



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
SAN FRANCISCO DISTRICT, U.S. ARMY CORPS OF ENGINEERS
1455 MARKET STREET
SAN FRANCISCO, CALIFORNIA 94103-1398

APR 19 2010

Regulatory Division

SUBJECT: File Number 2007-400560S

Mr. Leonard Beuth
411 Vetter Lane
Arroyo Grande, California 93420

Dear Mr. Beuth:

This letter is written in response to the South Pacific Division's remand of the administrative appeal for the Grand View Terrace property jurisdictional determination. The subject property is located at the end of Grand View Terrace in the City of Half Moon Bay, San Mateo County, California.

Based on further review of information provided by the appellant and further coordination with the Environmental Protection Agency (EPA) in accordance with the procedures outlined in the "CWA Jurisdiction Following the U.S. Supreme Court Decision in *Rapanos v. United States*" (see enclosed EPA correspondence dated March 16, 2010) the San Francisco District has determined that the extent of U.S. Army Corps of Engineers' (Corps) jurisdiction was accurately determined on July 21, 2008. The site contains 2.13 acres of Waters of the U.S. subject to Corps' jurisdiction pursuant to Section 404 of the Clean Water Act (33 U.S.C. Section 1344).

All proposed discharges of dredged or fill material into waters of the United States must be authorized by the Corps pursuant to Section 404 of the Clean Water Act (33 U.S.C. Section 1344). Waters of the United States generally include tidal waters, lakes, ponds, rivers, streams (including intermittent streams), and wetlands.

Your proposed activity is within our jurisdiction and a permit will be required for your project. Application for Corps authorization should be made to this office using the application form available at our website (<http://www.spn.usace.army.mil/regulatory/index.html>). To avoid delays it is essential that you enter the file number at the top of this letter into Item No. 1 of the application. The application must include plans showing the location, extent and character of the proposed activity, prepared in accordance with the requirements. You should note, in planning your project, that upon receipt of a properly completed application and plans, it may be necessary to advertise the proposed work by issuing a Public Notice for a period of 30 days.

Should you have any questions regarding this matter, please call Cameron Johnson of our Regulatory Division at 415-503-6773. Please address all correspondence to the Regulatory Division and refer to the File Number at the head of this letter.

Sincerely,



Laurence M. Farrell, P.E.
Lieutenant Colonel, U.S. Army
Commanding

Enclosures

Copies Furnished (w/copy of letter only):

SPD, Attn: Mr. Thomas Cavanaugh

Law Offices of William S. Walter, Attn: Mr. William Walter

Copies Furnished (w/o enclosures):

Live Oak Associates, Attn: Melissa Denena

US EPA, San Francisco, CA

CA RWQCB, Oakland, CA

California Coastal Commission, San Francisco, CA



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

75 Hawthorne Street
San Francisco, CA 94105-3901

MAR 16 2010

Cameron Johnson
South Branch Chief
San Francisco District
U.S. Army Corps of Engineers
Regulatory Division, 16th Floor
1455 Market Street
San Francisco, CA 94103

Dear Mr. Johnson:

In response to your December 14, 2009 email, EPA Region IX has reviewed the information provided to us concerning the Grand View Terrace jurisdictional determination following the remand of this matter to the San Francisco District on October 21, 2009. We concur in the San Francisco District's proposed determination that the 2.05 acres of wetlands and 0.08 acres of other waters described in the record are waters of the United States. It should be noted that our review of this matter is limited to the record provided to us by the San Francisco District. We have not independently investigated conditions at the site.

Findings of the San Francisco District

In its initial jurisdictional determination, the San Francisco District determined that the waters of the United States present at the site consisted of a manmade ditch system into which natural water flow had been diverted, and wetlands directly abutting the ditches. Approved Jurisdictional Form, dated July 21, 2008, Administrative Record at pp. 105-113 ("2008 JD Form"). See also, Live Oak Associates, Inc. Report, dated June 16, 2008, Administrative Record at p. 74. In making this determination, the San Francisco District examined the frequency of flow in the ditches, and determined that the ditch system is a relatively permanent water ("RPW") as that term is defined in the EPA/Corps guidance Revised Guidance on Clean Water Act Jurisdiction Following the U.S. Supreme Court's Decision in Rapanos v. United States and Carabell v. United States, dated December 2, 2008 ("Revised Rapanos Guidance").¹ The San Francisco District also determined that 2.05 acres of wetlands on the site directly abutted the RPW ditch system as that term is defined in the Revised Rapanos Guidance. In addition, the San Francisco District determined that the RPW ditch and its abutting wetlands were tributary to traditionally navigable waters ("TNWs") as that term is defined in the Revised Rapanos Guidance.

¹ The Rapanos Guidance was initially issued on June 5, 2007, then revised in December 2, 2008. For purposes of evaluating this proposed jurisdictional determination, EPA Region IX is applying the guidance as revised.

Relatively Permanent Water

The San Francisco District concluded that the ditch system was a relatively permanent water based on the presence of seasonal flow. 2008 JD Form, Administrative Record at p. 107. In making this determination the District estimated the average number of flow events per year in a range from 11 to 20, and noted that the drainage traps overland flow sheet flow, precipitation and stormwater. Id. The District further found that the ditch “likely flows consistently during the winter wet months.” Id. The District also found that the presence of an OHWM in the ditch system, given the area’s Mediterranean climate and seasonal rainfall pattern, was “indicative of continuous seasonal flow within the channel.” Id. at p. 111. In addition, in the record of Administrative Appeal conference, the District noted the presence of obligate wetland vegetation in the channel, and indicated that the presence of such species is “indicative of long duration hydrology” and “supports the determination that there is water present in the channel seasonally”. Administrative Appeal Conference, March 31, 2009 at p.2.

Abutting Wetlands

The San Francisco District found that 2.05 acres of wetlands were present on the site and that these wetlands directly abut the ditch that the District had determined was a relatively permanent water. 2008 JD Form, Administrative Record at p. 110. In support of that conclusion, the District found that “seasonal wetlands 1, 2, 3, and 4 all directly abut the larger arroyo willow swale which is directly connected to the drainage ditch at the northwestern terminus. Seasonal wetlands 5 and 6 are both directly connected to drainage #7. All of these wetlands are directly connected physically and hydrologically (i.e. there is no upland between the wetland and the drainage ditches).” Id. at p. 111.

TNWs

In its initial jurisdictional determination, the San Francisco District determined that the Pacific Ocean was the relevant TNW for purposed of this analysis. Memorandum For Record, dated September 19, 2008, Administrative Record at pp. 139-140. In its proposed determination following remand, the San Francisco District also found Pilarcitos Creek to be a TNW. Memorandum For Record, dated November 24, 2009, at p. 2.

Significant Nexus

In its initial jurisdictional determination, the San Francisco District made no determination as to whether the wetlands and ditch system on the site have a significant nexus to a downstream TNW. 2008 JD Form, Administrative Record at pp. 110-111. The District did provide information in its record as to the functions performed by the aquatic features on the site and the importance of these functions to the larger watershed. Id. at p. 110.

Administrative Appeal Decision

Following appeal of the San Francisco District's jurisdictional determination, the Appeals Officer remanded the determination to the District for reconsideration. Administrative Appeal Decision, dated October 21, 2009. The administrative appeal decision document directs

The District must further document its determination that the drainage to which the Wetlands on the property are adjacent is a relatively permanent water (RPW) and that the conclusion that is an RPW has been evaluated under a "significant nexus standard".

Additionally the District must also consider whether its final determination as to the jurisdictional nature of the channel has an effect on its conclusion as to its role in providing a significant nexus to a traditional navigable water (TNW) for the wetlands on the property.

Administrative Appeal Decision at 2.

EPA Region IX Evaluation

Based on its review of the record, Region IX views two issues as crucial to this jurisdictional determination. The first issue is the technical determination of the San Francisco District that the ditch system on this site is an RPW. The second issue is finding of the Appeals Officer that, even if the ditch system is an RPW, as a policy matter it must be evaluated under a significant nexus standard.² In addition, the District has, in response to the Administrative Appeal Decision, evaluated whether the waters on site have a significant nexus to the downstream TNW. Region IX does not believe that a significant nexus determination is necessary for this jurisdictional determination. However, Region IX concurs with the District that the waters found jurisdictional by the District have a significant nexus to the downstream TNW.

Relatively Permanent Waters

Both the District's initial jurisdiction determination and the Administrative Appeal Determination correctly find that a seasonal waterbody can constitute an RPW. See, 2008 JD Form, Administrative Record at p. 106-107; Administrative Appeal Decision at 4 (RPWs typically flow year-round or have continuous flow at least seasonally). The issue with regard to this finding is whether the record adequately supports the District's determination that the ditch system is a seasonal RPW.

Region IX believes that substantial evidence in the record supports the District's determination that the ditch system is a seasonal RPW. In the record developed by the District

² Region IX concurs with the San Francisco District that Pilarcitos Creek is a TNW based on the information presented by the District. Region IX also notes that lower portions of Pilarcitos Creek are subject to tidal influence, and that this is an independent basis for determining that at least portions of Pilarcitos Creek are TNW.

prior to the Administrative Appeal Decision, the District described the area's rainfall patterns (11 – 20 flow events in an average year) and determined that flow was likely consistent during winter months. This conclusion was buttressed by findings of an OHWM and the presence of vegetation that was indicative of long duration hydrology. Following the remand, the District further supported its analysis of this issue with a site visit following a recent rain event which demonstrated that the ditch system held water after the first significant rainfall of the season. Memorandum for Record, December 14, 2009.

Given the number of flow events that could be expected in an average year and the Corps' documentation of site conditions, including both the presence of an OHWM and wetland vegetation, the District could have reasonably determined that in a normal year continuous flows could have been expected in the ditch system once seasonal rains commenced. The further information developed by the District in its site visit following the remand is consistent with its earlier determination and further describes a hydrologically reasonable basis for its conclusion that flows in the ditch would likely be consistent during the wet season following the commencement of seasonal rains.

Need for Significant Nexus Analysis

Once the District determines that the ditch system is an RPW that is tributary to a TNW, there is no need for a separate determination that the ditch system has a significant nexus to the downstream TNW. As set forth in the Revised Rapanos Guidance, "the agencies will assert jurisdiction over relatively permanent non-navigable tributaries of traditionally navigable waters without a legal obligation to make a significant nexus finding." Revised Rapanos Guidance at 7. The Administrative Appeal Decision cites to this language in the Revised Rapanos Guidance. However, it also states "CWA jurisdiction over these waters will be evaluated under a significant nexus standards". Administrative Appeal Decision at 4. This latter language appears to misconstrue the Revised Rapanos Guidance.

The pertinent section of the Revised Rapanos Guidance distinguishes between the treatment of two different types of non-navigable tributaries of TNWs. With regard to non-navigable tributaries that are RPWs, no significant nexus analysis is needed. This is because, in the Rapanos decision, "[b]oth the plurality and the dissent would uphold CWA jurisdiction over non-navigable tributaries that are 'relatively permanent'." Revised Rapanos Guidance at 6. The Revised Rapanos Guidance then distinguishes these relatively permanent waters from "ephemeral tributaries" and "intermittent streams which do not typically flow year round or have continuous flows at least seasonally". Revised Rapanos Guidance at 7. The Revised Rapanos Guidance goes on to state that as to these non-RPWs, "CWA jurisdiction over these waters will be evaluated under the significant nexus standard." Revised Rapanos Guidance at 7. It is inconsistent with the Revised Rapanos Guidance to require a significant nexus determination for RPWs tributary to a TNW.

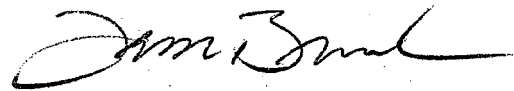
The Administrative Appeal Decision is correct when it notes that "[a]s a matter of policy, Corps and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial

...and a traditionally navigable water.” Administrative Appeal Decision at 6. Region IX believes that the District has done this. However, it is critical to distinguish between this policy decision to include this information in the record and the legal standards for making jurisdiction determinations. As the Revised Rapanos Guidance notes, this information can and should be included in the record “even though a significant nexus finding is not required as a matter of law.” Revised Rapanos Guidance at 13. See also, Administrative Appeal Decision at 6.

