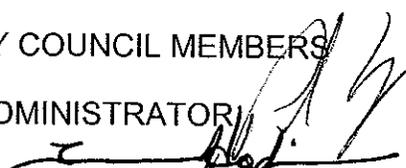


Council/Agency Meeting Held: _____ Deferred/Continued to: _____ <input type="checkbox"/> Approved <input type="checkbox"/> Conditionally Approved <input type="checkbox"/> Denied	_____ City Clerk's Signature
Council Meeting Date:                      3/17/2008	Department ID Number:              PW 08-003

**CITY OF HUNTINGTON BEACH  
REQUEST FOR CITY COUNCIL ACTION**

**SUBMITTED TO:** HONORABLE MAYOR AND CITY COUNCIL MEMBERS

**SUBMITTED BY:** PAUL EMERY, INTERIM CITY ADMINISTRATOR 

**PREPARED BY:** TRAVIS K. HOPKINS, PE, DIRECTOR OF PUBLIC WORKS

**SUBJECT:** Approve Memorandum of Understanding between the City and the Huntington Beach Wetlands Conservancy

Statement of Issue, Funding Source, Recommended Action, Alternative Action(s), Analysis, Environmental Status, Attachment(s)
--

**Statement of Issue:** A Memorandum of Understanding (MOU) is required to allow the Huntington Beach Wetlands Conservancy to mitigate impacts to adjacent wetlands as a result of the Newland Street Widening Project, CC-1095 and the Magnolia Street Sidewalk Project CC-1228.

**Funding Source:** Funding in the amount of \$118,000 is budgeted in Traffic Impact Fund, Newland Widening, Street Improvements 20690003.82300.

**Recommended Action: Motion to:**  
Approve and authorize the Mayor and City Clerk to execute the Memorandum of Understanding between the Huntington Beach Wetlands Conservancy and the City of Huntington Beach.

**Alternative Action(s):** Do not approve the Memorandum of Understanding and direct staff on how to proceed.

E-7

## REQUEST FOR CITY COUNCIL ACTION

MEETING DATE: 3/17/2008

DEPARTMENT ID NUMBER: PW 08-003

**Analysis:** An MOU is required to meet a condition of approval to offset the impacts associated with the Newland Street Widening Project, which was awarded at the November 19, 2007 City Council Meeting and the proposed Magnolia Sidewalk Project. The street improvements encroach upon existing degraded wetlands, both along the existing street as well as in the Huntington Beach Channel, necessitating their replication elsewhere. The proposed MOU provides for the financial commitment from the City to provide funding to be used by the Huntington Beach Wetlands Conservancy to restore the Upper Magnolia Marsh. In turn, the Conservancy will carry out the work effort. The goals of the restoration project are to create a self-sustaining inter-tidal and upper marsh habitat; to enhance the site as a potential wildlife and nesting habitat; and to improve water quality. The restoration will primarily consist of vegetation removal, grading and water supply reestablishment.

Through the MOU, the Conservancy will perform the restoration, maintenance and monitoring. In addition, the Conservancy will submit required reports to the California State Department of Fish and Game, the Regional Water Quality Control Board and the Army Corps of Engineers.

### **Strategic Plan Goal:**

I-1 Improve the City's plan for funding and completing infrastructure needs, and develop strategies for resolving crucial infrastructure problems to preserve the physical foundation of the community and enable the community's value to grow.

**Public Works Commission Action:** The Public Works Commission reviewed and approved the Newland Widening Project on March 15, 2006, by a vote of 6-0-1 (Commissioner Spencer absent).

**Environmental Status:** Pursuant to the California Environmental Quality Act (CEQA), the Newland Widening Project required a Negative Declaration. COASTAL DEVELOPMENT PERMIT 05-07 and MITIGATED NEGATIVE DECLARATION NO. 05-05 were acted upon by the Zoning Administrator of the City of Huntington Beach on February 21, 2007, and by the Huntington Beach Planning Commission on April 24, 2007 and conditionally approved. In addition, the Magnolia Street Sidewalk Project was conditionally approved for COASTAL DEVELOPMENT PERMIT 06-05 and MITIGATED NEGATIVE DECLARATION NO. 06-04 from the Zoning Administrator on February 20, 2008.

### **Attachment(s):**

City Clerk's Page Number	No.	Description
3	1.	Memorandum of Understanding
28	2.	Upper Magnolia Marsh Exhibit

E7.3

# ATTACHMENT #1

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**MEMORANDUM OF UNDERSTANDING  
BETWEEN  
THE HUNTINGTON BEACH WETLANDS CONSERVANCY AND  
THE CITY OF HUNTINGTON BEACH**

This MEMORANDUM OF UNDERSTANDING (MOU) is made and entered into this \_\_\_\_\_ day of \_\_\_\_\_, 2008 (“Effective Date”) by and between the HUNTINGTON BEACH WETLANDS CONSERVANCY, a California nonprofit corporation (“Conservancy”), and the CITY OF HUNTINGTON BEACH, a California municipal corporation (“City”). Conservancy and City may hereafter collectively be referred to as “the Parties.”

RECITALS

WHEREAS, Conservancy currently owns approximately 102 acres of wetlands between the Santa Ana River and Newland Street, within the City of Huntington Beach, comprised of some or all of the areas frequently referred to as the Talbert Marsh, the Brookhurst Marsh, and the Magnolia Marsh (“HB Wetlands”); and

WHEREAS, the Upper Magnolia Marsh is a triangular, 1.6 acre site within HB Wetlands, generally located at the north end of the Magnolia Marsh and bounded by the AES Power Generation Facility to the west, the Huntington Flood Control Channel to the east, and an earthen berm to the south, which separates the Upper Magnolia Marsh from the larger Magnolia Marsh; and

WHEREAS, Conservancy is a California non-profit organization organized under Section 501(c)(3) of the Internal Revenue Code, governed by a seven member Board of Directors with no employees, established to enhance, protect, restore and preserve wetlands habitat along the coast within the City of Huntington Beach; and

WHEREAS, City intends to widen and improve portions of Newland Street (“Newland Street Widening Project”); and

WHEREAS, the Newland Street Widening Project may impact biological resources, and City desires to mitigate such impacts, as described in Negative Declaration 2005-005; and

WHEREAS, Conservancy desires to undertake the restoration of the Upper Magnolia Marsh, with the primary goal of the restoration project to create self-sustaining inter-tidal and upper marsh habitats by returning the site to a more natural condition (i.e. restore the tidal influence) and to enhance the site as wildlife habitat and to improve water quality; and

WHEREAS, Conservancy will not be directly providing the restoration and monitoring work, but rather contracting with one or more contractors to furnish the work described in this Agreement, and the Parties acknowledge that any obligation or duty of Conservancy hereunder may be fulfilled by legally-binding contract with such contractor(s).

