

CH2M HILL

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October 28, 2002

Ms. Kristy Chew
Siting Project Manager
California Energy Commission
1516 Ninth Street, MS-15
Sacramento, CA 95814

RE: Data Responses, Set 3J
Cosumnes Power Plant (01-AFC-19)

On behalf of the Sacramento Municipal Utility District, please find attached 12 copies and one original of the Data Responses, Set 3J, in response to Staff's Data Requests dated April 5, 2002.

Please call me if you have any questions.

Sincerely,

CH2M HILL

A handwritten signature in blue ink that reads "John L. Carrier".

John L. Carrier, J.D.
Program Manager

c: Colin Taylor/SMUD
Kevin Hudson/SMUD
Steve Cohn/SMUD

**COSUMNES POWER PLANT
(01-AFC-19)**

DATA RESPONSE, SET 3J
(Responses to Data Requests: 201 and 206)

Submitted by
**SACRAMENTO MUNICIPAL
UTILITY DISTRICT (SMUD)**

October 28, 2002



2485 Natomas Park Drive, Suite 600
Sacramento, California 95833-2937

**COSUMNES POWER PLANT (01-AFC-19)
DATA RESPONSES, SET 3J**

Technical Area: Biological Resources

Authors: Melinda Dorin and Rick York

CPP Authors: EJ Koford and Russel Huddleston

BACKGROUND

At the Data Response Workshop on February 24, 2002 there was a discussion between staff and EJ Koford about the response to Data Request 8 and the anticipated schedule for the federal lead agency to initiate consultation. Table BR-8 shows the anticipated consultation schedule as well as two potential lead agencies. It was stated during the Data Response Workshop that the U.S. Army Corps of Engineers (ACOE) will act as the federal lead agency for the project, but that has not been confirmed.

DATA REQUESTS

201. Provide a new proposed schedule that identifies when the Biological Assessment will be submitted to the USFWS and NMFS, and when CDFG permits (2081 and 1601) and Regional Water Quality Control Board 401 certification applications will be submitted.

Response: In Data Response Set 3D, three copies of the Streambed Alteration Agreement Application that were submitted to CDFG on June 3, 2002, were provided as Attachment BR-201A and three copies of the Preliminary Draft Biological Resources Assessment (BRA) are also provided as Attachment BR-201B.

Since then, the Streambed Alteration Agreement (SAA) was amended to cover an additional 35 crossings. Five copies of the amended SAA were provided as Attachment BR-201A3, Data Response Set 3G.

Provided as Attachment BR-201A2 is a October 22, 2002 letter to Warden Carolyn Dooty regarding amending the SAA for the Franklin Boulevard realignment of the gas pipeline.

BACKGROUND

Data Response 20 (Set 1H) provided figures depicting wetland areas located within 125 feet of the 26-mile natural gas alignment and a very general summary of the wetlands.

Data Requests 19 and 20 requested a figure (with a scale of 1"=100') outlining the vernal pools and where jurisdictional wetlands occur within 250 feet of the linear facilities and a table that estimates the amount of wetland habitat that may be directly or indirectly impacted with a 250-foot buffer surrounding vernal pools, respectively.

**COSUMNES POWER PLANT (01-AFC-19)
DATA RESPONSES, SET 3J**

DATA REQUEST

206. Please provide the wetland delineation surveys that were completed for the alignment. Include a figure with the delineation points mapped, the wetland delineation sheets that were completed, a timeline for when the wetland delineation will be submitted to the Army Corps of Engineers for jurisdictional wetland classification, and a discussion of when consultation with the USFWS is expected.

