Michael Brandman Associates

ENVIRONMENTAL COMPLIANCE • PLANNING • RESOURCES MANAGEMENT

August 5, 1995

Mr. Keith O. Van Holt
Director of Community Services
City of Costa Mesa
P. O. Box 1200
Costa Mesa, California 92628-1200

Subject: Jurisdictional Delineation of Fairview Park Vernal Pools, Costa Mesa, Orange County, California.

Dear Mr. Van Holt:

This letter report summarizes our preliminary findings of U.S. Army Corps of Engineers (Corps) and California Department of Fish and Game (CDFG) jurisdiction for the above-referenced property.[1] On May 19, 1995 a regulatory specialist and botanist of Michael Brandman Associates (MBA) examined the project site to determine the limits of Corps jurisdiction pursuant to Section 404 of the Clean Water Act, and CDFG jurisdiction pursuant to Division 2, Chapter 6, Section 1601 of the Fish and Game Code. Enclosed is a 100-scale aerial photograph, with topographic contours superimposed on an aerial photograph of the site [Exhibit 1], which depicts the areas of Corps jurisdiction. Photographs to document inundation within the vernal pool basins, as well as vegetation within the basins, are provided as Exhibit 2. Wetland data sheets are attached as Appendix A.

I. METHODOLOGY

Prior to conducting the field delineation, a 100-scale black and white aerial photograph with superimposed topographic contours, historic aerial photographs, and the USGS topographic map Newport Beach (dated 1965 and photorevised 1981) were examined to determine the locations of potential locations of vernal pool habitat. Water levels in the basins were monitored visually approximately every two weeks beginning on January 14, following significant rainfall which resulted in ponding of the vernal pool basins.

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[1]This report presents our best effort at determining the subject jurisdictional boundaries using the most up-to-date regulations and written policy and guidance from the regulatory agencies; however, only the regulatory agencies can make a final determination of jurisdictional boundaries.

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In the process of performing the delineation, suspected vernal pool basins were field-checked for the presence of wetland vegetation, soils and hydrology.[2] Vernal pool basins on the site were evaluated using the methodology set forth in the U.S. Army Corps of Engineers Wetland Delineation Manual[3] (Wetland Manual). While in the field, the jurisdictional area was recorded onto a 100-scale black and white aerial photograph using visible landmarks. Other data were recorded onto wetland data sheets.

The Soil Conservation Service (SCS) has mapped the following soils as occurring in the general vicinity of the project site: Myford sandy loam, 0 to 2 percent; and Cropley clay, 2 to 9 percent. Neither of these soil units is identified as hydric in the SCS's publication, Hydric Soils of the United States[4].

II. JURISDICTION

A. U.S. Army Corps of Engineers

Pursuant to Section 404 of the Clean Water Act, the Corps regulates the discharge of dredged and/or fill material into waters of the United States. The term "waters of the United States" is defined at 33 CFR Part 328 and includes (1) all navigable waters (including all waters subject to the ebb and flow of the tide); (2) all interstate waters and wetlands; (3) all other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce; (4) all impoundments of waters mentioned above; (5) all tributaries to waters mentioned above; (6) the territorial seas; and, (7) all wetlands adjacent to waters mentioned above.

Wetlands are defined at 33 CFR 328.3(b) as "those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and which under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions." In 1987 the Corps published a manual to guide its field personnel in determining

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[2] Vegetation indicators were clearly present at the time of the delineation; however as part of a separate task, plants within the basins were monitored through the beginning of August. Complete results of the botanical surveys are included in a separate report.

[3] Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1, U.S. Army Engineer Waterways Experimental Station, Vicksburg, Mississippi.

[4] United States Department of Agriculture, Soil Conservation Service. 1991. Hydric Soils of the United States, 3rd Edition, Miscellaneous Publication Number 1491. (In cooperation with the National Technical Committee for Hydric Soils.)

jurisdictional wetland boundaries. The methodology set forth in the 1987 Wetland Manual generally requires that, in order to be considered a wetland, the vegetation, soils, and hydrology of an area exhibit at least minimal hydric characteristics. While the manual provides great detail in methodology and allows for varying special conditions, a wetland should normally satisfy each of the following three parameters:

> more than 50 percent of the dominant plant species at the site must be typical of wetlands (i.e., rated as facultative or wetter in the National List of Plant Species that Occur in Wetlands[5]);
>
> soils must meet the criteria for hydric soils, as developed by the National Technical Committee for Hydric Soils which defines hydric soils as "a soil that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part".[6]
>
> hydrologic characteristics must indicate that the ground is saturated to within 12 inches of the surface for at least five percent of the growing season during a normal rainfall year.[7]

B. California Department of Fish and Game

Pursuant to Division 2, Chapter 6, Sections 1600-1603 of the California Fish and Game Code, the CDFG regulates all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake which supports fish or wildlife.

CDFG defines a "stream" (including creeks and rivers) as "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation." CDFG's definition of "lake" includes "natural lakes or man-made reservoirs."

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[5] Reed, P.B., Jr. 1988. National List of Plant Species that Occur in Wetlands. U.S. Fish and Wildlife Service Biological Report 88(26.10).

[6] U.S. Department of Agriculture, Natural Conservation Service. 1995. For vernal pools and other similar types of wetlands, the hydic soil criteria which must be satisfied is the criteria of being ponded for long duration (seven to one month) or very long duration (greater than one month).

[7] For most of low-lying southern California, five percent of the growing season is equivalent to 18 days.

Thus, CDFG jurisdictional limits closely mirror those of the Corps. Exceptions are CDFG's exclusion of isolated wetlands (those not associated with a river, stream, or lake), the addition of artificial stock ponds and irrigation ditches constructed on uplands, and the addition of riparian habitat supported by a river, stream, or lake regardless of the riparian area's federal wetland status. Vernal pools, as isolated wetlands, are not subject to CDFG's jurisdiction pursuant to Section 1600 of the California Fish and Game Code.

III. RESULTS

A. Corps Jurisdiction

A total of seven vernal pool basins and one vernal marsh were observed at Fairview Park [Exhibit 1]. Corps jurisdiction, associated with the seven vernal pool basins and one vernal marsh, totals approximately 3.40 acres of waters of the United States.[8] The boundaries of the waters of the United States are depicted on Exhibit 1.

1. Vernal Pool Basin 1

Vernal Pool Basin 1 [Exhibit 2, Photographs A and B], covers 2.07 acres and is the largest basin observed in the park. Historically, the basin appears to have been approximately twice its current size, having extended into the area into which fill material was placed for purposes of capping Archeological Site Ora-58 [Exhibit 3].

The center of the basin is vegetated with dense stands of creeping spikerush (*Eleocharis macrostachya*, OBL), water-wort (*Elatine* sp., OBL), and low bulrush (*Scripus cernuus*, OBL). The perimeter of the basin is vegetated with a number of annual species typically found in vernal pool habitats. These included dwarf wooly-heads (*Psilocarphus brevissimus*, OBL), prostrate navarretia (*Navarretia prostrata*), Virginia rockcress (*Sibara virginica*, OBL), prostrate verbena (*Verbena bracteata*), water pygmy-weed (*Crassula aquatica*, OBL), spreading alkali-weed (*Cressa truxillensis*, FACW), hyssop-leaved loosestrife (*Lythrum hyssopifolia*, FACW), smooth spike-primrose (*Epilobium pygmaeum*, OBL), purslane speedwell (*Veronica peregrina*, OBL) and alkali mallow (*Malvella leprosa*, FAC).

