration of recreation: Water-based recreation has been a major use of the Sea in the past. Through the 1970's sunbathing, water skiing, boating, fishing, swimming, camping, and picnicking were enjoyed by locals and visitors alike. The Salton Sea State Recreation Area was established along 20 miles of the northeastern shoreline to accommodate recreational visitors. Since the 1970's visitation to the Sea has declined sharply as the Sea has become less attractive (Johnson, 1994). It is uncertain what has made the Sea undesirable as a recreational destination, but it is probable that nuisance factors, such as odor, dead fish, dead birds, and high algal populations are major reasons. The perception that the Sea is a repository of toxic wastes from Mexicali could also be a factor. The

decline of fishing success and a California Department of Health Services health advisory on fish taken from the Sea may also have had a chilling effect on visitation.

The aesthetic amenities offered by a body of water in a desert environment with majestic mountain backgrounds are a source of enjoyment for residents and visitors.

Economic development: Economic activity surrounding the Sea has been in a depressed state for a number of years. Residential lots have been laid out, but remain vacant. Businesses have closed or are struggling. Retail revenue for many businesses is flat. Many commercial and residential buildings are unoccupied and in disrepair. Since many of the businesses depend upon revenue from visitors to the area, the decline in visitation has had a direct impact on business success. Motels, restaurants, fishing tackle and supply stores, recreation vehicle parks, and other businesses have seen a shrinking market and losses of revenue.

Other considerations: The Torres-Martinez Desert Cahuilla Indian Tribe are the largest landowner at the Sea and have a significant stake in the future of the Sea. As a sovereign, they have a special role in decision-making relating to the Sea.

BASELINE ASSUMPTIONS

Certain conditions at the Sea are in a state of flux. Changes that occur in the future could have major impacts on either the effectiveness of alternatives or formulation of a preferred alternative. Therefore, identifying and obtaining consensus on the baseline assumptions is imperative.

Inflow: Inflow to the Sea from all sources has been holding at about 1.3 million acre-feet a year. Recent developments in the areas of water transfer and wastewater reclamation and reuse suggest that a reduced inflow volume reflects the most probably future condition. Reduced flows across the border from Mexico and the conservation of water in Imperial Valley as a requirement for water transfer from the Imperial Irrigation District to San Diego may reduce inflow to the Sea by up to 500,000 acre-feet a year. Alternatives, then, should be able to accommodate an inflow to the Sea of from 1.3 million to 0.8 million acre-feet a year.

Maintenance of current migratory bird populations: Migratory birds now use the Sea in abundance. It is estimated that over half of the birds on the Pacific flyway stop at the Sea at some point on their migration. Alternative sites for migratory bird use either do not exist or are severely limited as a result of habitat degradation or destruction elsewhere. Fish and birds are currently dying in large numbers as a result of the current conditions in the Sea. Over 200,000 birds have died over the past six years. These die-offs resulted in the loss of approximately 10 percent of the Pacific flyway population of American white pelicans, approximately 10 percent of the fall eared grebe population, and over 1,100 endangered brown pelicans. At a concentration of about 44 parts per thousand, salinity is currently 25 percent above ocean levels. Influx of nutrients is high, resulting in frequent algae blooms and degraded water quality.

AVAILABILITY OF RESOURCES

Among the resources that have an impact on the ability to formulate a solution that meets project objectives are inflows to the Sea, sites for outflow discharge, sources of imported water, and infrastructure.

Sea Inflow. Inflows to the Sea originate from surface flows, groundwater, and direct precipitation. Surface flows come primarily from the New River, Alamo River, Whitewater River, Salt Creek, San Felipe Creek, and agricultural drains that discharge directly to the Sea. The table below shows average annual flow quantities for the period 1961 through 1995 for each inflow source and quality of major sources (Metropolitan, 1997). While it is clear that transfers of water currently used in the Imperial and Coachella Valleys to coastal urban markets is likely, the entire range of possible transfer volumes will be considered in the analysis. Water conservation and transfer of water from Imperial Valley to the California coast may reduce the amount of water drawn from the Colorado River for irrigation and alter the inflow quantity from the New and Alamo Rivers and drains. While it is not known at this time how much inflow will be reduced through these measures, a range of reductions in inflows from 0 to 500,000 acre feet a year will be examined.

Water Source	Inflow Quantity, af/yr	Percentage of Inflow	TDS, mg/l
Alamo River	613,000	46	2370
New River	444,000	33	2840 (1989)
Whitewater River	95,000	7	
Other drains	162,000	11	
Other creeks/local precipatation	28,000	2	
Groundwater	4,000	<1	
TOTAL	1,346,000	100	

Discharge Sites. Several sites have been identified in the past that could serve as a disposal site for water pumped out of the Sea. Palen, Ford, and Clark dry lakes have been considered in past studies as candidates for use as final evaporation of water from the Sea. Palen and Ford dry lakes are northeast of the Sea, while Clark dry lake is west of the Sea.. Laguna Salada, a natural depression in Mexico, has also been considered as a possible disposal site for Sea water. Another suggestion for disposal is deep well injection. Other sites may be identified during public scoping of the project.

Import water. In order to minimize fluctuations of the Sea's water surface elevation for the pump out alternatives a source of importation water is desirable. The Colorado River has been suggested as one source, however, the Colorado River as an annual source of water for import is not available due to legal constraints on the amount of water each entity may withdraw limited to their basic

entitlement under the Boulder Canyon Project Act. Other sources may include groundwater, ocean water, or treated wastewater from the Phoenix/Tucson or Los Angeles areas. The public scoping process will be used to identify other potential possibilities.

