

Attachment E – Notice of Intent

SEP 18 2013

WATER QUALITY ORDER NO. 2013-0002-DWQ
 GENERAL PERMIT NO. CAG990005

STATEWIDE GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
 (NPDES) PERMIT FOR RESIDUAL AQUATIC PESTICIDE DISCHARGES TO WATERS OF
 THE UNITED STATES FROM ALGAE AND AQUATIC WEED CONTROL APPLICATIONS

I. NOTICE OF INTENT STATUS (see Instructions)

Mark only one item	A. New Applicator	B. <input checked="" type="checkbox"/> Change of Information: WDID# <u>4A567300005</u>
	C. <input type="checkbox"/> Change of ownership or responsibility: WDID# _____	

II. DISCHARGER INFORMATION

A. Name Ventura County Watershed Protection District			
B. Mailing Address 800 South Victoria Avenue			
C. City Ventura	D. County Ventura	E. State CA	F. Zip 93009-1610
G. Contact Person Karl Novak	H. E-mail address karl.novak@ventura.org	I. Title Deputy Director, Operations & Maintenance	J. Phone (805) 672-2106

III. BILLING ADDRESS (Enter information only if different from Section II above)

A. Name Mariann Kovats			
B. Mailing Address Ventura County Public Works - Accounts Payable, 800 South Victoria Avenue			
C. City Ventura	D. County Ventura	E. State CA	F. Zip 93009-1600
G. E-mail address mariann.kovats@ventura.org	H. Title Accounts Payable Supervisor	I. Phone (805) 654-2320	

IV. RECEIVING WATER INFORMATION

A. Algaecide and aquatic herbicides are used to treat (check all that apply):

- Canals, ditches, or other constructed conveyance facilities owned and controlled by Discharger.
Name of the conveyance system: Ventura County Watershed Protection District flood control facilities
- Canals, ditches, or other constructed conveyance facilities owned and controlled by an entity other than the Discharger.
Owner's name: _____
Name of the conveyance system: _____
- Directly to river, lake, creek, stream, bay, ocean, etc.
Name of water body: Calleguas Creek and selected tributaries, Santa Clara River and selected tributaries, Ventura River and selected tributaries, selected tributaries to Malibu Creek, and selected tributaries to the Pacific Ocean (map in APAP)

B. Regional Water Quality Control Board(s) where treatment areas are located
(REGION 1, 2, 3, 4, 5, 6, 7, 8, or 9): Region 4
(List all regions where algaecide and aquatic herbicide application is proposed.)

V. ALGAECIDE AND AQUATIC HERBICIDE APPLICATION INFORMATION

A. Target Organisms: Surface annual and perennial weeds (typically broad leaf weeds and grasses), Arundo donax (giant reed) and other invasives.

B. Algaecide and Aquatic Herbicide Used: List Name and Active ingredients
Glyphosate-based aquatic herbicide products (e.g. Aquamaster, Rodeo). Active ingredient is glyphosate, N-(phosphonomethyl)glycine in the form of its isopropylamine salt.

C. Period of Application: Start Date January 1st End Date December 31st

D. Types of Adjuvants Used: Non-ionic adjuvant approved for aquatic use (e.g. Magnify)

VI. AQUATIC PESTICIDE APPLICATION PLAN

Has an Aquatic Pesticide Application Plan been prepared and is the applicator familiar with its contents?
 Yes No

If not, when will it be prepared? _____

VII. NOTIFICATION

Have potentially affected public and governmental agencies been notified? Yes No


VIII. FEE

Have you included payment of the filing fee (for first-time enrollees only) with this submittal?
 YES NO NA (Note: fee was paid to Region 4 Regional Board, August 2013)

IX. CERTIFICATION

"I certify under penalty of law that this document and all attachments were prepared under my direction and supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment. Additionally, I certify that the provisions of the General Permit, including developing and implementing a monitoring program, will be complied with."

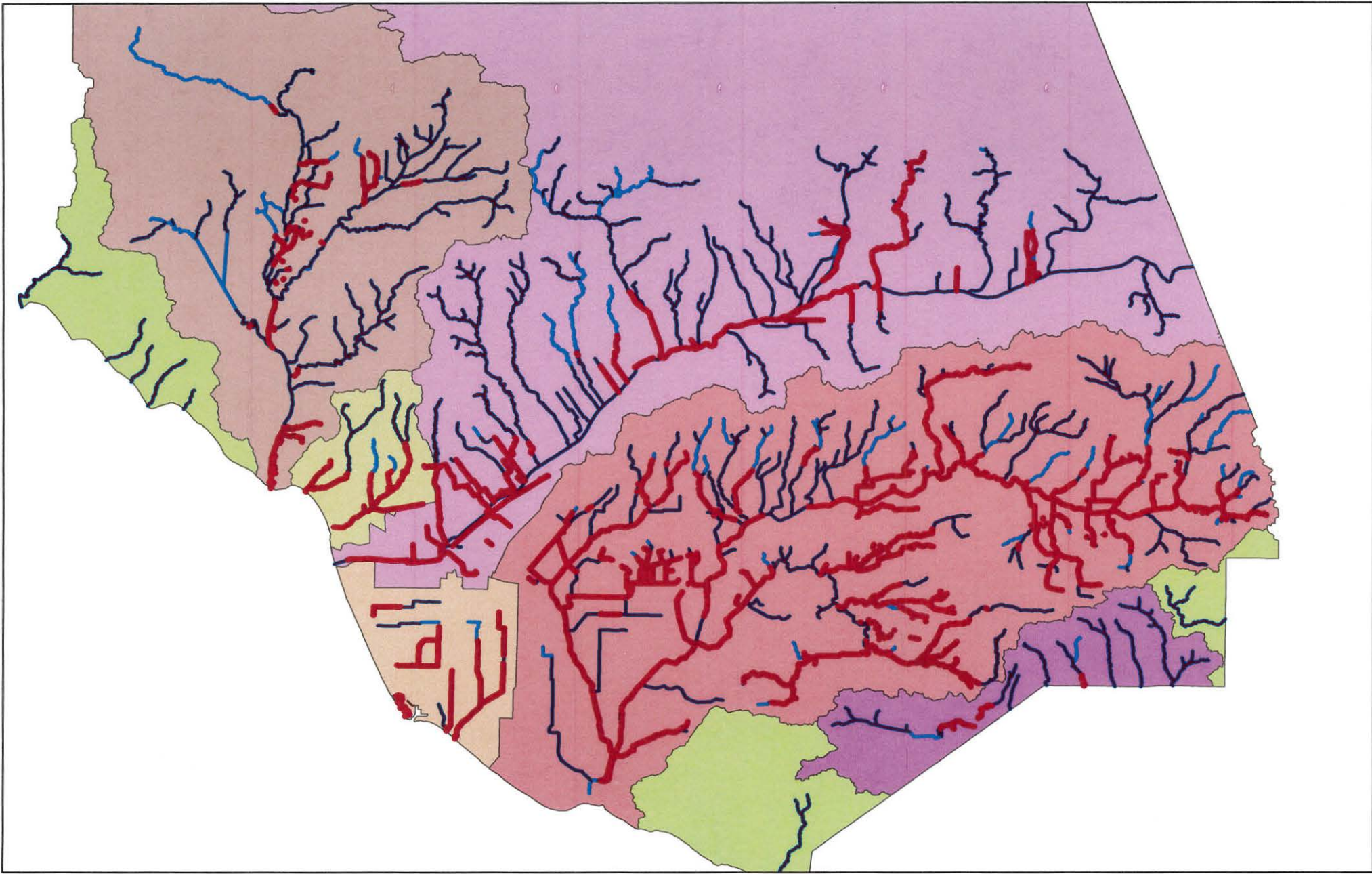
A. Printed Name: Tully Clifford

B. Signature:  Date: 9/12/2013

C. Title: Director, Ventura County Watershed Protection District

XI. FOR STATE WATER BOARD STAFF USE ONLY

WDID:	Date NOI Received:	Date NOI Processed:
Case Handler's Initial:	Fee Amount Received: \$	Check #:
<input type="checkbox"/> Lyris List Notification of Posting of APAP	Date _____	Confirmation Sent _____

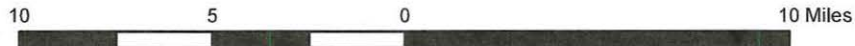


Legend

- | | | |
|--|---|---|
|  Jurisdictional Channel | MajWatersh |  Oxnard Coastal |
|  Reach |  Calleguas Creek |  Santa Clara River |
| |  Others |  Ventura Coastal |
| |  Malibu Creek |  Ventura River |

County of Ventura Aquatic Pesticide Application

1 inch = 5 miles



SEPTEMBER 2013

Ventura County
Watershed Protection District

Aquatic Pesticides Application Plan

Prepared by:

VENTURA COUNTY WATERSHED
PROTECTION DISTRICT

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- B Ventura Countywide Stormwater Quality Management Program Application Protocol
- C Aquatic Herbicide Application Sites and Beneficial Uses

1 Background

On 12 March 2001, the Ninth Circuit Court of Appeals ruled that discharges of pollutants from the use of aquatic pesticides to waters of the United States require coverage under an NPDES permit. Consequently, the State Water Resources Control Board (SWRCB) developed an Emergency Aquatic Pesticide Permit (Order No. 2001-12-DWQ) to cover short-term seasonal discharges by public entities of pollutants associated with the application of aquatic pesticide for resource or pest management to waters of the United States. An updated version of the Aquatic Pesticide Permit for the control of aquatic weeds (General Permit No. CAG990005) was completed in 2004 (Order No. 2004-0009-DWQ) and then again in 2013 (Order No. 2013-0002-DWQ). The basic requirements of 2013-0002-DWQ (Order) include the following:

1. The applicator must follow all Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) pesticide label instructions and any Restricted Material Use Permits issued by a County Agricultural Commissioner;
2. The discharger must be licensed by the California Department of Pesticide Regulation (DPR) if licensing is required for the application project;
3. Herbicides and adjuvants must be labeled for aquatic use;
4. Discharges of residual¹ algaecides² and aquatic herbicides and their degradation byproducts are not authorized to waters of the United States that are impaired by the same active ingredients and their degradation byproducts;
5. The discharger must comply with effluent and receiving water limitations and must develop and implement an Aquatic Pesticides Application Plan (APAP);
6. The discharger must comply with monitoring and reporting requirements.

An APAP is a comprehensive plan developed by the discharger that describes the pesticide application program and must contain the following elements sufficient to address each proposed treatment area:

1. Description of the water system to which algaecides and aquatic herbicides are being applied;
2. Description of the treatment area in the water system;
3. Description of types of weed(s) and algae that are being controlled and why;
4. Algaecide and aquatic herbicide products or types of algaecides and aquatic herbicides expected to be used and if known their degradation byproducts, the method in which they are applied, and if applicable, the adjuvants and surfactants used;
5. Discussion of the factors influencing the decision to select algaecide and aquatic herbicide applications for algae and weed control;

¹ Defined in the Permit as those portions of the aquatic herbicide that remain in the water after the application and its intended purpose (injury or elimination of targeted pests) have been completed.

² The Ventura County Watershed Protection District does not apply algaecides.

6. If applicable³, list the gates or control structures to be used to control the extent of receiving waters potentially affected by algaecide and aquatic herbicide application and provide an inspection schedule of those gates or control structures to ensure they are not leaking;
7. If the Discharger has been granted a short-term or seasonal exception under State Water Board *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays,* and Estuaries of California* (Policy) section 5.3 from meeting acrolein and copper receiving water limitations, provide the beginning and ending dates of the exception period, and justification for the needed time for the exception. If algaecide and aquatic herbicide applications occur outside of the exception period, describe plans to ensure that receiving water criteria are not exceeded because the Dischargers must comply with the acrolein and copper receiving water limitations for all applications that occur outside of the exception period;
8. Description of monitoring program;
9. Description of procedures used to prevent sample contamination from persons, equipment, and vehicles associated with algaecide and aquatic herbicide application;
10. Description of the BMPs to be implemented. The BMPs shall include, at the minimum:
 - a. Measures to prevent algaecide and aquatic herbicide spill and for spill containment during the event of a spill;
 - b. Measures to ensure that only an appropriate rate of application consistent with product label requirements is applied for the targeted weeds or algae;
 - c. The Discharger's plan in educating its staff and algaecide and aquatic herbicide applicators on how to avoid any potential adverse effects* from the algaecide and aquatic herbicide applications;
 - d. Discussion on planning and coordination with nearby farmers and agencies with water rights diversion so that beneficial uses of the water (irrigation, drinking water supply, domestic stock water, etc.) are not impacted during the treatment period; and
 - e. A description of measures that will be used for preventing fish kill when algaecides and aquatic herbicides will be used for algae and aquatic weed controls.
11. Examination of Possible Alternatives. Dischargers should examine the alternatives to algaecide and aquatic herbicide use to reduce the need for applying algaecides and aquatic herbicides. Such methods include:
 - a. Evaluating the following management options, in which the impact to water quality, impact to non-target organisms including plants, algaecide and aquatic resistance, feasibility, and cost effectiveness should be considered:
 - i. No action;
 - ii. Prevention;

³ Not applicable for the Ventura County Watershed Protection District (District)].

- iii. Mechanical or physical methods;
- iv. Cultural methods;
- v. Biological control agents; and
- vi. Algaecides and aquatic herbicides;

If there are no alternatives to algaecides and aquatic herbicides, Dischargers shall use the minimum amount of algaecides and aquatic herbicides that is necessary to have an effective control program and is consistent with the algaecide and aquatic herbicide product label requirements.

- a. Using the least intrusive method of algaecide and aquatic herbicide application; and
- b. Applying a decision matrix concept to the choice of the most appropriate formulation.

The APAP described in the following pages addresses all of the applicable above-mentioned requirements. This APAP is proposed by the Ventura County Watershed Protection District (District).

2 Water System to which Aquatic Herbicides are Applied

Ventura County is characterized by a dry coastal climate, seasonal precipitation, and a large number of historically ephemeral streams. Relative to the rest of Southern California, a large amount of open space and agricultural land remains intact throughout the area. For many watercourses in Ventura County, water is only present during the winter and spring due to runoff from rain events. By the fall, flows have decreased substantially and aquatic habitats are either absent or present in small isolated locations. However, there are drainages with perennial flows due to natural spring and bank seepage, urban runoff, agricultural return flows, industrial discharges, and wastewater discharges.

The District applies aquatic herbicide to District facilities (channels, levees, debris basins etc.) for control of aquatic weeds for flood control and facilities maintenance purposes. Aquatic herbicide is used even though many of the District facilities are non-perennial and are often dry at the time of application. District facilities are located within the following hydrological units in Ventura County: Ventura River Watershed, Santa Clara River Watershed, Calleguas Creek Watershed, Malibu Creek Watershed, and portions of several smaller coastal watersheds. These watersheds are described below.

2.1 Ventura River Watershed

The 223 square mile Ventura River watershed contains diverse terrain, ranging from rugged mountains covered in chaparral in the upper areas to relatively flat valleys in the lower reaches. Almost half of the watershed is within the Los Padres National Forest. Most of the rivers in the system have natural channel beds. The Ventura River is the primary watercourse within the watershed, with several major tributaries including Matilija Creek. The Matilija Creek subwatershed is about 55 square miles in area, about ninety percent of which is nearly pristine wilderness.

Most of the land in the Ventura River Watershed is undeveloped open space. Residential areas account for the largest proportion of developed land in the watershed, while a smaller but significant amount of land is used for commercial, industrial, or agricultural purposes. There are pockets of urbanized areas, including the cities of Ojai and Ventura and the unincorporated communities of Oak View, Mira Monte, Matilija Canyon, Live Oak Acres, Meiners Oaks, and Casitas Springs. Human activities occurring outside urban areas that impact watershed conditions include grazing and livestock, agriculture, oil production and recreation.

2.2 Santa Clara River Watershed

The Santa Clara River drains a total area of slightly more than 1600 square miles. The river flows generally westward from its headwaters in Los Angeles County to its junction with Sespe Creek in Fillmore, then southwest to the Pacific Ocean. Approximately 60 percent of the watershed is located in Ventura County and 40 percent in Los Angeles County. Most of the watershed is comprised of mountainous or hilly terrain, with some peaks reaching above 8,000 feet in altitude. The remaining land areas are comprised primarily of valley floor and coastal plain.

Most of the drainage area comprises undeveloped open space, including portions of the Los Padres National Forest and the Sespe Wilderness. Most of the developed lands within the watershed are used for agriculture, primarily in the floodplain and foothill areas near the Santa Clara River. Area farmers harvest oranges, lemons, avocados, and a variety of row crops. Residential, commercial, and industrial land uses occur primarily in the cities of Santa Paula, Fillmore, Oxnard, and Ventura. The largest of these cities is Oxnard, with a population of more than 200,000 people.

2.3 Calleguas Creek Watershed

The Calleguas Creek Watershed is located almost entirely in southern Ventura County, although the easternmost end of the watershed lies in western Los Angeles County. The watershed is approximately 30 miles long and 14 miles wide, with a drainage area of about 344 square miles. Surface water flow is discharged to Mugu Lagoon through Calleguas Creek, Revolon Slough, and the southwestern Oxnard Plain. Most of the channels in this watershed have been altered, and many have been completely or partially lined with concrete and riprap. The watershed contains the cities of Moorpark, Simi Valley, Camarillo, and Thousand Oaks, as well as a small portion of Oxnard.

About half of the watershed comprises undeveloped open space. Agricultural uses occupy about one fourth of the total drainage area, and urban areas occupy most of the remaining fourth. The primary crops grown in this area are lemons, avocados, strawberries, peppers and a variety of other row crops. Avocado and citrus groves tend to exist in the foothill areas, while the Oxnard plain produces mostly row crops. Residential development accounts for about two thirds of the urban areas, with the remainder of urban lands used for transportation/utilities, industrial, and commercial activity.

2.4 Malibu Creek Watershed

Only a small portion of the Malibu Creek Watershed lies within Ventura County, much of which consists of undeveloped open space situated in the headwaters of the drainage area. Located about 35 miles west of Los Angeles, the watershed extends from the Santa Monica Mountains and adjacent Simi Hills to the Pacific Coast at Santa Monica Bay. Several creeks and lakes are located in the upper portions of the watershed which ultimately drain into Malibu Creek. Flows from the watershed drain into Malibu Lagoon and ultimately into Santa Monica Bay when the Lagoon is breached.

Approximately 80% of the land in Malibu Creek Watershed is undeveloped. The developed land is primarily occupied by residential uses, although some commercial and industrial activity also occurs. Only a small amount of land is used for agriculture in this watershed, due to large portions of land set aside for parks and also because of the very steep slopes present in much of the region.