NOW THEREFORE, Conservancy and City agree as follows:

1. The Parties agree that the above Recitals are true and correct to the best of each party's knowledge, and such Recitals are incorporated by this reference as though fully set forth herein.

2. City shall provide the sum of \$118,000 to Conservancy within fifteen (15) calendar days from the effective date of this MOU for the express purpose of completing the restoration, monitoring and reporting of the Upper Magnolia Marsh restoration project described herein, to fulfill City's mitigation obligations as set forth in City's Mitigated Negative Declaration 2005-005 for the Newland Street Widening Project, and Mitigated Negative Declaration 2006-004 for the Magnolia Sidewalk Widening Project. The mitigation obligations described above were determined by City, and nothing in this Agreement shall be construed as the Conservancy providing a guarantee of any kind that the mitigation obligations are appropriate. Accordingly, Conservancy shall not provide any insurance, indemnification, or other protection to City in the event of a dispute over the adequacy of mitigation obligations or the Mitigated Negative Declarations.

3. Conservancy agrees to restore the Upper Magnolia Marsh, located as described above and consisting of approximately 69,000 square feet (1.597 acres). The proposed restoration project includes the construction of a berm outside the pipeline easement area, which will provide 42,109 square feet (0.97 acres) of land available for restoration.

4. The primary goals of the restoration project are: to create a self-sustaining intertidal and upper marsh habitat by returning the site to more natural conditions; to enhance the site as a wildlife habitat by providing potential Belding savanna sparrow nesting habitat to compensate for the habitat being impacted by the Newland Street Widening Project and the Magnolia Street Sidewalk projects; and to improve water quality.

5. The restoration shall primarily consist of Vegetation Removal, Grading, and Water Supply Re-establishment. The criteria for these items are set forth in the Huntington Beach Wetlands Conceptual Restoration Plan prepared by the Chambers Group and dated March 2007, a copy of which is attached hereto as Exhibit "A" and incorporated by this reference as though fully set forth herein. The 75% area of cover with native vegetation and less than 2% cover of invasive non-natives and 5% non-invasive non-natives, requirement shall exclude the areas covered by mud flat & open water.

6. Conservancy agrees to perform the required maintenance and monitoring of the Upper Magnolia Marsh restoration area, as part of the mitigation requirements listed in the Negative Declaration 2005-005 for the Newland Street Widening Project. The maintenance and monitoring shall consist of a minimum of bi-annual inspections of the site with associated photographs, and the establishment of two (2) transects, to document changes in the conditions of the vegetation over time. As part of the inspection and documentation process, Conservancy shall establish eight (8) fixed photo station locations that will supplement the transects and help explain any areas of Upper Magnolia Marsh that might be growing differently than the transect lines.

7. Conservancy's restoration specialist shall submit an annual report of the restoration and monitoring of the project to the California Department of Fish and Game, Regional Water Quality Control Board and Army Corps of Engineers for a period of five years following the completion of the project, or until upon meeting the success criteria set forth in Section 5 of Exhibit "A."

8. Except as otherwise set forth herein, City shall procure all permits and licenses necessary to accomplish the work described in Exhibit "A" and shall pay any and all necessary fees, including any City grading permit fees. Conservancy shall obtain any necessary entitlements from the Orange County Flood Control District.

9. In the event of any conflict between the terms of the restoration, maintenance, or monitoring work described in this MOU and Exhibit "A," the terms of this MOU shall apply.

10. Conservancy hereby agrees to protect, defend, indemnify and hold harmless City, its officers, elected or appointed officials, employees, agents, and volunteers from and against any and all, claims, damages, losses, expenses, judgments, demands defense costs, and consequential damage or liability of any kind or nature, however caused, including those resulting from death or injury to Conservancy's employees and damage to Conservancy's property, arising directly or indirectly out of the obligations or operations herein undertaken by Conservancy, caused in whole or in part by any negligent act or omission of Conservancy, any sub-contractors, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, including but not limited to concurrent active or passive negligence, except where caused by the active negligence, sole negligence, or willful misconduct of City.

Conservancy will conduct all defense at its sole cost and expense, and City shall approve selection of Conservancy's counsel, which approval shall not be unreasonably withheld. This indemnity shall apply to all claims and liability regardless of whether any insurance policies are applicable. The policy limits do not act as a limitation upon the amount of indemnification to be provided by Conservancy. The requirements of this Section shall be satisfied if the contractor(s) with whom Conservancy contracts agrees to protect, defend, indemnify and hold harmless the City, its officers, elected or appointed officials, employees, agents, and volunteers to the full extent mandated by this section.

11. Pursuant to California Labor Code Section 1861, Conservancy acknowledges awareness of Section 3700 et seq. of this Code, which requires every employer to be insured against liability for workers' compensation; Conservancy covenants that it will comply with such provisions prior to commencing performance of the work hereunder.

Conservancy shall obtain and furnish to City workers' compensation and employer's liability insurance in an amount of not less than the State statutory limits.

Conservancy shall require all sub-contractors to provide such workers' compensation and employer's liability insurance for all of the sub-contractors' employees. Conservancy shall furnish to City a certificate of waiver of subrogation under the terms of the workers' compensation and employer's liability insurance and Conservancy shall similarly require all sub-contractors to waive subrogation. Conservancy has no employees. The requirements of this Section shall be satisfied if the contractor(s) with whom Conservancy contracts provides the

insurance coverage and protection for the benefit of the City to the full extent mandated by this section.

12. In addition to the workers' compensation and employer's liability insurance and Conservancy's covenant to defend, hold harmless and indemnify City, Conservancy shall obtain and furnish to City a policy of general public liability insurance, including motor vehicle coverage, covering the obligations undertaken pursuant to this Agreement. This policy shall indemnify Conservancy, its officers, employees and agents while acting within the scope of their duties, against any and all claims arising out or in connection with the obligations undertaken pursuant to this Agreement, and shall provide coverage in not less than the following amount: combined single limit bodily injury and property damage, including products/completed operations liability and blanket contractual liability, of One Million Dollars (\$1,000,000) per occurrence. If coverage is provided under a form which includes a designated general aggregate limit, the aggregate limit must be no less than One Million Dollars (\$1,000,000) for obligations undertaken pursuant to this Agreement. This policy shall name City, its officers, elected or appointed officials, employees, agents, and volunteers as Additional Insureds, and shall specifically provide that any other insurance coverage which may be applicable to the obligations undertaken pursuant to this Agreement shall be deemed excess coverage and that Conservancy's insurance shall be primary.

