
SAN FRANCISCO DISTRICT

PUBLIC NOTICE

Regulatory Branch
1455 Market Street
San Francisco, CA 94103-1398

NUMBER: 274340N DATE: 18 April 2007
RESPONSE REQUIRED BY: 18 May 2007

PERMIT MANAGER: David A. Ammerman PHONE: 707-443-0855

Email: David.A.Ammerman@spd02.usace.army.mil

1. **INTRODUCTION:** The City of Arcata, 736 F Street, Arcata, California 95521, (Contact Ms. Julie Neander at 707-822-8184) and the California Department of Fish and Game, 619 2nd Street, Eureka, California 95501 (Contact: Ms. Karen Kovacs at 707-441-5789) have jointly applied for a Department of the Army Permit to discharge fill in navigable waters of the United States (Humboldt Bay) and other waters of the United States (McDaniel Slough and Janes Creek), as well as diked former tidelands in connection with activities associated with Phase One of the McDaniel Slough Wetland Enhancement Project. The project site is located adjacent to Humboldt Bay (Arcata Bay), west of the City of Arcata's Arcata Marsh complex and south of Highway 255/Samoa Boulevard, in Humboldt County, California (See Sheet 1 of 4 of project drawings). This application is being processed pursuant to the provisions of Section 404 of the Clean Water Act (33 U.S.C. Section 1344) and Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. Section 403).

2. **PROPOSED PROJECT:** The City of Arcata (City) and the California Department of Fish and Game (CDFG) plan to restore tidal wetland functions to 200 of 240 acres of former tidal salt/brackish marsh and freshwater wetlands adjacent to Humboldt Bay. The remaining 40 acres would be enhanced and managed as freshwater and brackish ponds, and grassland/riparian areas. Funding for this project is partly derived from the applicants' respective agencies and partly from the U.S. Fish and Wildlife

Service (USFWS). The USFWS is coordinating with the applicants in regards to technical aspects of the project. The project area is owned by the City (88 acres) and the CDFG (166 acres). The 88 acre City owned property provides a critical link from the 154-acre existing Arcata Marsh and Wildlife Sanctuary to the CDFG Mad River Slough Wildlife Area (547 acres) located west of Janes Creek/McDaniel Slough. The Humboldt Bay National Wildlife Refuge is located to the south of the AMWS. The City of Arcata is responsible for implementing the project under a cooperative agreement with the CDFG.

Due to the complexity of the project and coordination required with Federal and state resource agencies concerning endangered species and their habitat, the applicants anticipate implementing the project in three phases:

Phase I (See Sheet 2 of 4):

- Freshwater pond construction
- Enhance historic slough channels on the eastern portion of the site
- Remove portions of levee bordering McDaniel Slough
- Build and revegetate levees on the eastern portion of site – includes brackish pond levees and levees along east side of V Street
- Contour bottom of future brackish pond, build and vegetate islands in brackish pond – initial phase of pond operation would be as a seasonal fresh water pond

- PG&E to reinforce tower structures
- Construct trails, viewing structures, kiosks
- Plant upland areas

Phase II:

- Mute open culvert to allow the western portion of the project area to dry out while maintaining water in lower reaches of the western remnant channels
- Build and revegetate levees on western portion of site – south side of V Street area and westward
- Isolate borrow ditch area, dewater, install culvert with tide gate and connect to existing levee
- Modify western remnant channels to maintain/enhance post project habitat for the endangered tidewater goby
- Complete design infrastructure for brackish pond
- Allow levees to season/settle
- Remove tide gates

Phase III:

- Plant salt marsh vegetation
- Remove culverts
- Reinforce levees at mouth of McDaniel Slough
- Begin operation of brackish marsh

Note: This Public Notice and associated environmental assessment only addresses activities under Phase One. Phases Two and Three may be authorized under a separate nationwide permit (Nationwide Permit 27).

The following project description is derived from (unless otherwise indicated) the City of Arcata’s Pre-Construction Notification and Permit Application for Phase I through the City’s letter of March 27, 2007.