The soil in the basin exhibited gleying (10YR 3/1) and inundation was observed from January 15 to March 11.[9]

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[8]The distinction between vernal pool and vernal marsh is based upon the vegetation present. In the area designated as vernal marsh, although wetland indicator species were predominant, no indicator species for vernal pool habitat were observed.

[9]Localized areas within the basin were still ponded on April 30.

2. Vernal Pool Basin 2

Vernal Pool Basin 2 [Exhibit 2, Photographs C], covers 0.05 acre and is located immediately north and adjacent to Basin 1. It appears that this basin was part of Basin 1 prior to filling activities which separated this basin from Basin 1.

The eastern two-thirds of the basin is a near monoculture of smooth spike-primrose and the western one-third is predominately hyssop-leaved loosestrife. Other species include dwarf wooly-heads, low bulrush, creeping spikerush, rabbitsfoot grass (*Polypogon monspeliensis*, FACW+), and alkali mallow.

The soil in the basin exhibited gleying (10YR 3/1) and inundation was observed from January 15 to March 11.

3. Vernal Pool Basin 3

Vernal Pool Basin 3 [Exhibit 2, Photograph D], covers 0.02 acre and is located immediately north and adjacent to Basin 2. It appears that this basin was also part of Basin 1 prior to filling activities which separated this basin from Basins 1 and 2.

This basin is a near monoculture of dwarf wooly-heads with occassional individuals of creeping spikerush, smooth spike-primrose, hyssop-leaved loosestrife, rabbitsfoot grass, alkali mallow and canary grass (*Phalaris minor*, NI).

The soil in the basin exhibited gleying (10YR 3/1) and inundation was observed from January 15 to March 11.

4. Vernal Pool Basin 4

Vernal Pool Basin 4 [Exhibit 2, Photograph E], covers 0.05 acre and is located southeast of Basin 1 and adjacent Canyon Drive. The basin is dominated by creeping spikerush and smooth spike-primrose. Other species include curly docks, hyssop-leaved loosestrife, dwarf wooly-heads, rabbitsfoot grass and prostrate knotweed (*Polygonum aviculare*).

The soil in the basin exhibited gleying (10YR 3/1) and inundation was observed from January 15 to March 11.

5. Vernal Marsh

Vernal marsh [Exhibit 2, Photograph F], covers 0.25 acre and is located south of Basin 4 and adjacent Canyon Drive. The vegetation associated with this basin is characteristic of a vernal marsh rather than a vernal pool. The basin is dominated by curly docks and prostrate knotweed with some dense patches of creeping spikerush. Other species typical of vernal marsh include cocklebur (*Xanthium*

strumarium), bristly ox tongue (*Picris echioides*), bermuda grass (*Cynodon dactylon*), and tall flatsedge (*Cyperus eragrostis*).

The soil in the basin exhibited gleying (10YR 3/1) and inundation was observed from January 15 to March 11.

6. Vernal Pool Basin 5

Vernal Pool Basin 5 [Exhibit 3, Photographs G and H], covers 0.90 acre and is located east of Basin 1 and adjacent to the turfgrass portions of the park. The vegetation is characteristic of vernal pools and includes dwarf wooly-heads, western marsh cudweed (*Gnaphalim palustre*, FACW), smooth spike-primrose, purslane speedwell, hyssop-leaved loosestrife, water fern (*Marsilea vestita*, OBL), toad rush (*Juncus bufonius*, FACW+), prostrate navarretia, and water pygmy-weed. Other wetland species observed included saltgrass (*Distichlis spicata*, FACW), brass buttons (*Cotula coronipifolia*, FACW+), curly docks, rabbitsfoot grass, matted broom-spurge (*Chamaesyce serpens*, FAC), tall flatsedge and a few scattered cattails (*Typha* sp., OBL).

The soil in the basin exhibited gleying (10YR 3/1) and inundation was observed from January 15 to March 11.

7. Vernal Pool Basin 6

Vernal Pool Basin 6 covers approximately 0.04 acre and is located southeast of Basin 6 near the fenceline at the corner of the property. The basin is somewhat degraded by trash which has been dumped there. The vegetation includes creeping spikerush, purslane speedwell, hyssop-leaved loosestrife, smooth spike-primrose, curly docks spreading alkali weed, and small patches of dwarf wooly heads.

The soil in the basin exhibited gleying (10YR 3/1) and inundation was observed from January 15 to March 11.

8. Vernal Pool Basin 7

Vernal Pool Basin 7, is the smallest basin, and covers less than 0.01 acre (approximately 300 square feet). The basin is somewhat inconspicuous, located in a *Hordeum* dominated grassy field approximately 250 feet west of Basin 6. The vegetation in the small basin is dominated by dwarf wooly heads and hyssop-leaved loosestrife. Prostrate navarretia, smooth spike-primrose and rabbitsfoot grass were also observed.

The soil in the basin exhibited gleying (10YR 3/1) and inundation was observed from January 15 to March 11.

B. CDFG Jurisdiction

Pursuant to Section 1600 of the Fish and Game Code, CDFG does not regulate activities in isolated wetlands. The vernal pools at Fairview Park are isolated wetlands, not connected to streams or lakes. Therefore, there is no CDFG jurisdiction associated with the eight vernal pool basins.

IV. DISCUSSION

A. Corps Regulations and Procedure

The discharge of dredged or fill material (temporarily or permanently) into waters of the United States requires prior authorization from the Corps pursuant to Section 404 of the Clean Water Act. Activities that usually involve a regulated discharge of dredged or fill materials include (but are not limited to): grading, pouring concrete, laying sod, preparing soil for planting (e.g., turning soil over, adding soil amendments[10]), excavation, stockpiling excavated material, excavating, and mechanized removal of vegetation. Activities that do not involve a regulated discharge (if performed in a manner to avoid discharges) clearing of vegetation using hand-held equipment, and working above the ground surface,[11] pumping water, and walking or driving non-track vehicles.

Federal law recognizes wetlands and other waters of the United States as valuable natural resources. Therefore, federal agencies, principally the Corps, USFWS, and EPA, strongly discourage activities within federal jurisdiction that alter aquatic habitats. In addition, Corps policy, derived from the National Environmental Policy Act, prohibits "piece-mealing," the submission of separate permit applications for discharges which are reasonably related to the same project.

1. Nationwide Permits

The Corps has issued 36 nationwide permits (NWPs) that preauthorize specific minor discharges. Generally, use of these NWPs does not require review by the Corps or any other federal agency. Formulation of a project design in which all proposed discharges into waters of the United States are authorized under NWPs could reduce federal permit processing time to a few days (except for a few NWPs which require a pre-discharge notification to the Corps, USFWS, EPA, and CDFG).

NWP number 26 authorizes the discharge of dredged or fill material into waters of the United States (located above the headwaters or isolated from other waters of the United States) that would

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[10] Similar planting activities associated with on-going farming operations may be exempt from regulation by Section 404 of the Clean Water Act.