Under no circumstances shall said above-mentioned insurance contain a self-insured retention, or a "deductible" or any other similar form of limitation on the required coverage. The requirements of this Section shall be satisfied if the contractor(s) with whom Conservancy contracts provides the general public liability insurance and protection for the benefit of the City to the full extent mandated by this section.

13. Prior to commencing performance of the work hereunder, Conservancy shall furnish to City certificates of insurance subject to approval of the City Attorney evidencing the foregoing insurance coverages as required by this Agreement; the certificates shall:

- a. provide the name and policy number of each carrier and policy;
- b. state that the policy is currently in force; and
- c. promise to provide that such policies will not be canceled or modified without thirty (30) days' prior written notice of City.

Conservancy shall maintain the foregoing insurance coverages in force until the work under this Agreement is fully completed and accepted by City.

The requirement for carrying the foregoing insurance coverages shall not derogate from the Conservancy's defense, hold harmless and indemnification obligations as set forth under this Agreement. City or its representative shall at all times have the right to demand the original or a copy of all the policies of insurance. Conservancy shall pay, in a prompt and timely manner, the premiums on all insurance hereinabove required.

14. Conservancy shall provide a separate copy of the additional insured endorsement to each of Conservancy's insurance policies, naming City, its officers, elected and appointed officials, employees, agents and volunteers as Additional Insureds, to the City Attorney for approval prior to any payment hereunder.

15. It is understood and agreed that Conservancy is, and shall be, acting at all times hereunder as an independent contractor and not an employee of City. Conservancy shall secure at its own cost and expense, and be responsible for any and all payment of all taxes, social security, state disability insurance compensation, unemployment compensation and other payroll deductions for Conservancy and its officers, agents and employees and all business licenses, if any, in connection with the obligations undertaken pursuant to this Agreement.

16. This MOU shall be interpreted and applied in accordance with California law. Any litigation concerning this MOU shall be brought in Orange County Superior Court. In the event suit is brought by either party to construe, interpret and/or enforce the terms and/or provisions of this Agreement or to secure the performance hereof, each party shall bear its own attorney's fees, such that the prevailing party shall not be entitled to recover its attorney's fees from the non-prevailing party.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by and through their authorized officers on \_\_\_\_\_ 2008.

Huntington Beach Wetlands Conservancy  
A California nonprofit corporation

CITY OF HUNTINGTON BEACH  
A California municipal corporation

By: *Krista Border*  
Its: Vice-Chair

\_\_\_\_\_  
Mayor

By: *Ann McCarthy*  
Its: Treasurer

\_\_\_\_\_  
City Clerk

REVIEWED AND APPROVED:

APPROVED AS TO FORM:

*[Signature]*  
City Administrator

*[Signature]*  
City Attorney 3.3.08  
*2-22-08*

*Pre 2/21/08*

INITIATED AND APPROVED:

*[Signature]*  
Director of Public Works

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EXHIBIT “A”

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# **HUNTINGTON BEACH WETLANDS CONCEPTUAL RESTORATION PLAN**

*Prepared for:*

**GC Environmental  
1230 N. Jefferson Street, Suite J  
Anaheim, California 92807**

*Prepared by:*

**CHAMBERS GROUP, INC.  
17671 Cowan Avenue, Suite 100  
Irvine, California 92614  
(949) 261-5414**

**March 2007**

## **1 SECTION 1.0 – INTRODUCTION AND PROJECT DESCRIPTION**

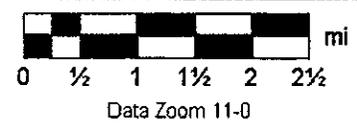
### **1.1 INTRODUCTION**

Chambers Group, Inc., was retained by GCE Environmental to develop a conceptual restoration plan for the Upper Magnolia Marsh Restoration Project (Project) in the City of Huntington Beach, Orange County, California. The engineering part of this restoration plan was developed by Moffatt & Nichol Engineers, also under contract to GCE Environmental. The primary purpose of the Project is to restore and enhance Southern Coastal Salt Marsh habitat within the Restoration Area to compensate for impacts to similar habitats resulting from the Newland Street and Magnolia Street Widening Projects to improve habitat function and value on a regional level. The Newland Street Widening Project would result in the loss of 0.002 acres of wetlands and 0.048 acres of Other Waters of the United States under the jurisdiction of the U.S. Army Corps of Engineers (USACE) and 0.16 acres of stream bed and bank habitat under the jurisdiction of the California Department of Fish and Game (CDFG). The Magnolia Street Widening Project would result in the permanent loss of 0.007 acres of wetland under the jurisdiction of the USACE and 0.30 acres of streambank habitat under the jurisdiction of CDFG. Figure 1 shows the vicinity of the proposed wetlands restoration site and the two road widening projects. Figure 2 shows the location of each of these sites.

