

CALIFORNIA COASTAL COMMISSION

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SFS



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Filed:	October 23, 1998
49 th Day:	Waived
Staff:	Robert Merrill
Staff Report:	July 7, 1999
Hearing Date:	July 16, 1999
Commission Action:	

STAFF REPORT: APPEAL**SUBSTANTIAL ISSUE**

LOCAL GOVERNMENT:	County of Humboldt
DECISION:	Denial
APPEAL NO.:	A-1-HUM-98-88
APPLICANT:	CALIFORNIA DEPT. OF TRANSPORTATION DISTRICT 1
PROJECT LOCATION:	At the Mouth of the Mad River, just south of Clam Beach, adjacent to Highway 101, McKinleyville area of Humboldt County; APNs 511-351-01,05,07
PROJECT DESCRIPTION:	Construction of a rock slope protection revetment (Phase I), and placement of an additional 1,000 feet of rock slope protection (approximately 12,000 cubic yards of two-ton rocks) (Phase II) to protect Highway 101 and the coastal vista point from wave damage. The work was completed in March 1992 for Phase I and July 1995 for Phase II under the authorization of Emergency Coastal Development Permit Nos. CDP-42-912 and E-CDP-47-94.
APPELLANTS:	CALIFORNIA DEPT. OF TRANSPORTATION DISTRICT 1
SUBSTANTIVE FILE DOCUMENTS:	Coastal Development Permit Application No. 1-92-69; Humboldt County CDP Application #02-95; and the Humboldt County LCP

SUMMARY OF STAFF RECOMMENDATION:

The staff recommends that the Commission determine that a substantial issue exists with respect to the grounds on which the appeal has been filed, because the appellant has raised a substantial issue with the local government's action and its consistency with the certified LCP.

Staff recommends that the Commission open and continue the de novo hearing on the merits of the project. To enable those who have traveled long distances to attend the July 16 meeting to present their testimony to the Commission, staff recommends that the Commission accept testimony at the hearing. However, to enable the Commission to act on the de novo portion of the appeal at the same meeting as the Commission considers Coastal Development Permit Application No. 1-92-69, the application that covers the portion of the overall project within the Commission's retained jurisdiction, staff recommends that the Commission continue the public hearing to a future meeting. Application No. 1-92-69 has not been filed yet because the applicants have not submitted a final mitigation plan. The final plan is scheduled to be completed by August 15. If Caltrans maintains that schedule, the hearing on the appeal and the hearing on Coastal Development Permit Application No. 1-92-69 could be scheduled for the Commission's consideration at the September meeting in Eureka. This schedule would also have the advantage of providing for a hearing on the project in the local area.

The Motion to adopt the Staff Recommendation of Substantial Issue is found on Page 5.

STAFF NOTES:

1. Appeal Process.

After certification of Local Coastal Programs (LCPs), the Coastal Act provides for limited appeals to the Coastal Commission of certain local government actions on coastal development permits (Coastal Act Section 30603.)

Section 30603 states that an action taken by a local government on a coastal development permit application may be appealed to the Commission for certain kinds of developments, including developments located within certain geographic appeal areas, such as those located between the sea and the first public road paralleling the sea or within three hundred feet of the mean high tide line or inland extent of any beach or top of the seaward face of a coastal bluff, or those located in a sensitive coastal resource area.

Furthermore, developments approved by counties may be appealed if they are not designated the "principal permitted use" under the certified LCP. Finally, developments that constitute major public works or major energy facilities may be appealed, whether approved or denied by the city or county.

The subject development is appealable to the Commission because the proposed development constitutes a major public works. The grounds for the appeal are limited to an allegation that the development conforms to the standards set forth in the certified local coastal program and the public access policies set forth in the Coastal Act.

Section 30625(b) of the Coastal Act requires the Commission to hear an appeal unless the Commission determines that no substantial issue is raised by the appeal. If the Commission decides to hear arguments and vote on the substantial issue question, proponents and opponents will have three minutes per side to address whether the appeal raises a substantial issue. It takes a majority of Commissioners present to find that no substantial issue is raised. Unless it is determined that there is no substantial issue, the Commission would continue with a full public hearing on the merits of the project, which may occur at a subsequent meeting. If the Commission were to conduct a de novo hearing on the appeal, because the proposed development is between the first road and the sea, the applicable test for the Commission to consider would be whether the development is in conformity with the certified Local Coastal Program and with the public access and public recreation policies of the Coastal Act.

The only persons qualified to testify before the Commission on the substantial issue question are the applicants, persons who made their views known before the local government (or their representatives), and the local government. Testimony from other persons regarding substantial issue must be submitted in writing.

2. Filing of Appeal.

The appellants filed an appeal to the Commission in a timely manner on October 23, 1998, within ten working days of receipt of the County's Notice of Final Action, which was received in the Commission's offices on October 8, 1998.

3. Waiver of 49-Day Hearing.

Pursuant to Section 30621 of the Coastal Act, an appeal hearing must be set within 49 days from the date an appeal of a locally issued coastal development permit is filed. The appeal on the above-described decision was filed on October 23, 1998. The 49th day occurred on December 11, 1998. On November 17, 1999, Commission staff received from Caltrans a signed waiver of the 49-day requirement, waiving Caltrans right to a hearing within 49 days after the appeal was filed. The Caltrans representative indicated to Commission staff that Caltrans was seeking reconsideration of a decision by Humboldt County not to hear the local appeal that Caltrans

submitted to the County after the Planning Commission acted on the project. The County had previously determined that the appeal was submitted after the close of the local appeal period, and the Planning Commission decision was final. Caltrans indicated to Coastal Commission staff that Caltrans had submitted the local appeal within the appeal period indicated to them by the County and believed they would be successful in getting the Board of Supervisors to accept its local appeal. As any decision by the County to withdraw the Notice of Final Local Action and hear the local appeal would render the appeal filed with the Commission moot, Commission staff agreed to wait until the County had resolved the matter before scheduling the appeal for Coastal Commission consideration. In addition, Caltrans indicated that if its efforts to get the County to reconsider its decision were not successful, Caltrans would prefer to have the Commission hear the appeal at the same time that the Commission considers Coastal Development Permit Application No. 1-92-69, the application that covers the portion of the overall project within the Commission's retained jurisdiction.

On April 9, 1999, the Commission staff received a letter from the Humboldt County staff indicating that Caltrans request to allow the agency's local appeal to be filed had been heard by the Board of Supervisors. The Board rejected Caltrans' request, refusing to consider a local appeal of the application.

In May of 1999, Commission staff met with Caltrans staff on-site, to discuss the proposed mitigation proposal for the project and view the proposed mitigation site. Caltrans indicated that the mitigation plan would soon be completed. Staff received a draft mitigation plan on June 24, 1999 (see Exhibit 9). The draft mitigation plan indicates the final plan will be prepared by August, 1999.

4. Public Comment at Subsequent Commission Meetings.

During the Public Comment period of the December, 1998 Commission meeting and several subsequent meetings, several landowners of property upstream of the revetment project urged the Commission to schedule the appeal for action. The property owners are concerned that the revetment may be affecting bluff erosion on their property, located approximately half a mile up river. After receiving such testimony, the Commission directed staff to schedule the hearing for consideration at the July 1999 meeting in San Rafael.

PART ONE – SUBSTANTIAL ISSUE

I. STAFF RECOMMENDATION ON SUBSTANTIAL ISSUE

Pursuant to Section 30603(b) of the Coastal Act and as discussed below, the staff recommends that the Commission determine that a substantial issue exists with respect to the grounds on which the appeal has been filed. The proper motion is:

MOTION:

I move that the Commission determine that Appeal No. A-1-MEN-99-26 raises NO substantial issue as to conformity with the certified Local Coastal Program with respect to the grounds on which an appeal has been filed pursuant to Section 30603 of the Coastal Act.

Staff recommends a NO vote. To pass the motion, a majority vote of Commissioners present is required. Approval of the motion means that the County action denying the coastal permit is final.

II. Findings and Declarations.

The Commission hereby finds and declares:

A. APPELLANTS' CONTENTIONS.

The Commission received from the applicant (Caltrans, District 1) an appeal of Humboldt County's decision to deny the major public works project. The project as denied by the County consists of the construction of a rock slope protection revetment (Phase I), and placement of an additional 1,000 feet of rock slope protection (approximately 12,000 cubic yards of two-ton rocks) (Phase II) to protect Highway 101 and the coastal vista point from wave damage. The work was completed in March 1992 for Phase I and July 1995 for Phase II under the authorization of Emergency Coastal Development Permit Nos. CDP-42-912 and E-CDP-47-94. The application was submitted as the follow up application to those emergency permits.

The appellants' contentions are presented in full below:

"This is a major public works project designed and required to protect the integrity of U.S. Highway 101. The project is consistent with all applicable provisions of the LCP and the public access policies of the Coastal Act. In particular, the project is necessary

to the public health, safety, and welfare in Humboldt County as it is necessary to preserve the integrity of the only major interregional north-south highway in Humboldt County."

B. LOCAL GOVERNMENT ACTION.

The Humboldt County Planning Commission considered the proposed project during numerous Commission meetings between March 20, 1997 and September 17, 1998. On September 17, 1998, the Planning Commission denied the project. County staff had recommended approval, but the Planning Commission denied the project making the following motion for denial:

"Deny the project based upon the fact that sufficient evidence does not exist to make required finding #4: The proposed development and conditions under which it may be operated or maintained will not be detrimental to the public health, safety, or welfare."

Based on an examination of the minutes of the Planning Commission's hearing when action was taken, the Planning Commission was concerned that the revetment may be causing increased erosion of the bluffs upstream of the project and did not have sufficient evidence from Caltrans or others that such erosion was not resulting from the Caltrans project. A suggestion was made by one Commissioner that "the permit be denied and have it resubmitted with real attention to the specific items the Commission has requested." A copy of the Planning Commission minutes are attached in Exhibit 5.

The project was not appealed to the Board of Supervisors in a timely manner. An appeal of the denial was submitted by Caltrans a day after the appeal period closed and the County determined that the appeal could not be filed. The Board of Supervisors affirmed the decision to not accept the appeal at a Board meeting in March of 1999.

