

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENVIRONMENTAL ANALYSIS

P.O. BOX 942873, MS-27

SACRAMENTO, CA 94273-0001

PHONE (916) 653-7136

FAX (916) 653-7757

TTY 711

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September 20, 2013

Tom Howard
Executive Director
State Water Resources Control Board
1001 I Street 24th floor
Sacramento, CA 95814

Subject: Draft ASBS Compliance Plan

Dear Mr. Howard,

The enclosed draft ASBS Compliance Plan (draft Plan) is submitted in compliance with the Caltrans NPDES Permit effective July 1, 2013 (Permit) and the General Exception to the California Ocean Plan for Selected Discharges into Areas of Special Biological Significance (Exception).

Lack of rainfall in the 2012/2013 storm season did not allow the required monitoring. In the May 13, 2013 letter to Caltrans the State Board granted an extension of one year for monitoring. Monitoring will be initiated in the 2013/2014 storm season. The primary purpose of the monitoring program is to determine if structural storm water controls are necessary to protect ASBS water quality.

The draft Plan is intended to be a preliminary draft and currently lacks detail in areas that require monitoring but includes detail for items that do not require monitoring and reaffirms required compliance dates. Without monitoring, placement of required structural controls cannot be determined. The draft plan provides the type of treatment BMPs that will be considered, if monitoring indicates they are necessary to maintain natural water quality.

The final ASBS Compliance Plan will be submitted in the future and will include a description and a final schedule for implementation of structural controls based on the results of reference and receiving water monitoring. The Permit requires the final ASBS Compliance Plan be submitted no later than September 20, 2014. In a letter to the State Board dated June 25, 2013 Caltrans requested extension of the final compliance submittal date to September 20, 2015. The ASBS Compliance Plan will be referenced in the updates to the SWMP.

If you have any questions, please contact me at 916-653-4446 or Dr. Bhaskar Joshi at 916-653-5240.

Mr. Tom Howard
September 20, 2013
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Sincerely,



G. SCOTT MCGOWEN
Chief Environmental Engineer

Enclosure

cc: Vicky Whitney, Deputy Director, State Water Board
Diana Messina, manager Surface Water Permitting Section, State Water Board
Walt Shannon, Surface Water/Permitting Section Municipal Unit, State Water Board
Bhaskar Joshi, Office of Stormwater Program Development, Caltrans

Draft Compliance Plan for Areas of Special Biological Significance



Prepared for:
California Department of Transportation



September 20, 2013

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1. Overview

1.1. Purpose of the Compliance Plan

This Plan describes the California Department of Transportation (Caltrans) strategy to comply with the provisions of E.D.b.2) of Caltrans' *National Pollutant Discharge Elimination System (NPDES) Statewide Stormwater Permit Waste Discharge Requirements (WDRs) for State of California Department of Transportation, Order No. 2012-0011-DWQ* (SWRCB, 2012) (Caltrans Statewide Stormwater Permit or "Permit"). The permit has provisions on point source stormwater and nonpoint source discharges that provide special protections for marine aquatic life and natural water quality in Areas of Special Biological Significance (ASBS). It specifically addresses the prohibition of non-stormwater runoff and the requirement to maintain natural water quality for stormwater discharges to an ASBS as required by the Permit.

The final ASBS Compliance Plan, including a description and final schedule for structural controls will be based on the results of runoff and receiving water monitoring. In a letter dated June 25, 2013 Caltrans requested an extension of the Final ASBS Compliance Plan submittal date until September 2015. It will be submitted no later than September 20, 2015 and shall be included in the SWMP.

1.2. Regulatory Background

The *California Ocean Plan – Water Quality Control Plan, Ocean Waters of California* (SWRCB, 2009) (Ocean Plan) was first adopted in 1972 by the State Water Resources Control Board (SWRCB). It establishes water quality objectives for California's ocean waters and provides the basis for regulation of wastes discharged into the state's coastal waters. It prohibits waste discharges, including trash, into these coastal areas and states that discharges composed of stormwater runoff shall not alter natural water quality in an ASBS. Since 1983, the Ocean Plan has prohibited the discharge of both point and nonpoint source waste to ASBS, unless the SWRCB grants an exception.

The only discharges allowed into ASBS are those from existing stormwater outfalls, provided the discharges are essential for flood control or slope stability, are designed to prevent soil erosion, occur only during wet weather, and are composed of only stormwater runoff.

Caltrans discharges stormwater into the following ASBS:

- Redwoods National Park ASBS*
- Saunders Reef ASBS*
- James V. Fitzgerald ASBS*
- Año Nuevo ASBS*
- Carmel Bay ASBS*
- Point Lobos ASBS
- Julia Pfeiffer Burns ASBS

* ASBS with Priority Discharge Locations according to Caltrans Stormwater Permit, Attachment III.

- Salmon Creek Coast ASBS
- Laguna Point to Latigo Point ASBS*
- Irvine Coast ASBS*

Additional non-stormwater discharges to a segment of Caltrans' facilities with a direct discharge to an ASBS are allowed only to the extent the relevant Regional Water Quality Control Board (RWQCB) finds that the discharge does not alter natural ocean water quality in the ASBS. The Ocean Plan allows the SWRCB to grant exceptions to this prohibition, provided the exception will not compromise protection of ocean waters for beneficial uses and the public interest will be served.