Borrow Material. Some alternatives identified during the scoping process may require large amounts of borrow material. There appears to be an adequate supply of clay, silt, and sand within the immediate area surrounding the Sea. Armoring material appears to be available from the Chocolate Mountains or Santa Rosa Mountains, but the haul distance could be 25 to 30 miles.

Infrastructure. A railroad traverses the east shoreline of the Sea and highways pass on both the west and east shoreline. Highway 86 on the west side is a four-lane divided highway for much of its stretch along the Sea, while Highway 111 on the east side is a two-lane highway. Depending upon location of construction sites, power may have to be extended by the construction of power line spurs, but existing power sources are fairly nearby at most locations. Water for construction purposes is available from the Sea, from canals or drains on the south end of the Sea, or from the Coachella Canal, which traverses the foothills on the east side of the Sea.

ENVIRONMENTAL CONSIDERATIONS

Rising Salinity. Several factors that currently operate in the Salton Sea have affected the fish and wildlife resources in the Sea ecosystem. The most apparent of these is the increase in salinity since the Sea's creation. Rising salinity in the Sea will ultimately preclude fish reproduction and will result in the collapse of the fishery. This will impact several species of fish-eating birds, including the endangered brown pelican. Salinity may also affect the dynamics of pathogenic organisms in the Sea, but it is not clear at this time how increasing or decreasing salinity will change the potential for wildlife disease in this system.

Nutrients. Nutrients—largely nitrogen and phosphorus—are problematic in the Sea. Nutrient loading results in algae blooms which ultimately die, causing low dissolved oxygen, unpleasant odors, and poor water visibility. Low dissolved oxygen levels frequently cause fish kills, increasing the unpleasant atmosphere of the Sea. Some microbe species produce biotoxins which pose a threat to fish, birds (potentially responsible, in part, for the eared grebe die-offs), and possibly to human consumers of fish. Nutrients may also promote the growth of other pathogenic organisms involved in the recent fish and bird die-offs at the Sea.

Contaminants. Contaminants pose a potential risk to fish, birds, and humans in the Salton Sea ecosystem. Selenium has been found in fish at concentrations that may pose a threat to successful reproduction for the fish themselves and in birds that consume them. In 1986 the State Department of Health Services announced that analysis of edible flesh from fish caught in the Sea indicated the presence of selenium at levels sufficiently high to warrant issuance of a health advisory to for people who consume these fish (no more than one 4-ounce portion every two weeks or one 8-ounce portion per month; avoidance by women of child-bearing age and by children under the age of 15 years). Bird egg concentrations of selenium are at levels that may result in reduced reproductive proficiency in some species. The organochlorine pesticides DDE, which is a breakdown product of DDT, has

been found at concentrations in bird eggs that are capable of causing such reproductive problems as eggshell thinning and embryo abnormalities. As fish-eating birds have the highest concentrations, this contaminant appears to biomagnify in the food chain. Selenium and DDE are found largely in the sediments of the Salton Sea rather than the water column. Changes in the Sea that result in redistribution of these sediments may increase the bioavailability of these contaminants. Organophosphate and carbonate pesticides have been isolated from water samples from the Alamo River and the Salton Sea. Though concentration found were not high enough to directly impact fish and wildlife, the effects of low level exposure to these pesticides have not been studied in detail at the Salton Sea.

Pathogens and Disease. Several diseases have been diagnosed recently at the Salton Sea among the fish and wildlife: avian botulism, avian cholera, vibriosis, Newcastle disease and *Amyloodinium ocellatum*. Others, such as the eared grebe die-offs and many fish kills, have thus far not been diagnosed. There is uncertainty in how these pathogens function in the Salton Sea and predict how perturbations to the system (such as that from ongoing increases in salinity or a project to lower salinity) will affect these pathogens and the potential for disease outbreaks.

Existing Conditions. All of these factors interact to produce the existing conditions at the Salton Sea and the resultant disease outbreaks, the reduction in the recreational fishery, and unpleasant sights and odors that discourage recreational use. In order to address the project objectives, the causes of all of these impacts will be considered when evaluating all alternatives.

Project Impacts. The development of a project itself could result in specific impacts that need to be considered. Construction impacts are likely within the Sea and in the surrounding areas, the magnitude of which depend on the specifics of the project design. An impoundment project could result in impacts to terrestrial species such as the desert tortoise, flat-tailed horned lizard and Coachella Valley fringed-toed lizard, or other sensitive species depending on the location(s) of the borrow site(s) and method(s) of material transport. A pump-out alternative could result in similar impacts in the construction of a pipeline and at the point of discharge. Increased impacts are possible within an impoundment in the Sea as a result of evaporative concentration of contaminants in the water column and/or through changes in the water level that make sediment-sorbed contaminants more biologically available. Pump-out alternatives could result in similar impacts if the discharge point is a dry area flooded with Salton Sea water. Discharge into an aquatic environment could result in impacts as a result of changes in salinity, introduction of nutrients and/or contaminants, and introduction of non-native species currently residing in the Salton Sea. Environmental impacts of other alternatives will also need addressing at this detail, including the potential impacts of development and recreation activities with the completion of the project.