Since, as a matter of law, a significant nexus finding is not required for this jurisdictional decision, it was not correct for the Administrative Appeal Decision to direct the District to evaluate its jurisdiction determination “under the ‘significant nexus standard’.” Administrative Appeal Decision at 2.

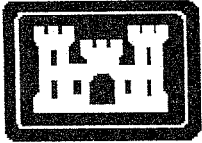
I hope you find Region IX’s comments on this jurisdictional determination useful. If you have any questions regarding these comments please contact Robert Leidy at (415) 972-3463 or Hugh Barroll at (415) 972-3895.

Sincerely,

A handwritten signature in black ink, appearing to read "Jason Brush", is written over a horizontal line.

Jason Brush
Chief, Wetlands Office

Cc: Donna Downing, EPA Headquarters Office of Water



MEMORANDUM FOR RECORD

FILE NUMBER: 2007-00560S
PROJECT: Grand View Terrace
DATE: 11/24/09
SUBJECT: Appeal Remand

Background:

In a memorandum dated October 21, 2009, the South Pacific Division Appeal Officer Mr. Thomas J. Cavanaugh determined that the San Francisco District must re-evaluate its jurisdictional determination based on further information provided by the Appellant. Specifically, the memo directs the District to "further evaluate its determination that the drainage, to which the wetlands on the property are adjacent, is a relatively permanent water and whether a significant nexus determination is required for the wetlands. The District must document that its conclusion as to whether the drainage is an RPW has been evaluated under the "significant nexus standard".

Note:

The Administrative Appeal Decision page 2, paragraph 5 contains a factual error. The Appeal states, "The District concluded that the site contained 2.05 acres of waters of the United States, including wetlands within CWA jurisdiction." This sentence should state that the District concluded that the site contained 2.13 acres of waters of the United States. The site contains 2.05 acres of wetland and 0.08 acre of Other Waters of the U.S. which collectively represent 2.13 acres of waters of the U.S.

Site Summary:

The Grandview Terrace Site is located at the terminus of Grandview Terrace in the town of Half Moon Bay in San Mateo County, California. The site contains two drainage ditches that run from northeast to southwest and join together at the center of the project site. The ditches then continue to the southeast corner of the parcel. The water is channeled to a drainage ditch that parallels the housing development on the southeastern boundary of the adjacent neighborhood. Waters from the site are culverted under Highway 1 and flow to the Pilarcitos creek and the Pacific Ocean (3/4 of a mile from the site). Also located on the property are seasonal wetlands and an arroyo willow wetland swale. These features are all directly abutting the drainage ditches. Thus all waters and wetlands on-site have a direct surface connection to navigable waters of the U.S.

Further Consideration:

Legal: Please see the attached memo titled "Discussion of Grand View Terrace Appeal Decision" dated November 19, 2009, provided as enclosure 1. This memo was authored by the District Office of Counsel Jack Kerns in response to the legal arguments presented in Mr. Cavanaugh's memo and by the appellant at the appeals conference.

Significant Nexus: Please see the Memorandum for the Record (MFR) dated September 19, 2008, provided as enclosure 2. This MFR was authored by the District Regulatory Project Manager Paula Gill on September 19, 2008, in preparation for the appeal conference. The MFR addresses the wetland connection to waters of the U.S. off-site and provides additional further clarification on the "Significant Nexus" determination. Mr. Cavanaugh states that this document was not considered in the review of the appeal. See also the District's response to Appeal Officer question number 4 which was discussed at the appeal conference, "Please explain why you believe the wetlands on the Grandview Terrace property have a significant nexus with the Pacific Ocean (Appeal Item 1)" provided as enclosure 3.

The Post Rapanos "Approved Jurisdictional Determination Form" originally dated July 21, 2008, was revised on November 23, 2009. Specifically, an updated supplemental "significant nexus" finding was added to the form, the watershed and drainage areas were revised, and Pilarcitos Creek was determined to be the Traditional Navigable Water (TNW, enclosures 4 & 5). The seasonality of California's climate, the contiguous nature of the larger wetland complex, and Historic aerial photography of the project site were also further evaluated as a part of the significant nexus review.

The watershed and the drainage area are approximately the same size on the Grandview Terrace property. The drainage area is the area of land that drains to the stream order segment, evaluated for significant nexus purposes, between the upper and lower stream orders. The watershed is the area of land that drains to the stream order segment to the point at which the stream order segment is tributary to the TNW. Since the seasonal RPW on the site is tributary to the TNW (Pilarcitos Creek) and the seasonal RPW does not change order within the mapped extent of its reach on the 7.5 minute USGS quadrangle, the watershed and drainage area are the same (enclosure 5).

Pilarcitos Creek was determined to be the TNW because it maintains high enough volume and depth (see attached USGS data, enclosure 6) to support navigation in a canoe. Discharge data was collected from an upstream USGS gauge station and these data support the finding that discharge in Pilarcitos Creek is sufficient for canoeing (up to 13 cfs of flow in February). A 'snap shot' in time was available for Pilarcitos Creek near the project site from another USGS gauge station that indicates depth of flow in Pilarcitos Creek, seven days prior to November 23, 2009, was approximately 5 feet. This depth is indicative of low flow in Pilarcitos Creek because the November rains had not yet begun. At the time of the site visit the downstream TNW was not visited, the Pacific Ocean was determined to be the nearest TNW during the desk review of the provided information.

Most precipitation that occurs within California's Mediterranean climate is restricted to winter wet months generally between November and April. The below data taken from the WETS weather station for Half Moon Bay summarizes monthly average rainfalls over a 29-year period. On average 22.48" of rainfall occurs within the five winter months. This accounts for 80% of the rainfall in an average given year in Half Moon Bay. Given this climatic trend it is appropriate for the District to conclude that in a Mediterranean climate features that meet the definition of waters of the U.S. and that exhibit flow during the winter months, even if they are dry during summer months, should be considered seasonal RPWs.

A site visit was conducted on December 12, 2009, after the first heavy rains of the season. Water was observed in the drainage just beyond the project site. Permission had not been granted to access the site; therefore the photograph was taken from the closest public access location. This finding supports the determination that as soon as rains begin the wetland complex maintains enough moisture to charge the system to the point that the drainage at the lowest point in the watershed beyond the project site maintains standing water. See MFR included in the file as enclosure 7.

WETS Station: HALF MOON BAY, CA3714

Creation Date: 08/29/2002

Latitude: 3728

Longitude: 12227

Elevation: 00040

State FIPS/County(FIPS): 06081

County Name: San Mateo

Start yr. - 1971 End yr. - 2000

Month	Temperature (Degrees F.)			Precipitation (Inches)				
	avg daily max	avg daily min	avg	avg	30% chance will have		avg # of days w/.1 or more	avg total snow fall
					less than	more than		
January	58.7	43.2	51.0	5.55	2.71	6.78	8	0.0
February	59.7	44.2	52.0	4.91	2.23	6.00	7	0.0
March	59.8	44.6	52.2	4.36	2.00	5.32	7	0.0
April	60.8	44.7	52.8	1.76	0.83	2.15	3	0.0
May	61.1	47.6	54.4	0.79	0.21	0.95	1	0.0
June	63.1	49.9	56.5	0.26	0.09	0.33	0	0.0
July	64.4	51.9	58.1	0.16	0.03	0.20	0	0.0
August	65.8	53.1	59.5	0.27	0.09	0.33	0	0.0
September	67.0	51.7	59.4	0.44	0.11	0.55	1	0.0
October	65.5	48.7	57.1	1.82	0.63	2.19	2	0.0
November	62.4	45.6	54.0	3.56	1.57	4.34	5	0.0
December	58.9	43.3	51.1	4.10	2.05	5.01	6	0.0
Annual	-----	-----	-----	-----	22.05	31.54	--	-----
Average	62.3	47.4	54.8	-----	-----	-----	--	-----
Total	-----	-----	-----	27.98	-----	-----	40	0.0

As depicted in the current Google Earth image titled "Study Area location relative to larger wetland complex on Grandview Terrace property" and dated November 23, 2009, it is clear that the wetlands on the Grandview Terrace property are a part of a larger wetland complex that extends up-watershed of the project site (enclosure 8). Wetland systems dominated by perennial phreatophytes, such as willow, retain soil moisture for prolonged periods beyond rainfall events. As lower watershed features dry down or drain to the TNW the upper watershed wetlands beyond the project site continue to provide moisture to lower watershed wetlands (i.e. wetland recharge). The result is prolonged soil moisture beyond the rainfall event within the larger system. The perennial nature of the wetlands on the site is depicted in the Google Earth image titled "Google Earth Image dated August 29, 2006." This image is from

August when at the end of the summer months prior to the winter rains. In California's climate August would be the driest time of year, yet a green wetland signature is still apparent on the aerial photograph (enclosure 9). The figure titled "Google Earth Image dated October 29, 1991" shows the wetland complex and arroyo willow swale on the site has been established since 1991 (enclosure 10).

Significant Nexus:

The determination was made that the waters within the Grandview property are classified as seasonal relatively permanent waters (RPWs) and that the wetlands are directly abutting these seasonal RPWs. The above further consideration of the seasonality of California's climate continues to support the determination that the drainage on the project site was appropriately identified as a seasonal RPW. According to the Corps memorandum dated June 5, 2007, a significant nexus is therefore implied. A significant nexus determination however, can be articulated.

The watershed and drainage area are the same size (0.5 square miles) as depicted in the attached map (enclosure 5). For this reason adverse effects to wetlands or waters within the drainage area directly translate to adverse effects within the watershed. Fecal coliform levels at Pilarcitos Creek Beach have been documented and are periodically in violation of State of California water quality standards. This small watershed also provides documented habitat for many federally listed species including coho salmon, steelhead trout, red-legged frog, San Francisco garter snake, and Western snowy plover. Within this watershed there are many local farms and other agriculture practices which may adversely effect water quality. The Pilarcitos Creek watershed is a source of water supply for the town of Half Moon Bay and other coastal cities and is instrumental to the health of the coastal ecosystem. Functions documented within the watershed are important to this highly agricultural and small watershed. Immediately north and west of the project area there are agricultural operations and residential developments. During the site visit it was observed that wetlands on the Grandview site intercept sheet flow from the neighboring and upstream properties. Although the project site is small, it contains a high percentage of wetland cover (17%). These wetlands are also a portion of a larger continuous wetland/waters matrix that extends beyond and up-watershed of the project boundary. Given the documented concerns regarding water quality and habitat protection within Pilarcitos watershed, functions and values preformed by wetlands on the site, the sites location with the lower reaches of the watershed, and the overlap in the drainage and watershed area it is believed that biological, chemical, and physical functions occurring on the Grandview Terrace site would translate to water quality of the TNW (Pilarcitos Creek).

Conclusion:

Based on the attached legal analysis, the information presented in the appeal conference, information provided in the Administrative Record, and the above updated significant nexus determination the District continues to maintain jurisdiction over the 2.13 acres of waters of the U.S. on the project site. This determination is based on a documented significant nexus between the features on the project site and the downstream TNW.

The Administrative Record including this Memo should be provided to the EPA in accordance with procedures outlined in the CWA Jurisdiction Following the U.S. Supreme Court Decision in Rapanos v. United States. According to this guidance EPA coordination is required when the Corps makes a significant nexus determination, therefore the record should be provided to EPA for their concurrence.



Paula Gill

12/14/09
Date

Discussion of Grand View Terrace Appeal Decision, 11/19/09

The appeal decision found merit with the Appellant's argument that there was no basis after *Rapanos* to assert jurisdiction because there was not a continuous flowing stream or other body of water, and that intermittent channels that periodically provide drainage for rainfall are not jurisdictional. Below is a summary of the findings of the decision:

- applied a "continuous seasonal flow" test to the drainage ditch adjacent to and connected to the wetlands, citing the Revised Rapanos Guidance.¹
- The following determinations were made:
 - the District did not include data or records of observations in the AR indicating a continuous seasonal flow or that the drainage is a seasonal RPW
 - the record did not support a finding that drainage on the property is a seasonal RPW
 - a significant nexus determination must be done for the drainage
 - a significant nexus determination for the wetlands is to be done if the drainage is a non-RPW

Intermittent streams satisfy the significant nexus test in the 9th Circuit (and 6th Circuit)
Justice Kennedy's significant nexus test is the controlling test in the 9th Circuit. See *United States v. Moses* (*Moses*), 496 F.3d 984 (9th Cir. 2007); *N. Cal. River Watch v. City of Healdsburg* (*Healdsburg*), 496 F.3d 993 (9th Cir. 2007). Under Kennedy's significant nexus test, an intermittent stream can be a 'waters of the United States.' See *Moses, Healdsburg*.