- **Response:** Wetland delineation surveys for the gas pipeline were submitted to the CEC on May 20, 2003 (Data Response 206, Set 3C). The wetland delineation for the CPP plant site and laydown area was submitted on June 7th (Data Response, Set 3D). Additional information about the wetland delineation regarding the Franklin Boulevard realignment (referred to as Segment 3a) and the laydown area is included as Attachment BR-206F. Attachment BR-206F includes the following documents:
 - October 24, 2002 letter to Justin Cuttler from EJ Koford
 - October 10, 2002 Technical memo from Steven Long to EJ Koford
 - CPP Wetland verification figures: Tiles 3, 3a, 4, 24, and 25

**COSUMNES POWER PLANT (01-AFC-19)
DATA RESPONSES, SET 3J**

Attachment BR-201A3

Letter to Carolyn Dooty



CH2MHILL

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October 22, 2002

164746

Warden Carolyn Doody
California Department of Fish and Game
770 Beach Drive
Rio Vista, CA 94571

Subject: AMENDMENT TO STREAMBED ALTERATION AGREEMENT R2002-246

Dear Miss Doody:

Thank you for discussing SMUD's upcoming gas pipeline construction for the Rancho Seco Power Plant with me yesterday. CH2M HILL is assisting SMUD in procuring environmental permits for the power plant and pipeline. This letter confirms the changes we see may be necessary in the project and to request your advice on any amendments to the SAA that may be implied.

In a meeting with USFWS on October 10, 2002, USFWS indicated they felt the gas pipeline alignment west of UPRR between Elk Grove and Franklin Boulevard would cause impacts to vernal pool crustaceans and *strongly* urged an alternative route. SMUD proposed as an alternative that the pipeline turn east on the south side of Elk Grove Boulevard, then south on the east side of Franklin Boulevard to the UPRR crossing, and then continue on the east side of UPRR south as previously proposed. This new segment is referred to as "Segment 3a." It will be more costly to construct than the previous proposal, but will avoid impacts to vernal pools and swales.

The previous SAA included as Crossing No. 3, an unnamed drainage that is the western portion of the Laguna South Canal. Segment 3a crosses this same drainage on the east side of Franklin Boulevard bridge. Therefore, SMUD would like to revise the SAA to authorize crossing at this new location.

As of October 10, 2002 the area east of Franklin Road bridge was dewatered but supported bulrush vegetation on both sides of the canal. However, according to plans filed with the City of Elk Grove, this area will be substantially altered by imminent and approved construction. SMUD understands that a concrete culvert will be placed in the channel and Franklin Boulevard extended approximately 50 feet to the east. The remainder of the channel to the east will be graded and cleared for additional flood capacity. The East Franklin Development plans show residential development adjacent to and on the east side of the future Laguna South Canal. SMUD has not procured detailed plan drawings of the bridge improvements or a schedule as yet, and therefore cannot provide detailed drawings

Carolyn Doody
Page 2
October 24, 2002
164746

at this time. SMUD believes that the pipeline crossing can be coordinated with existing construction such that no additional vegetation removal or clearing would be necessary.

Please advise if you require additional information regarding this crossing at this time. You can contact me at (916) 286-0305 for any questions or further details.