2.5 Coastal Watersheds

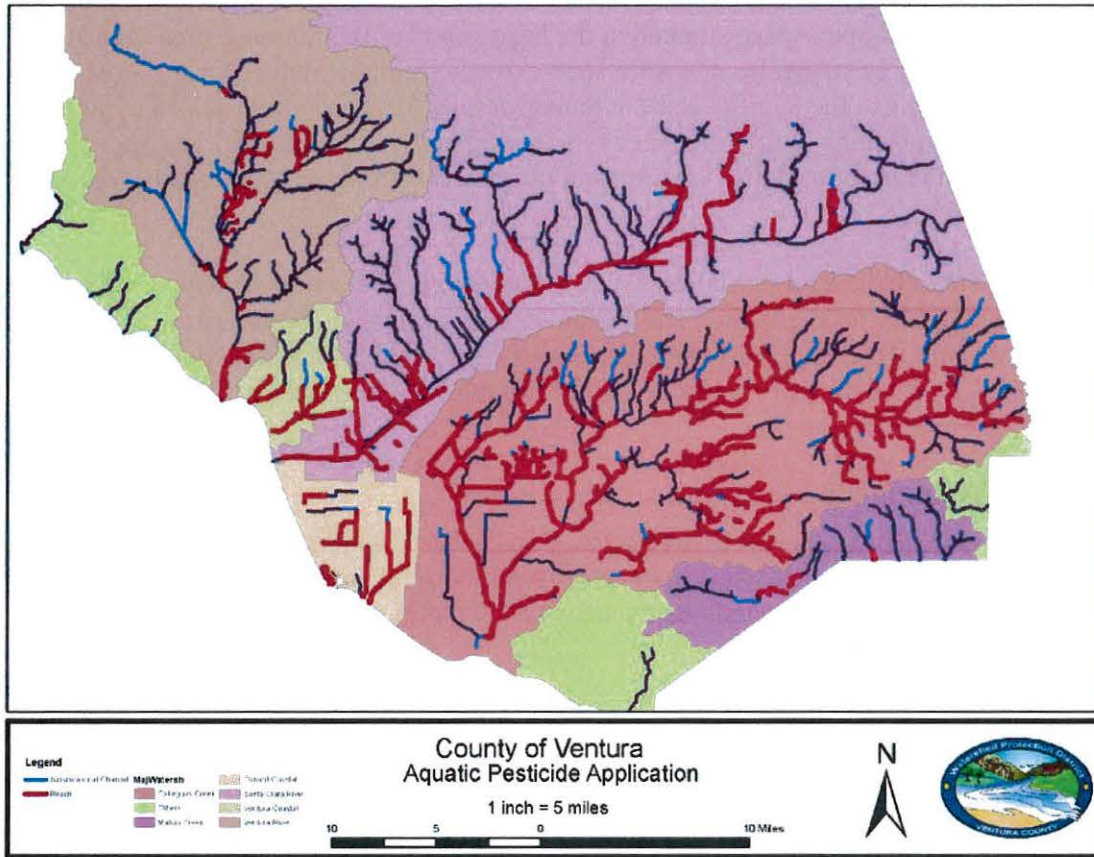
Several small watersheds discharge to the Pacific Ocean. These watersheds can include commercial, residential, industrial, and open space land uses and are typically located near the coast in the cities and unincorporated county areas near Ventura, Oxnard, and Port Hueneme.

3 Application/Treatment Areas

Aquatic herbicide (glyphosate) is applied to vegetation in District facilities, including drains, channels, levees, debris basins, and stream banks throughout Ventura County. Aquatic pesticide is applied according to the label and all applicable manufacturer instructions. Any residue flows downstream through the channels, tributaries, and main stems towards the Pacific Ocean.

A map showing the facilities to which the District applies aquatic herbicide is shown in Figure 1. A site list and smaller scale maps are included in Appendix C. Application areas are typically selected based on their capacity to drain storm water flow or to meet regulatory permit requirements and include natural and altered channels and ephemeral and perennial waterbodies. Applications are made to (low, mid, and high velocity) flowing waters, as well as channels that may be ponded or dry at the time of application, but are treated as if water was present and flowing in order to ensure water quality is protected when water does flow. Aquatic herbicide is used in all channel treatments, whether water is present or not. The District does not apply aquatic herbicide to non-flowing waters such as lakes or ponds. Pesticide application areas are surrounded by a variety of land use types, including: urban, industrial, commercial, and agriculture.

Figure 1 - Aquatic Herbicide Application Sites



Since glyphosate is only effective when applied to the leaf or freshly cut stalk surfaces of target plants, the District targets aquatic herbicide applications only directly to live vegetation. Only incidental contact of aquatic herbicide with the water body being treated may occur during applications. In other words, the District does not attempt to treat nuisance vegetation by applying aquatic herbicide directly to water bodies. Therefore, for this program, the treatment area is the same as the application area.

4 Need for Control Measures and Description of Targeted Weeds

Ventura County relies on its channels and debris basins to divert stormwater to prevent flooding. In order for District facilities to function correctly and safely transport stormwater away from urban areas, channels must be kept clear of any vegetation that could cause damage to District facilities, reduce capacity, and/or obstruct the flow of water. Vegetation has the potential to interfere with the structural integrity of channel banks and levees, including breaking up fill and concrete, and has the potential to cause drain blockages which can result in flooding, property damage, and threaten life. Vegetation is also removed or reduced by herbicide in a 15-foot wide zone at the base of any bank protection (e.g. concrete, riprap) to provide an unobstructed view of the toe of the slope to allow for visual inspection. Deposition and accumulation of silt in channels leads to growth of aquatic vegetation like broad leaf weeds and grasses, which in turn

can cause a buildup of additional sediment. The District currently applies the aquatic herbicide glyphosate to remove these weeds and prevent the growth of perennial woody vegetation in order to protect and maintain channel capacity.

Aquatic herbicide (only glyphosate) applications occur throughout the year. Applications are made at a frequency to control vegetation at a level that maintains the hydraulic capacity of the application site, usually no more than twice per year. The application frequency at a given site may vary based on seasonal weather patterns, species present, Department of Fish and Wildlife or other environmental permit restrictions, and availability of application crews.

In addition to aquatic herbicide applications for the purpose of maintaining hydraulic capacity, the District uses aquatic herbicide as a component of its riparian habitat restoration program, which strives to mitigate the environmental impacts of District projects. At mitigation sites, herbicide applications are used to eradicate non-native invasive species including giant cane (*Arundo donax*) and castor bean (*Ricinis communis*). This helps promote native species establishment and meet eradication requirements. For these projects, aquatic herbicide is used to spot treat target species within the mitigation sites, however the sites are typically dry at the time of application.

Applications within the mitigation sites are typically conducted quarterly, with additional applications as needed. All invasive species are treated as needed to prevent establishment.

5 Aquatic Herbicide Products, Adjuvants, and Application Methods

The only herbicide applied within drainage channels in Ventura County by the District is non-selective, glyphosate-based aquatic herbicide (e.g. Aquamaster, Rodeo etc.), which is applied throughout the county to control aquatic weeds, grasses, broad leaf weeds, and woody vegetation. Glyphosate is a non-residual broad-spectrum, systemic, post-emergence herbicide that is absorbed into plant cells and is translocated throughout the plant. Glyphosate inhibits enzymes required by the plant for the biosynthesis of essential aromatic amino acids which are needed by plants to generate proteins, growth promoters and inhibitors, phenolics, and lignin.

Visible effects of glyphosate begin with gradual wilting and yellowing of the plant and progress to complete browning of above ground growth and failing of the root systems. The effects usually occur slowly, within two to four days for annual weeds and up to seven days or more for perennial weeds. Visible effects may be delayed during periods of extremely cool or cloudy weather.

Glyphosate is only effective through direct application to foliage or direct application to the freshly cut surface of plant stalks (cut-and-daub method) due to its strong attraction to soil and sediment. Glyphosate sprayed onto soil or water will be quickly adsorbed to the soil and sediment and become unavailable for uptake by the plant, therefore it does not work well on submerged or mostly submerged foliage. Microbial action in soil is the main pathway for glyphosate decomposition and so the rates of glyphosate breakdown are affected by the factors that affect this activity. Glyphosate is of limited solubility in common organic solvents but is

highly soluble in both water and fat, which indicate that it has a low tendency for bioaccumulation.

The District uses aquatic-approved non-ionic surfactant in conjunction with a glyphosate-based aquatic herbicide to control the growth of aquatic plants. MAGNIFY is a water soluble sucrose-based activator/penetrant used by the District. It is formulated with ammonium salts, non-ionic surfactants and anti-foaming agents. The active ingredients (51.15%) are alkyl polyglycoside (seen by the targeted plant as a food source enhancing translocation resulting in faster and more complete weed control), and ammonium sulfate and ammonium nitrate (prevent calcium deactivation of glyphosate and act as stimulants to increase weed metabolism, enhancing speed and completeness of control). MAGNIFY has shown no phytotoxicity when used with selective herbicides and was selected by the District as a safer alternative adjuvant to nonylphenol.

The method and extent of spraying varies based on site specific conditions. In general, glyphosate-based aquatic herbicide is applied to channel slopes and up to 15 feet from the toe towards the center of District facilities using a boom spray. If a boom spray cannot be used (e.g. due to space restrictions, the need to avoid desirable plants, distances greater than the reach of the boom, etc.), the District will use hand sprayers connected to spray trucks. Only vegetative material is sprayed; herbicide is not applied to open water or bare earth. Back pack herbicide spraying is only used to treat otherwise inaccessible areas along channels or in basins. This application technique is primarily used for invasive species removal for mitigation projects. Cut and daub applications typically use sponges connected to wands in order to apply the herbicide directly to the freshly cut stump.

The lowest effective concentration is used by the District for all aquatic applications. A maximum concentration of 1% glyphosate-based aquatic herbicide product is utilized for foliar applications, whether applied by boom, hand held hose (truck), or back pack sprayer. Cut and daub applications usually utilize the product at full strength, in order to ensure effective treatment of the targeted vegetation.

6 Aquatic Herbicide Use Factors

Multiple approaches are available for dealing with aquatic weeds including: no action, prevention, mechanical or physical methods, cultural methods, biological control agents, and aquatic herbicides. These methods have been evaluated for use in Ventura County and are used when and where appropriate. Aquatic weeds can block flood control channels causing flooding, property damage, and threaten life. For these reasons, action must be taken to control aquatic weed growth.

1. Most preventative measures, such as controlling water depth and bank slope, are not applicable to District facilities in Ventura County due to flood control requirements. Some channels have steep banks lined with concrete which reduces but does not eliminate the need for aquatic weed treatment at these locations; however there are many waterways where these measures are not appropriate.
2. When appropriate, the District removes undesirable plants in channel and basin bottoms by mechanical means (i.e. disking, mowing, or hydroaxe) or by hand crews. Disking and mowing are common weed control methods for basin and channel bottoms during the

summer and fall when basins are dry enough for equipment. However, when water is present, mechanical removal of weeds is not appropriate and is prohibited by the environmental permits issued to the District. In some areas, access to channels with heavy equipment for weed removal is restricted/prohibited by regulatory agencies such as the Army Corps of Engineers, California Department of Fish and Wildlife, and U.S. Fish and Wildlife Service, etc. Hand crews are periodically used to remove trash and weeds from channels and drains when appropriate. Physical weed removal is costly and potentially destructive to the environment, resulting in habitat and water quality degradation and increased turbidity.

3. Cultural methods such as fertilization, dyes, draw downs and benthic barriers are inappropriate techniques for District facilities as they are designed for use in ponds and/or for treating submerged vegetation and algae and not for flowing or dry channels and emergent vegetation.
4. There are two types of biological control agents available for aquatic weed control in California, however neither is appropriate for use in Ventura County (<http://wric.ucdavis.edu/information/aquatic/biocontrol.htm>). The functionally sterile triploid grass carp (*Ctenophyllum idealla*) has had limited success in controlling filamentous algae and most submersed aquatic plants, however, it is non-native and is currently restricted to three counties in Southern California (Imperial, Riverside, and San Bernardino) by the California Department of Fish & Game. The other biological control agent is a weevil to target water hyacinth, but it is thought to have had little impact and water hyacinth is not common in Ventura County. The potential for interaction between biological control agents and other species in Ventura County is also of concern.
5. Bank stabilization reduces erosion, thus decreasing the total amount of silt that may erode into the channel, reducing the available substrate for aquatic weed growth. Bank stabilization is currently used at some locations.
6. Other pesticides have also been evaluated for use. However, no alternatives have been discovered that have been proven to provide the same level of effectiveness as glyphosate at a comparable cost and with minimal environmental impacts. Additionally, alternatives investigated are generally more toxic to non-target species. Alternative pesticides have some or all of the following limitations:
 - a. Higher handling hazard;
 - b. Less effective at controlling target weeds;
 - c. Use restrictions;
 - d. Not legal for use by the District;
 - e. Lack of translocation resulting in lowered long-term effectiveness;
 - f. Potential negative impacts upon surrounding crops or the environment; and/or are
 - g. Cost-prohibitive.

7 Application Rate Determination and Application Logs

Aquatic herbicide applications are made in a manner consistent with all product label instructions and Material Safety Data Sheets (MSDS). Applications are made directly to live target vegetation, which are treated until wet, but not to the point of run-off. The aquatic herbicide concentration used is generally the lowest percentage of the range specified by the product label for each type of application.

An application log must be maintained for each aquatic herbicide application and include the date and location of application; name of applicator; type and amount of aquatic herbicide used; application details including flow and level of water body, time application started and stopped, and aquatic herbicide application rate and concentration; visual monitoring assessment; and certification that applicator(s) followed the APAP.

8 Water Quality and Designated Use Impacts

Best management practices are in place to prevent designated use impacts as the result of District applications of aquatic herbicide.

8.1 Receiving Water Limitations

The discharge of residual aquatic herbicides must meet applicable water quality standards including those stated in the General Permit (List # 1-8 below) and Los Angeles Region Basin Plan (List # 9 below):

1. The instantaneous maximum receiving water limitation outside the treatment area for glyphosate in waters with a MUN⁴ designated beneficial use is the U.S. EPA MCL, 700 µg/L.
2. Floating material may not be present in amounts that cause nuisance or adversely affect beneficial uses.
3. Settleable substances may not be present in concentrations that result in the deposition of material that causes nuisance or adversely affects beneficial uses.
4. Suspended material may not be present in concentrations that cause nuisance or adversely affect beneficial uses.
5. Taste- or odor-producing substances may not be present in concentrations that impart undesirable tastes or odors to fish flesh or other edible products of aquatic origin, or that cause nuisance, or otherwise adversely affect beneficial uses or domestic or municipal water supplies.
6. Toxic pollutants may not be present in the water column, sediments, or biota in concentrations that adversely affect beneficial uses; that produce detrimental response in human, plant, animal, or aquatic life; or that bioaccumulate in aquatic resources at levels which are harmful to human health.

⁴ Most of the reaches to which the District applies aquatic herbicide are designated existing, potential, or intermittent MUN.

7. Esthetically undesirable discoloration may not be present.
8. Aquatic communities and populations, including vertebrates, invertebrates, and non-target plant species may not be degraded.
9. At a minimum, no single determination of dissolved oxygen shall be below 5.0 mg/L, except when natural conditions cause lesser concentrations. Dissolved oxygen shall not be depressed below the following limits for the stated designated beneficial uses as a result of waste discharges: 6 mg/L for COLD, and 7 mg/L for COLD and SPWN.

8.2 Aquatic Impacts

There is a low overall risk to aquatic resources, including water quality and beneficial uses, from the District's application of aquatic herbicide (glyphosate) to District flood control facilities. Along most maintained drainages, effects are expected to be minor because water is generally not present during maintenance. Any effects would be of low magnitude and frequency. Typical beneficial uses in the rivers and creeks of the County include: municipal and domestic supply, groundwater recharge, agricultural supply, wildlife habitat, cold freshwater habitat, warm freshwater habitat, and water contact recreation.

In general, plants provide erosion control, temperature modulation, water storage, energy exchange, microhabitats and cover for wildlife, food sources for invertebrates and vertebrates, and form the basis of ecosystems. However, the design of most District flood control facilities does not include capacity for vegetation growth on channel and basin bottoms and banks; therefore vegetation must be maintained at an artificially low level for the facilities' proper function and operation. The ongoing vegetation management means that the wetland and riparian species that are able to colonize flood control facilities are primarily annual non-native aggressive and opportunistic plants, with short life cycles and periods of development that provide poor quality habitat and limited ecosystem functionality.

Much of the District's application of aquatic herbicide occurs at District facilities when water is not present, resulting in no adverse impacts to designated uses or water quality. For sites where water is present, the following impacts⁵ may occur:

1. Weed removal can reduce the amount of shade on surface water which can increase surface water temperatures, stimulating algal growth which reduces dissolved oxygen and harms aquatic organisms. However, most facilities are maintained so that only early seral, low-growing herbaceous vegetation may establish. Trees and large shrubs are actively precluded from establishing because they compromise the structural integrity of the facilities. Therefore, most facilities already lack shade and the vegetation removed does not generally create a dense canopy with a shading effect. This may cause minor effects to beneficial uses related to habitat.
2. Decaying plant matter can lower dissolved oxygen levels in the water, which can affect the respiration ability of other aquatic organisms. The District treats vegetation when needed to help prevent this potential impact. This may cause minor effects to beneficial uses related to habitat.

⁵ The relative risk of known and potential impacts to water quality are low but equal and so are not ranked in terms of relative risk.

3. Removal of vegetation from channel and basin bottoms exposes bare dirt to possible erosion during subsequent winter flows, which may cause an increase in the wash and bed loads of the drainage at and below the affected reach. The amount of material eroded depends on the velocity of the flows and its inherent capability to convey sediment. Increased amounts of sediment and resulting turbidity may have a marginal, short-term adverse effect on surface water quality and habitat in downstream environments. Some erosion related sediment occurs naturally in all watersheds in the County.
4. Improper application or spills of aquatic herbicide could lead to designated use impacts related to habitat, water supply, and recreation through exceedances of the MUN water quality objective (700 µg/L) for residual levels of the active ingredient, glyphosate. However, this risk is minimized through the use of the best management practices (BMPs) described in Section 12 and 13 below and in the attached Ventura Countywide Stormwater Quality Management Program Application Protocol (Appendix B), or most recent update.

9 Monitoring Program

In this section, all aspects of the monitoring program are discussed in detail, including: overall approach, site selection, sampling procedures, quality assurance/quality control (QA/QC), reporting, and monitoring site descriptions. The District must comply with the Monitoring and Reporting Program (MRP), which is detailed in Attachment C of the Order. The MRP addresses two key questions:

1. Does the residual algaecides and aquatic herbicides discharge cause an exceedance of receiving water limitations?
2. Does the discharge of residual algaecides and aquatic herbicides, including active ingredients, inert ingredients, and degradation byproducts, in any combination cause or contribute to an exceedance of the “no toxics in toxic amount” narrative toxicity objective?