The Salton Sea National Wildlife Refuge is important to a wide variety of migratory bird species including the endangered Yuma clapper rail. This Refuge, originally created in 1925 to provide alternative foraging habitat for wintering waterfowl, has a species list of over 380 birds including seabirds, shorebirds, waterfowl and songbirds that use the refuge at some time in their annual migration or reside in the Salton Sea area. The Refuge encompasses shoreline areas near the New and Alamo River deltas with some of the largest congregations of birds seen on the Salton Sea, and several thousand acres that are currently submerged at the south end of the Sea.

NEPA/CEQA PROCESS

The national- and State-level processes for environmental compliance essentially parallel each other in terms of document preparation and content. The main NEPA/CEQA steps are structured by law with minimum time frames attached to each. It is anticipated that the Federal and State compliance requirements would progress simultaneously so that duplication is minimized and that joint documentation could be prepared. The main steps include 1) identification and statement of the purpose and needs (problems and outcome that is anticipated from undertaking some action), 2) public scoping to determine project parameters, issues, and alternatives, 3) preparation of a draft environmental compliance document that complies with all environmental laws, 4) distribution of the draft EIS/EIR and formal solicitation of public comment through public hearings, 5) preparation and distribution of the final EIS/EIR, and 6) issuance of the Record of Decision/State decision document. More information on each of these steps are provided below.

1. The purpose and need statement will identify problems in the area and explicitly define the need for Federal action. A detailed description of the proposed action will be prepared. The proposed action includes: maintenance of the Sea as a repository for agricultural drainage; providing a safe, productive environment for resident and migratory birds; maintenance of a viable sport fishery; restoration of recreation uses; creation of conditions favorable for economic development; and other considerations, such as meeting the needs of the Torres-Martinez Indian Tribe and maintaining aesthetic values of the area.

2. The public will be notified of the intention to prepare an EIS/EIR through the *Federal Register* and local media. This notice will describe the scoping process, including public meeting dates and location, if known at publication time. A key part of the preparation of the EIS/EIR is full public participation early and throughout the process. This process will be outlined in a Public Involvement Plan. The extent of public involvement during the scoping process will be determined by the issues and level of anticipated public interest. Public scoping meetings will likely include a presentation by the joint lead agencies, followed by the opportunity for one-on-one discussions. Meetings will be held in several locations in the vicinity of the Sea and Southern California, and at various times to ensure adequate participation by interested publics.

3. The draft EIS/EIR will be prepared as required by law and regulation. This is a major step that includes a description of alternatives that were considered and eliminated; the alternative selection process; alternatives considered in detail, including no action; the affected environment; environmental consequences of each alternative; consultation and public involvement; and supporting material. Data collected and analyzed by the Science Subcommittee will be incorporated into preparation of the draft EIS/EIR as appropriate. Supporting material may include references, list of preparers, document distribution, and agency correspondence. In addition to the EIS/EIR, a number of appendices will be prepared. Among the appendices that may be prepared are engineering, geology, public involvement, alternative development and screening criteria, water quality, endangered species, cultural

resources, social/economic, biology, and air quality.

4. Notification to the public as to the availability of the draft EIS/EIR and the opportunity to comment will be published in the *Federal Register*, appropriate media outlets, and the scoping mailing list. During the public comment period, public hearings would be announced. Points of contact for seeking additional information and providing written comments will also be identified. Hearings will probably be held at the cities that hosted the scoping meetings.

5. Review and response to comments on the draft EIS/EIR and preparation of the final EIS/EIR. The final document will include a thorough analysis of all comments.

6. Announcement of the availability of the final EIS/EIR. This announcement will be placed in the *Federal Register* and local media.

7. Issuance of the Record of Decision by the Secretary of the Interior and the decision document by the State of California.

ROLES & RESPONSIBILITIES

Roles and responsibilities under this work plan are schematically presented in Exhibit ___.

INSERT ROLES & RESPONSIBILITIES SCHEMATIC

Lead Agencies

The work plan involves development of an Environmental Impact Statement under the National Environmental Policy Act (NEPA) and a State Environmental Impact Report (EIR) under the California Environmental Quality Act (CEQA). The work plan also involves appraisal and feasibility level engineering. For the EIS/EIR processes, the Bureau of Reclamation and the Salton Sea Authority are joint lead agencies.

The Bureau of Reclamation has been designated by the Secretary of the Interior as the lead agency for all of the federal agencies because of its mission in water resource protection and development; its responsibilities for managing the Colorado River; its capabilities in the areas of planning, design, and construction; and an ongoing successful relationship with the Salton Sea Authority. Reclamation's Regional Director in Boulder City, Nevada is the federal lead person for the NEPA/CEQA process. The Regional Director is responsible for maintaining productive relationships with the Cooperating Federal agencies and for ensuring regular communication with the local lead agency, the Salton Sea Authority. In addition, the Regional Director is responsible for hiring and supervising Reclamation's Program Manager.

The Salton Sea Authority is the local lead agency. The Authority's formal members include the County of Imperial, the Imperial Irrigation District, the Coachella Valley Water District and the County of Riverside. Each has a direct stake in the restoration of the Sea. The Authority also includes *ex-officio* representation from several state and federal agencies and the Torres-Martinez Desert Cahuilla Indians. The Salton Sea Authority's Executive Director will serve as the Authority's Program Manager.

