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STAFF REPORT AND RECOMMENDATION ON CONSISTENCY DETERMINATION

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Consistency Determination

No. CD-115-96

Staff:

LJS-SF

File Date: September 12, 1996

45th Day: October 27, 1996

60th Day: November 11, 1996

Commission Meeting: Oct. 8, 1996

FEDERAL AGENCY: U.S. Fish and Wildlife Service

DEVELOPMENT

LOCATION:

Bolsa Chica Lowlands, Orange County (Exhibit 1)

DEVELOPMENT

DESCRIPTION:

Bolsa Chica Lowland Acquisition and Conceptual Wetland Restoration Plan.

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EXECUTIVE SUMMARY

The U.S. Fish and Wildlife Service (Service) has submitted a consistency determination which outlines an acquisition and conceptual wetland restoration project (Project) for the Bolsa Chica Lowlands, located inland of Pacific Coast Highway on the northern Orange County coastline. The Service proposes to participate in an interagency effort (detailed in the Project Agreement document) to purchase and restore at least 880 acres of wetland habitat in the Bolsa Chica Lowlands. The State Lands Commission (SLC) would acquire fee title to a minimum of 880 acres of property currently owned by the Koll Real Estate Group (KREG). A negotiated interagency Concept Plan for wetland restoration (included as a part of the Project Agreement) calls for the Service to construct an ocean inlet, restore approximately 384 acres to full tidal wetlands supporting intertidal and subtidal habitat, restore approximately 220 acres to managed tidal wetlands supporting saltmarsh, saltponds, and saltflats, retain approximately 275 acres as an active oil production field, and provide public access and recreational opportunities where appropriate and consistent with the protection of fish and wildlife resources and habitats.

Acquisition and restoration activities will be funded primarily by the Ports of Los Angeles and Long Beach, which will receive mitigation credits for future landfill construction in their jurisdictions. (The analysis of mitigation credits generated by the proposed Project and their use as compensation for future port landfills is found in the staff report and recommendation on two Port Master Plan Amendments appearing later on the Commission's October 8 agenda.) An additional \$1 million for acquisition will be provided by the California State Coastal Conservancy (Conservancy). Additional funding to eliminate a potential \$16 million shortfall in the acquisition and restoration project budget is currently being sought by the Federal and State agencies that are signatories to the Project Agreement. Should this current shortfall persist, then the Service will determine, in accordance with the Project Agreement, that the acquisition and restoration of the Koll property at Bolsa Chica will not go forward. In addition, should questions regarding the extent and funding for remediation of potential environmental contaminants on the site not be adequately resolved, the Service will likewise determine that the Project should not go forward.

The Project plan is conceptual in nature and is the first step in a phased federal consistency review process for the U.S. Fish and Wildlife Service's proposed wetland restoration project at the Bolsa Chica Lowlands. The Service acknowledges that upon completion of an environmental impact statement/report and selection of a final restoration plan, it will submit a more detailed consistency determination to the Commission for restoration and construction activities at the Bolsa Chica lowlands. However, the current submittal does contain sufficient information to enable the Commission to determine that this phase of the plan is consistent with the applicable policies of the California Coastal Management Program (CCMP).

The proposed Project would significantly restore and enhance wetland habitats and fish and wildlife resources within the Bolsa Chica lowlands consistent with the wetland protection, marine resources, and environmentally sensitive

habitat policies of the CCMP (Sections 30230, 30231, 30233, and 30240 of the Coastal Act). The Project includes construction of an ocean inlet to reintroduce seawater to the central portion of the lowlands, an essential component for wetland restoration and enhancement activities, and is consistent with the shoreline structure and development policies of the CCMP (Sections 30235, 30251, and 30253 of the Coastal Act). The Project includes a commitment to provide public access and recreational opportunities consistent with the protection of fish and wildlife resources and habitats, and a commitment to protect existing public access and recreational activities at Bolsa Chica State Beach. The project is therefore consistent with the public access and recreation policies of the CCMP (Sections 30210, 30211, 30212, 30213, 30220, and 30221 of the Coastal Act).

STAFF SUMMARY AND RECOMMENDATION:

I. Staff Note. This consistency determination is an integral part of a much larger puzzle intended to achieve an overall "solution" to several issues of major significance and consequence to the Commission, local government, property owners, the public and other public agencies. Among these issues are two primary objectives: (1) the long-term protection, restoration, and enhancement of habitat resources and values in the lowlands and appropriate buffer zones of the Bolsa Chica area of Orange County; and (2) the identification and provision of effective and legally adequate mitigation (i.e., compensation) measures to enable the industrial and economically vital Ports of Los Angeles and Long Beach to expand port facilities through appropriate ocean area fill projects to meet future commercial needs of California and the Nation - the essence of "environmentally sustainable economic development." Although Commission staff is not privy to all the details of the historical evolution of the strategy to address the issues and achieve these objectives, staff was contacted after considerable work had been done and asked to participate in a cooperative effort to bring about an "overall solution."

One aspect of the strategy was the preparation and execution of an interagency Project Agreement (Agreement) among key public agencies. The Commission was asked by U.S. Department of Interior officials to become a party to this Agreement. Staff rejected this request on the basis that in view of the Coastal Commission's Coastal Act responsibilities, it would not be appropriate to join in any Agreement that would commit the agency to a particular course of action relative to port mitigation requirements and relative to a number of major land use issues that the Commission must ultimately address through its regulatory and planning procedures and requirements. At the same time, staff made clear that an important Coastal Commission objective and responsibility is to take whatever actions are appropriate to identify and implement solutions to complex and significant coastal management issues and problems whenever possible. Accordingly, Commission staff recommended the approach that includes the preparation of the consistency determination now before the Commission as well as the two Port Master Plan amendments and the Coastal Conservancy Enhancement Plan appearing later on the agenda.

An essential part of the strategy designed by the architects of the Agreement to achieve an "overall solution" for the Bolsa Chica Lowlands involves the

transfer of the lowlands to public ownership and the provision of the ways and means to ensure the restoration, enhancement, and maintenance of an ecosystem of habitat values in the lowlands that includes wetland restoration. The principal means of achieving this goal is through the payment of funds by the Ports of Los Angeles and Long Beach into accounts established for acquisition and restoration purposes in return for the mitigation credits required by public agencies, such as the Commission, as compensation for the loss of subtidal and ocean water habitat in the ports due to new fill projects. Staff recognizes that the approach envisioned in its recommendations both in this consistency determination and the two Port Master Plan amendments represents a significant departure from past practice by the Commission in dealing with port fill mitigation requirements under the Coastal Act. However, longstanding and seemingly intractable problems require creative solutions and thinking, especially in the context of contemporary fiscal, legal, and economic realities. Toward that end, staff believes the approach recommended for adoption by the Commission entails a very real likelihood of achieving a "win-win" situation that ensures multiple benefits and that staff recommends be found to be consistent with Coastal Act policies.

Nevertheless, the Commission's discretion to find "solutions" is limited by the policies of the Coastal Act. An example of a "solution" that does not fully implement Coastal Act policies is the establishment of mitigation "credits" under the Coastal Act for port fill projects through the payment of funds into an account solely for future land acquisition, with no assurance that habitat restoration, enhancement, and maintenance will ever occur. Because land acquisition does not result in restoration of marine habitat and resources, it does not result in mitigation as required under the Coastal Act. Lost living marine resources do not grow in bank accounts. Actual and adequate habitat restoration, enhancement, and maintenance must be integral parts of any mitigation bank approach for new port fill projects if those fills are to be found consistent with Coastal Act policies. In this instance, Port funds will be allocated towards land acquisition and restoration activity. The "new" approach staff is recommending in this case is to approve the use of mitigation credits under circumstances that acknowledge that habitat values to compensate for lost marine habitat and resources will not be provided prior to or concurrent with the actual construction of port landfill projects.

The approach staff is recommending here, together with its recommendations relative to the two Port Master Plan amendments, necessarily includes the following essential elements that must be met before any port landfill mitigation credits actually become available for purposes of meeting Coastal Act requirements and before new port landfill projects relying on these mitigation credits can proceed to construction.

1. The overall mitigation "package" is such that the Commission can be certain that the restoration, enhancement, and maintenance of the identified habitat values, in terms of type, general location, and extent, will actually be provided within a reasonable period of time. Toward that end, the following elements were identified by staff as being essential.
2. All of the Bolsa Chica Lowlands that are to be restored, enhanced, and maintained, and the restoration, enhancement, and maintenance of which is to serve as mitigation for the identified new port fill projects, must have been conveyed to a public agency and must be in public ownership.

3. The Commission must have taken a legal action that gives at least conceptual approval (i.e., this consistency determination) to a habitat restoration plan for the affected Bolsa Chica Lowlands that identifies, generally, the type of habitat values to be provided, where, when, and how.

4. Sufficient funds are deposited into an irrevocable account for the purpose of ensuring the implementation of the habitat restoration and enhancement plan and the appropriate monitoring and maintenance to ensure the continuing viability of the habitat values that are identified and provided as compensation for lost port habitat values.

5. Restrictions or safeguards are in place to ensure that the habitat values and area that serves as mitigation for port fill projects are not subsequently used to provide mitigation for any other project that may require mitigation. This is to avoid "double counting" of habitat resources for mitigation purposes.

Finally, the staff has scheduled this consistency determination prior to the two Port Master Plan amendments in order to achieve the third element described above. Accordingly, if for any reason the Commission defers action on this matter or fails to approve it, the two Port Master Plan amendments would be postponed for future consideration after the Commission has acted upon a restoration plan for the lowlands, the implementation of which is directly related to port mitigation credits.

The plan described in the consistency determination and before the Commission today is a conceptual restoration plan and represents the first step in a phased process that will culminate in: (1) the selection of a final restoration plan, through the preparation of an Environmental Impact Statement/Report, for the acquisition and restoration of the Bolsa Chica Lowlands; and (2) Coastal Commission action on a consistency determination from the Service for the final restoration plan. Notwithstanding the present funding shortfall to implement the acquisition and restoration activities, and the uncertainty regarding clean-up costs for potential environmental contaminants at the site, the conceptual plan now before the Commission contains adequate information regarding project objectives and the habitat values that will arise from the restoration project. As a result, the Commission staff has determined that at this time, the restoration plan would be consistent with the resource protection policies of the Coastal Act.

Finally, the staff reports and recommendations on the two Port Master Plan amendments that follow this consistency determination on the October 8 Commission hearing agenda address the adequacy of the proposed conceptual restoration plan as compensatory mitigation for future port landfills. Commission action on the amendments is necessary at this time (that is, prior to property acquisition using Port funds) in order to assure the Ports that the proposed mitigation credit account is consistent with the Coastal Act. The staff report and recommendation on the State Coastal Conservancy Enhancement Plan for the Bolsa Chica Lowlands that follow this consistency determination on the October 8 Commission agenda addresses the same Concept Plan for wetland restoration that is contained in the consistency determination. Commission action on the Enhancement Plan is necessary for the Conservancy to contribute funding to the acquisition effort.

II. Project Description. The U.S. Fish and Wildlife Service (Service) has submitted a consistency determination for a land acquisition and conceptual wetland restoration project (Project) for an 880-acre portion of the Bolsa Chica Lowlands, located inland of Pacific Coast Highway on the northern Orange County coastline (Exhibits 1-4). The entire 1,300-acre Lowlands is comprised of mostly saltmarsh and seasonal ponds, with active oil wells, access roads, and associated production facilities located over large portions of the area. The 1,300-acre Lowland is currently owned by the Koll Real Estate Group (KREG) (930 acres), the State of California (the 306-acre Department of Fish and Game Ecological Reserve at Inner Bolsa Bay), the Metropolitan Water District (25 acres; this land is proposed to be transferred to the State), and the Fieldstone Company (42 acres)(Exhibit 5).

The proposed Project arises from an Interagency Agreement ("Agreement to Establish a Project for Wetlands Acquisition and Restoration at the Bolsa Chica Lowlands in Orange County, California, for the Purpose, Among Others, of Compensating for Marine Habitat Losses Incurred by Port Development Landfills Within the Harbor Districts of the Cities of Los Angeles and Long Beach, California") signed recently by the U.S. Fish and Wildlife Service, National Marine Fisheries Service, Environmental Protection Agency, Army Corps of Engineers, California Department of Fish and Game, State Lands Commission, State Coastal Conservancy, Resources Agency, Port of Los Angeles, and Port of Long Beach (Exhibit 8).

A. Project Schedule. The Project, as defined in the aforementioned Interagency Agreement, calls for: (1) the State Lands Commission (SLC) to acquire fee title to a minimum of 880 acres of KREG property in the lowlands; (2) the Service to implement a wetland restoration project (as detailed in the Interagency Agreement's "Concept Plan for Fish and Wildlife Habitat Restoration at the Bolsa Chica Lowlands, Orange County, California") on the lowlands; and (3) monitoring, maintenance, and management of the restored wetland by the SLC or an agency or entity selected by the SLC.

The consistency determination explains the timeline contained in the Interagency Agreement for completion of the KREG property acquisition. The Agreement states that:

... the four Federal agencies and four State agencies which are parties to the Agreement must, each in its sole discretion prior to December 16, 1996, make a determination as to whether or not the acquisition by the SLC of the approximately 880 acres of KREG property should be consummated. If all eight parties determine to proceed, and if the Coastal Commission at its October 1996 meeting has taken final action concurring in this Consistency Determination and approving certain amendments to the Ports' Master Plans, then, pursuant to Section 12(a) of the Agreement, each Port will be obligated to deposit \$33.375 million, and the State Coastal Conservancy ("Coastal Conservancy") will be obligated to deposit \$1 million, with the SLC before the end of December 1996. In turn, the purchase of the KREG property will be consummated prior to the end of the month, with the 454 mitigation credits vesting in the Ports at that time for their immediate use in accordance with Section 15 of the Interagency Agreement.

If the purchase is consummated, then detailed planning for the Project will be commenced by the Coastal Conservancy. Following additional public review of the conceptual wetland restoration Project contained in this consistency determination, completion of an Environmental Impact Statement/Report, adoption of a specific restoration alternative, Coastal Commission action on a consistency determination for the final plan, and completion of final design of the restoration project, the Service would construct a wetland restoration project on approximately 384 acres of the Bolsa Chica Lowlands (the "Full Tidal" area illustrated in Exhibit 2).

The consistency determination includes a proposed implementation schedule for the Project (Exhibit 6):

If the purchase of the KREG property is consummated at the end of December, 1996, then commencing immediately in 1997, and in accordance with Sections 3 and 4 of the Interagency Agreement, the Coastal Conservancy would refine the Concept Plan for the Project into a more detailed Feasibility Plan. Concurrently, the SLC, Service, and Corps of Engineers would commence the necessary state and Federal environmental review (i.e., CEQA and NEPA) processes for the Project. At the completion of the environmental review processes, the Coastal Conservancy would make any modifications in the Feasibility Plan required by the results of those processes and prepare such preliminary engineering designs as may be required for the necessary state and Federal regulatory permit applications (collectively, the "Final Plan" for the Project). The SLC would be responsible, as the owner of the land upon which restoration would be undertaken, for obtaining all necessary state and Federal regulatory permits for the construction of the Restoration Features Component of the Project.

Section 6 of the Interagency Agreement anticipates that the above-described planning, environmental review, public involvement, and permitting processes, and the second Federal consistency determination, will take approximately two and one half years to complete. Thus, it is anticipated that actual construction of the Restoration Features Component of the Project will commence not later than October, 1999. Construction is then expected to take three years (i.e., be completed in the fall of 2002).

The Interagency Agreement states that the SLC will be responsible for the long-term operation and management of the Project, but acknowledges that it may enter into an agreement with another agency or entity for this purpose. The California Department of Fish and Game and the Service have a "first right of refusal" to enter into an agreement to manage the Lowlands on SLC's behalf. If the Service enters into such an agreement, then the Project lands would be managed as a unit of the National Wildlife Refuge System. If the Department of Fish and Game enters into such an agreement, the Project lands would be added to the existing Ecological Reserve, which is managed by the Department.

Funding for long-term operation, maintenance and monitoring of the Project is assured by the Interagency Agreement through the creation of a \$5 million Maintenance Account funded by the Ports but managed by the SLC. More specific details regarding the monitoring and performance standards required for the

restoration project will be generated during the development of the final restoration plan, and the Commission will review those details as part of the second consistency determination to be submitted for the final plan. However, due to the significant magnitude and complexity of the proposed restoration effort at Bolsa Chica, and the provision for release of mitigation credits to the Ports prior to the commencement of restoration work, the Commission does support the current Project Agreement proposal that requires up-front funding by the Ports of an independent account, to be held by the State Lands Commission (and managed by the State Lands Commission or another agency or entity agreeable to the Project Agreement signatories), for monitoring, maintenance, and management of the project. This provision should ensure an adequately funded, scientific, and independent evaluation of: (1) the degree of success of all facets of the restoration project, and (2) the need for any remedial actions to ensure the maintenance in perpetuity of habitat values once restoration is deemed complete and successful.

B. Funding. The Service states in the consistency determination that:

Funding for the Project ... will be provided primarily by the Harbor Departments of the Cities of Los Angeles and Long Beach ("Ports"). Pursuant to Section 14 of the Interagency Agreement, it is the Restoration Features Component and Restoration O & M Component of the Project (and only these two components) which are expected to create habitat values and aquatic functions sufficient to offset 454 acres of landfill in the outer harbor area of the Ports. Pursuant to Section 15 of the Agreement, the Ports will be entitled to use these 454 acres of "mitigation credits" as soon as they have deposited their monies with the SLC and title to a minimum of approximately 880 acres in the Bolsa Chica Lowlands has vested in the SLC.

The Project calls for the Ports of Los Angeles and Long Beach to convey a total of \$66,750,000 to accounts identified in the interagency Project Agreement to fund the acquisition of a minimum of 880 acres of lowland property owned by the Koll Company, and the proposed restoration project on the approximately 384-acre Full Tidal area of the Bolsa Chica Lowlands. Approximately 344 acres of the 384-acre Full Tidal area would be restored to full tidal influence (comprised of intertidal and subtidal habitat) and it is this acreage which is the basis for calculating the 454 acres of port mitigation credits (the remaining 40 acres consist of that part of Rabbit Island above full tidal influence)(Exhibit 7).

As of September 12, 1996, the firm sources of funding for the Project are as follows:

Ports of Los Angeles and Long Beach	\$66,750,000
State Coastal Conservancy	1,000,000
Interest (estimated)	<u>6,000,000</u>
TOTAL	\$73,750,000

The Service reports that interest earnings would accrue due to the fact that the Ports and the Coastal Conservancy would be required to deposit their funds in December 1996. However, construction is not expected to commence until October 1999 and would take three years to complete. As a result, these

funds, less the purchase price for the KREG property, can be invested for a period of time. The Service assumed a conservative rate of return of 5.5 percent (compounded annually) to calculate the interest income.

