Lost Hills Road/Route 101
Lost Hills Road Overcrossing Replacement
& Interchange Modification Project

Project ID 0700000419

CITY OF CALABASAS, LOS ANGELES COUNTY, CALIFORNIA
DISTRICT 7 – US-101 (PM 31.9/32.3)

Jurisdictional Delineation Report

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September 7, 2011

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SECTION 1.0 – INTRODUCTION

The Lost Hills Road/U.S Highway 101 (US-101)/Overcrossing Replacement and Interchange Modification Project (project) proposes the replacement of the existing Lost Hills Road Interchange, which crosses US-101 in the City of Calabasas, Los Angeles County, California. The project will require a new bridge and local road alignment.

Chambers Group, Inc. (Chambers Group) was retained by Huitt-Zollars, Inc. to perform a Jurisdictional Delineation (JD) for the purpose of identifying and delineating potential jurisdictional waterways of the project site that are subject to the regulatory jurisdiction of the United States Army Corps of Engineers (USACE) pursuant to Section 404 of the Clean Water Act (CWA), the Regional Water Quality Control Board (RWQCB) pursuant to Section 401 of the CWA, and the California Department of Fish and Game (CDFG) pursuant to Section 1602 of the Fish and Game Code.

1.1. PROJECT OBJECTIVES

The existing Lost Hills Road overcrossing is considered for total replacement. The intersections in the vicinity of the overcrossing are too closely spaced and there are relatively high intersecting traffic flows, especially for future growth conditions. The proposed improvements would increase roadway widths for the proper lane arrangements. In addition to the bridge inadequacies, the existing US-101 ramp intersections do not meet the current and future traffic demands. The condition would continue to worsen as result of the continued population growth in the area. Interchange modifications are proposed to alleviate use demand.

The proposed improvements would substantially enhance future traffic operation at the interchange. The improvements would address operational, traffic, and safety needs.

1.2. PROJECT LOCATION

The project site is located in the U.S. Geological Survey (USGS) *Calabasas* California 7.5-minute topographic quadrangle. The elevation on the site ranges from 780 feet above sea level (amsl) to approximately 930 feet above amsl. The site is located in the City of Calabasas in the foothills south of Simi Hills and north of the Santa Monica Mountains (Figure 1). Approximately 40 acres of the project site will be impacted by grading activities (Impact Area; Figure 2).

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N
W E
S

1:46,000

0 0.5 1 2 Miles

Figure 1
Project Vicinity

Figure 2

Impact Area

Legend

Impact Area

US 101 / Lost Hills Interchange
Improvement Project
City of Calabasas, CA

0 100 200 400
Feet

N
W E
S

1:2,148

08-30-2011

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SECTION 2.0 – JURISDICTIONAL CRITERIA

2.1. UNITED STATES ARMY CORPS OF ENGINEERS

Pursuant to Section 404 of the CWA, the USACE regulates the discharge of dredged and/or fill material into waters of the United States. Waters of the United States include navigable waterways and wetlands adjacent to navigable waterways and non-navigable waterways and wetlands adjacent to non-navigable waters that are contiguous with navigable waterways. The term "waters of the United States" is defined by 33 Code of Federal Regulations (CFR) Part 328 and currently 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 (e.g., lakes, rivers, intermittent streams) that 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. The waters of the U.S. do not include (1) waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA, and (2) prior converted cropland.

Wetlands are defined by 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 … a prevalence of vegetation typically adapted for life in saturated soil conditions." In 1987, the USACE published a manual to guide its field personnel in determining jurisdictional wetland boundaries. This manual was amended in 2008 by the USACE 2008 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0). Currently, the 1987 Wetland Manual and the 2008 Arid West Supplement provide the legally accepted methodology for identification and delineation of USACE-jurisdictional wetlands in southern California.