[11] Weed abatement, if performed using power equipment (i.e. various types of mowers) would not be considered a discharge so long as there is no disturbance (turning over as in discing) of the soil.

adversely affect less than 10 acres of such waters. The calculation of affected acreage for this NWP need not include the acreage affected by other NWPs (such as those cited above), but must include adverse effects related to non-regulated activities such as flooding, draining, and excavation of waters of the United States. If less than one acre of waters of the United States is adversely modified by the proposed project, the district engineer need not be notified of the proposed discharge. However, it is sometimes advisable that a letter be sent to the Corps informing them of the proposed discharge and requesting written confirmation that the discharge is authorized by the Corps. If the area of adverse modification caused by the discharge is between one and ten acres then the prospective permittee must obtain approval from the Corps on a case-by-case basis through the pre-discharge notification process.

a. Pre-discharge Notification Process

Some NWPs require that the Corps approve each use of the NWP on a case-by-case basis. The process of obtaining this approval is called a pre-discharge notification. Obtaining authorization through the pre-discharge notification process is not automatic, and may require a processing time of three months or more.

Notification to the Corps must include (1) the permittee's name, address, and telephone number; (2) location of the project; (3) description of the project, its purpose, its impacts, and information about other Corps authorization needed;[12] (4) a delineation of special aquatic sites (if required by the NWP); and (5) a statement that the permittee has contacted the USFWS regarding the potential presence of any endangered species at the site, and has also contacted the State Historic Preservation Officer regarding the potential presence of any historic properties at the site.

The Corps has 30 days to obtain input from USFWS, EPA, and CDFG and to complete its review of the notification. If the permittee has not received notice from the Corps within that 30-day period, the permittee may assume that authorization has been approved.

b. Conditional Use of Nationwide Permits

The use of the NWPs is subject to a set of general conditions published at 33 CFR 330 Appendix A, Section C. Particular attention should be paid to ensure compliance with three specific conditions dealing with (1) endangered species; (2) cultural resources; and, (3) state water quality certification.

In regard to 401 water quality certification, condition number 9 states that an individual 401 water quality certification must be obtained or waived. In the past, the State of California has waived the 401 water quality certification requirement for all projects authorized by nationwide permits.

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[12] Many Corps districts (including the Los Angeles District) have issued written policy clarifying that their intent is to receive a small version of an environmental assessment with each notification.

However, with the issuance of the new nationwide permits in 1992, the California Water Quality Control Board has decided that individual 401 water quality certification, or a waiver of certification, will be required for use of all nationwide permits.

In regard to endangered or threatened species, condition number 11 states that no activity is authorized under any NWP if the activity is likely to jeopardize the continued existence of a federally-listed threatened or endangered species, or a species proposed for such designation as identified under the Federal Endangered Species Act, or which is likely to destroy or adversely modify the critical habitat of such species. If the activity may adversely affect a listed species, the Corps must initiate and complete a Section 7 consultation pursuant to the Endangered Species Act. The district engineer may, at his option, complete the consultation and allow the activity to be authorized by NWP, or he may at any time take discretionary authority (i.e., require that an individual permit be obtained for the proposed activity). If any federally-listed (or proposed for listing) endangered or threatened species or critical habitat might be affected by the proposed project, <u>or is in the vicinity of the project</u>, the permittee must not commence work and must notify the Corps.

In regard to cultural resources, condition number 12 states that no activity which may affect historic properties listed, or eligible for listing in the National Register of Historic Places, is authorized until the Corps has complied with 33 CFR 325, Appendix C. The permittee must notify the district engineer if the proposed activity may adversely affect historic properties which the National Park Service has listed, or determined eligible for listing, on the National Register of Historic Places.

c. Expiration of Nationwide Permits

Nationwide permits are issued for a period of 5 years. The 36 nationwide permits became effective on January 21, 1992. If not modified or reissued, these nationwide permits will expire on January 21, 1997. In the past, reissued NWPs have had a "grandfather clause" that allowed discharges into waters of the United States to continue for one year beyond the expiration of the NWPs provided that the work on the project had commenced in reliance of the NWP prior to the date of its expiration.[13]

A letter of verification from the Corps, stating that the proposed work is authorized by nationwide permit may be obtained for any nationwide permit, but must be obtained for those nationwide permits for which "notification" is required by condition number 13. The letter of verification is valid only for a stated period of time (usually two years) after which it expires. If a continuation is required, a new letter would have to be obtained, possibly requiring that the "notification" process be undertaken a second time.

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[13] The Corps has determined that being under contract prior to expiration of the NWPs to have work commence is equivalent to having started the work prior to expiration of the NWPs.

B. Management Recommendations

1. Weed Abatement

As stated above, a number of activities are regulated when performed in jurisdictional wetlands, as such activities are considered to be a discharge of fill material. Generally, the placement of any fill material or distubance of the soil (by discing or bullbozing for example) is regulated and requires authorization from the Corps. Weed abatement should only be done by mowing above the ground surface if such mowing extends into the basins. Flagging of the basins prior to such activities can prevent all disturbance of the basins.

2. Recreational Useage

None of the current recreational uses within the park are in conflict with preservation of the vernal pool habitat. The area has been used for a variety of recreational uses including jogging, bicycling, walking dogs, and in particular flying model airplanes. Given that these activities have been ongoing and given that the vernal pool habitat is quite healthy, it appears that all of these uses can coexist without restrictions to any of the groups.[14]

3. Potential Restoration

Based upon an evaluation of historic aerial photographs, it appears that the fill material placed upon Archeological Site Ora-58 resulted in reducing the size of Vernal Pool Basin 1 by approximately one-half. Restoration of the basin could be accomplished by removal of the stockpiled material. Potential impacts to Archeological Site Ora-58 resulting from removal of the stockpiled material would need to be coordinated with the Corps.

If you have any questions about this letter report, please contact Tony Bomkamp at (714) 250-5555.

Sincerely,

MICHAEL BRANDMAN ASSOCIATES

Tony Bomkamp

Tony Bomkamp
Regulatory Specialist

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[14] In particular, use of the site by model airplane enthusiasts has been ongoing for many years. Their use of the site, including the mowing of "runways" through areas of the vernal pool habitat, has not contributed to degradation of the vernal pool habitat.

Photograph A Vernal Pool basin 1 during wet phase.

Photograph B: Vernal Pool Basin 1 during vegetated phase

Photograph C: Vernal Pool Basin 2 during vegetated phase

Photograph D Vernal Pool basin 3 during vegetated phase.

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exhibit 2

Site Photographs A-D

Fairview Park Vernal Pool Habitat Jurisdictional Delineation

Photograph E Vernal Pool basin 4 during vegetated phase.

Photograph F: Vernal Marsh during vegetated phase

Photograph G: Vernal Pool Basin 6 during wet phase

Photograph H Vernal Pool basin 6 during vegetated phase.

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exhibit 2

Site Photographs E-H

Fairview Park Vernal Pool Habitat Jurisdictional Delineation

Photograph A Vernal Pool basin 1 during wet phase.