The goals of the MRP as stated in Section VII.A of Attachment D of the Order are to:

1. Identify and characterize aquatic herbicide application projects conducted by the discharger;
2. Determine compliance with the receiving water limitations and other requirements specified in this General Permit;
3. Measure and improve the effectiveness of the APAP;
4. Support the development, implementation, and effectiveness of BMPs;
5. Assess the chemical, physical, and biological impacts on receiving waters resulting from aquatic herbicide applications;
6. Assess the overall health and evaluate long-term trends in receiving water quality;
7. Demonstrate that water quality of the receiving waters following completion of resource or weed management projects are equivalent to pre-application conditions;

8. Ensure that projects that are monitored are representative of all aquatic herbicides and application methods used by the discharger.

9.1 Logical Framework

The Order requires that a logical framework be used to develop an effective monitoring program. The required components of the framework are included in this APAP and their location is summarized in the table below.

Table 1 - Logical Framework Components

Logical Framework Requirement	Section Number
Basic geographic and hydrographic features of the area, particularly application points and the pathways(s) of residue flows.	2, 3
Algaecides and aquatic herbicides application practices and how they are distributed in space and time.	3, 4, 7
Relevant knowledge about the transport, fates, and effects of algaecides and aquatic herbicides, including best- and worst-case scenarios.	5
Description of the designated beneficial uses in each water body.	Appendix C
Relevant knowledge about the action of cumulative and indirect effects.	5
Mechanisms through which algaecides and aquatic herbicides applications could lead to designated use impacts, given the basic features of the area.	8
Known and potential impacts of algaecides and aquatic herbicides applications on water quality, ranked in terms of relative risk, based on factors such as magnitude, frequency and duration.	8
Sufficient number of sampling areas to assess the entire Discharger's or Coalition's area of influence.	9
A description of sampling methods and a sampling schedule.	9
Receiving water conditions at the time of water quality sampling	9

9.2 Monitoring Approach

Since glyphosate is commonly used in agricultural as well as residential areas, background concentrations may exist prior to, or after, an application event by the District. The application site selected for monitoring shall be sampled in multiple locations. Collection of five samples at each representative monitoring site shall take place according to the following:

- Pre-event background monitoring – Collect sample upstream of the application area at the time of the application event or in the application area just prior to (up to 24 hours in advance of) the application event.
- Event monitoring – Collect sample immediately downstream of the treatment area in flowing waters immediately after the application event, but after sufficient time has elapsed such that treated water would have exited the treatment area.
- Post-event background monitoring – Collect sample upstream of the application area within one week after the application event.

- Post-event treatment area monitoring - Sample within the treatment area within one week after the application event.
- Post-event downstream monitoring - Sample immediately downstream of the treatment area within one week after the application event.

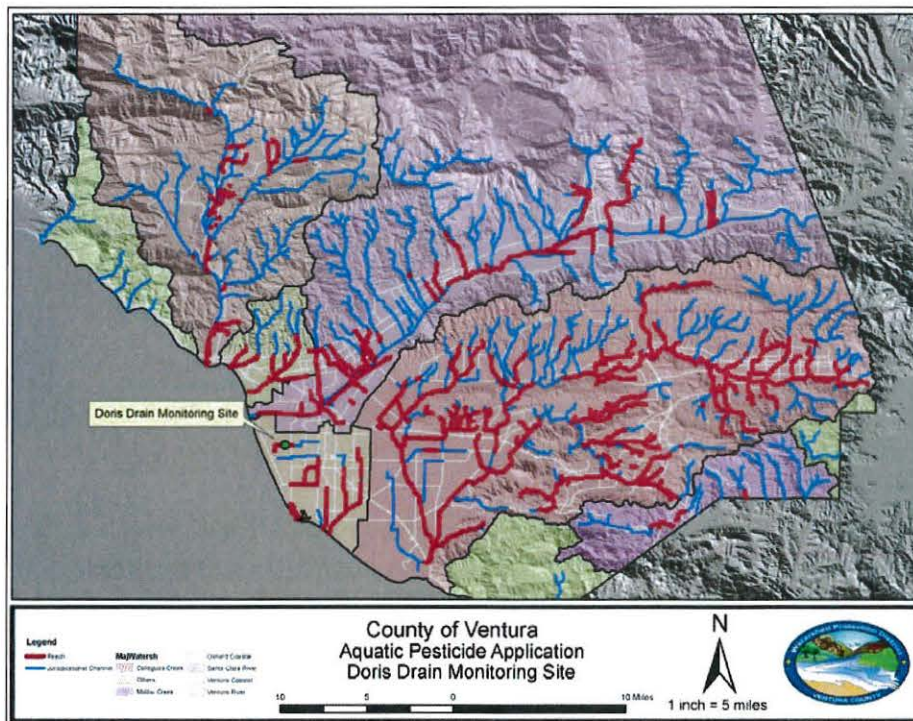
Monitoring shall be conducted for one application event per calendar year at the selected monitoring site (see section 9.3).

Additionally, background data shall be collected at the three District Mass Emission monitoring stations located on the Ventura River, the Santa Clara River, and Calleguas Creek. Glyphosate is on the list of constituents currently being monitored in receiving water samples during dry and wet weather events. The results of these data shall be reviewed during the production of the annual report. See the Ventura Countywide Stormwater Monitoring Program’s “*Stormwater Program: Water Quality Monitoring Standard Operating Procedures 2009 - 2014*” from April 2011, or most recent update, for details regarding Mass Emission station monitoring.

9.3 Representative Monitoring Site

The General Permit requires annual water quality sampling at one application site during one event per Discharger when glyphosate is used for aquatic weed management. Many of the District’s applications of “aquatic” herbicides are made to District facilities that are dry at the time of application. The District has selected one representative aquatic herbicide application site for monitoring. The aquatic herbicide monitoring site was selected based on the following criteria: flow volume present during application months, site accessibility, and field safety

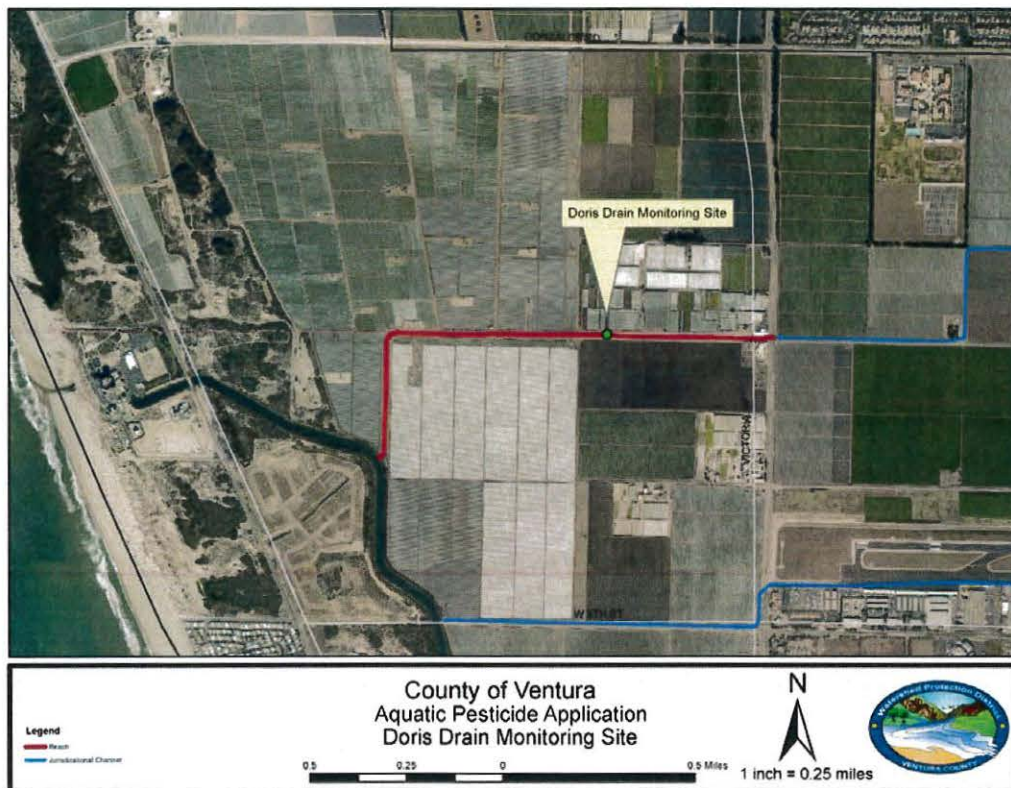
Figure 2 - Aquatic Pesticide Application Monitoring Site



Doris Drain

The Doris drain monitoring site is located west of the intersection of Doris Road and Victoria Avenue. See Figure 4..

Figure 3 - Doris Drain Monitoring Site



9.4 Sample Collection

Sampling Event Scheduling

Since monitoring is dependent on time of pesticide application, notification and scheduling are necessary in order to prepare for these monitoring events. The District usually applies pesticide at least once a year during the summer months. Additional treatments are made on an as-needed basis. The District Operations & Maintenance (O&M) staff shall notify the field sampling crew as early as possible of planned pesticide applications to the selected monitoring site. When applying pesticide, the District shall fill out a Pesticide Application Field Log sheet in addition to the Monthly Pesticide Use Report required by the Department of Pesticide Regulation (both forms are included in Appendix A of this document).

Sampling Preparation and Logistics

The following equipment preparation and maintenance activities shall be performed in preparation for each monitoring event. The field crew shall inventory field equipment and replace items as necessary. A checklist of necessary field equipment is listed in Table 3.

Table 2 - Field Sampling Checklist

Equipment	
	Grab Sample Bottles and Labels
	Expandable Grab Sampling Pole (if needed)
	Wading Boots
	Pencils (2) and Permanent Markers (2)
	Powder-free Nitrile Gloves (2)
	Digital Camera
	GPS Unit
	Cooler and Ice
	First Aid Kit
	Water for Field Blanks
	Cellular Phone
	Field Meters (pH, Conductivity, Temp, DO, Turbidity)
Documents	
	APAP
	Area Map (i.e. Thomas Guide)
	Field Log Forms
	Chain of Custody Forms

Bottles shall be obtained from the laboratory prior to each monitoring event. Bottle orders shall include grab sample bottles and labels, and blank water for field blank generation. Sample bottle labels shall be filled out and applied to sample bottles prior to collecting samples. COCs will be supplied by the District (Appendix A). Coolers will be supplied by the District or the laboratory, as needed.

Field personnel shall have a cellular phone or other means of remote communication. This is important for safety as well as for general communication. The field crew shall always have the project contact list in their possession while in the field (Table 4).

Table 3 - Contact List

Name	Organization	Phone	Email Address
Arne Anselm	District (Water Quality Manager)	805-654-3942 805-218-4522 cell	arne.anselm@ventura.org
Kelly Hahs	District (Water Resources Specialist)	805-658-4375 805-701-1689 cell	kelly.hahs@ventura.org
Bill Carey	District (Water Resources Specialist)	805-662-6835 805-701-6547 cell	wb.carey@ventura.org
Bram Sercu	District (Water Resources Specialist)	805-654-5142 805-223-1006 cell	bram.sercu@ventura.org
Dennis Kanthack	District (Restoration Coordinator)	805-650-4083	dennis.kanthack@ventura.org
Roger Boross	District Zone 3 & 4 (Superintendent)	805-378-3033 805-443-4505 cell	roger.boross@ventura.org
Mike Horn	District Zone 3 & 4 (Supervisor)	805-378-3033 805-443-4506 cell	mike.horn@ventura.org
Rick Cadena	District Zone 3 & 4 (Supervisor)	805-378-3033 805-443-4504 cell	richard.cadena@ventura.org
John Lagomarsino	District Zone 1 & 2 (Superintendent)	805-672-2114 805-443-4503 cell	john.lagomarsino@ventura.org
David McCarthy	District Zone 1 & 2 (Supervisor)	805-672-2115 805-320-5970 cell	david.mccarthy@ventura.org
William DuFrain	District Zone 1 & 2 (Supervisor)	805-672-2113 805-320-5971 cell	william.dufrain@ventura.org
Sample Receiving	FGL Environmental Laboratories, Inc.	805-392-2017	

Field Safety

Safety is a primary concern. If for any reason sample collection appears unsafe, the sampling event shall be delayed or canceled. Sampling crews shall always consist of a minimum of two people. In general, sampling personnel shall be aware of their surroundings (including maintaining a safe distance as the aquatic herbicide is applied), stay together, and remain watchful of one another. Personnel must pay careful attention to footing during all sample collection activities. Additionally, personnel should familiarize themselves with the location of local hospitals, in case a medical problem occurs while working in the field. All sampling crews shall have immediate access to a first aid kit while working in the field.

Sampling Protocol

Water quality sampling activities shall be performed by District water quality staff. Since sample collection is required just prior to and following pesticide application, District O&M shall notify the water quality field crew (see Table 4) of the time and date for planned application events at the selected monitoring site, with sufficient advance notice (at least one week prior to planned application).

During each monitoring site visit the sampling crew shall record visual observations of receiving water conditions, including the presence or absence of floating or suspended matter; discoloration; bottom deposits; aquatic life; visible films, sheens, or coatings; fungi, slimes, or objectionable growths; and potential nuisance conditions. Weather conditions (fog, rain, wind, etc.) and any other relevant information shall also be recorded. Digital pictures and GPS

coordinates shall be recorded. Visual observations shall be recorded in the Monitoring Field Log (see Appendix A).

For this project, the preferred method for grab sample collection is direct submersion of sample bottles at a depth of three feet below the surface of the water body or at mid water column depth if the depth is less than three feet. However, due to monitoring site configuration and safety concerns, direct filling of sample bottles may not always be possible. Monitoring site configuration will dictate grab sample collection technique.

Water quality analyses required for this program are shown in Table 5. Water quality samples for glyphosate analysis shall be conducted at a laboratory certified for such analyses by the California Department of Public Health in accordance with California Water Code section 13176. In addition, field measurements for conductivity, water temperature, pH, dissolved oxygen, and turbidity shall be recorded at the time of water quality sample collection using field meters calibrated according to manufacturer's instructions. All field meters and equipment shall be maintained, serviced, and calibrated at appropriate intervals specified by the manufacturer. Calibration records shall be maintained in the District's Water Quality Section field equipment calibration logbook and/or on the monitoring field log sheet.

Table 4 - Constituents and Sampling Parameters

Constituent	Analytical Method	Sample Container	Preservative	Maximum Hold Time	Reporting Limit
Glyphosate	EPA 547	125 ml Amber Glass; or 2 x 80 ml Amber VOAs	4° C	14 days	≤ 20 µg/L (lab specific)
Turbidity	Field Meter ⁶	N/A	None	Field	N/A
Conductivity	Field Meter ⁷	N/A	None	Field	N/A
Dissolved Oxygen	Field Meter ⁷	N/A	None	Field	N/A
Temperature	Field Meter ⁷	N/A	None	Field	N/A
pH	Field Meter ⁸	N/A	None	Field	N/A

Clean Sample Collection Procedures

“Clean sampling” techniques are required to collect and handle water samples in a way that results in neither contamination, loss, nor change in the chemical form of the constituents of interest. Samples shall be collected using rigorous protocols summarized below:

1. Samples are collected only into rigorously pre-cleaned sample bottles.
2. At least two persons, wearing clean, powder-free nitrile gloves at all times when handling samples, are required on a sampling crew.

⁶ Hach 2100P or similar

⁷ YSI 85 or similar

⁸ Beckman-Coulter 255 or 410 or similar

3. Clean, powder-free nitrile gloves are changed whenever something not known to be clean has been touched.
4. Clean techniques must be employed whenever handling containers or equipment used for collection of samples.

To reduce potential sample contamination, sample collection personnel must adhere to the following rules at all times while collecting or handling samples:

1. No smoking.
2. Wear clean, powder-free, nitrile or similar surgical-quality gloves when handling sample containers.
3. Never sample near a running vehicle. Do not park vehicles in immediate sample collection area (even non-running vehicles).
4. Minimize the amount of time any sample container is left open.
5. Do not set lids down where they may accumulate contaminants.
6. Prevent foreign material (blowing dust, leaves, etc.) from entering any open sample container.
7. Never touch the inside surfaces of sample bottles or lids, even with gloved hands.
8. Face into the flowing body of water.

Shipment of Samples

Samples requiring analysis at an analytical laboratory shall be delivered to the laboratory for analysis as quickly as possible in order to ensure that holding times are not exceeded. Chain-of-custody (COC) forms shall be filled out for all samples submitted to the laboratory. Sample date, sample location, and analysis requested shall be noted on each COC. Additionally, QA/QC analysis specified in Table 6 shall be noted on the COC. A blank COC form is included in Appendix A.

9.5 Quality Assurance / Quality Control (QA/QC)

Field QA/QC Samples

Field QA/QC is conducted in compliance with 40 CFR 136 which refers to the method for QA/QC requirements. The method for glyphosate states "Field blanks must be analyzed to determine that sampling and storage procedures have prevented contamination" and describes field blanks as "Reagent water placed in a sample container in the laboratory and treated as a sample in all respects, including exposure to sampling site conditions, storage, preservation and all analytical procedures." The field crew shall use blank water provided by the analytical laboratory to fill a sample container according to standard procedures. One field blank sample will be collected for glyphosate analysis during each monitoring event, but will only be analyzed if one or more of the environmental samples collected during the event contain levels of glyphosate above 70 µg/L (10% of the MCL). The field blank will be collected at the downstream monitoring site during the application visit and from within the treatment area during the follow up visit.

According to the analytical method, field duplicate analysis is optional and defined as “Two separate samples collected at the same time and place under identical circumstances and treated exactly the same throughout field and laboratory procedures.” Field duplicates provide a measure of the variability (precision) associated with sample collection, preservation and storage, as well as with laboratory procedures. One field duplicate sample will be collected for glyphosate analysis immediately prior to the collection of the downstream environmental grab sample during the first year of the new General Permit and every five years thereafter to ensure that current protocols provide quality samples, unless the field duplicate has an RPD >25% and laboratory QA/QC meets requirements, then a field duplicate will be collected the following year.

Laboratory QA/QC Samples

Laboratory quality control samples shall be analyzed in compliance with method requirements and laboratory QA/QC protocols. This includes the use of laboratory control standards (LCS), matrix spikes and matrix spike duplicates (MS/MSDs). Quality control sample results will be used for data evaluation and interpretation. Data quality objectives (DQO) for glyphosate analysis shall be the stricter of the limits below or those set by the laboratory.