The Authority and Reclamation will participate as equal partners in completing the environmental compliance process and proceeding with other activities required for project implementation. In order to facilitate the efficient and effective progress of project planning and environmental compliance, there will be times that specific tasks are the primary responsibility of one or the other of the Lead Agency Program Managers. The two lead agencies will make these determinations as the needs arise. Both Program Managers will however retain the joint responsibility and accountability for oversight of the entire project and all tasks performed.

Cooperating Agencies

The lead agencies—the Salton Sea Authority and Bureau of Reclamation—are responsible for establishing liaison with all federal, state, local and tribal agencies that have jurisdiction by law or special expertise with respect to any environmental impact involved in a proposed action and for requesting their participation as appropriate. The Council on Environmental Quality has identified areas of jurisdiction by law or special expertise for all federal agencies. An agency may ask the lead agencies to designate it as a cooperating agency. One of the first steps in the planning/compliance process is for the lead agencies to develop formal Memoranda of Understanding with each cooperating agency, identifying the respective responsibilities of the lead agency and the cooperating agency in preparing the EIS/EIR. In addition, the lead agencies will meet periodically with cooperating agencies to discuss issues and study progress. Some likely cooperating agencies include:

TRIBAL
Torres-Martinez Desert Cahuilla Indians

FEDERAL
U.S. Fish and Wildlife Service
U.S. Geological Survey
Bureau of Land Management
U.S. Army Corps of Engineers
International Boundary and Water Commission
U.S. Environmental Protection Agency
U.S. Bureau of Indian Affairs

STATE
California Environmental Protection Agency
Regional Water Quality Control Board
California Department of Fish and Game
The Resources Agency of California
California Department of Water Resources

Public Involvement

During past efforts to address problems at the Sea, public workshops and forums have been integral to problem definition and initial appraisal-level alternatives analysis. Public involvement will continue to occur throughout the NEPA/CEQA process, beginning with scoping meetings. Scoping will begin immediately upon initiation of the planning/compliance process. In addition to meetings and workshops designed to provide and solicit information and ideas, the public will be informed through community and media outreach. While the specific methods and timing of project scoping are not yet known, the intention is to assure full opportunity for public input. Public involvement will be continuous during the NEPA/CEQA process and adjustments may be made to support optimum effectiveness. A Salton Sea Citizens Advisory Committee, established by the Salton Sea authority, can be utilized during the next phase of the process.

Research

A Research Management Committee has been established. The Committee facilitates the pooling of financial resources for research activities and coordination of research on a time sensitive basis for potential use in the NEPA/CEQA process. The Committee makes funding and other relevant decisions and recommendations regarding science to be funded to support the NEPA/CEQA process. The Research Management Committee consists of high-level representatives of the four governments involved in the Salton Sea recovery effort: 1)the United States; 2) the State of California; 3) the Salton Sea Authority; and 4) the Torres-Martinez Desert Cahuilla Indians.

A Science Subcommittee (hereafter referred to as the Subcommittee) has been established to serve

as an independent and objective advisory committee to provide scientific evaluations and recommendations to the Research Management Committee. The Subcommittee functions as a coordinated body to determine information gaps, identify science / information needs, and provide the Research Management Committee with recommendations for funding priorities regarding the science activities. These needs are directly linked to this Salton Sea Work Plan. The Subcommittee will provide scientific evaluations and recommendations to guide the NEPA/CEQA process to sound conclusions regarding alternative actions for restoring the Salton Sea ecosystem and the Sea's recreational, economic and wildlife values. Thus, the Subcommittee is the focal and pivotal science body for scientific efforts to be undertaken.

WORK PROGRAM

Background. Reclamation, the Authority, and the State of California have been working together on the Salton Sea since Reclamation was authorized to do planning and research on the Sea in 1992. Work Plan Number 1 was an exhibit to Agreement No. 4-LC-94-0003, which was executed on August 22, 1994. Work Plan Number 1 described activities to be performed with Federal funding appropriated in fiscal year 1994 and accompanying non-Federal cost-sharing funds. The Agreement was amended on July 1, 1995 to modify the work plan. The modified work plan, designated Work Plan Nº. 1.1, made some changes to the tasks to be completed with the fiscal year 1994 funds. The Agreement was further amended in 1996. Amendment Number 2 contained two work plans that specified tasks to be performed with Federal fiscal year 1995 and 1996 and matching non-Federal funds. Exhibit A to Amendment Number 2, executed in July 1996, was an unnumbered work plan that described the tasks to be performed by DWR as in-kind service and with funds appropriated by the California State Legislature. Exhibit B, executed on March 8, 1996, was an agreement between Reclamation and the Authority on how Reclamation's funds and cost-sharing from the Authority would be spent. Division of the tasks into two exhibits, each signed separately, was done to accommodate a cumbersome State process for signing agreements.

Funding. In accordance with Public Law 102-575, funding from the federal government must at least be matched with non-federal funds. Reclamation's appropriations have been $100,000 in each of fiscal years 1994, 1995, and 1996; $200,000 in fiscal year 1997; and $400,000 in fiscal year 1998. Non-federal funds have been provided through the Authority by the Authority's member agencies and by the State of California. In 1997, California citizens passed a bond issue that contained $2.5 million for cost-sharing Reclamation's appropriations for the Salton Sea. The University of Redlands obtained $1 million in each of fiscal years 1997 and 1998 for Salton Sea activities and the Authority received $5 million of federal funds for fiscal year 1998, both through the Environmental Protection Agency budget. The process for accessing funds through the Environmental Protection Agency has yet to be finalized. The Fish and Wildlife Service received $1 million in its fiscal year 1998 budget for use at the Salton Sea. These funds must also be matched by the State of California. However, as of June 1998, the matching funds for this match has not yet occurred. The specific source of funds for individual tasks in this Work Plan has yet to be determined. Additional funding may become available through current legislative efforts.