The County's Notice of Final Action on the permit was received by Commission staff on September 28, 1998 and became complete on October 8, 1998, the day the local appeal period closed (Exhibit No. 6).

On November 17, 1999, Commission staff received from Caltrans a signed waiver waiving Caltrans' right to a hearing within 49 days after the appeal was filed.

C. PROJECT AND SITE DESCRIPTION.

The proposed development consists of the construction of a 2,300-foot-long rock slope protection revetment (Phase I), and placement of an additional 1,000 feet of rock slope protection (approximately 12,000 cubic yards of two-ton rocks) (Phase II) to protect Highway 101 and an adjacent coastal vista point from wave damage (See Exhibits 3 and 4).

The work was completed in March 1992 for Phase I and July 1995 for Phase II under the authorization of Emergency Coastal Development Permit Nos. CDP-42-912 and E-CDP-47-94. The current application seeks permanent approval of the development authorized under the emergency permits.

The subject site is located at the mouth of the Mad River, just south of Clam Beach, adjacent to Highway 101, in the McKinleyville area of Humboldt County. The highway and vista point are on a bluff top that fronts along Clam beach. For many years prior to the winter of 1992, the mouth of the Mad River existed further south. However, the mouth began migrating northward, cutting through the beach in a northerly direction near the base of the bluff. As the river moved northward, a sand spit formed between the river and the ocean. In some years the river migrated northward several hundred feet a year (see Exhibit 5). Eventually, the northward migration of the mouth of the river reached a point where it threatened the bluff that supports the highway and vista point. As Highway 101 is the major north south artery for the region, Caltrans applied for and received emergency permits from the County, the Executive Director of the Coastal Commission, and the U.S. Army Corps of Engineers to construct a 2,300-foot-long revetment to halt the erosion. This Phase I of the project was completed in 1992.

By 1995, erosion of the bluff immediately adjacent to the south of the constructed revetment threatened the bluff below the vista point. Caltrans sought and obtained additional emergency permits from the agencies to extend the rock revetment another 1,000 feet to protect this additional portion of the bluff. This portion of the overall project is considered to be Phase II.

The project site is bisected by the boundary between the Commission's retained permit jurisdiction and the coastal development permit jurisdiction of the County. The portion of the development within the Commission's jurisdiction is the subject of Coastal Development Permit application No. 1-92-69.

D. SUBSTANTIAL ISSUE ANALYSIS

Section 30603 (3) of the Coastal Act states:

The grounds for an appeal of a denial of a permit pursuant to paragraph (5) of subdivision (a) shall be limited to an allegation that the development conforms to the standards set forth in the certified local coastal program or the public access policies set forth in this division.

The contention raised in the appeal presents potentially valid grounds for appeal in that the contention alleges the project's consistency with policies of the certified LCP. The Commission finds that a substantial issue is raised.

Public Resources Code Section 30625(b) states that the Commission shall hear an appeal unless it determines.

With respect to appeals to the Commission after certification of a local coastal program, that no substantial issue exists with respect to the grounds on which an appeal has been filed pursuant to Section 30603.

The term substantial issue is not defined in the Coastal Act or its implementing regulations. The Commission's regulations simply indicate that the Commission will hear an appeal unless it "finds that the appeal raises no significant question." (Cal. Code Regs., tit. 14, section 1311(b). In previous decisions on appeals, the Commission has been guided by the following factors:

1. The degree of factual and legal support for the local government's decision that the development is consistent or inconsistent with the certified LCP
2. The extent and scope of the development as approved or denied by the local government;
3. The significance of the coastal resources affected by the decision;
4. The precedential value of the local government's decision for future interpretation of its LCP; and
5. Whether the appeal raises only local issues, or those of regional or statewide significance.

Even where the Commission chooses not to hear an appeal, appellants nevertheless may obtain judicial review of the local government's coastal permit decision by filing petition for a writ of mandate pursuant to Code of Civil Procedure, section 1094.5.

In this case, for the reasons discussed further below, the Commission exercises its discretion and determines that the development as approved by the County presents a substantial issue with regard to the appellant's contention.

The Planning Commission denied the project on the basis that sufficient evidence does not exist to make a required finding that "the proposed development and the conditions under which it may be operated or maintained will not be detrimental to the public health, safety, or welfare." Based on Commissioners' comments during the hearing when the Planning Commission took action, the public health, safety or welfare concern relates to the alleged potential of the revetment to be contributing to the geologic instability of the surrounding area, specifically that the revetment may be causing increased erosion of the bluffs upstream of the project.

Caltrans is both the applicant and appellant in this case. In its appeal of the denial, Caltrans contends that the project is consistent with all applicable provisions of the LCP and the public

access policies of the Coastal Act. Furthermore, Caltrans contends that the project is necessary to the public health, safety, and welfare in Humboldt County as it is necessary to preserve integrity of the only major interregional north-south highway in Humboldt County.

Local Coastal Program Policies

Section A315-14 of the Coastal Zoning Ordinance states:

Section A315-14. Required Findings for All Discretionary Permits. The Hearing Officer may approve or conditionally approve an application for a special permit, use permit, coastal development permit, or planned unit development permit only if all of the following findings, in addition to those findings that are applicable in Sections A315-15 through A315-18, inclusive, are made.

- A. The proposed development is in conformance with the County General Plan;
- B. The proposed development is consistent with the purposes of the existing zone in which the site is located, or when processed in conjunction with a zone reclassification, is consistent with the purposes of the proposed zone;
- C. The proposed development conforms with all applicable standards and requirements of these regulations; and
- D. The proposed development and conditions under which it may be operated or maintained will not be detrimental to the public health, safety, or welfare.

In the case where no findings are required by State Law, the above findings shall not be required.

Section A315-16 of the Coastal Zoning Ordinance states:

"In addition to the required findings of Sections A315-14 through A315-15, as applicable, the Hearing Officer may approve.... an application for a use permit, coastal development permit....only if the following findings (can be made)

H. Public Safety Impact Findings

.....

(2) Coastal Geologic Hazard (CZ).

- (a) The development will be sited and designed to assure stability and structural integrity for the expected economic lifespan while minimizing alteration of natural landforms;
 - (b) Development on bluffs and cliffs (including related storm runoff, foot traffic, site preparation, construction activity, irrigation, wastewater disposal and other activities and facilities accompanying such development) will not create or contribute significantly to problems of erosion or geologic instability on the site or on surrounding areas; and
 - (c) Alteration of cliffs and bluff tops, faces, or bases by excavation or other means will be minimized. Cliff retaining walls shall be allowed only to stabilize slopes.
- (3) Coastal Shoreline Protection (CZ).
- 1) The structure is the least environmentally damaging feasible alternative; and
 - 2) (If applicable), Beach nourishment and vegetative protection is not feasible.

Section 30253 of the Coastal Act has been adopted as a policy of the McKinleyville Area Plan, the LUP segment covering the project site.

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 areas or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.

Policy 3.28F of the McKinleyville Area Plan states:

New shoreline protection structures, including revetments, breakwaters, groins, seawalls, and other such construction, that alter natural shoreline processes may be permitted to protect existing principal structures or public facilities in areas subject to damage from wave action where relocation of the structures is not feasible and when:

- 1. It is least environmentally damaging feasible alternative.

2. Adverse impacts on shoreline sand supply have been eliminated or minimized by the project's design.
3. The project has been designed by a registered civil engineer with expertise in shoreline processes. Permanent shoreline structures shall be permitted only when based on a comprehensive study of areawide shoreline processes, which assesses long-term effects of the structures on sand transport, downdrift beaches, circulation patterns and flow rates, including effects such as erosion, shoaling, or reflection of wave energy on adjacent shorelines. It is the policy of the County to prefer beach nourishment and vegetative protection where feasible, to permanent structural shoreline stabilization. Temporary shoreline structures to protect individual lots may be permitted in emergencies provided that any temporary structure is removed upon construction of a permanent structure.
4. The County shall request the Department of Boating and Waterways to review plans for construction of shoreline protective structures. The Department may recommend measures to mitigate adverse effects on shoreline processes.
5. The County encourages study of shoreline erosion in McKinleyville to develop long term solutions to existing erosion hazards between School Road and Miller Road.

Discussion

In its denial of the project, the Planning Commission simply adopted a motion that sufficient evidence does not exist to make a required finding that "the proposed development and the conditions under which it may be operated or maintained will not be detrimental to the public health, safety, or welfare." No other findings were adopted by the Planning Commission to support the adopted motion. County staff had prepared a recommendation for approval of the project with conditions. Thus, the findings included in the staff recommendation could not be adopted by the Planning Commission to support its action. No subsequent hearing to adopt revised findings supporting denial of the project was held.

As noted previously, the Planning Commission action appears to have been based on concerns expressed by property owners owning bluff top property approximately half a mile upstream (down coast) from the proposed revetment that the revetment was responsible for increasing the rate of erosion of the bluffs on their property. Over the course of the various Planning Commission hearings on the project, the property owners presented testimony that between 1995 and October 1998, at least 20 feet of bluff retreat had occurred on their properties. The property owners assert the erosion was accelerated by the southward movement of the mouth of the river after the revetment was installed. The property owners also assert that the revetment halted the previously rapid northward migration of the river mouth and in so doing, caused the mouth to broaden and move south. For a period of time, the mouth was opposite the bluffs on the

neighbors' projects, exposing these bluffs to direct wave attack from the ocean. In addition, the property owners contend that the changes resulting from construction of the revetment caused river currents to form an eddy opposite their bluffs which increased scouring of the bluffs. During the course of the County's review of the project, the property owners hired two local geologists to evaluate the cause of accelerated erosion to their bluffs. The property owners testified at the Planning Commission that the geologists support their contention that the Caltrans revetment is responsible for the accelerated erosion of the bluff.

Caltrans representatives testified at the Planning Commission hearings that the bluff erosion occurring on the neighbors' property is not attributable to the revetment. At the September 17, 1998 hearing, Charlie Fielder, Caltrans Hydrologic Engineer, testified that the revetment has not contributed to the accelerated erosion upstream. Erosion was already taking place upstream before the installation of the revetment.