Table 5 - QA/QC Sample Type and Data Quality Objective

QA/QC Sample Type	DQO
Method Blank	< Reporting Limit
Laboratory Control Sample (LCS) recovery	50 – 150 %
MS/MSD recovery	50 – 150 %
MS/MSD relative percent difference (MSRPD)	25 %
Laboratory duplicate	25%

The chain of custody will include a note requesting the laboratory to perform MS/MSD analyses using the submitted samples, whenever possible. MS/MSD analyses are internal (laboratory performed) QA/QC checks for both precision and accuracy. No special sample collection considerations are required; however additional sample volume may be required.

Laboratory duplicate analysis shall be performed in accordance with method requirements and the laboratory’s QA/QC manual.

Field Meter Calibration

All field meters and equipment shall be maintained, serviced, and calibrated at appropriate intervals specified by the manufacturer. Calibration records shall be maintained in the District Water Quality Section field equipment calibration logbook.

10 Recordkeeping

10.1 Monitoring Records Retention

The District shall retain for a period of at least three (3) years from the date of the sample, all records of monitoring information, including all calibration and maintenance records; date, exact place, and time of sampling or measurements; individual(s) who performed the sampling or measurements; dates the analyses were performed; individual(s) who performed the analyses; analytical techniques or methods used; and the results of such analyses.

10.2 Annual Information

Information for each reporting (calendar) year shall be completed and maintained annually and be made available to the State Water Resources Control Board (SWRCB) Deputy Director (Deputy Director) or Los Angeles Regional Water Quality Control Board (RWQCB) Executive Officer (Executive Officer), on request. The following information shall be completed annually:

1. Executive summary (discuss compliance/violation status with Order and effectiveness of APAP in reducing/preventing the discharge of pollutants associated with aquatic herbicide applications);
2. Monitoring data summary (identify water quality improvement/degradation resulting from aquatic herbicide application, if appropriate, and recommendations for improvements to the APAP [including proposed best management practices (BMPs)] and monitoring program based on the monitoring results. Compare all receiving water monitoring data to receiving water limitations and receiving water monitoring triggers);
3. Identify BMPs currently in use and discuss their effectiveness in meeting the Order requirements;
4. Discuss BMP modifications addressing any violations of the Order;
5. A map showing the location of each treatment area;
6. Types and amounts of aquatic herbicide used at each application event;
7. Information on surface area and/or volume of treatment areas and any other information used to calculate dosage, concentration, and quantity of each algaecide and aquatic herbicide used;
8. Sampling results (indicate the name of the sampling agency or organization, detailed sampling location information (including latitude and longitude or township/range/section if available), detailed map or description of each sampling area (address, cross roads, etc.), collection date, name of constituent/parameter and its concentration detected, minimum levels, method detection limits for each constituent analysis, name or description of water body sampled, and a comparison with applicable water quality standards, description of analytical QA/QC plan. Sampling results shall be tabulated so that they are readily discernible); and
9. Summary of algaecide and aquatic herbicide application log.

11 Reporting

All reports shall be submitted to the Deputy Director and the Executive Officer. Submitted reports shall comply with the provisions of Attachment B "Standard Provisions" and Attachment C "Monitoring and Reporting Program" of the General Permit.

11.1 Annual Report

The District shall submit a calendar year annual report to the Deputy Director and the Executive Officer no later than March 1 of the following year. As further described in section C of Attachment C, the Annual Report shall contain the following:

1. An executive summary discussing compliance or violation of this General Permit and the effectiveness of the APAP; and
2. A summary of monitoring data, including the identification of water quality improvements or degradation as a result of the algaecide or aquatic pesticide application.
 - a. Monitoring data must include the laboratory conducting the analysis, method detection level (MDL) and reporting limit (RL).

The report shall be submitted to the following addresses:

Executive Officer, or
Augustine Anijelo, c/o Gensen Kai
Regional Water Quality Control Board - L.A.
320 West 4th Street, Suite 200
Los Angeles, CA 90013

Deputy Director, or
Russell Norman
State Water Resources Control Board
NPDES Unit
1001 I Street, 15th Floor
Sacramento, CA 95814

All reports shall be signed by a principal executive officer, ranking elected official, or duly authorized representative as described in section B "Signatory and Certification Requirements" of Attachment B "Standard Provisions." Any person signing a document submitted to the RWQCB shall complete the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

11.2 Twenty-Four Hour (Oral) and Five Day (Written) Reports

Noncompliance that may endanger health or the environment must be reported to the SWRCB and RWQCB orally within 24 hours from the time that the District becomes aware of the circumstances. The oral report must include:

1. The caller's name and phone number;

2. Applicator name, mailing address, and Waste Discharge Identification (WDID) Number (4A567300005);
3. Name and telephone number of a contact person;
4. How and when the District became aware of the noncompliance;
5. A description of the noncompliance identified, including location and USEPA pesticide registration number(s) of the product (s) applied in the area; and
6. The steps taken/to be taken to correct, repair, remedy, cleanup, or otherwise address any adverse effects.

A written submission is required within five days of the time that the District becomes aware of the noncompliance (unless waived on a case-by case basis by SWRCB or RWQCB staff) and shall include:

1. The information required by the 24 hour report, the date and time the report was made and any instructions received during the 24 hour report;
2. Description of the noncompliance and its cause, including exact date and time and species affected, estimated number of individual and approximate size of dead or distressed organisms (other than the pests to be eliminated);
3. Location of incident, including the names of any waters affected and appearance of those waters (sheen, color, clarity etc);
4. Magnitude and scope of the affected area (e.g. aquatic square area or total stream distance affected);
5. Aquatic herbicide application rate, intended use site (e.g. banks, above, or direct to water), method of application, name of aquatic herbicide product, description of aquatic herbicide ingredients, and U.S. EPA registration number;
6. Description of the habitat and circumstances under which the noncompliance activity occurred (including any available ambient water data for aquatic herbicides applied);
7. Any laboratory tests performed and timing of tests (provide a summary of the test results within five days after they become available);
8. If applicable, explain why the District believes the noncompliance could not have been caused by exposure to the aquatic herbicides from a District application; and
9. Actions to be taken to prevent recurrence of adverse incidents.

Section F of Attachment C lists the information required to be reported for both the 24 hour oral and five-day written reports.

11.3 Notifications

Public Notification

Every calendar year, potentially affected public agencies must be notified at least 15 days prior to the first application of aquatic herbicide. The notification shall also be posted at: www.vcwatershed.org → Services Tab → Herbicide Calendar. The calendar includes non-

aquatic sites. The direct link is:

http://portal.countyofventura.org/portal/page/portal/PUBLIC_WORKS/Watershed_Protection_District/Services/Herbicide%20Brush%20and%20Weed%20control%20maintenance.

Notification shall include a statement of the intent to apply aquatic herbicide, the name of the aquatic herbicide, purpose of use, general time period and locations of expected use, any water use restrictions or precautions during treatment, and a phone number that interested persons may call to obtain additional information.

Application Schedule

The most current application schedule must be provided to all persons who request it with information about whether the schedule is subject to change, as well as a phone number or specific contact information for additional application information. Information may be made available by electronic means, including posting prominently on a well-known website.

12 Current and Planned BMPs

BMPs currently employed or being implemented are presented in this section. For additional detail regarding pesticide application protocols, see the 2009 Ventura Countywide Stormwater Quality Management Program Application Protocol (Appendix B) or most recent update.

12.1 Certification, Pesticide Labels, and Permits

Personnel that make aquatic applications operate following the application protocols as written in the Ventura County Application Protocol for Pesticides, Fertilizers, and Herbicides, in compliance with the Ventura Countywide Municipal Separate Storm Sewer System NPDES Permit. Pesticide use is consistent with the pesticide label instructions and any applicable Use Permits. A Qualified Applicator Certificate Holder (QAC) must be physically present and available on-site (within the location) to directly manage and control the application of any pesticide by supervising others. The certificate is issued by the California Department of Pesticide Regulation. The QAC manages and controls the application of pesticides, herbicides, and fertilizers through various verbal channels including direct interaction, telephones, cellular phones, 800 mhz phones, and radios. All certified applicators are required to stay current on pesticide issues through continuing training. Training covers such topics as safe application techniques, environmental protection, proper use of application equipment, applicable laws and regulations, and specifics about the use of aquatic and non-aquatic herbicides that are used.

12.2 Notification Requirements

The District maintains monthly aquatic herbicide application logs, which are completed when water is present at an application site. These logs are to be submitted with the annual report to the State Water Resources Control Board with the annual report, due March 15th. The District also maintains monthly pesticide use reports (PURs) which document the amounts and locations of all (including non-aquatic) District pesticide applications. The PURs are submitted to the Ventura County Agricultural Commissioner, who then submits the data to the California

Department of Pesticide Regulation. An open line of communication exists with the Ventura County Department of Agriculture regarding what, why, and how different products are used.

12.3 Preliminary Site Evaluations

These are used to determine areas in need of a treatment, location of a treatment site (site suitability), and to identify some of the precautions to be used for a particular type of treatment. The District considers the different treatment options on an ongoing basis. Pest type and growth stage are also considered in order to help determine the treatment type. This greatly increases the likelihood of achieving a high level of control.

12.4 Secondary Site Evaluations and Pre-Treatment Assessment

Some of the factors considered are weed species present, growth stage weed location, and weed density. These are used to help determine such things as the appropriate mechanical control measure, aquatic herbicide use and application rate, and number of treatment sites needed.

12.5 BMPs Implemented Prior to Treatment

Prior to application the District shall check daily weather forecasts to schedule and/or modify the application. If it is raining, or more than 0.25" of rain is forecast within 24 hours after a proposed glyphosate application, the application is canceled. If the wind is high enough to cause significant drift at the start of or during glyphosate application, the application is either delayed or canceled. If conditions become dusty during a glyphosate treatment, the treatment will be delayed (since dust hinders control). Low-pressures and special nozzles will be used, as needed, to help control drift.

12.6 Post Treatment Assessment

The evaluation of efficacy is routine, normally starting about one week after application season begins and continuing through the end of the application season. If a treatment is deemed hazardous or ineffective, the District will make corrective changes, eliminate that treatment type from a given area, or totally eliminate a certain type of treatment from the pest control program.

13 Evaluation of Other Potential BMPs

Several alternative measures have been investigated, as described in a previous section of this document. To date, no acceptable alternatives have been identified. In keeping with adaptive management strategy, the District shall continue to track and consider potential alternative control measures. In order to maintain current applicator licenses, District applicators regularly attend seminars and trade shows. This continued education allows applicators to stay informed regarding the latest technologies and practices including potential future BMPs.

14 References

State Water Resources Control Board (SWRCB), 2013, Water Quality Order No. 2013-0002-DWQ, *Statewide General National Pollutant Discharge Elimination System Permit For Residual Aquatic Pesticide Discharges To Waters of the United States From Algae And Aquatic Weed Control* (General Permit No. CAG990005)

Ventura Countywide Stormwater Quality Management Program, Application Protocol - Pesticides, Fertilizers, and Herbicides, amended October 15, 2009.

APPENDIX A - FIELD FORMS

Aquatic Pesticide Application Field Log

Application Date	Application Location (address, cross roads, coordinates)	Application Details				Visual Monitoring		Map Book Page(s) Showing Application Area
		Water Temp.	Application Start/Stop Times	Quantity Applied, Application Rate & Concentration	Site Description (pond, lake, channel, estimate of % covered by vegetation)	Appearance of Waterway (sheen, color, clarity, etc.)	Weather (fog, rain, wind, etc.)	

Applicator Name: _____

Comments and Observations: _____

Note: Information such as surface area or volume of application is not applicable for aquatic glyphosate applications as applications are made directly to vegetation.

I hereby certify that all applications listed on this sheet were conducted in accordance with the Ventura County Watershed Protection District Aquatic Pesticide Application Plan:

Signature: _____

Date: _____

**Aquatic Herbicide Monitoring Program
Monitoring Field Log**

Field Crew: _____

Date: _____

Monitoring Location/ Sample Time	Samples Collected/ Photos/ Turbidity	Dissolved Oxygen/ Water Temp	Conductivity (umhos/cm) (=µS)	Salinity (ppt)/ pH	OBSERVATIONS (circle and provide description, if applicable)	Comments
Doris Upstream N 34° 12' 30.7" W 119° 13' 17.1" Altitude: _____ Time: _____ AM/PM Serial Numbers (Meter/No.): _____ / _____ _____ / _____ _____ / _____	<u>Samples:</u> Glyphosate <input type="checkbox"/> <u>Photos:</u> Upstream <input type="checkbox"/> Downstream <input type="checkbox"/> <u>Turbidity:</u> 1 _____ 2 _____ 3 _____ Average: _____	_____ % _____ mg/L _____ °C/F	Electrical Conductivity	_____ ppt _____ pH Units	Weather: Clear / Partly Cloudy / Overcast / Other _____ Wind: _____ Water Clarity: Clear / Cloudy / Milky / Muddy / Other _____ Water Color: Clear / Brown / Red / Green / Other _____ Visible Films/Sheens/Coatings: Yes / No _____ Floating/Suspended Matter (Algae, Trash etc): _____	
			Specific Conductance		Bottom Deposits: Yes / No _____ Aquatic Life: Yes / No _____ Fungi/Slimes/Objectionable Growth: Yes / No _____ Potential Nuisance Conditions: Yes / No _____	
Doris @ Treatment N 34° 12' 30.6" W 119° 13' 19.1" Altitude: _____ Time: _____ AM/PM Serial Numbers (Meter/No.): _____ / _____ _____ / _____ _____ / _____	<u>Samples:</u> Glyphosate <input type="checkbox"/> <u>Photos:</u> Upstream <input type="checkbox"/> Downstream <input type="checkbox"/> <u>Turbidity:</u> 1 _____ 2 _____ 3 _____ Average: _____	_____ % _____ mg/L _____ °C/F	Electrical Conductivity	_____ ppt _____ pH Units	Weather: Clear / Partly Cloudy / Overcast / Other _____ Wind: _____ Water Clarity: Clear / Cloudy / Milky / Muddy / Other _____ Water Color: Clear / Brown / Red / Green / Other _____ Visible Films/Sheens/Coatings: Yes / No _____ Floating/Suspended Matter (Algae, Trash etc): _____	
			Specific Conductance		Bottom Deposits: Yes / No _____ Aquatic Life: Yes / No _____ Fungi/Slimes/Objectionable Growth: Yes / No _____ Potential Nuisance Conditions: Yes / No _____	
Doris Downstream N 34° 12' 30.1" W 119° 13' 21.8" Altitude: _____ Time: _____ AM/PM Serial Numbers (Meter/No.): _____ / _____ _____ / _____ _____ / _____	<u>Samples:</u> Glyphosate <input type="checkbox"/> <u>Photos:</u> Upstream <input type="checkbox"/> Downstream <input type="checkbox"/> <u>Turbidity:</u> 1 _____ 2 _____ 3 _____ Average: _____	_____ % _____ mg/L _____ °C/F	Electrical Conductivity	_____ ppt _____ pH Units	Weather: Clear / Partly Cloudy / Overcast / Other _____ Wind: _____ Water Clarity: Clear / Cloudy / Milky / Muddy / Other _____ Water Color: Clear / Brown / Red / Green / Other _____ Visible Films/Sheens/Coatings: Yes / No _____ Floating/Suspended Matter (Algae, Trash etc): _____	
			Specific Conductance		Bottom Deposits: Yes / No _____ Aquatic Life: Yes / No _____ Fungi/Slimes/Objectionable Growth: Yes / No _____ Potential Nuisance Conditions: Yes / No _____	

Note: Boundary of observation is stated in guidelines as the "treatment area"



Chain of Custody Record
 Ventura County Watershed Protection District
 Aquatic Pesticide Monitoring

Grabs - FGL Laboratories

Sampling Date: _____ Sample Event: Aquatic Pesticides YYYY

Sampling Team: _____

SAMPLE ID	DATE/TIME COLLECTED	Glyphosate (EPA 547)						NOTES
Doris Upstream								upstream
Doris Downstream								downstream
Doris @ Treatment								in treatment area

Relinquished Printed Name _____
 Signature _____
 Affiliation _____ Date/Time _____

Received Printed Name _____
 Signature _____
 Affiliation _____ Date/Time _____

Other Notes: _____

**APPENDIX B - VENTURA COUNTYWIDE STORMWATER QUALITY
MANAGEMENT PROGRAM PESTICIDES APPLICATION PROTOCOL**

APPLICATION PROTOCOL PESTICIDES, FERTILIZERS, AND HERBICIDES

1 Ventura County Watershed Protection District NPDES Stormwater Permit

The purpose of this standard operating procedure (SOP) is to define an application protocol for the routine and non-routine application of pesticides, fertilizers, and herbicides (including pre-emergents). This SOP provides a comprehensive policy to comply with the Ventura County Permit (CAS004002), a guidance to provide for consistent implementation countywide for Ventura County Watershed Protection District (VCWPD), the County of Ventura, the Cities of Camarillo, Fillmore, Moorpark, Ojai, Oxnard, Port Hueneme, San Buenaventura, Santa Paula, Simi Valley, and Thousand Oaks (referred to separately as Co-permittees), and a method for reducing runoff of pesticides, fertilizers, and herbicides to the storm drain system. This protocol was amended to reflect new requirements in the May 7, 2009 Ventura County Municipal Stormwater Permit, Order No. 09-0057.

2 Scope

The scope of this application protocol is to focus on preventing pesticides, fertilizers, and herbicides from entering the storm drain system and discharging to receiving waters. This protocol is applicable to 1) the outdoor use of pesticides, herbicides, and fertilizers; 2) the use of pesticides and fertilizers where the materials may come into contact with precipitation; 3) the use of pesticides, herbicides, and fertilizers where these materials may come into contact with runoff (natural or induces); and 4) the use of pesticides, herbicides, or fertilizers anywhere where they may be directly or indirectly discharged to a storm drainage system.

This protocol is applicable to any Co-permittee staff and contracted services that apply pesticides, fertilizers, or herbicides. Such staff commonly include park, public works, purchasing, building/grounds maintenance, hazardous materials, and pesticide application staff.

This protocol is not applicable to the indoor use of pesticides, herbicides or fertilizers, but is applicable to the consequential outdoor handling, mixing, transport, or disposal of materials related to indoor use. This protocol does not apply when another NPDES permit and/or abatement orders are in effect at the selected site.

Furthermore, this protocol is not intended to replace federal or state requirements or provide complete directions for applying, handling, transporting, mixing, or storing pesticides, fertilizers, or herbicides. Consult federal and state requirements for this additional information. Use information for each pesticide, fertilizer, or herbicide can be found on the manufacturer's label. Additional safety information can be found in chemical-specific material safety data sheets (MSDSs).