Construct freshwater ponds (See Sheets 2 of 4 and 4 of 4) - Two freshwater ponds would be excavated to six or 10 foot depths to expose groundwater and provide year round pond habitat. The two freshwater marshes would total 5.5 acres in size. The applicant states the ponds would provide freshwater habitat and increased storm water storage capacity while reducing storm water pollution to Humboldt Bay. The existing “log pond” located within the Arcata Marsh and Wildlife Sanctuary (AMWA) southeast of the project site on G Street provides a reference site. The proposed freshwater ponds are expected to develop similar habitat conditions. Soil and other materials excavated to form these ponds would be used for levee construction and to build up marsh plain elevations in low-lying areas. The upland area around the freshwater ponds would be planted with native trees and shrubs with the intent of creating a riparian forest type. Artificial roosting “snags” would be installed by excavating deep holes and setting several large conifer logs into the soil set on end. Bat boxes (for *Myotis* sp. or other flying mammal species) and swallow (Family *Hirundinidae* of birds) nesting platforms would be anchored to the “snags” (City of Arcata, Pre-Construction Notification, dated March 22, 2007).

Enhance historic slough channels (Sheet 2 of 4) - Several smaller historic slough channels found on the diked former tidelands that have aggraded with sediment would be deepened by excavation during Phase I to improve site drainage and habitat. Approximately 1,440 linear feet of smaller slough channels would be excavated in existing agricultural wetlands (for Phase One). Approximately 500 cubic yards of material would be excavated to form these channels and this material would be used in levee construction.

Remove portions of levees bordering McDaniel Slough (Sheet 2 of 4) - Portions of the existing levees that border the McDaniel Slough/Janes Creek channel would be removed to improve marsh plain

drainage and habitat transition. The existing levee system adjacent to McDaniel Slough/Janes Creek channel does not allow for floodplain function, channel meandering, or marsh plain drainage. Some portions of the levee would remain intact to serve as roosting islands and to break up wave fetch within the project area to promote deposition of suspended sediment. Approximately 1,200 linear feet of levee along McDaniel Slough would be excavated – constituting 6,200 cubic yards of material. The excavation would be to adjacent ground elevations and would not affect the creek/slough channel. Excavated material would be used in new levee construction.

Brackish Pond (Sheet 2 of 4 and 4 of 4) - The brackish pond would eventually utilize a mix of fully treated discharged wastewater and bay water. The initial phase of pond operation would be as a seasonal freshwater pond. The brackish marsh would be approximately 14 acres in size. There would be approximately 2 acres of upland islands within the pond. The brackish pond would be excavated to appropriate elevations for mixing bay water with treated wastewater to create the brackish marsh suitable for vegetation such as widgeon grass (*Ruppia maritima*, an obligate wetland plant). The treated wastewater meets Humboldt Bay discharge standards and is not an expansion of the City's facility but does provide a new beneficial use of fully treated wastewater. Approximately 1 to 6 cubic feet per second of treated wastewater would be gravity fed to the new brackish marsh. Flow volumes would be managed to mimic natural seasonal fluctuations in other Humboldt Bay tributaries. The brackish marsh inlet and outlet would be adjustable to mute the tidal cycle and to provide flexibility to adjust salinity to desired ranges which are expected to benefit the endangered tidewater goby and widgeon grass. A complex ridged bottom topography is proposed for this pond at select locations for marsh habitat improvement. The grading would include the creation of ridges to provide network of shallow

channels and diversity to aquatic plant species composition.

Levee construction (Sheet 2 of 4 and 3 of 4) - Three types of levees would be constructed on portions of the project site: (1) flood levees, (2) eco-levees, and (3) pond perimeter levees. For Phase I, all three types of levees would be constructed in the eastern and northeastern portions of the McDaniel Slough project area, east of the intersection of V Street with Samoa Boulevard/Highway 255. Flood levees would be earthen structure constructed with a straight 2.5:1 side slope down to existing grade. The flood levees would separate the project area from adjacent properties not involved in the restoration effort and prevent inadvertent flooding of adjacent properties that may result from wetland restoration. Eco-levees are permanent, earthen levees with a 2.5:1 outboard slope down to 4.5 feet NGVD (National Geodetic Vertical Datum) and 10:1 inboard down to between 4.5 and 3.5 feet NGVD (the inboard area is the area being developed as wetland or other aquatic habitat). The eco-levees would provide a band of transition from low to high marsh habitat and to separate freshwater from brackish marsh. The eco-levees would support a wider range of vegetation and a more diverse range of wildlife habitat. The eco-levee slopes would be planted with wetland and other native vegetation. The pond perimeter levees (surrounding the created brackish water pond) would be similar to the flood levees but would permanently contain pond water. The pond perimeter levees would be constructed on the north, east and south sides of the brackish pond. Materials for constructing all three types of levees would be derived from the excavation of the freshwater ponds, removal of existing levees along McDaniel Slough and historic slough excavation. New levee construction for the entire project (Phases I through III) would require 80,000 cubic yards of fill material. The estimated volume of excavation and fill material for Phase I would be approximately 42,700 cubic yards to construct 7,290 feet of levee.