Regarding the issue of intermittent flow in the ditches, the 9th Circuit has held that intermittent flowing tributaries satisfy the significant nexus test. See *United States v. Moses*, 496 F.3d 984 (9th Cir. 2007) ("*Moses*"), *Sierra Club and United States v. Mastec North America*, Civ. No. 03-1697-HO, U.S. District Court for District of Oregon, (February 19, 2009) ("*Mastec*"), citing *Headwaters v. Talent Irrigation District*, 243 F.3d 526 (9th Cir. 2001) ("*Headwaters*"). In *Moses*, the 9th Circuit stated that "his[Kennedy's] opinion surely does not denigrate or even undercut the concept that a seasonal stream could be a water of the United States." *Moses* at 990. The 9th Circuit in *Moses* also stated that Justice Kennedy was not satisfied with the plurality's reasoning, noting his statement in *Rapanos*:

The plurality's first requirement --- permanent standing water or continuous flow, at least for a period of "some months," --- makes little practical sense in a statute concerned with downstream water quality. The merest trickle, if continuous, would count as a "water" subject to federal regulation, while torrents thundering at irregular interval through otherwise dry channels would not. Though the plurality seems to presume that such irregular flows are too insignificant to be of concern in a statute focused on "waters," that may not always be true. Areas in the western parts of the Nation provide some examples. *Moses* at 990.

¹ It should be noted that the District's position at the hearing was that there was a continuous seasonal flow in the drainage ditch.

“Therefore, far from undercutting our decision in *Headwaters*, the Supreme Court unanimously agreed that intermittent streams (at least those that are seasonal) can be waters of the United States.” *Moses at 991*.

The District Court in *Mastec* also agreed that streams that flow intermittently are waters of the United States, quoting *Headwaters*, “it does not matter that a stream, at the time of the activity, is or is not discharging water continuously into navigable waters as long as it would flow into such water.” *Mastec* at slip opinion 6.

The 6th Circuit also held recently that intermittent flows satisfy jurisdictional requirements (*United States v. Cundiff*, 2009 WL 249095 (6th Cir. Feb. 4, 2009)² (“*Cundiff*”). In *Cundiff*, the 6th Circuit stated in footnote 5 that “the Cundiffs’ view that any interruption in flow means that jurisdiction under the plurality’s test is improper would improperly exclude seasonal rivers and other such water bodies whose surface connection was not perpetual.” *Cundiff* at 212.

Evidence in the AR to support the District’s Position

- documented OHWM in drainage ditch considered to be RPW
- documented water quality functions of wetlands, including the fact that a pollutant would flow from the wetlands through endangered species habitat and impaired waters at Pilarcitos Creek Beach into the Pacific Ocean
- documented Jurisdictional Determination for wetlands, including significant nexus finding

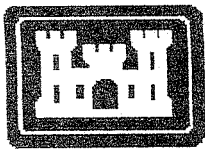
Conclusions

Under the appeal decision, only continuously flowing seasonal tributaries are to be considered ‘waters of the United States.’ Furthermore, a tributary with an OHWM and seasonal flow is on its face not a RPW. The implication of this decision is that wetlands connected by a seasonal drainage to a TNW $\frac{3}{4}$ mile away (the Pacific Ocean) are not jurisdictional.

The District will gather additional information regarding seasonal rainfall amounts and rough estimations of flow volumes. It is hard to imagine what additional information the District could provide, absent a full time on-site project manager. Given the impact of this decision, it is recommended that EPA review the significant nexus determination referral package.

Jack Kerns
Assistant District Counsel

² The 6th Circuit also held in *Cunliff* that the agency’s opinion that a pollutant placed in a wetland would flow to a TNW was significant.



MEMORANDUM FOR RECORD

FILE NUMBER: 2007-00560

PROJECT: Grand View Terrace

DATE: 9/19/08

SUBJECT: Wetlands connection to waters of the U.S. off-site

Subject: This memo is intended to further clarify:

Part B - *Characteristics of the Tributary and its Adjacent Wetlands*

Section 1 - *Characteristics of Non-TNW that flow directly or indirectly into TNW*

Subsection ii - *Physical Characteristics*

Subsection b - *General Tributary Characteristics*

in the Post Rapanos jurisdictional determination form dated 7/21/08. This memo is also further clarifies the significant nexus determination.

Memo: The ditches were constructed on-site the 1960's and '70s. The form states that natural flowing waters are conveyed by these ditches. There are a series of small ponds and a perennial creek (indicated by solid blue line) located immediately northeast of the property. From the aerial photograph it is clear that these features are directly connected to the arroyo willow wetland swale and the ditches that were mapped and verified on-site. This connection can be seen on the attached 7.5 Minute Half Moon Bay Quadrangle (~~enclosure 1~~ ^{attachment}) and the Google aerial map (~~enclosure 2~~ ^{attachment}). This is further supported by the delineation map produced by Live Oaks Associates (~~enclosure 3~~ ^{attachment}). Thus the attached documents support the determination that ditches on-site convey natural flows to the southwest corner of the site. The ditch bisects the neighboring property drains to a culvert under Highway 1 and eventually to the Pacific Ocean.

Additionally, this section is intended to further clarify the Significant Nexus determination:


According to the "Clean Water Act Jurisdiction Following the U.S. Supreme Court's Decision in *Rapanos v. United States* & *Carabell v. United States*" memorandum published on June 5, 2007, by the EPA Regions and the U.S. Army Corps of Engineers Districts, the Corps will assert jurisdiction over the following waters: (a) traditional navigable waters, (b) wetlands adjacent to traditional navigable waters, (c) non-navigable tributaries of traditional navigable waters that are relatively permanent; (d) where the tributaries typically flow year-round or have continuous flow at least seasonally (e.g., typically three months) and (e) Wetlands that directly abut such tributaries. It was determined that features on-site qualified as (d) or (e) above (see C&R form for these determination). Thus, technically the significant nexus determination is not required for these features. The below paragraph however, summarizes a supplementary "significant-nexus" finding.

There are many biological, chemical, and physical functions being preformed within the project area wetlands and drainage ditches (seasonal RPW) including: biogeochemical cycling (i.e. biologic, physical, and chemical transformations of various nutrients within the soil and water), flood desynchronization (i.e. providing for receiving, storing, and releasing of water), biodiversity (i.e. environmental variation which provides for diverse plant and animal habitat),

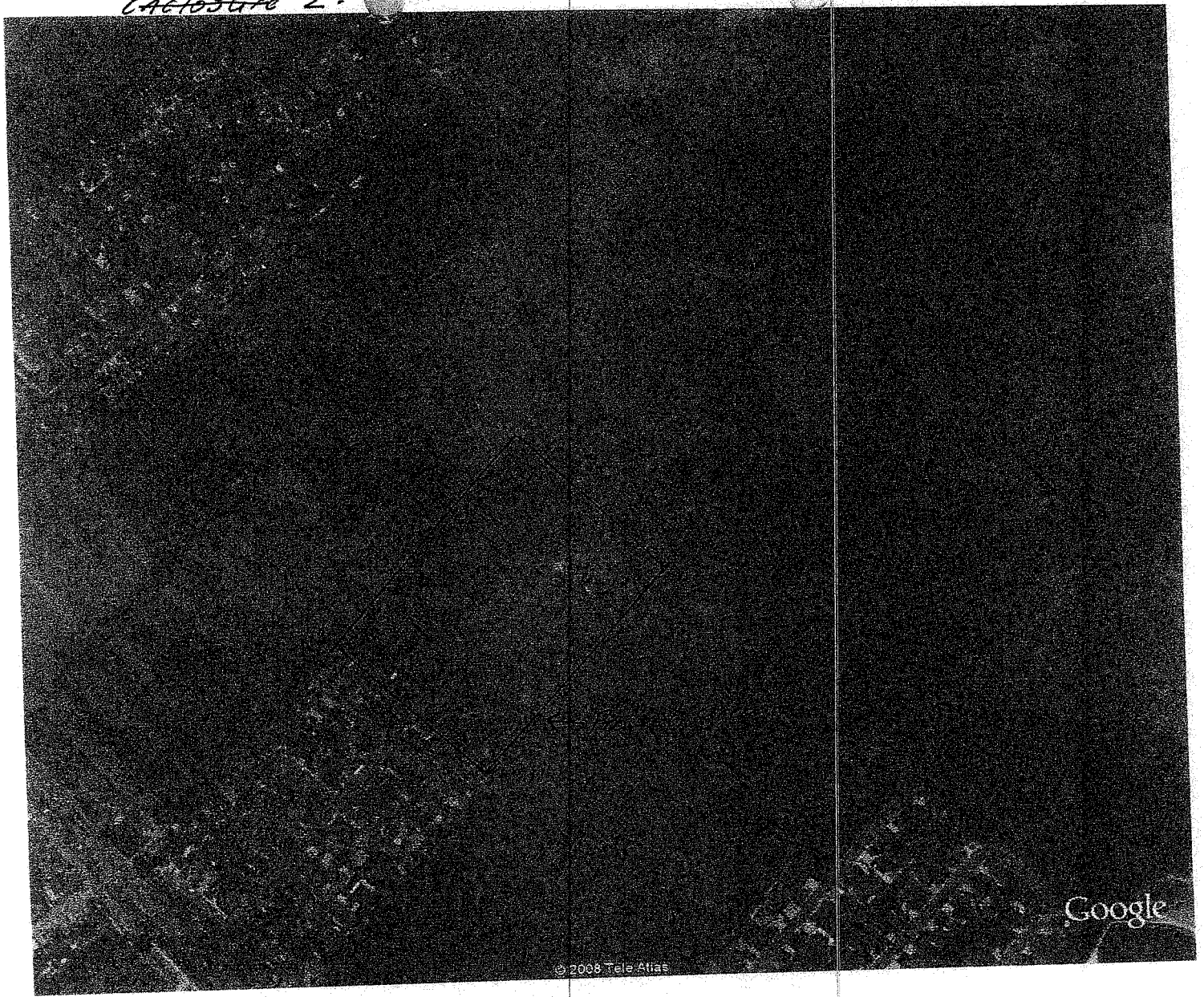
intercepting surface runoff and removing or retaining inorganic nutrients, processing organic wastes, and reducing suspended sediments delivered to downstream waterways, and ground water replenishment. No specific studies have been completed on the project site to determine the magnitude at which the above mentioned functions and values are being performed.

These functions (at any given magnitude) are however important to this highly agricultural and small watershed. Immediately northwest and north of the project area there are agricultural operations. During the site visit it was observed that wetlands on the Grandview site intercept flows from the neighboring and upstream properties. Although the project site is small, it contains a high percentage of wetland cover (17%). These wetlands are also a portion of a larger continuous wetland/waters matrix that extends beyond the project boundary. For these reasons it is believed that biological, chemical, and physical functions described above would contribute to the quality of water tributary to the downstream TNW (the Pacific Ocean). On-site waters and wetlands have a direct surface connection to navigable waters; impacts to the physical, chemical and / or biological integrity of these waters would translate to adverse affects, of unknown magnitude, to downstream navigable waters.

Topographic map of Half Moon Bay, California. The map shows the coastline with several beaches labeled: Miramar Beach, Naples Beach, Dunes Beach, Venice Beach, Elmar Beach, Francis Beach, and Half Moon Bay. Inland features include the Corral de Tierra (Palomares) area, Frenchmans Creek, and various roads such as Young Ave, Venice Blvd, and State Beach. A legend in the bottom left corner indicates the project area added on 12/14/09. The map also shows the Half Moon Bay High School, Mobile Home Park, and IOOF Cem. The map is oriented with North at the top.