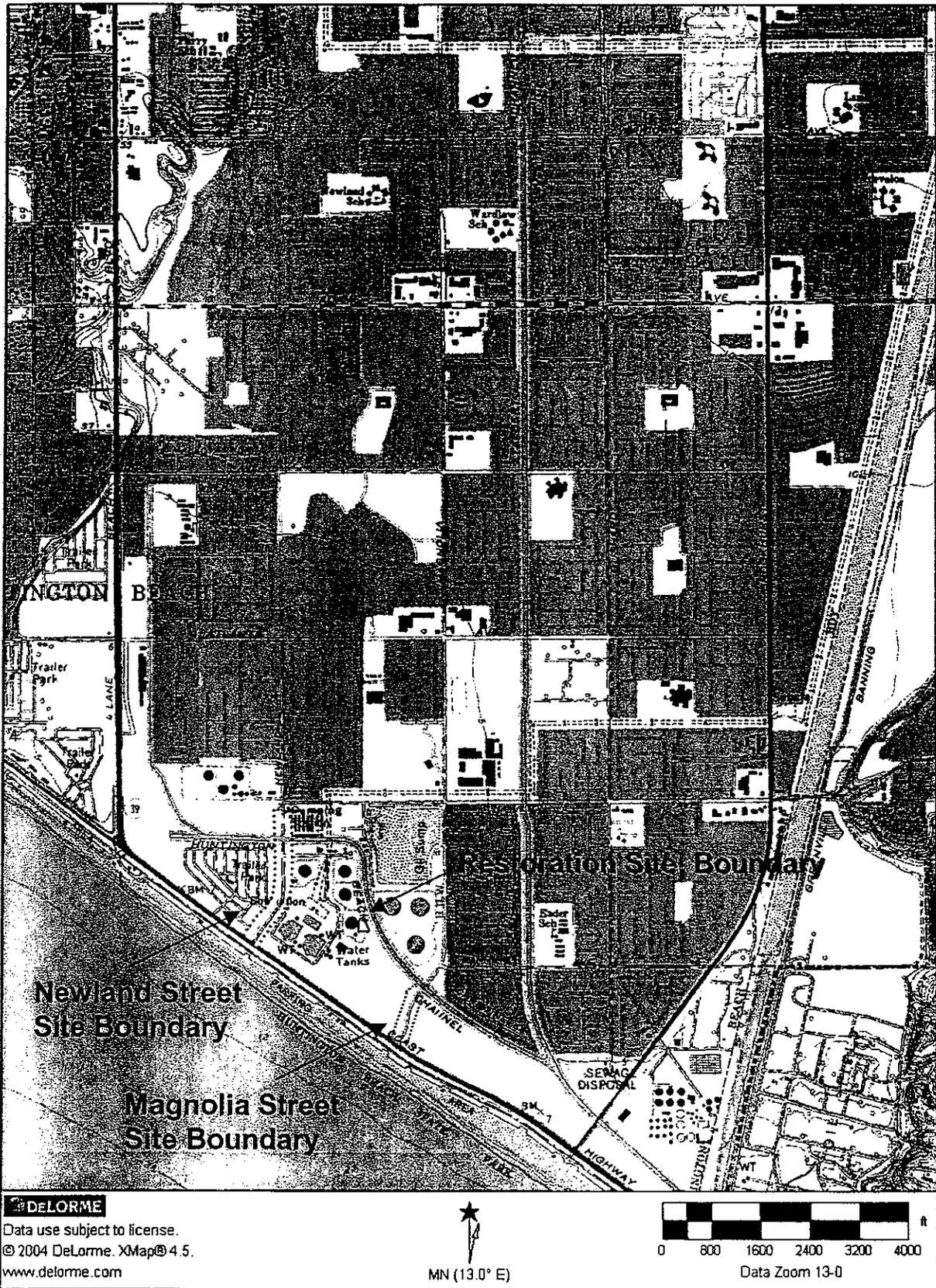


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 www.delorme.com

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**PROJECT AND RESTORATION SITE VICINITY MAP**  
**E7.12** **FIGURE 1**



E7.13

## **1.2 PROJECT LOCATION**

The proposed Upper Magnolia Marsh Restoration Project is located at the north end of the Magnolia Marsh in the City of Huntington Beach, Orange County, CA. The "Upper Marsh" Project site is an approximately 1.6-acre triangular-shaped basin located north of the larger Magnolia Marsh, east of the AES Power Plant, and west of the Huntington Beach Flood Control Channel. The site is separated from the Magnolia Marsh and the Huntington Beach Flood Control Channel by a series of earthen dikes/berms.

## **1.3 PROJECT DESCRIPTION**

The proposed Upper Magnolia Marsh Restoration Project is designed to create and restore intertidal and upper marsh habitats within a 1.6-acre triangular basin located north of the existing Magnolia Marsh and west of the Huntington Beach Flood Control Channel through the re-introduction of tidal hydrology to the site.

The primary goal of the restoration program is to create self-sustaining intertidal and upper marsh habitats through returning the site to more natural conditions (i.e. restore tidal influence) and to enhance the site as wildlife habitat and to improve water quality. The Project consists of three elements: water supply, grading, and vegetation removal. Special consideration has been given to the unique physical and hydrological requirements of Coastal Salt Marsh Habitat.

As part of the proposed project, the site would be graded to create approximately 4,300 square feet of sub-tidal habitat, 5,200 square feet of intertidal habitat, and 32,551 square feet of upper marsh habitat.

This conceptual restoration plan has been derived from consultation with the resource agencies (i.e. USACE, CDFG, and RWQCB), the City of Huntington Beach, and the project proponent (Huntington Beach Wetlands Conservancy).

Specifications for site preparation, maintenance, and monitoring of the mitigation site are included in this plan.

## **1.3 RESPONSIBLE PARTIES**

The Huntington Beach Wetlands Conservancy will be responsible for the implementation of this Plan. The contact person is:

Mr. Gary Gorman  
Huntington Beach Wetlands Conservancy  
P.O. Box 5903  
Huntington Beach, CA  
(714) 963-2123

The preparer of the Restoration Plan is Chambers Group, Inc. The contact person is:

Dr. Noel Davis  
Chambers Group, Inc.  
17671 Cowan Avenue, Suite 100  
Irvine, California 92614  
(949) 261-5414  
[ndavis@chambersgroupinc.com](mailto:ndavis@chambersgroupinc.com)

With assistance from:

Mr. Chris Webb  
Senior Coastal Scientist  
Moffatt and Nichol  
3780 Kilroy Airport Way, Ste 600  
Long Beach, CA 90806  
(562) 426-9551

#### 1.4 QUALIFICATIONS OF PERSONNEL

A qualified restoration specialist (RESTORATION SPECIALIST) will supervise the implementation of this Plan. That person shall be a qualified biologist, botanist, or restoration ecologist familiar with the biology and ecology of southern California plant communities and will have experience in horticultural and related practices required for habitat restoration and revegetation. The RESTORATION SPECIALIST's name, address, telephone number, and email address (if available) will be provided to all permitting agencies.

The RESTORATION SPECIALIST or a designated representative will be present at all preconstruction and pre-grading meetings and will be onsite during all restoration activities involving removal of vegetation resulting from project implementation to ensure compliance with resource-related mitigation measures and conditions of approval contained in the permits.

A biological monitor (MONITOR) shall be a qualified biologist familiar with the procedures to be used in the implementation of this Plan. The monitor may serve as the designated representative of the RESTORATION SPECIALIST at meetings and during work at the restoration site.

Site preparation (including clearing and grubbing), excavation, earthwork, and related duties will be the responsibility of a qualified construction contractor (CONTRACTOR). Prior to commencement of grading or any construction-related vegetation removal, the CONTRACTOR will stake, fence, flag, and/or sign sensitive habitats or habitat features that are not to be impacted. The CONTRACTOR will also supervise the salvage of native plant materials. The CONTRACTOR will coordinate closely with the RESTORATION SPECIALIST to ensure that the specifications of the Plan are properly implemented.