3. OTHER STATE AND FEDERAL PERMITS:

Water Quality Certification - Under Section 401 of the Clean Water Act (33 U.S.C. Section 1341), an applicant for a Corps permit must first obtain a State water quality certification before a Corps permit may be issued. The applicant has provided the Corps with evidence that they have submitted a valid request for State water quality certification to the California Regional Water Quality Control Board (RWQCB), North Coast Region. No Corps permit will be granted until the applicant obtains the required water quality certification. The Corps may assume that water quality certification has been obtained if the State fails or refuses to act on a valid request for certification within 60 days after the receipt of a valid request, unless the District Engineer determines a shorter or longer period is reasonable for the State to act.

Coastal Zone Management Act - The McDaniel Slough Restoration Project, including Phase I is within the permitting jurisdiction of the California Coastal Commission (CCC). Section 307 [c] of the Coastal Zone Management Act of 1972, as amended (16 U.S.C. 1456 [c]), requires any non-federal applicant for a federal license or permit to conduct an activity affecting land or water uses in the state's coastal zone to furnish a certification that the proposed activity will comply with the state's coastal zone management program. Generally, no permit will be issued until the state has concurred with the non-federal applicant's certification. The City has provided evidence that they have applied for a Coastal Development Permit from the CCC for this project.

Endangered Species Act - The Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531 *et seq.*) requires that federal agencies, in consultation with the U.S. Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS), to

use their authorities in furtherance of its purposes by taking such action necessary to insure that any action authorized, funded or carried out by the Agency is not likely to jeopardize the continued existence of such endangered or threatened species or result in the destruction or adverse modification of critical habitat of such species. Humboldt Bay and its tributaries, including McDaniel Slough/Janes Creek, are critical habitat for the Southern Oregon/Northern California Coastal (SONCC) Evolutionarily Significant Unit (ESU) coho salmon (*Oncorhynchus kisutch*), California Coastal (CC) ESU Chinook salmon (*O. tshawytscha*), and Northern Coastal (NC) Distinct Population Segment (DPS) steelhead (*O. mykiss*). All three of these anadromous fish are listed as threatened by the NMFS. Janes Creek and McDaniel Slough historically supported coho salmon migration but no coho salmon have been found in this stream since 1985 (pers. comm. M. Gilroy, CDFG to K. Meyer, NMFS, November 2006). In addition, portions of Humboldt Bay and its tributaries, including McDaniel Slough, are critical habitat for the tidewater goby (*Eucyclogobius newberryi*), which is listed as endangered by the USFWS (F.R., Vol. 71, No. 228, November 28, 2006).

During a series of interagency meetings concerning the McDaniel Slough Wetlands Enhancement Project, the Corps exchanged information with the applicants, NMFS, and USFWS regarding potential impacts to listed species and their critical habitat as a result of Phase I of the project. The consensus of discussion indicated that Phase I of the project involving construction of the freshwater and brackish water ponds and construction of some of the pond levees, Eco-Levees and flood levees would not directly or indirectly adversely impact listed species and aquatic or terrestrial habitat in areas where listed species are known to occur or historically have occurred. Based on previous site inspections and these discussions with the interagency group, the Corps has made a preliminary determination that the Phase I Restoration Project would have **NO**

EFFECT on any listed species or their respective critical habitats. However, Phases II and III of this project would likely require Section 7 consultation with NMFS and USFWS, and this consultation is on going. No Corps permit will be issued for Phases II and III until this consultation has been concluded.

Essential Fish Habitat - The Magnuson-Stevens Fishery Conservation and Management Act, as amended (16 U.S.C. 1801 *et seq.*) requires all Federal agencies to consult with the NMFS on all actions, or proposed actions permitted by the agency that may adversely affect Essential Fish Habitat (EFH). Phase I of the above described project would have **NO EFFECT** on EFH. However, Phases II and III of this project may affect EFH. EFH consultation is proceeding concurrently with ESA consultation with NMFS with respect to Phases II and III of this project.

National Historic Preservation Act, Section 106 - A Corps of Engineers' archaeologist will be requested to conduct a cultural resources assessment of the permit area, involving review of published and unpublished data on file with city, State, and Federal agencies. If, based upon assessment results, a field investigation of the permit area is warranted, and cultural properties listed or eligible for listing on the National Register of Historic Places are identified during the inspection, the Corps of Engineers will coordinate with the Tribal Historic Preservation Officer (THPO) represented by the Yurok Tribe in Klamath, California, to take into account any project effects on such properties.