 Project Area
added 12/14/09

Attachment
Enclosure 2:



Project Area added 12/14/209

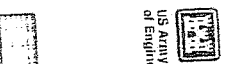
*attachement
Enclosure 5.*

LEGEND

- Seasonal Wetland (24,676s.f. / 0.56 ac.)
- Man-made Drainage Ditch (3,626s.f. / 0.08 ac.)
- Arroyo Willow Swale (64,874s.f. / 1.49 ac.)
- Culvert
- Sample Point

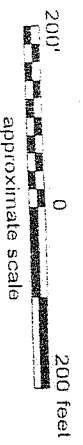
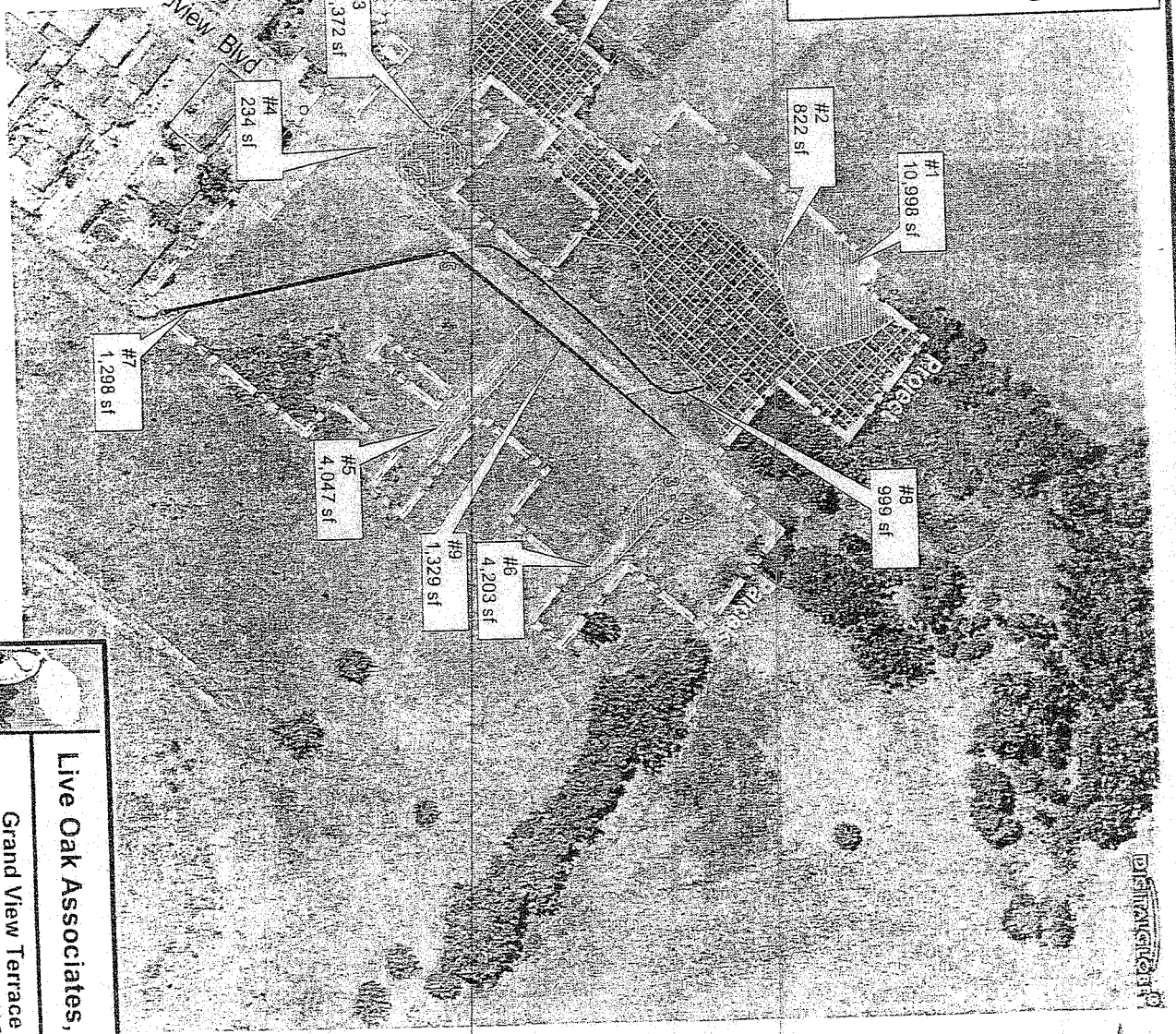
Sources:
Orthophotography courtesy of Digital Globe.
Base map courtesy of TERRAlytics Digital Mapping

**Jurisdictional Determination For
Grandview Terrace Project San Mateo County, CA**
Areas subject to the jurisdiction of:
Section 404 of the Clean Water Act (33 U.S.C. Section 1344)



- Wetlands (2.85 acres)
- Waters of the U.S. (0.08 acre)

File No. 2007-005603
Date: 7/17/08



Live Oak Associates, Inc.

**Grandview Terrace
Potential Waters of the U.S.**

Date	7/08/08	Project #	853-05	Figure #	4
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Administrative Appeal Conference
Army Corps of Engineers, San Francisco District
Grand View Terrace Property
Jurisdictional Determination, File Number 2007-00560
Prepared by Paula Gill, March 31, 2009

District:

1. Please explain why you believe that the wetlands on the Grandview Terrace property are jurisdictional as waters of the United States. (Appeal item 1)

The process of determining that a wetland is jurisdictional pursuant to section 404 of the Clean Water Act requires two steps. First it must be determined if the area meets the definition of a wetland. Second, it must be determined if the wetland has a hydrologic and/or significant nexus to a Traditionally Navigable Water (TNW).

According to the 1987 Corps of Engineers Wetlands Delineation Manual (the 1987 Manual), "*The CE (Federal Register 1982) and the EPA (Federal Register 1980) jointly define wetlands as: Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.*" Also, according to the 1987 Manual areas meeting this definition exhibit a predominance of hydrophytic plant community, hydric soils indicators, and indications of wetland hydrology. As documented in the Administrative Record by both the Corps (pgs 46, 52-53, 56-57) and the Appellant's Consultant, Live Oak Associates (pgs 16-17, 22-23, 26-27, 30-31, and 69,75,76, 81-82, 85-86, and 89-90) the areas mapped as wetland met all three criteria (i.e. hydrophytic plant community, hydric soils, and wetland hydrology).

The Grandview property is located approximately ¾ of a mile from the Pacific Ocean (the downstream TNW). All features on the Grandview site are hydrologically connected to one another (i.e. there is no upland mapped between the features on the site). Water flows from the northern corner to the southern corner of the property and is channeled into the drainage ditch that parallels the housing development on the southeastern boundary of the adjacent neighborhood. Waters from the site are culverted under Highway 1 and flow northwest to the Ocean. This was documented by the Appellants' Consultant (see pgs 75 and 93) and was confirmed by the Corps on 3/31/09 (see attached diagram and photographs). Thus all waters and wetlands on-site have a direct surface connection to navigable waters; impacts to the physical, chemical and / or biological integrity of these waters would impact navigable waters downstream (Pacific Ocean).

Therefore, all features mapped on the site meet the definition of a wetland and also have a hydrologic connection to the Pacific Ocean. For information regarding the significant nexus between the wetlands on-site and the downstream TNW please see question #4.

2. Please explain why you believe that the drainages that convey water from the Grandview Terrace property should be classified as relatively permanent waters. (Appeal item 1)

In accordance with the regulations 'Other Waters' are jurisdictional to the lateral extent of the Ordinary High Water Mark (OHWM). According to CFR 328.3(e) *"the term ordinary high water mark means that the line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding area."* Again both the Corps (pgs 46, 50-59, 107, and 111) and the Appellant's Consultant, Live Oak Associates, (pgs 10, 14, 16, and 73) documented an OHWM within the drainages.

According to the Clean Water Act Jurisdiction Following the U.S. Supreme Court's Decision in *Rapanos v. United States & Carabell v. United States* memorandum *"both the plurality opinion and the dissent would uphold CWA jurisdiction over non-navigable tributaries that are 'relatively permanent' - waters that typically (e.g., except due to drought) flow year-round or waters that have continuous flow at least seasonally (e.g., typically three months)."* As documented, by the Corps, in the Approved Jurisdictional Determination Form (pgs 105-114), *"the overall California climate is characterized as Mediterranean, with the majority of precipitation occurring as rain in the winter months, and generally mild temperatures year round. Given the limited amount of rainfall restrict to winter months, presence of an OHWM is indicative of continuous seasonal flow within the channel."*

The San Francisco District maintains that given the limited amount of rainfall outside of the winter season, that it is appropriate to define "seasonally" as features that maintain hydrology during the winter wet months. Features that flow consistently during winter wet months would maintain a continuous OHWM, as they do in the Grandview property, and therefore are classified as seasonal relatively permanent waters.

Further, vegetation documented in the channel by the Appellant's consultant is also indicative of long duration hydrology (page 89). Obligate species observed in the ditch included: *Juncus effuses* and *Oenathe sarmentosa*. According to the 1987 Manual obligate wetland plants are defined as, *"Plants that occur almost always (estimated probability >99 percent) in wetlands under natural conditions, but which may also occur rarely (estimated probability <1 percent) in non-wetlands."* The presence of these species supports the determination that there is water present in the channel seasonally.

Given the observation of an OHWM and obligate vegetation in the channel it was determined that the drainage ditches maintain flows seasonally during the winter wet months.

3. Please describe your understanding of the hydrologic connection between the wetlands on the Grandview Terrace Property and the Pacific Ocean. (Appeal item 1)

Both the Appellant's Consultant and the Corps document the same hydrologic connection between the Grandview Terrace Property and the Pacific Ocean.

Appellant's Documentation in the Administrative Record:

On page 16 and 75 of the record the Appellant states, *"The ditch eventually drains through a culvert under Highway 1 and into what appears to have been the historic natural channel to the northwest of the site."* A photograph of the culvert was provided by the Appellant on page 34 and 93 of the Administrative Record. On page 16 and 75 in reference to wetlands, the Appellant's Consultant documents that, *"All of these features eventually flow into the larger of the two drainage ditches occurring onsite, which continues to flow offsite where it appears to eventually empty into the Pacific Ocean."*

Corps' documentation in the Administrative Record:

On page 107 of the record the Corps states, *"The ditch flows off the site at the southwest corner. It continues to traverse the southern edge of the existing residential development immediately adjacent to the site. The ditch eventually drains through a culvert under Highway 1 and into what appears to have been the historic natural channel to the northwest of the site."*

This was further confirmed on March 30, 2009, as described in the enclosed diagram. There is no disagreement within the Administrative Record that there is a direct, continuous hydrologic connection between the wetlands and the Pacific Ocean.

4. Please explain why you believe the wetlands on the Grandview Terrace property have a significant nexus with the Pacific Ocean. (Appeal item 1)

The determination was made that the waters within the Grandview property are classified as seasonal relatively permanent waters (RPWs) and that the wetlands are directly abutting these RPWs. Therefore according to the Corps memorandum dated June 5, 2007, a significant nexus is implied (see pgs 105-112 and 139-143).