As of September 12, 1996, the Service's estimates of Project costs are as follows:

Purchase price of KREG property	\$25,000,000
Planning, env. review, permitting	2,200,000
Legal fee contingency for Conservancy	500,000
Construction of Restoration Features	56,700,000
Maintenance Account	<u>5,000,000</u>
 TOTAL	 \$89,400,000

The current Project costs are based upon the following assumptions or requirements:

1. The purchase price for the KREG property has not yet been established. The \$25 million figure is being used for planning purposes. The actual purchase will not exceed the appraised fair market value, as determined by the SLC.
2. The "Planning..." line item includes the costs of all pre-construction planning, environmental compliance, and permitting; final engineering design and specifications are included in the "Construction" line item.
3. The litigation contingency is required by the Interagency Agreement.
4. The construction cost estimate was prepared in April 1995 and included three years of inflation with a construction start date in summer 1998. With the start date now delayed until fall 1999, a fourth year of inflation was added.
5. The Maintenance Account is required by the Interagency Agreement.

The Service states in the consistency determination that based on the above figures, there exists today a potential funding shortfall for the Project of as much as \$16 million. This problem is being addressed as follows:

Project construction costs are being examined to provide more accurate (and hopefully lower) estimates.

Less expensive alternatives to oil well buyout and abandonment costs are being examined.

Additional sources of funding are being sought.

However, the Service states in its consistency determination that:

In order to provide reasonable assurances that resoration of the lowlands can be accomplished in accordance with the Concept Plan, the Service will require that the estimated costs for for the Project (which estimated costs will assume only the acquisition of the KREG property and will include \$5 million for the Maintenance Account, and, if applicable, the cost of insurance for contaminants clean-up and the cost of contaminants clean-up to standards more stringent than the remediation standards agreed to by third parties) not significantly exceed the funding which is committed for the Project and which is reasonably likely to become available for the Project as of the date that the determination required by Section 13(a)(1)(A) of the Interagency Agreement must be made. If this condition cannot be met, then the Service will determine, in accordance with Section 13(a)(1)(A) of the Interagency Agreement, that the acquisition of the KREG property should not go forward. This would cause the Interagency Agreement to be terminated, in which event the Project would not go forward, the Ports would not receive any mitigation credits, and funds would be returned to the submitting party.

C. Environmental Contaminants. In addition to the funding shortfall for Project acquisition and restoration, the issue of environmental contaminants is also unresolved at the present time. The Service reports that the Bolsa Chica Lowlands lie within the Huntington Beach Oil Field and that the 880 acres proposed to be acquired from KREG are subject to two oil and gas leases, the present operator of which is CalResources. The lowlands have been an operating oil field for over 50 years and some soil and water contamination by petroleum hydrocarbons and perhaps by other kinds of chemicals is to be expected. Remediation of documented contamination has been undertaken by CalResources. However, the knowledge of the existing nature and extent of contamination throughout the Project site is not complete. A contaminants survey on the site is presently underway (funded by the Service, the Coastal Conservancy, the National Fish and Wildlife Foundation, KREG, and CalResources) and is scheduled for completion in mid-October 1996.

The consistency determination states that in order to provide reasonable assurances that restoration of the lowlands can be accomplished in accordance with the Concept Plan contained in the Interagency Agreement, the Service will require either that:

1. No significant contamination be found to exist based upon the results of the currently on-going contaminants survey being performed by Tetra Tech, or
2. KREG, CalResources, or operators prior to CalResources, or some combination thereof, have entered into a legally binding agreement with the SLC by which one or more of them agree to be responsible for the remediation of all contaminants, known or unknown as of this point in time, with the standards for remediation to be those required by any applicable regulatory authorities or, in the absence thereof, as may otherwise be agreed upon, or
3. KREG, CalResources, or operators prior to CalResources, or some combination thereof, have entered into a legally binding agreement with the SLC by which one or more of them agree to be responsible for

the remediation of all known contaminants (based upon the results of the currently ongoing contaminants survey), with the standards for remediation to be those required by any applicable regulatory authorities or, in the absence thereof, as may otherwise be agreed upon, and the SLC, as the buyer, has been able to obtain an insurance policy covering the future remediation of presently unknown contaminants, should such ever be encountered, the costs of such insurance to be a Project cost....

The consistency determination additionally states that:

If at least one of these three conditions cannot be met, then the Service will determine, in accordance with Section 13(a)(1)(A) of the Interagency Agreement, that the acquisition of the KREG property should not go forward. This would cause the Interagency Agreement to be automatically terminated, in which event the Project would not go forward, the Ports would not receive any mitigation credits, and funds would be returned to the submitting party. Furthermore, if the remediation standards to which KREG, CalResources, or operators prior to CalResources, or some combination thereof, are subject or to which they have otherwise agreed are not as stringent as are required for the purposes of the wetlands restoration to be effected by the Project, then the Service will require that the estimated cost of the increment of clean-up above and beyond the agreed upon remediation standards be included as a Project cost when reaching the [go/no-go] decision required by the [Interagency Agreement].

D. Restoration Plan. This consistency determination covers only the acquisition of lowland properties and the conceptual restoration plan, and does not propose a final restoration plan or any construction or restoration work at Bolsa Chica at this time. The Service is submitting the conceptual Project plan for Commission review at this time in order to provide the Commission and other interested parties a description of the Service's restoration objectives at Bolsa Chica, and to provide evidence that the property acquisition and wetland restoration plan justifies the provision of landfill mitigation credits to the Ports of Los Angeles and Long Beach (as described in the Project Agreement).

The consistency determination states that:

The goal of the Bolsa Chica restoration plan is to provide for the retention of existing fish and wildlife resources, and as much as desirable and feasible, the enhancement thereof. Further, it is intended that the ecosystem resulting from the implementation of the plan be naturalistic, biologically diverse, productive, and estuarine in nature. That is, it shall be predominately salt water influenced but incorporating biologically beneficial freshwater influence. In addition, the acreage of waters and wetlands in the lowlands shall not be diminished.

The specific objectives of the conceptual Bolsa Chica restoration plan are that:

1. Overwintering habitat value for migratory shorebirds, seabirds, and waterfowl shall not be diminished and shall be enhanced where feasible.

2. Nesting habitat for migratory shorebirds and seabirds shall not be diminished and shall be expanded where feasible.
3. Habitat value for estuarine fishes shall not be diminished and shall be expanded and diversified where feasible.
4. Nesting and foraging conditions for State and Federal endangered species shall not be adversely impacted. Also, implementation of the plan shall especially contribute to the recovery of these species: light-footed clapper rail, California least tern, western snowy plover, and Belding's savannah sparrow.
5. The mix of habitat types shall include perennial brackish ponds, seasonal ponds/salt flats, pickleweed dominated flats, cordgrass dominated intertidal zone, unvegetated intertidal mudflat, and subtidal seawater volume with low residence times.
6. Modifications to the hydraulic regime, necessary to achieving the above objectives, shall emphasize minimalized requirements for manipulations and maintenance, and no degradation of existing flood protection levels.
7. The interests of contiguous property owners will be protected.
8. Once completed, maintenance and management of the area shall be to maximize native, estuarine fish and wildlife habitat value of the Bolsa Chica lowland, in perpetuity, to include active removal and exclusion of detrimental, nonnative biota.
9. Allowable public uses shall include passive and non-intrusive recreation activities, focused on peripheral areas, interpretive foci, and trails.
10. Total removal of oil extraction activities and their past effects shall be conducted in a phased, cost effective, and environmentally sensitive manner.
11. Monitoring and evaluation of the success of biological objectives shall be conducted.

The conceptual restoration plan is illustrated in Exhibits 2 and 3. No changes to the full tidal part of Outer Bolsa Chica Bay or the muted tidal part of Inner Bolsa Chica Bay (the State Ecological Reserve) are contemplated due to the existing and highly valued biological resources found in these areas (located outside the properties proposed for purchase by the Service). Similarly, an approximately 120-acre area in the southeastern corner of the lowlands designated as seasonal ponds will remain unchanged due to existing habitat values.

The conceptual plan proposes to reestablish full tidal circulation to a significant portion of the Bolsa Chica Lowlands in order to increase biological diversity and productivity. The consistency determination states that:

Bolsa Chica was historically full tidal and had its own ocean inlet. Improving tidal influence is widely recognized as the principle method of restoring missing components of this coastal wetland ecosystem. However, engineering and biological constraints are expected to limit the size and location of contemplated tidal restoration. Some of the areas planned for full tidal restoration have some existing wetland values, the loss of which will be compensated either through enhancing these values when full tidal action is restored (designated Full Tidal areas), or by introducing managed tidal waters into other areas of the site (designated Managed Tidal areas).

The conceptual plan includes the construction of an ocean inlet at the southern end of the lowlands. The Service states that:

Preliminary engineering indicates that significant increases in the tidal prism (the volume of seawater between the high and low tides) necessary to achieve the biological benefits in the lowland cannot be conveyed through the existing channels of outer Bolsa Chica, through Huntington Harbour and Anaheim Bay without damaging tidal flats and incurring erosion and safety problems. Therefore, an ocean inlet, to reestablish the historic connection to the sea, is contemplated, albeit in a different location from the historic location. At Bolsa Chica State Beach, further beach erosion or water quality problems will be avoided and human recreational access, public safety access, and the public transportation thoroughfare requirements will be fully protected. Bank protection measures, such as rip rap, may be necessary in places.

The consistency determination contains a description of the proposed modifications to and the habitat types to be restored within the Bolsa Chica Lowlands:

The enclosed figure [Exhibits 2 and 3 of the staff report] depicts a contemplated ocean inlet connecting to an area shown as Full Tidal (approximately 384 gross acres). Levee reinforcements are contemplated to be necessary primarily along the inland side of this area, as the Ecological Reserve dike and flood channel levees may already be sufficient for the purpose. A full tidal range (extreme tides are about +7.5 to -1.5 feet Mean Lower Low Water, MLLW) would be expected in this entire area. Most of this area, but for the upland sand dune area known as Rabbit Island, already lies between +3 and -3 feet MLLW. Excavation within the contemplated Full Tidal area would be the minimum necessary [approximately 1.7 million cubic yards] to achieve an inlet bottom depth and subtidal slough about -4 feet MLLW. (That is, at extreme low tide this subtidal area could be waded across.) The areas adjacent to this shallow subtidal slough would become intertidal mudflats and vegetated saltmarsh, especially cordgrass. Some deposition of dredge spoil in these areas may be appropriate in order to achieve sufficient acreage at tidal elevations suitable for cordgrass (+2.5 to +4 feet MLLW), essential habitat for the endangered light-footed clapper rail. Oil wells, water injection wells, well pads and access roads would all be removed from within the Full Tidal area.

Two adjacent areas depicted on the enclosed figure [Exhibits 2 and 3 of the staff report] as Managed Tidal (about 220 acres) are not contemplated to be physically modified directly but would have seawater readmitted to them in an intermittent or very muted manner through culverts or water control structures through the reinforced levee or flood channel levee. Pickleweed dominated saltmarsh and shallow saltponds-saltflats are the contemplated habitat types. Existing pickleweed in this managed tidal area as well as the tidal and muted tidal portions of the Ecological Reserve would remain intact and will exceed 200 acres in extent. Oil well pads and roads could be removed or revegetated upon inactivation of the wells in this area.

The remaining area depicted on the enclosed figure [Exhibits 2 and 3 in the staff report] is designated as Future Full Tidal (about 275 gross acres). This area includes the highest concentrations of active oil wells but much of the lowest elevations in the lowland. It is therefore contemplated that upon depletion of the oil field in 15-20 years and removal of the wells and any contamination, it may be feasible to simply breach the dike and allow a large portion of it to become slough, tidal flats, and saltmarsh without extensive earthwork. Maintenance and management of this area is part of the Management Component of the Project. However, potential future restoration of this area is not part of the Project and is not a basis for the mitigation credits to be granted to the Ports.

Enhancement of suitable nesting areas for Belding's savannah sparrow would be achieved in the Managed Tidal areas, while other existing valuable areas are retained intact in the Muted Tidal and Seasonal Pond areas. Seasonal pond habitats in all areas would not be less than 120 acres. Significant enhancement of suitable nesting habitat for the light-footed clapper rail would be achieved in the cordgrass expansion part of the Full Tidal area. Nesting area for the California least tern and western snowy plover would be achieved by creation and retention of sparsely vegetated sandflat and mudflat areas protected from disturbance or water inundation.

No rerouting of the Garden Grove-Wintersburg Flood Control Channel has been contemplated although relocating the existing flapgate outlet about 0.5 miles upstream may be considered [this would assist in the delivery of tidal waters into the proposed "managed tidal" area located north of the flood control channel]. The rerouting of this flood channel is generally viewed as providing little biological benefit to the restored wetland. On the other hand it may convey contamination and trash from urban runoff into the restored tidal wetland and into the nearshore zone where surfers and beach users are expected to be present. Nevertheless, during the preparation of the EIR/S, it will be considered for its public safety benefits

Preliminary engineering also indicates that a barrier to groundwater encroachment into the existing houses along the easterly edge of the lowland may be necessary. Further studies of this potential problem are expected to resolve the need for such a barrier, as well as the location and type of barrier that would need to be constructed.

III. Status of Local Coastal Program. The standard of review for federal consistency determinations is the policies of Chapter 3 of the Coastal Act, and not the Local Coastal Program (LCP) of the affected area. If the LCP has been certified by the Commission and incorporated into the CCMP, it can provide guidance in applying Chapter 3 policies in light of local circumstances. If the LCP has not been incorporated into the CCMP, it cannot be used to guide the Commission's decision, but it can be used as background information. The Bolsa Chica LCP has been certified by the Commission but not incorporated into the CCMP.

IV. Federal Agency's Consistency Determination. The U.S. Fish and Wildlife Service has determined the project to be consistent to the maximum extent practicable with the California Coastal Management Program.

V. Staff Recommendation:

The staff recommends that the Commission adopt the following resolution:

A. Concurrence.

The Commission hereby concurs with the consistency determination made by the U.S. Fish and Wildlife Service for the proposed acquisition and conceptual wetland restoration project for the Bolsa Chica Lowlands, finding that the project is consistent to the maximum extent practicable with the California Coastal Management Program.

VI. Findings and Declarations:

The Commission finds and declares as follows:

A. Environmentally Sensitive Habitats and Resources. The proposed conceptual plan includes provisions for restoration and enhancement of wetland resources. The Coastal Act provides:

Section 30230. Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.

Section 30231. The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

Section 30233.

(a) The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:

...

(7) Restoration purposes.

(b) Dredging and spoils disposal shall be planned and carried out to avoid significant disruption to marine and wildlife habitats and water circulation. Dredge spoils suitable for beach replenishment should be transported for such purposes to appropriate beaches or into suitable long shore current systems.

(c) In addition to the other provisions of this section, diking, filling, or dredging in existing estuaries and wetlands shall maintain or enhance the functional capacity of the wetland or estuary. Any alteration of coastal wetlands identified by the Department of Fish and Game, including, but not limited to, the 19 coastal wetlands identified in its report entitled, "Acquisition Priorities for the Coastal Wetlands of California", shall be limited to very minor incidental public facilities, restorative measures, nature study, commercial fishing facilities in Bodega Bay, and development in already developed parts of south San Diego Bay, if otherwise in accordance with this division.

Section 30240.

(a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.

(b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.

The concern that the Commission has over the protection of wetland resources is in part based on the ecological importance of this habitat type. Wetlands provide highly diverse and productive habitat to a wide variety of plants and animals. The wetlands of the Bolsa Chica lowland are important resources to the state and the nation, and comprise one of the largest remaining coastal wetland complexes in southern California. The lowland complex is comprised of a mix of habitat types as illustrated in Exhibit 4: pickleweed, brackish marsh, salt grass, cord grass, open water/channel non-tidal, open water/bay, open water/flat unvegetated, and uplands. The biological health and productivity of those habitat types varies widely across the lowlands from poor to excellent, with most of the area in need of significant restoration and enhancement.

The Service notes that although the 1,300-acre lowland area is significantly diminished from its historic size and value, sections of the lowland still possess high biological value, despite the presence of oil extraction activities within the lowland. Due in part to its large size, the potential for ecosystem enhancement, and its regional significance, the Service believes that stemming further habitat loss and restoring and enhancing fish and wildlife habitats at Bolsa Chica is both highly feasible and desirable.

The consistency determination includes a summary description of wetland values present at Bolsa Chica:

Although badly abused when compared to its condition of a century ago, the Bolsa Chica wetland complex is not "dying" and some parts of it continue to have superb biological value. (Part of the Bolsa Chica Ecological Reserve, Inner Bolsa, should be considered as a magnificently successful biological enhancement project, having been restored to muted tidal influence in 1978 after many decades of being diked off from the sea's influence.)

The biological values of the tidally influenced parts of the State's Ecological Reserve, especially fish and birds are well known and recognized, in part because of the high visibility provided by public access opportunities. Outer Bolsa is particularly renowned for the diversity and numbers of shorebirds utilizing its tidal mudflats, whereas Inner Bolsa is especially valuable for providing suitable conditions for thousands of breeding seabirds, as well as the food supply for a high diversity of fish eating birds. (The muted tidal waters of Inner Bolsa sustain a relatively low diversity of fishes but some of them are extremely abundant, at times.)

The seasonal ponds and wetlands of the privately owned parts of the Bolsa Chica lowland are less visible and not publicly accessible, but some documentation of biological values indicates particular areas have particular value. For example, the State listed endangered Belding's savannah sparrow nests in some pickleweed areas but not others (FWS 1989). Similarly, the Federally listed threatened western snowy plover nests and rears young in some of the salt flats and around some of the ponds of the Bolsa Chica lowland. Some non-tidal areas of Bolsa Chica are heavily used by shorebirds and waterfowl, especially during the migratory season and when high tide levels inundate the tidal mudflats of outer Bolsa Chica (Guthrie et al. 1993, FWS 1982).

The Commission recognizes that the Service's conceptual wetland restoration plan (Project) submitted for consistency review is the first step in a phased review of the proposed restoration of the Bolsa Chica lowlands. The Service acknowledges that further consistency review by the Commission will be necessary after a detailed, final restoration plan is selected upon completion of an Environmental Impact Statement/Report. Therefore, the Commission is only evaluating whether the submitted Project plan is consistent with the applicable Chapter 3 policies of the Coastal Act, and is not making any final determination on restoration plans or activities at the Bolsa Chica lowlands.