4. ENVIRONMENTAL ASSESSMENT: The Corps will assess the environmental impacts of the proposed action in accordance with the requirements of the National Environmental Policy Act of 1969 (42 U.S.C. Section 4371 *et seq.*), the Council on Environmental Quality's Regulations (40 C.F.R. Parts 1500-1508), and the Corps' Regulations (33 C.F.R. Part 230 and Part 325, Appendix B). Unless

otherwise stated, the Environmental Assessment will describe only the impacts (direct, indirect, and cumulative) resulting from activities within the Corps' jurisdiction. The documents used in the preparation of the Environmental Assessment will be on file with the U.S. Army Corps of Engineers, San Francisco District, Regulatory Branch, 1455 Market Street, San Francisco, California 94103-1398.

5. EVALUATION OF ALTERNATIVES: Evaluation of the proposed activity's impact will include application of the guidelines promulgated by the Administrator of the Environmental Protection Agency under Section 404(b)(1) of the Clean Water Act (33 U.S.C. Section 1344(b)). An evaluation has been made by this office that the proposed project is water dependent.

6. PUBLIC INTEREST EVALUATION: The decision whether to issue a permit will be based on an evaluation of the probable impact, including cumulative impact, of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefits that reasonably may be expected to accrue from the proposed activity must be balanced against its reasonably foreseeable detriments. All factors that may be relevant to the proposal will be considered, including its cumulative effects. Among those factors are: conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people.

7. CONSIDERATION OF COMMENTS: The Corps of Engineers is soliciting comments from the public, Federal, State and local agencies and officials,

Indian Tribes, and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps to determine whether to issue, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest in the proposed activity.

8. SUBMISSION OF COMMENTS: Interested parties may submit, in writing, any comments concerning this activity. Comments should include the applicant's name and the number and the date of this Public Notice, and should be forwarded so as to reach this office within the comment period specified on Page 1. Comments should be sent to the Eureka Field Office, P.O. Box 4863, Eureka, California 95502. It is the Corps' policy to forward any such comments that include objections to the applicant for resolution or rebuttal. Any person may also request, in writing, within the comment period of this Public Notice that a public hearing be held to consider this application. Requests for public hearings shall state, with particularity, the reasons for holding a public hearing. Details on any changes of a minor nature that a re made in the final permit action will be provided upon request. Additional details may be obtained by contacting the applicant whose name and address are indicated in the first paragraph of this Public Notice or by contacting David A. Ammerman of our Eureka Field Office, Regulatory Branch, at telephone 707-443-0855 or by E-mail at: David.A.Ammerman@spd02.usace.army.mil.