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

- 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 1988 National List of Plant Species that Occur in Wetlands [Reed 1988]). These plants are known as "hydrophytic vegetation."
- Soils must exhibit physical and/or chemical characteristics indicative of permanent or periodic saturation (e.g., a gleyed color or mottles with a matrix of low chroma indicating a relatively consistent fluctuation between aerobic and anaerobic conditions). Such soils, known as "hydric soils," have characteristics that indicate they are developed in conditions where soil oxygen is limited by the presence of saturated soil for long periods during the growing season.
- 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. For most of low-lying southern California, five percent of the growing season is equivalent to 18 days.

Although the most reliable evidence of wetland hydrology may be provided by a gauging station or groundwater well data, such information is often limited for most areas. Thus, most hydrologic indicators are those that can be observed during field inspection. The following indicators provide some evidence of hydrology: (1) standing or flowing water; (2) water-logged soils during the growing season;

(3) water marks present on trees or other objects associated with a drainage; (4) drift lines, or small piles of debris oriented in the direction of water movement through an area; (5) shelving; (6) destruction of terrestrial vegetation; and (7) thin layers of sediments deposited on leaves or other objects. The 2008 Arid West Supplement includes additional indicators such as surface soil cracks, inundation visible on aerial imagery, salt and biotic crusts, aquatic invertebrates, hydrogen sulfide odor, and evidence of oxidation/reduction reactions within the soil profile. In general, a combination of hydrologic indicators identifies a more defined hydrological system.

In the absence of wetlands, the limits of USACE jurisdiction in non-tidal waters, including intermittent Relatively Permanent Water (RPW) streams, extend to the Ordinary High Water Mark (OHWM), which is defined by 33 CFR 328.3(e) as:

> *… that line on the shore established by the fluctuation of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.*

On January 9, 2001, the U.S. Supreme Court ruled (in *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers*) (SWANCC) that the USACE jurisdiction does not extend to previously regulated isolated waters, including but not limited to isolated ponds, reservoirs, and wetlands. Examples of isolated waters that are affected by this ruling include vernal pools, stock ponds, lakes (without outlets), playa lakes, and desert washes that are not tributary to navigable or interstate waters or to other jurisdictional waters.

A joint guidance by the U.S. Environmental Protection Agency (EPA) and the USACE was issued on June 5, 2007, to clarify circumstances where a CWA Section 404 permit would be required before conducting activities in wetlands, tributaries, and other waters. This guidance is consistent with the Supreme Court's decision in the consolidated cases *Rapanos v. United States* and *Carabell v. United States* (126 S. Ct. 2208 [2006]) (*Rapanos*), which address the jurisdiction over waters of the United States under the CWA (33 U.S.C. §1251 et seq.). This *Rapanos* guidance does not supersede the 2003 guidance interpreting SWANCC (68 FR 1991), and the agencies will continue to evaluate jurisdiction over isolated waters on a case-by-case basis.

The USACE will continue to assert jurisdiction over traditional navigable waters (TNW), wetlands adjacent to traditional navigable waters, non-navigable tributaries of TNW that are relatively permanent waters (RPW) where the tributaries typically flow year-round or have continuous flow at least seasonally (e.g., typically three months), and wetlands that directly abut such tributaries. The USACE generally will not assert jurisdiction over swales or erosional features (e.g., gullies, small washes characterized by low volume, infrequent, or short duration flow) or ditches (including roadside ditches) excavated wholly in uplands, draining only uplands, and do not carry a relatively permanent flow of water.

The USACE does not generally consider non-tidal drainage ditches excavated on uplands to be waters of the United States. The USACE defines a drainage ditch as:

> *A linear excavation or depression constructed for the purpose of conveying surface runoff or groundwater from one area to another. An "upland drainage ditch" is a drainage ditch constructed entirely in uplands (i.e., not in waters of the United States) and is not a water of the United States, unless it becomes tidal or otherwise extends the ordinary high water line of existing waters of the United States.*

Furthermore, the USACE generally does not consider "Artificially irrigated areas which would revert to upland if the irrigation ceased" to be subject to their jurisdiction. These irrigation ditches are linear excavations constructed for the purpose of conveying agricultural water from the adjacent fields. Therefore, these agricultural ditches are not considered to be subject to USACE jurisdiction.