3 Definitions

Application – means the use of the product as a fumigant, direct surface spray, treatment, drench, injection, incorporation, side-dressing, pre-emergent, furrowed spread, or broadcast agent.

California Department of Pesticide Regulation (CDPR) – The state agency responsible for regulating the use of pesticides in California.

Direct On-site Supervision – A QAC (or QAL, if services contracted) is physically present and available, on-site (within the location as specified in the Monthly Summary Pesticide Use Report Form located on the California Department of Pesticide Regulation website: <http://www.cdpr.ca.gov/docs/pur/forms/enf060.pdf>) to directly manage and control the application (of any pesticide, herbicide, or fertilizer) by supervising others. The QAC or QAL manages and controls the application of pesticides, herbicides, and fertilizers through available verbal communication to include direct interaction, telephones, cellular phones, 800 mhz phones, and radios.

Feasible – means capable of being accomplished in a successful manner, within a reasonable period of time, taking into account economic, environmental, social, and technological factors.

Forecasted Storm Event – A weather event predicted to commence within the next 24-hour time window, where at least 0.25 inches of rain or more is forecasted to fall.

Herbicide – A common pesticide focused on killing weeds and other plants that grow where they are not wanted.

Integrated Pest Management (IPM) – means a sustainable approach to managing pests by combining biological, cultural, physical and chemical tools in a way that minimizes economic, health, and environmental risks.

Manufacturer's Label – The main source of information on how to use the product correctly, safely, and legally. The main sections of a label are: common name and brand name, active ingredient, EPA registration number, signal words, first aid, directions for use, and storage/disposal.

Material Safety Data Sheets (MSDSs) – An information sheet provided by a chemical manufacturer describing chemical qualities, hazards, safety precautions, and emergency procedures to be followed in case of a spill, fire, or other emergency.

Non-Routine Application – A non-scheduled application to include a “one-time” or an “emergency” use of pesticides, herbicides, and fertilizers.

Notice of Intent (NOI) for Pesticide Usage – An oral or written notification submitted prior to the use of a restricted use pesticide, pursuant to a permit.

Pesticide – Defined by the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) as “...any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any insects, rodents, nematodes, fungi, weeds, or any other forms of life declared to be pests, and any substance or mixture of substances intended for use as a plant regulator, defoliant, or desiccant.”

Qualified Applicator Certificate Holder (QAC) – Any person who has successfully passed the California State Pesticide Laws and Regulations exam, and qualified in one or more pest control categories and may therefore apply restricted materials, supervise pesticide application, but who is not entitled to supervise the operations of a pest control business.

Qualified Applicator License Holder (QAL) – Any person who has successfully passed the California State Pesticide Laws and Regulations exam, and qualified in one or more pest control categories and may therefore apply restricted materials and supervise the pesticide application/operations made by a licensed pest control business.

Routine Application – A scheduled (weekly, quarterly, annually, etc.) use of a pesticide, herbicide, or fertilizer to attain a specific goal.

Signal Word – Defines approximately how hazardous a pesticide could be to people by using descriptors such as: **DANGER, WARNING, CAUTION, or DANGER-POISON.**

Storm Event – A weather event that produces more than .25 inch of precipitation.

Use - means any pesticide related activity including:

- a. Pre-application to include arranging for application, mixing, loading, and making necessary preparations for application;
- b. Application of the pesticide; and
- c. Post-application activities – control of the treated area, management of the treated area, transportation, storage, disposal of excess pesticides, equipment wash, containers, and cleaning of equipment.

Use does not include emergency responders, commercial transportation, manufacturing, formulating, or packaging.

4 Responsibilities

4.1 Co-permittees

Co-permittees shall:

- a. Designate a QAC or QAL holder, to provide advice and assistance in all matters related to pesticide usage, disposal of products, and safety.
- b. Provide pesticide applicators (including contracted businesses) with appropriate record keeping forms to document pesticide use
<http://www.cdpr.ca.gov/docs/enforce/prenffrm/enf060.pdf> (Attachment A).

- c. Annually verify that the purchasing, storing, mixing, loading, and safety tasks for pesticide, fertilizer, and herbicide use are in accordance with this protocol, applicable laws, and regulations including the current and valid QAC/QAL certifications.
- d. Verify that no banned or unregistered pesticide is stored or applied.
- e. Request landscapers to implement procedures to encourage the retention and planting of native vegetation to reduce water, pesticide and fertilizer needs.
- f. Coordinate annual refresher training courses for all pesticide handlers to meet the continuing education requirements.

4.2 Pesticide applicators

Pesticide applicators shall:

- a. Be certified as or under the direct on-site supervision of, a QAC or QAL holder and be properly trained to start work with pesticides, fertilizers, and/or herbicides.
- b. Follow manufacturer's label instructions and this SOP. When such instruction is in conflict with this SOP, the label instructions will be followed.
- c. Ensure that no banned or unregistered pesticide is stored or applied.
- d. Follow the policies and procedures established in this application protocol.
- e. Report any unsafe work practices to their respective supervisors

4.3 Integrated Pest Management Program (IPM)

Co-Permittees and Pesticide applicators shall implement an IPM program by May 7, 2010 that includes the following:

- a. Pesticides are used only if monitoring indicates they are needed according to established guidelines.
- b. Treatment is made with the goal of removing only the target organism.
- c. Pest controls are selected and applied in a manner that minimizes risks to human health, beneficial, non- target organisms, and the environment.
- d. Its use of pesticides, including Organophosphates and Pyrethroids do not threaten water quality.
- e. Partner with other agencies and organizations to encourage the use of IPM.
- f. Adopt and verifiably implement policies, procedures, and/or ordinances requiring the minimization of pesticide use and encouraging the use of IPM techniques (including beneficial insects) in the Permittees' overall operations and on municipal property.
- g. Policies, procedures, and ordinances shall include commitments and timelines to reduce the use of pesticides that cause impairment of surface waters by implementing the following procedures:
 - i. Quantify pesticide use by its staff and hired contractors.
 - ii. Prepare and annually update an inventory of pesticides used by all internal departments, divisions, and other operational units.
 - iii. Demonstrate reductions in pesticide use.

5 Environmental Conditions

Environmental conditions (weather and site conditions) required for application of pesticides, fertilizers, and herbicides is dependent upon label and Ventura County Stormwater Permit requirements. Site conditions are determined by visually (V) observing the area for situations or

by collecting information from recognized weather forecasting (F) organizations. For example, storm events can be tracked by using any Internet web link that forecasts rainfall (e.g. www.weather.com).

The following table is provided as a guide to applicators where weather or site conditions may impact the application of the pesticide, fertilizer, or herbicide. Weather/Site conditions must be verified for all listed conditions. Forecasting may be used for other weather/site conditions, but is necessary to establish a 24-hour timeframe prior to actual rainfall. A “Yes” indicates the weather/site conditions where application of pesticides, fertilizers, and herbicides may occur. A “No” indicates weather/site conditions where application of pesticides, fertilizers, and herbicides may not occur.

Weather/Site Conditions	Form of Determining Weather/Site Conditions	Routine Application	Non-Routine Application
Wind-free (sufficient to avoid spray drift from point of application)	V	Yes	Yes
Storm events (see definition)	V	No	No
Within one day of a forecasted storm event (see definition) > 0.25 inches	V, F	No*	No
After a storm event where water is leaching or running	V	No	No
Water is running off-site	V	No	No
Rising groundwater	V	No	No
Ground is saturated	V	No	No

* Except for application of pre-emergents.

6 Pollution Prevention and Spill Control

Irrigation canals, open trenches, surface waters, wetlands, designated 303(d) waterbodies, and groundwater sources should be noted and application shall be made to prevent contamination of these areas.

In the event that pesticides, fertilizers, and/or herbicides not intended for water application are inadvertently sprayed or spilled into the water sources listed above, the following steps are to be taken:

- a. Stop all pesticide applications and assess the situation.
- b. Prevent further contamination of water sources by using control measures such as storm drain inlet protection, absorbent materials, sandbags, or trenching.

- c. Mark the area where the spill or overspray occurred.
- d. Contact the environmental coordinator in your jurisdiction
- e. Report the spill to the appropriate department for clean up.
- f. Contact governmental agency of reportable quantities.

7 Aquatic Pesticide Application

For control of pests and weeds in open water, storm drainage system, and flood control channel areas, only those materials specifically designed and registered for direct water application may be used. Directions on the labels must be followed as well as evaluating the application for the potential to harm the environment. Currently, the following is required prior to applying an aquatic pesticide.

- a. Coverage is obtained and compliance is achieved under Water Quality Order No. 2013-0002-DWQ – Aquatic Pesticide NPDES Permit. For copy of the permit visit the State Water Resources Control Board web site at:
http://www.waterboards.ca.gov/water_issues/programs/npdes/aquatic.shtml.
- b. Directions on the label are followed.
- c. The application site is evaluated prior to application for the potential of the pesticide to harm the environment.

8 Training and Documentation

8.1 QAC and QAL Requirements

Each Co-permittee will only use staff (including contracted businesses) that are under the direct on-site supervision of a QAC/QAL holder. The QAC/QAL must possess a valid and current certification. The applicator is responsible for following any federal and state requirements as well as all label requirements and reviewing the MSDS prior to use.

8.2 Training

Each person who applies pesticides, fertilizers, or herbicides must be trained for the following:

- a. Appropriate application of the pesticide, fertilizer, or herbicide.
- b. Application laws and regulations
- c. Affects application may have on stormwater quality management
- d. The type of chemical and the immediate and long term hazards resulting from exposure
- e. The MSDS information
- f. Safety procedures
- g. Emergency spill information
- h. Use of protective equipment
- i. Cleanup procedures
- j. Disposal procedures

9 Storage Facilities

Co-permittees will adopt a purchase, storage, and disposal policy such that all pesticides, fertilizers, and herbicides are under the control of a QAC/QAL holder. Pesticide storage facilities

shall meet regulatory requirements to prevent releases into the surrounding environment, waterbodies, or be exposed to stormwater and protect the safety of personnel working within such facilities. These pesticides storage facilities shall be locked/secured when not in use. All doors/entrances to the facilities shall be posted with appropriate warning signs (as specified in the California Department of Pesticide Regulations, see references). All signs shall be legible at a minimum distance of 25 feet from any direction.

Pesticide containers should not be stored on the floor or bare ground. No floor drains, which empty into storm drains, are permitted within the storage facility. All pesticides in a storage facility shall either be in the original container, or the service container. Secondary containment is recommended, but not mandatory. All containers will have a copy of the product label attached.

Open bags of pesticides must be enclosed in a secondary container (a closed heavy plastic bag, or can with a tight lid), to prevent exposure or spillage. If the original pesticide containers are metal and are in a state of rust or deterioration, properly labeled plastic or metal secondary containers shall be provided to prevent accidental leakage.

10 Decontamination/Disposal

Each Co-permittee will adopt a decontamination and disposal procedure that is managed by a QAC/QAL and meets the following minimum requirements. Liquids produced during the decontamination process shall be handled according to federal and state requirements and managed to reduce exposure to stormwater and from entering the storm drain system or surface waters.

10.1 Cleanup

Containers used to apply pesticides, fertilizers, or herbicides of 28 gallons or less must be triple rinsed after each use. Containers sent back to the manufacturer will follow manufacturer's recommendations or State and Federal guidelines for transporting. The triple-rinse procedures will consist of the following:

- a. Use $\frac{1}{4}$ the container volume for containers less than 5 gallons and $\frac{1}{5}$ the container volume for containers greater than 5 gallons.
- b. Place rinse medium in the container, securely close, agitate.
- c. Drain rinse solution into tank mix. Allow draining 30 seconds.
- d. Repeat steps b. and c. a minimum of two times; or
- e. Invert emptied container over a nozzle located in the opening of the mix tank that is capable of rinsing all inner surfaces of the container.

For further information, please visit the web site for the California Department of Pesticide Regulations listed in Section 10 of this SOP.

10.2 Disposal

Pesticide, fertilizer, and herbicide waste includes leftover chemicals and chemical container rinsates. All pesticide waste shall be treated as hazardous waste. Minimization of pesticide waste

is a high priority for the pesticide user. If waste is stored before removal, it should be stored in an area that is not exposed to stormwater, stormwater runoff, or surface water.

10.3 Storage

Storage of pesticides, fertilizers, and herbicides should be in accordance with requirements as specified in the manufacturer's instructions or California Department of Pesticide Regulations (see References) if the instructions from the manufacturer are not provided.

11 References

11.1 Regulations

- a. Ventura County NPDES Permit CAS004002 (Order No. 09-0057)
- b. Title 3 CCR, Pesticide and Control Operations Section 6674, 6700-6900 (CalEPA)
- c. Uniform Fire Code, Pesticide Storage and Display
- d. 40 CFR Regulations of Pesticides sections 165.1-180 (www.usepa.gov)
- e. State Water Resources Control Board Statewide General NPDES Permit for the Residual Aquatic Pesticide Discharges to Waters of the United States from Algae and Aquatic Weed Control Applications; General Permit No. CAG990005 – Water Quality Order No. 2013-0002-DWQ
- f. State Water Resources Control Board Statewide NPDES Permit for Biological and Residual Pesticide Discharges to Waters of the United States from Vector Control Applications; General Permit No. CAG990004 – Water Quality Order No. 2012-0003-DWQ.

11.2 Web Sites

- a. California Department of Pesticide Regulation - www.cdpr.ca.gov
- b. Weather tracking – www.weather.com
- c. California Environmental Protection Agency (CalEPA) – www.calepa.ca.gov
- d. State Water Resources Control Board – Aquatic Pesticide Permits - http://www.waterboards.ca.gov/water_issues/programs/npdes/aquatic.shtml

**ATTACHMENT A (TO APPENDIX B) - CALIFORNIA DEPARTMENT OF
PESTICIDE REGULATION MONTHLY SUMMARY PESTICIDE USE
REPORT TEMPLATE (DPR-ENF-060)**

MONTHLY SUMMARY PESTICIDE USE REPORT

INSTRUCTIONS FOR COMPLETING THIS FORM ARE INDICATED BELOW AND ON THE REVERSE SIDE

OPERATOR (FIRM NAME)		ADDRESS	CITY	ZIP CODE	PHONE NUMBER
OPERATOR ID/PERMIT NUMBER	LICENSE NUMBER	COUNTY WHERE APPLIED	COUNTY NUMBER	MONTH/YEAR OF USE	TOTAL NUMBER OF APPLICATIONS

1. Complete Columns A, B, C, and D for All Users

2. Complete Column E by using one of the following codes:

- Code 10 - Structural Pest Control.....includes any pest control work performed within or on buildings and other structures.
- Code 30 - Landscape Maintenance Pest Control.....includes any pest control work performed on landscape plantings around residences or other buildings, golf courses, parks, cemeteries, etc.
- Code 40 - Right-of-Way Pest Control.....includes any pest control work performed along roadsides, power lines, median strips, ditch banks, and similar sites.
- Code 50 - Public Health Pest Control.....includes any pest control work performed by or under contract with State or local public health or vector control agencies.
- Code 80 - Vertebrate Pest Control.....includes any vertebrate pest control work performed by public agencies or work under the supervision of the State or county agricultural commissioner.
- Code 91 - Commodity Fumigation (Nonfood/Nonfeed).....includes fumigation of nonfood/nonfeed commodities such as pallets, dunnage, furniture, burlap bags, etc.
- Code 100 - Regulatory Pest Control.....includes any pest control work performed by public employees or contractors in the control of regulated pests.

3. Complete Columns F and G, if use does not fit one of the above codes

A	B	C	D	E	F	G
MANUFACTURER AND NAME OF PRODUCT APPLIED	EPA/CALIFORNIA REGISTRATION NUMBER FROM LABEL INCLUDE ALPHA CODE	TOTAL PRODUCT USED (Check One Unit of Measure)	NUMBER OF APPLICATIONS	CODE	COMMODITY OR SITE TREATED	ACRES/UNITS TREATED
		<input type="checkbox"/> LB <input type="checkbox"/> OZ <input type="checkbox"/> PT <input type="checkbox"/> QT <input type="checkbox"/> GA				
		<input type="checkbox"/> LB <input type="checkbox"/> OZ <input type="checkbox"/> PT <input type="checkbox"/> QT <input type="checkbox"/> GA				
		<input type="checkbox"/> LB <input type="checkbox"/> OZ <input type="checkbox"/> PT <input type="checkbox"/> QT <input type="checkbox"/> GA				
		<input type="checkbox"/> LB <input type="checkbox"/> OZ <input type="checkbox"/> PT <input type="checkbox"/> QT <input type="checkbox"/> GA				
		<input type="checkbox"/> LB <input type="checkbox"/> OZ <input type="checkbox"/> PT <input type="checkbox"/> QT <input type="checkbox"/> GA				
		<input type="checkbox"/> LB <input type="checkbox"/> OZ <input type="checkbox"/> PT <input type="checkbox"/> QT <input type="checkbox"/> GA				
		<input type="checkbox"/> LB <input type="checkbox"/> OZ <input type="checkbox"/> PT <input type="checkbox"/> QT <input type="checkbox"/> GA				

REPORT PREPARED BY _____

DATE _____

Print Form

GENERAL INFORMATION FOR COMPLETING THE MONTHLY SUMMARY PESTICIDE USE REPORT

(Page 2 of 2)

Reporting Requirements

Reporting of all pesticide applications including spray adjuvants and plant growth regulators, is required by:

1. Landscape maintenance gardener pest control businesses, agricultural pest control businesses performing residential work, and structural pest control businesses.
2. Public agencies, pest control businesses and property operators who apply pesticides for agricultural use other than for the production of an agricultural commodity. These uses include applications for the production of poultry, fish, and apiary. Pest control businesses must report uses for the production of livestock. Also, uses on golf courses, parks, rights-of-way, cemeteries, forests, ditches, fence lines, etc. must be reported.
3. Persons who use restricted materials for uses other than the production of an agricultural commodity.
4. Persons who use a pesticide for industrial post-harvest commodity treatments.
5. Persons who use a Ground Water Protection pesticide, listed in Title 3, California Code of Regulations, section 6800(b) for any outdoor, institutional or industrial use.

Report Filing Deadlines

Submit two (2) copies of this report to the county agricultural commissioner by the 10th of the month, following the month in which the work was performed. Reports may be hand-delivered or mailed, the postmark serving as the date of delivery. Retain a copy for your records.

For each month when no pest control work has been performed, licensed pest control businesses must submit a use report by the 10th day of the following month to the county agricultural commissioner in counties where they are registered. The use report must indicate that no pest control work was performed.

SPECIFIC INSTRUCTIONS FOR COMPLETING THE FACE PAGE

The operator/firm information should be filled out completely, including the address, ZIP code, and telephone number.

Identify the Operator Identification/Restricted Material Permit Number, if applicable.