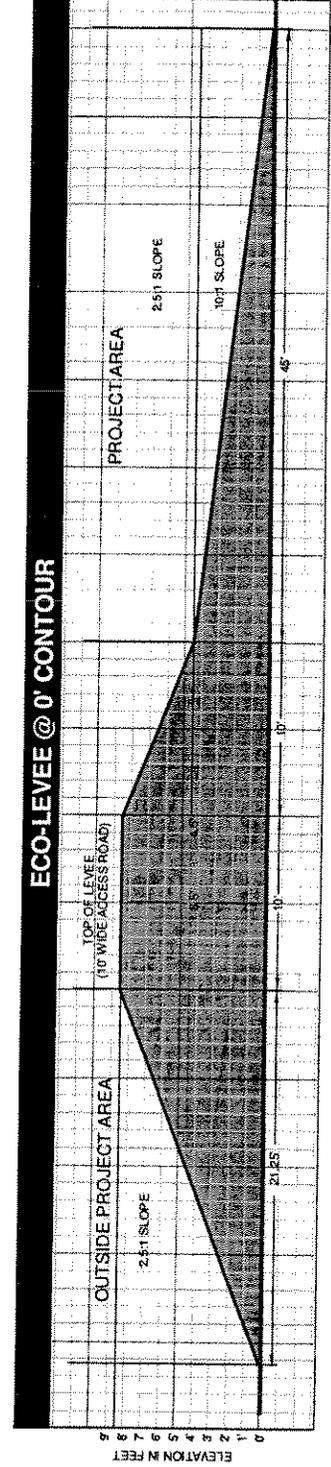
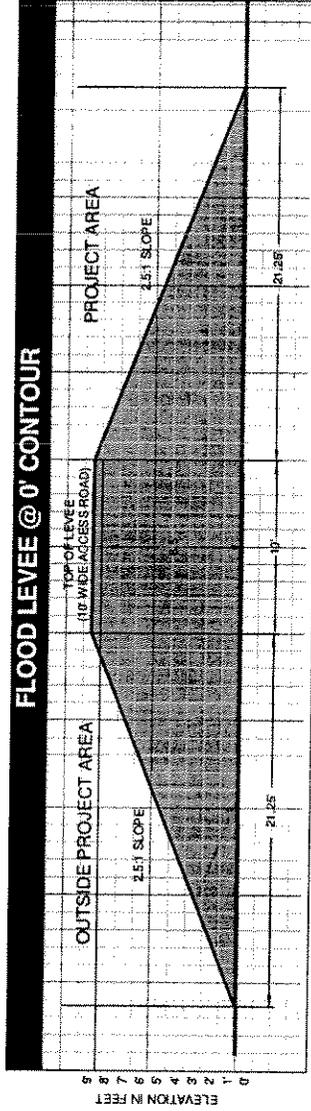
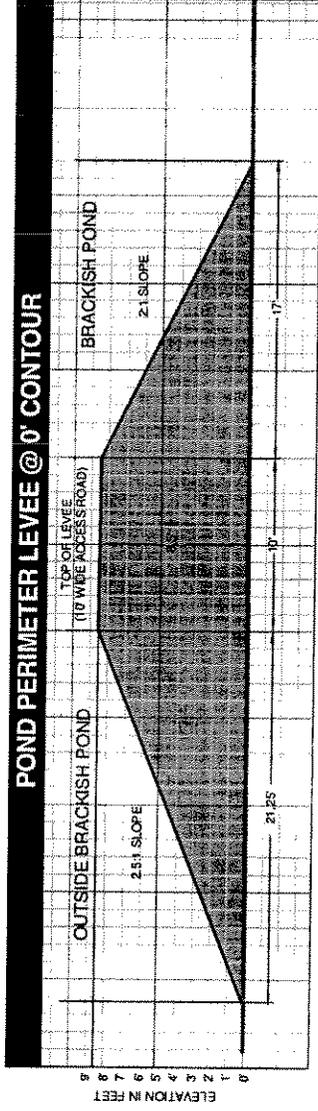
Date: 3/27/2007

Enclosure 1

File No. 274340N

Purpose: Marsh and Wildlife Enhancement, Phase One,
At: Properties Adjacent to McDaniel Slough, In: McDaniel
Slough/Janes Creek, Co: Humboldt, State: CA, Application By:
City of Arcata and Calif. Dept. of Fish and Game