Photograph B: Vernal Pool Basin 1 during vegetated phase

Photograph C: Vernal Pool Basin 2 during vegetated phase

Photograph D Vernal Pool basin 3 during vegetated phase.

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exhibit 2

Site Photographs A-D

Fairview Park Vernal Pool Habitat Jurisdictional Delineation

Photograph E Vernal Pool basin 4 during vegetated phase.

Photograph F: Vernal Marsh during vegetated phase

Photograph G: Vernal Pool Basin 6 during wet phase

Photograph H Vernal Pool basin 6 during vegetated phase.

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exhibit 2

Site Photographs E-H

Fairview Park Vernal Pool Habitat Jurisdictional Delineation

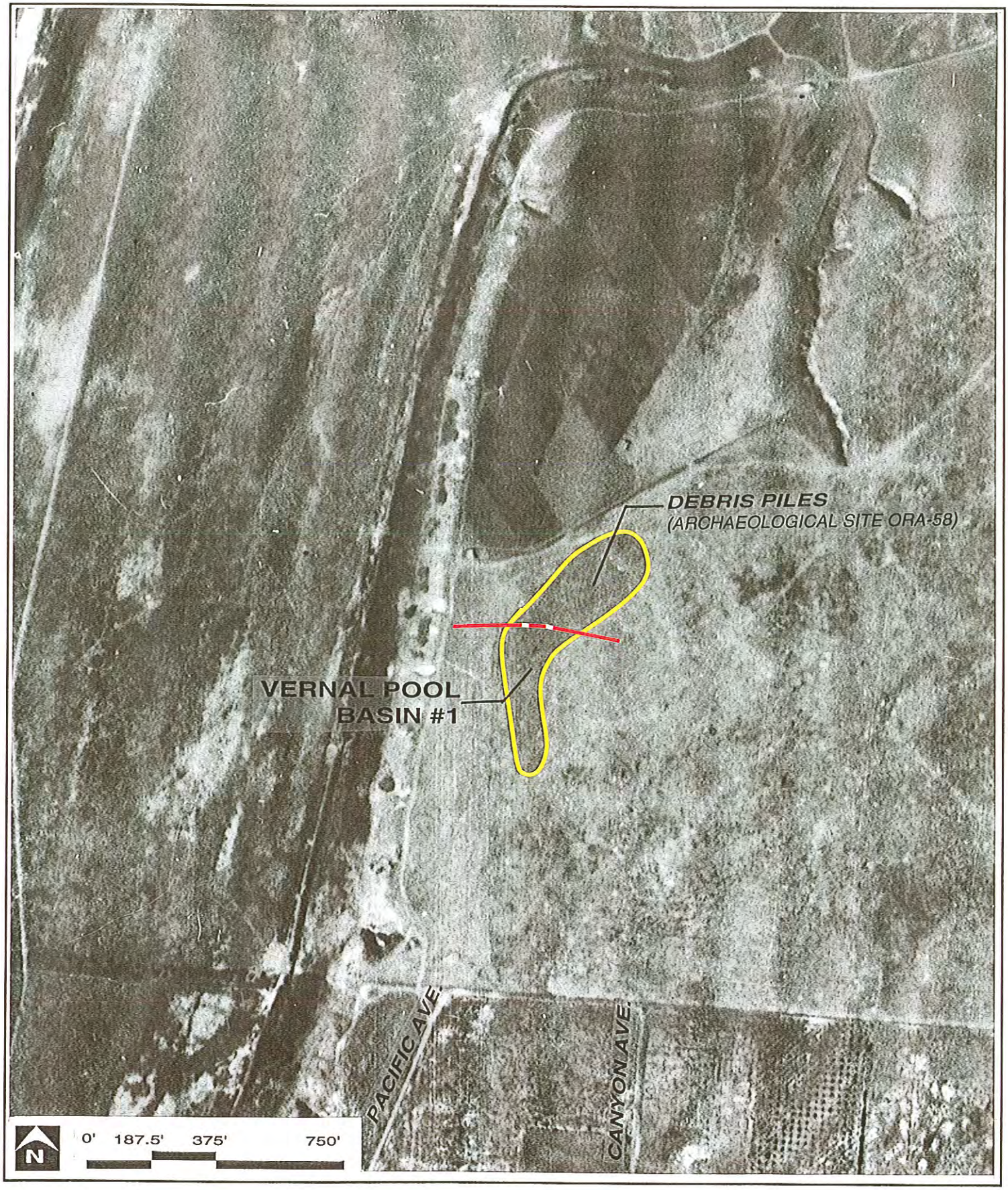

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exhibit **3**

Historical Aerial Photograph (1927)

Fairview Park Vernal Pool Habitat Jurisdictional Delineation

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DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: FAIRVIEW PARK
Applicant/Owner: COSTA MESA
Investigator(s): TBirmkamp

Date: 5-19-95
County: OR
State: CA

Do Normal Circumstances exist on the site? X Yes ___ No
Is the site significantly disturbed (Atypical Situation)? ___ Yes X No
Is the area a potential Problem Area? ___ Yes X No
(If needed, explain on reverse or attach separate sheet.)

Community ID: ___
Transect ID: ___
Plot ID: POOL 1

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Eleocharis macrostachya	H	OBL	9.		
2. Scirpus cernua	H	OBL	10.		
3. Elatine sp	H	OBL	11.		
4. Navarretia prostrata	H	OBL	12.		
5. Psilocarphus brevissimus	H	OBL	13.		
6. Rumex crispus	H	FACW	14.		
7. Lythrum hyssopifolia	H	FACW	15.		
8. Epilobium pygmaeum	H	FACW	16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks:
1. Assume presence of wetland vegetation? X Yes ___ No
2. Rooted emergent vegetation present? ___ Yes ___ No

HYDROLOGY

___ Recorded Data (Describe in Remarks):
___ Stream, Lake, or Tide Gauge
___ Aerial Photographs
___ Other

___ No Recorded Data Available

Field Observations:
Depth of Surface Water: ___ (in.)
Depth to Free Water in Pit: ___ (in.)
Depth to Saturated Soil: ___ (in.)

Wetland Hydrology Indicators:
Primary Indicators:
X Inundated – observed Between Jan 15 TO LATE MARCH
___ Saturated in: ___ Upper 12" ___ 13-18"
___ Water Marks
___ Drift Lines
___ Sediment Deposits
___ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required):
___ Oxidized Root Channels in: ___ Upper 12" ___ 13-18"
___ Water-Stained Leaves
___ Local Soil Survey Data
___ FAC-Neutral Test
___ Other (Explain in Remarks)

Observations and Remarks:
1. *Filamentous or sheet forming algae present?* ___ *Yes* ___ *No*
2. *Slope:* ___ *0-2%; or* ___ *> 2%*
3. *Oxidized rhizospheres:* ___ *new roots only;* ___ *old roots only;* ___ *new and old roots, or* ___ *none*
4. *Flooding:* ___ *none, flooding not probable;* ___ *rare, unlikely but possible under unusual weather conditions;* ___ *occasional, occurs on an average of once or less in 2 years, or* ___ *frequent, occurs on an average of more than once in 2 years.*
5. *Duration:* ___ *very brief, if < 2 days;* ___ *brief, if 2-7 days, or* ___ *long, if > 7 days*
6. *Site ponds water?* ___ *Yes* ___ *No*