General Approach. Prior planning has resulted in the identification and preliminary analysis of a large number of alternative solutions to the problems of the Sea. The planning/compliance effort

under this Work Plan will take full advantage of this prior work.. However, a thorough scoping process will be performed to assure inclusion of all reasonable alternatives and a wider range of project objectives. Using the NEPA/CEQA process—particularly public scoping and involvement—those reasonable alternatives will be evaluated and screened down to the identification of one or more preferred alternatives. Environmental compliance will then be completed on these alternatives.

Alternatives will be evaluated on the degree to which they meet project objectives outlined in this work plan, and rely on proven technology. Alternatives with high capital and/or high annual operations, maintenance, energy and replacement (OME&R) costs may be considered, but must be practical and there must be a reasonable probability that they can be initially and continuously funded through any combination of federal, state, tribal, local or private funding sources.

TASK DESCRIPTIONS

PHASE I. INTERNAL SCOPING

Task 1.1 Develop a Work Plan and Plan of Accomplishment

This task involves development of a Work Plan and agreement between Reclamation and the Authority that establishes the basis for proceeding with the planning and NEPA/CEQA compliance. Also under this task initial development of draft agreements with cooperating agencies, statement of work for contracting, establishing requirements for technical work, and other activities preliminary to other task will be completed.

Deliverables: Agreement between Reclamation and the Authority; Work Plan; draft agreements, schedule, and contracting requirements
Estimated Completion Time: Two months

Task 1.2 Initial Coordination with Agencies

This task involves the articulation of problems and needs that will be addressed, identification of issues, an agreement on the approach that will be taken, and concurrence on the relationships among agencies. This will be done through meetings with all agencies involved, correspondence, and other contacts.

During this task agencies that will be cooperators will be identified and any formal requests will be made. Requirements for Memoranda of Understanding with cooperating agencies or other agencies that will have a role in the NEPA/CEQA process will be determined and their content agreed upon. These agreements may address compliance requirements such as Fish and Wildlife Coordination Act and Clean Water Act.

Deliverables: Narrative of the Problems and Needs; identification of cooperating agencies; agreement on MOU's

Estimated Completion Time: Two months

PHASE 2. EXTERNAL SCOPING

Task 2.1. Public Involvement

Issues, objectives, desires, and alternatives will be solicited from the public by conducting workshops, meetings, or other methods at several locations around the Sea. It is anticipated that at least two public involvement events will be held during the three-month alternative identification and screening period, with a number of additional events scheduled during the rest of the planning period.

One of the more significant components of the NEPA/CEQA process is providing the public opportunities for meaningful involvement in the decision-making process. Interaction with people and institutions will ensure that results of the project planning/compliance effort are responsive to the needs and concerns of those people and institutions. Scoping under the auspices of NEPA and CEQA will be part of public involvement plan, but the plan will go beyond those requirements. The plan will lay out specific activities that will be used during the entire planning/compliance effort to both inform the public and solicit public response regarding the public's needs, values, and evaluations of proposed solutions.

Scoping will be on project objectives, alternative strategies to meet those objectives, and screening criteria from the 1997 Alternative Analysis report. Scoping and alternative screening will allow for the possibility of an adaptive management alternative.

This task involves preparation of a plan that details public participation actions during the project planning and environmental compliance activities, including details as to where, how, when, and who. While this plan will be alive in the sense that adjustments may be made as the situation warrants, it will act as an instrument for agency and public review and a guide for implementing the public involvement effort.

Deliverables: Public Involvement Plan; notes of public involvement events to include description of the event, where it was held, who was there, what was discussed, and any action items; other public involvement material.

Estimated Completion Time: Three months, continuing

Subtask 2.1.1 Public Involvement Plan

This task involves preparation of a plan that outlines public participation during the project planning and environmental compliance activities.

Deliverables: Public involvement plan to be included in the Public Involvement Appendix
Estimated Completion Time: one month

Subtask 2.1.2. Public Workshops & NEPA/CEQA Scoping Meetings

Public participation is a necessary part of the planning process. This task provides for that participation by conducting public workshops and scoping meetings as defined by the public involvement plan.

Deliverables: Notes of workshops and meeting to be included in the Public Involvement Appendix.
Estimated Completion Time: on-going

Subtask 2.1.3. Documentation

This task involves the compilation of documentation of the public involvement tasks for the entire project into a public involvement appendix. This task also provides for newsletters, fact sheets, and other means of public notification of the progress of the project.

Deliverables: Public involvement appendix
Estimated Completion Time: facts sheets, etc.—on-going; Appendix—three months (subsequent to last public involvement activity)

Task 2.2. Alternative Screening

During the initial scoping activities under Task 2.1, alternatives that have not been previously considered may be proposed. Those new alternatives, along with previously identified alternatives, will be evaluated at a preliminary level and screened against the 22 criteria developed from the 1997 engineering report and their ability to meet the goals of the project, as adjusted based on lead agencies incorporation of public comment through the public involvement process. This process will consist of preliminary engineering analyses of each alternative to determine if they met project objectives. Those that meet project objectives will be further evaluated to establish a preference priority. Among the additional alternatives that may be considered are treatment alternatives, pump-out and pump-in/pump-out alternatives, and best management practices. Also during this task, the no action alternative will be identified, defined and screened against the same criteria as all of the other alternatives. Alternatives to be pursued in more detail will be selected from among those at the top of the priority list.