The USACE will use fact-specific analysis to determine whether waters have a significant nexus with TNW for non-navigable tributaries that are not relatively permanent (non-RPW), wetlands adjacent to non-navigable tributaries that are not relatively permanent, and wetlands adjacent to, but that do not directly abut, a relatively permanent non-navigable tributary. According to USACE, *"a significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by all wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical and biological integrity of downstream traditional navigable waters,"* including consideration of hydrologic and ecologic factors. A primary component of this determination lies in establishing the connectivity or lack of connectivity of the subject drainages to a TNW; therefore, the drainages of the project site must be analyzed from their origins to their terminus for any USACE jurisdictional determination.

In May 2007, the USACE and EPA jointly published and authorized the use of the *Jurisdictional Determination Form Instructional Guidebook* (USACE 2007). The form and guidebook define how to determine if an area is USACE jurisdictional, and if a significant nexus exists per the Rapanos decision. A nexus must have more than insubstantial and speculative effects on the downstream TNW to be considered a significant nexus.

2.2. REGIONAL WATER QUALITY CONTROL BOARD

The State of California (State) regulates discharge of material into waters of the State pursuant to Section 401 of the CWA and the California Porter-Cologne Water Quality Control Act (California Water Code, Division 7, §13000 et seq.). Porter–Cologne reserves the right for the State to regulate activities that could affect the quantity and/or quality of surface and/or ground waters, including isolated wetlands, within the State. If impacted, Waters of the State determined to be jurisdictional for these purposes have waste discharge requirements and a 401 Certification (in the case of the required USACE permit) must be obtained. The State Water Resources Control Board (SWRCB) and the local Regional Water Quality Control Boards (RWQCB) are the relevant permitting agencies. Limits of jurisdiction include wetland boundaries and the OHWMs of TNWs, RPWs, non-RPWs.

2.3. CALIFORNIA DEPARTMENT OF FISH AND GAME

Pursuant to Division 2, Chapter 6, Sections 1600-1602 of the California Fish and Game Code, 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." CDFG limits of jurisdiction include the maximum extents of the uppermost bank-to-bank distance or riparian vegetation drip line.

SECTION 3.0 – METHODS

3.1. LITERATURE REVIEW

Chambers Group scientists researched available maps and documents that pertain to the project. The search consisted of a review of the USGS 7.5-minute topographic quadrangle containing the site (USGS 2011), the United States Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) maps (USFWS 2011), the United States Department of Agriculture, National Resource Conservation Science (USDA-NRCS) Web Soil Survey and National List of Hydric Soils (USDA-NRCS 2009 and 2011, respectively), and a review of aerial photographs.

3.2. FIELD SURVEY

Chambers Group scientists Linette Lina and Corey Vane performed a field investigation on August 19, 2011 to determine the presence of, characterize, and if necessary, delineate onsite wetland and streams within the Impact Area (Figure 2). In the field, boundaries and dimensions of jurisdictional features were recorded on aerial photographs, sub-meter Global Positioning System (GPS) units, tablet computers, and field notes. Features within the project site were investigated for the presence of drainages, including culverts, corrugated metal pipe (CMP) drains, reinforced concrete pipes (RCP), V-ditches, water bodies, riparian habitats, potential wetlands, and connectivity.

Potential USACE / RWQCB / CDFG jurisdictional areas were field-checked for the presence of definable channels and/or wetland vegetation, riparian habitat, soils, and hydrology. Potential wetland habitats were evaluated using the methodology set forth in the 1987 Corps of Engineers Wetlands Delineation Manual (1987 Manual) and the 2008 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region, Version 2.0 (Arid West Supplement; USACE 1987, 2008). Potential wetland habitat features were also investigated for potential CDFG jurisdiction by utilizing the USFWS one-parameter method. Features with no evidence of wetland hydrology and that supported only upland vegetation were evaluated for the upward limits of jurisdiction and not exclusively for wetland parameters.