*All additions in italics are by Huffman & Associates, Inc.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: FAIRVIEW PARK Applicant/Owner: COSTA MESA Investigator(s): J Bonkamp	Date: 5-19-95 County: OR State: CA
Do Normal Circumstances exist on the site? X Yes ___ No Is the site significantly disturbed (Atypical Situation)? ___ Yes X No Is the area a potential Problem Area? ___ Yes X No (If needed, explain on reverse or attach separate sheet.)	Community ID: ___ Transect ID: ___ Plot ID: POOL 2

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Epilobium pygmaeum	H	FACW	9.		
2. Lythrum hyssopifolia	H	FACW	10.		
3. Psilocarphus brevissimus	H	OBL	11.		
4. Polypogon monspeliensis	H	FACW	12.		
5. Eleocharis macrostachya	H	OBL	13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks:
1. Assume presence of wetland vegetation? ___ Yes ___ No
2. Rooted emergent vegetation present? ___ Yes ___ No

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

___ No Recorded Data Available

Field Observations:
- Depth of Surface Water: ___ (in.)
- Depth to Free Water in Pit: ___ (in.)
- Depth to Saturated Soil: ___ (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- X Inundated OBSERVED FROM JAN 15 TO LATE MARCH
- ___ Saturated in: ___ Upper 12" ___ *13-18"*
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in: ___ Upper 12" ___ *13-18"*
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Observations and Remarks:
1. *Filamentous or sheet forming algae present?* ___ *Yes* ___ *No*
2. *Slope:* ___ *0-2%; or* ___ *> 2%*
3. *Oxidized rhizospheres:* ___ *new roots only;* ___ *old roots only;* ___ *new and old roots, or* ___ *none*
4. *Flooding:* ___ *none, flooding not probable;* ___ *rare, unlikely but possible under unusual weather conditions;* ___ *occasional, occurs on an average of once or less in 2 years, or* ___ *frequent, occurs on an average of more than once in 2 years.*
5. *Duration:* ___ *very brief, if < 2 days;* ___ *brief, if 2-7 days, or* ___ *long, if > 7 days*
6. *Site ponds water?* ___ *Yes* ___ *No*

**All additions in italics are by Huffman & Associates, Inc.*

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Fairview Park Applicant/Owner: COSTA MESA Investigator(s): TTBornkamp	Date: 5-19-95 County: OR State: CA
Do Normal Circumstances exist on the site? X Yes ___ No Is the site significantly disturbed (Atypical Situation)? ___ Yes X No Is the area a potential Problem Area? ___ Yes X No (If needed, explain on reverse or attach separate sheet.)	Community ID: ___ Transect ID: ___ Plot ID: POOL 3

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Psilocarphus brevissimus	H	OBL	9.		
2. Epilobium pygmaeum	H	FACW	10.		
3. Lythrum hyssopifolia	H	FACW	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks:
1. Assume presence of wetland vegetation? X Yes ___ No
2. Rooted emergent vegetation present? ___ Yes ___ No

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

___ No Recorded Data Available

Field Observations:
- Depth of Surface Water: ___ (in.)
- Depth to Free Water in Pit: ___ (in.)
- Depth to Saturated Soil: ___ (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- X Inundated observed from JAN 15 to LATE March
- ___ Saturated in: ___ Upper 12" ___ *13-18"*
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in: ___ Upper 12" ___ *13-18"*
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Observations and Remarks:
1. *Filamentous or sheet forming algae present?* ___ *Yes* ___ *No*
2. *Slope:* ___ *0-2%; or* ___ *> 2%*
3. *Oxidized rhizospheres:* ___ *new roots only;* ___ *old roots only;* ___ *new and old roots, or* ___ *none*
4. *Flooding:* ___ *none, flooding not probable;* ___ *rare, unlikely but possible under unusual weather conditions;* ___ *occasional, occurs on an average of once or less in 2 years, or* ___ *frequent, occurs on an average of more than once in 2 years.*
5. *Duration:* ___ *very brief, if < 2 days;* ___ *brief, if 2-7 days, or* ___ *long, if > 7 days*
6. *Site ponds water?* ___ *Yes* ___ *No*

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**All additions in italics are by Huffman & Associates, Inc.*

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: FAIRVIEW PARK Applicant/Owner: COSTA MESA Investigator(s): [illegible]	Date: 5-19-95 County: OR State: CA
Do Normal Circumstances exist on the site? X Yes ___ No Is the site significantly disturbed (Atypical Situation)? ___ Yes X No Is the area a potential Problem Area? ___ Yes X No (If needed, explain on reverse or attach separate sheet.)	Community ID: ___ Transect ID: ___ Plot ID: POOL 4

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Eleocharis macrostachya	H	OBL	9.		
2. Epilobium pygmaeum	H	FACW	10.		
3. Psilocarphus brevissimus	H	OBL	11.		
4. Lythrum hyssopifolia	H	FACW	12.		
5. Rumex crispus	H	FACW	13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks:
1. Assume presence of wetland vegetation? ___ Yes ___ No
2. Rooted emergent vegetation present? ___ Yes ___ No

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

___ No Recorded Data Available

Field Observations:
- Depth of Surface Water: ___ (in.)
- Depth to Free Water in Pit: ___ (in.)
- Depth to Saturated Soil: ___ (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- X Inundated — observed from Jan 15 to late March
- ___ Saturated in: ___ Upper 12" ___ 13-18"
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in: ___ Upper 12" ___ 13-18"
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Observations and Remarks:
1. *Filamentous or sheet forming algae present?* ___ *Yes* ___ *No*
2. *Slope:* ___ *0-2%; or* ___ *> 2%*
3. *Oxidized rhizospheres:* ___ *new roots only;* ___ *old roots only;* ___ *new and old roots, or* ___ *none*
4. *Flooding:* ___ *none, flooding not probable;* ___ *rare, unlikely but possible under unusual weather conditions;* ___ *occasional, occurs on an average of once or less in 2 years, or* ___ *frequent, occurs on an average of more than once in 2 years.*
5. *Duration:* ___ *very brief, if < 2 days;* ___ *brief, if 2-7 days, or* ___ *long, if > 7 days*
6. *Site ponds water?* ___ *Yes* ___ *No*

All additions in italics are by Huffman & Associates, Inc.