In reports submitted to the County, Caltrans engineers and their consultants have pointed out that because of complex coastal dynamics where the river inlet migration is occurring, predicting the future rate of erosion is very difficult. River mouth migration and erosion are influenced by river flow, tidal currents, ocean wave power and direction, the rate of sediment supply to the inlet, and other factors. Even past gravel extraction activities within the Mad River watershed may have been a major factor due to sediment reduction.

The Commission notes that in March of 1999, subsequent to the Planning Commission's denial of the project, the river breached at a new location approximately two miles south of the Caltrans revetment. As a result, the neighboring property owners' bluffs are no longer exposed to wave attack.

In its recommendation for approval of the project, County Planning Department staff stated the following:

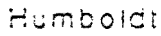
"While it appears that the work was necessary for the protection of this vital transportation link, stabilizing this channel in this location could have long range and yet undetermined impacts to the County and nearby property owners."

This statement and the conflicting testimony of the property owners and Caltrans representatives demonstrates that there are significant questions as to whether the Caltrans revetment has contributed to bluff erosion upstream or not. Whether or not the revetment contributed to bluff erosion is a key element for determining whether the project is consistent with the requirements of Section A315-14(d) of the Coastal Zoning Ordinance that the proposed development and the conditions under which it may be operated or maintained will not be detrimental to the public health, safety, or welfare. In the absence of any specific findings to support the Planning Commission's denial of the project, the Commission finds that a substantial issue is raised as to

whether the proposed project is consistent with Section A315-14(D) of the Coastal Zoning Ordinance.

The decision of whether to approve the project or not affects significant coastal resources. Denial of the permit application and subsequent removal of the revetment could create the same threats to Highway 101 and the vista point that caused Caltrans to undertake the development in the first place. Highway 101 is the major arterial linking coastal regions of the north coast. As such, the highway is the major means by which the public can gain access to the numerous coastal parks, beaches, and rivers in the area. Loss of the highway to erosion would thus have a major impact on coastal access. In addition, the vista point provides spectacular views of the ocean and rugged Humboldt County coastline. Loss of the well-used vista point would thus have significant adverse effects on visual resources. Furthermore, the revetment also protects dune hollow wetland habitat within the dunes north of the revetment. Continued migration of the mouth of the river northward would erode away much of this wetland area.

Therefore, for the reasons described above, the Commission finds that with respect to the grounds on which the appeal was filed, the County's denial raises a substantial issue of conformity with the certified LCP.



REGIONAL LOCATION

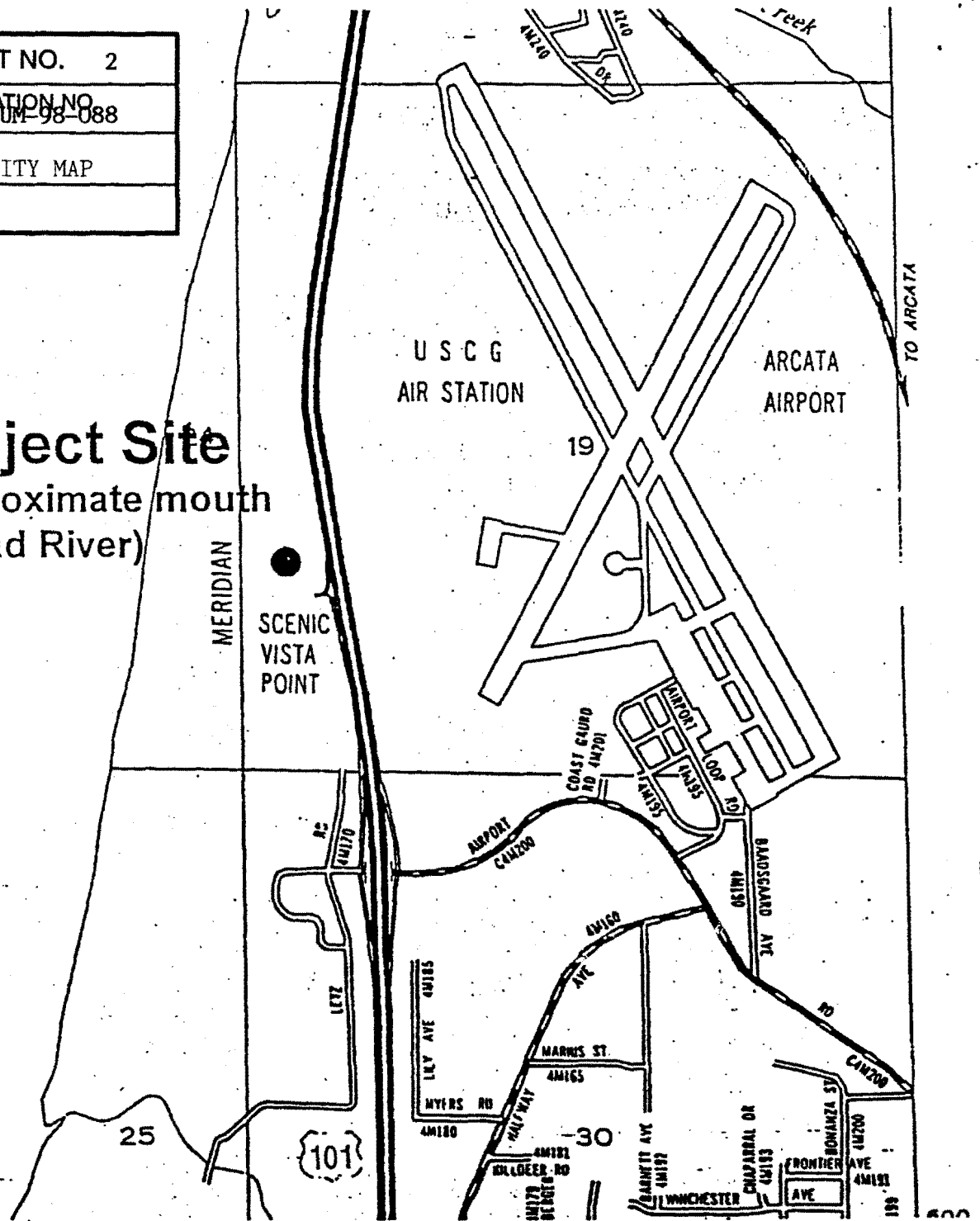


EXHIBIT NO. 2

APPLICATION NO.
A-1-HUM-98-088

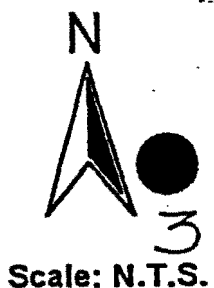
VICINITY MAP

Project Site
(approximate mouth
of Mad River)



Proposed Caltrans Coastal Development/Special Permits
McKinleyville Area CDP-02-95/SP-16-95
APN: 511-351-01 and -05 Section 19 T7N R1E H.B.&M.

Location Map



FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA,
SEE RIGHT OF WAY MAPS AT DISTRICT OFFICE.

PACIFIC OCEAN

Scale: 1" = 300'

DIST	COUNTY	ROUTE	POST MILE	SECTION
01	HUM	101	R94.1/R94.5	

John C. Bullen
REGISTERED CIVIL ENGINEER

PLANS APPROVAL DATE

BEACH SAND

ESTABLISHED SAND DUNES

STATE OF CALIFORNIA
911-331-002

Borrow Site

Existing Wetlands

EXISTING ACCESS ROAD (20 FEET WIDE)

EXISTING GATE

ROUTE 101

410

415

Construction Access From Route 101

TO TRINIDAD

EXISTING BARRIERS

EXISTING STATE RIGHT-OF-WAY

STOCKPILE AREA

EXISTING GATE

EXISTING STATE RIGHT-OF-WAY

EXISTING FACE OF BLUFF

"P" LINE

20

EXISTING ROCK SLOPE

"A" LINE

395

400

405

410

415

TO ARCAT

VISTA POINT

VISTA POINT OFF RAMP

PERMANENT EASEMENT

HUM CO TO STATE OF CA

PERMANENT EASEMENT

HUM CO TO STATE OF CAL

PROTECTION

BEACH SAND

RIVER

MAD

HUMBOLDT COUNTY

Limits of Proposed
Placement of Rock Slope Protection

Phase II - Extend Rock Slope Protection Revetment

VERTICAL DATUM
NGVD 1929

LAYOUT

EXHIBIT NO. 4
APPLICATION NO. A-1-HUM-98-088
PHASE II SITE PLAN
(Page 1 of 2)

7



HUMBOLDT
COUNTY

P+10+00
Begin Rock Slope Protection

MAD

MLLW

MHHW

Existing Toe of Slope and High Tide Line

P+22+25
End Rock Slope Protection

PERMANENT CASEMENT
HUM CO TO STATE OF CAL

P+23+50

"P" LINE

20

C/F

Existing Rock Slope Protection

STOCKPILE AREA

VISTA POINT

Limits of Proposed
Placement of Rock Slope Protection

VISTA POINT OFF RAMP

400

"A" LINE

395

TO ARCATA

390

EXISTING DOWNDRAINS

Existing State Right-of-Way

ROUTE 405

0 100 200 300
SCALE IN FEET

PURPOSE: PROTECTION OF
HIGHWAY 101
VERTICAL DATUM: NCGD 1929
ADJACENT PROPERTY OWNERS:
COUNTY OF HUMBOLDT

PLAN VIEW

CALTRANS DISTRICT 01
PO BOX 3700
EUREKA, CA

Phase II

Extend Rock Slope Protection Reve
MAD RIVER
MCKINLEYVILLE
COUNTY OF HUMBOLDT

A-1

SEP 91
MAY 91

89-90

88

VISTA
POINT

AIRPORT

Dows
Prairie
Sch

R R A I R

N

HISTORICAL M. RIVER COURSE

SCALE 1"=2000'