#### 1.5 KEY DEFINITIONS

For the purpose of this document several key terms must be defined, these terms are defined as they are generally used by restoration professionals in California and by the Society for Ecological Restoration (SER).

**Restoration** is the process of intentionally altering a site to establish a defined, indigenous, historic ecosystem. The goal of this process is to emulate the structure, function, diversity, and dynamics of the specified ecosystem.

**Revegetation** establishes vegetation on disturbed lands. The term in itself does not imply that the vegetation being established is native.

**Creation** establishes a historical ecosystem on lands that did not previously support that ecosystem or on severely altered sites. Creation is usually a form of restoration, but in some cases refers to planting on a site that historically supported a different vegetation type.

**Enhancement** alters a site for improvement of a specific value (for example: non-indigenous species eradication within an existing habitat or increasing species diversity of an area). Enhancement is usually a form of restoration.

**Long-term management** is an integral part of preserving and increasing native plant

communities. Long-term management occurs on intact or restored habitats and encompasses actions to ensure that the project goals are met. Control of weeds and erosion is the most common management practice. Additional long-term management features include fencing and signing for site protection and conducting ecological studies on habitat characteristics or usage.

## 2 SECTION 2.0 – PROJECT GOALS

### 2.1 GOALS OF ENHANCEMENT AND RESTORATION

The primary purpose of this Project is to restore and enhance Southern Coastal Salt Marsh habitat onsite to compensate for impacts to similar habitats resulting from the Newland Street and Magnolia Street Widening Projects to improve habitat function and value on a regional level. This conceptual restoration plan provides a preliminary design and specifications for the materials and methods proposed to restore Southern Coastal Salt Marsh habitat within the Upper Magnolia Marsh Project site. Figure 3 shows the conceptual grading plan for Upper Magnolia Marsh. The principal management concerns described in this document includes monitoring and managing sensitive biological resources. The management guidelines presented herein are chiefly concerned with the creation and enhancement of wildlife habitats and general biological resource areas. Increased wildlife use will be gained in the mitigation area by establishing native plant cover and structural diversity. Recommended actions include restoration of tidal hydrology and subsequent monitoring of biological resources within the restoration areas. The plan also provides criteria and recommendations for the protection, enhancement, maintenance, and management of these natural resources located in the mitigation areas.

### 2.2 TYPES OF HABITATS TO BE RESTORED

#### 2.2.1 Southern Coastal Salt Marsh (Intertidal & Upper Marsh)

Southern Coastal Salt Marsh is a highly productive, herbaceous and suffrutescent, salt-tolerant community forming moderate to dense cover which can grow up to 3 feet in height (Holland 1986). Soils are usually hydric and subject to regular tidal inundation by salt water for at least part of each year. Southern Coastal Salt Marsh habitat is characteristic of the marsh areas in the project vicinity. Plant species typical of this community include alkali weed (*Cressa truxillensis*), saltgrass (*Distichlis spicata*), fleshy Jaumea (*Jaumea carnosa*), alkali heath (*Frankenia salina*), and pickleweed (*Salicornia virginica*).

### 3 SECTION 3.0 – EXISTING CONDITIONS

The "Upper Marsh" is an approximately 1.6 acre triangular basin isolated from tidal exchange of surface waters but retains some of its wetland character through a combination of direct rainfall, urban runoff, and tidal and seasonal fluctuations of the water table. Under current conditions, the basin lacks connectivity to the tidal hydrology characteristic of the surrounding marsh areas. The basin is separated from the larger Magnolia Marsh to the south and from the Huntington Beach Flood Control Channel to the east by a series of earthen dikes/berms. Located adjacent to the site immediately to the west is the AES power plant. The center of the basin is highly disturbed with ruts and mounds caused by off-road cyclists. The perimeter of the basin retains some native wetlands plant species including pickleweed (*Salicornia virginica*) and salt grass (*Distichlis spicata*). Other vegetation within the basin includes non-native species such as myoporum (*Myoporum laetum*), iceplant (*Carpobrotus* sp., *Mesembryanthemum edulis*), and palm (*Washingtonia* sp.).

## 4 SECTION 4.0 - APPROACH, RATIONALE, AND METHODOLOGY

Section 4.0 provides guidelines and specifications for implementing the Plan. The RESTORATION SPECIALIST will supervise implementation of the revegetation plan and will be responsible for oversight of implementation monitoring.

### 4.1 RATIONALE FOR EXPECTING IMPLEMENTATION SUCCESS

Implementation of the proposed project would be expected to result in successful restoration of wetland habitat function through the re-introduction of tidal hydrology throughout the project site. Creating conditions capable of supporting the desired habitat structure / floral and faunal species composition.

### 4.2 SCHEDULE

Table 4-1  
Preliminary Schedule Guidelines for Restoration Activities

<b>Site Preparation June to October 2007</b>
➤ Contract with CONTRACTOR June 2007
➤ Implement Weed Control Program August 2007
➤ Clearing and Grubbing September 2007
<b>Earthwork &amp; Grading October to December 2007</b>
➤ Over-excavation of subtidal basin October 2007
➤ Install sub-surface pipe to Huntington Beach Channel November 2007
<b>Maintenance and Monitoring 2007 through 2012</b>
➤ Coordinate remedial measures (as necessary) 2007-2012
<b>Documentation 2007 through 2012</b>
➤ RESTORATION SPECIALIST submits annual report to agencies by January 31 each year following implementation until the end of the monitoring period

### 4.3 SPECIAL CONDITIONS TO PROTECT SENSITIVE SPECIES DURING PROJECT IMPLEMENTATION

#### 4.3.1 Sensitive Wildlife Species

Regional environmental regulations require the protection of sensitive biological resources and habitats within and surrounding the project site. Impacts shall be minimized through project scheduling and construction monitoring. Specific measures to protect sensitive resources are discussed below.

Measures to protect biological resources within the proposed project footprint include:

- Placement of construction fencing;
- Implementation of the Stormwater Management Plan; and
- Scheduling of clearing and grubbing activities outside of the nesting bird season.

All construction will be scheduled to occur outside of the nesting bird season (typically February 15-August 15). In the event that construction must occur within the nesting bird season, pre-construction surveys shall be conducted for nesting birds no more than 48 hours prior to initiation of construction activities. In addition, all construction conducted during the nesting bird season will be conducted under the supervision of a qualified biological monitor to ensure that there is no incidental take of resident or migrant birds.

### 4.4 GENERAL CONSTRUCTION GUIDELINES

#### **4.4.1 Site Fencing and Signage**

Orange plastic fencing (or other similar material) shall be used to demarcate environmentally sensitive habitat areas. Where applicable, fencing will be located no closer than 15 feet from the habitat to be protected.