SOILS

Map Unit Name (Series and Phase): _____

Taxonomy (Subgroup): _____

Drainage Class[1]: _____
Permeability[2]: _____
Run off[3]: _____
Field Observations:
Confirm Mapped Type? ___ Yes ___ No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance[4]/ Contrast[5]	Texture[6], Concretions, Structures[7], etc.
0-10		2.5Y 3/1	2.5Y 2.5/1		

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Observations and Remarks:

1. Smell: ___ Neutral; ___ Slightly Fresh or ___ Freshly Plowed Field Smell
2. Site: ___ Irrigated; ___ Land leveled; ___ Ditch Drained; ___ Pumped ___ Graded to drain via slope
3. Soils: ___ do ___ do not become frequently ponded or saturated for long (> 7 days) to very long durations (> 30 days) during the growing season

WETLAND DETERMINATION

Hydrophytic Vegetation Present? X Yes ___ No
Wetland Hydrology Present? X Yes ___ No
Hydric Soils Present? X Yes ___ No

Is this Sampling Point Within a Wetland? X Yes ___ No

Remarks:

1. Possible water of the U.S.? X Yes ___ No
2. Possibly exempt from Corps/EPA regulation? ___ Yes X No (If yes, check item(s) below).
(a) ___ Non-tidal drainage and irrigation ditches excavated on dry land
(b) ___ Artificially irrigated areas which would revert to upland if the irrigation ceased.
(c) ___ Artificial lakes or ponds created by excavating and/or diking dry land to collect and retain water and which are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing.
(d) ___ Artifical reflecting or swimming pools or other small ornamental bodies of water created by excavating and/or diking dry land to retain water for primarily aesthetic reasons.
(e) ___ Waterfilled depressions created in dry land incidental to construction activity and pits excavated in dry land for the purpose of obtaining fill, sand, or gravel unless and until the construction or excavation operation is abandoned and the resulting body of water meets the definition of waters of the United States (see 33 CFR 328.3(a)).

Approved by HQUSACE 3/92*

NOTE:

[1] *Drainage class: Excessively drained (ED), Somewhat excessively drained (SED), Well drained (WD), Moderately well drained (MWD), Somewhat poorly drained (SPD), Poorly drained (PD), or Very poorly drained (VPD).*
[2] *Permeability: Very slow (less than 0.06 inch), slow (0.06 to 0.20 inch), moderately slow (0.2 to 0.6 inch), moderate (0.6 to 2.0 inches), moderately rapid (2.0 to 6.0 inches), rapid (6.0 to 20 inches), or very rapid (more than 20 inches).*
[3] *Runoff: Slow, moderate or rapid.*
[4] *Mottle abundance: Few, common, or many.*
[5] *Mottle contrast: Faint, distinct, or prominent.*
[6] *Texture: Sand, loamy sand, sandy loam, loam, silt, silt loam, sandy clay loam, clay loam, silty clay loam, sandy clay, silty clay, or clay.*
[7] *Structure: Platy (laminated), prismatic (vertical axis of aggregates longer than horizontal), columnar (prisms with rounded tops), blocky (angular or subangular), or granular.*

**All additions in italics are by Huffman & Associates, Inc.*

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Fairview Park
Applicant/Owner: Costa Mesa
Investigator(s): T Bomkamp

Date: 5-19-95
County: OR
State: CA

Do Normal Circumstances exist on the site? X Yes ___ No
Is the site significantly disturbed (Atypical Situation)? ___ Yes X No
Is the area a potential Problem Area? ___ Yes X No
(If needed, explain on reverse or attach separate sheet.)

Community ID: ___
Transect ID: ___
Plot ID: Pool 5

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Eleocharis macrostachya	H	OBL	9.		
2. Rumex crispus	H	FACW	10.		
3. Polygonum Aviculare	H	FAC	11.		
4. Picris echioides	H	FAC	12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks:
1. Assume presence of wetland vegetation? ___ Yes ___ No
2. Rooted emergent vegetation present? ___ Yes ___ No

HYDROLOGY

___ Recorded Data (Describe in Remarks):
___ Stream, Lake, or Tide Gauge
___ Aerial Photographs
___ Other

___ No Recorded Data Available

Field Observations:
Depth of Surface Water: ___ (in.)
Depth to Free Water in Pit: ___ (in.)
Depth to Saturated Soil: ___ (in.)

Wetland Hydrology Indicators:
Primary Indicators:
X Inundated Direct observation
___ Saturated in: ___ Upper 12" ___ *13-18"*
___ Water Marks
___ Drift Lines
___ Sediment Deposits
___ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required):
___ Oxidized Root Channels in: ___ Upper 12" ___ *13-18"*
___ Water-Stained Leaves
___ Local Soil Survey Data
___ FAC-Neutral Test
___ Other (Explain in Remarks)

Observations and Remarks:
1. *Filamentous or sheet forming algae present?* ___ *Yes* ___ *No*
2. *Slope:* ___ *0-2%; or* ___ *> 2%*
3. *Oxidized rhizospheres:* ___ *new roots only;* ___ *old roots only;* ___ *new and old roots, or* ___ *none*
4. *Flooding:* ___ *none, flooding not probable;* ___ *rare, unlikely but possible under unusual weather conditions;* ___ *occasional, occurs on an average of once or less in 2 years, or* ___ *frequent, occurs on an average of more than once in 2 years.*
5. *Duration:* ___ *very brief, if < 2 days;* ___ *brief, if 2-7 days, or* ___ *long, if > 7 days*
6. *Site ponds water?* ___ *Yes* ___ *No*

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**All additions in italics are by Huffman & Associates, Inc.*

SOILS

Map Unit Name (Series and Phase): _____

Taxonomy (Subgroup): _____

Drainage Class[1]: _____
Permeability[2]: _____
Run off[3]: _____
Field Observations:
Confirm Mapped Type? ___ Yes ___ No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance[4]/ Contrast[5]	Texture[6], Concretions, Structures[7], etc.
0-10	Disturbed * Soil	2.5Y 4/2**			
10-18	Clay Layer Undisturbed	2.5Y 7/1			

* Possibly Disced in Past ~ Shows Mixture of horizons
** Predominately (other colors Mixed in)

Hydric Soil Indicators:
- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Observations and Remarks:
1. *Smell:* ___ *Neutral;* ___ *Slightly Fresh or* ___ *Freshly Plowed Field Smell*
2. *Site:* ___ *Irrigated;* ___ *Land leveled;* ___ *Ditch Drained;* ___ *Pumped* ___ *Graded to drain via slope*
3. *Soils:* ___ *do* ___ *do not become frequently ponded or saturated for long (> 7 days) to very long durations (> 30 days) during the growing season*

WETLAND DETERMINATION

Hydrophytic Vegetation Present? X Yes ___ No
Wetland Hydrology Present? X Yes ___ No
Hydric Soils Present? X Yes ___ No

Is this Sampling Point Within a Wetland? X Yes ___ No

Remarks:
1. *Possible water of the U.S.?* ___ *Yes* ___ *No*
2. *Possibly exempt from Corps/EPA regulation?* ___ *Yes* ___ *No* *(If yes, check item(s) below).*
   - *(a)* ___ *Non-tidal drainage and irrigation ditches excavated on dry land*
   - *(b)* ___ *Artificially irrigated areas which would revert to upland if the irrigation ceased.*
   - *(c)* ___ *Artificial lakes or ponds created by excavating and/or diking dry land to collect and retain water and which are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing.*
   - *(d)* ___ *Artifical reflecting or swimming pools or other small ornamental bodies of water created by excavating and/or diking dry land to retain water for primarily aesthetic reasons.*
   - *(e)* ___ *Waterfilled depressions created in dry land incidental to construction activity and pits excavated in dry land for the purpose of obtaining fill, sand, or gravel unless and until the construction or excavation operation is abandoned and the resulting body of water meets the definition of waters of the United States (see 33 CFR 328.3(a)).*