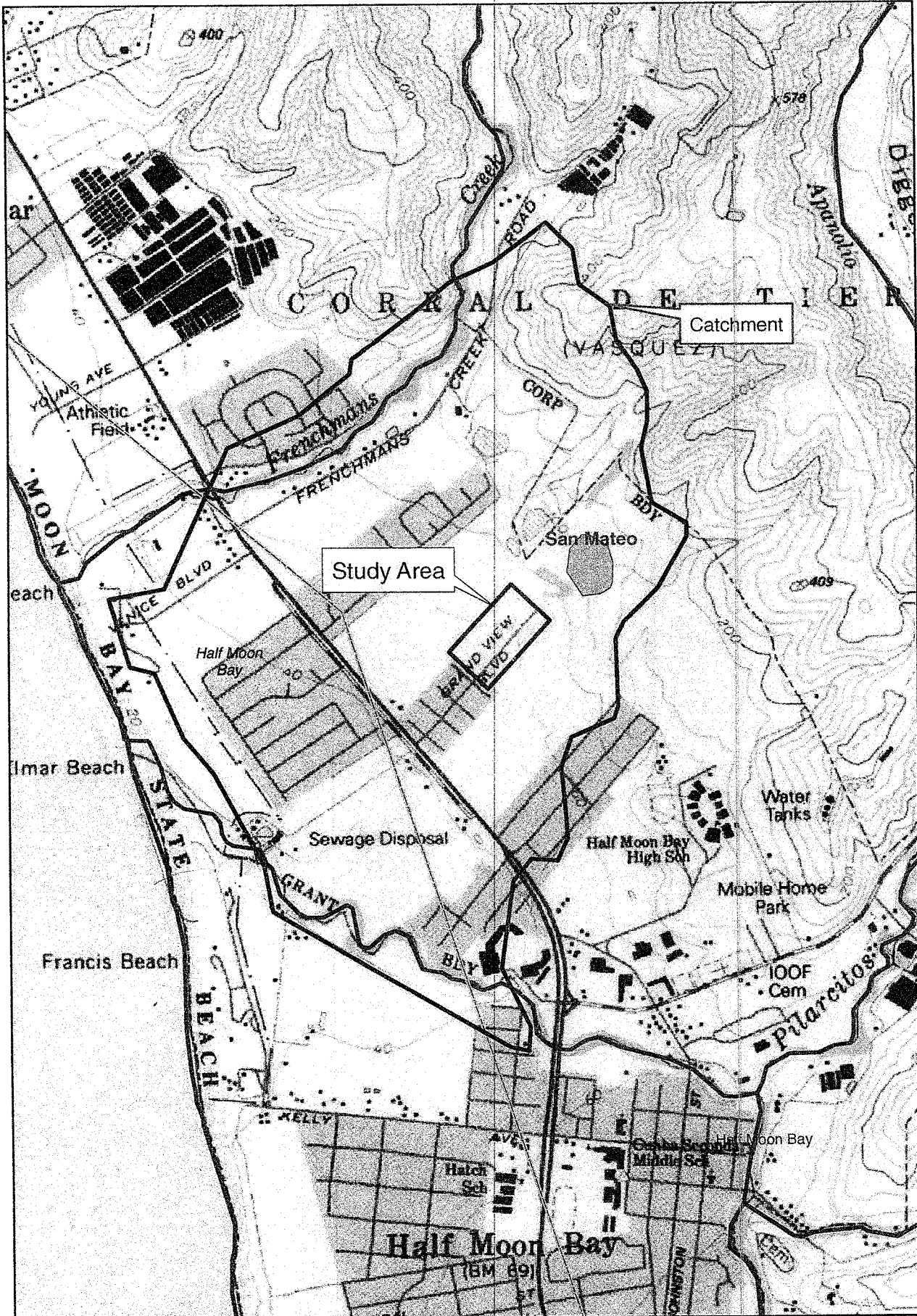
The significant nexus is further explained here and in the Administrative Record (pgs 139-143). The study area is within Pilarcitos Watershed which includes approximately 28 square miles of land. The head of the larger Pilarcitos watershed is found on the south slope of Whiting Ridge 1.3 km (0.8 mi) east of North Peak, the watershed flows east-southeast, through Pilarcitos Lake to join Albert Canyon where it flows southwest for 4.8 km (3 mi) to the community of Half Moon Bay where it continues west-northwest for 3.2 km (2 mi) to enter Half Moon Bay and the Pacific Ocean. Pilarcitos Creek discharges at Pilarcitos Creek Beach, within Half Moon Bay State Beach.

A smaller drainage area, or catchment, encompasses the lower reaches of the Pilarcitos Watershed. The drainage area is 1.99 square miles in size and is depicted in the attached map. Fecal coliform levels at Pilarcitos Creek Beach have been documented and are periodically in violation of State of California water quality standards. This small watershed also provides documented habitat for many federally listed species including coho salmon, steelhead trout, red-legged frog, and San Francisco garter snake. Within this watershed there are many local farms and other agriculture practices which influence water quality within the watershed. The Pilarcitos Creek Watershed is a source of water supply for the town of Half Moon Bay and other coastal cities and is instrumental to the health of the coastal ecosystem.

As documented in the Administrative Record by the Corps, there are many biological, chemical, and physical functions being performed with the project area wetlands and drainage ditches (seasonal RPW). These documented functions include biogeochemical cycling; flood desynchronization; provision of diverse habitat types; intercepting surface runoff and removing or retaining inorganic nutrients; processing organic wastes; reducing suspended sediments delivered to downstream waterways; and ground water replenishment.

These functions are important to this highly agricultural and small watershed. Immediately northwest and north of the project area there are agricultural operations. During the site visit it was observed that wetlands on the Grandview site intercept flows from the neighboring and upstream properties. Although the project site is small, it contains a high percentage of wetland cover (17%). These wetlands are also a portion of a larger continuous wetland/waters matrix that extends beyond the project boundary to Pilarcitos Beach. For these reasons it is believed that biological, chemical, and physical functions described above would contribute to improved quality of water tributary to the downstream TNW (the Pacific Ocean). Given the documented concerns regarding water quality and habitat protection at Pilarcitos Beach, it is important to retain the functions and values performed within the wetlands on the Grandview site, within the lower reaches of the Pilarcitos watershed, and within the mapped drainage area.

0 0.15 0.6 Miles



Catchment area (indicated in red, 1.99 sq. miles) within the Pilarcitos Watershed.
Grandview Terrace project site indicated by blue rectangle. Study area location corrected 11/23/09.

2 enclosure 4.

APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 11/23/09

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: SPN, 2007-00560S, Grand View Terrace

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: CA County/parish/borough: San Mateo County City: Half Moon Bay
Center coordinates of site (lat/long in degree decimal format): Lat. 37.47825695° N Long. -122.43558047° W.
Universal Transverse Mercator: 10

Name of nearest waterbody: Pilarcitos Creek

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Pilarcitos Creek

Name of watershed or Hydrologic Unit Code (HUC): 18050006

- ☒ Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.
☐ Check if other sites (e.g., offsite mitigation sites, disposal sites, etc...) are associated with this action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

- ☒ Office (Desk) Determination. Date: November 23, 2009
☒ Field Determination. Date(s): August 1, 2007

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There ~~are~~ **no** "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [Required]

- ☐ Waters subject to the ebb and flow of the tide.
☐ Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.
Explain:

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There ~~are~~ "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]

1. Waters of the U.S.

a. Indicate presence of waters of U.S. in review area (check all that apply):¹

- ☐ TNWs, including territorial seas
☐ Wetlands adjacent to TNWs
☒ Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs
☐ Non-RPWs that flow directly or indirectly into TNWs
☒ Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
☐ Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
☐ Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
☐ Impoundments of jurisdictional waters
☐ Isolated (interstate or intrastate) waters, including isolated wetlands

b. Identify (estimate) size of waters of the U.S. in the review area:

Non-wetland waters: li near feet: width h (ft) and/or 0.08 acres.
Wetlands: 2.05 acres.

c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual

Elevation of established OHWM (if known): and OHWM.

2. Non-regulated waters/wetlands (check if applicable):³

- ☐ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.
Explain:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1. **TNW**

Identify TNW: .

Summarize rationale supporting determination: .

2. **Wetland adjacent to TNW**

Summarize rationale supporting conclusion that wetland is "adjacent": .

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. **Characteristics of non-TNWs that flow directly or indirectly into TNW**

(i) **General Area Conditions:**

Watershed size: 0.5 square miles

Drainage area: 0.5 square miles

Average annual rainfall: 27.98 (Half Moon Bay, WETS table) inches

Average annual snowfall: 0 inches

(ii) **Physical Characteristics:**

(a) Relationship with TNW:

☒ Tributary flows directly into TNW.

☐ Tributary flows through Pick List tributaries before entering TNW.

Project waters are 1-2 river miles from TNW

Project waters are 1 (or less) river miles from RPW.

Project waters are 1 (or less) aerial (straight) miles from TNW.

Project waters are 1 (or less) aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain: No.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

Identify flow route to TNW⁵: The ditch flows off the site at the southwest corner. It continues to traverse the southern edge of the existing residential development immediately adjacent to the site. The ditch eventually drains through a culvert under Highway 1 and into what appears to have been the historic natural channel to the northwest of the site. Tributary stream order, if known: Unknown.

(b) General Tributary Characteristics (check all that apply):

Tributary is:

☒ Natural

☒ Artificial (man-made). Explain: The ditches were created in the 1960's and 1970s and have not been maintained.

☒ Manipulated (man-altered). Explain: Natural waters have been diverted into a ditch which bisects the property.

Tributary properties with respect to top of bank (estimate):

Average width: 2 feet

Average depth: 2 feet

Average side slopes: **Vertical (1:1 or less).**

Primary tributary substrate composition (check all that apply):

☒ Silts

☐ Sands

☐ Concrete

☒ Cobbles

☐ Gravel

☐ Muck

☐ Bedrock

☐ Vegetation. Type/% cover:

☐ Other. Explain:

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: stable.

Presence of run/riffle/pool complexes. Explain: None.

Tributary geometry: **Relatively straight**

Tributary gradient (approximate average slope): %

(c) Flow:

Tributary provides for: **Seasonal flow**

Estimate average number of flow events in review area/year: **11-20**

Describe flow regime: This drainage traps overland sheet flow, precipitation, and storm water.

Other information on duration and volume: This drainage likely flows consistently during the winter wet months.

Surface flow is: **Discrete.** Characteristics:

Subsurface flow: **Unknown.** Explain findings:

☐ Dye (or other) test performed:

Tributary has (check all that apply):

☐ Bed and banks

☒ OHWM⁶ (check all indicators that apply):

☒ clear, natural line impressed on the bank

☐ changes in the character of soil

☐ shelving

☐ vegetation matted down, bent, or absent

☐ leaf litter disturbed or washed away

☐ sediment deposition

☐ water staining

☐ other (list):

☐ the presence of litter and debris

☒ destruction of terrestrial vegetation

☐ the presence of wrack line

☐ sediment sorting

☐ scour

☐ multiple observed or predicted flow events

☐ abrupt change in plant community

☐ Discontinuous OHWM.⁷ Explain:

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

☒ High Tide Line indicated by:

☐ oil or scum line along shore objects

☐ fine shell or debris deposits (foreshore)

☐ physical markings/characteristics

☐ tidal gauges

☐ other (list):

☒ Mean High Water Mark indicated by:

☐ survey to available datum;

☐ physical markings;

☐ vegetation lines/changes in vegetation types.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

⁶ A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

⁷ Ibid.

(iii) Chemical Characteristics:

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).

Explain: None observed.

Identify specific pollutants, if known: Unknown.

(iv) **Biological Characteristics. Channel supports (check all that apply):**

- ☒ Riparian corridor. Characteristics (type, average width): arroyo willow swale.
- ☒ Wetland fringe. Characteristics: Obligate Vegetation.
- ☒ Habitat for:
 - ☐ Federally Listed species. Explain findings:
 - ☐ Fish/spawn areas. Explain findings:
 - ☒ Other environmentally-sensitive species. Explain findings: Amphibians and reptiles (e.g. Pacific Tree Frog).
 - ☒ Aquatic/wildlife diversity. Explain findings: Macroinvertebrates.

2. **Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW**

(i) **Physical Characteristics:**

(a) General Wetland Characteristics:

Properties:

- Wetland size: 2.05 acres
- Wetland type. Explain: Paulustrine Emergent and Arroyo Willow Swale.
- Wetland quality. Explain: No wetland quality assessment was completed.
- Project wetlands cross or serve as state boundaries. Explain: No.

(b) General Flow Relationship with Non-TNW:

Flow is: Intermittent flow. Explain:

Surface flow is: Discrete

Characteristics:

Subsurface flow: Pick List. Explain findings:

- ☐ Dye (or other) test performed:

(c) Wetland Adjacency Determination with Non-TNW:

- ☒ Directly abutting
- ☐ Not directly abutting
 - ☐ Discrete wetland hydrologic connection. Explain:
 - ☐ Ecological connection. Explain:
 - ☐ Separated by berm/barrier. Explain:

(d) Proximity (Relationship) to TNW

- Project wetlands are 1-2 river miles from TNW.
- Project waters are 1-2 aerial (straight) miles from TNW.
- Flow is from: Wetland to navigable waters.
- Estimate approximate location of wetland as within the Pick List floodplain.