Appendix J Levee Cross-Sections



Date: 3/27/2007
Enclosure 1
File No. 274340N

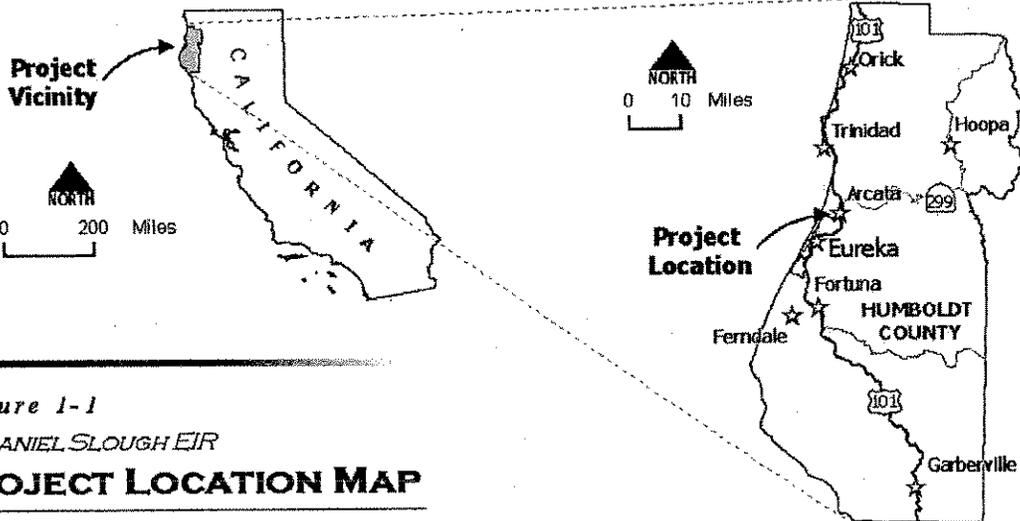
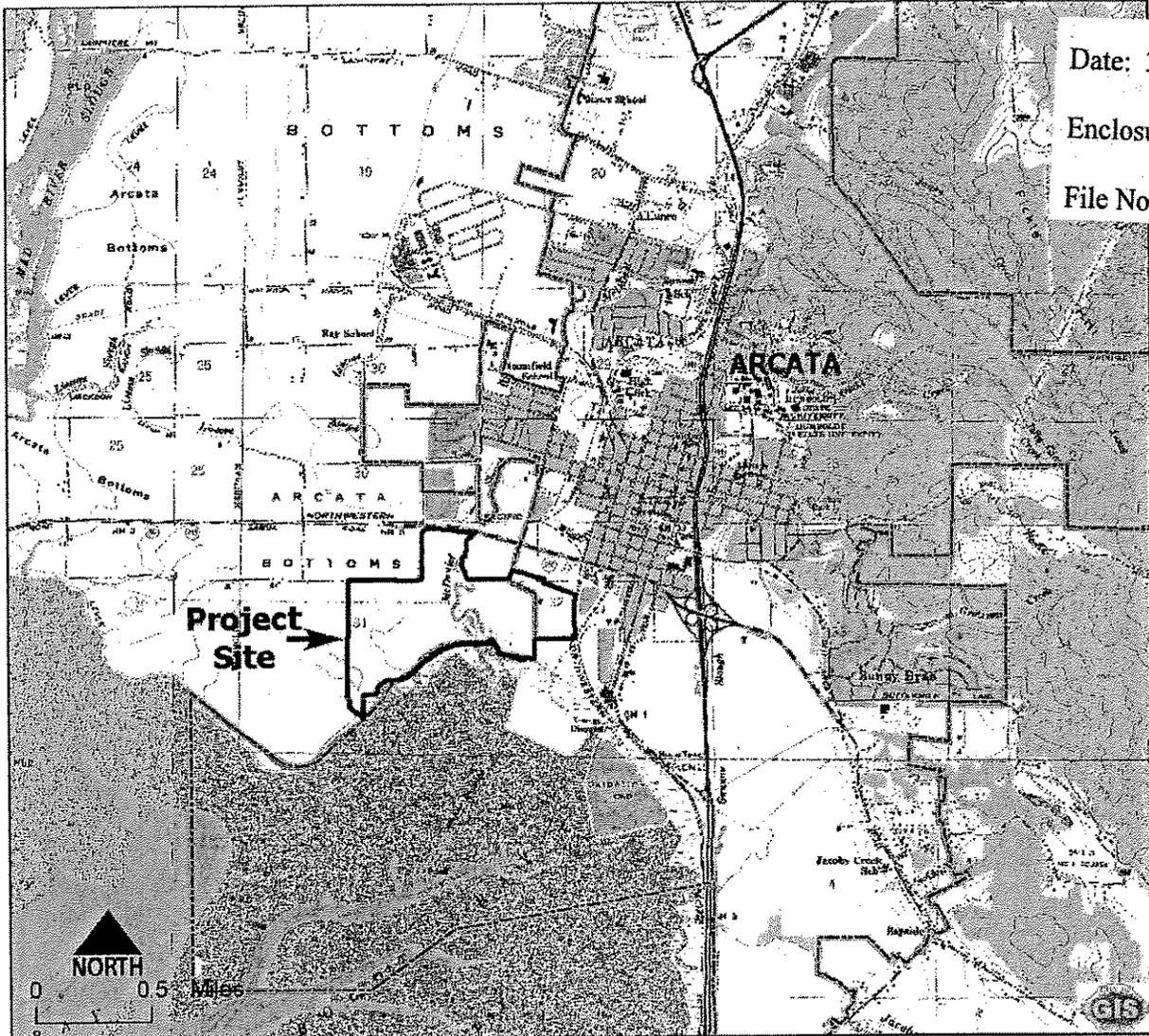