Deliverables: Evaluation report documenting the analysis and screening process and results.

Estimated Completion Time: Three months

Task 2.3. Baseline Resources Analysis

A number of baseline studies will need to be performed in order to establish a basis for analyzing and determining impacts of project alternatives. Baseline conditions in the areas of biology, sociology, cultural resources, air quality, land use, hydrology, etc. will need to be established. This task will include the identification of areas where additional data are needed or existing data need to be substantiated. Mapping the distribution of biological and cultural resources, current land use, and hydrologic parameters is expected. Future conditions with and without the project cannot be predicted without the knowledge of baseline conditions. Requirements for this task will be developed by an interdisciplinary, multi-agency Science Subcommittee.

Deliverables: Summary of currently available data (the baseline for NEPA/CEQA), data gaps identification report; individual reports on short-term surveys and studies; all to be published as part of the environmental appendix to the Planning/EIR/EIS.
Estimated Completion Time: Three months

PHASE 3. APPRAISAL ANALYSIS

Task 3.1 Appraisal Engineering

Engineering analyses will be performed for each alternative that survived the screening process of Task 2.2. These analyses will typically use existing data to help determine general alternative feature sizes, locations, and configurations. Designs and cost estimates will be in sufficient detail to allow comparisons among alternatives and provide reasonable confidence of technical feasibility and financial soundness. Typically, this level of engineering results in one or two drawings or illustrations.

Any available findings from the Science Subcommittee will be assessed during this task. If additional water quality objectives are formulated as a result of the work of the Science Subcommittee, will be developed during this task. Such actions may include adjusting the design of salinity/evaluation control actions, incorporation of best management practices, and /or developing other remediation programs and projects.

Deliverables: Engineering report documenting appraisal engineering assumptions, calculations, and results.
Estimated Completion Time: Four months

Task 3.2. Appraisal Screening

Alternatives that were evaluated at the appraisal level will be compared to each other to determine a relative ranking. Criteria for ranking will be determined through the public involvement process.

The screening process itself will done with input from all interested agencies and the public. Screening parameters will include not only technical information developed under Task 3.1, but anticipated environmental and cultural impacts. Comparison of those impacts with baseline data collected under Task 2.3 will provide support for a comparison between alternatives. Section 106 of the National Historic Preservation Act provides for the accumulation and analysis of cultural resources data. Class 1 surveys will be done during the Appraisal Analysis phase. This level of effort consists of literature review, analysis of maps, development of the historical context of the project area, and initial contact with the State Historic Preservation Officer.

Deliverables: Documentation of the screening parameters, the screening process, and the screening outcome.
Estimated Completion Time: One month

PHASE 4 FEASIBILITY ANALYSIS AND NEPA EVALUATION

Task 4.1 Biological Assessment

As required under Section 7 of the Endangered Species Act, a detailed assessment of the biological impacts of the remaining alternatives will be made under this task. The assessment will evaluate potential effects of the project on listed and proposed species and designated and proposed critical habitat, determine if any such species or habitat are likely to be adversely affected, and determine whether formal consultation is necessary. If formal consultation is requested, the Fish and Wildlife Service will formulate a biological opinion as to whether the project is likely to jeopardize the continued existence of listed species and/or adversely modify their critical habitat (see Task 4.3). The Science Subcommittee will provide assistance in recommending assessments to be made, identifying the level of detail, and obtaining peer review. Information from this assessment will provide guidance for determining the final feasibility design.

Deliverables: Biological Assessment to be included in an Environmental Appendix.
Estimated Completion Time: Eight months

Task 4.2 Hydrology and Water Quality Analysis

Project construction may alter a number of physical or chemical conditions of the Sea or portions of the Sea. Investigation will need to be conducted to determine the concentration and distribution of the following constituents and/or properties: salinity, biological oxygen demand, organic carbon, nitrogen, phosphorus, chemical composition, selenium and other potentially toxic constituents, temperature gradients, dissolved oxygen saturation levels, odor-generating mechanisms and other chemical and physical parameters, as required.

Deliverables: Technical papers and reports to be combined with those from other tasks to be published as part of the environmental appendix to the Planning Report/EIS/EIR.
Estimated Completion Time: Nine months

Task 4.3 Fish and Wildlife Coordination Act

The Fish and Wildlife Service will provide at least two reports under the Fish and Wildlife Coordination Act that will help formulate the project and identify environmental impacts and mitigation measures. Baseline environmental information and further data needs will be the subject of an early report. Results of biological studies and any mitigation measures will be included in the Coordination Act report. These reports will utilize existing data and data collected under the recommendation of the Science Subcommittee.

Deliverables: Planning Aid Report and Coordination Act Report
Estimated Completion Time: Thirteen months, coincidental with all Phase 1, 2, and 3 activities.