Sincerely,

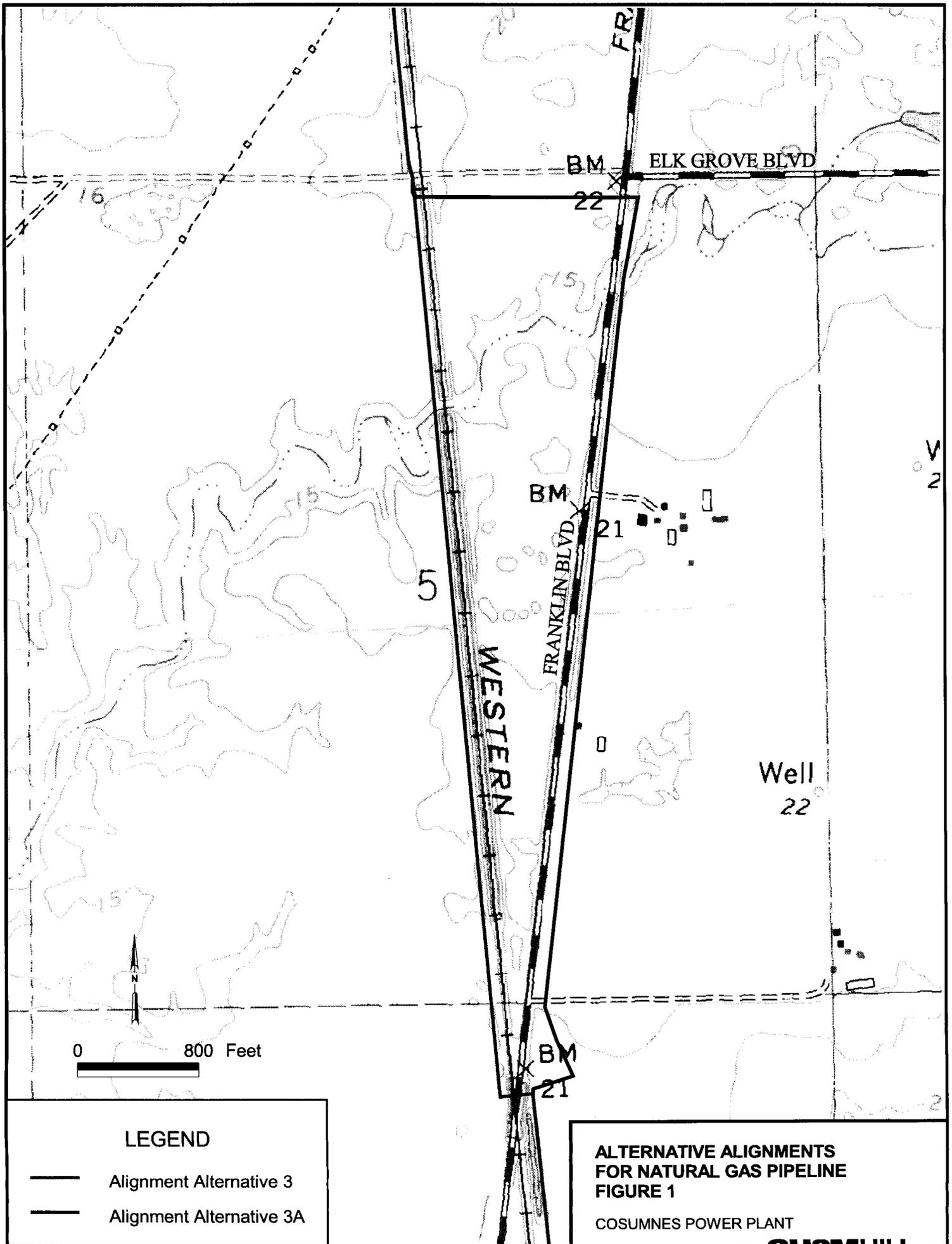
CH2M HILL



EJKoford
Senior Biologist

SAC\Document1

c: Dale Watkins; CDFG, 1701 Nimbus Road, Sacramento, CA 95670
K. Hudson



**COSUMNES POWER PLANT (01-AFC-19)
DATA RESPONSES, SET 3J**

Attachment BR-206F

Additional Wetland Delineation Data



CH2MHILL

CH2M HILL
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October 24, 2002

Justin Cutler
Army Corps of Engineers
1325 J Street
Sacramento, CA 95814

Subject: Cosumnes Power Plant Project, Wetland Delineation Report Revised
Segment 3a and Laydown Area Data

Dear Mr. Cutler:

As you know, SMUD is proposing to build a 26-mile pipeline from the Carson Cogeneration Facility to a new power plant to be located near the Rancho Seco Power Plant. Because of the size of the project, the wetland delineation was submitted in two parts; one describing the pipeline and one describing the power plant site and laydown area. The parts are different in that impacts along the pipeline are nearly all temporary, whereas impacts to the project site are generally permanent. From consultations with you, we anticipate that one permitting action under Section 404 of the Clean Water Act would result from the overall project.