(ii) **Chemical Characteristics:**

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: None known.
Identify specific pollutants, if known: None known.

(iii) **Biological Characteristics. Wetland supports (check all that apply):**

- ☐ Riparian buffer. Characteristics (type, average width):
- ☒ Vegetation type/percent cover. Explain: Hydrophytic vegetation. See data sheet in file.
- ☒ Habitat for:
 - ☐ Federally Listed species. Explain findings:
 - ☐ Fish/spawn areas. Explain findings:
 - ☒ Other environmentally-sensitive species. Explain findings: reptiles and amphibians.
 - ☒ Aquatic/wildlife diversity. Explain findings: macro-invertebrates.

3. **Characteristics of all wetlands adjacent to the tributary (if any)**

All wetland(s) being considered in the cumulative analysis: 3
Approximately (2.05) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>	<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>
Wetland 1 Y	10,998 sq. feet	Wetland 2 Y	822 sq. feet
Wetland 3 Y	4,372 sq. feet	Wetland 4 Y	234 sq. feet
Wetland 5 Y	4,047 sq. feet	Wetland 6 Y	4,203 sq. feet
Wetland 10 Y	64,874 sq. feet		

Summarize overall biological, chemical and physical functions being performed: There are many likely biological, chemical, and physical functions being performed within the project area wetlands including: biogeochemical cycling (i.e. biologic, physical, and chemical transformations of various nutrients within the soil and water), flood desynchronization (i.e. providing for receiving, storing, and releasing of water), biodiversity (i.e. environmental variation which provides for diverse plant and animal habitat), intercepting surface runoff and removing or retaining inorganic nutrients, processing organic wastes, and reducing suspended sediments delivered to downstream waterways, and ground water replenishment. No specific studies have been completed on the project site to determine the magnitude at which the above mentioned functions and values are being performed. The seasonal wetland functions to intercept surface runoff from residential and agricultural areas and is therefore important to improved water quality within this watershed. For these reasons function explained above provide value for the larger watershed and contribute to improved downstream water quality.

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

1. **Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:
2. **Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
3. **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: The determination was made that the waters within the Grandview property are classified as seasonal relatively permanent waters (RPWs) and that the wetlands are directly abutting these RPWs. Therefore according the Corps memorandum dated June 5, 2007, a significant nexus is implied. A significant nexus determination however, can be articulated. The watershed and drainage area are the same size (0.5 square miles) as depicted in the attached map. Fecal coliform levels at Pilarcitos Creek Beach have been documented and are periodically in violation of State of California water quality standards. This small watershed also provides documented habitat for many federally listed species including coho salmon, steelhead trout, red-legged frog, San Francisco garter snake, and Western snowy plover. Within this watershed there are many local farms and other agriculture

practices which adversely effect water quality. The Pilarcitos Creek Watershed is a source of water supply for the town of Half Moon Bay and other coastal cities and is instrumental to the health of the coastal ecosystem. Functions documented above are important to this highly agricultural and small watershed. Immediately northwest and north of the project area there are agricultural operations. During the site visit it was observed that wetlands on the Grandview site intercept flows from the neighboring and upstream properties. Although the project site is small, it contains a high percentage of wetland cover (17%). These wetlands are also a portion of a larger continuous wetland/waters matrix that extends beyond the project boundary to Pilarcitos Creek. For these reasons it is believed that biological, chemical, and physical functions described above would contribute to improved quality of water tributary to the downstream TNW (Pilarcitos Creek). Given the documented concerns regarding water quality and habitat protection at Pilarcitos Beach and within Pilarcitos Creek, functions and values preformed within the wetlands on the Grandview site, within the lower reaches of the Pilarcitos watershed, and within the mapped drainage/watershed area occur at a large enough magnitude to effect water quality of the downstream TNW, Pilarcitos Creek.

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS: THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1. TNWs and Adjacent Wetlands. Check all that apply and provide size estimates in review area:

- ☐ TNWs: li near feet width (ft) , Or, acres.
☐ Wetlands adjacent to TNWs: acres.

2. RPWs that flow directly or indirectly into TNWs.

- ☐ Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
☒ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: The overall California climate is characterized as Mediterranean, with the majority of precipitation occurring as rain in the winter months, and generally mild temperatures year round. Given the limited amount of rainfall restrict to winter months, presence of an OHWM is indicative of continuous seasonal flow within the channel.

Provide estimates for jurisdictional waters in the review area (check all that apply):

- ☒ Tributary waters: **3,626 sq. feet** linear feet width (ft).
☐ Other non-wetland waters: a cres.
Identify type(s) of waters: .

3. Non-RPWs⁸ that flow directly or indirectly into TNWs.

- ☐ Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional waters within the review area (check all that apply):

- ☐ Tributary waters: li near feet width (ft).
☐ Other non-wetland waters: acres.
Identify type(s) of waters: .

4. Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.

- ☒ Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
☐ Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .
☒ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: The seasonal wetlands 1, 2, 3, and 4 all directly abut the larger arroyo willow swale which is directly connected to the drainage ditch at the northwestern terminus. Seasonal wetlands 5 and 6 are both directly connected to drainage #7. All of these wetlands are directly connected physically and hydrologically (i.e. there is no upland between the wetland and the drainage ditches).

Provide acreage estimates for jurisdictional wetlands in the review area: **2.05** acres.

5. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.

⁸See Footnote # 3.

- ☐ Lakes/ponds: acres.
☐ Other non-wetland waters: acres. List type of aquatic resource: .
☐ Wetlands: acres.

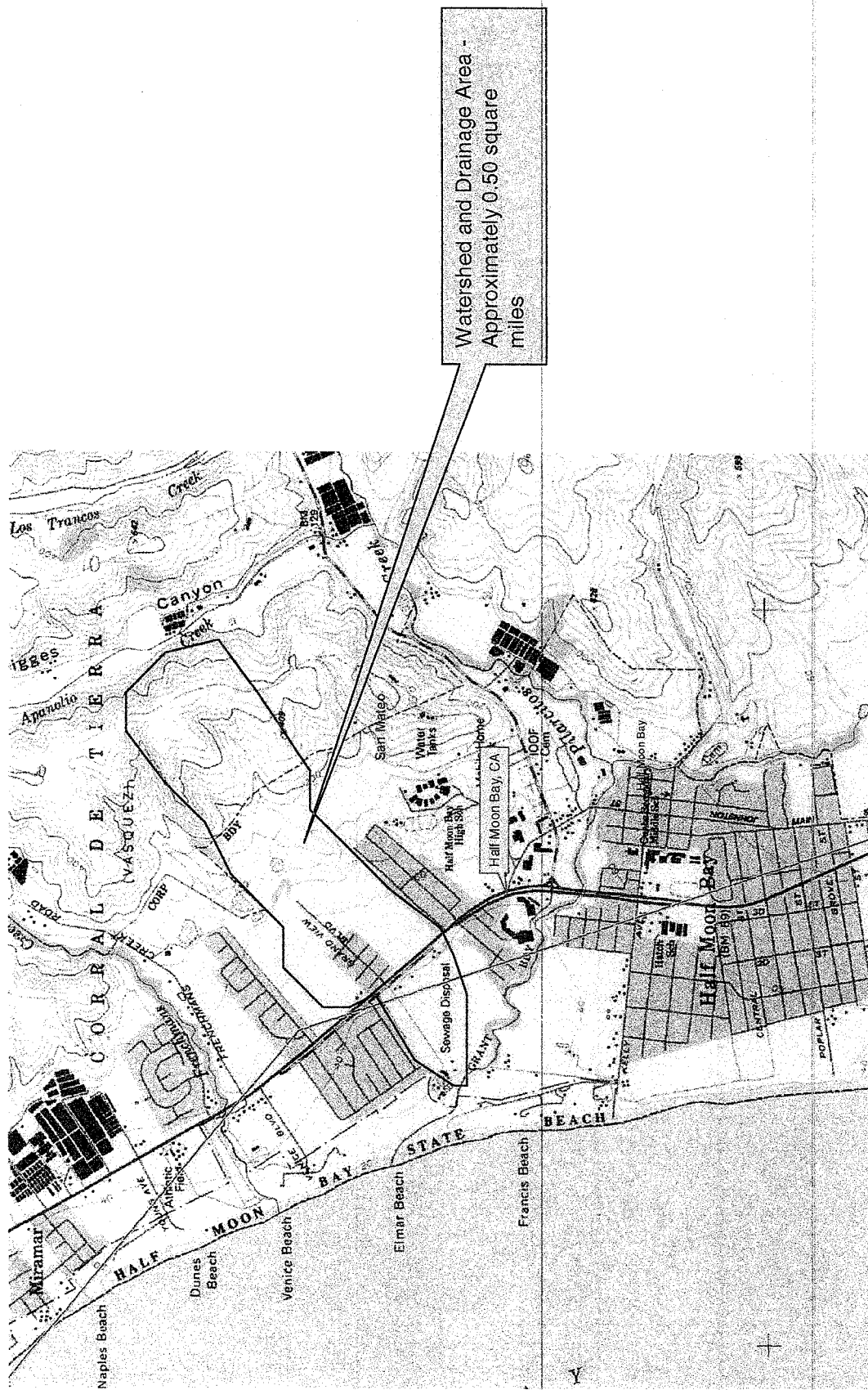
SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):

- ☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: An Investigation of Potential Waters of the U.S. Grand View Terrace Half Moon Bay dated June 11, 2007 and June 10, 2008.
☒ Data sheets prepared/submitted by or on behalf of the applicant/consultant.
 ☐ Office concurs with data sheets/delineation report.
 ☐ Office does not concur with data sheets/delineation report.
☒ Data sheets prepared by the Corps: See File.
☐ Corps navigable waters' study:
☐ U.S. Geological Survey Hydrologic Atlas:
 ☐ USGS NHD data.
 ☐ USGS 8 and 12 digit HUC maps.
☒ U.S. Geological Survey map(s). Cite scale & quad name: U.S.G.S. 7.5 minute quadrangle Half Moon Bay.
☐ USDA Natural Resources Conservation Service Soil Survey. Citation: .
☐ National wetlands inventory map(s). Cite name: .
☐ State/Local wetland inventory map(s): .
☐ FEMA/FIRM maps:
☐ 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
☒ Photographs: ☒ Aerial (Name & Date): .
 or ☐ Other (Name & Date): .
☐ Previous determination(s). File no. and date of response letter: .
☐ Applicable/supporting case law: .
☐ Applicable/supporting scientific literature: .
☐ Other information (please specify): .

B. ADDITIONAL COMMENTS TO SUPPORT JD:

Enclosure 5:



The watershed and the drainage area are approximately the same size on the Grandview Terrace property. The drainage area is the area of land that drains to the stream order segment; evaluated for significant nexus purposes, between the upper and lower stream orders. The Watershed is the area of land drains to the stream order segment to the point at which it is tributary to the TNW.

Figure created November 23, 2009.



USGS Home
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National Water Information System: Web Interface

USGS Water Resources

Data Category:

Surface Water

Geographic Area:

United States

GO

News - updated November 2009

USGS Surface-Water Monthly Statistics for the Nation

The statistics generated from this site are based on approved daily-mean data and may not match those published by the USGS in official publications. The user is responsible for assessment and use of statistics from this site. For more details on why the statistics may not match, [click here](#).