Several of the restoration activities proposed in the Project plan (described in Section II of this staff report) would constitute filling, dredging, and diking of wetlands, and the Commission must evaluate these proposed activities using the three tests of Section 30233 of the Coastal Act. The first test requires that the Commission find that the proposed activities are an allowable use. Section 30233(a)(7) describes projects that are for restoration purposes as an allowable use. The Service states that the purpose of the proposed Project is to restore and enhance the wetlands of the Bolsa Chica lowlands in order to protect fish and wildlife resources and habitat, and that the biological diversity and value of the restored wetland complex will be significantly improved over present conditions. Therefore, the Commission finds that the dredging, diking, and filling proposed in the Project plan are for restoration purposes, and thus are an allowable use pursuant to Section 30233(a)(7).

The second and third tests require the Commission to find that the proposed Project is the least damaging feasible alternative and includes feasible mitigation, respectively. In order to assess the Project plan's consistency with these tests, the Commission will use policies of Section 30230, 30231, 30233(c), and 30240 to determine if the Project, at a minimum, maintains the biological productivity and functional capacity of the habitat. The Commission must then consider whether the Project will result in any adverse effects on the environment and whether those effects can be avoided by project alternatives and/or mitigation.

The Commission finds that the Project plan will lead to the enhancement and restoration of functional capacity and biological productivity of the lowlands, and the phased abandonment and removal of oil extraction activities and equipment. Implementation of the Project will convert an area that has been diked off and isolated from tidal waters into a contiguous complex of subtidal, intertidal, and salt marsh/flat/pond habitats. The return of tidal influences to both the proposed "Full Tidal" and "Managed Tidal" areas (at differing degrees) will in turn greatly improve the diversity and productivity of plant and animal species using these areas. In addition, the Project plan calls for the retention of seasonal ponds at the southeast corner of the lowlands and the protection of those species dependent on this habitat type. As noted in the Project plan, some of the areas planned for full tidal restoration possess some existing wetland values, and as a result, any losses will be fully compensated either through enhancing these values when full tidal action is restored, or by introducing managed tidal waters into other areas of the lowlands. The Commission concurs with the Service's finding that the Project plan will enhance species diversity and use of the lowlands by wetland-dependent species, and thus enhance the biological productivity of the area.

The expected improvements to species diversity and utilization indicate that the Project will also enhance the functional capacity of the Bolsa Chica lowlands. However, to fully determine if the functional capacity will be enhanced, the Commission must evaluate the wetland's ability to be self-sustaining. The Service proposes to reintroduce tidal waters to the central portion of the lowlands (the proposed "Full Tidal" area) by constructing an ocean inlet at the southern end of the lowlands. In addition, tidal waters will be readmitted through culverts or water control structures to areas

designated "Managed Tidal." By manipulating the current hydrologic regime, modifying portions of the lowland topography, and replanting wetland vegetation in order to mimic a more natural, tidally-influenced coastal wetland, the Bolsa Chica lowlands should become self-sustaining. The Project plan does not call for the rerouting of the Garden Grove-Wintersburg Flood Control Channel, which could generate significant changes to the hydrology of the Bolsa Chica Lowlands. However, the Project plan does state that due to potential public safety and flood control concerns, this issue will be addressed during the preparation of the EIS/R and the final restoration plan. Lastly, because of the complexity of wetland restoration, the Project plan includes provisions for monitoring, maintenance, and remediation activities in order to ensure that the restoration project achieves its objectives.

The Commission finds that implementation of the Project plan would enhance the biological productivity and functional capacity of the Bolsa Chica lowlands and would lead to a significant improvement to wetland habitats and fish and wildlife resources within the lowlands. The Commission also finds that implementation of the Service's conceptual restoration plan would improve the quality and quantity of habitat, and will not be environmentally damaging. Because the Project will not have significant adverse effects on the environment, additional alternatives analysis and mitigation requirements, pursuant to Section 30233(a) of the Coastal Act, are not required to find the proposed filling, dredging, and diking consistent with the marine resource policies of the Coastal Act.

In conclusion, the proposed Project plan for restoration of the Bolsa Chica lowlands includes provisions for substantial restoration and enhancement of wetlands and fish and wildlife resources. The Commission recognizes that the proposed Project is conceptual in nature and will require additional consistency review upon completion of a final restoration and construction plan. However, the Commission finds that the Project plan outlines wetland restoration activities that would beneficially affect coastal resources in a manner that is consistent with the marine resource and habitat protection policies of the California Coastal Management Program (Sections 30230, 30231, 30233, and 30240 of the Coastal Act).

B. Shoreline Structures and Development. The Coastal Act provides:

Section 30235. Revetments, breakwaters, groins, harbor channels, seawalls, cliff retaining walls, and other such construction that alters natural shoreline processes shall be permitted when required to serve coastal-dependent uses or to protect existing structures or public beaches in danger from erosion, and when designed to eliminate or mitigate adverse impacts on local shoreline sand supply. Existing marine structures causing water stagnation contributing to pollution problems and fish kills should be phased out or upgraded where feasible.

Section 30251. The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas,

and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting.

Section 30253. New development shall:

(1) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.

(2) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs....

The proposed Project plan for wetland restoration calls for the construction of an ocean inlet to reintroduce tidal waters to the central portion of the Bolsa Chica lowlands. Construction of the inlet will require dredging, excavation, dredge material disposal, two jetties, a revetment, and shore protection measures. The Project plan states that:

The wetland restoration plan will neither create nor contribute to significant erosion of the beach. All suitable sand excavated would be placed on the ocean beach, as would sand excavated from the inlet channel during maintenance. Bank protection measures, such as rip rap, may be necessary inside the inlet structure. Such structural features will be fully considered during EIR/S preparation and final consistency determination.

The Project plan also states that:

The scenic and visual qualities of coastal areas will be protected through the restoration of the Bolsa Chica wetlands. The Project, and public ownership of the Lowlands, will assure that the scenic and visual qualities associated with coastal wetlands will be maintained. Additionally, a goal of the Project is the removal, over time, of all oil extraction activities which will enhance the scenic and visual qualities of the site.

Because of the conceptual nature of the subject plan, the Commission is unable at this time to fully evaluate the the aforementioned activities and structures for consistency with the referenced Coastal Act policies. The Service acknowledges in its consistency determination that additional consistency review will be necessary once a final restoration plan is selected after completion of the environmental impact statement/report for the restoration project.

However, the Commission is able to find at this time that an ocean inlet will be required for successful wetland restoration of the Bolsa Chica lowlands at the scale envisioned in the Project plan. The Service states that the volume of seawater necessary to achieve the restoration objectives in the lowlands

cannot be conveyed through existing channels through Anaheim Bay, Huntington Harbour, and outer Bolsa Bay without damaging existing tidal flats and causing erosion, and, as a result, construction of an ocean inlet is required. The Commission agrees. The Commission also concurs with the Service that at the conceptual Project plan level, an ocean inlet can be constructed and maintained at the proposed location without generating significant, adverse effects on other coastal resources (namely sand supply, beach erosion, visual resources, and public safety) through appropriate design, monitoring, and mitigation (i.e., sand management, beach nourishment). However, the Commission will have the opportunity to review in a subsequent consistency determination the specifics of the ocean inlet, its associated features, and any mitigation measures necessary to bring this component of the Project into consistency with the Coastal Act. Therefore, the Commission finds that the proposal in the Service's Project plan for an ocean inlet to reintroduce tidal waters to the Bolsa Chica lowlands for the purposes of wetland restoration and enhancement is consistent with the shoreline structure and development policies of the California Coastal Management Program (Sections 30235, 30251, and 30253 of the Coastal Act).

C. Public Access and Recreation. The Coastal Act provides:

Section 30210. In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.

Section 30211. Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.

Section 30212.

(a) Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where:

(1) it is inconsistent with public safety, military security needs, or the protection of fragile coastal resources,

(2) adequate access exists nearby....

Section 30213. Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred....

Section 30220. Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses.

Section 30221. Oceanfront land suitable for recreational use shall be protected for recreational use and development unless present and foreseeable future demand for public or commercial recreational activities that could be accommodated on the property is already adequately provided for in the area.

The consistency determination states that:

The primary emphasis of the Project is the conservation of fish and wildlife resources and habitats. However, environmental interpretation and education and related public access and facilities will be an integral part of further planning for the Project. The expected focus will be on suitability and location for trails and kiosks, although construction, location, operations and maintenance of an interpretive center may be considered if additional funding sources are identified.

The Project area is not suitable for intensive recreational uses. The goal of the Project is to restore a currently degraded wetland ecosystem to a productive, biologically diverse ecosystem. As such, intensive recreational uses would be in conflict with the goals of habitat restoration. Trails and interpretive kiosks will be considered as a means of meeting the public access and recreational policies of the California Coastal Act. Waterborne recreation will be considered only where consistent with the primary purpose of fish and wildlife resource conservation. The inlet channel and jetties are not intended to be navigable, but are intended to be designed and implemented to retain and protect the existing recreational uses of the State Beach Park. Public access and State Beach safety and maintenance vehicle access would be retained across the inlet channel, separate from the Pacific Coast Highway Bridges.

Currently, public access and recreation are not available on the privately-owned lands in the Bolsa Chica lowlands. The Project plan for the Bolsa Chica lowlands includes provisions for public access and recreation within the constraints of protecting fish and wildlife resources and habitats. In addition, the Project calls for the retention and protection of existing public recreational uses of Bolsa Chica State Beach. During the development of the final restoration plan (including plans for construction of the ocean inlet and jetties), efforts to minimize and mitigate the loss of sandy beach from these structures will be focused on avoiding significant, adverse effects on public access to and recreational use of Bolsa Chica State Beach. The Commission recognizes that the proposed Project is conceptual in nature and will require additional consistency review upon completion of a final restoration and construction plan. However, the Commission finds that the Project plan contains a commitment to include features that would enhance public access and recreational opportunities in the Bolsa Chica lowlands, and protect existing public access to and recreational use of Bolsa Chica State Beach. Therefore, the Commission finds that the Project plan is consistent with the public access and recreation policies of the California Coastal Management Program (Sections 30210, 30211, 30212, 30213, 30220, and 30221 of the Coastal Act).

SUBSTANTIVE FILE DOCUMENTS:

1. Agreement to Establish a Project for Wetlands Acquisition and Restoration at the Bolsa Chica Lowlands in Orange County, California, for the Purpose, Among Others, of Compensating for Marine Habitat Losses Incurred by Port Development Landfills Within the Harbor Districts of the Cities of Los Angeles and Long Beach, California (1996). (The "Concept Plan for Fish and Wildlife Habitat Restoration at the Bolsa Chica Lowlands in Orange County, California" is Exhibit A to the "Agreement")
2. California Department of Fish and Game Determination of the Status of the Bolsa Chica Wetlands, April 1982.
3. Adopted Revised Findings on Bolsa Chica Land Use Plan Amendment No. 1-95/Implementing Actions Program as approved by the Commission on June 12, 1996.

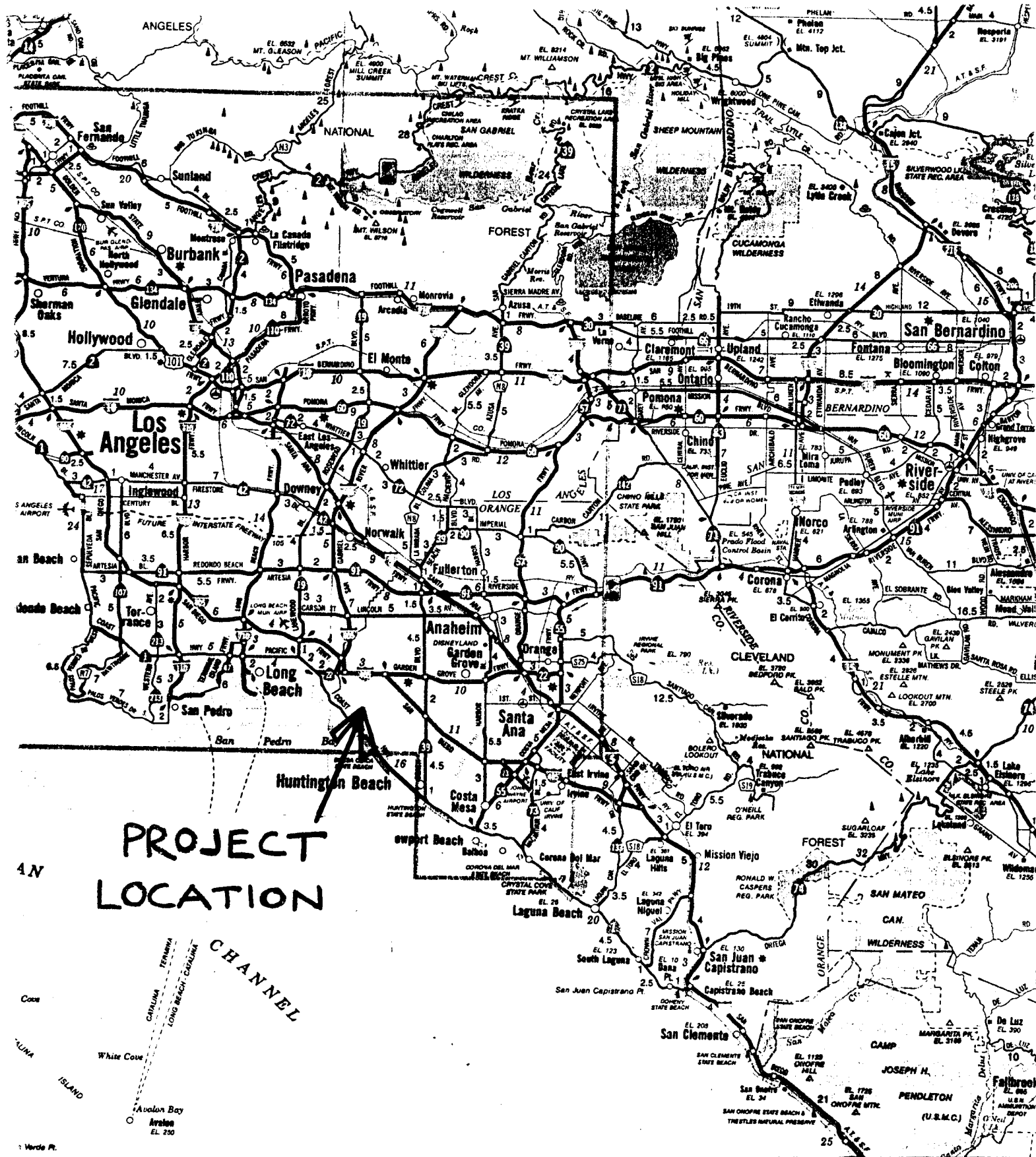


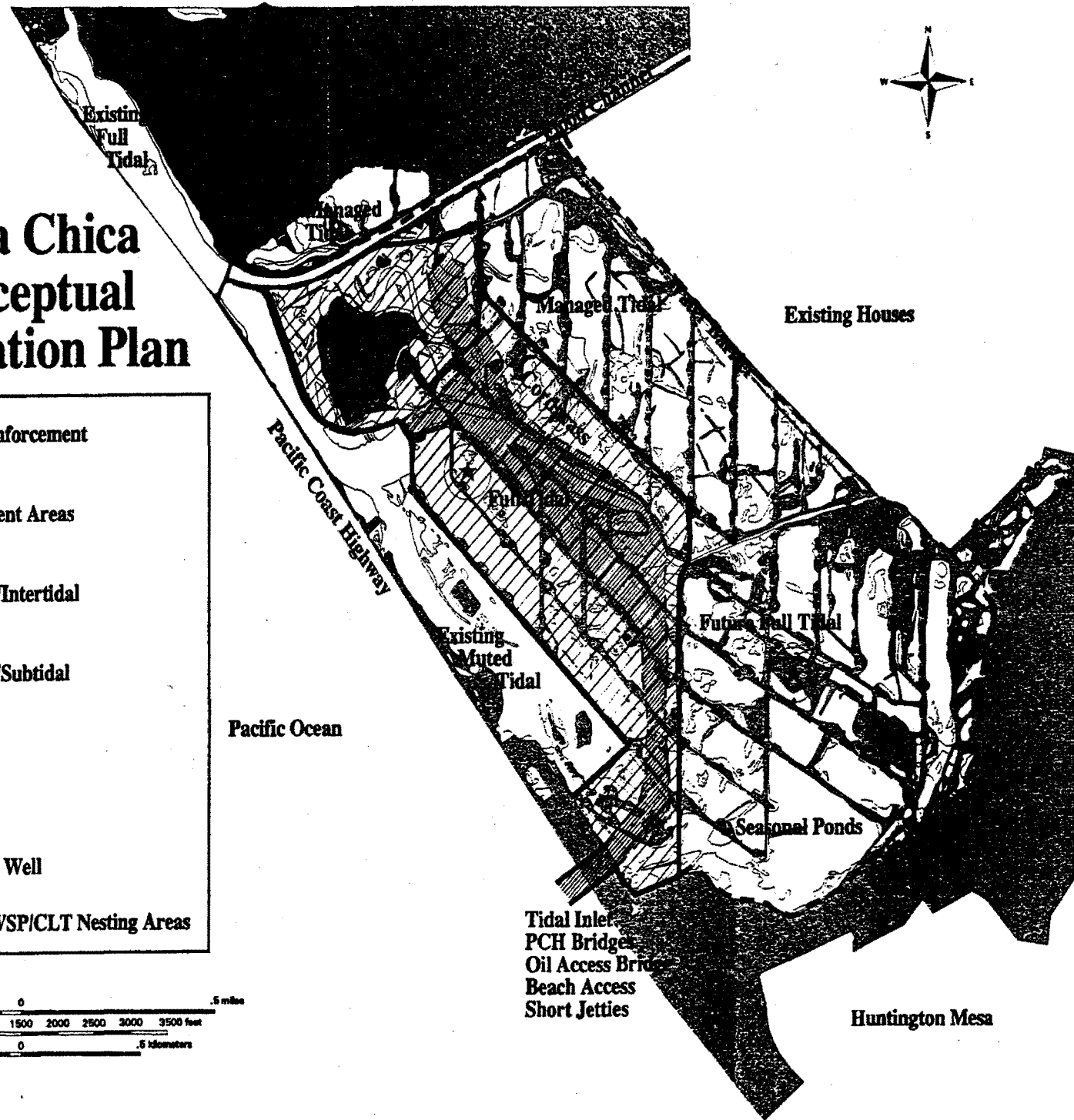
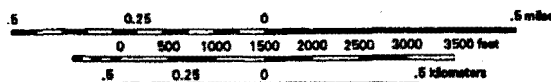
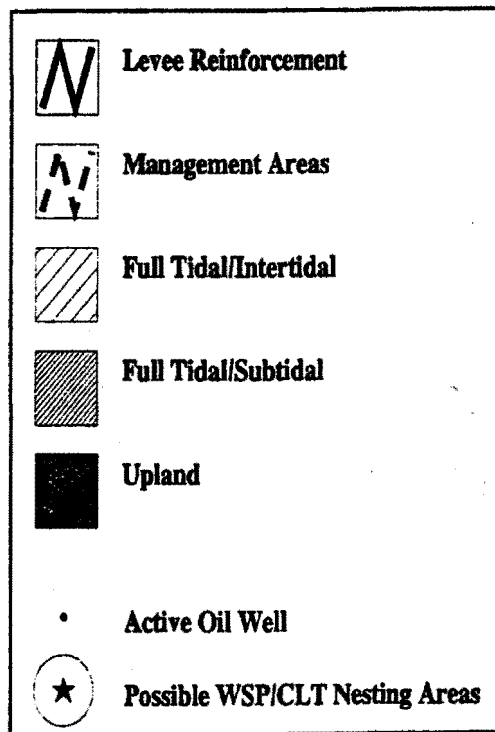
EXHIBIT NO. 1

APPLICATION NO.