PACIFIC OCEAN

81

78

74

71

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66-67

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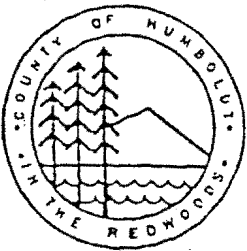
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PLANNING DIVISION
OF THE PLANNING AND BUILDING DEPARTMENT
COUNTY OF HUMBOLDT
3015 H STREET
EUREKA, CALIF. 95501-4484 PHONE (707) 445-7541

SEP 23 1998

DATE: September 22, 1998

APPEAL STATUS: Appealable

CALIFORNIA COASTAL COMMISSION
North Coast District
45 Fremont Street, Suite 2000
San Francisco, CA 94105-2219

SUBJECT: Coastal Development Permit
NOTICE OF ACTION TAKEN

CONTACT: Michael Wheeler, Planner I

Applicant: Caltrans
Address: P.O. Box 3700
Eureka, CA 95502

Case No. CDP-02-95

File No. APN 511-351-01

Following a noticed public hearing, the Humboldt County Planning Commission ~~approved~~ the referenced application on September 17, 1998
denied

Sincerely,

HUMBOLDT COUNTY PLANNING DIVISION
HUMBOLDT COUNTY PLANNING AND BUILDING DEPARTMENT

Michael Wheeler for...
Michael Wheeler, Planner I
Attachments: Agenda Item Transmittal
Staff Report
Exhibit A
Plot Plan
Location Map

/ak

EXHIBIT NO.	6
APPLICATION NO.	A-1-HUM-98-088
NOTICE OF FINAL ACTION	(Page 1 of 7)

**PLANNING COMMISSION
COUNTY OF HUMBOLDT, STATE OF CALIFORNIA**

Certified Copy of Portion of Proceedings, Meeting of SEPTEMBER 17, 1998

SUBJECT: CALTRANS, MCKINLEYVILLE AREA, Case No. CDP-02-95 & SP-16-95,
File No. APN 511-351-01.

ACTION: 1. Opened the Continued Public Hearing.
2. Received staff report.
3. Received Public Testimony (See attached Minutes).
4. Closed the Public Hearing.
5. Deny the project.

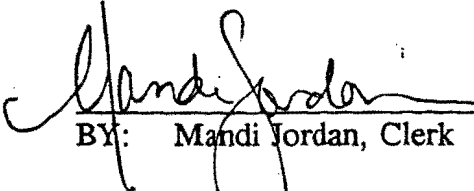
MOTION: Deny the project based upon the fact that sufficient evidence does not exist to make required finding #4: The proposed development and conditions under which it may be operated or maintained will not be detrimental to the public health, safety, or welfare.

Adopted on motion by COMMISSIONER WHITCHURCH, second by COMMISSIONER GARRETT SMITH, and the following vote:

AYES: FLESCHNER, GEARHEART, GARRETT SMITH, & WHITCHURCH
NAYS: NONE
ABSTAIN: BLYTHER
ABSENT: EMAD & JEFF SMITH

STATE OF CALIFORNIA)
)
COUNTY OF HUMBOLDT)

I, KIRK A. GIRARD, Secretary to the Planning Commission of the County of Humboldt, do hereby certify the foregoing to be a true and correct record of the action taken on the above entitled matter by said Commission at the meeting held on the Date noted above.


BY: Mandi Jordan, Clerk

DATE: September 22, 1998

Last Day to appeal to the Board of Supervisors: October 2, 1998 by 5 p.m. (file with Planning).

DRAFT

CONTINUED PUBLIC HEARINGS

1. **CALTRANS, MCKINLEYVILLE AREA;** a Coastal Development Permit and Special Permit application for the construction and design review of: 1) Phase I- a rock slope protection revetments at the Mad River mouth, just south of Clam Beach; and 2) Phase II- placement of an additional 1,000 feet of rock slope protection (approximately 12,000 cubic yards of two ton rocks) to protect Highway 101 and the coastal vista point from wave damage. The work was completed in March of 1992 for Phase I and July 1995 for Phase II under the authorization of Emergency Coastal Development Permit No(s). CDP-42-912 and E-CDP-47-94. **CASE NO(S). CDP-02-95** (filed on 8/7/95) and SP-16-95; **FILE NO. APN 511-351-01. (MEW)**

ISSUES: Bluffs have experienced increase erosion due to the placement of the Rock Slope Protection, duration of the permit process for the project

STAFF REPORT AND RECOMMENDATION: Caltrans, the Mouth of the Mad River Project, was first heard in December 1995. At that meeting a motion was made to continue the project for further review of the supporting studies and to analyze how the categorical exemption from CEQA was made. After study the item was agendized on March 20, 1997. County Counsel reviewed the exemption from CEQA and concluded that the determination was correctly made. Conditions were revised for the March 20, 1997 meeting to include further monitoring, a re-opener provision if further repairs were needed, and a hold harmless clause (based on a similar provision that was in the parallel CCC permit).

March 20, 1997, Caltrans' counsel expressed an interest in working with County Counsel in regards to the language of the hold harmless clause. The project was continued to May 1, 1997. May 1, 1997 two versions of the conditions were submitted to the Commission. Exhibit A-1 was staff's conditions, which included greater detail in the geological monitoring requirement (condition #4). Exhibit A-2 contained Caltrans preferred language in limiting monitoring to visual inspection only, the monitoring not to include the bluff area further up river from the RSP, and the removal of the hold harmless clause. After public comments and discussion the item was continued to June 5, 1997.

On June 5, 1997, the project was continued to July 10, 1997.

At the July meeting the item was continued to August 7, 1997 because of no significant developments in the project.

August 7, 1998 the item was moved to be rescheduled and renoticed pending information provided by the USACE on their assessment of the environmental document (Caltrans estimated the Corp. issues to be resolved no sooner than November 1997). The item came up again at the May 7, 1998 Planning Commission under old business as an update of the project. At that time, Caltrans noted it was close to completing the third annual river mouth monitoring report.

Estimated completion was June 1998. The report was made available to the County in August 1998. August 20, 1998, the project was continued due to time constraints of the agenda. The project was rescheduled for a public hearing on September 17, 1998.

Open the public hearing; receive staff report and public testimony; close public hearing and on the basis of the submitted evidence find either 1) that evidence exists to make the required findings and approve the project subject to the recommended conditions of approval, including the requirement for submittal of 5-year post approval monitoring reports and indemnification and hold harmless agreement between Caltrans and the County; or 2) to find that sufficient evidence does not exist to make the required findings, and continue the project until the completion of the Environmental Assessment required by the USACE for the Section 404 Permit or deny the project, with or without prejudice. Note: This project has been found to be exempt from CEQA by Caltrans as the Lead Agency.

Commissioner Garrett Smith asked if the USACE's environmental assessment had been released yet? Michael Wheeler contacted the USACE on September 11, 1998. The update memorandum on the status was submitted in the supplemental packet for the Commission's review. The USACE is considering a letter of modification to the 404 permit, which was issued under an emergency status, that would require additional monitoring and impose special conditions. A draft environmental report has been completed by the Eureka Army Corp, and is being reviewed by the S.F. division. Final determination has not been made. Further studies and monitoring would be the responsibility of Caltrans, as the USACE has no budget for the work. Caltrans has continued to work with the USACE and the City of Eureka on a joint agreement for a mitigation site (located off-site) to off set the wetland impacts.

Chairman Fleschner asked if there is a new project taking place in this area?

Steve Werner said Caltrans is currently performing some bank stabilization and storm work. This project is not associated with the RSP per say.

Chairman Fleschner asked why does the RSP need a CDP and the new project not?

Steve Werner stated the current work is associated with the storm activity of last winter, and is qualified for an exemption from the Coastal Act under the Firestone exemption. The current work is within the right of way of the highway. The project heard tonight is prior to the Firestone exemption.

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SPEAKERS AGAINST:

John White, 3412 Letz Ave., McKinleyville.

- Submitted a written letter of testimony included in the cumulative packet submitted at the meeting.
- He stressed his testimony is based upon facts and not opinions of possible future effects.
- Two local geologists support the bluff property owners contention that the Caltrans RSP is responsible for the accelerated erosion of the bluff.
- Pointed out photos displayed for the Commission's review. Mr. White described the historical erosion of the bluff area.
- The one side installation of the RSP has had a predictable effect on the erosion of the sand spit and bluff area.
- Built his house in 1995 with retirement funds. He and his wife followed the advice of geologists as to the placement of their house on the bluff, based on the historical erosion of the bluff area.
- At least twenty feet of his property has been lost to the erosion of the bluff, caused by the dynamic whirlpool effect.
- The vegetative slope of the bluff is now bare.
- 39 facts show that Caltrans did not need to block the northern migration of the Mad River in the way they did.
- Property owners are currently losing land. The Commission should make a decision now. Delaying a decision equates to damage to bluff property owners.

Harry Conner, 3578 Letz Ave, McKinleyville.

- Submitted a letter of testimony for the Commission's review.
- Corrections to the 1998 Caltrans' Monitoring Report include the low priority by the USACE on the cover letter to the report, the Arcata Business Park mentioned should be the Airport Business Park (noted in Section: Other Studies), and Caltrans' implications in the study are incorrect.
- Historically, the changes in Widow White Creek were directly caused by the northern migration of the Mad River. The reversal of the historical pattern and the accelerated erosion on the banks of the Mad River occurred only after the RSP was installed in 1992.
- The erosion noted in the study only refers to that of the Widow White Creek and not the Mad River.
- The RSP was expected to and did cause accelerated erosion to the banks of the Mad River.

-He encouraged the Commission to make their decision tonight.

George Owens, P.O. Box 2039, McKinleyville.

- Described the photos displayed before the Commission.
- Submitted cumulative material packets for Commission review, which includes photos, fact sheets, reports, and references.

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-This project should not have been considered an emergency. Western Municipal court case referenced. Foreseen events can not be allowed to become an emergency and then be acted on as an emergency.

-The Shore Protection Manual says both sides of a river should be rocked. Engineering reports state without rocking both sides of the river, there will be migration of the mouth back to the opposite direction.

-The RSP is the cause of the accelerated erosion to the bluff area.

-Time is of the essence in this project due to the damage of property. The Caltrans proposed dates are not a satisfactory time line of events.