The lateral extents of jurisdictional drainages were measured. In the absence of a defined wetland, the USACE and the RWQCB traditionally use the determination of the presence of a bed and bank to the upper limit of the OHWM. Under the Rapanos court decision, the USACE now requires a fact-specific significant nexus analysis to be performed for dry or ephemeral washes (non-RPWs) in southern California to determine the extent of USACE jurisdiction on a given project site. Connectivity was investigated and determined through a “desktop” study by utilizing the USGS topographic maps (USGS 2011), NWI maps (USFWS 2011), and Google Earth images (Google 2011).

The RWQCB jurisdictional limits includes USACE jurisdictional areas, OHWMs in non-RPWs, isolated wetlands, and other features that have an effect on surface or subsurface water quality within California.

The CDFG claims jurisdiction to the top of the bank on either side of the drainage or to the outer edge of all riparian vegetation, whichever measurement is greater, and including associated riparian wetlands that can be defined using the one-parameter USFWS methodology for wetland habitat identification.

This edge, as determined by the drip line of the riparian canopy, is used as the line of demarcation between riparian and upland habitats. On smaller streams or dry washes with little or no riparian habitat, the top of the bank is used to mark the lateral extent of CDFG jurisdictional drainage. Drainage widths were measured for jurisdictional acreage calculations.

3.3. VEGETATION

For the purposes of wetland delineation, plants are categorized according to their probabilities to occur in wetlands versus non-wetlands in accordance with the categories in the *National List of Species that Occur in Wetlands* (Reed 1988). More specifically, the California Land Resource Region (Region 0) wetlands plant list is used, which is a regional adaptation of the *National List*. The wetland species categories are:

I. **Obligate Wetland (OBL)** – Occur almost always (estimated probability >99 %) under natural conditions in wetlands.

II. **Facultative Wetland (FACW) –** Usually occur in wetlands (estimated probability 67 % to 99 %), but occasionally found in non-wetlands.

III. **Facultative (FAC) –** Equally likely to occur in wetlands or non-wetlands (estimated probability 34 % to 66 %).

IV. **Facultative Upland (FACU) –** Usually occur in non-wetlands (estimated probability 67 % to 99 %), but occasionally found in wetlands.

V. **Obligate Upland (UPL) –** May occur in wetlands in another region, but occur almost always (estimated probability >99 %) under natural conditions in non-wetlands in southern California. All species not listed on the *National List of Species that Occur in Wetlands* (Reed 1988) are considered to be UPL.

VI. **No Indicator (NI)** – NI is recorded for those species for which insufficient information was available to determine an indicator status.

Plant species and absolute percent covers are recorded by stratum (i.e., tree, sapling/shrub, herb, woody vine) and evaluated for dominance and prevalence according to guidelines in the 1987 Manual and Arid West Supplement. Naming conventions follow the Jepson Manual (Hickman 1993).

3.4. HYDROLOGY

Typical hydrologic indicators were observed per the 1987 Manual and Arid West Supplement guidelines and recorded. Indicators identified included surface water, saturation, sediment deposits, drift deposits, surface soil cracks, water-stained leaves, biotic crust, aquatic invertebrates, and oxidized rhizospheres along living roots.

Climate and flow frequency was considered when observing watermarks and drift lines. For the purpose of determining hydrologic connectivity to a TNW, aerial photos, NWI maps, and USGS quadrangle maps were referenced; and features were inspected in the field on- and offsite for true connectivity.

3.5. SOILS

The USDA-NRCS Web Soil Survey (USDA-NRCS 2011a and USDA-NRCS 2011b) was referenced for soil types found within and in the vicinity of the project site. In the field, soil pits were investigated in representative delineated features within the site, and were evaluated according to guidelines in the 1987 Wetland Manual and Arid West Supplement. Soil layers were examined for the presence or absence of hydric soil indicators and oxidation/reduction features indicative of historic saturated soil conditions.

SECTION 4.0 – RESULTS

The results presented below represent the site conditions at the time of the investigation. The vegetation was assessed during the growing season, and there were no recent storm events or other indications that vegetation or soil condition had been altered.

4.1. LITERATURE REVIEW

The USFWS NWI online mapper did not indicate the presence of any wetlands within the Impact Area. The USDA-NRCS Web Soil Survey described four types of soils within the Impact Area (USDA-NRCS 2009).