Task 4.4 Biological Opinion

In the event the Bureau of Reclamation determines that the proposed Federal action may adversely affect listed species, they will request formal consultation from the Fish and Wildlife service. The biological opinion will include a description of the project, the environmental baseline, effects of the proposed project on listed species, any cumulative effects, a determination as to whether the project will result in jeopardy to any listed species or adverse modification of critical habitat, specification of measures considered necessary to minimize taking of any listed species, and conservation measures that may be taken to minimize or avoid adverse effects on listed species or critical habitat. If the opinion determines that the project will jeopardize the continued existence of a listed species or result in the destruction or adverse modification of critical habitat, reasonable and prudent alternatives to the project are included in the opinion.

Deliverables: Biological opinion
Estimated Completion Time: Four months

Task 4.5 Cultural Resources

This task will assure compliance with the National Historic Preservation Act, the Native American Graves Protection and Repatriation Act, Antiquities Act, and Archaeological Resources Protection Act, as well as active coordination with affected parties in accordance with good planning practices. Prior to project construction, a Class 3 cultural survey will need to be performed. This effort will consist of an on-the-ground survey of 100 percent of the area impacted by the project, to the extent physically possible. However, because it would be prohibitively expensive and time consuming to perform this level of survey for multiple potential feature locations, a "programmatic agreement" among all interested parties could be entered into that stipulates roles and responsibilities for the future protection of cultural resources. This would allow the postponement of Class 3 surveys until the final designs are near completion. At that point, feature locations will have been determined and the surveys could be done more efficiently. This task also includes continued contact with appropriate entities to coordinate cultural aspects of the project.

Deliverables: Signed agreement

Estimated Completion Time: Eight months, coincidental with all Phase 1, 2, and 3 activities.

Task 4.6 Native American Consultation

Consultation with Native Americans is an integral part of the NEPA/CEQA process. Contacts will begin early in the process. California tribal contacts will be solicited from the Indian Heritage Commission. Contacts with Indian tribes will seek information on tribal interests, desires, issues, and location and potential impacts to sacred sites, traditional use areas, and ceremonial sites.

Deliverables: Documentation of contacts and discussion results
Estimated Completion Time: Consultations will take place through out the entire process, coincidental with all Phases of this effort.

Task 4.7 Design Data Collection

Prior to initiation of the feasibility design task, data must be collected on geologic conditions, topography, availability of infrastructure, seismic risk, construction materials, and other data designers will need. Depending upon what the preferred alternative(s) is(are), a number of geologic evaluations may be required. Any civil structures will require an analysis of foundation conditions; it may be necessary to identify borrow material (earth, rock, dredged sediments) locations and determine acceptability; and seismotectonic evaluations may be required. Both field work and laboratory analyses may be required. More detailed topography will need to be acquired, depending upon the type of structures involved. Access to construction sites, power availability, proximity to urban amenities, accessibility to a source of water for construction purposes, and other factors that determine construction costs will be provided to the designers.

Subtask 4.1.1. Geotechnical Data Analysis

This task includes gathering geotechnical data from the field in order to complete designs and estimate embankment costs. Foundation conditions along the embankment of the preferred alignment must be determined. Borrow material (earth, rock, dredged sediments) locations must be located and the acceptability of those materials must be determined through extensive field and laboratory analysis.

Deliverables: Geotechnical report
Estimated Completion Time: four months

Task 4.8 Feasibility Engineering and Design

Feasibility designs are performed at a level necessary to support Congressional requests for project authorization and funding. This level of design provides a high confidence in cost estimates and technical viability. The level of effort is greater than an appraisal design, but less than required for final construction drawings and specifications. It typically includes several drawings for each major feature. Depending upon the preferred alternative(s) selected, design items could include earth embankments, outlet works, spillways, power generation features, pumping plants, pipelines, canals, wetlands, water treatment plants, and ancillary features that may be part of the project (such as boat

ramps and roads). Any mitigation features may also require design support. These designs will be used to develop a project description that will define the whole of the action to be used for environmental analysis and compliance.

Deliverables: Design report containing narrative, design assumptions, design calculations, drawings, and cost estimates to be documented as an appendix to the planning report/EIR/EIS.
Estimated Completion Time: five months (subsequent to **Task 4.7**)

Subtask 4.8.1.: Cost Estimating

Construction costs, including design and construction management, operation and maintenance costs, mitigation, and any interest costs will be estimated under this task. Documentation of costs and how those costs were derived will be included Engineering appendix.

Deliverables: Cost estimate data report
Estimated Completion Time: three months

Task 4.9 Economics

This task will identify beneficiaries of the project and allocate costs in proportion to benefits. Federal, state, and local interests will be quantified. Cost/benefit analyses will be performed. Future (with and without the project) sociological parameters (population numbers, distribution, and dynamics; economic status of residents and commerce; jobs; etc.) Will also be compiled and analyzed. This analysis will be prepared in accordance with the Federal Principles and Guidelines for Water Resources Planning.

Deliverables: Technical paper to be included in the planning report/EIR/EIS as an appendix.
Estimated Completion Time: six months

Task 4.10 Recreation

This task will include the conduct of necessary analyses and assess the impacts of a project on existing recreation uses and the potential for the development of future recreational ooportunities. This task may be subdivided into more specific subtask.

Deliverables: Analyses and impact papers to be included in the planning report/EIR/EIS as an appendix.
Estimated Completion Time: four months

Task 4.11 Hazards, traffic, aesthetics, planning, and land use

This task will include the conduct of necessary analyses and assess the impacts of a project on existing hazards, traffic, aesthetics, and local planning and land uses. This task may be subdivided

into more specific subtask in each of the defined areas.