CD-115-96

California Coastal Commission

Bolsa Chica Conceptual Restoration Plan



 California Coastal Commission	CD-115-96
	APPLICATION NO.
	EXHIBIT NO. 2

BOLSA CHICA / PORT MITIGATION WETLANDS CONCEPTUAL GRADING PLAN APRIL 15, 1998

PREPARED BY:
 PORT OF CALIFORNIA, CONSTRUCTION
 DIVISION
 PORT OF LOS ANGELES
 CONSULTANT:
 WILLIAMS & BERRY / HNTB-BELL
 HNTB & BERRY, CONSULTANTS
 HNTB ASSOCIATES

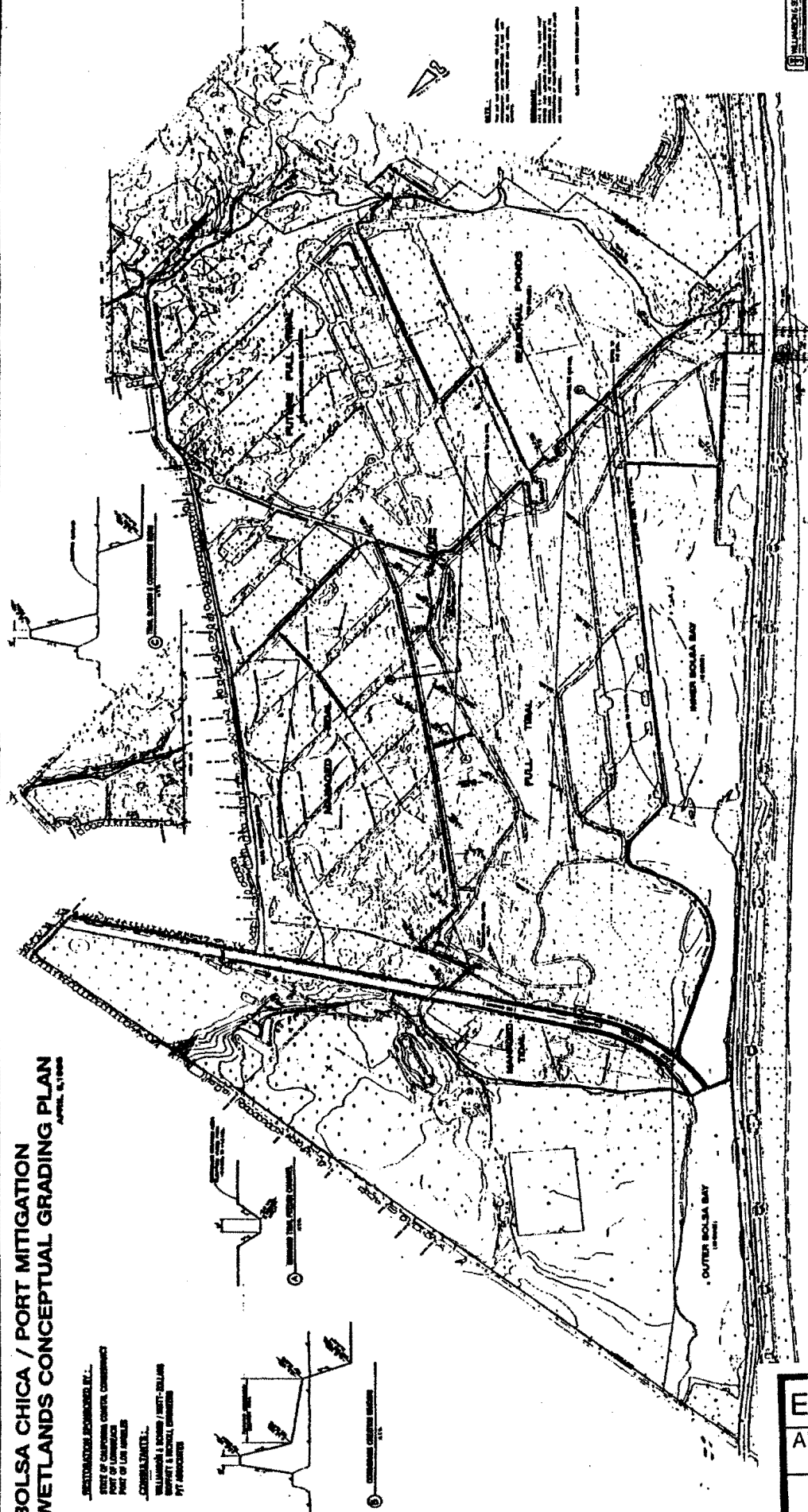


EXHIBIT NO. 3
 APPLICATION NO.

CD-115-96



EXISTING HABITAT

EXHIBIT NO. 4
APPLICATION NO.
CD-115-96
California Coastal Commission

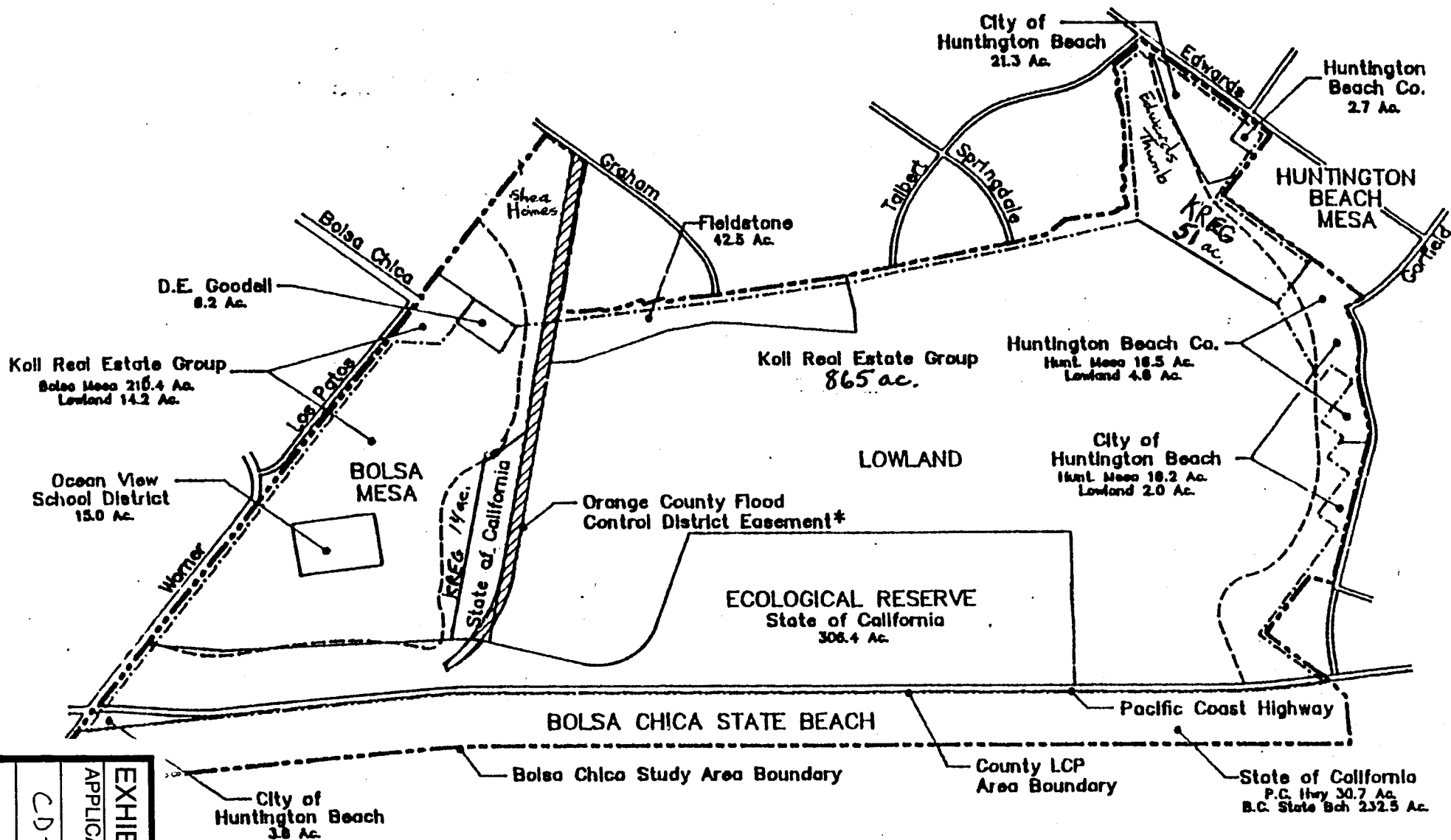


Figure 1. ACREAGE BY OWNERSHIP

EXHIBIT NO. 5
APPLICATION NO.
CD-115-96
California Coastal Commission

RESTORATION CONCEPT PLAN MASTER SCHEDULE

PREPARED APRIL 12, 1995

	1996				1997				1998				1999				2000			
	1996				1997				1998				1999				2000			
ACTIVITY	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
PLANNING & DESIGN PHASE:																				
• PLAN APPROVAL		X																		
• AGREEMENT (M.O.A.)		X																		
• PROJECT FUNDING ARRANGEMENTS																				
• APPROVALS & PERMITS																				
• ACQUISITIONS																				
• AGENCY PROPOSAL REQUESTS																				
• CONSTRUCTION DESIGN																				
CONSTRUCTION PHASE:																				
• FULL TIDAL BASIN & MANAGED TIDAL AREA																				
• OIL WELL ABANDONMENT																				
• GAS LINE RELOCATION																				
• IMPROVEMENTS																				
• TIDAL INLET AREA																				
• BRIDGE WORK																				
• INLET WORK																				
• CONSTRUCTION SERVICES DURING CONSTRUCTION																				
• CONSTRUCTION MANAGEMENT																				
OPERATION & MAINTENANCE:																				
(SHORT TERM: 2 YRS. 2000 & 2001)																				
2001 2002																				
OPERATION PHASE:																				
(LONG TERM: 2003 & BEYOND)																				
2003																				

EXHIBIT NO. 6

APPLICATION NO.

CD-115-96

FINAL ESTIMATE DETAIL

PAGE # 1 OF 4

BCLSA CHICA/PORT MITIGATION CONSTRUCTION COST ESTIMATES
 BASED UPON COASTAL CONSERVANCY RESTORATION CONCEPT PLAN
 AS REVISED APRIL 1995

PREPARED BY:

12-Apr-95

MOFFATT & NICHOL, ENGINEERS
 WILLIAMSON & SCHMID HUITT-ZOLLARS
 P/T ASSOCIATES

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S E	ITEM NO.	DESCRIPTION	QUANTITY	UNIT	UNIT COST	ESTIMATED COST
	I.	CONSTRUCTION PHASE				
	A.	FULL TIDAL BASIN & MANAGED TIDAL AREA				
	1.	MOBILIZATION				922,315
	2.	CLEAR & GRUBB	234	AC	2000.00	468,000
	3.	DEMO - MISC. STRUCTURES	1	LS	30,000.00	30,000
	4.	OIL WELL ABANDONMENT	26	EA	65,000.00	1,690,000
	5.	GAS LINE RELOCATION - BY UTILITY				-
	6.	OTHER UTILITY RELOCATIONS				-
	7.	EXCAVATION & GRADING				
		EXCAVATION TOTAL 1,680,000 C.Y.	740,000	CY	5.95	4,403,000
		(BY LAND BASED & DREDGE OPERATIONS)				
	8.	MATERIAL DISPOSAL OPTIONS				
		ON-SITE:				
		FILL (DIKES & CORD GRASS AREA)	140,000	CY	4.00	560,000
		TEMP. STORAGE (FUTURE OFF-SITE USE)	600,000	CY	1.00	600,000
		OFF-SITE:				
		NEAR SHORE - VIA DREDGE	940,000	CY	6.00	5,640,000
	9.	REVTMENT & PROTECTION OF IMPROVEMENTS	60,000	TN	25.00	1,500,000
	10.	GROUND WATER INTRUSION BARRIER (HDPE)	8,000	LF	180.00	1,440,000
	11.	PROTECTION OF EXISTING HOMES & PROPERTY (SEE OPTIONS FOR FIELDSTONE PROPERTY)				-
		NOTE: NO ADDITIONAL PROTECTION FOR EXISTING HOMES IS NECESSARY.				

EXHIBIT NO. 7
 APPLICATION NO.

CD-115-96

BOLSA CHICA/PORT MITIGATION CONSTRUCTION COST ESTIMATES
 BASED UPON COASTAL CONSERVANCY RESTORATION CONCEPT PLAN
 AS REVISED APRIL 1995

PREPARED BY:

12-Apr-95

MOFFATT & NICHOL, ENGINEERS
 WILLIAMSON & SCHMID HUITT-ZOLLARS
 P/T ASSOCIATES

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ITEM NO.	DESCRIPTION	QUANTITY	UNIT	UNIT COST	ESTIMATED COST
12.	WATER CONTROL SYSTEM (STRUCTURES & CHANNELS)				
a.	GATES - MANUAL	3	EA	25,000	75,000
b.	ELECTRIC OPTION	3	EA	5,000	15,000
c.	PIPES/CULVERTS	350	LF	125.00	43,750
d.	CHANNELS - W/ EXCAVATION	N/A			-
13.	REVEGETATION				
a.	EMBANKMENTS (LEAVE BARE)				-
b.	CORD GRASS PLANTING	40	AC	8,166.00	326,640
c.	SALVAGING EXIST'G PICKLEWEED	40	AC	3,500.00	140,000
	SUBTOTAL			16,931,390	
	MOB. 5.4 %			922,915	
	TOTAL A			17,854,205	
B.	TIDAL INLET AREA				
1.	MOBILIZATION				844,985
2.	PCH BRIDGE				
a.	CONSTRUCT DETOUR ROAD	200,000	SF	4.85	970,000
b.	CONSTRUCT NEW BRIDGE & APPROACHES				
(1)	NEW BRIDGE	34,000	SF	80.00	2,720,000
(2)	APPROACHES	264,000	SF	6.10	1,610,400
c.	BEACH ACCESS ROAD (WITH NEW BRIDGE)				-
d.	REPLACE ST. BEACH FACILITIES	1	LS	500,000.00	500,000
3.	CONSTRUCT OIL SERVICE BRIDGE	9,300	SF	70.00	651,000

SCLSA CHICA/PORT MITIGATION CONSTRUCTION COST ESTIMATES
 BASED UPON COASTAL CONSERVANCY RESTORATION CONCEPT PLAN
 AS REVISED APRIL 1995

PREPARED BY:

12-Apr-95

MOFFATT & NICHOL ENGINEERS
 WILLIAMSON & SCHMID HUITT-ZOLLARS
 P/T ASSOCIATES

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ITEM NO.	DESCRIPTION	QUANTITY	UNIT	UNIT COST	ESTIMATED COST
4.	INLET WORK				
a.	JETTIES				
(1)	STONE	68,350	TN	28.60	1,954,810
(2)	CONC. SEAL	760	CY	237.00	180,120
(3)	SCOUR PROTECTION	1	LS	300,000.00	300,000
b.	REVETMENT	22,500	TN	28.80	648,000
c.	SHEET PILE WALL	700	LF	1,921.00	1,344,700
d.	EXCAVATION (50 % 84,500 C.Y.)	42,250	CY	8.30	350,675
e.	SHORE PROTECTION				
(1)	UNDER BRIDGE(S) WITH b. ABOVE				-
(2)	@ BEACH (N. & S. OF INLET)	55,700	TN	28.45	1,584,665
f.	MATERIAL DISPOSAL (50 % 84,500 C.Y.) - VIA DREDGE	42,250	CY	6.00	253,500
g.	OIL BOOM SYSTEM	750	LF	60.00	45,000
SUBTOTAL		13,112,870			
MCB. 6.4 %		844,985			
TOTAL B		13,957,855			
C.	CONST. SERVICES DURING CONSTRUCTION BY DESIGN TEAMS				1,000,000
D.	OVERALL CONSTRUCTION MANAGEMENT				3,500,000
E.	OIL BUY-OUT (IN 1998)				
1.	OIL BUY-OUT DIRECT COSTS				2,060,000
2.	OIL CONSULT'G, NEGOTIATION & ENGR'G.				250,000
SUBTOTAL CONSTRUCTION COSTS (ITEM I.)					38,622,060

BCLSA CHICA/PORT MITIGATION CONSTRUCTION COST ESTIMATES
 BASED UPON COASTAL CONSERVANCY RESTORATION CONCEPT PLAN
 AS REVISED APRIL 1995

PREPARED BY:

12-Apr-95

MOFFATT & NICHOL, ENGINEERS
 WILLIAMSON & SCHMID-HUITT-ZOLLARS
 P/T ASSOCIATES

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ITEM NO.	DESCRIPTION	QUANTITY	UNIT	COST	ESTIMATED COST
F.	ESCALATION (3YRS @ 3.0 %)				3,475,385
	SUBTOTAL				42,098,045
G.	CONTINGENCY @ 20 %				8,419,609
	TOTAL DIRECT CONSTRUCTION COST ESTIMATE				50,517,654
	TOTAL DIRECT CCE (ROUNDED)				50,500,000
II.	OPERATION & MAINTENANCE (O&M): SHORT TERM				
A.	MONITORING PROGRAM	2	YR	50,000.00	100,000
B.	OPERATION PLAN	2	YR	125,000.00	250,000
C.	MAINTENANCE PLAN	2	YR	325,000.00	650,000
III.	CONSTRUCTION DESIGN				3,500,000
A.	STUDIES, REPORTS & GEOTECH. WORK				
B.	PREPARE PRELIM. PLANS				
C.	PREPARE FINAL PLANS				
D.	FINAL CONST. DOCUMENTS				
E.	ADVERTISE, BID & AWARD				
IV.	OPERATION PHASE: LONG TERM (BY OPERATING AGENCY)				EXCLUDED
A.	MONITORING PROGRAM				
B.	OPERATION				
C.	FUTURE DEVELOPMENT				
D.	MAINTENANCE PLAN				
	GRAND TOTAL				55,000,000

4/12/95

NOTES PERTAINING TO THE COST ESTIMATE - PORT MITIGATION AT BOLSA CHICA

EXCLUSIONS

The cost estimate does not include engineering analysis of the concept plan.