Since we submitted our previous delineation information on May 15 and June 3, 2002 we have made minor revisions to the construction corridor to avoid oak trees, elderberries and small wetlands, as well as responded to USFWS and public concerns. The two most significant concerns are:

- The USFWS has strongly urged SMUD to propose a gas pipeline alignment along the east side of Franklin Boulevard to avoid impacts to endangered vernal pool species.
- SMUD has proposed a revised construction laydown area south of Clay East Road that extends further south, but avoids cultural sites to the east and wetlands to the west.

CEC staff and the USFWS expressed concern about the biological impacts of the gas line alignment south of Elk Grove Boulevard, and requested that SMUD consider an alternate route down Franklin Boulevard. The alternate route would have fewer impacts on wetlands, as the area east of Franklin Boulevard is currently being cleared for residential development. SMUD is preparing an analysis to list and evaluate these impacts, but requests the ACOE verify the alternate route in addition to the proposed route. The alternate route is shown on Tile 3a of 25. The environmental analysis and alternate will be selected before ACOE needs to prepare NEPA analysis.

Enclosed with this submittal are figures and data sheets to supplement information previously provided to you:

- 1) One set of 3 11 x 17 color images depicting the revised Segment 3a alignment along Franklin Boulevard. These are Tiles 3, 3a and 4 of the enclosed package. As previously they show the proposed pipeline corridor, the construction corridor, jurisdictional and other wetlands, sampling points, and elderberry shrubs. The construction area is enclosed by a polygon depicting the limits of the project for purposes of ACOE verification. Along the pipeline all wetlands were delineated by CH2M HILL.
- 2) One set of 2 11 x 17 color images depicting the revised construction laydown area south of Clay East Road. Tiles 24 and 25 show the revised proposal. The eastern end shows the overlay of the proposed plant site and drainages that would be affected by construction.
- 3) A technical memorandum and figures describing wetland features of the revised construction laydown area, dated October 10, 2002. This memorandum contains detailed figures of topography, wetlands, and datasheets from the wetland delineation done for the laydown area.

SMUD is requesting verification of the wetland delineation and determination of jurisdictional wetland areas. We will be using this information from the Corps to seek authorization for project construction activities under an individual 404 permit. SMUD has met with the USFWS on September 19 and October 10, 2002 to discuss the contents of a Biological Assessment, which will probably be required and has prepared a draft for submittal when you are ready.

This delineation, along with the data sheets provided on May 15, and June 3, 2002, comprise our complete wetland delineation for the project. If you have any questions, or require further clarification, please do not hesitate to contact me at (916) 286-0305.

Sincerely,

CH2M HILL


EJ Koford
Senior Biologist

cc. K. Hudson
CEC
Enclosures

Consumnes Power Plant Project, Wetland Delineation for Site and Laydown Areas

PREPARED FOR: EJ Koford/CH2M HILL
PREPARED BY: Steven Long and Russell Huddelston/CH2M HILL
DATE: October 10, 2002

Introduction

SMUD is proposing to construct a new gas-fired power plant on the site adjacent to the Rancho Seco Power Plant (Figure 1). Because of the size of the project, the wetland delineation was prepared in two segments and conveyed to Mike Finan of the U.S. Army Corps of Engineers (Corps). The first segment addressed the 26-mile gas supply pipeline (CH2M HILL, 2002a), the second segment addressed the power plant site and laydown area (CH2M HILL, 2002b).

Since the original reports were conveyed to the Corps, modifications to the laydown area were made in response to initial agency comments requesting a reduction in wetland impacts. The shape and size of the laydown area was changed, which required an expanded area for the wetland delineation. This memorandum provides the wetland delineation information for the final proposed laydown area and surrounding areas. The information presented in this technical memorandum supercedes any laydown area wetland delineation information previously submitted in previous reports (i.e., CH2M HILL 2002 a,b). As previously discussed with the Corps, we anticipate a single permitting action under Section 404 of the Clean Water Act would result from the overall project.