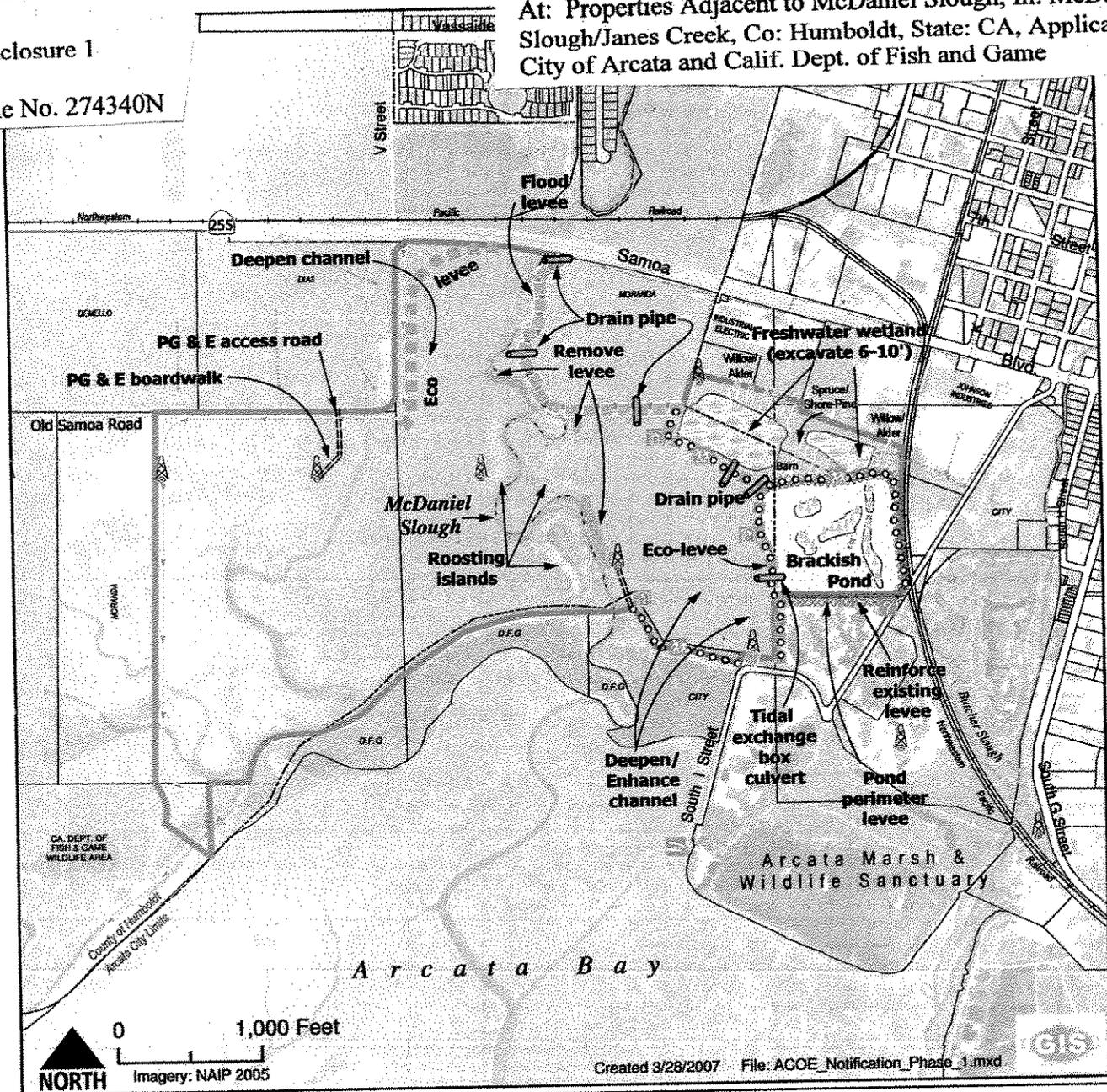
Figure 1-1
MCDANIEL SLOUGH EIR
PROJECT LOCATION MAP

Date: 3/27/2007

Enclosure 1

File No. 274340N

Purpose: Marsh and Wildlife Enhancement, Phase One,
 At: Properties Adjacent to McDaniel Slough, In: McDaniel
 Slough/Janes Creek, Co: Humboldt, State: CA, Application By:
 City of Arcata and Calif. Dept. of Fish and Game