ASSUMPTIONS

- 1) Earthwork and dredging values are based on preliminary concept plans by proposed by the State Coastal Conservancy, Port of Los Angeles and Port of Long Beach, and designed by Moffatt & Nichol, Engineers, Williamson & Schmid, Huit/Zollars and P/T & Associates.
- 2) Unit costs for excavation and onsite fill include costs for dewatering and mobilization. Mass excavation costs are based on using land-based equipment.
- 3) Dredged material is suitable for disposal in the nearshore zone (-20 to -30 foot MLLW depth).
- 4) Unit costs for dredging include use of a medium dredge (16 to 24 inches) mobilized from land, and disposal of all material in the nearshore zone. One 10,000 foot long discharge pipe is to extend from the wetland offshore to a spill barge and downpipe. The dredge capacity is 750 cubic yards of material per hour pumped over a distance of 10,000 feet. No booster pump is necessary.
- 5) Dredge mobilization costs include purchase and laying of the discharge line, and pipe-jacking the discharge line under Pacific Coast Highway.
- 6) The HDPE Subsurface Barrier and groundwater monitoring costs are based on information recieved from Woodward-Clyde Consultants and Earth Tech.
- 7) The subsurface barrier is assumed to extend from the East Garden Grove - Wintersburg Flood Control Channel along the inland property boundary to Huntington Mesa.
- 8) The unit cost for on-site fill include construction of the berm surrounding the full tidal basin and for filling the new cordgrass area. On-site materials are assumed to be adequate for berm construction. No costs are included for import of earth materials such as clay for an impermeable core.
- 9) The cordgrass creation area is based on the area graded from -0.3 to +1.2 MSL (-2.5 to +4 MLLW) as will be shown on the conceptual grading plan.
- 10) Pickleweed salvage is assumed to cover the same area as the cordgrass creation. The unit cost assumes that the salvaged pickleweed will be used for restoration purposes on-site.
- 11) The managed tidal area is to remain unimproved; no grading or modifications are proposed other than installation of culverts to connect individual cells. An oil spill containment method should be considered.
- 12) No modifications are proposed to the East Garden Grove - Wintersburg Flood Control Channel, Outer Bolsa Bay and Inner Bolsa Bay.
- 13) Groundwater monitoring is required prior to, during and after construction.
- 14) Ultimate improvements to Pacific Coast Highway (PCH), including drainage (curb and gutter) and NPDES requirements (oil/water separators), are not included. One disposal option being considered includes widening and elevating PCH from Warner Avenue to the future tidal inlet bridge.

15) Oil buy-out pertains to the full tidal basin only.

16) Construction of PCH bridge is to be completed prior to construction of the tidal inlet (in the dry).

17) Project construction will start in ~~1991~~ ¹⁹⁹⁹

**AGREEMENT TO ESTABLISH A PROJECT
FOR WETLANDS ACQUISITION AND RESTORATION
AT THE BOLSA CHICA LOWLANDS IN ORANGE COUNTY, CALIFORNIA,
FOR THE PURPOSE, AMONG OTHERS, OF
COMPENSATING FOR MARINE HABITAT LOSSES INCURRED BY
PORT DEVELOPMENT LANDFILLS WITHIN THE
HARBOR DISTRICTS OF THE CITIES OF
LOS ANGELES AND LONG BEACH, CALIFORNIA**

THIS AGREEMENT, made the _____ day of _____, 1996, is entered into by the UNITED STATES OF AMERICA, acting by and through the FISH AND WILDLIFE SERVICE, UNITED STATES DEPARTMENT OF THE INTERIOR ("FWS"), the NATIONAL MARINE FISHERIES SERVICE, NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, UNITED STATES DEPARTMENT OF COMMERCE ("NMFS"), the CORPS OF ENGINEERS, DEPARTMENT OF THE ARMY ("USACE"), and the ENVIRONMENTAL PROTECTION AGENCY ("EPA"); by the STATE OF CALIFORNIA ("State"), acting by and through the DEPARTMENT OF FISH AND GAME ("CDFG"), the COASTAL CONSERVANCY ("CONSERVANCY"), the RESOURCES AGENCY ("RA"), and the STATE LANDS COMMISSION ("SLC"); and by the CITIES OF LONG BEACH and LOS ANGELES, acting by and through their respective BOARDS OF HARBOR COMMISSIONERS (collectively, "BOARDS").

RECITALS

I. WHEREAS, the BOARDS are empowered by their respective State Tidelands Grants to foster the orderly and necessary development of the Ports of Los Angeles and Long Beach, consistent with the public trust for navigation, commerce, recreation, and fisheries, including the development of new land in the Harbor Districts of the Cities of Los Angeles and Long Beach by landfill, and these developments contribute significantly to the local, regional and national economies by accommodating maritime commerce; and

II. WHEREAS, the FWS and the CDFG have as their primary mandates in this matter the conservation, protection, and enhancement of fish and migratory birds and their habitats, including the planning of biological loss avoidance, minimization, and compensation; and the NMFS has as its primary mandate the conservation, protection, and enhancement of marine fisheries resources and their habitats, including the planning of biological loss avoidance, minimization, and compensation; and

III. WHEREAS, the USACE has as its primary mandate in this matter the responsibility to ensure adequate and proper mitigation of impacts associated with construction of Federally authorized projects, as well as its regulatory authority pursuant to the Clean Water Act and Rivers and Harbors Act, with permit processing procedures including the 404(b)(1) analysis and public interest review; and the EPA has as its primary mandate protecting the environment, including restoring and maintaining the chemical, physical, and biological integrity of the Nation's waters; and

IV. WHEREAS, the CONSERVANCY has as its primary mandate in this matter the protection, acquisition, and restoration of coastal resources, planning and implementation of coastal wetland restoration projects, and promotion of coastal dependent economic development consistent with the California Coastal Act of 1976; and

V. WHEREAS, the RA has as its primary mandate in this matter the coordination and oversight of various departments, boards, and commissions related to natural resource management, including the CDFG, CONSERVANCY, and Coastal Commission; and

EXHIBIT NO. 8

APPLICATION NO.

CD-115-96

VI. WHEREAS, the SLC is vested with all residual jurisdiction and authority over tidelands which have been granted to governmental subdivisions, is authorized by Public Resources Code §8625(c) to accept money into its Land Bank Fund for mitigation projects which provide open space, habitat for plants and animals, and public access, and holds title to 327.5 acres of the low-elevation lands between the Huntington Mesa and Bolsa Chica Mesa, said low-elevation lands being those generally depicted in the figure which is an enclosure to Exhibit A of this Agreement (the "Bolsa Chica Lowlands" or the "Lowlands"); and

VII. WHEREAS, port development landfills and coastal wetland restoration are subject to State and Federal environmental evaluation-pursuant to, among others, the California Environmental Quality Act, National Environmental Policy Act, and Coastal Zone Management Act and are subject to State regulation pursuant to the California Coastal Act, to Federal regulation pursuant to the Clean Water Act and the Rivers and Harbors Act, and to State and Federal regulations pursuant to the State and Federal Endangered Species Acts (collectively, "ESA"); and

VIII. WHEREAS, the BOARDS anticipate the need for the construction of new landfills that will permanently eliminate marine fish and wildlife habitat and other aquatic functions that FWS, NMFS, USACE, EPA, RA, and CDFG recommend be compensated by creation or restoration of equivalent aquatic functions and habitat values that would be maintained on a permanent basis; and

IX. WHEREAS, the parties intend that compensation for the unavoidable, authorized losses of marine habitat and aquatic functions be provided to the extent possible in advance of or concurrently with the losses of habitat and functions predicted from harbor landfills; and

X. WHEREAS, the parties concur that advance planning of appropriate compensatory mitigation requires a procedure whereby habitat gains and losses are identified, completion of mitigation is reasonably assured, and credits and debits are accounted; and

XI. WHEREAS, the parties concur that creation or restoration of habitat values and aquatic functions within the Harbor Districts to offset large-scale losses of habitat values and aquatic functions from the landfills envisioned in this Agreement within the Harbor Districts (i.e., onsite mitigation) is not feasible in that adequate areas for appropriate mitigation do not presently exist within the geographical boundaries of the Harbor Districts; and

XII. WHEREAS, the USACE, NMFS, CDFG, EPA, RA, and FWS are of the collective opinion that compensation for unavoidable significant adverse impacts upon the marine ecosystem from Harbor District projects should emphasize the creation of shallow water, tidally influenced coastal embayment habitats to the extent practical, consistent with competing ecological priorities as set out below; and

XIII. WHEREAS, allowing the BOARDS to provide monies for acquisition, restoration, and maintenance of such shallow water, tidally influenced coastal embayment habitats in order to effect mitigation for loss of such lands in the Harbor Districts due to harbor development would be consistent with regulatory mandates for environmental protection and would be consistent with State public trust restrictions on the use of Harbor District revenues so long as title to the acquired lands and any capital improvements thereon is held by the SLC to ensure that the acquired lands are used only for fish and wildlife habitat protection in perpetuity; and

XIV. WHEREAS, the Bolsa Chica Lowlands are considered a unique

public resource because they represent one of the few remaining large wetland areas in southern California, because portions of the Lowlands provide a variety of valuable habitats to a variety of fish and wildlife resources and endangered species, and because the potential to increase the Lowlands' value to fish and wildlife through restoration and enhancement to a variety of habitat types is high; and

XV. WHEREAS, given these unique resource values, there is a compelling public interest in maximizing the habitat values and aquatic functions for a variety of fish and wildlife resources at the Bolsa Chica Lowlands, including but not limited to endangered species; and

XVI. WHEREAS, the Bolsa Chica Lowlands are an appropriate location to offset future, unavoidable habitat losses within the Harbor Districts, including allowing offset credit for some creation, restoration, and enhancement of habitat types different from those affected by the Harbor Districts' projects and some deviation from accepted port mitigation practices; and

XVII. WHEREAS, implementation of a compensatory mitigation procedure at the Bolsa Chica Lowlands is in the best interests of the people of the State in that such mitigation best promotes public trust purposes by restoring lands to the character of tide and submerged lands, appropriately locating the mitigation in consideration of public trust needs, by addressing the specific impacts of the Harbor Districts' landfill projects, and by ensuring that the Lowlands will only be used for public trust purposes of fish and wildlife habitat protection in perpetuity; and

XVIII. WHEREAS, nearly all of the Bolsa Chica Lowlands not already owned by the SLC are owned by three other entities; and

XIX. WHEREAS, the Signal Bolsa Corporation, a wholly owned subsidiary of the Koll Real Estate Group, Inc., owns approximately 930 acres in the Bolsa Chica Lowlands, making it the largest of the landowners in the Lowlands, and has indicated a willingness to sell to the SLC, under certain terms and conditions, approximately 880 acres of the property which it owns in the Bolsa Chica Lowlands; and

XX. WHEREAS, should it become possible to acquire a minimum of approximately 880 acres of the unrestored Bolsa Chica Lowlands from the Signal Bolsa Corporation, the FWS, CDFG, SLC, EPA, RA, USACE, NMFS, and CONSERVANCY contemplate physically altering a portion of the Lowlands acquired from the Signal Bolsa Corporation to restore fish and wildlife habitat by restoring tidal influence, recontouring portions of the wetland, maintaining the wetland as altered, and taking other actions, as generally and conceptually described in the "Concept Plan for Fish and Wildlife Habitat Restoration at the Bolsa Chica Lowlands, Orange County, California" (the "Concept Plan"), attached hereto as Exhibit "A" and incorporated herein by this reference; and

XXI. WHEREAS, public acquisition of lands in the Bolsa Chica Lowlands which are not presently owned by the SLC would facilitate public agency implementation of the Concept Plan; and

XXII. WHEREAS, none of the parties to this Agreement independently has the necessary financial resources to acquire the properties in the Bolsa Chica Lowlands and to undertake the implementation of the Concept Plan; and

XXIII. WHEREAS, the parties find that a joint effort which combines their financial and other resources and their expertise would assist the parties in carrying out the acquisition and restoration of the Bolsa Chica Lowlands and would be mutually advantageous; and

XXIV. WHEREAS, the parties have determined that entering into this Agreement does not constitute the adoption of, or a commitment to carry out, the Concept Plan as those terms are used in the California Environmental Quality Act, Public Resources Code Section 21000, et seq. ("CEQA"), that entering into this Agreement does not constitute a major Federal action significantly affecting the human environment as those terms are used in the National Environmental Policy Act, 42 U.S.C. Section 4321, et seq. ("NEPA"), and that completion of CEQA and NEPA compliance are conditions precedent to any party being committed to carry out any obligations set forth in this Agreement for which such compliance is required; and

XXV. WHEREAS, the CONSERVANCY has the statutory authority to prepare plans, preliminary and final designs, environmental documents, and permit applications, and to undertake other activities necessary to implementation of a resource enhancement plan pursuant to Chapter 6 of Division 21 of the Public Resources Code and to the terms and conditions of this Agreement; and

XXVI. WHEREAS, the parties have determined that: (1) SLC is the appropriate agency to hold fee title to any property acquired in the Bolsa Chica Lowlands, (2) the CONSERVANCY is the appropriate agency to take the lead in preparing final plans for the physical features identified in the Concept Plan, in consultation with the other parties to this Agreement, (3) the SLC is the appropriate agency to obtain all necessary Federal and State permits and approvals for implementing the Concept Plan and is the appropriate lead State agency for preparation of CEQA documents for implementing the Concept Plan, (4) the FWS and USACE are the appropriate co-lead Federal agencies for preparation of NEPA documents for the Federal actions that will be required for construction of the physical features identified in the Concept Plan, (5) the FWS is the appropriate agency to oversee construction of the said physical features, and (6) the SLC is the appropriate agency to operate, maintain, monitor, and manage the completed project and all properties acquired in the Bolsa Chica Lowlands; and

XXVII. WHEREAS, the EPA, NMFS, CDFG, CONSERVANCY, RA, and BOARDS shall cooperate with the SLC and with the USACE and FWS in processing applications for permits and approvals for implementing the Concept Plan; and

XXVIII. WHEREAS, the RA and the U.S. Department of the Interior are deliberating on the development of a Southern California wetlands clearinghouse which could define a new approach to the restoration of Southern California's severely diminished coastal wetlands and could secure more efficient and more certain mitigation for necessary coastal development.

NOW, THEREFORE, in consideration of the mutual promises and other good and valuable consideration hereinafter set forth, the parties hereto agree as follows:

DESCRIPTION OF THE BOLSA CHICA LOWLANDS PROJECT

SECTION 1. Short Description of Project.

(a) The Bolsa Chica Lowlands Project (the "Project") shall consist of the following components: (1) the acquisition by the SLC of as many properties in the Bolsa Chica Lowlands as possible, but not less than approximately 880 acres (the "Land Acquisition Component"), (2) the expeditious restoration of the wetlands and habitat areas in the Bolsa Chica Lowlands which are identified in the Concept Plan as the Full Tidal area (consisting of approximately 384 gross acres, inclusive of the degraded, unrestored areas within the Inner Bolsa Bay portion of the existing SLC/CDFG

Ecological Reserve (the "Ecological Reserve") and possibly including the most recently restored cell in the Inner Bolsa Bay portion of the Ecological Reserve) and the Managed Tidal areas (consisting of approximately 220 gross acres), subject to all necessary permits and approvals and completion of appropriate environmental analysis pursuant to Section 4 below, which restoration shall include planning, obtaining permits and approvals for, designing, and constructing the physical features identified in the Concept Plan (the "Restoration Features Component"), (3) monitoring activities to determine the condition of the restored habitats in the Full Tidal and Managed Tidal areas on a regular basis and the necessary operation, maintenance and management of the Full Tidal and Managed Tidal areas and their associated physical features, both during and after construction of those physical features (the "Restoration O&M Component"), and (4) the necessary maintenance and management of the approximately 275 gross acres which are identified in the Concept Plan as the Future Full Tidal area and of the approximately 120 gross acres which are identified in the Concept Plan as the Seasonal Ponds area (the "Management Component"). The Project does not intend any modification of the Outer Bolsa Bay portion of the Ecological Reserve currently under full tidal influence or of the Inner Bolsa Bay portion of the Ecological Reserve currently under muted tidal influence, except for the possible inclusion, as noted above in this subsection, of the most recently restored cell in the Restoration Features Component of the Project. Furthermore, restoration of the Future Full Tidal area as identified in the Concept Plan is not a part of the Project as defined herein. If established, and as appropriate, a Southern California wetlands clearinghouse or other mechanism could provide future mitigation opportunities for restoration and enhancement of that portion of the Bolsa Chica Lowlands which is in the Future Full Tidal area as identified in the Concept Plan.

(b) In entering into this Agreement, the parties intend, subject to Section 3 below, to carry out the Project in substantial conformance with the Concept Plan, except as future compliance with NEPA, CEQA, ESA, Section 404 (b)(1) Guidelines of the Federal Clean Water Act, and other applicable laws may require otherwise.

(c) Consistent with the goals and general description of the Project as set forth in the Concept Plan attached as Exhibit A, and subject to such modifications (if any) of the Restoration Features Component of the Project as are determined to be necessary to mitigate its adverse environmental impacts, the USACE, NMFS, EPA, FWS, and CDFG agree that the Restoration Features and Restoration O&M Components of the Project shall provide mitigation, as described in Section 14 below, for new landfills to be constructed by the BOARDS.

(d) The parties agree that the Project shall provide, in perpetuity, fish and wildlife habitats in the Bolsa Chica Lowlands consistent with the Concept Plan. Therefore, fee title to any property acquired and to the capital improvements constructed thereon, as well as to all other capital improvements constructed as part of the Project, shall be vested in the SLC and held in public trust by the SLC for the purposes of ecological restoration and preservation, scientific study, open space, and fish and wildlife habitat protection.

THE LAND ACQUISITION COMPONENT OF THE PROJECT

SECTION 2. Lands to be Acquired.

(a) The parties acknowledge and agree that it will be necessary to purchase from the Signal Bolsa Corporation a minimum of approximately 880 acres in the Bolsa Chica Lowlands. The parties further acknowledge and agree

that the purchase price for the said 880 acres (more or less) will have to be paid, in part, with monies to be provided by the BOARDS pursuant to Sections 8(a) and 12(a) below.