USGS 11162620 PILARCITOS C BL STONE DAM NR HILLSBOROUGH CA

Available data for this site

Time-series: Monthly statistics

GO

San Mateo County, California
Hydrologic Unit Code 18050006
Latitude 37°31'29", Longitude 122°23'54" NAD27
Drainage area 6.54 square miles
Gage datum 500 feet above sea level NGVD29

Output formats

HTML table of all data

Tab-separated data

Reselect output format

00060, Discharge, cubic feet per second,												
Monthly mean in cfs (Calculation Period: 1997-10-01 -> 2008-09-30)												
YEAR	Calculation period restricted by USGS staff due to special conditions at/near site											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1997										0.047	0.354	0.426
1998	28.2	60.4	3.44	0.992	0.588	0.462	0.384	0.258	0.224	0.317	0.715	0.478
1999	1.18	23.0	2.82	1.45	0.413	0.309	0.211	0.180	0.150	0.097	0.102	0.074
2000	1.72	20.3	6.99	0.564	0.561	0.262	0.231	0.140	0.141	0.298	0.149	0.327
2001	0.443	1.44	0.577	0.216	0.125	0.062	0.055	0.054	0.056	0.026	0.139	1.44
2002	11.7	0.840	1.34	0.388	0.185	0.208	0.302	0.280	0.184	0.106	0.162	6.46
2003	2.76	0.352	0.462	0.833	0.732	0.394	0.376	0.291	0.173	0.169	0.274	1.92
2004	1.33	0.841	0.562	0.335	0.251	0.137	0.127	0.135	0.088	0.211	0.192	0.600
2005	1.56	1.10	4.74	1.72	0.529	0.447	0.310	0.263	0.108	0.165	0.139	11.6
2006	29.2	15.4	31.9	34.2	8.23	2.92	0.775	0.181	0.139	1.65	2.70	2.07
2007	1.12	4.05	6.59	1.55	1.67	1.50	1.21	0.702	0.554	0.719	0.635	1.40
2008	14.3	18.8	1.82	1.72	1.75	1.38	1.31	1.25	0.954			
Mean of monthly	8.5	13	5.6	4.0	1.4	0.73	0.48	0.34	0.25	0.35	0.51	2.4

**** No Incomplete data have been used for statistical calculation**

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Title: Surface Water data for USA: USGS Surface-Water Monthly Statistics
URL: <http://waterdata.usgs.gov/nwis/monthly?>

Page Last Modified: 2009-11-23 20:14:27 EST
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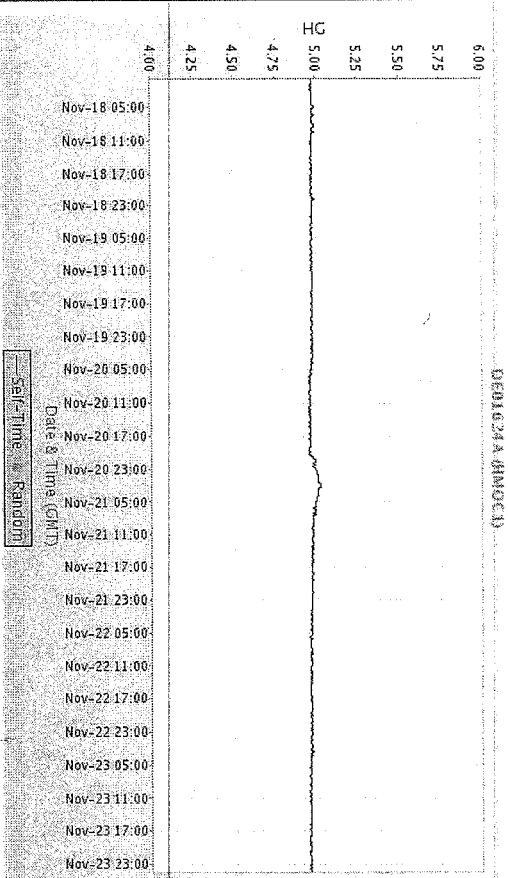


DE01624A (HMOC1)

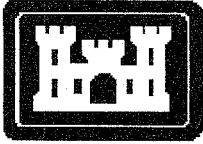
Owned and/or operated by WATER RESOURCES DIVISION-US GEOLOGICAL SURVEY

HG Height river stage (FT) Refresh

PILARCITOS CREEK BELOW STONE DAM NEAR HALF MOON BAY GNNE



Self-Time Random



MEMORANDUM FOR RECORD

FILE NUMBER: 2007-400560S
PROJECT: Grand View Terrace
DATE: 12/14/09
SUBJECT: Site Visit Summary

Site Location: The property is located at the terminus of Grand View Terrace in Half Moon Bay, San Mateo County, California

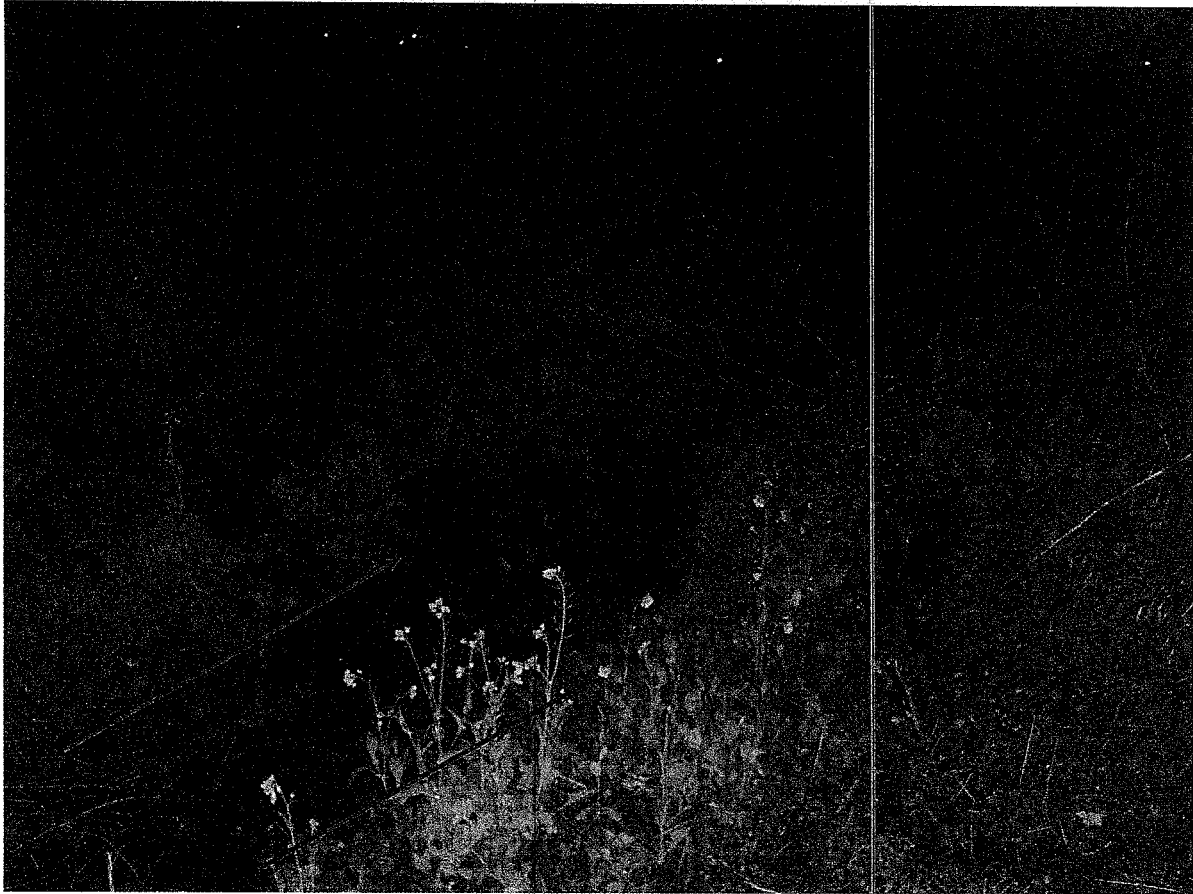
Background: A jurisdictional determination was completed on July 21, 2008. The applicant appealed the Corps determination on August 13, 2008. An appeals conference was held and the South Pacific Division remanded the decision back to the San Francisco District. The South Pacific Division requested the District further review their finding.

Site Visit: After the first heavy rains of the season (December 11-13, 2009) the District Project Manager, Paula Gill, traveled to the site in the evening (approximately 1730) to confirm the presence of water in the channel. Permission to access the property had not been obtained, so the drainage at the southwest corner of the property was observed from a public street (Golden Gate Avenue). The site visit was intentionally made toward the end of one of the first heavy rain events of the season to demonstrate that the ditch would be holding water early in the season.

Observations:

Approximately 2-5 inches of standing water were observed in the bottom of the channel. The ditch was not yet flowing, but the up-stream wetland system was clearly charged and the drainage was serving to hold water at the beginning of the winter rainy months.

Note: According to the data provided in the WETS table December is late in the year for the first substantial rain events to be occurring. According to the WETS table in an average year between July and December the Half Moon Bay area has received 10.35" of rain. To date, (according to the Department of Water Resources, California Data Exchange Center, at the Crystal Springs Cottage Tipping Bucket) there have only been two significant rain events totally 6.83" of rain. The first rain event occurred on October 14th and approximately 4.5" of rainfall occurred. Thus prior to this rain the system would have been drier than normal for this time of year yet water was still observed in the channel.



Photograph taken by Paula Gill 12/12/09. Standing water apparent between the two red lines in the photograph above. Bent vegetation is also indicative of flowing water in the channel. Water was approximately 2-5" deep and about 3" below the ordinary high water mark.

Paula Gill, Project Manager/Ecologist

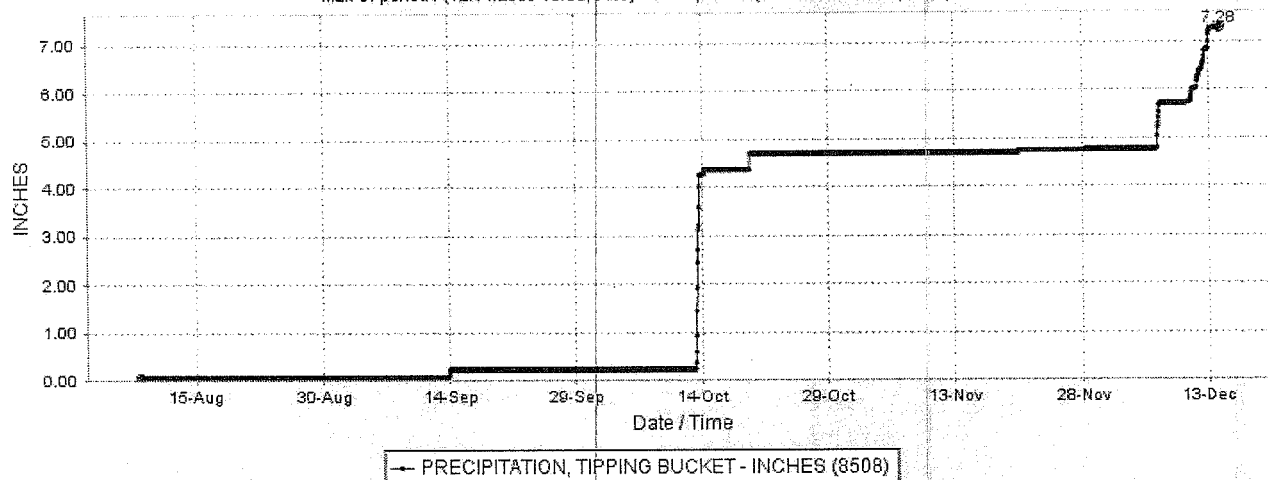
Date

Department of Water Resources California Data Exchange Center

CRYSTAL SPRINGS COTTAGE (CSC)

Date from 08/08/2009 11:26 through 12/14/2009 11:26 Duration: 128 days

Max of period: (12/14/2009 10:00, 7.28) Min of period: (08/08/2009 12:00, 0.07)