Enter the name of the county where the pesticide(s) was applied.

Indicate the county number where the product(s) was applied. The county number is available from the county agricultural commissioner's office. A separate report must be filed for each county where pesticides were applied.

Enter the month and year in which the applications were made.

Enter the total number of applications (i.e., the total of column D below) made during the month.

In Column A, enter both the manufacturer and brand name of the product.

In Column B, enter the "EPA Registration Number" or "California Registration Number" that appears on the pesticide label, including alpha codes, if any (AA, ZA, ZB, etc.). Do not use the "EPA Establishment Number" (Est. No.).

In Column C, indicate the total amount of product used as formulated and packaged by the manufacturer. Do not report the total mixture after dilution. Check only one unit of measure. If necessary, decimals and fractions may be used.

In Column D, indicate the total number of applications for each pesticide used during the reporting month. Each separate site (home, apartment complex, building, right-of-way, grain silo, etc.) should be counted as one application. For tank mixes, each represented pesticide should be credited with one application.

In Column E, if the use of the product is structural, landscape, right-of-way, vertebrate, public health, commodity fumigation (nonfood/nonfeed) or regulatory, enter the appropriate code number. Leave Columns F and G blank.

In Column F, if use of the product is not included in one of the number coded categories that are identified in column E, such as food/feed commodity fumigations, seed treatment, noncrop fencelines or ditch banks, etc., enter the commodity or site treated. Leave Column E blank.

Do not enter vertebrate pest control work in production areas such as orchards or other crop areas. This work should be reported on the Production Agriculture Monthly Pesticide Use Report.

In Column G, if use of the product is not included in one of the number-coded categories that are identified in Column E, enter the amount treated and the appropriate unit of measure (acres, pounds, square feet, tons, etc.). If you have a different measure, describe it fully and enter the amount treated. Leave Column E blank.

Enter the name of the person responsible for completing the information, and date the report. This could be a licensee, a manager, the person who applied the pesticide, a bookkeeper, etc.

**APPENDIX C - AQUATIC HERBICIDE APPLICATION SITE
INVENTORY AND BENEFICIAL USES**

Beneficial Use Definitions

Water Contact Recreation (REC-1)

Uses of water for recreational activities involving body contact with water, where ingestion of water is reasonably possible. These uses include, but are not limited to, swimming, wading, water-skiing, skin and scuba diving, surfing, white water activities, fishing, or use of natural hot springs.

Non-contact Water Recreation (REC-2)

Uses of water for recreational activities involving proximity to water, but not normally involving body contact with water, where ingestion of water is reasonably possible. These uses include, but are not limited to, picnicking, sunbathing, hiking, beachcombing, camping, boating, tidepool and marine life study, hunting, sightseeing, or aesthetic enjoyment in conjunction with the above activities.

Municipal and Domestic Supply (MUN)

Uses of water for community, military, or individual water supply systems including, but not limited to, drinking water supply.

Industrial Service Supply (IND)

Uses of water for industrial activities that do not depend primarily on water quality including, but not limited to, mining, cooling water supply, hydraulic conveyance, gravel washing, fire protection, or oil well re-pressurization.

Industrial Process Supply (PROC)

Uses of water for industrial activities that depend primarily on water quality.

Agricultural Supply (AGR)

Uses of water for farming, horticulture, or ranching including, but not limited to, irrigation, stock watering, or support of vegetation for range grazing.

Ground Water Recharge (GWR)

Uses of water for natural or artificial recharge of ground water for purposes of future extraction, maintenance of water quality, or halting of saltwater intrusion into freshwater aquifers.

Freshwater Replenishment (FRSH)

Uses of water for natural or artificial maintenance of surface water quantity or quality (e.g., salinity).

Navigation (NAV)

Uses of water for shipping, travel, or other transportation by private, military, or commercial vessels.

Hydropower Generation (POW)

Uses of water for hydropower generation.

Commercial and Sport Fishing (COMM)

Uses of water for commercial or recreational collection of fish, shellfish, or other organisms including, but not limited to, uses involving organisms intended for human consumption or bait purposes.

Warm Freshwater Habitat (WARM)

Uses of water that support warm water ecosystems including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates.

Cold Freshwater Habitat (COLD)

Uses of water that support cold water ecosystems including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates.

Estuarine Habitat (EST)

Uses of water that support estuarine ecosystems including, but not limited to, preservation or enhancement of estuarine habitats, vegetation, fish, shellfish, or wildlife (e.g., estuarine mammals, waterfowl, shorebirds).

Marine Habitat (MAR)

Uses of water that support marine ecosystems including, but not limited to, preservation or enhancement of marine habitats, vegetation such as kelp, fish, shellfish, or wildlife (e.g., marine mammals, shorebirds).

Wildlife Habitat (WILD)

Uses of water that support terrestrial ecosystems including, but not limited to, preservation and enhancement of terrestrial habitats, vegetation, wildlife (e.g., mammals, birds, reptiles, amphibians, invertebrates), or wildlife water and food sources.

Preservation of Biological Habitats (BIOL)

Uses of water that support designated areas or habitats, such as **Areas of Special Biological Significance (ASBS)**, established refuges, parks, sanctuaries, ecological reserves, or other areas where the preservation or enhancement of natural resources requires special protection.

Rare, Threatened, or Endangered Species (RARE)

Uses of water that support habitats necessary, at least in part, for the survival and successful maintenance of plant or animal species established under state or federal law as rare, threatened, or endangered.

Migration of Aquatic Organisms (MIGR)

Uses of water that support habitats necessary for migration, acclimatization between fresh and salt water, or other temporary activities by aquatic organisms, such as anadromous fish.

Spawning, Reproduction, and/or Early Development (SPWN)

Uses of water that support high quality aquatic habitats suitable for reproduction and early development of fish.

Shellfish Harvesting (SHELL)

Uses of water that support habitats suitable for the collection of filter-feeding shellfish (e.g., clams, oysters, and mussels) for human consumption, commercial, or sports purposes.

Wetland Habitat (WET)

Uses of water that support wetland ecosystems, including, but not limited to, preservation or enhancement of wetland habitats, vegetation, fish, shellfish, or wildlife, and other unique wetland functions which enhance water quality, such as providing flood and erosion control, stream bank stabilization, and filtration and purification of naturally occurring contaminants.

Key to table:

E: Existing

P: Potential

I: Intermittent

* Designated under SB 88-63 and RB 89-03. Some designations may be considered for exemption at a later date.

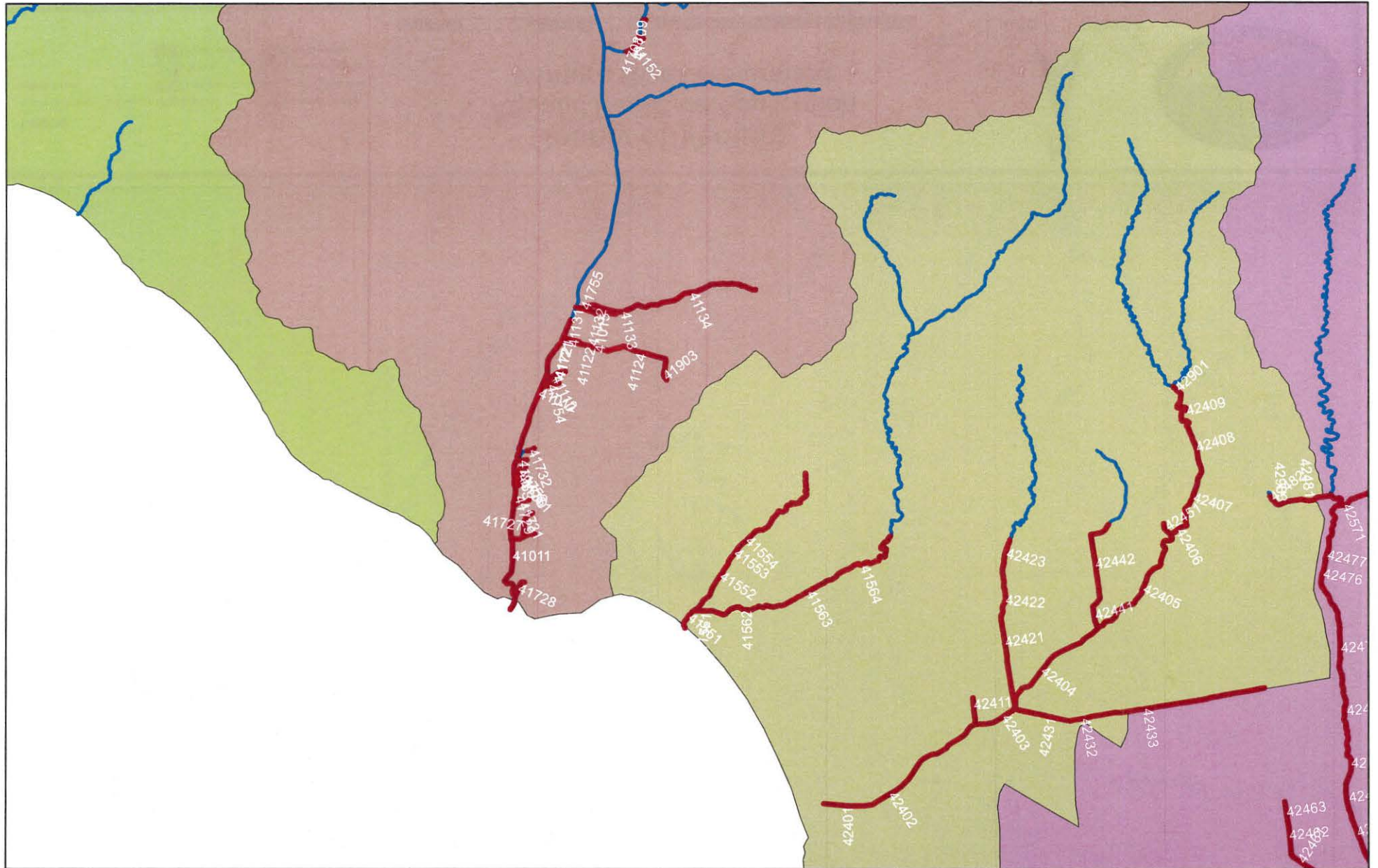
d: Limited public access precludes full utilization

g: Condor refuge

p: Habitat of the Clapper Rail

q: Whenever flow conditions are suitable

Watershed Channel Name	Location	Type of Facility	Perennial/ephemeral	RECL	RECL	RAIN	IND	PROC	RR	GWR	FRON	HAU	POW	COMM	WARM	COLD	EST	RAIR	WILD	BIRL	RAIR	WIGR	SPWIN	SHLL
Revolon Slough	42101 Wood Rd to Laguna Rd	Concrete Lined Channel	P	Eq	E	P*	P		E	E				E				E					E	
Revolon Slough	42102 Laguna Rd to Pleasant Valley Rd	Concrete Lined Channel	P	Eq	E	P*	P		E	E				E				E					E	
Revolon Slough	42104 Pleasant Valley Rd to Camarillo Hills Drain	Concrete Lined Channel	P	Eq	E	P*	P		E	E				E				E					E	
Revolon Slough	45101 Hwy 1 to Las Posas Rd	Bank Protection	P	Eq	E	P*	P		E	E				E				E					E	
Revolon Slough	45103 Las Posas to Hueneeme Rd	Bank Protection	P	Eq	E	P*	P		E	E				E				E					E	
Revolon Slough	45105 Hueneeme Rd to Wood Rd (Zone 2)	Bank Protection	P	Eq	E	P*	P		E	E				E				E					E	
Rose Lane Drain Secondary	46704 Arroyo Santa Rosa to Santa Rosa Rd	Concrete Lined Channel	E	I	I	P*			I	I				I				E						
Rotsler Ditch Secondary /Barbara Drain	46701 Santa Rosa Rd to South of Conejo Creek	Bank Protection	E	I	I	P*			I	I				I				E			E			
Runkle Canyon	47401 Arroyo Simi to Appleton Rd Drain Jct.	Concrete Lined Channel	P	I	I	P*	I		I	I				I				E						
Runkle Canyon	47402 Appleton Rd drain Jct. To Fitzgerald Rd	Concrete Lined Channel	E	I	I	P*	I		I	I				I				E						
Runkle Canyon	47403 Fitzgerald Rd to Watson Ave	Concrete Lined Channel	E	I	I	P*	I		I	I				I				E						
Runkle Canyon	47404 Watson Ave to Dam	Concrete Lined Channel	E	I	I	P*	I		I	I				I				E						
Runkle Canyon Debris Basin	47907 @ Runkle Reservoir, SIMI VALLEY	Debris Basin	E	I	I	P*	I		I	I				I				E						
Santa Clara Ave Drain	42191 Nyealand Drain to Central Ave	Improved Unlined Channel	E	E	E	P*			E	E				E				E						
Santa Clara Ave Drain	42192 Central Ave to Wright Rd	Improved Unlined Channel	E	E	E	P*			E	E				E				E						
Santa Clara Ave Drain	42193 Wright Rd to Los Angeles Ave	Concrete Lined Channel	P	E	E	P*			E	E				E				E						
Santa Clara Ave Drain	45293 Mesa School to La Vista Rd	Bank Protection	P	E	E	P*			E	E				E				E						
Santa Clara Diversion	42181 Beardsley Wash to Santa Clara Ave Drain	Concrete Lined Channel	P	E	E	P*			E	E				E				E						
Santa Rosa Rd Debris Basin # 1	46901 Off Oak Canyon Rd, CAMARILLO	Invert Stabilization	P	I	I	P*			I	I				I				E						
Santa Rosa Rd Debris Basin # 2	46902 East of Vista Arroyo Dr, THOUSAND OAKS	Debris Basin	P	I	I	P*			I	I				I				E						
Santa Susana Knolls Secondary	47760 Black Canyon at Sylvan Dr #123	Improved Unlined Channel	E	I	I	P*	I		I	I				I				E						
Santa Susana West Drain	47501 Arroyo Simi to Cochran St	Conduits	P	I	I	P*	I		I	I				I				E						
Santa Susana West Drain	47502 Cochran St to Alamo St	Concrete Lined Channel	P	I	I	P*	I		I	I				I				E						
Santa Susana West Drain	47503 Alamo St to Tapo St	Conduits	P	I	I	P*	I		I	I				I				E						
Somis Drain	45451 Calleguas Crk to Lewis Rd	Concrete Lined Channel	P	E	E	P*	P	P	P	P				E	P			E						
Somis Drain	45452 S. end of Sharon St. to Lewis rd.	Asphalt Lined Channel	E	E	E	P*	P	P	P	E				E	P			E						
Somis Drain	45453 Lewis Rd to Ronderosa Dr	Concrete Lined Channel	P	E	E	P*	P	P	P	E				E	P			E						
Somis Drain	45454 Ponderosa Rd to Las Posas Rd	Concrete Lined Channel	P	E	E	P*	P	P	P	E				E	P			E						
Somis Drain East Tributary	45471 Somis Drain to Las Posas Rd	Conduits	P	E	E	P*	P	P	P	E				E	P			E						
Somis Drain West Tributary	45461 Loop Dr to Loma Dr	Conduits	P	E	E	P*	P	P	P	E				E	P			E						
South Branch Arroyo Conejo	46111 Arroyo Conejo to Ventu Park Rd	Concrete Lined Channel	P	I	I	P*			I	I				I				E						
South Branch Arroyo Conejo	46112 Ventu Park Rd to Borchard Rd	Concrete Lined Channel	P	I	I	P*			I	I				I				E						
South Branch Arroyo Conejo	46113 Boardchard Rd to Wendy Dr	Invert Stabilization	P	I	I	P*			I	I				I				E						
South Branch Arroyo Conejo	46114 Wendy Dr to Reino Rd	Concrete Lined Channel; Improved Unlined Chan	P	I	I	P*			I	I				I				E						
South Branch Arroyo Conejo	46115 Reino Rd to Kimber Dr	Concrete Lined Channel	P	I	I	P*			I	I				I				E						
South Branch Arroyo Conejo	46116 Kimber Rd to Lynn Rd	Bank Protection	P	I	I	P*			I	I				I				E						
South Branch Arroyo Conejo	46118 Lynn Rd to end of Reino Rd (South)	Concrete Lined Channel	P	I	I	P*			I	I				I				E						
South Branch Arroyo Conejo	46119 end of Reino Rd to end of lined channel (Portero Rd)	Concrete Lined Channel	P	I	I	P*			I	I				I				E						
South Branch Arroyo Conejo West	46124 South Branch Arroyo Conejo @ mile 5.1 U/S - underground section to DB	Conduits	P	I	I	P*			I	I				I				E						
Strathern Canyon	47182 Los Angeles Ave to East Fork Jct	Concrete Lined Channel	P	I	I	P*	I		I	I				I				E			E			
Strathern Canyon	47184 East Fork U/S	Concrete Lined Channel	E	I	I	P*	I		I	I				I				E			E			
Sycamore Canyon	47321 Arroyo Simi to Tierra Rejada Rd	Conduits; Concrete Lined Channel	P	I	I	P*	I		I	I				I				E						
Sycamore Canyon	47322 Tierra Rejada Rd to Bonita Dr	Conduits	P	I	I	P*	I		I	I				I				E						
Sycamore Canyon	47325 Bonita Dr to D/S end of Golf Course (Parrot Ln)	Conduits	P	I	I	P*	I		I	I				I				E						
Sycamore Canyon Dam	47903 East of Madera Rd, SIMI VALLEY	Detention Basin	P	I	I	P*	I		I	I				I				E						
Sycamore Park Detention Basin	47924 Rudolph Dr. 400' East of Crosby Ave.	Detention Basin	P	I	I	P*	I		I	I				I				E						
Sylvan Dr #123 (Simi Sub Zone)	49123 between 6291/6297 Sylvan Dr to R.R.	Conduits	E	I	I	P*	I		I	I				I				E						
Tapo Canyon	47421 Arroyo Simi to Los Angeles Ave	Concrete Lined Channel	P	I	I	P*		P	P	I				I				E						
Tapo Canyon	47422 Los Angeles Ave to Cochran St	Concrete Lined Channel	P	I	I	P*		P	P	I				I				E						
Tapo Canyon	47423 Cochran St to Avenida Simi	Concrete Lined Channel	P	I	I	P*		P	P	I				I				E						
Tapo Canyon	47424 Avenida Simi to Walnut St	Concrete Lined Channel	P	I	I	P*		P	P	I				I				E						
Tapo Canyon	47425 Walnut St to 7000' North of Walnut St	Bank Protection; Concrete Lined Channel	P	I	I	P*		P	P	I				I				E						
Tapo Hills Diversion	47433 Dry Canyon Jct to Sycamore Dr	Conduits	E	I	I	P*	I		I	I				I				E						
Tapo Hills Diversion	47432 Sycamore Dr to Reservoir Dr	Concrete Lined Channel	E	I	I	P*	I		I	I				I				E						
Tapo Hills Diversion	47433 Reservoir Dr U/S	Bank Protection; Concrete Lined Channel	E	I	I	P*	I		I	I				I				E						
Tapo Hills Diversion D.B. # 1	47905 North of Ditch Rd, SIMI VALLEY	Conduits; Debris Basin	E	I	I	P*	I		I	I				I				E						
Tapo Hills Diversion D.B. # 2	47906 North Ditch Rd, SIMI VALLEY	Conduits; Detention Basin	E	I	I	P*	I		I	I				I				E						
Thousand Oaks North Drain	46231 Arroyo Conejo to Flittner Cl.	Concrete Lined Channel	P	I	I	P*			I	I				I				E						
Thousand Oaks North Drain	46232 Flittner Cl. to Moorpark Freeway	Concrete Lined Channel	P	I	I	P*			I	I				I				E						
Thousand Oaks North Drain	46233 Moorpark Freeway to Encino Vista Dr	Conduits	P	I	I	P*			I	I				I				E						
Thousand Oaks North Drain	46234 Encino Vista Dr to Rosario Ct	Concrete Lined Channel	P	I	I	P*			I	I				I				E						
Thousand Oaks North Drain	46235 Rosario Ct U/S	Concrete Lined Channel	P	I	I	P*			I	I				I				E						
Upland Road Drain	46051 Conejo Creek to Santa Rosa Rd	Improved Unlined Channel	P	Eq	E	P*	E	E	E	E				E				E						
Vista Lago Secondary	49001 End of Vista Lago Drive	Conduits	E	I	I	P*	I		I	I				I				E						
Wales Street Secondary	46760 Dover Ave to Warwick Ave	Conduits	E	I	I	P*	I		I	I				I				E						
Walnut Canyon	47111 Gabbert Canyon Channel to R.R.	Concrete Lined Channel	E	I	I	P*	I		I	I				I				E			E			
Walnut Canyon	47112 R.R. to Moorpark S.D. # 1	Concrete Lined Channel	E	I	I	P*	I		I	I				I				E			E			
Walnut Canyon	47114 Moorpark S.D. # 1 through Box Section	Concrete Lined Channel	E	I	I	P*	I		I	I				I				E			E			