Approved by HQUSACE 3/92*

NOTE:
[1] *Drainage class: Excessively drained (ED), Somewhat excessively drained (SED), Well drained (WD), Moderately well drained (MWD), Somewhat poorly drained (SPD), Poorly drained (PD), or Very poorly drained (VPD).*
[2] *Permeability: Very slow (less than 0.06 inch), slow (0.06 to 0.20 inch), moderately slow (0.2 to 0.6 inch), moderate (0.6 to 2.0 inches), moderately rapid (2.0 to 6.0 inches), rapid (6.0 to 20 inches), or very rapid (more than 20 inches).*
[3] *Runoff: Slow, moderate or rapid.*
[4] *Mottle abundance: Few, common, or many.*
[5] *Mottle contrast: Faint, distinct, or prominent.*
[6] *Texture: Sand, loamy sand, sandy loam, loam, silt, silt loam, sandy clay loam, clay loam, silty clay loam, sandy clay, silty clay, or clay.*
[7] *Structure: Platy (laminated), prismatic (vertical axis of aggregates longer than horizontal), columnar (prisms with rounded tops), blocky (angular or subangular), or granular.*

All additions in italics are by Huffman & Associates, Inc.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Fairview Park Applicant/Owner: Costa Mesa Investigator(s): T Bornkamp	Date: 5-19-95 County: OR State: CA
Do Normal Circumstances exist on the site? X Yes ___ No Is the site significantly disturbed (Atypical Situation)? ___ Yes X No Is the area a potential Problem Area? ___ Yes X No (If needed, explain on reverse or attach separate sheet.)	Community ID: ___ Transect ID: ___ Plot ID: Pool 6

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Psilocarphus brevissimus		OBL	9.		
2. Eleocharis macrostachya		OBL	10.		
3. Rumex crispus		FACW	11.		
4. Lythrum hyssopifolia		FACW	12.		
5. Veronica peregrinna		OBL	13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100 %

Remarks:
1. Assume presence of wetland vegetation? ___ Yes ___ No
2. Rooted emergent vegetation present? ___ Yes ___ No

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

___ No Recorded Data Available

Field Observations:
- Depth of Surface Water: ___ (in.)
- Depth to Free Water in Pit: ___ (in.)
- Depth to Saturated Soil: ___ (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- X Inundated observed inundation from Jan 15 to March
- ___ Saturated in: ___ Upper 12" ___ 13-18"
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in: ___ Upper 12" ___ 13-18"
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Observations and Remarks:
1. *Filamentous or sheet forming algae present?* ___ *Yes* ___ *No*
2. *Slope:* ___ *0-2%; or* ___ *> 2%*
3. *Oxidized rhizospheres:* ___ *new roots only;* ___ *old roots only;* ___ *new and old roots, or* ___ *none*
4. *Flooding:* ___ *none, flooding not probable;* ___ *rare, unlikely but possible under unusual weather conditions;* ___ *occasional, occurs on an average of once or less in 2 years, or* ___ *frequent, occurs on an average of more than once in 2 years.*
5. *Duration:* ___ *very brief, if < 2 days;* ___ *brief, if 2-7 days, or* ___ *long, if > 7 days*
6. *Site ponds water?* ___ *Yes* ___ *No*

*All additions in italics are by Huffman & Associates, Inc.

SOILS

Map Unit Name (Series and Phase): _____

Taxonomy (Subgroup): _____

Drainage Class[1]: _____
Permeability[2]: _____
Run off[3]: _____
Field Observations:
Confirm Mapped Type? ___ Yes ___ No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance[4]/ Contrast[5]	Texture[6], Concretions, Structures[7], etc.
0-10'		10YR 2/1			

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Observations and Remarks:

1. *Smell:* ___ *Neutral;* ___ *Slightly Fresh or* ___ *Freshly Plowed Field Smell*
2. *Site:* ___ *Irrigated;* ___ *Land leveled;* ___ *Ditch Drained;* ___ *Pumped* ___ *Graded to drain via slope*
3. *Soils:* ___ *do* ___ *do not become frequently ponded or saturated for long (> 7 days) to very long durations (> 30 days) during the growing season*

WETLAND DETERMINATION

Hydrophytic Vegetation Present? X Yes ___ No
Wetland Hydrology Present? X Yes ___ No
Hydric Soils Present? X Yes ___ No

Is this Sampling Point Within a Wetland? X Yes ___ No

Remarks:

1. *Possible water of the U.S.?* ___ *Yes* ___ *No*
2. *Possibly exempt from Corps/EPA regulation?* ___ *Yes* ___ *No* *(If yes, check item(s) below).*
   - *(a)* ___ *Non-tidal drainage and irrigation ditches excavated on dry land*
   - *(b)* ___ *Artificially irrigated areas which would revert to upland if the irrigation ceased.*
   - *(c)* ___ *Artificial lakes or ponds created by excavating and/or diking dry land to collect and retain water and which are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing.*
   - *(d)* ___ *Artifical reflecting or swimming pools or other small ornamental bodies of water created by excavating and/or diking dry land to retain water for primarily aesthetic reasons.*
   - *(e)* ___ *Waterfilled depressions created in dry land incidental to construction activity and pits excavated in dry land for the purpose of obtaining fill, sand, or gravel unless and until the construction or excavation operation is abandoned and the resulting body of water meets the definition of waters of the United States (see 33 CFR 328.3(a)).*

Approved by HQUSACE 3/92*

NOTE:

[1] *Drainage class: Excessively drained (ED), Somewhat excessively drained (SED), Well drained (WD), Moderately well drained (MWD), Somewhat poorly drained (SPD), Poorly drained (PD), or Very poorly drained (VPD).*
[2] *Permeability: Very slow (less than 0.06 inch), slow (0.06 to 0.20 inch), moderately slow (0.2 to 0.6 inch), moderate (0.6 to 2.0 inches), moderately rapid (2.0 to 6.0 inches), rapid (6.0 to 20 inches), or very rapid (more than 20 inches).*
[3] *Runoff: Slow, moderate or rapid.*
[4] *Mottle abundance: Few, common, or many.*
[5] *Mottle contrast: Faint, distinct, or prominent.*
[6] *Texture: Sand, loamy sand, sandy loam, loam, silt, silt loam, sandy clay loam, clay loam, silty clay loam, sandy clay, silty clay, or clay.*
[7] *Structure: Platy (laminated), prismatic (vertical axis of aggregates longer than horizontal), columnar (prisms with rounded tops), blocky (angular or subangular), or granular.*

**All additions in italics are by Huffman & Associates, Inc.*

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Fairview Park Applicant/Owner: Costa Mesa Investigator(s): [illegible]	Date: 5-19-95 County: OR State: CA
Do Normal Circumstances exist on the site? X Yes ___ No Is the site significantly disturbed (Atypical Situation)? ___ Yes X No Is the area a potential Problem Area? ___ Yes X No (If needed, explain on reverse or attach separate sheet.)	Community ID: ___ Transect ID: ___ Plot ID: Pool 7

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Eleocharis macrostachya	H	OBL	9.		
2. Crassa truxillensis	H	FAC	10.		
3. Rumex crispus	A	FACW	11.		
4. Veronica peregrinica	H	OBL	12.		
5. Lythrum hyssopifolia	H	FACW	13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks:
1. Assume presence of wetland vegetation? ___ Yes ___ No
2. Rooted emergent vegetation present? ___ Yes ___ No