4.2. SOILS

The USDA-NRCS Web Soil Survey described four types of soils within the Impact Area: Cumulic Haploxerolls, Urban Land-Xerorthents, Landscaped Complex, Urban Land-Xerorthents, Landscaped, Complex, (rarely flooded), and Linne Silty Clay Loam. The USDA-NRCS Web Soil Survey did not have information for approximately 1.2 acres, or 3.4 percent of the Impact Area.

200—Cumulic Haploxerolls

Cumulic Haploxerolls are alluvium derived from volcanic and sedimentary rock. These non-saline, well-drained soils can be found at elevations between 10 to 900 feet amsl on slopes between 0 to 9 percent. These soils can be found on riparian terraces. Cumulic haploxerolls are made up of 15 percent minor components that include: cumulic haploxerolls composed of clay and found in riparian terraces specifically willow thickets, riverwash found in drainageways, Danville coastal found on alluvial fans and fluvial terraces, and typic argixerolls found on mountains and hills in coastal scrub. Cumulic haploxerolls compose approximately 16.4 acres, 45.6 percent, of the Impact Area.

250—Urban Land-Xerorthents, Landscaped Complex

Urban Land is man-made developments. Xerothents, Landscaped are colluvium and residuum derived from sedimentary rock and other mixed sources. These well-drained soils form hills that can be found on slopes 0 to 5 percent. Urban-Land-Xerothents, Landscaped Complex can be found at elevations between 30 to 1,970 ft amsl and makes up 0.2 acres, 0.5 percent of the Impact Area.

252—Urban Land-Xerorthents, Landscaped, Complex, (rarely flooded)

Urban Land is man-made developments. Xerothents, Landscaped are colluvium and residuum derived from sedimentary rock and other mixed sources. These well-drained soils are rarely flooded and form hills that can be found on slopes 0 to 5 percent. Minor components of this complex include: elder, coastal that make up inset fans in riparian terraces. Urban-Land-Xerothents, Landscaped Complex (rarely flooded) can be found at elevations between 30 to 1,970 ft amsl and makes up 5.1 acres, 14.2 percent of the Impact Area.

332—Linne Silty Clay Loam

Linne soils are Residuum weathered from shale with stratified layers of clay and silt loam. These well-drained soils form loamy hills. Minor components include: calcic haploxerolls that form ridges in coastal

scrub, and los osos forming shaly hills. Linne Silty Clay Loam can be found on slopes between 9 to 15 percent at elevations between 800 to 1,200 ft amsl. Linne Silty Clay Loam makes up 13.1 acres, 36.4 percent, of the Impact Area.

4.3. VEGETATION COMMUNITIES

The project is located in residential, commercial, and rural areas in the City of Calabasas, within Los Angeles County, California. Land uses in the immediate vicinity of the site include Grape Arbor Park, open space/hillside, urban development such as residential areas, roads (e.g., US-101, Lost Hills Road) and other existing infrastructure. The northwest and northeast (north of US-101 and east of Lost Hills Road) corners of the site appear to be less fragmented by urban development and road coverage. Vegetation communities onsite include Purple Sage Scrub, Coyote Brush Series, California Annual Grassland Series, Black Mustard Monotypic Stands, and Ornamental Landscaping (Chambers Group 2011a).

The majority of the Impact Area is made up of Black Mustard Monotypic Stands and California Annual Grassland Series, with scattered fragments of Purple Sage Scrub, Coyote Bush Series, and Ornamental Landscaping. All drainages that are proposed to be impacted are concrete v-ditches which are mostly unvegetated, except for occasional weedy species that may grow in silt buildup.