Deliverables: Analyses and impact papers to be included in the planning report/EIR/EIS as an appendix.
Estimated Completion Time: four months

Task 4.12 Air Quality

Baseline air quality information will be compiled and the necessary analyses performed to assess the impacts of a project on air quality.

Deliverables: Technical paper to be included in the planning report/EIR/EIS as an appendix.
Estimated Completion Time: four months

Task 4.13 Financial Plan Development

An analysis of possible sources of construction and operation funding will be done under this task. The task will include the development of optional funding methods, the cost of those methods, their political viability, legal implications, and impact of public sectors. Funding possibilities may include government financing with full or partial repayment, debt funding through bonds, private financing, or some combination of these or other financing arrangements.

Deliverable: Financing reports, funding agreement among federal, state, local agencies
Estimated Completion Time: Three months

PHASE 5. NATIONAL ENVIRONMENTAL POLICY ACT/CALIFORNIA ENVIRONMENTAL QUALITY ACT DOCUMENTATION

Task 5.1 Compile Draft Documents

The National Environmental Policy Act (NEPA) applies to all federal agencies and most of the projects they initiate, regulate, or fund that affect the environment. It requires all agencies to disclose and consider the environmental implications of their proposed actions (Bass and Herson, 1993). The California Environmental Quality Act (CEQA) requires state and local agencies to estimate and evaluate the environmental implications of their actions. Furthermore, it aims to prevent negative environmental effects of the agency actions by requiring agencies, when feasible, to avoid or reduce the significant environmental impacts of their decisions (Bass, Herson, and Bogdan, 1996). This task involves initiating and completing the prescribed CEQA/NEPA process including conducting the necessary analyses to determine environmental impacts not covered in any of the previous tasks (i.e., air quality, cultural and historical resources, etc.) and the compilation of an Environmental Impact Report/Environmental Impact Statement (EIR/EIS).

This task constitutes the framework or backbone upon which every other task hangs. It provides the guide for obtaining public input, establishing project alternatives, evaluation of those alternatives, developing an environmental baseline, and presenting environmental consequences.

Included in this task is the initiation of application process for necessary permits. Specific federal, state, and local environmental permits will be necessary prior to construction of a project. This task will rely on appropriate regulatory agencies to process permits and provide the necessary consultation. Required permits may include Section 402 and 404 of the Clean Water Act, stream bed alteration permit, air quality permits, and others. Actually obtaining the permits will come after completion of the NEPA/CEQA process.

Deliverables: Draft EIS/EIR
Mitigation Monitoring Plan
Estimated Time to Complete Process: Seventeen Months

Task 5.2 Public Comment

Notice of availability of the DEIR/DEIS will be distributed and the public will be given opportunity over several months to provide comments. Public hearings will be held to accept comments in a formal setting.

Deliverables: Notice of availability of DEIR/DEIS, transcript of public hearings, compilation of public comments
Estimated Completion Time: Three months

Subtask 5.3 Environmental Permitting

Specific environmental permits will be necessary prior to construction of a project. This task provides for the application and completion of all necessary federal, state, and local permitting action. This task may include the transfer of funds to other agencies in order to process permits and provide the necessary consultation. This task provides for Section 7, Endangered Species Act consultation with the U.S./ Fish & Wildlife Service; Section 404, Clean Water Act permit activities with the U.S. Army Corps of Engineers and the California Department of Fish & Game; and all other state and federal permit requirements as identified in **Task 1.2 and Task 6.2.**

Deliverables: Permit applications
Section 7 consultation- biological assessment & opinion/incidental take permit
Section 404-application and permits
other state and federal permits (to be identified)
Estimated Completion Time: Two years (concurrent with EIS/EIR)

Task 5.4 Final Documents

Responses to comments obtained during the DEIR/DEIS review period will be developed. A final

EIR/EIS will be prepared and distributed. If additional analysis is needed to address public comments, this may affect completion time. Announcement of the FEIR/FEIS will be made through a notice of availability. A record of decision will be prepare "for signature at least 30 days after the Final EIS/EIR is made available."

Deliverables: Compilation of comments to the DEIR/DEIS, FEIR/FEIS, ROD
Estimated Completion Time: Three months

PHASE 6 MANAGEMENT AND COORDINATION

Task 6.1 Program Management

This task involves performance of activities that will ensure acceptable, efficient, and effective completion of all work necessary to complete the requirements for project funding and environmental compliance. Appropriate program management techniques will be used to track task status and expenditures; administer contracts; perform public involvement activities; and anticipate any schedule slips, budget overruns, or task adjustments and provide solutions to these problems. Knowledge of funding sources and adeptness in addressing funding issues are also necessary. Public presentation of project status and future action is required. Reports will be prepared for use by the joint lead agencies, cooperating agencies, other interested parties, and the public. A full-time program manager is employed by both the Authority and Reclamation.

Deliverable: Periodic status reports; final documentation
Estimated Completion Time: Planning/environmental compliance period (to run concurrent with all other tasks)

Task 6.2 Continuous Coordination with Agencies

During the progress of the planning/compliance effort input from cooperating agencies and other agencies with interest in activity progress and substance will be obtained through on-going communication and contact. Periodic meetings with these agencies will be held to exchange information. Correspondence and written communication or other means will also be used to assure that all interests have an opportunity to participate at an appropriate level during all phases of the study.

Deliverable: Meeting notes; on-going communication/contact
Estimated Completion Time: Planning/environmental compliance period (to run concurrent with all other tasks)