**County of Ventura
Aquatic Pesticide Application
Ventura River Watershed**

Legend	<p> Jurisdictional Channel</p> <p> Reach</p>	MajWatersh	<p> Others</p> <p> Oxnard Coastal</p> <p> Calleguas Creek</p> <p> Malibu Creek</p> <p> Santa Clara River</p> <p> Ventura Coastal</p> <p> Ventura River</p>
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2 Miles

N

1 inch = 1 miles

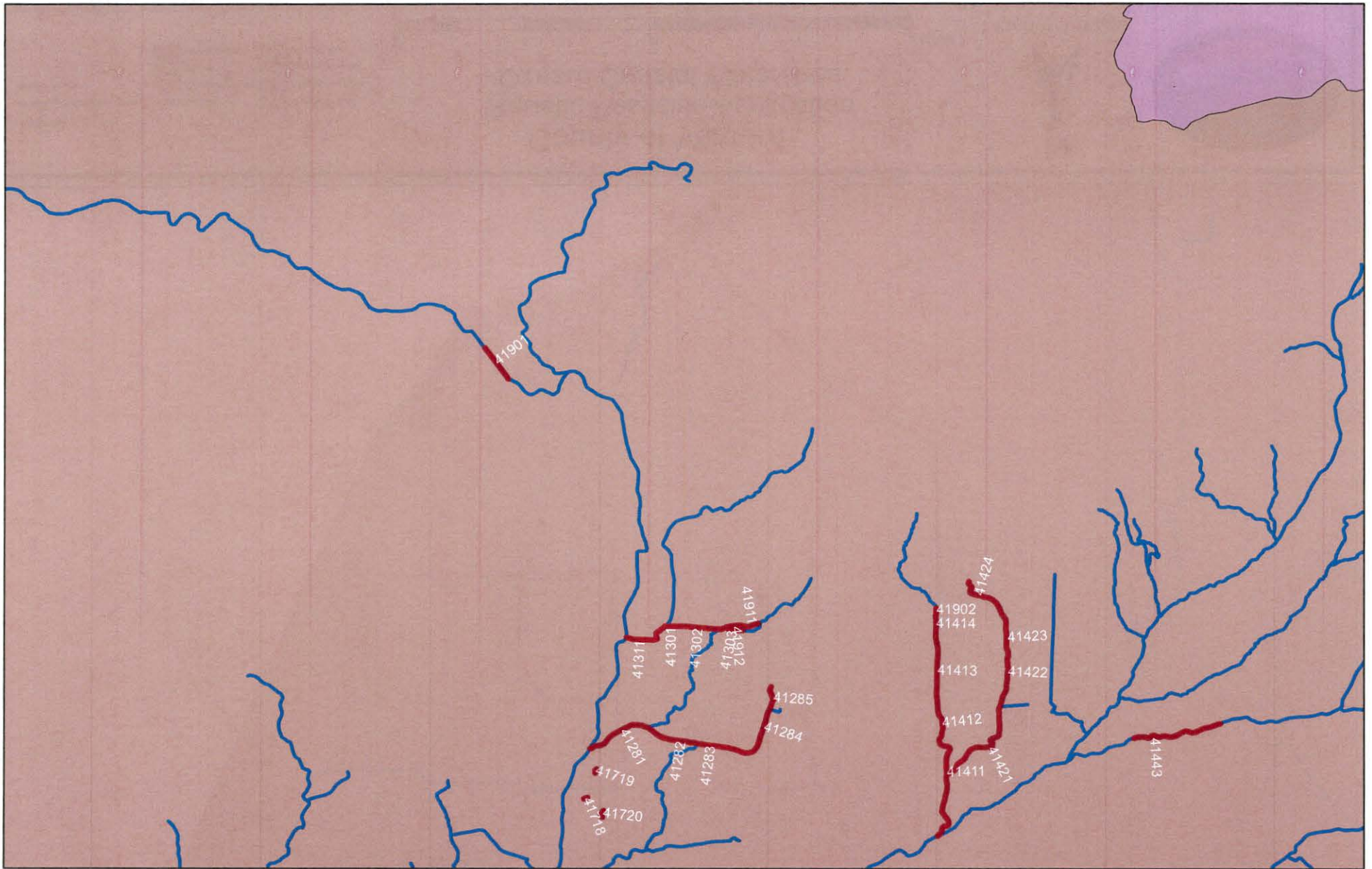
Watershed Protection District
VENTURA COUNTY



County of Ventura Aquatic Pesticide Application Ventura River Watershed

- Legend**
- | | | |
|------------------------|-------------------|-------------------|
| Jurisdictional Channel | MajWatersh | Oxnard Coastal |
| Reach | Calleguas Creek | Santa Clara River |
| | Others | Ventura Coastal |
| | Malibu Creek | Ventura River |

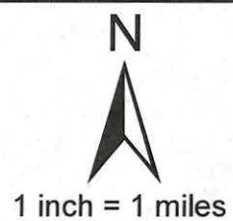
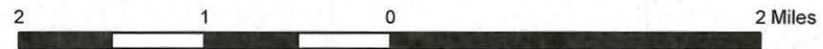


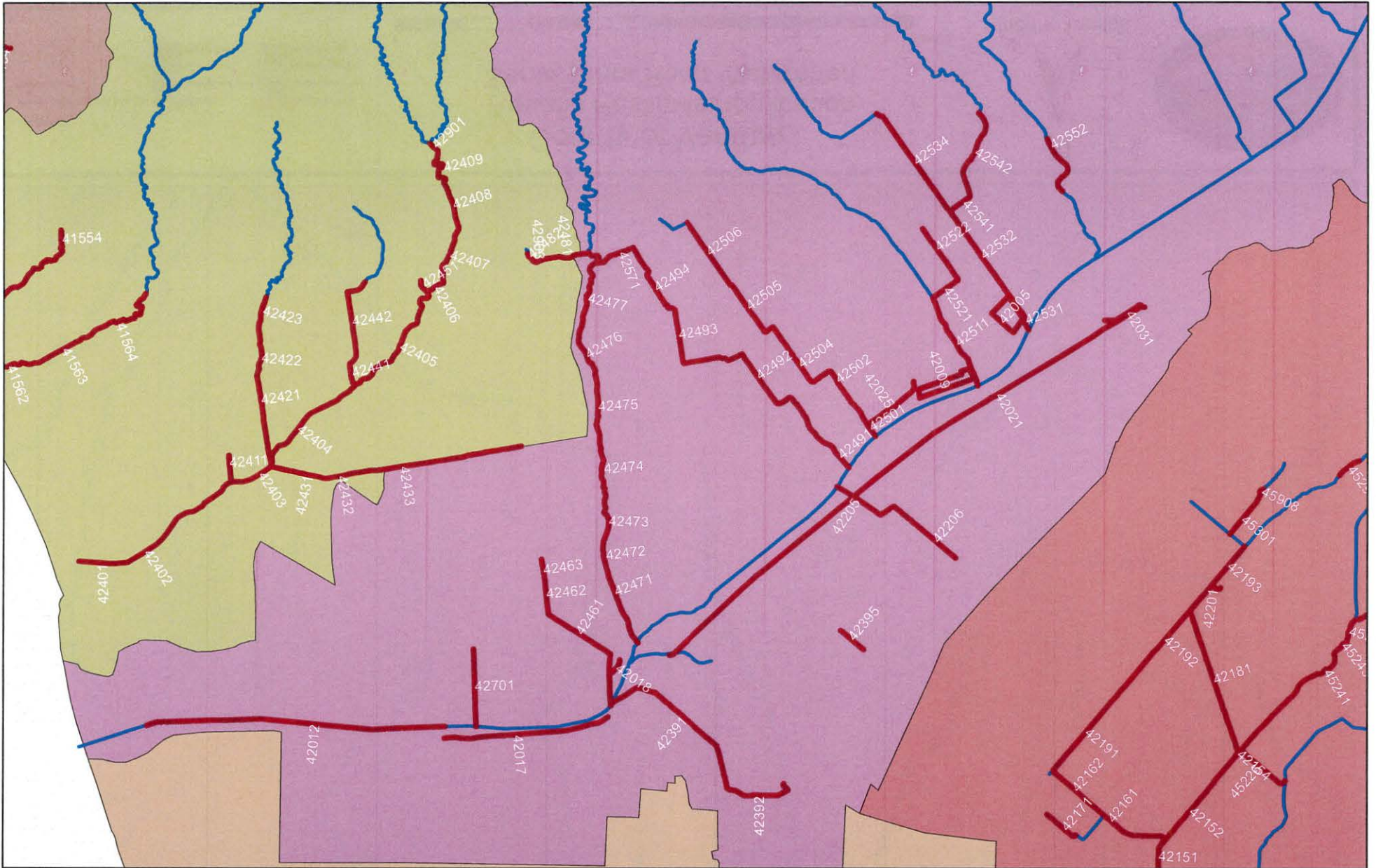


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


- | | | |
|--|---|---|
|  Jurisdictional Channel | MajWatersh |  Oxnard Coastal |
|  Reach |  Calleguas Creek |  Santa Clara River |
| |  Others |  Ventura Coastal |
| |  Malibu Creek |  Ventura River |

County of Ventura Aquatic Pesticide Application Ventura River Watershed



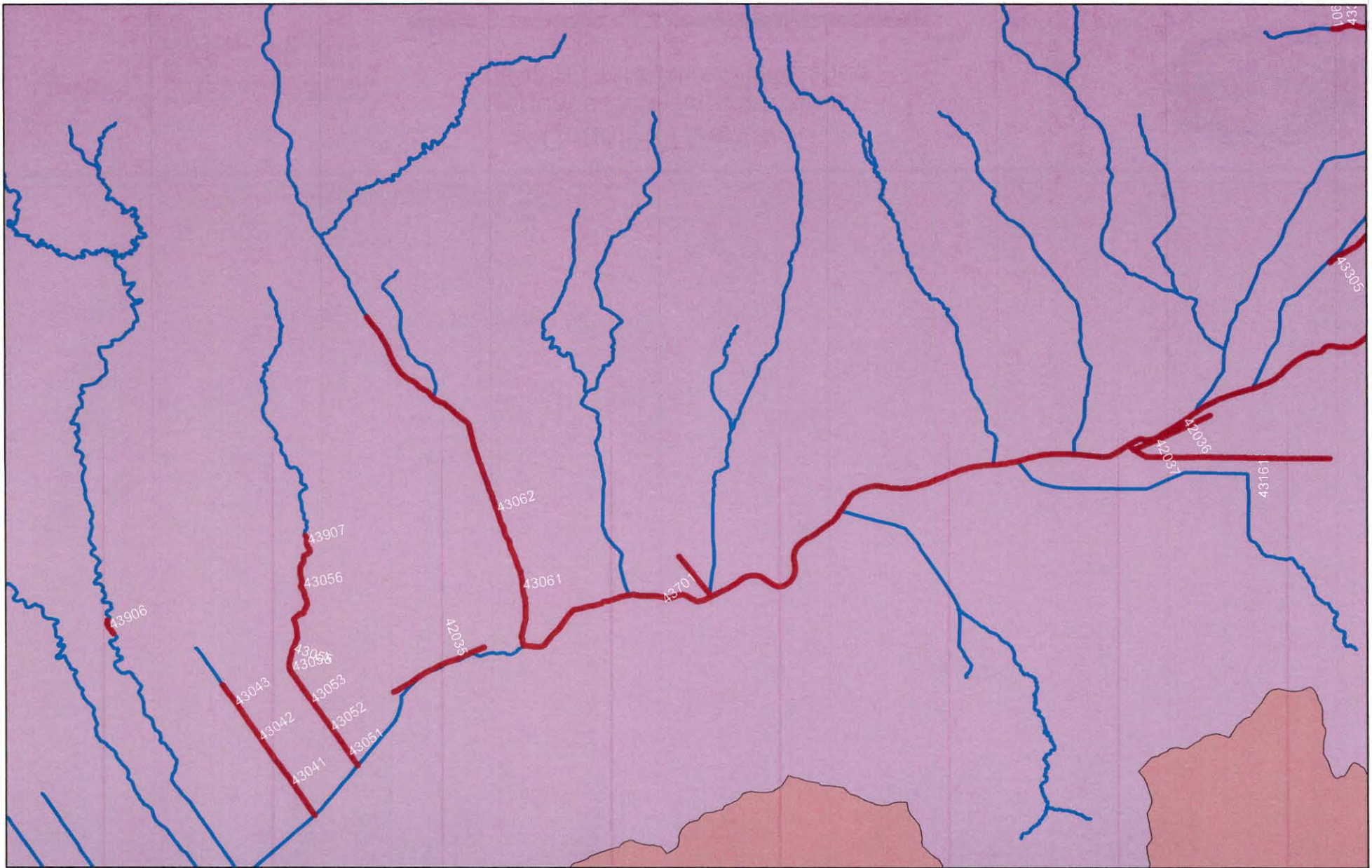


Legend

- | | | |
|--|---|---|
|  Jurisdictional Channel | MajWatersh |  Oxnard Coastal |
|  Reach |  Calleguas Creek |  Santa Clara River |
| |  Others |  Ventura Coastal |
| |  Malibu Creek |  Ventura River |

County of Ventura Aquatic Pesticide Application Santa Clara River Watershed

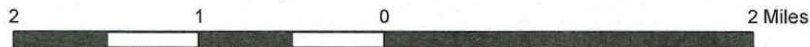




Legend

- | | | |
|---|---|---|
|  Jurisdictional Channel | MajWatersh |  Oxnard Coastal |
|  Reach |  Calleguas Creek |  Santa Clara River |
| |  Others |  Ventura Coastal |
| |  Malibu Creek |  Ventura River |

County of Ventura Aquatic Pesticide Application Santa Clara River Watershed



1 inch = 1 miles





**County of Ventura
Aquatic Pesticide Application
Santa Clara River Watershed**

Legend	<ul style="list-style-type: none"> — Jurisdictional Channel — Reach 	MajWatersh <ul style="list-style-type: none"> ■ Calleguas Creek ■ Others ■ Malibu Creek 	<ul style="list-style-type: none"> ■ Oxnard Coastal ■ Santa Clara River ■ Ventura Coastal ■ Ventura River
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2 Miles

N

Watershed Protection District
VENTURA COUNTY

1 inch = 1 miles



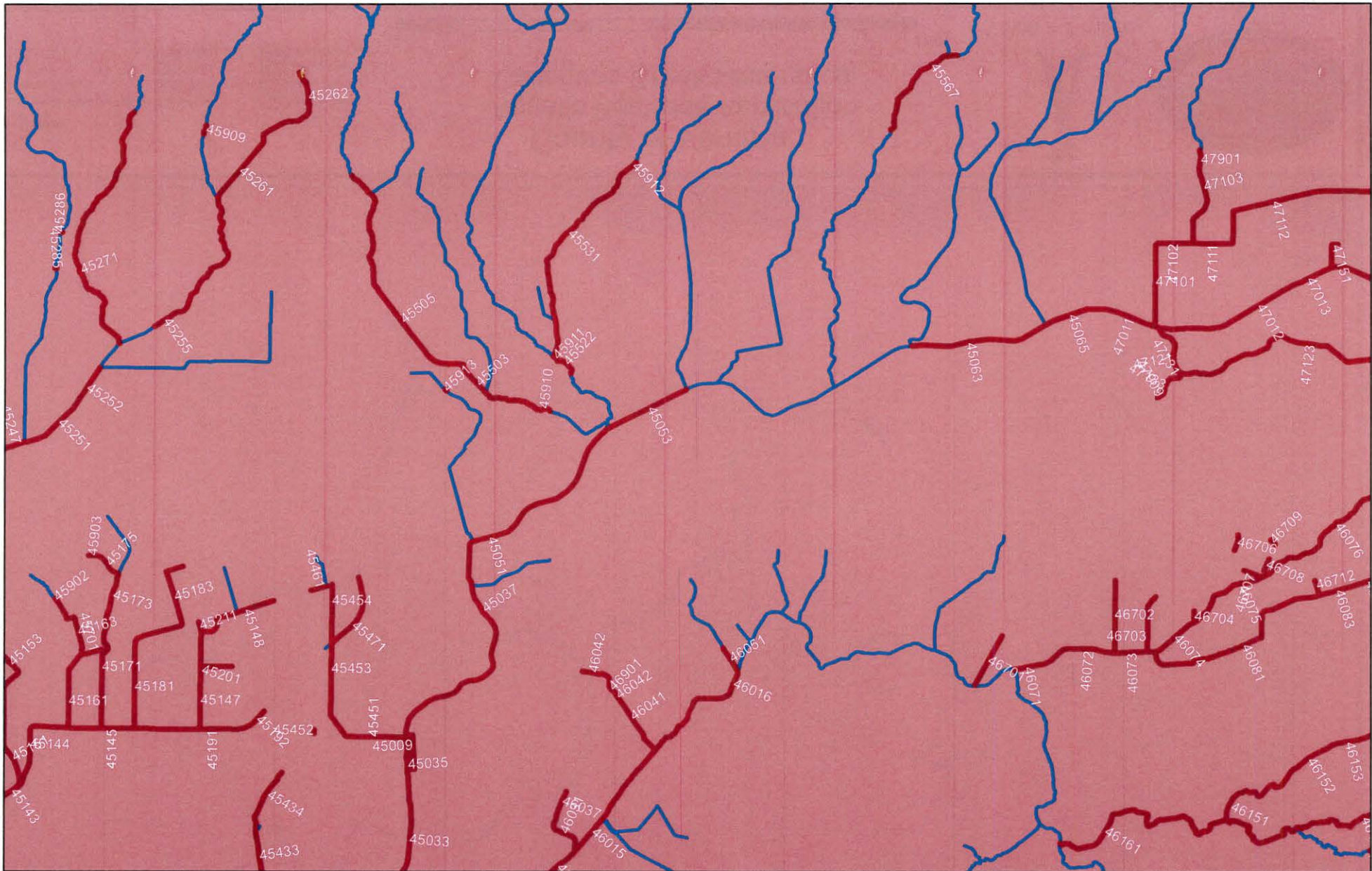
**County of Ventura
Aquatic Pesticide Application
Calleguas Creek Watershed**