-Permit Streamline Act (California G.C. Articles 6592-6598) only allows for 270 days. This project has been going on for 6 years.

-He requests the Commission make their decision tonight and let the project go onto the Board of Supervisors.

SPEAKERS FOR:

Charlie Fielder, Caltrans Hydrologic Engineer, 1556 Union Street, Eureka.

-The last monitoring report was the last report required by the USACE.

-There has been more localized erosion at the terminal end of the RSP.

-There is a sand spit forming on the north end of the RSP. The dune structure is lower due to the lack of replenishment, the northerly winds, and sediment settling upstream.

-Caltrans did what was necessary to allow the river the opportunity to move back to the historical mouth at School Road.

-The forecasted migration did not take place. But the RSP kept the river from migrating further to the north.

COMMISSION DISCUSSION:

Commissioner Garrett Smith asked if the damage to the north would have included Clam Beach? **Charlie Fielder** answered it is purely speculative how far to the north it would have effected. It could have transected with the Highway.

Commissioner Gearheart asked which dune removal was he referring to? North or south? **Charlie Fielder** said he was reffering to the dunes to the south.

Chairman Fleschner asked if Caltrans believed the river would not have effected the highway? **Charlie Fielder** said the rock would have to been placed, because the erosion was already affecting the highway prism. **Chairman Fleschner** asked Mr. Fielder, as a hydrologist, if he believed the placement ofin the RSP contributed to the accelerated erosion that is currently taking place?

Charlie Fielder stated in his opinion, the RSP has not contributing to the accelerated erosion upstream. Erosion was already taking place upstream before the installation of the RSP.

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Commissioner Gearheart asked what was included in the revised Exhibit A-2? Michael Wheeler said Exhibit A-2 contained Caltrans' preferred wording for the monitoring and the deletion of the hold harmless clause.

Chairman Fleschner was disturbed by the time, energy, and materials spent on a project that really has not changed significantly over the past 2 years of hearings. The Commission has a responsibility to review all projects with a careful eye. The Commission has let Caltrans know that specific details of the project are needed and need to be addressed. He believes Caltrans knew that the project as proposed would most likely cause erosion to the south.

He has personally seen the erosion caused by the RSP. Chairman Fleschner believes Caltrans has been directly asking the Commission, because of the overwhelming need to keep Hwy 101 open, not to give this project the same kind of review the Commission is required to give all projects.

He is not comfortable with the hold harmless clause in the conditions. He does not think the Commission should approve a project when evidence is presented and the foreseeable is obvious.

He believes the Commission has an obligation to make a decision and let the project go to the next level. He suggested the permit be denied and have it resubmitted with real attention to the specific items the Commission has requested.

Commissioner Whitchurch agreed the Commission can not make the finding with regards to the project not causing detriment to the public health, safety and welfare as it stands currently. The facts show the RSP is accelerating erosion.

Commissioner Garrett Smith said Caltrans did what was best for the Vista Point. But the finding can not be made for #4. He supports a motion for denial to stop the current erosion of land. Commissioner Whitchurch believes Caltrans did believe the highway facility was being threatened. But under the permit, the Commission must make all required findings; and he does not believe finding #4 can be made.

THE MOTION WAS MADE (Whitchurch/Garrett Smith) to deny the project, based upon the fact that sufficient evidence does not exist to make required finding #4: The proposed development and conditions under which it may be operated or maintained will not be detrimental to the public health, safety, or welfare.

THE MOTION PASSED 4-0-1. Commissioner Blyther abstained from the project.

RECEIVED
JUN 24 1999

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CALIFORNIA
COASTAL COMMISSION

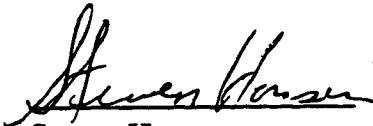
MITIGATION AND MONITORING PROPOSAL

FOR WETLAND IMPACTS
FROM THE RIPRAP PLACEMENT
AT THE MAD RIVER MOUTH, HUMBOLDT COUNTY,
ROUTE 101 POST MILE R94.5

01-HUM-101-R94.5
EA 30320K

June 1999

Prepared by:



Steven Hansen
Associate Environmental Planner (Biologist)
Environmental Management Office
Caltrans, District 1

EXHIBIT NO. 7
APPLICATION NO. A-1-HUM-98-088
DRAFT MITIGATION PLAN
(Page 1 of 15)



LOCATION MAP



Scale 1" = 1/2 mile
0 1/4 1/2

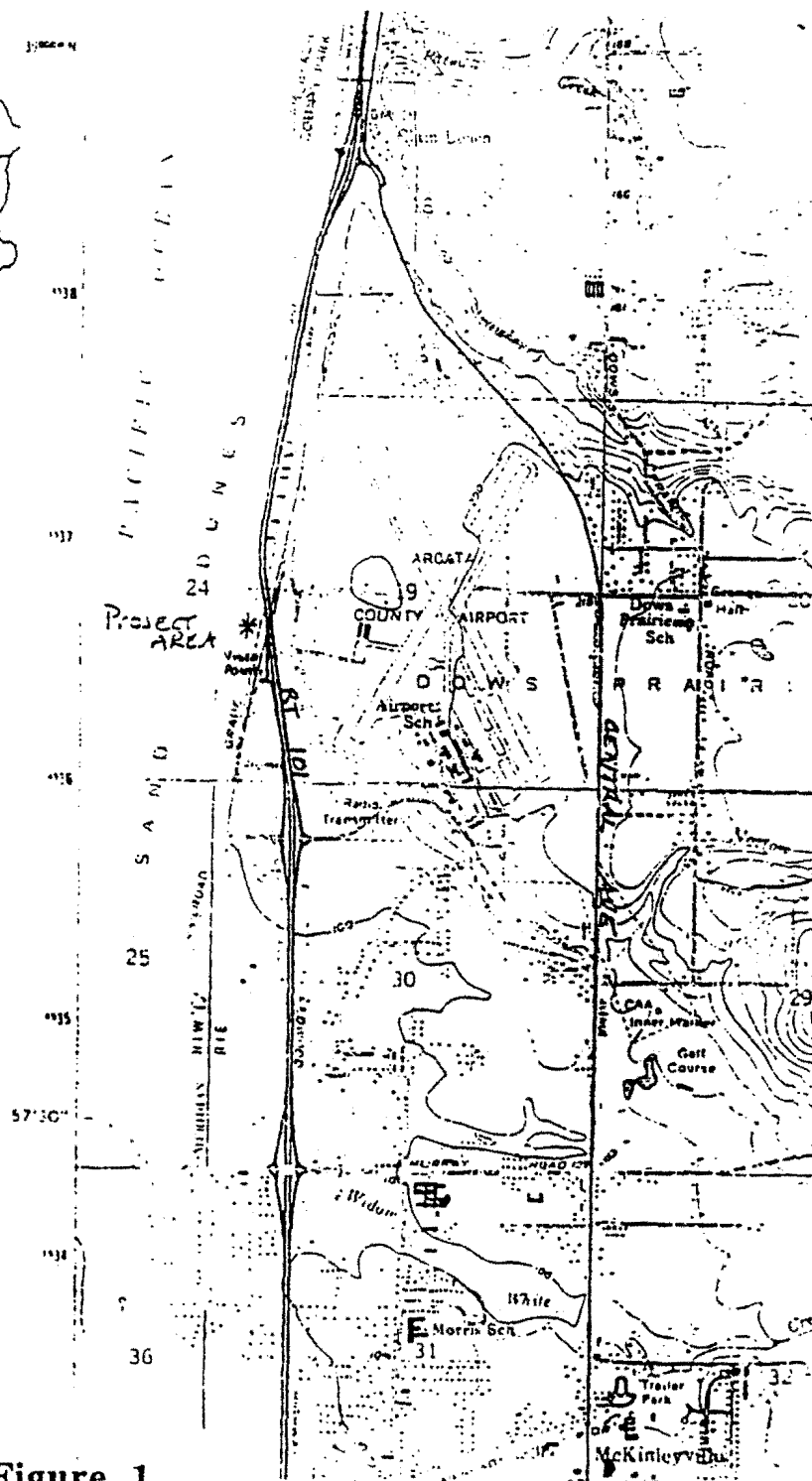


Figure 1

1 OSE: PROTECTION OF
HIGHWAY 101
DATUM: NGVD
ADJACENT PROPERTY OWNERS
COUNTY OF HUMBOLDT

LOCATION MAP

CALTRANS DISTRICT 01
PO BOX 3700
EUREKA, CA

Wetland Mitigation Site
MAD RIVER
MCKINLEYVILLE
COUNTY OF HUMBOLDT
APPLICATION BY: CALTRANS

I. PROJECT DESCRIPTION

Project Location

This project is located near Highway 101 and the community of McKinleyville, at post mile 94.5 in Humboldt County (figure 1).

Project History (Appendix 1)

In November 1991, Caltrans started an emergency repair project to prevent the loss of Highway 101 as a result of bank erosion from exposure to wave and tidal action at the mouth of the Mad River. Construction on this project started in January 1992.

The original project proposal on November 26, 1991 was for a linear strip of riprap along the base of the slope parallel with Highway 101 for 2300 feet to protect the highway from the Mad River. This preliminary proposal estimated wetland impacts of up to 5 acres by filling dune hollow wetlands. As the project progressed, it was scaled back to a linear strip of riprap 1300 feet long on December 5, 1991 which was estimated to impact 1.3 acres of dune hollow wetlands.

On February 5, 1992, after construction had started, the project was re-designed to place a curving strip of RSP along the natural bank of the Mad River that directed the flow seaward and prevented continued northward migration of the river mouth.

Permit History (Appendix 2)

The original U.S. Army Corps of Engineers permit identified both 1.3 acres of wetland impact (page 1), and 3.5 acres of wetland impact (Special Conditions to Permit No. 19454N66). The 12/20/91 wetland delineation prepared by Caltrans showed the 19-acre study area contained 3.0 acres of wetlands. The Caltrans project (December 5, 1991 proposal) would impact 1.3 acres of wetlands (Appendix 3).