(b) The parties agree that the SLC will endeavor to acquire title in fee to substantially all of the property in the Bolsa Chica Lowlands not owned by the State as of the date of this Agreement, including the property owned by the Fieldstone Corporation as of the date of this Agreement; Provided, however, that the first land to be acquired must be a minimum of approximately 880 acres of the property owned by the Signal Bolsa Corporation. Lands owned by persons or entities other than the Signal Bolsa Corporation may be acquired with Project funds only after construction of the Restoration Features Component of the Project (on the approximately 604 gross acres which are associated with that component) has been completed in accordance with Section 5 below or, if construction has not been completed, then only if, and to the extent that, the FWS determines, after consultation with the other State and Federal agencies which are parties to this Agreement, that sufficient monies would remain available after such property acquisition to complete the construction of the Restoration Features Component of the Project.

(c) The acquisition by the SLC of a minimum of approximately 880 acres in the Bolsa Chica Lowlands from the Signal Bolsa Corporation shall be subject to satisfaction of the conditions precedent and other requirements set forth in Section 13(a)(1) below.

PLANNING, PERMITTING, AND CONSTRUCTION OF THE PROJECT

SECTION 3. Completion of Planning for the Project.

(a) On behalf of the SLC, RA, CDFG, FWS, NMFS, USACE, and EPA, the CONSERVANCY shall be responsible for preparing, or causing to be prepared, a more detailed plan of the Restoration Features Component of the Project than is set forth in the Concept Plan, which plan (the "Feasibility Plan") shall be based upon and consistent with the Concept Plan and shall be prepared at the level of detail required by the SLC, USACE, and FWS for the purposes of the NEPA/CEQA compliance process for which those agencies are responsible pursuant to Section 4 below; Provided, however, that the CONSERVANCY may not incur any expenses for, nor commence preparation of, the Feasibility Plan until the SLC has received title to a minimum of approximately 880 acres of the property owned by the Signal Bolsa Corporation in the Bolsa Chica Lowlands. The CONSERVANCY shall consult closely with the SLC, RA, CDFG, FWS, NMFS, USACE, and EPA, and shall comply with the requirements of Section 13(b) below, in conducting any studies required for, and in preparing, the Feasibility Plan.

(b) Following completion of NEPA/CEQA compliance by the SLC, USACE, and FWS pursuant to Section 4 below, the CONSERVANCY shall, on behalf of the SLC, RA, CDFG, FWS, NMFS, USACE, and EPA, prepare, or cause to be prepared, such modifications, if any, in the Feasibility Plan as may be required by the results of the NEPA/CEQA process and such preliminary engineering designs and drawings as may be required by the SLC, USACE, and FWS for the purpose of all necessary State and Federal regulatory permit applications (collectively, the "Final Plan"). The CONSERVANCY shall consult closely with the SLC, RA, CDFG, FWS, NMFS, USACE, and EPA, and shall comply with the requirements of Section 13(b) below, when preparing the Final Plan.

(c) In order to prepare the Feasibility Plan and the Final Plan, including any studies or analyses needed therefore, the CONSERVANCY may, at its option but subject to the requirements of Section 13(b)(1), contract for and utilize the services of consultants rather than utilizing its own personnel.

(d) The parties acknowledge that the final configuration of the Restoration Features Component of the Project (including, but not limited to, the location of the tidal inlet, depths in the Full Tidal Basin, and configuration of the Garden Grove-Wintersburg Flood Control Channel) will be determined through the planning, public consultation, environmental review and documentation, and permitting processes provided for by this section and Section 4, which processes will address differences between the Concept and Feasibility Plans and the separate wetlands restoration plan which has already been approved by the County of Orange.

SECTION 4. Lead Agencies for NEPA/CEQA Compliance and Permits.

(a) Utilizing the Feasibility Plan prepared by the CONSERVANCY, the SLC shall be responsible, in consultation with the FWS and USACE, for obtaining all Federal and State permits and approvals necessary for the implementation of the Restoration Features Component of the Project. The SLC shall be the lead State agency for compliance with CEQA. The FWS and the USACE shall be co-lead Federal agencies for compliance with NEPA for Federal actions associated with implementation of the Restoration Features Component of the Project. The SLC, FWS, and USACE agree to prepare, or cause to be prepared, and to process joint NEPA and CEQA documents, including any supplemental CEQA/NEPA documentation that may be required during or after construction of the Restoration Features Component of the Project. In carrying out these responsibilities, the SLC, FWS, and USACE shall consult closely with the RA, CDFG, CONSERVANCY, EPA, and NMFS and shall comply with the requirements of Section 13(b) below.

(b) In preparing the required NEPA/CEQA documents and the required permit applications, including any supporting studies and analyses, the SLC, FWS, and USACE may each, at its option but subject to the requirements of Section 13(b)(1), contract for and utilize the services of consultants rather than utilizing its own personnel.

SECTION 5. Construction of the Restoration Features Component of the Project.

(a) On behalf of and in consultation with the SLC, RA, CDFG, CONSERVANCY, NMFS, EPA, and USACE, the FWS shall be responsible for performing, or causing the performance of, any sediment sampling, archaeological surveys, or other technical studies, or any supplemental NEPA documentation, required before or during construction as a condition of any approvals or permits for the Project or because of changed circumstances; for preparing, or causing the preparation of, final designs and specifications; and for constructing, or causing the construction of, the Restoration Features Component of the Project. The FWS shall be obligated to construct the Restoration Features Component of the Project in substantial conformance with the Final Plan and in conformance with any Federal or State permits or approvals issued for that component.

(b) In carrying out the activities required of it by subsection (a) of this section, the FWS may, at its option but subject to the requirements of Section 13(b)(1), contract for any necessary services (including, but not limited to, construction management), rather than providing the same with its own personnel. Such contracts may, at the FWS's option, be with the SLC or CONSERVANCY.

(c) The FWS's obligation to initiate and proceed with construction of the Restoration Features Component of the Project is expressly conditioned upon completion of all necessary NEPA/CEQA documentation and findings; approval of the Final Plan by the FWS, USACE, NMFS, and EPA; the obtaining of

all necessary permits and approvals; and compliance with all legally imposed conditions of the permits and approvals. Furthermore, the FWS shall have no obligation to initiate construction, or thereafter award any given construction contract, unless and until it determines, in its sole discretion, that the monies remaining for the Project at the time are sufficient to complete construction or, if applicable, cover the amount of a given contract. If the FWS determines pursuant to the preceding sentence to not proceed with construction or the award of any given contract, then any monies for the Project which remain unexpended at that time shall be handled in accordance with Section 14(b) below.

(d) The SLC shall grant to the FWS, pursuant to a license or other permission to enter upon its property, or pursuant to a short term lease, the right to enter upon and occupy the property for the purpose of constructing the Restoration Features Component of the Project, any such license, other permission to enter, or lease being upon mutually agreeable terms and conditions as between the SLC and the FWS.

SECTION 6. Project Schedule. All parties hereto shall perform their obligations hereunder with all due diligence so as to facilitate progress and completion of the Project in substantial conformance with the Concept Plan, as refined by the Final Plan. All parties desire that the implementation of the Project shall be undertaken in an expeditious manner, with actual construction of the Restoration Features Component of the Project anticipated to be initiated not later October 1, 1999, and anticipated to be substantially completed within three years of the time actual construction is initiated.

OPERATION AND MAINTENANCE OF THE PROJECT

SECTION 7. Project Operation, Maintenance and Management.

(a) To the extent that monies are available from the Maintenance Account pursuant to Section 13(c) below, the SLC shall be responsible for effecting the Restoration O&M and Management Components of the Project for the primary purpose of preserving in perpetuity fish, wildlife, and wetland habitat values and aquatic functions. The parties acknowledge and agree that the SLC may enter into an agreement or agreements with another agency or entity (including, but not limited to, long-term leases of Project lands and features) in order to effect the said components of the Project.

(b) If the SLC elects to effect the said components of the Project by entering into an agreement or agreements with another agency or entity, it must first offer to the CDFG and FWS the opportunity to enter into such agreement or agreements, including a long-term lease of Project lands and features. If both the CDFG and the FWS decline to enter into such an agreement or agreements with the SLC, or if mutually satisfactory terms cannot be agreed to after good faith negotiations, then the SLC may enter into an agreement or agreements with a third party approved by the RA, CDFG, CONSERVANCY, FWS, EPA, NMFS, and USACE.

(c) If the SLC enters into such an agreement with the FWS, then the FWS hereby covenants that it shall manage all lands acquired for the Project, and all physical features associated therewith, as a unit of the National Wildlife Refuge System pursuant to Title 50 of the Code of Federal Regulations and the FWS and the CDFG agree to cooperate in their management and maintenance of, respectively, the Project and the Ecological Reserve.

FUNDING FOR THE PROJECT

SECTION 8. Sources of Funding for the Project.

(a) Each BOARD will provide the sum of \$33,375,000, which sum shall constitute the entirety of each BOARD's financial obligation under this Agreement. Each BOARD will deposit this sum with the SLC in accordance with Section 12(a) below, less any amount, not to exceed \$50,000 for each BOARD, advanced by a BOARD to the SLC for the purpose of defraying the SLC's costs of negotiating a contract with the Signal Bolsa Corporation for the purchase of its property by the SLC.

(b) The CONSERVANCY will provide a discretionary grant of matching funds in the amount of \$1,000,000. The said \$1,000,000 shall be deposited by the CONSERVANCY in accordance with Section 12(a) below.

The parties understand and agree that this grant cannot be used to pay for mitigation required for the landfill in the outer harbor areas of the BOARDS' Harbor Districts, but rather will be utilized to assure acquisition, to assure preparation of the Feasibility Plan and/or the Final Plan, and/or to assure restoration of wetlands in the Bolsa Chica Lowlands not included in the Full Tidal and Managed Tidal areas as identified in the Concept Plan.

(c) The parties acknowledge that, as of the date of this Agreement, the monies to be provided by the BOARDS and the CONSERVANCY, including future interest earnings thereon over time, may not be sufficient to fully fund the acquisition of all properties in the Bolsa Chica Lowlands as well as the other three components of the Project, depending upon the results of further engineering studies. Therefore, additional sources of funding will be actively sought for the Project by the State and Federal agencies which are parties to this Agreement in advance of the decision points identified in Section 13(a)(1).

(d) Nothing in this Agreement shall be construed to prohibit the CONSERVANCY, USACE, the BOARDS, or any other agencies or entities from funding restoration of any portion of the Bolsa Chica Lowlands that does not provide mitigation for the BOARDS' projects (e.g., the Future Full Tidal area as identified in the Concept Plan).

SECTION 9. Management of Monies Received for the Project.

(a) All monies received for the Project, except for those obligated and encumbered by a Federal agency in accordance with Section 12(c), shall be deposited with the SLC and then immediately placed by the SLC into the SLC's Land Bank Fund. All monies so received, and all interest earnings thereon, shall be held by the SLC for the benefit of the parties to this Agreement and the SLC shall administer and disburse all such monies and interest earnings only in accordance with the requirements and limitations of this Agreement.

(b) The parties acknowledge that monies for the Project which are deposited in the SLC's Land Bank Fund will be commingled with monies from numerous State funds and accounts and managed and invested by the State Treasurer. The SLC agrees that the SLC and the State Treasurer shall manage and invest the monies deposited with the SLC for the Project at no cost to the parties or to the Project.

ACTIONS TO BE SOUGHT FROM THE CALIFORNIA COASTAL COMMISSION

SECTION 10. Initial Federal Consistency Determination.

(a) In accordance with the requirements of section 307(c) of the Federal Coastal Zone Management Act (16 U.S.C. §1456(c)) and of Subpart C, Part 930, Chapter IX, Title 15 of the Code of Federal Regulations (15 CFR §§930.30 et seq.), the FWS and/or the USACE shall prepare and present to the California Coastal Commission (the "Coastal Commission") for its consideration an initial Federal consistency determination for the Project, which initial determination shall be based upon the Concept Plan. Concurrently therewith, the BOARDS shall submit to the Coastal Commission for its action such amendments to their existing Port Master Plans as they deem necessary in order to obtain Coastal Commission approval of the 454 acres of mitigation credits to be granted to the BOARDS pursuant to Sections 14 and 15 of this Agreement. The said consistency determination and amendments to the Port Master Plans shall be presented to the Coastal Commission for consideration at its October, 1996, meeting unless the Signal Bolsa Corporation advises the SLC, FWS, and BOARDS in writing that it has no objection to the said matters being presented to the Coastal Commission at its November, 1996, meeting or at its January, 1997, meeting.

(b) If the Coastal Commission acts to express its disagreement with this initial Federal consistency determination or fails to act on it at all prior to November 16, 1996, or if the Coastal Commission acts to express its agreement with this initial Federal consistency determination prior to November 16, 1996, but does not approve the amendments to the BOARDS' Port Master Plans prior to this date, then this Agreement shall automatically terminate on November 30, 1996, and no party hereto shall have any further obligations hereunder; Provided, however, that if the initial Federal consistency determination and the amendments to the BOARDS' Port Master Plans are not presented to the Coastal Commission until its January, 1997, meeting, then the foregoing November 16 and November 30, 1996, dates shall be automatically extended to January 11, 1997, and January 25, 1997, respectively.

SECTION 11. Subsequent Federal Consistency Determination. The parties acknowledge that a second Federal consistency determination will need to be submitted to the Coastal Commission based upon the Final Plan. The FWS and/or the USACE shall be responsible for preparing and submitting this second determination to the Coastal Commission at the appropriate time.

DEPOSITS AND DISBURSEMENTS OF MONIES FOR THE PROJECT

SECTION 12. Deposits of Monies.

(a) If the Coastal Commission acts to express its agreement with the initial Federal consistency determination and to approve the accompanying amendments to the Ports' Master Plans by the deadlines set forth in Section 10(b) above, and if both BOARDS determine, each in their sole discretion acting in accordance with Section 13(a)(1)(F) below, that the Coastal Commission's actions and findings reflect the Coastal Commission's approval of the use of mitigation credits for the BOARDS' landfills consistent with the conditions of this Agreement, then, and only then, the BOARDS and CONSERVANCY shall be obligated to deposit with the SLC the sums specified in Section 8(a) and 8(b), respectively, within three business days after the date upon which the last of the conditions set forth in subparagraphs (A), (B), (C), (E), and (F) of Section 13(a)(1) below is satisfied.

(b) All sources of other non-Federal monies shall, if and when received, be deposited with the SLC, unless otherwise agreed by the SLC and the entity providing the monies. All sources of other non-Federal monies deposited with the SLC shall be placed by it in its Land Bank Fund and managed by it in accordance with the requirements of Section 9 above.

(c) If any Federal funding is forthcoming, it shall either be deposited with and managed by the SLC in accordance with the requirements of Section 9 above or obligated and encumbered by the involved Federal agency for direct expenditure by that Federal agency on the Project.

SECTION 13. Disbursements from the SLC's Land Bank Fund. Monies deposited into the SLC's Land Bank Fund pursuant to this Agreement from all sources shall be disbursed and used only as follows:

(a) Land Acquisition Component of the Project. Subject to the requirements of Section 1(d), Section 2, and paragraph (1) of this subsection (a), the SLC may use monies deposited in its Land Bank Fund pursuant to this Agreement for the acquisition of any lands in the Bolsa Chica Lowlands.

(1) The SLC may not use any monies from the Land Bank Fund for the purchase of all or any portion of the Signal Bolsa Corporation's property in the Bolsa Chica Lowlands unless and until:

(A) The FWS, USACE, NMFS, and EPA have each advised the other parties to this Agreement in writing prior to December 16, 1996, that each of them has determined, in its sole discretion after consultation with the other Federal agencies to this Agreement, that the acquisition of land from the Signal Bolsa Corporation in the Bolsa Chica Lowlands should be consummated and the planning, environmental review, and regulatory permitting processes for the Project commenced in accordance with Sections 3 and 4 above,

(B) The RA, CDFG, and CONSERVANCY have each advised the other parties to this Agreement in writing prior to December 16, 1996, that each of them has determined, in its sole discretion after consultation with the other State agencies to this Agreement, that the acquisition of land from the Signal Bolsa Corporation in the Bolsa Chica Lowlands should be consummated and the planning, environmental review, and regulatory permitting processes for the Project commenced in accordance with Sections 3 and 4 above,

(C) The SLC has advised the other parties to this Agreement in writing prior to December 16, 1996, that it is prepared to take title to the lands which the Signal Bolsa Corporation is requiring be purchased and that the Signal Bolsa Corporation is prepared to sell to the SLC a minimum of approximately 880 acres,

(D) The Coastal Commission has acted to express its agreement with the initial Federal consistency determination, to approve the amendments to the Ports' Master Plans, and to adopt findings which reflect the Coastal Commission's approval of the use of the mitigation credits for the BOARDS' landfills, consistent with the conditions of this Agreement, which findings and actions must be satisfactory to both BOARDS, each acting in its sole discretion,

(E) Sixty (60) days have elapsed from the date of the Coastal Commission's final action on the initial Federal

consistency determination and on the amendments to the Ports' Master Plans, and

(F) The SLC has received written notification from each BOARD (which notification shall be provided by the sixty-fifth day after the Coastal Commission's final action on the initial Federal consistency determination and on the amendments to the Ports' Master Plans or by the fifth business day after the last of the notifications required by subparagraphs (A), (B), and (C) of this paragraph (1) is given, whichever is later) advising that each has determined, in its sole discretion, that the Coastal Commission's actions are satisfactory to it, that all other pre-conditions to the vesting of the mitigation credits have been satisfied or are being waived by it, and that the SLC should proceed to close the transaction.

(2) If all of the Federal and State agencies do not, prior to December 16, 1996, determine pursuant to paragraphs (1)(A) and (1)(B) immediately above to proceed, then this Agreement shall automatically terminate on the said date and no party hereto shall have any further obligations under this Agreement.

(b) Restoration Features Component of the Project.

(1) If, and only if, title to a minimum of approximately 880 acres in the Bolsa Chica Lowlands has vested in the SLC and \$5 million has been transferred into the Maintenance Account in accordance with subsection (c) of this section, then all monies remaining in or subsequently deposited to the Land Bank Fund pursuant to this Agreement, and the interest earnings thereon, shall be available to the SLC, FWS, USACE, and the CONSERVANCY to cover the costs incurred by each of them in carrying out the activities for which they are responsible pursuant to Sections 3, 4, and 5 of this Agreement in accordance with the following:

(A) It is understood and agreed that the CONSERVANCY, SLC, USACE, and FWS will obtain the contractual services of planning consultants, consulting engineers, construction management firms, construction contractors, and other necessary consultants and contractors to accomplish the activities for which each of them is responsible. The costs of all such contractual services incurred by the CONSERVANCY, SLC, USACE, and FWS shall be paid for out of the monies in the SLC's Land Bank Fund that are available for the Restoration Features Component of the Project.