The objective of this memorandum is to provide sufficient information to support a determination from the U.S. Army Corps of Engineers (Corps) of the limit of jurisdictional waters of the U.S. (including wetlands) in the proposed laydown area to be considered along with the overall project area. The Corps is ultimately responsible for making a determination based on the definition of waters of the U.S. and criteria set forth in the 1987 Corps Wetland Delineation Manual (WTI, 1987).

SMUD is requesting verification of the wetland delineation for the proposed power plant site, access road and laydown area, as well as, the linear pipeline routes. We will be using this information from the Corps to seek authorization for project construction activities under an individual 404 permit.

Methods

The 1987 Wetland Delineation Manual (WDM) requires an examination for the presence of indicators of three mandatory diagnostic characteristics. These characteristics, or wetland parameters, are hydrophytic vegetation, wetland hydrology, and hydric soils. Except in limited instances, the 1987 WDM requires that evidence of a minimum of one positive

indicator from each of the three mandatory wetland parameters be present for an area to be called a wetland under Section 404 jurisdiction.

A wetland delineation was initially conducted for the proposed laydown area south of Clay East Road by CH2MHILL personnel on February 13 and 14, 2002. As previously mentioned, this information was included in the wetland delineation report for the proposed 26-mile natural gas supply pipeline (dated May 15) that has been conveyed to the Corps. An additional wetland delineation was completed by CH2M HILL personnel for the modified laydown area and surrounding areas on September 24 and 25, 2002. The complete information for the laydown area is provided again in this report in order to present a concise documentation of associated wetlands at the project laydown area. Delineated wetland areas are shown on Figure 2 and the corresponding Routine Wetland Determination Data Forms are included in Appendix A.

Potential wetland impact areas associated with the project laydown area are shown in Figure 3. The total area of potential impact for the laydown area is summarized in Table 1.

Proposed Activities and Anticipated Wetland Impacts.

It is anticipated that portions of an existing seasonal stream (SW1) and three seasonal wetland swales (SW1A, SW2, and SW3) would be filled during construction of the laydown area and the power plant site (see Figure 3). In addition, vernal pools would be filled at the following locations: VP2, VP3, and VP12 through VP15). These areas would both be graded to provide a suitable surface for storing construction materials and for construction of the proposed gas fired power generation facilities.

The surface water would be diverted to the west side of the laydown area. This diverted water would be channeled through existing natural drainage swales where possible or excavated swales where needed to convey the water toward the northwest corner of the laydown area. From this point, the water would be conveyed through an excavated channel along the west side of the project site and empty back into the original drainage channel north of the proposed plant site.

It is anticipated that the surface water diversions will be done in a manner that will create a new stream channel that will provide similar habitat values as the channels that would be lost. The choice of diverting the water to the west, rather than the east of the laydown pad, was indicated by the fact that the vernal pools in the western portion of the site were of higher quality than those on the east side of the drainage. It was felt that the western portion of the property offered the highest potential for using the diverted surface water for enhancement of existing vernal pools and seasonal wetland swales. In addition, the swale and mound surface topography also provides some options for potential creation of additional wetland habitat.

As documented in the original May 29, 2002 technical memorandum describing wetland impacts at the project site and laydown area (CH2M HILL, 2002b), three degraded seasonal wetland areas were identified on the project site north of the proposed power plant and stormwater detention basin (DEC, 2000). The areas were designated as DSW1, DSW2, and DSW3 (shown on Figure 2 in the May 29, 2002 memorandum) and were determined to be 1.224 acres, 0.228, and 0.349 acres in size, respectively. It was reported that these areas had been previously used as acid rinsing basins when the former nuclear power plant was in

operation. These basins are essentially devoid of vegetation to this date. It is proposed that these degraded basins be considered for restoration to offset some of the wetland losses associated with the aforementioned construction activities. The three basins would provide a potential on site wetland mitigation area of 1.801 acres (CH2M HILL, 2002b).