#### **4.4.2 Access**

Access to the restoration site will be from existing roads and trails including the Huntington Beach Flood Control Channel Levee maintenance road and the AES power plant access roads.

#### **4.4.3 Trash and Debris Removal**

The CONTRACTOR will be responsible for removing trash and debris from all areas of the site and disposing of it properly offsite. Any biomass of selected weed species (e.g., *Arundo donax* and *Tamarix ramosissima*) will be removed to an appropriate offsite green waste disposal facility site unless mechanically ground to a size at which remnant biomass poses no risk of vegetative propagation. Other weed biomass may remain onsite following herbicide treatment.

#### **4.4.4 Erosion Control**

As necessary, non-vegetative erosion control measures and Best Management Practices (BMPs) will be employed to prevent erosion and sedimentation within the mitigation area to avoid the introduction of exotic weedy species into the seed bank of areas with native vegetation. Erosion control devices may include sandbags, silt fencing, slope breakers, trenches, and/or energy dissipaters. The use of erosion control devices with materials that could potentially contaminate the site (e.g., hay bales or non-sterile mulches, etc.) is not permitted on the site. Drainage and sedimentation control devices will be routinely cleaned, maintained, and repaired prior to and during the rainy season. Any failure of these control systems to prevent the discharge of untreated runoff will result in immediate repair.

### **4.5 RESTORATION PROGRAM**

This Plan identifies those methods and techniques selected for site preparation and maintenance.

#### **4.5.1 Site Preparation**

##### **4.5.1.1 Weed Control**

The CONTRACTOR will initiate weed abatement activities in Winter 2006-2007 in order to reduce the seed bank of target species, effectively eliminating a major competitive advantage of non-native species to the re-establishment of native vegetation. All herbicide application will be conducted by a State of California Department of Pesticide Regulation (DPR) Qualified Applicator Licensee (QAL) pursuant to the recommendations of an Agricultural Pest Control Advisor Licensee under the supervision of the RESTORATION SPECIALIST. Herbicides may be used as prescribed under California law. Weed species to be removed will include, but are not limited to, those listed in Table 4-2 below.

**Table 4-2  
Target Exotic Species**

Scientific Name	Common Name
<i>Carpobrotus chilense</i>	iceplant
<i>Carpobrotus edulis</i>	Hottentot fig
<i>Mesembryanthemum edulis</i>	iceplant
<i>Myoporum laetum</i>	myoporum
<i>Washingtonia sp.</i>	palm

**4.5.1.1.1 Weed Control Methods**

Manual removal, mechanical clearing, mowing, and manual application of systemic non-residual herbicides (e.g., Rodeo® and/or Roundup®) via backpack sprayer or wick application will be used to remove target non-native species.

**4.5.2 Excavation and Earthwork**

CONTRACTOR shall be responsible for excavation and earthwork as identified in the Conceptual Grading Plan (Appendix A)

**4.6 AS-BUILT CONDITIONS**

An "As-Built Assessment" will be conducted to document the actual project conditions on the site immediately upon completion of the installation. This assessment will be performed by the RESTORATION SPECIALIST. The RESTORATION SPECIALIST will check the site for compliance with the Plan's technical specifications, permit conditions, and project objectives. Data pertaining to the following factors will be collected by the RESTORATION SPECIALIST and compared with the detailed construction documents:

- site location;
- site topography;
- substrate (soil source, texture);

Any differences found between the original design and the as-built conditions shall be fully assessed and documented by the RESTORATION SPECIALIST through field maps, photographs, and descriptive text. It is expected that some modifications of the original plan will be deliberate and some will be due to unforeseen site conditions that became evident during construction. Any deliberate changes in the plan shall be justified to, and accepted in writing by, the RESTORATION SPECIALIST and the CONTRACTOR before the as-built conditions are approved. The RESTORATION SPECIALIST shall also make recommendations for corrective measures at the conclusion of the As-Built Assessment.

A report of the "as-built" conditions, describing the "as-built" status of the restoration project, will be submitted to the agencies within six weeks of completion of site preparation and planting. The report will include a map or diagram showing the mitigation area and the locations of the plantings and other installation items.

## 5 SECTION 5.0 – MAINTENANCE AND MONITORING PROGRAM

### 5.1 INTRODUCTION

The goal of this Conceptual Restoration Program is to progress toward the performance standards detailed below. Performance standards are based on the progress of the mitigation toward targets for native vegetative cover and species diversity as described in Section 5.4.

Aspects of the performance standards set forth in the plan include the following:

- The monitoring period may be terminated ahead of schedule at the discretion of the USACE, CDFG, and RWQCB if the final year performance standards below have been met.
- If performance standards cannot be met because of adverse soil or other unmanageable site conditions, an auxiliary mitigation plan may be submitted to the USACE, CDFG, and RWQCB for approval.

### 5.2 MAINTENANCE PROGRAM

Maintenance of the mitigation sites will be the responsibility of the CONTRACTOR and will be performed with the knowledge and oversight of the RESTORATION SPECIALIST. The RESTORATION SPECIALIST will be responsible for overseeing maintenance of the mitigation sites and preparing maintenance reports. The CONTRACTOR shall be knowledgeable of the physical requirements of native vegetation and experienced in the maintenance of native habitats. The Restoration Contractor's maintenance requirements will include maintenance weeding, trash and debris removal, site fencing and signage, and erosion control.

#### 5.2.1 Maintenance Weeding

Weeds will be controlled within the Mitigation Areas for years 2 through 5. Weed species will be prioritized for removal as indicated in Table 4-2. Less troublesome weeds may be allowed to grow if they are known to be harmless to native species in the conditions of the mitigation site. Such species are sometimes helpful in preventing the invasion of more harmful species, and in providing shade and other protection to native plant species. Mechanical clearing, mowing, and manual application of systemic non-residual herbicides (e.g., Rodeo® and/or Roundup®) via backpack sprayer or wick application will be used to remove target non-native species. Weeds will not be allowed to reach 10 percent or greater cover except in the case of protective weeds as defined by the RESTORATION SPECIALIST.

#### 5.2.2 Trash and Debris Removal

Following rain or high wind events, trash and debris may enter the restoration areas. After the initial removal of trash during site preparation, the CONTRACTOR will remove any additional trash and debris, such as that deposited by visitors.

#### 5.2.3 Site Fencing and Signage

Site protection is integral to the success of the native restoration efforts. The CONTRACTOR will be responsible for installation and maintenance of a temporary protective fence.