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

___ No Recorded Data Available

Field Observations:
- Depth of Surface Water: ___ (in.)
- Depth to Free Water in Pit: ___ (in.)
- Depth to Saturated Soil: ___ (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- X Inundated – From Jan 15 to March 1 observed
- ___ Saturated in: ___ Upper 12" ___ 13-18"
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in: ___ Upper 12" ___ 13-18"
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Observations and Remarks:
1. *Filamentous or sheet forming algae present?* ___ *Yes* ___ *No*
2. *Slope:* ___ *0-2%; or* ___ *> 2%*
3. *Oxidized rhizospheres:* ___ *new roots only;* ___ *old roots only;* ___ *new and old roots, or* ___ *none*
4. *Flooding:* ___ *none, flooding not probable;* ___ *rare, unlikely but possible under unusual weather conditions;* ___ *occasional, occurs on an average of once or less in 2 years, or* ___ *frequent, occurs on an average of more than once in 2 years.*
5. *Duration:* ___ *very brief, if < 2 days;* ___ *brief, if 2-7 days, or* ___ *long, if > 7 days*
6. *Site ponds water?* ___ *Yes* ___ *No*

*All additions in italics are by Huffman & Associates, Inc.

SOILS

Map Unit Name (Series and Phase): _____

Taxonomy (Subgroup): _____

Drainage Class[1]: _____
Permeability[2]: _____
Run off[3]: _____
Field Observations:
Confirm Mapped Type? ___ Yes ___ No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance[4]/ Contrast[5]	Texture[6], Concretions, Structures[7], etc.
0-10		10YR 2/1			

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Observations and Remarks:

1. Smell: ___ Neutral; ___ Slightly Fresh or ___ Freshly Plowed Field Smell
2. Site: ___ Irrigated; ___ Land leveled; ___ Ditch Drained; ___ Pumped ___ Graded to drain via slope
3. Soils: ___ do ___ do not become frequently ponded or saturated for long (> 7 days) to very long durations (> 30 days) during the growing season

WETLAND DETERMINATION

Hydrophytic Vegetation Present? X Yes ___ No
Wetland Hydrology Present? X Yes ___ No
Hydric Soils Present? X Yes ___ No

Is this Sampling Point Within a Wetland? X Yes ___ No

Remarks:

1. Possible water of the U.S.? X Yes ___ No
2. Possibly exempt from Corps/EPA regulation? ___ Yes X No (If yes, check item(s) below).
(a) ___ Non-tidal drainage and irrigation ditches excavated on dry land
(b) ___ Artificially irrigated areas which would revert to upland if the irrigation ceased.
(c) ___ Artificial lakes or ponds created by excavating and/or diking dry land to collect and retain water and which are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing.
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Approved by HQUSACE 3/92*

NOTE:

[1] *Drainage class: Excessively drained (ED), Somewhat excessively drained (SED), Well drained (WD), Moderately well drained (MWD), Somewhat poorly drained (SPD), Poorly drained (PD), or Very poorly drained (VPD).*
[2] *Permeability: Very slow (less than 0.06 inch), slow (0.06 to 0.20 inch), moderately slow (0.2 to 0.6 inch), moderate (0.6 to 2.0 inches), moderately rapid (2.0 to 6.0 inches), rapid (6.0 to 20 inches), or very rapid (more than 20 inches).*
[3] *Runoff: Slow, moderate or rapid.*
[4] *Mottle abundance: Few, common, or many.*
[5] *Mottle contrast: Faint, distinct, or prominent.*
[6] *Texture: Sand, loamy sand, sandy loam, loam, silt, silt loam, sandy clay loam, clay loam, silty clay loam, sandy clay, silty clay, or clay.*
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DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: FAIRVIEW PARK Applicant/Owner: COSTA MESA Investigator(s): TROM KAMP	Date: 5-19-95 County: OR State: CA
Do Normal Circumstances exist on the site? X Yes ___ No Is the site significantly disturbed (Atypical Situation)? ___ Yes X No Is the area a potential Problem Area? ___ Yes X No (If needed, explain on reverse or attach separate sheet.)	Community ID: ___ Transect ID: ___ Plot ID: Pool B

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Psilocarphus brevissimus		OBL	9.		
2. Navarretia prostrata		OBL	10.		
3. Eleocharis parvula		FACW	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks:
1. Assume presence of wetland vegetation? X Yes ___ No
2. Rooted emergent vegetation present? ___ Yes ___ No

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

___ No Recorded Data Available

Field Observations:
- Depth of Surface Water: ___ (in.)
- Depth to Free Water in Pit: ___ (in.)
- Depth to Saturated Soil: ___ (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in: ___ Upper 12" ___ *13-18"*
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in: ___ Upper 12" ___ *13-18"*
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Observations and Remarks:
1. *Filamentous or sheet forming algae present?* ___ *Yes* ___ *No*
2. *Slope:* ___ *0-2%; or* ___ *> 2%*
3. *Oxidized rhizospheres:* ___ *new roots only;* ___ *old roots only;* ___ *new and old roots, or* ___ *none*
4. *Flooding:* ___ *none, flooding not probable;* ___ *rare, unlikely but possible under unusual weather conditions;* ___ *occasional, occurs on an average of once or less in 2 years, or* ___ *frequent, occurs on an average of more than once in 2 years.*
5. *Duration:* ___ *very brief, if < 2 days;* ___ *brief, if 2-7 days, or* ___ *long, if > 7 days*
6. *Site ponds water?* ___ *Yes* ___ *No*

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SOILS

Map Unit Name
(Series and Phase): _____

Taxonomy (Subgroup): _____

Drainage Class[1]: _____
Permeability[2]: _____
Run off[3]: _____
Field Observations:
Confirm Mapped Type? ___ Yes ___ No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance[4]/ Contrast[5]	Texture[6], Concretions, Structures[7], etc.

Hydric Soil Indicators:

___ Histosol
___ Histic Epipedon
___ Sulfidic Odor
___ Aquic Moisture Regime
___ Reducing Conditions
___ Gleyed or Low-Chroma Colors
___ Concretions
___ High Organic Content in Surface Layer in Sandy Soils
___ Organic Streaking in Sandy Soils
___ Listed on Local Hydric Soils List
___ Listed on National Hydric Soils List
___ Other (Explain in Remarks)

Observations and Remarks:

1. Smell: ___ Neutral; ___ Slightly Fresh or ___ Freshly Plowed Field Smell
2. Site: ___ Irrigated; ___ Land leveled; ___ Ditch Drained; ___ Pumped ___ Graded to drain via slope
3. Soils: ___ do ___ do not become frequently ponded or saturated for long (> 7 days) to very long durations (> 30 days) during the growing season

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ___ Yes ___ No
Wetland Hydrology Present? ___ Yes ___ No
Hydric Soils Present? ___ Yes ___ No

Is this Sampling Point Within a Wetland? ___ Yes ___ No

Remarks:

1. Possible water of the U.S.? ___ Yes ___ No
2. Possibly exempt from Corps/EPA regulation? ___ Yes ___ No (If yes, check item(s) below).
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