A summary of the areas of impacts in potential jurisdictional waters of the U.S. associated with proposed activities in the laydown area is provided in Table 1.

TABLE 1. WETLANDS AND OTHER WATERS OF THE UNITED STATES THAT WILL BE POTENTIALLY IMPACTED BY THE PROPOSED LAYDOWN AREA CONSTRUCTION ACTIVITIES ASSOCIATED WITH THE CONSUMNES POWER PLANT PROJECT

Location/ID	Type	Size (acres)
LD SS1	Seasonal stream	0.350
LD SW1A	Seasonal wetland, swale	0.105
LD SW2	Seasonal wetland, swale	0.202
LD SW3	Seasonal wetland, swale	0.133
LD SW4	Seasonal wetland, swale	0.107
LD VP2	Vernal pool	0.023
LD VP3	Vernal pool	0.006
LD VP12	Vernal pool	0.005
LD VP13	Vernal pool	0.006
LD VP14	Vernal pool	0.004
LD VP15	Vernal pool	0.011
Subtotal for seasonal wetland swales and stream		0.896
Subtotal for vernal pools		0.055
Total for all wetland areas and other waters of the U.S in laydown area.		0.951

Note:

Wetland descriptions developed from in-field surveys and wetland data sheets. Potential areas of wetland impacts determined from ground level perimeter surveys of the delineated areas overlain onto proposed project features.

Discussion

The total areal impact to jurisdictional wetlands and other waters of the U.S. associated with the proposed activities at the project site and laydown area is estimated to be 0.951 acres,

which accounts for approximately 2% of the 48.730 acres surveyed. Of this total, 0.055 acres is represented by vernal pools, and 0.896 is represented by seasonal streams and swales.

It is proposed that the seasonal stream diversion associated with the laydown area and the plant site be completed in a manner that will help recreate some of the habitat values lost by diverting the streams. By diverting the water to the west side of the laydown area, it is felt that there will be increased opportunities to enhance existing vernal pools and wetland swales and to create additional wetland habitats. A culvert would be installed beneath Clay East Road to permit water to flow northward past the plant site and back into the original drainage channel northeast of the plant site.

As previously discussed, it is anticipated that three degraded wetland areas on the north side of the plant site would be restored to provide on-site mitigation for some of the wetland losses anticipated by the project. These wetland areas are essentially devoid of vegetation to this date and were degraded because of historical use as acid rinsing basins when the former nuclear power plant was in operation.

This memorandum has been prepared to obtain Corps concurrence with the wetland delineation as shown in the laydown area and to facilitate Corps review of the potential project impacts to jurisdictional wetlands and waters of the U.S. It is also intended to support consultations for proposed mitigation options for the anticipated wetland losses. If you have any questions or require further clarification, please do not hesitate to contact me at (916) 286-0258.

References

CH2M HILL. 2002a. Consumnes Power Plant Project, Wetland Delineation for Natural Gas Supply Pipeline, Technical Memorandum, dated May 15.

CH2M HILL. 2002b. Consumnes Power Plant Project, Wetland Delineation for Site and Laydown Areas, Technical Memorandum, dated May 29.

Davis Environmental Consulting (DEC). 2000. *Wetland Delineation Report for the Proposed South Sacramento Power Plant at Rancho Seco Sacramento County, California*. Prepared for Sacramento Municipal Utility District. June

NRCS. 1993. *Soil Survey of Sacramento County*. April.

Wetland Training Institute, Inc. (WTI). 2001. *Field Guide for Wetland delineation: 1987 Corps of Engineers Manual*. WTI 01-2. Glenwood, NM.