On February 5, 1992, Caltrans requested an amendment to the Corps Permit (19454N66). This provided for a design change that would allow for construction of a curving strip of RSP along the natural bank of the Mad River that directed the flow seaward and prevented continued northward migration of the river mouth. This was what was constructed. A re-evaluation of impacts to jurisdictional wetlands was not included in the permit amendment request.

In 1995, Caltrans completed an extension of the riprap that extended upstream from the existing riprap for approximately 1050 feet. This project was permitted under a separate Corps permit (No. 020748-ON-66) and did not involve any impacts to jurisdictional wetlands.

Responsible Parties

The project proponent is the California Department of Transportation (Caltrans) in cooperation with the Federal Highway Administration (FHWA). The local contact person at Caltrans is

Deborah Harmon, Chief, Environmental Management Office, P.O. Box 3700, Eureka, CA 95502-3700, (707) 445-6416.

Project Impacts

Based on the analysis of aerial photographs taken June 2, 1992 and the wetland delineation map prepared December 20, 1991 we were able to determine the actual extent of impacts to jurisdictional wetlands from the construction of this project. Analysis of these photographs indicates the disturbance by construction activities of 0.76 acres of dune hollow wetlands and 6.09 acres of dune uplands.

An additional 11.1 acres of vegetated dunes containing 0.32 acres of dune hollow wetlands were washed away by the river before the bank stabilization project was initiated. The riprap used to protect the bank was placed within an excavation in the area that had already been eroded by the Mad River and covers approximately 2.25 acres. This does not include the 1995 riprap extension project.

The project, as constructed, resulted in disturbance of 6.85 acres of vegetated dunes containing 0.76 acres of interdunal swale wetlands, referred to as dune hollow wetlands (figure 2). These wetlands are fresh water wetlands within hollows between sand dunes. The hydrology for the wetland is related to the ground water table, and is influenced by seasonal precipitation, roadway drainage, and tidal fluctuations in the ground water table. Infrequently, the tidal surge may result in an influx of brackish water into the wetland.

Wetland Type, Function, and Value

This wetland functions as a specialized microhabitat for endemic plants and associated wildlife. Dune hollow wetlands may provide habitat for special status plant species, wildlife, and provide aesthetic and recreational opportunities for people. This wetland is within the view shed of the highway vista point at the Mad River Mouth, and is adjacent to the Clam Beach County Park. It does not provide habitat for any known rare or listed plant or animal species.

II. GOAL OF MITIGATION

The goal of the mitigation is to offset the loss of wetlands with dune hollow wetlands of a similar habitat function and value. Two mitigation sites were considered to compensate for the rip rap project impacts.

Mitigation Proposal

This mitigation and monitoring proposal provides Caltrans' plan of action for project related impacts to the 0.76 acres of dune hollow wetlands located adjacent to the riprap at the Mad River mouth.

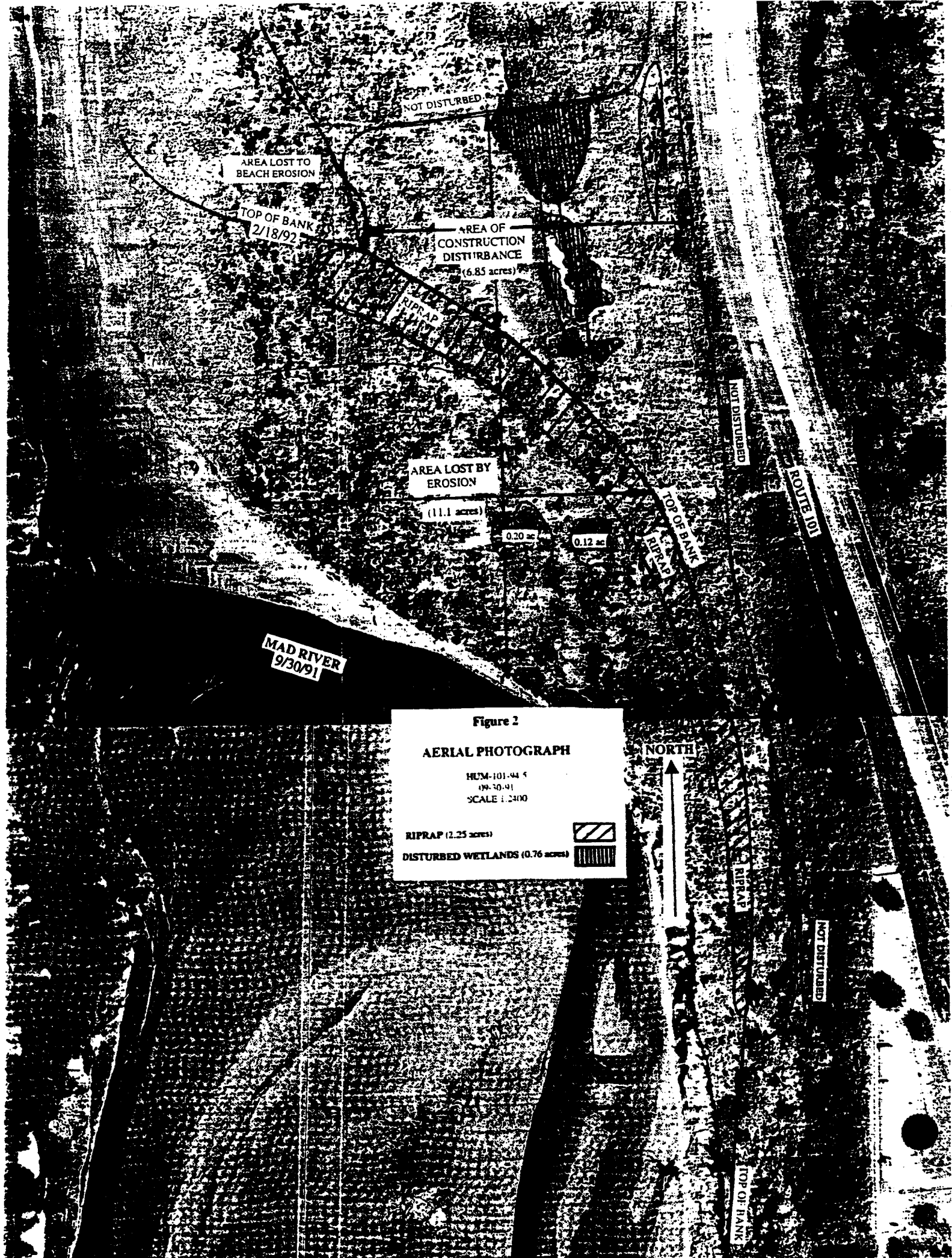


Figure 2
AERIAL PHOTOGRAPH
HUM-101-94 S
(9-30-91)
SCALE 1:2400
RIPRAP (2.25 acres)
DISTURBED WETLANDS (0.76 acres)

The on-site mitigation alternative consists of the restoration of the impacted 0.76 acres of dune hollow wetland on-site at a 1:1 ratio by restoring the existing degraded wetlands. An additional 0.84 acres of dune hollow wetlands may be created on-site for a total of 1.6 acres of wetlands. These wetlands have the potential to have the same function and value as the wetlands degraded or destroyed. They will also improve the aesthetic qualities of the construction site, and increase the overall area of dune hollow wetland in this vicinity.

The off-site mitigation alternative was to create approximately 5 acres of dune hollow wetland/upland which included 3.0 acres of dune hollow wetlands on City of Eureka property near the Eureka Municipal Airport on the Samoa Peninsula. This alternative is no longer being considered because this area has an abundance of known and suspected Native American archeological sites (Barry Douglas, pers. com.) which would be disturbed or destroyed by a wetland creation project. In addition, there is opposition from the county planners for the use of this site, and this site would be highly impacted by vandalism and illegal off-highway vehicle use.

Wetland Type, Function, and Value

The proposed mitigation will eventually provide the same quality wetlands on-site and contiguous with dune hollow wetlands in Clam Beach County Park. The Hammond Trail, a recreational hike/bike trail, is proposed for construction adjacent to these wetlands along the inland side. After restoration, the site will again provide habitat for a variety of wildlife species, and will provide non-consumptive recreational use opportunities such as natural scenic views of the dunes, bird watching and wildflower displays. The hydrology for the proposed wetland is related to the ground water table, and is influenced by seasonal precipitation and tidal fluctuations in the ground water table. Other than interflow through the sand, evaporation and transpiration by plant life, there is no outflow from the dune hollow.

Time Lapse

Since the completion of the riprap construction in April 1992, there has been very little revegetation of the extant disturbed wetland by native plant species within the project area. Limited willow, *Baccharis*, and *Juncus* recruitment has occurred, and there has been extensive invasion by European beach grass, bush lupine, and pampas grass. Based on this observed slow natural recovery rate, the long-term goal habitat is proposed to evaluate an early to mid seral stage of the vegetative community rather than the late seral stage found within the adjacent control plot. The time lapse for proposed monitoring and evaluation is five years from planting.

The wetland mitigation design and construction will occur upon approval of this mitigation and monitoring plan by the U.S. Army Corps of Engineers, County and State Coastal Commission, and other regulatory agencies. Mitigation design will include detailed soil treatment, planting, grading and fencing details. A one-year plant establishment monitoring will be a requirement of the construction contract. Subsequent monitoring and evaluation will be completed by Caltrans biologists. Remediation will be accomplished through separate contracts if found to be needed.

Estimated Cost

The funds available for wetland impact mitigation as a result of the Mad River riprap project are \$350,000 for planning, design, construction, and monitoring. Right-of-Way costs are not included since this parcel was acquired for construction staging and access related to the riprap placement. Contingency, maintenance, and supplemental planting costs are not estimated.

Special Aquatic Habitats

The interdunal swale wetland is a component of the dune / dune hollow complex formed along the windward beaches by wind-driven sand and the presence of surface water. The ratio between upland and wetland probably has a significant ecological value for indigenous plants and animals.