#### 5.2.4 Erosion Control

As necessary, CONTRACTOR will install and maintain non-vegetative erosion control measures and Best Management Practices (BMPs) to prevent erosion and sedimentation within the mitigation area and surrounding habitat. Erosion control devices may include sandbags, silt fencing, slope breakers, trenches, and/or energy dissipaters. The use of erosion control devices with materials that could potentially contaminate the site (e.g., hay bales or non-sterile mulches, etc.) is not permitted on the site. Drainage and sedimentation control devices will be routinely cleaned, maintained, and repaired prior to and during the rainy season. Any failure of these control systems to prevent the discharge of untreated runoff will result in immediate repair.

### 5.3 MONITORING PROGRAM

**5.3.1 Maintenance Monitoring**  
**5.3.1.1 Monitoring Schedule**

**Table 5-1**  
**Monitoring and Maintenance Schedule by Year**

	Year 1	Year 2	Year 3	Year 4	Year 5
Maintenance Monitoring <sup>1</sup>	Monthly	Monthly	Quarterly	Quarterly	Twice
Quantitative Survey <sup>1</sup>	Fall	Fall	Fall	Fall	Fall
Reference Photos <sup>1</sup>	Fall	Fall	Fall	Fall	Fall
<sup>1</sup> To be conducted by the RESTORATION SPECIALIST.					

**5.3.1.2 Trash and Debris Removal**

The CONTRACTOR will keep the site free of trash and debris.

**5.3.1.3 Vandalism**

The CONTRACTOR will be responsible for monitoring and reporting any unauthorized entry or vandalism observed on the Project site. The CONTRACTOR will note any instance of vandalism and report occurrences to the RESTORATION SPECIALIST within 24 hours. If necessary, recommendations for the replacement of damaged plants, irrigation components, and protective site fencing will be developed by the RESTORATION SPECIALIST.

**5.3.2 Performance Monitoring**

Performance monitoring will evaluate the general conditions of the planted area. Performance monitoring reports will be prepared to document the growth rates, percent coverage, and overall performance of the Restoration Program. Monitoring of the restoration performance will be performed by the RESTORATION SPECIALIST or qualified biologist to assess the performance of the habitat establishment efforts and recommend corrective measures, if needed.

Performance monitoring will involve documentation of site conditions prior to construction, preparation of an "As-built Assessment" following construction, and annual sampling of the site post-construction to document vegetation conditions (e.g. percent cover, presence or absence of non-native species, etc.), wildlife use, and general conditions of the site. Photographs will be taken bi-annually along multiple pre-selected transects to document changes in conditions over time. The RESTORATION SPECIALIST will prepare and submit annual Monitoring Reports to the City of Huntington Beach, USACE, CDFG, and RWQCB for a period of five years following completion of the project.

The success criteria for the Project are described below. If at any time the revegetation does not appear to be meeting the performance standards set forth in the plan, timely remedial actions will be initiated to ensure the performance standards are met. Performance monitoring will occur for a minimum period of five years or until the performance standards are achieved. If the performance standards were not achieved within five years, remedial actions will be developed for an additional three-year period.

Aspects of the performance standards set forth in the plan include the following:

1. Performance standards may be waived by the resource agencies if monitoring indicates that good growth and functional habitats are otherwise achieved.
2. If performance standards cannot be met because of adverse soil or other unmanageable site conditions, an alternative or auxiliary mitigation plan may be submitted to the resource agencies for approval.

#### **5.3.2.1 Percent Cover of Native Marsh Species**

During performance monitoring, density and cover will be quantified using standard vegetation transect methods within vegetated habitat. Representative areas within the restoration area will be also photographically documented from fixed stations. If the cover requirements have not been met, remedial measures will be taken (as necessary) to achieve the required standards. The performance standards for this restoration project will consist of 75 percent cover of native marsh species within vegetated habitat, less than 2 percent cover of invasive non-natives, and less than 5 percent cover of non-invasive non-natives. In addition, overall cover of salt marsh vegetation on the site will be documented by mapping. Based on the grading plan, about 0.75 acres of the site is expected to become vegetated with native marsh species. Therefore a second performance criterion is that at least 0.6 acres of the site support salt marsh vegetation. However, if Belding's savannah sparrows are documented to nest on the site, the site will be determined to have met the performance objectives (regardless of the extent and cover of salt marsh vegetation) as long as the criteria for non-native plant species are met.

#### **5.3.2.1.1 Non-Native Species within Mitigation Area**

Weeds will be controlled in the restoration area for five years or until native vegetation is well enough established to prevent detrimental competition between the non-native species and the native species for water, nutrients, light, and space. The percent cover measurements will be based on native plant species only; non-native plant species will not be accounted for in the percent cover measurements. The restoration area shall have a maximum 2 percent cover of invasive weed species after five years.

#### **5.3.2.2 Evidence of Natural Reproduction**

It is expected that natural recruitment of salt marsh species will be evident within 3 years after tidal restoration. If the RESTORATION SPECIALIST notices any areas that are deficient in the recruitment of native species, appropriate remedial measures will be implemented to remedy the situation.

#### **5.3.3 Vegetation Performance Monitoring Methods**

Performance monitoring will be conducted by the RESTORATION SPECIALIST or a qualified biologist with experience in site monitoring and vegetation transect measurements. Performance monitoring of vegetation within the restoration area will include detailed analysis of growth, cover, height, and viability through a sampling of a minimum of 5 percent of the vegetated restoration area using quadrat and point-intercept methods. Permanent photo-documentation stations shall be established to record the progress of the site over the five-year period. In addition the site will be mapped to document the extent of salt marsh habitat.

Plant vigor, recruitment, and patterns of growth within the restoration site will be noted and documented along with the quantitative performance data. Aggregations of individual plants or species into stands or zones will contribute to an informal analysis of plant distribution, because that can provide important information about gradients in physical parameters and interactions

with neighboring plants and wildlife.

#### **5.3.3.1 Data Collection**

Quantitative vegetation data will be collected on a minimum of ten permanent, 164-foot (50-meter) transects onsite, using a point-intercept sampling methodology modified from the California Native Plant Society (Sawyer and Keeler-Wolf 1995). Transect locations shall be randomly selected within the vegetated portions of the site. The location of each transect will be recorded using a Global Positioning System (GPS) unit to find the coordinates for each end of the transect line.