(B) With respect to the activities for which the CONSERVANCY is responsible pursuant to Section 3, its direct staff costs (including benefits), reasonable overhead costs associated with such direct staff costs, costs of materials and supplies, costs of liability insurance, and costs of defending against any litigation filed against the CONSERVANCY by reason of its actions pursuant to Section 3, not to exceed \$500,000 unless the other State and Federal parties to this Agreement agree to a larger amount, shall be paid for out of the monies in the SLC's Land Bank Fund that are available for the Restoration Features Component of the Project.

(C) With respect to the activities for which the SLC, USACE, and FWS are responsible pursuant to Sections 4 and 5, each of those parties direct staff costs (including benefits), reasonable overhead costs associated with such direct staff costs, and costs of materials and supplies shall be paid for out of the

monies in the SLC's Land Bank Fund that are available for the Restoration Features Component of the Project.

(D) Expenditures by the SLC, FWS, USACE, and the CONSERVANCY from the SLC's Land Bank Fund for implementation of the Restoration Features Component of the Project shall be made in accordance with an annual work program and budget prepared by each agency and agreed to by the other State and Federal parties to this Agreement. The SLC, FWS, USACE, and the CONSERVANCY shall provide the other State and Federal parties with quarterly reports of their respective expenditures while the Restoration Features Component of the Project is being implemented, with a final accounting of expenditures to be made by the SLC, FWS, USACE, and the CONSERVANCY upon completion each of the activities for which they are responsible pursuant to Sections 3, 4, and 5 above.

(E) Unless the Federal and State parties agree to the contrary, all contracts entered into by the SLC, USACE, FWS, and the CONSERVANCY for the purpose of implementing the Restoration Features Component of the Project using monies deposited to the Land Bank Fund shall contain a clause which provides that all work under the contract can be suspended by the SLC, USACE, FWS, or CONSERVANCY for a period of 60 days without penalty and a clause which provides that the contract is terminable by the SLC, USACE, FWS, or CONSERVANCY on no more than thirty (30) days notice without any further obligation other than to pay for non-cancellable costs incurred by the contractor prior to the date of notice to terminate and for services already provided.

(2) For the purposes of paragraph (1) of this subsection (b), the CONSERVANCY, FWS, or USACE may each enter into an agreement with the SLC to specify the details of transferring funds from the SLC's Land Bank Fund to each of them in a manner that best meets the administrative needs of the SLC and the other involved agency.

(3) One hundred eighty days after construction of the Restoration Features Component of the Project is completed, any monies remaining in the Land Bank Fund for the Project, except for the monies previously placed in the Maintenance Account (including any accrued interest earnings thereon) and except for monies otherwise encumbered, not to exceed \$3,000,000, shall be transferred by the SLC to the Maintenance Account to become part of the principal in the said account unless all of the Federal and State parties to this Agreement agree to an alternative disposition of the remaining monies; Provided, however, that if any construction or litigation claims have been proffered or are reasonably expected to be lodged, then no monies shall be transferred by the SLC to the Maintenance Account until the claims have been resolved. If the remaining monies exceed \$3,000,000, then the amount in excess of \$3,000,000 shall be available, upon the mutual written agreement of the Federal and State parties to this Agreement, for the restoration of the Future Full Tidal area described in the Concept Plan.

(c) Restoration O&M and Management Components of the Project.

(1) If, and only if, title to a minimum of approximately 880 acres in the Bolsa Chica Lowlands has vested in the SLC, then not later than ten business days after the vesting of title, \$5,000,000 shall be placed by the SLC in a separate Maintenance Account within the SLC's Land Bank Fund, to be permanently reserved as the principal of the Maintenance Account and managed for the production of investment income for the purposes of, and in accordance with, this subsection (c).

(2) Monies in the Maintenance Account shall be disbursed and used only for the expenses associated with the Restoration O&M and Management Components of the Project, as follows:

(A) Commencing at the end of the first year following the creation of the Maintenance Account, and each year thereafter, a sufficient portion of the interest earnings from the year shall be added to the principal of the Maintenance Account to cover the effects of any inflation which occurred during the year, as measured by the Consumer Price Index.

(B) From the date on which title to a minimum of approximately 880 acres in the Bolsa Chica Lowlands has vested in the SLC, accrued interest earnings from the Maintenance Account which remain after the requirements of subparagraph (A) of this paragraph (1) have been met may be used by the SLC, or the agency which has entered into an agreement with the SLC to manage the Project, for such operation, maintenance, monitoring, and management of the Project's lands and physical features as is necessary to maintain the Project's habitat values and aquatic functions, including removal of any blockage that may occur in the ocean inlet.

(C) Throughout the first, second, third, fifth, and tenth years following completion of the Restoration Features Component of the Project, the SLC, or the agency which has entered into an agreement with the SLC to manage the Project, shall carry out biological monitoring to document the fish and wildlife values and aquatic functions of the Project, with all costs of said monitoring to be covered with accrued interest earnings from the Maintenance Account. Such monitoring shall be carried out in accordance with a plan developed by the SLC, or the agency which has entered into an agreement with the SLC to manage the Project, and approved by the NMFS, FWS, EPA, USACE, and CDFG and shall include success criteria and at least an annual report for each of the years that are monitored which describes the results of each year's monitoring.

(D) The carrying out of the Restoration O&M and Management Components of the Project (including biological monitoring), and expenditures therefor from the Maintenance Account, shall be made in accordance with an annual work program and budget prepared by the SLC, or the agency which has entered into an agreement with the SLC to manage the Project, and agreed to by the NMFS, FWS, EPA, USACE, and CDFG. The SLC, or other managing agency, shall provide NMFS and CDFG with quarterly reports of: (i) its expenditures for restoration activities through the quarter in which construction of the Project is completed, (ii) its expenditures for operation, maintenance, monitoring, and management of the Project through year ten following completion of the full tidal basin and ocean inlet portions of the Project, and (iii) any withdrawals of the principal in the Maintenance Account, made in accordance with paragraph (4) of this subsection (c), including the justification therefor.

(3) Any accrued interest earnings which are not reinvested or withdrawn and expended in accordance with paragraph (2) of this subsection (c) shall remain available for future expenditure in accordance with the said paragraph (2), unless the State and Federal parties to this Agreement agree to add all or a portion of such excess interest earnings to the principal of the Maintenance Account.

(4) Account principal (i.e., the original \$5,000,000 and interest earnings added thereto over time) shall be available for expenditure only for the purpose of ensuring the preservation of fish, wildlife and wetland habitat values and aquatic functions in the event of a natural disaster or other catastrophic event of a non-recurring nature which would otherwise significantly reduce or eliminate such values and functions.

(d) Expenditures of monies made available for the Project shall be deemed to be made from the following sources:

(1) For the purposes of acquiring the initial 880 acres (more or less) from the Signal Bolsa Corporation, \$1,000,000 of the purchase price shall be deemed to come from the monies provided by the CONSERVANCY in accordance with Section 8(b), with the balance coming in prorata shares from all other sources of monies available at the time of closing.

(2) For the purposes of reimbursing costs incurred by the CONSERVANCY, SLC, FWS, and USACE in carrying out their respective responsibilities pursuant to Sections 3, 4, and 5, reimbursement of such costs shall be deemed to come in prorata shares from all sources of monies available for activities undertaken pursuant to Sections 3, 4, and 5.

(e) All records, invoices, vouchers, ledgers, correspondence, and other written documents of any kind developed during the course of the Project which document the expenditure by any party of monies for the Project, whether from the Land Bank Fund or otherwise, shall be retained for a period of four (4) years following the year in which an expenditure was made and shall be available to the extent provided under applicable law (such as the Public Records Act and Federal Freedom of Information Act), for audit by any party to this Agreement.

(f) If this Agreement or a related project results in litigation in which any party to this Agreement is challenged, each party shall bear its own legal fees and expenses, except as provided in Section 13(b)(1)(B) with respect to the CONSERVANCY.

GRANTING, VESTING, AND USE OF MITIGATION CREDITS

SECTION 14. Mitigation Credits Created by Project.

(a) Implementation of the Restoration Features and Restoration O&M Components of the Project are expected to create habitat values and aquatic functions, as determined in Exhibit B, sufficient to offset 454 acres of landfill in the outer harbor areas of the Harbor Districts. This is based on implementation of the Concept Plan as described in Exhibit A. The Concept Plan calls for a new ocean inlet and habitat areas subject to full tidal action in the following approximate proportions: not less than 50 percent below -3 feet Mean Lower Low Water (MLLW), 35 percent between -3 and +2.5 feet MLLW, and 15 percent between +2.5 and +5.5 feet MLLW.

(b) Even if it turns out that implementing the Restoration Features and Restoration O&M Components of the Project in accordance with the Final Plan as developed pursuant to Sections 3 and 4 will not generate sufficient habitat values and aquatic functions to create all 454 acres of landfill mitigation credit, or even if it turns out that the funding for construction of the Restoration Features Component of the Project proves to be insufficient and construction is terminated in accordance with Section 5(c) above with the

result that sufficient habitat values and aquatic functions are not generated so as to create all 454 acres of landfill mitigation credit, the 454 credits shall still remain vested in the BOARDS for their use in accordance with Section 15.

(1) If either of these events occurs, the USACE, FWS, NMFS, CDFG, EPA, SLC, RA, and CONSERVANCY shall (with good faith, due diligence, to the extent feasible and consistent with CEQA, NEPA, and other applicable laws, and to the extent that monies made available pursuant to this Agreement remain available in the SLC's Land Bank Fund after funding the Project) identify, plan, design, and implement an alternative tidal restoration project for the Bolsa Chica Lowlands or an appropriate tidal restoration project or projects at a location or locations other than the Bolsa Chica Lowlands, but still within the Southern California Bight, in order to generate sufficient additional credits. Prior to the expenditure of monies from the Land Bank Fund for this purpose, the parties agree that the lands to be restored at such other location or locations will either be acquired by the SLC or be made subject to a public trust easement in favor of the State of California, acting by and through the SLC.

(2) Furthermore, if either of these events occurs, the Federal and State parties to this Agreement shall, with good faith and due diligence, agree on an allocation of all or a portion of the principal then existing in the Maintenance Account for the operation and maintenance of any tidal restoration project or projects undertaken at a location or locations other than the Bolsa Chica Lowlands, but still within the Southern California Bight.

SECTION 15. Use of Mitigation Credits by the BOARDS.

(a) If the BOARDS have deposited the sum called for by Section 8(a), and if title to a minimum of approximately 880 acres in the Bolsa Chica Lowlands has vested in the SLC in accordance with this Agreement, then the BOARDS shall be entitled thereafter to immediately use up to 454 acres of outer harbor landfill mitigation credits to offset impacts of permitted projects. Half of said credits are allocated to each of the two BOARDS, and neither BOARD shall use more than its allocation of credits without express written permission of the other BOARD. One acre of inner harbor landfills (inner and outer harbor areas are shown in Exhibit C) shall be debited from this account at half the rate of outer harbor landfills since the inner harbor has less habitat value per acre than the outer harbor. Should biological surveys indicate that revision of the inner harbor definition shown in Exhibit C is warranted, then the BOARDS, CDFG, NMFS, and USACE may mutually agree to modify Exhibit C accordingly. Each BOARD shall maintain complete records and produce on demand for the other parties a current account of credits expended and remaining. If either BOARD is prevented from using its credits or has credits in excess of its landfill needs, then such BOARD may sell and transfer such credits to the other for the prorated cost of the credits being sold.

(b) The BOARDS covenant and agree that they will undertake port projects which affect fish and wildlife resources only after fee title to a minimum of approximately 880 acres in the Bolsa Chica Lowlands has been acquired by the SLC in accordance with this Agreement. The USACE, FWS, EPA, NMFS, and CDFG acknowledge and agree that some BOARD projects may involve impacts to fish and wildlife resources occurring in advance of compensatory mitigation being effected through implementation of the Restoration Features Component of the Project, although the USACE, FWS, EPA, NMFS, and CDFG anticipate that the BOARDS will use the mitigation credits to be generated by the Restoration Features Component of the Project over a number of years. So long as port projects involving fills are not in wetlands as defined in

FWS/OBS 79/31 and have received the required authorizations, the USACE, FWS, EPA, NMFS, and CDFG agree that the BOARDS shall be entitled to use all of the mitigation credits identified in subsection (a) of this section when and as set forth in subsection (a) of this section. This paragraph does not prevent the Ports from carrying out projects which affect fish and wildlife resources which have been mitigated by otherwise available mitigation.

(c) Projects within the Harbor Districts that may be regulated by any party to this Agreement, and which may require compensatory mitigation of marine habitat losses, shall be considered when submitted by the BOARDS. Nothing in this Agreement shall alter or replace the obligation of the FWS, USACE, EPA, NMFS, and CDFG to follow the normal procedures and requirements for processing permits for projects proposed by the BOARDS. If a port landfill project for which BOARDS are seeking permits has followed said normal procedures and is otherwise approvable, the FWS, USACE, EPA, NMFS, and CDFG acknowledge that the biological mitigation credits established by this Agreement will constitute acceptable compensatory mitigation, provided a positive balance of credits established herein exists.

(d) The FWS, USACE, EPA, NMFS, and CDFG (the "Agencies") agree that they have had their respective counsel review this Agreement, the applicable laws and regulations within their respective jurisdictions, the authorities which govern dredge and fill projects in coastal waters, and, as to the Port of Los Angeles (POLA), the "Deep Draft Navigation Project EIR/EIS" and related documentation. Based on this review and consistent with the above paragraphs, the Agencies concur that deposit by the BOARDS of the sums called for by Section 8(a) and acquisition by the SLC of title to a minimum of approximately 880 acres in the Bolsa Chica Lowlands in accordance with this Agreement satisfy all applicable requirements for the vesting of these credits in, and the use of these credits by, the BOARDS in accordance with subsections (a) and (b) of this section. All the Agencies concur that the mitigation credits which POLA receives will fulfill the requirements for up to 227 acres for Phase II of POLA's Pier 400 project, as discussed in the above referenced Deep Draft Navigation Project EIR/EIS, so long as the Coastal Commission and other permit agencies issue permits for such Phase II Pier 400 development. The Agencies further agree that such permit may not be denied solely on the basis that POLA intends to use the mitigation credits received pursuant to this Agreement to mitigate the Phase II Pier 400 landfill.

MISCELLANEOUS PROVISIONS

SECTION 16. Endangered Species Considerations. All parties agree that construction of the Project will be scheduled and completed taking into account any State or Federal endangered species which may utilize the Project area. Terms and conditions of a Biological Opinion for the Project, prepared pursuant to section 7 of the Federal Endangered Species Act (16 U.S.C. Sec. 1531 et seq.), shall be implemented.

SECTION 17. Effective Date, Term, and Termination/Withdrawal.

(a) This Agreement shall not take effect unless and until it is executed by all ten parties hereto. It shall be dated and take effect as of the latest date upon which it is executed as among the signatories hereto.

(b) This Agreement shall remain in full force and effect until automatically terminated pursuant to the terms hereof or by agreement of all the parties hereto.

(c) If any governmental agency, excluding the BOARDS, but including,

but not limited to, one of the other parties to this Agreement, any trial court (whether or not the trial court's final decision is appealed), or any new or existing legislation prevents either or both BOARDS from using the credits granted by this Agreement in the manner provided by this Agreement (including provisions of Section 14), then the affected BOARD shall be entitled, upon written notice to the other parties, to withdraw from this Agreement and recover its prorata share, less the cost of any non-cancellable obligations, of the unexpended balance of monies remaining in the SLC's Land Bank Fund (including the Maintenance Account). Such withdrawal will only be allowed to occur prior to the award of contracts for the major construction elements (defined as a value of at least \$5,000,000) of the Restoration Features Component of the Project or of any BOARD landfill that would have been mitigated by the Restoration Features and Restoration O&M Components of the Project.

(1) If only one BOARD withdraws from this Agreement, then the other BOARD shall have the right to purchase all of the mitigation credits of the withdrawing BOARD by paying directly to the withdrawing BOARD, within 45 calendar days of the other BOARD'S withdrawal, an amount of money equal to the amount to which the withdrawing BOARD is entitled pursuant to paragraph (3) of this subsection (c), in which event the monies of the withdrawing BOARD shall remain in the SLC's Land Bank Fund to be credited to the remaining BOARD and this Agreement shall terminate with respect to the rights and obligations of the withdrawing BOARD, but shall otherwise continue in full force and effect. However, if one BOARD withdraws from this Agreement but the other BOARD does not purchase the withdrawing BOARD'S mitigation credits within the aforementioned 45 day period, then this Agreement shall automatically terminate on the 46th day, unexpended monies deposited with the SLC by each BOARD shall be, subject to paragraph (3) of this subsection (c), immediately returned by the SLC in an amount proportionate to their respective contribution, and neither BOARD shall be allowed any mitigation credits.

(2) If the BOARDS give simultaneous written notices of their withdrawal from this Agreement, or if one BOARD has previously withdrawn and its mitigation credits have been purchased by the second BOARD which thereafter gives written notice of its withdrawal from this Agreement, then this Agreement shall automatically terminate 30 days after receipt of such notices by the SLC, unexpended monies deposited with the SLC by each BOARD (or credited to the second BOARD if it has purchased the first BOARD'S mitigation credits) shall be, subject to paragraph (3) of this subsection (c), immediately returned by the SLC in an amount proportionate to their respective contribution, and neither BOARD shall be allowed any mitigation credits.

(3) In the event a BOARD withdraws from this Agreement pursuant to this subsection (c), then the monies to which a BOARD is entitled shall be limited to that BOARD'S prorata share of the unexpended balance of monies, including interest earnings thereon, which remain as of, and for which no non-cancellable obligations have been incurred as of, the date a BOARD'S notice is received by the SLC.

(d) If a BOARD withdraws from this Agreement as authorized by subsection (c) of this section after acquisition from the Signal Bolsa Corporation of the approximately 880 acres of the Bolsa Chica Lowlands, and if, because of such acquisition, the withdrawing BOARD'S share of the monies used for the said acquisition cannot be returned to or reimbursed to that BOARD, then the Federal and State parties to this Agreement shall negotiate in good faith with the withdrawing BOARD to attempt to reach a mutually acceptable means of making the withdrawing BOARD whole, which may include, but are not limited to, (i) reallocation of mitigation credits, (ii) alternate

mitigation projects, and/or (iii) other forms of consideration.