Legend	Jurisdictional Channel	MajWatersh	Oxnard Coastal
	Reach	Calleguas Creek	Santa Clara River
		Others	Ventura Coastal
		Malibu Creek	Ventura River

2 Miles

N

1 inch = 1 miles




Legend

— Jurisdictional Channel	MajWatersh	 Oxnard Coastal
— Reach	 Calleguas Creek	 Santa Clara River
	 Others	 Ventura Coastal
	 Malibu Creek	 Ventura River


County of Ventura

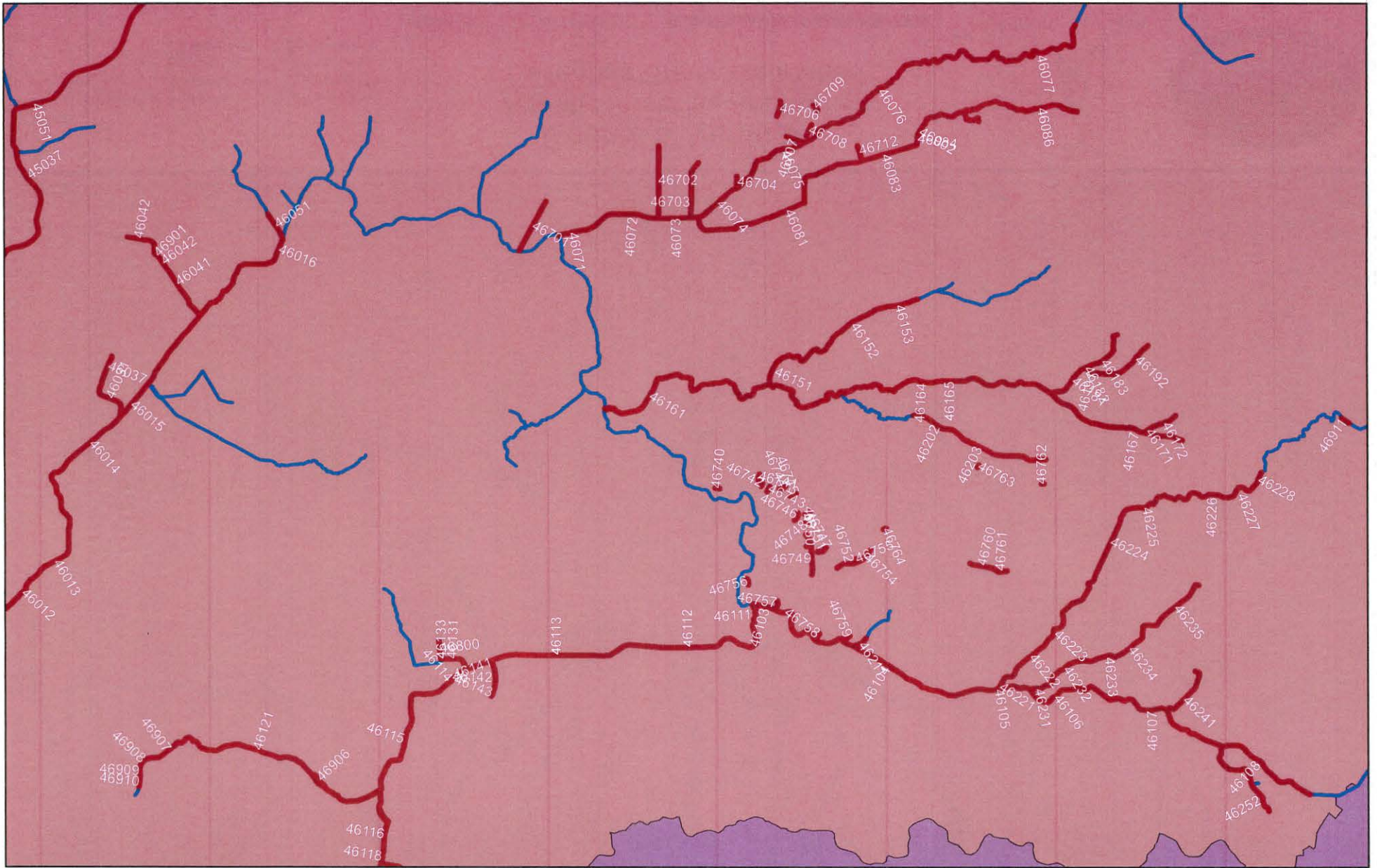
Aquatic Pesticide Application

Calleguas Creek Watershed



1 inch = 1 miles





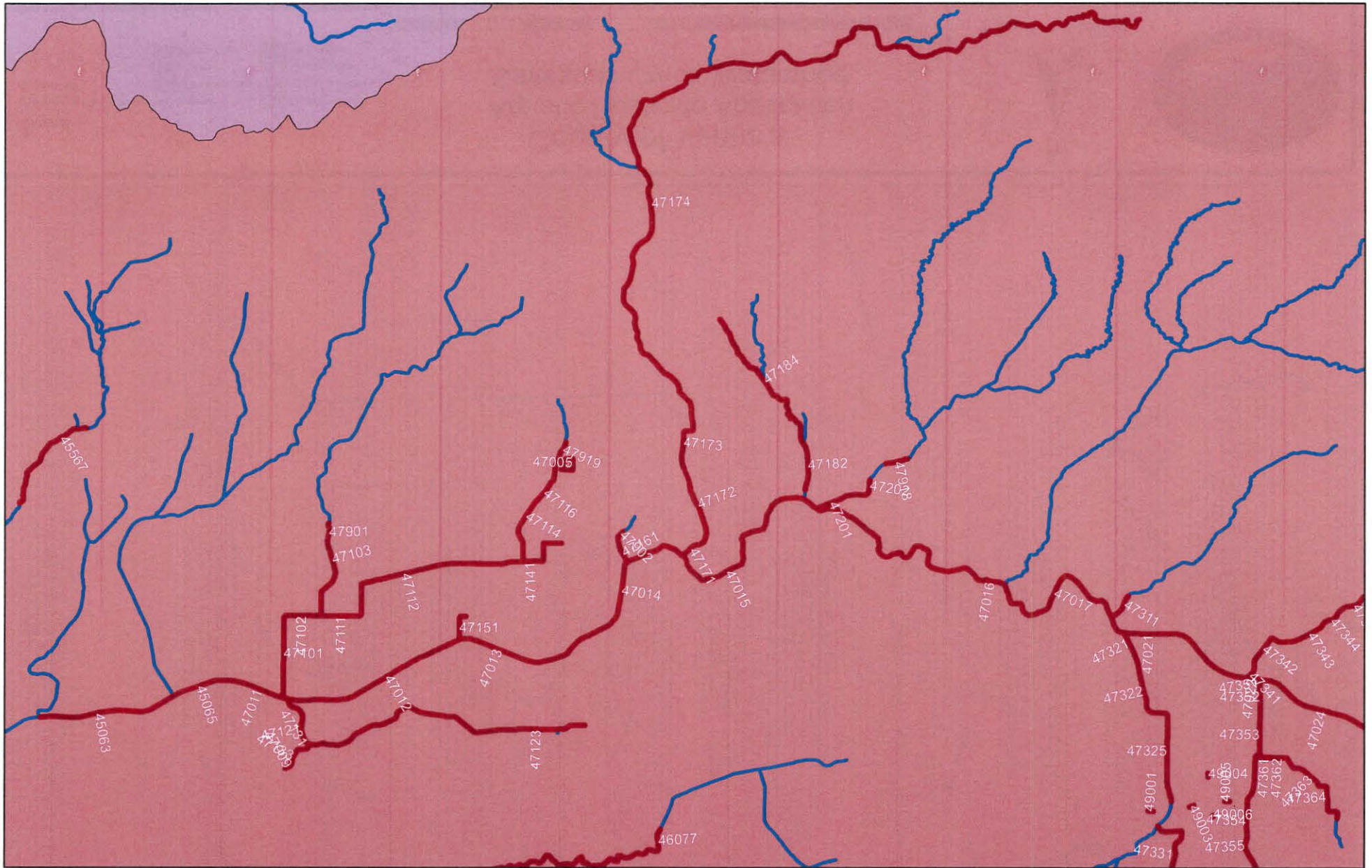
**County of Ventura
Aquatic Pesticide Application
Calleguas Creek Watershed**

Legend					
	Jurisdictional Channel		Reach		Oxnard Coastal
	Calleguas Creek		Malibu Creek		Santa Clara River
	Others		Ventura Coastal		Ventura River

2 Miles

N

1 inch = 1 miles



**County of Ventura
Aquatic Pesticide Application
Calleguas Creek Watershed**

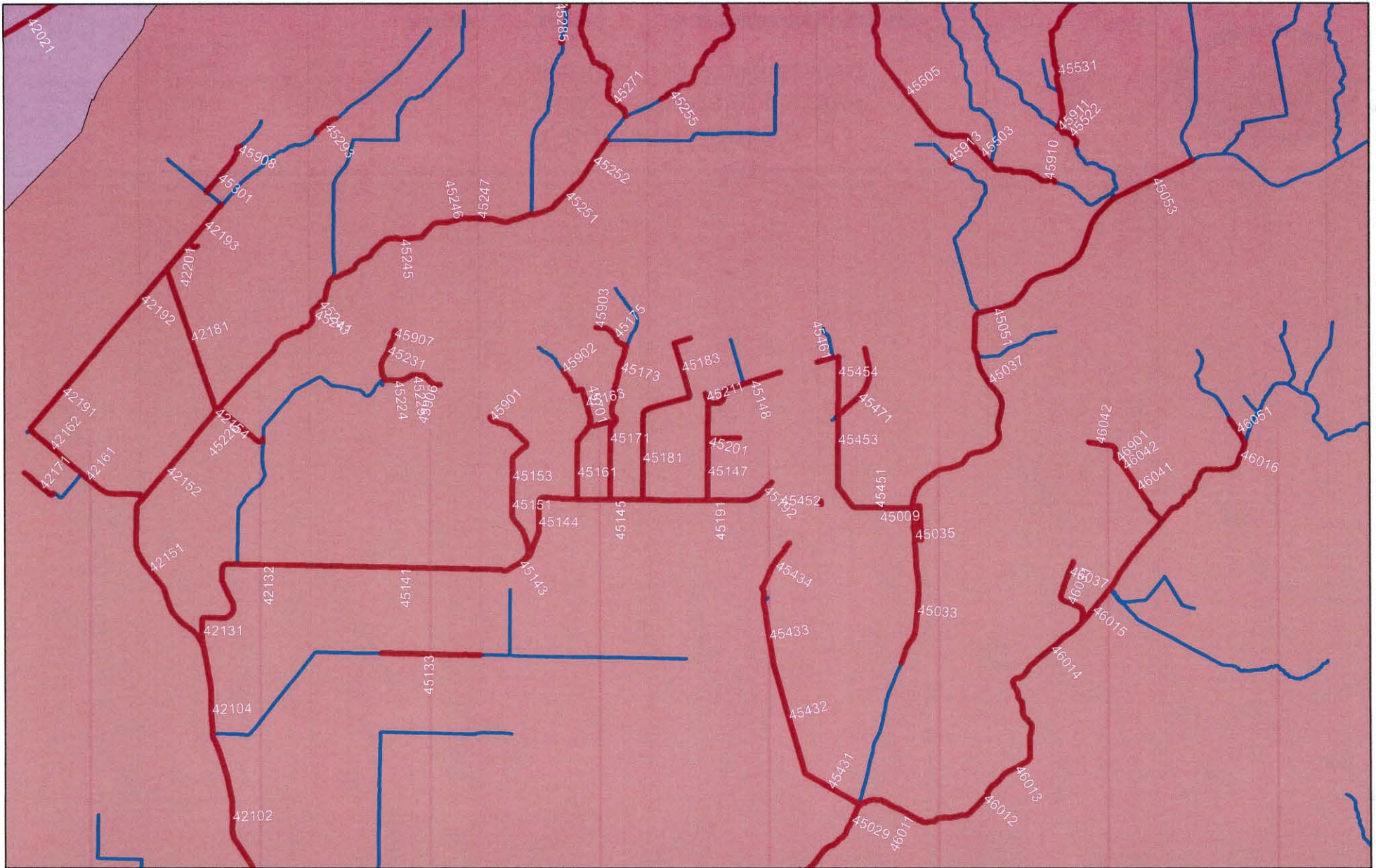
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2 Miles

N




Watershed Protection District
VENTURA COUNTY

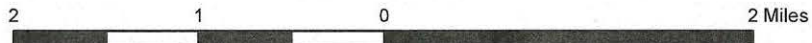
1 inch = 1 miles



County of Ventura Aquatic Pesticide Application Calleguas Creek Watershed

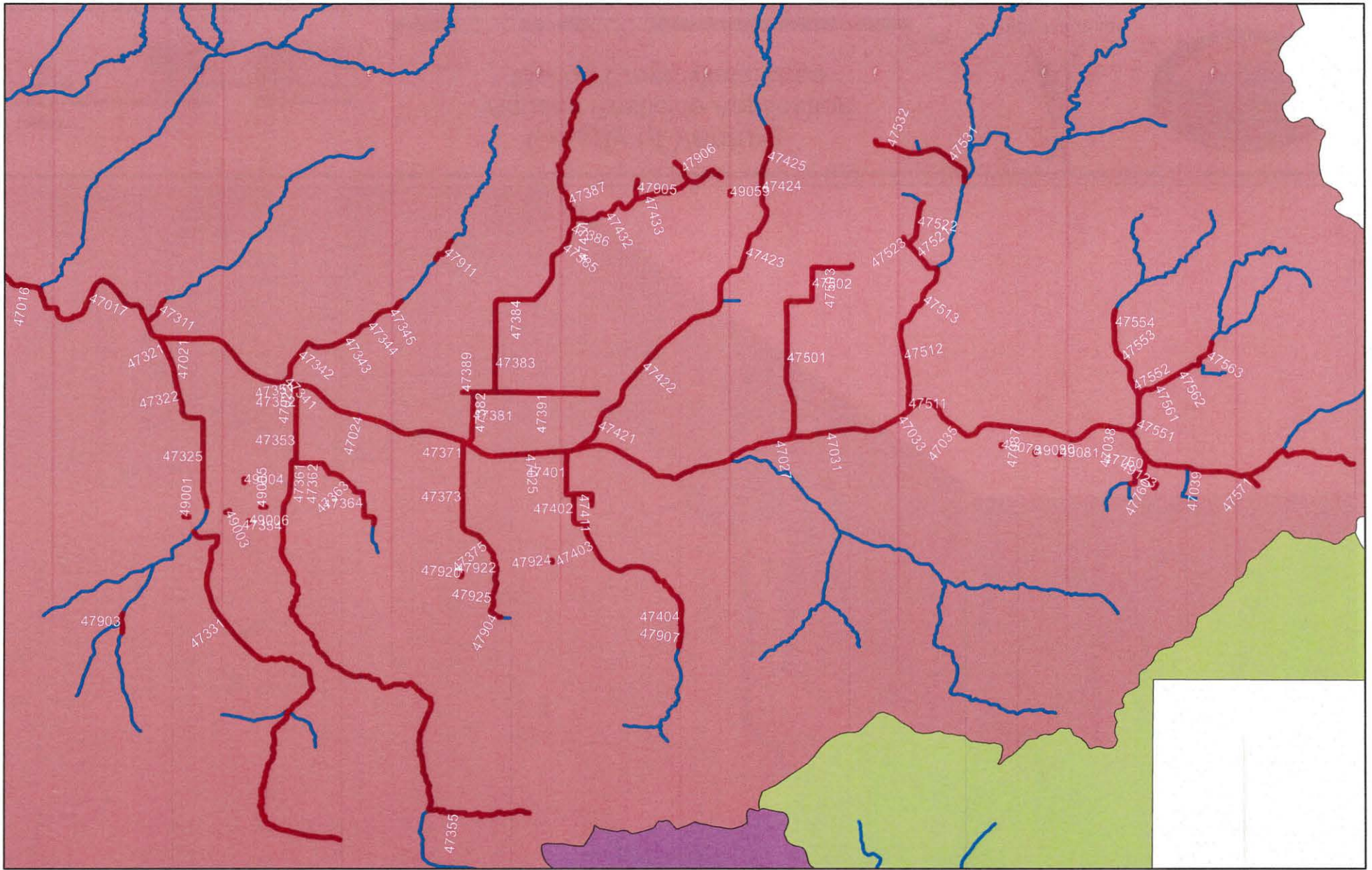
Legend

- | | | |
|--|---|---|
|  Jurisdictional Channel | MajWatersh |  Oxnard Coastal |
|  Reach |  Calleguas Creek |  Santa Clara River |
| |  Others |  Ventura Coastal |
| |  Malibu Creek |  Ventura River |



1 inch = 1 miles





Legend

Jurisdictional Channel	MajWatersh	Others	Oxnard Coastal
Reach	Calleguas Creek	Malibu Creek	Santa Clara River
	Ventura Coastal	Ventura River	

County of Ventura

Aquatic Pesticide Application

Calleguas Creek Watershed

1 inch = 1 miles