4.4. HYDROLOGIC CONNECTIVITY

The project site is within the Malibu Creek Watershed, a 109-square mile watershed in portions of Ventura and Los Angeles Counties (Resource Conservation District of the Santa Monica Mountains; RCDSMM 2011). Las Virgenes Creek crosses under Highway 101 approximately one half mile east of the project footprint. Las Virgenes Creek is a blue-line stream that originates in the Santa Monica Mountains and runs parallel to Highway 101 before converging with Malibu Creek and ultimately Santa Monica Bay (Chambers Group 2011b). A total of 4,757 linear feet of concrete drainages have been installed along both sides of Lost Hills Road and within the landscaped road cuts (Chambers Group 2011b). The concrete drainages east of Lost Hills Road are within the Impact Area and may be impacted by grading activities (Figure 3). These drainages are v-ditches and concrete aprons feeding into underground culverts. They are concrete-lined and function to convey nuisance flows (e.g., road and irrigation runoff) and stormwater from the surrounding areas to Las Virgenes Creek (Chambers Group 2011b). Las Virgenes Creek is a non-navigable relatively permanent water (non-RPW) which flows to Malibu Creek, a relatively permanent water (RPW) that eventually flows to the Pacific Ocean, a traditional navigable water (TNW).

4.5. WETLANDS

Even though evidence of hydrology was present within the Impact Area, the other two wetland indicators (hydrophytic vegetation and hydric soils) were not observed simultaneously. Therefore it was determined that no wetlands occur on the project site.

During previous Chambers Group site visits in May 2009 (Chambers Group 2011a), a Cattail Series community was observed at the base of the west-facing slope in the center of the Impact Area. No cattails (*Typha* spp.) were observed at this location during the August 19, 2011 survey. The location was the junction of two concrete culverts that drained the northwestern region of the project site, which then drained into a culvert underneath Lost Hills Road to the west. Approximately 50 square-feet of soil

approximately 1 to 4 inches deep with a cracked surface present, with existing concrete underneath was observed. No hydrophytic vegetation was observed at this location. The only plant observed at this location was shortpod mustard (*Hirschfeldia incana*), which is not considered a wetland indicator species. The concrete underneath the 1 to 4 inches of soil acts as an aquatard that will hold water for a period of time. However, no wetland vegetation or soils that exhibited hydric characteristics were observed during the survey.

4.6. WATERS OF THE U.S.

Within the Impact Area, there is a system of concrete drainages east of Lost Hills Road (Figure 3) which flow into a concrete-lined flood control channel that drains into Las Virgenes Creek approximately three miles south of the project site. Las Virgenes Creek is a non-RPW tributary to Malibu Creek, a RPW to the Pacific Ocean, which is a traditional navigable water (TNW). No jurisdictional drainages were found within the Impact Area west of Lost Hills Road.

Waters of the U.S. under the jurisdiction of the USACE are located at and below the field-delineated OHWM of the drainages that ranged in width from 0.5 feet to 7 feet and are approximately 0.115 acres in size within the project site. The project would impact 0.115 acres of USACE jurisdictional waters. A significant nexus analysis was performed to determine potential USACE jurisdiction as required by current regulations.

A USACE jurisdiction nexus was determined to exist for the project based on the following facts:

- The total acreage of drainages located at and below the OHWM to be impacted by the project is more than 0.10 acres, which is more impacted acreage than allowed under a maintenance permit;
- The drainages are hydrologically connected to RPWs flowing into a TNW. RPWs, by definition, are USACE-jurisdictional;
- It has the capacity to carry pollutants, nutrients, and organic carbon to the TNW;
- The nutrients and organic carbon support in-stream and downstream food webs; and
- The drainages effectively contribute to interstate commerce by channeling water towards Las Virgenes Creek and Malibu Creek, which flow towards the Pacific Ocean. Water quality is vital to the success of recreational and business opportunities that the Pacific Ocean presents to the public.

Table 1 below summarizes the area of Waters of the U.S. under the jurisdiction of the USACE to be impacted by this project.

4.7. WATERS OF THE STATE

4.7.1 <u>Regional Water Quality Control Board</u>

The project could affect the quantity and/or quality of surface and/or ground waters of the drainages toward Las Virgenes Creek and waters downstream. The limit of the RWQCB jurisdiction includes the

area within the OHWM of the drainages which are tributaries to RPWs that are hydrologically connected to a TNW. An area of 0.115 acres of impacts is subject to jurisdiction of the RWQCB. Table 1 below summarizes the area of Waters of the State under the jurisdiction of the RWQCB to be impacted by this project.