Also, the location of the dune hollows within the dune structure is probably an important component of the microclimate. In this location, we are fortunate enough to have adjacent dune / dune hollow habitats, which we will be using as a model to determine configuration, size, and location of the proposed dune hollow mitigation. The adjacent habitat will also be used as a control to provide the planting palette and to evaluate project success criteria.

III. FINAL SUCCESS CRITERIA

Target Function and Values

The proposed wetland mitigation target function is to provide similar and contiguous wildlife and plant habitat as is found within the control plot to the north. Site restoration will provide aesthetically pleasing views and opportunity for wildlife viewing.

The plant establishment objective is to have a first year survival rate of greater than 50% by stem count. Wetland revegetation will be considered successful if herbaceous plus woody cover is greater than 50% by the end of the five-year monitoring period, regardless of whether the plants were transplanted or volunteer. If cover is less than 50% at the end of the monitoring period, remedial planting will be done during the final monitoring year, and monitoring will continue until the success criteria is met or modified by consensus of the regulatory agencies.

Species diversity and evidence of natural reproduction will be evaluated in comparison to the control plot keeping in-mind the difference in seral stages. The objective for species diversity and natural reproduction will be met when plantings plus natural colonization diversity of dominant plant species approximates the control, and there is evidence that invasive non-native plants are being excluded naturally within the habitat.

Vegetation will consist of both persistent perennial species and non-persistent herbaceous annual species. Evaluation should be done in the late spring when the relative cover component of each group is present.

The target hydrologic regime is to have ponding up to 2 cm deep in 50% or more of the wetland from January to May (winter and spring) with soil saturation in the root zone (upper 30-cm) in 75 % or more of the wetland from January through July. This is to be compared with the control hydrology to meet or exceed the soil saturation and duration within the control plot.

Jurisdictional Acreage to be Created/Enhanced

The target acreage of wetlands to be restored (enhanced) is 0.76 acres with an additional 0.84 acres to be created for a total acreage of 1.6 acres within the 6.85-acre dune complex.

IV. PROPOSED MITIGATION SITE

Location and Size of Mitigation Area

The proposed mitigation site consists of graded sand dunes and degraded dune hollow wetlands adjacent to the riprap placed to divert the Mad River mouth. Grading disturbance, clearing and grubbing, and stockpiling rock for construction of the riprap degraded the wetlands. The disturbed areas have partially revegetated with a mix of beach strawberry, sand verbena, European beach grass, coyote brush, willow, wiregrass, yellow bush lupine, and pampas grass. The proposed mitigation will restore the 0.76 acre degraded wetland and expand the dune hollow wetlands to 1.6 acres by increasing the net wetland area within the disturbed construction zone (figure 3). The total disturbed area is 6.85 acres including uplands.

Ownership Status

The mitigation area is within a parcel of land owned by Caltrans. The purpose of this Right-of-Way parcel was to provide for a construction staging area. Since it is no longer required for construction staging, on-site restoration for wetland impacts is now being proposed. No other uses for this parcel are being considered. After the mitigation is complete, the parcel will remain in Caltrans ownership to allow for maintenance access to the riprap.

Existing Function and Values of Mitigation Area

To gain access onto the beach the public currently walks through the mitigation area. It provides a disturbed sand dune and dune hollow wetland habitat for colonization by plants that favor disturbed conditions. It is used by various wildlife species for foraging habitat. It detracts from the aesthetic value of the surrounding area.

Jurisdictional Delineation

A jurisdictional delineation map prepared in June 1999 shows that the site contains approximately 0.76 acres of wetlands with atypical soils and atypical vegetation (figure 4). The presence of ponding and wetland hydrology within this area during a substantial portion of the growing season, and colonization by native wetland vegetation leads to the conclusion that, if left undisturbed, this portion of the site would eventually recover into a functional dune hollow

Figure 3

**PROPOSED MITIGATION AREA
WETLAND MITIGATION SITE**

June 16, 1999

Project Boundary.....

Wetland Boundary.....

Aerial Photograph 4/1/99
Scale 1:2400

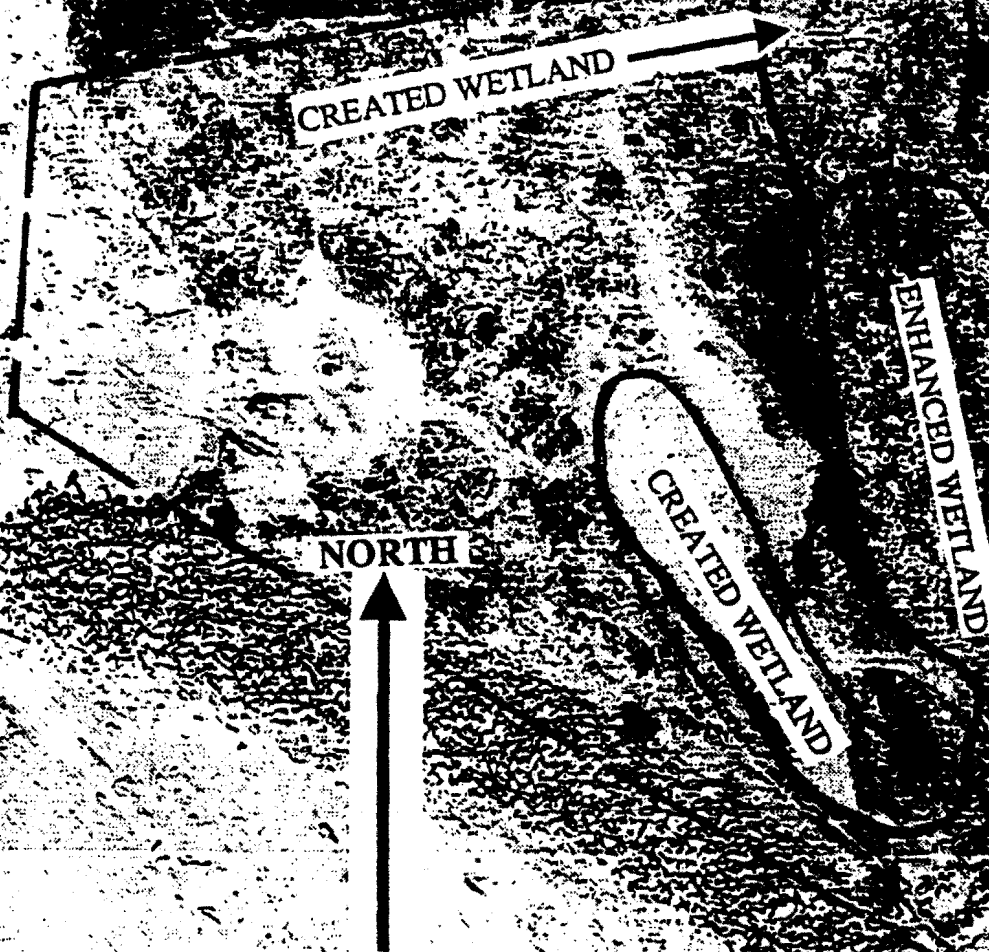


Figure 4

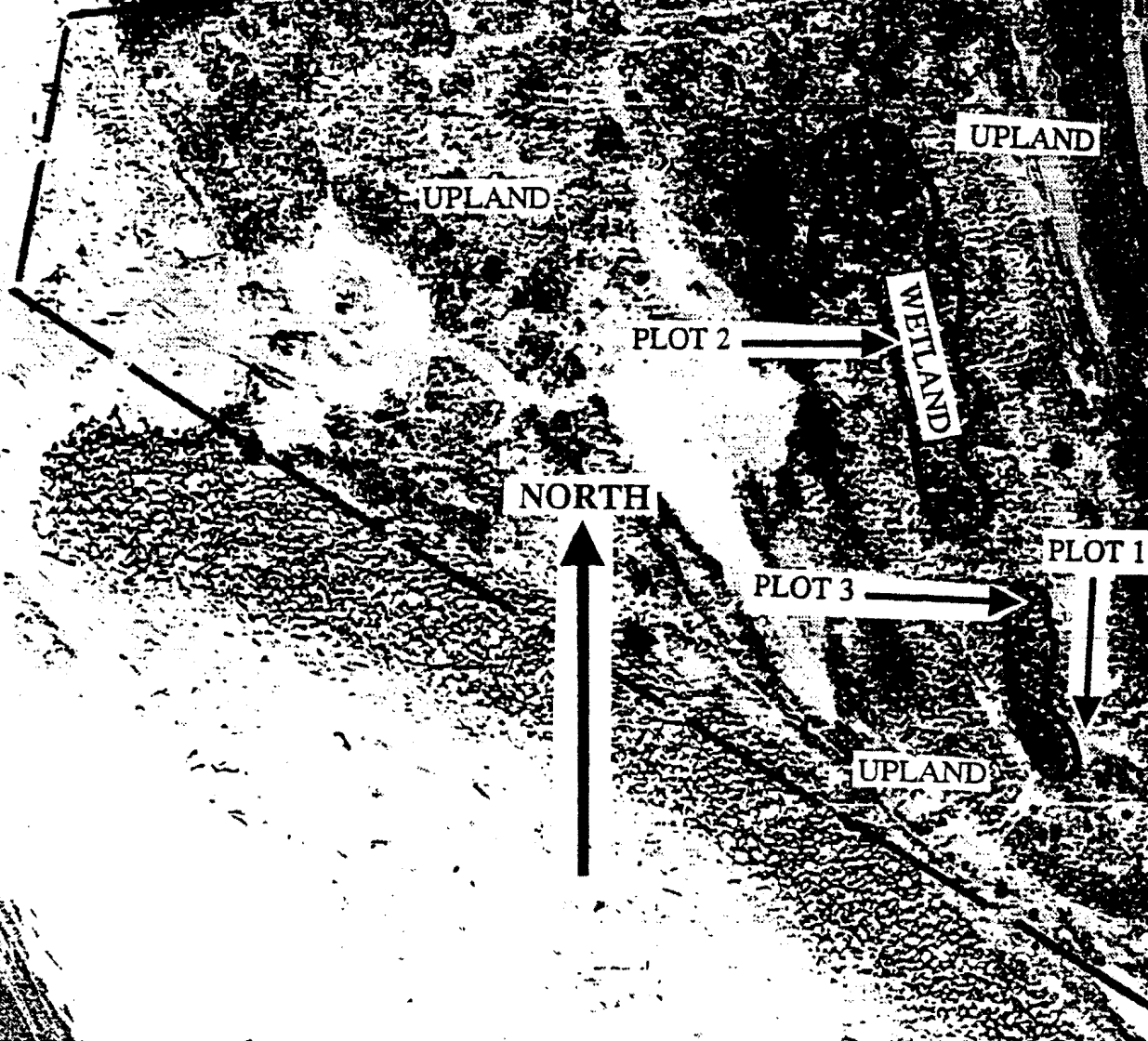
**WETLAND DELINEATION
WETLAND MITIGATION SITE**

April 7, 1999

Study Area.....