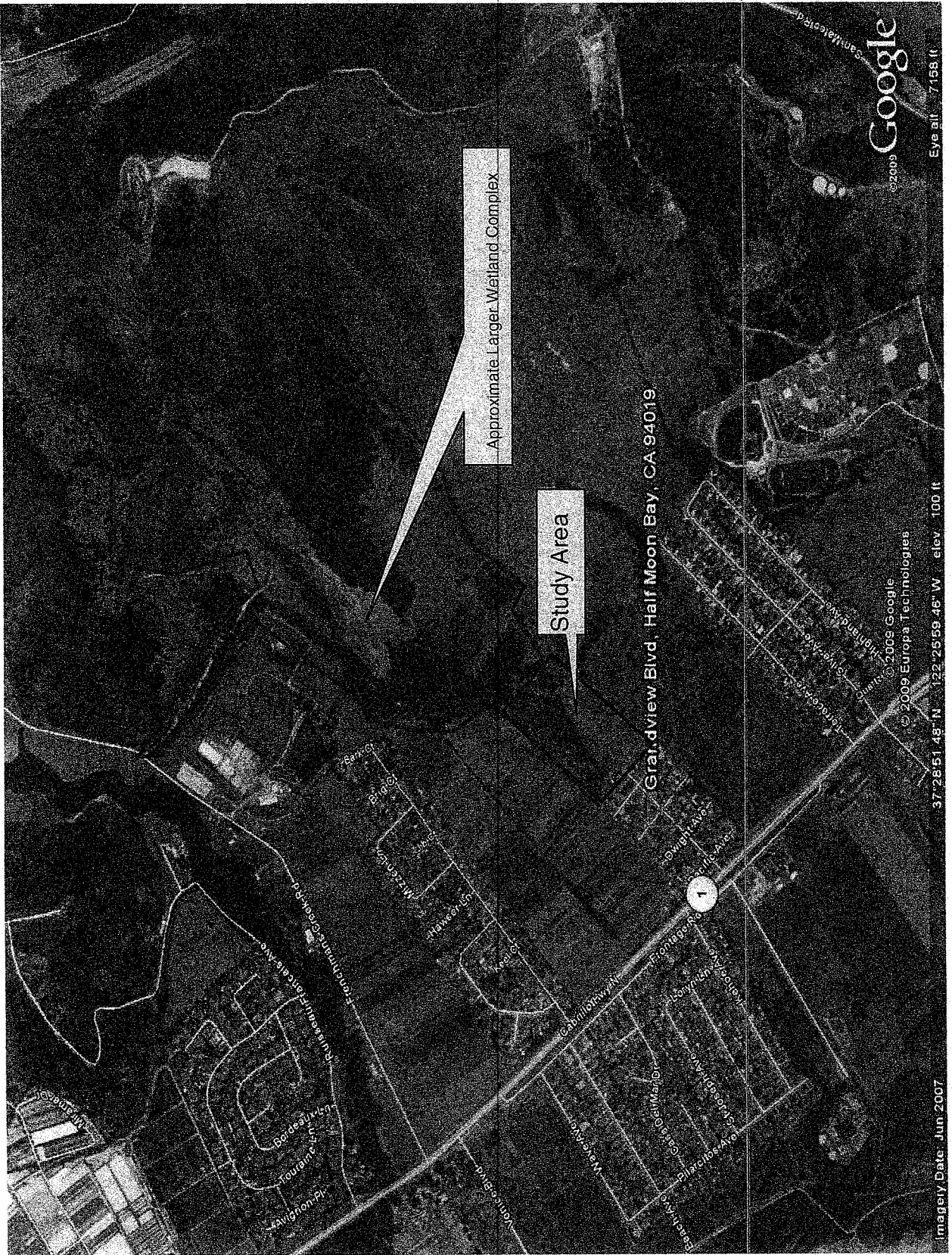
Generated on Mon Dec 14 11:27:20 PST 2009

[Plot all CSC Sensors](#) | [Real-Time CSC Data](#) | [CSC Data](#) | [Daily CSC Data](#) | [Show CSC Map](#) | [CSC Info](#)

Plot from ending date: Span: days

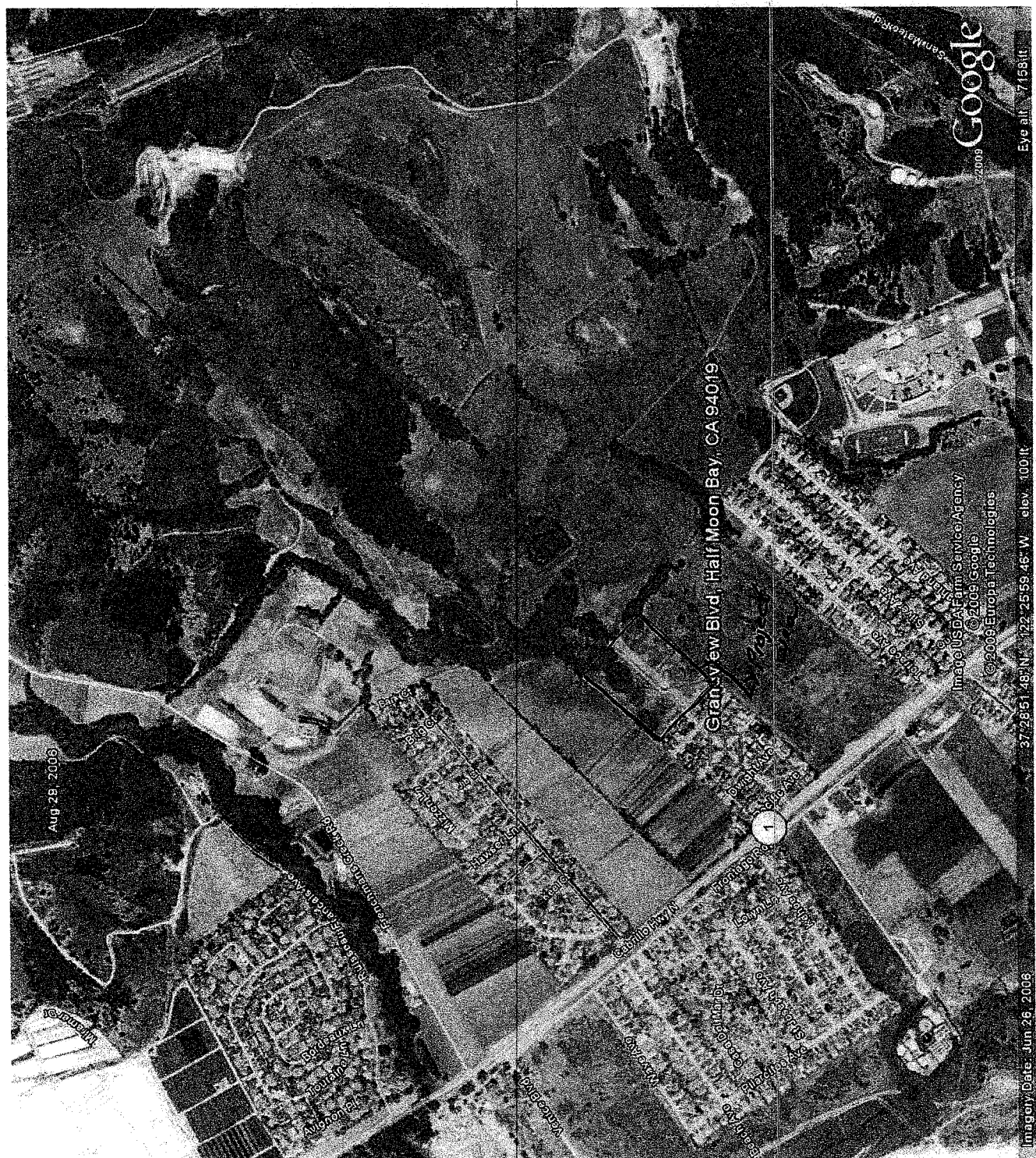
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Enclosure 8:



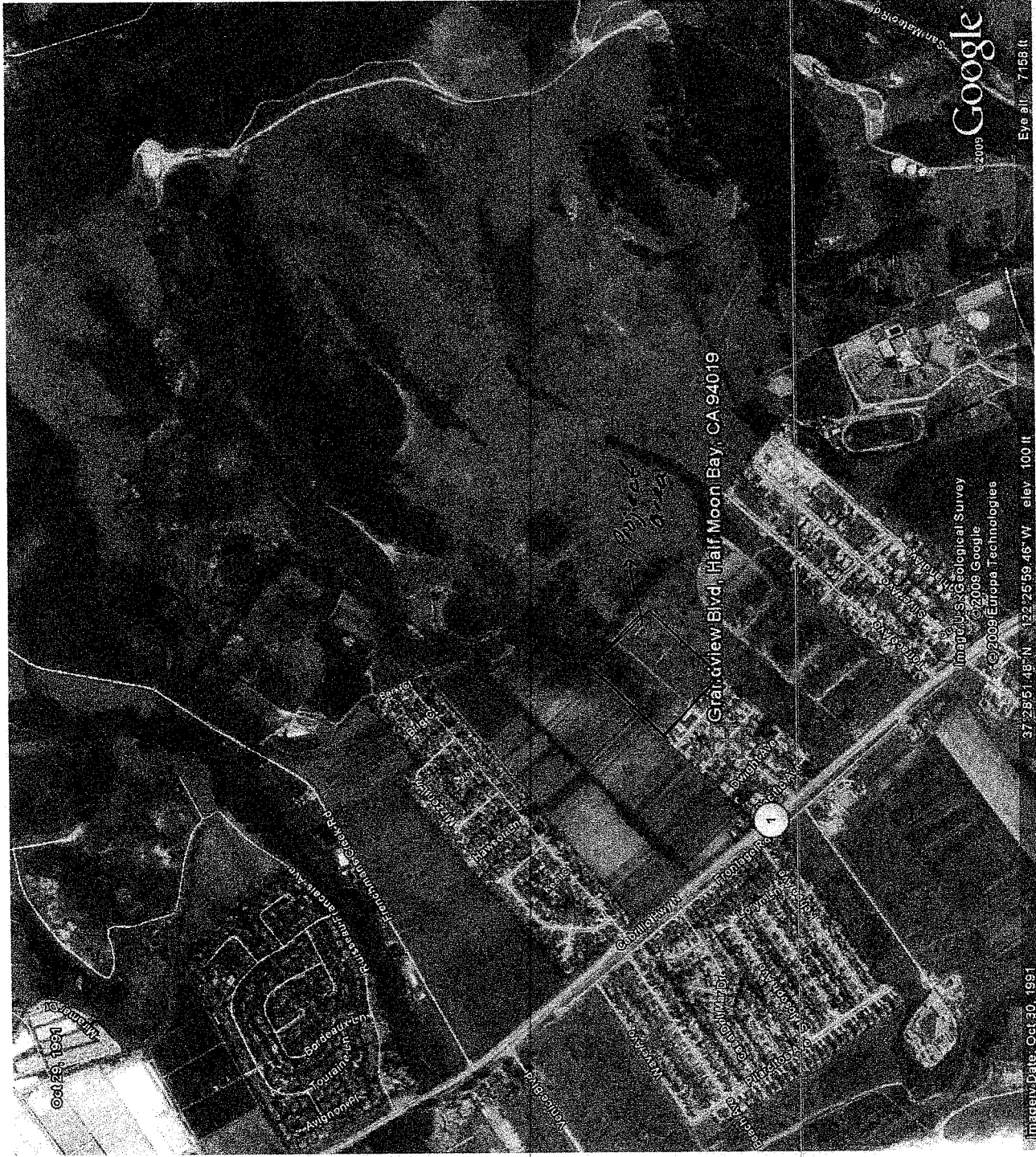
Study Area location relative to larger wetland complex on Grandview Terrace property, created November 23, 2009. Aerial photograph from Google Earth image dated 6/2007.

Enclosure 9:

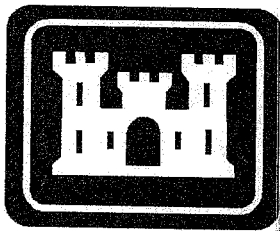


Google Earth Image dated August 29, 2006. Image taken at end of summer when annual plants have senesced and turned brown. Wetland complex still apparent (green signature). Created November 23, 2009.

Enclosure 10:



Google Earth Image dated October 29, 1991. Wetland complex still apparent including arroyo willow swale on project property.
Created November 23, 2009.



Memo For The Record

File No.: 2007-400560

Date: January 26, 2010

Subject: Photographs of water in channel. Please see attached photographs.

Site Location: These pictures were taken by Ian Liffmann from the end of Grand View Terrace, city of Half Moon Bay, San Mateo County, California.

Site Conditions: The site is where Grand View Terrace dead-ends into a field. There was a channel between the end of the road and the field, and there was a make-shift bridge crossing the channel. Water was seen flowing in the channel at the time it was visited. The water appeared to be between six inches and one foot deep, and was flowing towards the West.



Ian Liffmann, Project Manager

2/1/2010

Date