4.7.2 California Department of Fish and Game

Waters of the State under the jurisdiction of the CDFG were field-delineated from bank-to-bank of each drainage. The bank-to-bank field delineation measurements ranged from 1.5 feet to 12 feet in width and the area within CDFG jurisdiction is approximately 0.385 acres in size within the project. An area of 0.385 acres of impacts will occur to Waters of the State under the jurisdiction of the CDFG. Table 1 below summarizes the area of Waters of the State under the jurisdiction of the CDFG to be impacted by this project.

Table 1. Summary of Impact to Jurisdictional Waters

Authority	Streambed Permanent (acres)	Other Waters Permanent (acres)	Total Permanent Impacts (acres)
USACE	N/A	0.115	**0.115**
RWQCB	N/A	0.115	**0.115**
CDFG	0.385	N/A	**0.385**

Figure 3

Jurisdictional Delineation

Legend

- USACOE 0.115 Acres
- CDFG 0.385 Acres
- Impact Area

US 101 / Lost Hills Interchange
Improvement Project
City of Calabasas, CA

0 62.5 125 250
Feet

N W E S

1:1,310

08-30-2011

Chambers Group Inc.

CONCLUSION

4.8. FEDERAL PERMITS

The USACE regulates the discharge of dredged and/or fill material into waters of the United States under the Section 404 of the CWA. Fill materials will be placed into more than 0.10 acres of Waters of the U.S. as a result of this project; therefore a Section 404 permit pursuant to the CWA is required. The acreage subject to USACE jurisdiction for impacts to the tributary to a RPW is 0.115 acres. An Individual Permit may not be required for this project

4.9. STATE PERMITS

Under Section 401 of the CWA, the RWQCB regulates any activity that requires a federal permit for discharges to a water body. This project will require a RWQCB-issued Section 401 Certification for impacts to Waters of the State because materials will be placed directly into the water body and will likely result in the discharge of sediments. The acreage subject to RWQCB jurisdiction for impacts to drainages is 0.115 acres.

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. The project plans to directly place materials into the bed and bank of the tributary that flows to Las Virgenes Creek and Malibu Creek, which support wildlife. CDFG may require a Section 1602 Agreement pursuant to the Lake and Streambed Alteration Program for impacts relating to the Waters of the State. The acreage subject to CDFG jurisdiction for permanent impacts to the drainage is 0.385 acres.

4.10. RECOMMENDATIONS

In compliance with the USACE 2007 Nationwide Permit Program conditions, an Individual Permit is generally required for projects that exceed the thresholds for a Nationwide Permit. In non-tidal waters, the threshold for a Nationwide 14 Permit for linear transportation crossings is 0.5 acres. The acreage subject to USACE jurisdiction for permanent impacts to the wetland resulting from the placement of permanent structures is 0.115 acres. Therefore, a Nationwide 14 Permit for linear transportation crossings will be required prior to Project authorization.

A water quality certification, or waiver of certification, is required from the RWQCB for any activity that requires a Federal license or permit (such as a Section 404 Permit) and that may result in a discharge to jurisdictional waters. Therefore, a 401 certification will be required prior to Project authorization. Unlike USACE, CDFG regulates not only the discharge of dredged or fill material, but all activities that alter streams and lakes and their associated habitat. CDFG has no abbreviated permitting process comparable to the USACE nationwide permits. A CDFG 1602 Agreement is required for all activities resulting in impacts to streambeds and their associated riparian habitats.

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APPENDIX A – SITE PHOTOGRAPHS

Appendix A – Site Photographs

Photo 1 – Facing east from Lost Hills Rd north of Highway 101. Drainage runs parallel to the freeway.

Photo 2 – Facing south towards Highway 101. Drainage is east of, and runs parallel to, Lost Hills Road.

Photo 3 –Facing west to culvert where drainages along Highway 101 and Lost Hills Road meet. Soil buildup is present on top of concrete apron of culvert.

Photo 4 – Soil buildup was approximately 1 to 4 inches deep in culvert apron and drainage bottom. Shortpod mustard (*Hirschfeldia incana*) was growing in the soils.