Wetland Boundary...

Aerial Photograph 4/1/99
Scale 1:2400



wetland. The remainder of the site (6.09 acres) would continue to provide dune upland habitat with the dominant vegetation consisting of European beach grass.

Present and Proposed Uses of Adjacent Areas

The adjacent areas both north and south are zoned recreational and part of Clam Beach County Park. The area to the east is Highway 101 and to the west is the ocean. No change in use is expected to occur in the future.

Zoning

The county zoning of this area is "Public Recreation (PR)" with a defined purpose: to protect publicly owned lands suitable for recreational development or resource protection. The zoning to the north is also PR, with areas of "Natural Resources (NR)" within the parcels at Clam Beach County Park. The area south of the river mouth is zoned PR with lands further south zoned NR.

The defined purpose of NR zoning is to protect and enhance valuable fish and wildlife habitats and provide for public and private use of their resources, including hunting, fishing, and other forms of recreation. The site is within County Coastal Zone jurisdiction.

V. IMPLEMENTATION PLAN

Rationale for Expecting Implementation Success

The site currently consists of 0.76 acres of degraded dune hollow wetlands, which will be enhanced through grading and revegetation. The likelihood of success in this effort is excellent, based on the extant colonization of wetland vegetation and the naturally occurring hydrology. Success of the creation of an additional 0.84 acres of dune hollow wetlands is dependent on the occurrence of natural fresh-water hydrology at a shallow depth and sufficient duration to support a dune hollow wetland. If the natural hydrology is not present, then the attempted wetland creation will progressively revert to upland vegetation over time.

Responsible Parties

The mitigation proposal has not yet been assigned to a Project Manager. Until that happens, the local contact person at Caltrans is Deborah Harmon, Chief, Environmental Management Office, P.O. Box 3700, Eureka, CA 95502-3700, (707) 445-6416.

Schedule

The preliminary schedule for this monitoring plan is as follows:

Draft Mitigation Plan, Review	June 1999
Final Mitigation Plan, Review and Adopt	August 1999
Draft Construction Plans, Permits	June 2000
Final Plans, Specifications and Estimates	December 2000
Construction: Grading	September 2001

Construction: Planting
Monitoring
Remedial Planting (As required)

December 2001
June 2002 - 2007
February 2003 - 2007

Site Preparation

A site grading plan and quantity estimate will be prepared using a survey of the existing topographic condition. Depth of the grading will be determined by the placement of groundwater monitoring wells within the proposed dune hollow wetland. This will result in hollows and ridges (artificial dunes) similar in topography to the adjacent natural dune hollow wetlands/uplands to the north. Ridge and hollow elevations and orientation will correspond to the natural landscape. The site will be graded to an elevation that will sustain a dune hollow wetland through groundwater interflow hydrology. Graded soil will be used to create the ridges within the dune hollow complex. If there is a surplus of sand to be removed to establish the proper elevations for dune hollow wetlands, this material will be placed on the riprap. Volumes and grading plans

Subsequent to grading, invasive non-native plants remaining within the wetland mitigation area will be removed by hand. The plant material will be disposed of by burning or by off-site disposal. The site will be signed, and fenced with wire field fence to protect it from illegal OHV activity. The fence will be maintained through the monitoring period.

Planting Plan

Species	Spacing	Quantity	Plant
<i>Juncus leseurii</i> Salt rush	18 in.	15,488	plug
<i>Carex obnupta</i> Slough sedge	18 in.	15,488	plug
<i>Rubus ursinus</i> California blackberry	4 ft.	2,178	container
<i>Potentilla anserina</i> Pacific silverweed	4 ft.	2,178	stolons
<i>Salix hookeriana</i> Coast willow	6 ft.	968	cutting
<i>Myrica californica</i> Wax myrtle	10 ft.	348	container
<i>Lonicera involucrata</i> Twinberry	10 ft.	348	container
<i>Picea sitchensis</i> Sitka spruce	15 ft.	154	container
<i>Baccharis pilularis</i> Covote brush	3 ft.	3,872	cutting

Figure 5 Planting Table
(50% Cover Density)

mitigation.

Invasive pest plants will be removed from the wetland areas by hand on an annual basis. Depending on the magnitude of the problem, this will be done by Caltrans staff during periodic maintenance and monitoring, or by supplemental contract.

Responsible Parties

The maintenance of the mitigation site will be assigned to a Maintenance Manager upon completion of the construction contract. Until that happens, the local contact person at Caltrans is Deborah Harmon, Chief, Environmental Management Office, P.O. Box 3700, Eureka, CA 95502-3700, (707) 445-6416.

Maintenance Schedule

The proposed periodic maintenance schedule is for one site visit in the late spring (May or June) and one site visit in the late fall (October). This will provide the opportunity for the removal of exotic pest plants before they complete the reproductive cycle, but after they have reached maturity and are easily recognized. Unscheduled visits to maintain the fencing will be done on an as-needed basis.

VII. MONITORING PLAN

Performance Criteria

Plant establishment will be monitored for one year by the contractor with an objective of having a plant survival rate of 50%. At the end of the first year, supplemental planting to replace missing and dead plants will be done to achieve the 50% survival criteria. A second year of monitoring would then be required from the contractor to achieve the 50% plant establishment criteria.

The objective at five years is a 50% canopy cover within the dune hollow wetland consisting of both annual and perennial species. Canopy cover will be evaluated at three randomly selected locations within the wetland which encompass a large enough area to be representative of the habitat type. Plant species diversity and evidence of natural reproduction will be evaluated in comparison to the control plot keeping in-mind the difference in seral stages. The objective for species diversity and natural reproduction will be met when plantings plus natural colonization diversity of dominant plant species approximates the control, and there is evidence that invasive non-native plants are being excluded naturally within the habitat.

Monitoring Methods

Monitoring will be done in the late spring to account for the presence of both herbaceous annuals and perennial plant groups in the mitigation area. Evaluation techniques may use aerial photographs, remote sensing, quadrats, visual observations, photo stations and other qualitative

evaluation techniques for determining plant cover and density. Measurements within the control plots will be done concurrently. The results of the mitigation monitoring will be compared with measurements taken in the control plots and evaluated for progress, success, or failure. If the mitigation objectives are not reached, the site plan will be reevaluated to determine why, and if appropriate, additional planting will be done the following winter to meet the project plant establishment objectives.

Caltrans will provide biologists for site monitoring and reporting; and will initiate supplemental planting or exotic pest plant removal if they are required for the site objectives to be met.

Annual Reports

A report on the progress of the mitigation site will be prepared for the first year evaluation by January 2003. Subsequent reports shall be prepared annually in January. The final report on the five-year objectives will be prepared by January 2008. Copies of the report will be provided to the Corps.

The annual reports shall include:

- a. A list of names of all persons who prepared the report and participated in the monitoring activities
- b. A copy of the Corps Permit, any attached Special Conditions, and any subsequent letters of modification, as an Appendix
- c. Analysis of all qualitative monitoring data (success, failure, and remedial action). Graph and table format is preferred.
- d. Prints of all monitoring photographs (colored copies are acceptable).
- e. Maps identifying monitoring areas, transects, planting zones, etc. as appropriate.

Copies of all field data sheets shall be available for Corps review upon request.

VIII. COMPLETION OF MITIGATION

The completion of the initial site development will be reported to the Corps in an "As Built" report for the mitigation project. Completion of the mitigation plan and level of attainment will be reported in the final mitigation report, which should be completed in January 2008. If remedial planting and additional monitoring is necessary, the final report will be provided after the project meets the success criteria.

IX. CONTINGENCY MEASURES

Initiating Procedures

If additional plantings are required, Caltrans may do them through contracting. Generally, these contracts utilize the California Conservation Corps for planting crews, but they may be awarded to private contractors, as needed. With the concurrence of the Corps, initiation of the supplemental planting contracts will result when Caltrans monitoring reports indicate a lack of success in meeting stated plan objectives, and the supplemental planting is determined to be desirable.

Alternative Locations for Contingency Mitigation

No other locations are currently being considered as alternative mitigation sites. If the proposed site does not meet the necessary mitigation for a 1:1 ratio of wetland impacts, discussions with the Corps and other regulatory agencies will be initiated to determine if off-site mitigation is necessary or desirable.

Funding Mechanism

If contingency procedures are determined to be necessary to achieve the mitigation goals, Caltrans, with FHWA participation, will make funding available.

Responsible Parties

Caltrans will implement the mitigation monitoring and contingency procedures. The local contact person at Caltrans is Deborah Harmon, Chief, Environmental Management Office, P.O. Box 3700, Eureka, CA 95502-3700, (707) 445-6416.

X. REGULATORY REQUIREMENTS

The construction of the mitigation site will satisfy regulatory permits issued by the Corps of Engineers for the placement of the riprap. For Section 404 permitting, it is expected that the site construction will meet the requirements of Nationwide Permit 27 "Wetland and Riparian Restoration and Creation Activities". A coastal development permit from Humboldt County will be required. A 401 Certification/Waiver from the Regional Water Quality Control board is required. Since the restoration project does not involve jurisdictional waters of the state, nor state listed species, no permit from the California Department of Fish and Game is required. However, the California Department of Fish and Game will be provided the opportunity to review and comment on the mitigation proposal.

The project is not within coho salmon designated critical habitat and will have no effect on this species. Consultation with National Marine Fisheries Service is not required.