SECTION 18. Substantial Conformance. The term "in substantial conformance", whenever used in this Agreement, shall mean not differing in any way that results in a reduction in the habitat values and aquatic functions anticipated from the Project and not in conflict with the requirements of State and Federal law.

SECTION 19. Disclaimers.

(a) By participating in this Agreement, no party waives or yields to any other party to the Agreement any regulatory authority or duty that is necessary to the proper exercise of that party's discretion or otherwise imposed by law.

(b) Nothing in this Agreement shall be deemed a waiver of the attorney-client privileges of any party.

SECTION 20. Notices.

(a) Any communications or notices required by this Agreement shall either be mailed by United States first class mail, postage prepaid, and addressed as follows, or transmitted by facsimile as follows:

Executive Director
Port of Los Angeles
P.O. Box 151
425 S. Palos Verdes St.
San Pedro, CA 90733
Fax: 310-547-4643

Executive Director
Port of Long Beach
P.O. Box 570
925 Harbor Plaza
Long Beach, CA 90802
Fax: 310-495-4925

Field Supervisor
U.S. Fish and Wildlife Service
2730 Loker Ave. W.
Carlsbad, CA 92008
Fax: 619-431-9624

Regional Director
National Marine Fisheries Service
501 W. Ocean Blvd, Suite 4200
Long Beach, Ca 90802
Fax: 310-980-4018

District Engineer
U.S. Army Corps of Engineers
Los Angeles District
P.O. Box 2711
911 Wilshire Blvd.
Los Angeles, CA 90053-2325
Fax: 213-452-4214

Director, Water Management Division
Attention: Wetlands Section
U.S. Environmental Protection Agency
75 Hawthorne Street
San Francisco, CA 94105
Fax: 415-744-2499

Executive Officer
California Coastal Conservancy
1330 Broadway
Oakland, CA 94612
Fax: 510-286-0470

Secretary for Resources
California Resources Agency
1416 Ninth St., Suite 1311
Sacramento, CA 95814
Fax: 916-653-8102

Regional Manager
California Department of Fish and Game
330 Golden Shore, Suite 50
Long Beach, CA 90802
Fax: 310-590-5113

Executive Officer
California State Lands Commission
100 Howe Avenue, Suite 100 South
Sacramento, CA 95825-8202
Fax: 919-574-1810

(b) Each party hereto shall be responsible for advising the other parties in writing and in a timely fashion of any changes to the above titles,

addresses, and faxogram telephone numbers, and of any further subsequent changes. Until notice of such changes is received, all communications and notices shall be deemed to have been properly sent if sent to the last known title and address or faxogram telephone number for a party.

SECTION 21. Executed Counterparts. The signature pages of this Agreement are being executed in counterparts. When all parties have signed, all executed counterparts taken together shall constitute one and the same instrument. The FWS shall be responsible for receiving and retaining the originally executed signature pages of each party, for dating the Agreement as of the latest date upon which it is executed as among the signatories hereto, and for providing a copy of the dated and executed Agreement to each of the parties.

IN WITNESS WHEREOF, the parties have entered into this Agreement effective as of the date first written above.

[Two signature pages follow]

CITY OF LOS ANGELES, acting by and
through its Board of Harbor Commissioners

Date _____ EXECUTIVE DIRECTOR

CITY OF LONG BEACH, acting by and
through its Board of Harbor Commissioners

Date _____ EXECUTIVE DIRECTOR

RESOURCES AGENCY, STATE OF CALIFORNIA

Date _____ SECRETARY

CALIFORNIA DEPT. OF FISH AND GAME

Date _____ DIRECTOR

CALIFORNIA STATE LANDS COMMISSION

Date _____ EXECUTIVE OFFICER

CALIFORNIA COASTAL CONSERVANCY

Date _____ EXECUTIVE OFFICER

U.S. ARMY CORPS OF ENGINEERS

Date _____ DISTRICT ENGINEER

NATIONAL MARINE FISHERIES SERVICE, NOAA

Date _____ REGIONAL DIRECTOR

U.S. FISH AND WILDLIFE SERVICE

Date _____ REGIONAL DIRECTOR

ENVIRONMENTAL PROTECTION AGENCY

Date _____ REGIONAL
ADMINISTRATOR

[End of signature pages]

EXHIBIT A
CONCEPT PLAN
FOR FISH AND WILDLIFE HABITAT RESTORATION
AT THE BOLSA CHICA LOWLANDS,
ORANGE COUNTY, CALIFORNIA

Bolsa Chica Restoration Goals:

The goal of the Concept Plan for the Bolsa Chica Lowlands Project (the "Project") is to provide for the retention of existing fish and wildlife resources and, to the extent desirable and feasible, the enhancement thereof. Further, it is intended that the ecosystem resulting from the implementation of the plan be naturalistic, biologically diverse, productive, and estuarine in nature. That is, it shall be predominantly salt water influenced, but incorporating biologically beneficial freshwater influence. In addition, the acreage of waters and wetlands in the lowland shall not be diminished.

Specific Objectives of the Concept Plan:

The specific objectives of the Concept Plan for the Bolsa Chica Lowlands Project are that:

- @ overwintering habitat value for migratory shorebirds, seabirds, and waterfowl shall not be diminished and shall be enhanced where feasible.
- @ nesting habitat for migratory shorebirds and seabirds shall not be diminished and shall be expanded where feasible.
- @ habitat value for estuarine fishes shall not be diminished and shall be expanded and diversified where feasible.
- @ nesting and foraging conditions for State and Federal endangered species shall not be adversely impacted. Also, implementation of the plan shall especially contribute to the recovery of these species: light-footed clapper rail, California least tern, western snowy plover, and Belding's savannah sparrow.
- @ the mix of habitat types shall include perennial brackish ponds, seasonal ponds/salt flats, pickleweed dominated flats, cordgrass dominated intertidal zone, unvegetated intertidal mudflat, subtidal seawater volume with low residence times.
- @ modifications to the hydraulic regime, necessary to achieving the above objectives, shall emphasize minimalized requirements for manipulations and maintenance, no degradation of existing flood protection levels.
- @ interests of contiguous property owners will be protected.
- @ once completed, maintenance and management of the area shall be to maximize native, estuarine fish and wildlife habitat value of the Bolsa Chica Lowlands in perpetuity, to include active removal and exclusion of detrimental, nonnative biota.
- @ allowable public uses shall include passive and non-intrusive recreation activities, focused on peripheral areas, interpretive foci, and trails.
- @ total removal of oil extraction activities and their past effects shall be conducted in a phased, cost effective, and environmentally sensitive manner.

g monitoring and evaluation of the success of biological objectives shall be conducted.

Description of Concept Plan for the Bolsa Chica Lowlands Project:

No change is contemplated to the full tidal part of the Ecological Reserve (i.e., Outer Bolsa Bay) or the muted tidal portion of the Ecological Reserve (i.e., Inner Bolsa Bay), except for the degraded, unrestored areas within Inner Bolsa Bay and except for the possible inclusion in the Full Tidal area (see below) of the most recently restored cell in the Inner Bolsa Bay portion of the Ecological Reserve. No rerouting of the Garden Grove-Wintersburg Flood Channel is contemplated although relocating the existing flapgate outlet about 0.5 miles upstream is contemplated. An area of about 120 acres in the southeasterly corner of the Bolsa Chica Lowlands is also contemplated to be left unchanged and is depicted on the enclosed figure as Seasonal Ponds.

Reestablishing additional areas of full tidal habitat in the Bolsa Chica Lowlands is considered highly desirable for biological diversity and productivity reasons. Bolsa Chica was historically full tidal and had its own ocean inlet. Improving tidal influence is widely recognized as the principle method of restoring missing components of this coastal wetland ecosystem. However, engineering and biological constraints are expected to limit the size and location of contemplated tidal restoration. Some of the areas planned for full tidal restoration already have existing wetlands values, the loss of which will be compensated either through enhancing these values when full tidal action is restored (designated Full Tidal areas), or by introducing managed tidal waters into other areas of the site (designated Managed Tidal areas).

Preliminary engineering indicates that significant increases in the tidal prism (the volume of seawater between the high and low tides) necessary to achieve the biological benefits in the lowland cannot be conveyed through the existing channels of outer Bolsa Chica, through Huntington Harbor and Anaheim Bay without damaging tidal flats and incurring erosion and safety problems. Therefore, an ocean inlet, to reestablish the historic connection to the sea, is contemplated. Avoidance of further beach erosion or water quality problems, encouragement of human recreational access, retention of public safety access, and the public transportation thoroughfare requirements are related factors to be considered in contemplating reestablishment of a Bolsa Chica ocean inlet, with any adverse impacts thereto to be fully mitigated.

The enclosed figure depicts a contemplated ocean inlet connecting to an area shown as Full Tidal (approximately 384 gross acres). Levee reinforcements are contemplated to be necessary primarily along the inland side of this area, as the Ecological Reserve dike and flood channel levees may already be sufficient for the purpose. A full tidal range (extreme tides are about +7.5 to -1.5 feet Mean Lower Low Water, MLLW) would be expected in this entire area. Most of this area, but for the upland sand dune area known as Rattlesnake Island, already lies between +3 and -3 feet MLLW. Excavation within the contemplated Full Tidal area would be the minimum necessary to achieve: an inlet bottom depth and subtidal slough (shown as a thin dashed line) about -4 feet MLLW. The areas adjacent to this shallow subtidal slough would become intertidal mudflats and vegetated saltmarsh, especially cordgrass. Some deposition of dredge spoil in these areas may be appropriate in order to achieve sufficient acreage at tidal elevations suitable for cordgrass (+2.5 to +4 feet MLLW). Oil wells, water injection wells, well pads and access roads would all be removed from within the Full Tidal area.

Two adjacent areas depicted on the enclosed figure as Managed Tidal (about 220 gross acres) are not contemplated to be physically modified directly but would have seawater readmitted to them in an intermittent or very muted manner through culverts or water control structures through the reinforced levee or

flood channel levee. Pickleweed dominated saltmarsh and shallow saltponds-saltflats are the contemplated habitat types. Existing pickleweed in this managed tidal area as well as the tidal and muted tidal portions of the Ecological reserve would remain intact and well exceed 200 acres in extent. Oil well pads and roads could be removed or revegetated upon inactivation of the wells in this area.

The remaining area depicted on the enclosed figure is labelled as Future Full Tidal (about 275 gross acres). This area includes the highest concentrations of active oil wells but much of the lowest elevations in the lowland. It is therefore contemplated that upon depletion of the oil field in 15-20 years and removal of the wells and any contamination, it may be feasible to simply breach the dike and allow a large portion of it to become slough, tidal flats, and saltmarsh without extensive earthwork. Such maintenance and management of this area is part of the Project (i.e., the Management Component of the Project as defined in Section 1(a) of the body of the Agreement). However, potential future restoration of this area is not part of the Project and is not a basis for the mitigation credits to be granted to the BOARDS.

Enhancement of suitable nesting areas for Belding's savannah sparrow would be achieved in the Managed Tidal areas, while other existing valuable areas would be retained intact in the Seasonal Pond area and in the muted tidal portion (i.e., Inner Bolsa Bay) of the Ecological Reserve (except for the possible inclusion in the Full Tidal area of the most recently restored cell in the Ecological Reserve). Seasonal pond habitats in all areas (not just in the Seasonal Ponds area depicted on the attached map) would not be less than 150 acres. Significant enhancement of suitable nesting habitat for the light-footed clapper rail would be achieved in the cordgrass expansion part of the Full Tidal area. Nesting area for the California least tern and western snowy plover would be achieved by creation and retention of sparsely vegetated sandflat and saltflat areas protected from disturbance or water inundation.

EXHIBIT B

EXPLANATION OF THE PROPOSED HABITAT VALUE TRADEOFF RATIO

Habitat evaluations of Los Angeles/Long Beach outer harbor landfills impacts and tidal wetland mitigation have been previously completed. Subsequently, landfill projects and their mitigation projects have been permitted and undertaken, in consideration of these habitat evaluations. Specifically, Port of Long Beach Pier J landfill is now complete and its mitigation at Anaheim Bay is also complete, including the required biological follow-up monitoring. In addition, a portion of the Port of Los Angeles Pier 400 landfill has been permitted and is under construction, just as its mitigation at Batiquitos Lagoon is permitted and under construction.

The mitigation goal for outer harbor landfills has been and continues to be "no net loss of in-kind habitat value". This means that mitigation habitats may be a different type than that filled, provided it offsets the habitat value for the evaluation species of the filled habitat. Therefore, while the mitigation goal requires a value for value (1:1) tradeoff, the variable habitat benefits of different types of offsetting mitigation works can result in greater or less than acre for acre tradeoffs.

In the case of the Pier J-Anaheim Bay evaluation and project, restoration of tidal flow to non-tidal areas equally offsets the habitat values eliminated by the Pier J landfill and resulted in an acreage tradeoff ratio of 1.32 acres of landfill for each acre of mitigation (inversely, 0.76 acres of mitigation for each acre of landfill). Since the outer LA/LB Harbor biological baseline habitat value is considered to be the same as that established by the baseline studies and the previous habitat evaluations, and since the Anaheim Bay mitigation project type (tidal restoration near the ocean) is similar to the concept type contemplated for Bolsa Chica and its biological benefits have been verified through follow-up investigations, the same habitat evaluation and tradeoff ratio is adopted in this agreement. The complete "Anaheim Bay-Pier J" habitat evaluation report is available upon request. The habitat value of one acre of this type of mitigation is higher than the habitat value of an acre of outer harbor water area deeper than 20 feet, so that less than one acre of mitigation is needed to offset one acre of harbor landfill. That is, for each acre of Bolsa Chica restored to full tidal influence near the ocean, 1.32 acres of outer harbor landfill shall be considered mitigated.

Aquatic habitats of the main channels and interior slips of both Los Angeles and Long Beach Harbors (the Inner Harbor) have been documented to be of lower fish and bird diversity and abundance than the outer harbor (from the seaward edge of Terminal Island to the main breakwaters). Consequently, offsetting an acre of inner harbor landfill habitat loss has required less (half) compensation than an acre of outer harbor habitats deeper than 20 feet.

The Concept Plan contemplates about 344 acres of full tidal habitats, which would offset the habitat value loss of about 454 acres of outer harbor landfill (more inner harbor landfill acres). For example, 1.0 acres of restoration offsets 1.32 acres of outer harbor or 2.64 acres of inner harbor. Conversely, 1.0 acres of outer harbor landfill cost 0.76 acres of mitigation; an inner harbor landfill acre costs about 0.38 mitigation acres.

Harbor LandfillsBolsa Chica Restored Full Tidal Habitat

Port of Los Angeles:

Outer harbor 227 acres

172 acres

Port of Long Beach:

Inner harbor 60 acres

23 acres

Outer harbor 197 acres149 acres

TOTALS 484 acres

344 acres (mitigated by restoring)

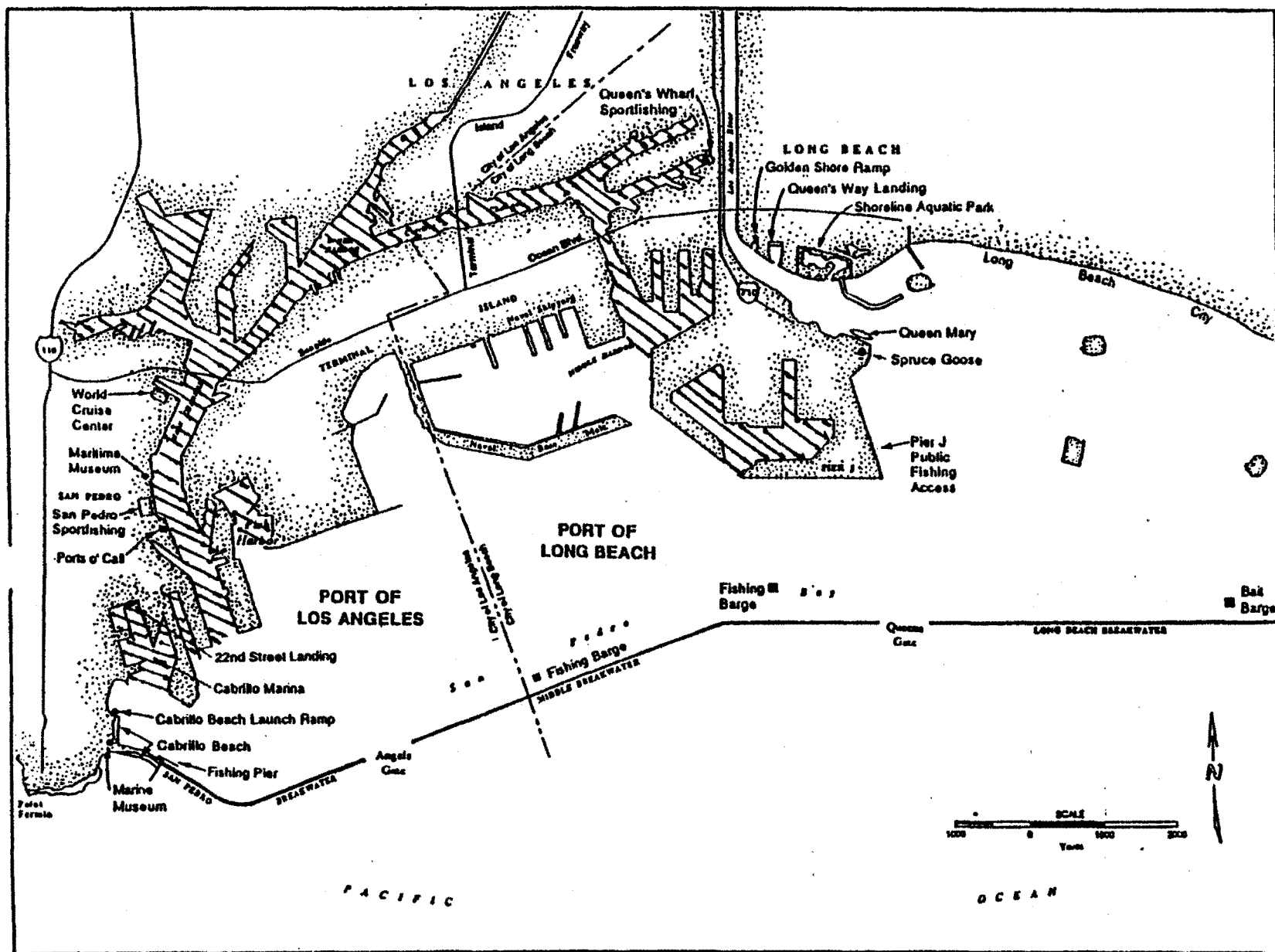


EXHIBIT C INNER HARBOR AREAS (CROSS HATCHED)