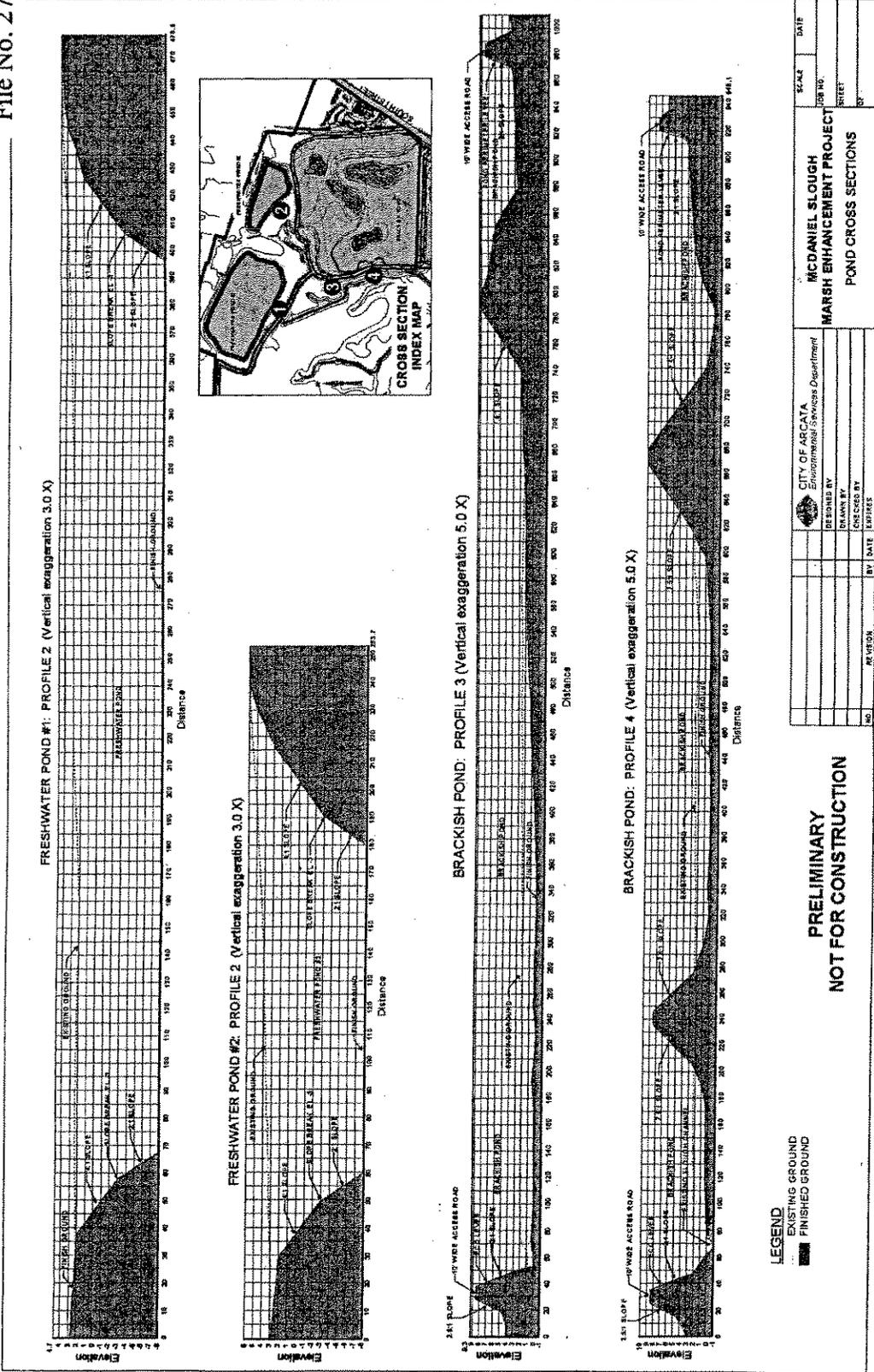


MCDANIEL SLOUGH
 MARSH ENHANCEMENT PROJECT

A.C.O.E.
NOTIFICATION
PHASE 1

Boundaries Project Boundary Arcata City Limits		Recreation Trail Bird Blind Information Kiosk Boat Launch	
Levee Types Flood Levee Eco-Levee Pond Perimeter Levee		Water Features Streams Freshwater Marsh Brackish Pond	
Transportation Access Road Railroad		Other Features Surface Water Flow Drainage Ditch Drainage pipe PG & E Tower Trees Remove Levee Roosting Island Parcel	

Appendix I
Pond Cross-Sections



CITY OF ARCATA Environmental Services Department		SCALE	DATE
DESIGNED BY		MCDANIEL SLOUGH	
DRAWN BY		MARSH ENHANCEMENT PROJECT	
CHECKED BY		POND CROSS SECTIONS	
NO.	REVISION	BY	DATE

**PRELIMINARY
NOT FOR CONSTRUCTION**

Purpose: Marsh and Wildlife Enhancement, Phase One,
At: Properties Adjacent to McDaniel Slough, In: McDaniel
Slough/Janes Creek, Co: Humboldt, State: CA, Application By:
City of Arcata and Calif. Dept. of Fish and Game