Plant species intersecting a vertical line at 1.6-foot (0.5-meter) intervals along each 164-foot (50-meter) transect will be recorded as "hits" and used to estimate cover by species. Species will be categorized by layer in the vegetation as "herbaceous/ground," "shrub," and "tree." Data will be recorded separately for each 1.6-foot (0.5-meter) interval in order to accurately assess vegetative cover.

#### **5.3.3.2 Annual Reports**

Annual reports presenting the monitoring results for on-site mitigation will be submitted to the USACE, CDFG, and RWQCB. These reports will assess the progress of the mitigation site toward the final success criteria. Annual reports will be submitted following each of the five monitoring years approximately 90 days after the completion of the vegetation monitoring transects.

Annual reports will include: (1) a list of names, titles, and organizations of all persons who prepared the content of the annual report and participated in the monitoring activities for the year; (2) analyses of all quantitative monitoring data (success, failure, and remedial action); (3) prints or color photocopies of all monitoring photographs; and (4) an overall evaluation of the habitat development.

#### **5.3.4 Schedule of Performance Monitoring**

Performance and maintenance monitoring, described year by year in Table 5-1, shall begin the first spring after construction, and continue for five years after construction or until performance standards are reached. Reporting will be in accordance with the specifications listed above in Sections 5.3.2 and 5.3.3.2.

#### **5.3.5 Contingency Measures**

If the final success criteria are not met, the permittee will prepare an analysis of the cause(s) of failure and, if determined necessary by the regulatory agencies, propose remedial action for approval. If the mitigation site has not met the performance standards, the maintenance and monitoring obligations will continue until the regulatory agencies give final approval.

#### **5.3.6 Notification of Completion**

When the five-year monitoring period is complete, and if the final success criteria have been met, notification of these events will be provided as part of the final annual report. A final report by the RESTORATION SPECIALIST will be provided to the reviewing agencies within 60 days of project completion.

Following receipt of the report, the applicant or their designee will provide access and guidance through the site to regulatory agencies, to confirm the adequate completion of the mitigation

effort.

## 6 SECTION 6.0 – REFERENCES

- Holland, R.F.  
1986 *Preliminary Descriptions of the Terrestrial Natural Communities of California.*  
Unpublished report available from California Department of Fish and Game,  
Sacramento, California.
- Sawyer, J.O., and Keeler-Wolf, T.  
1995 *A Manual of California Vegetation.* California Native Plant Society. Sacramento,  
California, 471 pp.

# ATTACHMENT #2

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Huntington Beach Wetlands Restoration  
North Magnolia Pocket Marsh  
Preferred Concept  
October 2005

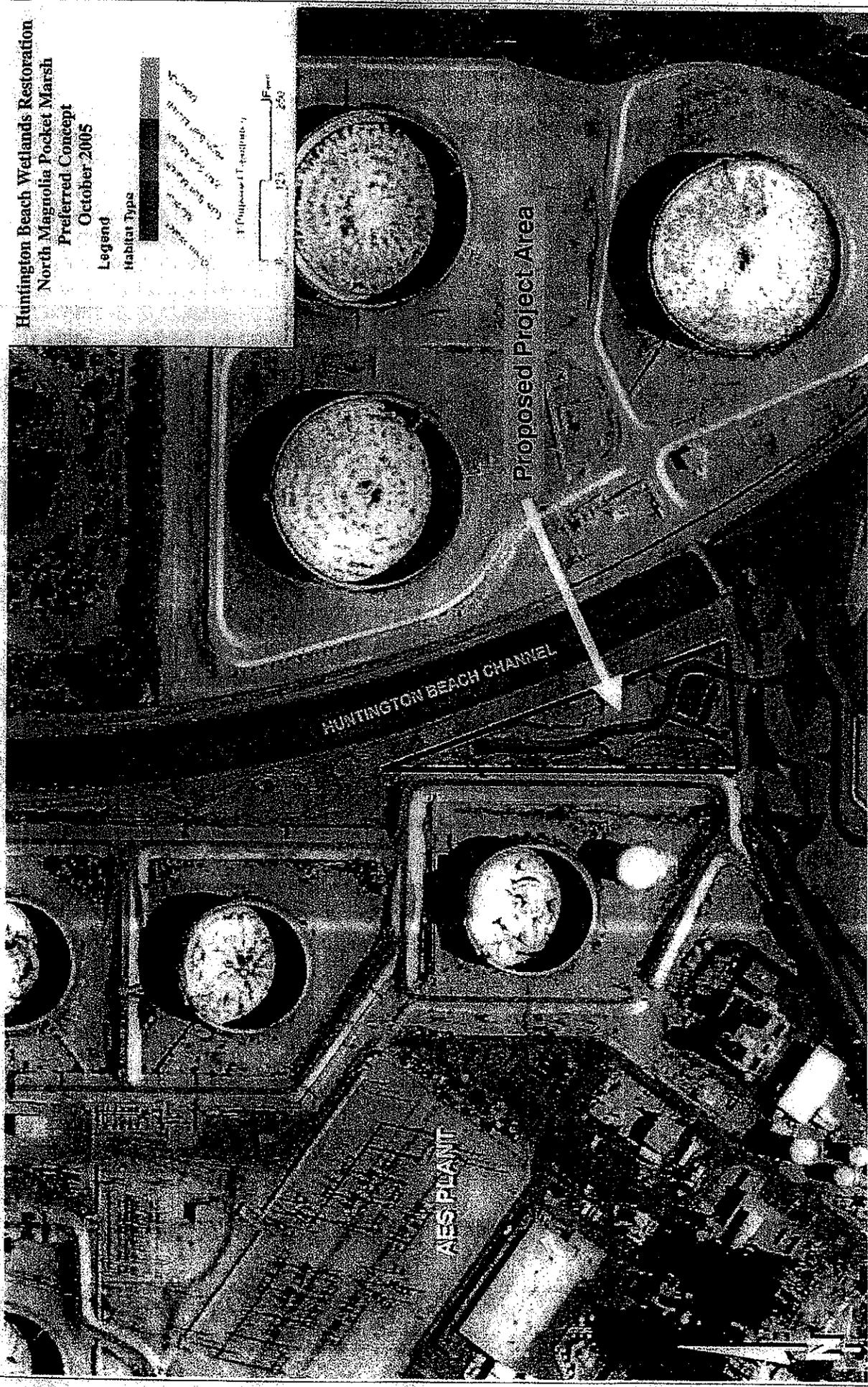
Legend

Habitat Type

- Open water
- Marsh
- Low marsh
- High marsh
- Wetland

1 (Proposed) 1 (Existing)

125' 50'



UPPER MAGNOLIA MARSH  
Figure 7

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