On October 18, 2004, the SWRCB notified a number of parties that they must cease the discharge of storm water and nonpoint source waste into ASBS or request an exception to the prohibition. Of these parties, 27, including Caltrans, submitted applications to the SWRCB for an exception. In April 2012, the SWRCB approved *State Water Resources Control Board Resolution No. 2012-0012, Approving Exceptions to the California Ocean Plan for Selected Discharges into Areas of Special Biological Significance, including Special Protections for Beneficial Uses, and Certifying a Program Environmental Impact Report* (SWRCB, 2012). This resolution approved the general exception to the Ocean Plan prohibition against waste discharges to ASBS for the discharges of storm water and nonpoint source waste by the applicants. A list of all the applicants are listed in *Attachment A – Applicants*. The main provisions for compliance with the General Exception are contained in *Attachment B – Special Protections for Areas of Special Biological Significance, Governing Point Source Discharges of Storm Water and Nonpoint Source Waste Discharges* (Special Protections).

Caltrans has applied for and been granted an exception under the General Exception for Stormwater and Non-Point Source Discharges to ASBS. This exception allows the continued discharge into ASBS, provided Caltrans complies with the Special Protections. Caltrans is also allowed to discharge to ASBS under the General Exception if such discharges are essential for emergency response purposes, structural stability, slope stability, or if they occur naturally. Caltrans is selected the Regional Monitoring required to monitor Attachment III Priority Discharge Location. .

1.3. Maps of ASBS Discharge Locations and Best Management Practices

Table 1 contains a brief summary of the ASBS discharge locations. Maps for these locations are provided in Appendix A. Each map shows surface drainage of stormwater runoff, sheet runoff, priority discharge locations, structural BMPs currently employed, and stormwater conveyances in relation to other features, such as service areas, sewage conveyances and treatment facilities, landslides, areas prone to erosion, and waste and hazardous material storage areas. These maps will be updated when changes are made to the stormwater conveyance facilities. Some of the locations identified in Attachment III have been removed or relocated. The maps in this report show the updated and current discharge monitoring locations, verbally approved by the SWRCB for ASBS 24, 33, 9, 15 and 34. Modified discharge monitoring locations for ASBS 5 and 8 are currently being reviewed by SWRCB. Table A-1 summarizes the Attachment III locations and recent changes to the locations.

Table 1: Summary of ASBS Locations











	<p>ASBS 5: Saunders Reef</p> <p><i>This small ASBS, approximately 2 miles, encompasses both rural and urban watersheds, with numerous seepages and earthen channels from bluff houses outlining the coast.</i></p> <ul style="list-style-type: none"> • Estimated 1.1 miles of US-101 • 10 priority discharges identified
	<p>ASBS 8: Redwoods National Park</p> <p><i>Rugged cliffs and sparse primitive campgrounds dominate this region and much of the coastline is limited to foot traffic.</i></p> <ul style="list-style-type: none"> • Estimated 10.6 miles of US-101 • 7 priority discharges identified
	<p>ASBS 9: James V. Fitzgerald</p> <p><i>Unique underwater habitat and extensive tide pools, surrounded by an array of land uses.</i></p> <ul style="list-style-type: none"> • Estimated 2.5 miles of SR-1 • 1 priority discharges identified
	<p>ASBS 15: Año Nuevo</p> <p><i>The coastline provides a unique habitat for wintering sea lions and elephant seals. Access to beaches is limited and most visitors to the park are confined to marked footpaths.</i></p> <ul style="list-style-type: none"> • Estimated 3.0 miles of SR-1 • 5 priority discharges identified
	<p>ASBS 16: Point Lobos</p> <p><i>This ASBS is regularly visited by a large number of day hikers; several small campgrounds and a small boat launch ramp are also located within the Reserve.</i></p> <ul style="list-style-type: none"> • Estimated 1.0 miles of SR-1 • 0 priority discharges identified
	<p>ASBS 18: Julia Pfeiffer Burns</p> <p><i>Cliffs along this stretch of coastline are rugged and steep, greatly limiting access to the waterline.</i></p> <ul style="list-style-type: none"> • Estimated 3.0 miles of SR-1 • 0 priority discharges identified

Table 1: Summary of ASBS Locations

	<p>ASBS 20: Salmon Creek Coast</p> <p><i>Cliffs along this stretch of coastline are rugged and steep, and there are several private homes within the ASBS.</i></p> <ul style="list-style-type: none"> • Estimated 4.0 miles of SR-1 • 0 priority discharges identified
	<p>ASBS 24: Laguna Point to Latigo Point</p> <p><i>The largest of the mainland ASBS with extensive bluffs, and private property on bluffs and beaches.</i></p> <ul style="list-style-type: none"> • Estimated 24 miles of SR-1 • 47 priority discharges identified
	<p>ASBS 33: Irvine Coast</p> <p><i>This ASBS is largely classified as an urban watershed; additional inputs include parking lots and walkways within the park, and from the development upstream.</i></p> <ul style="list-style-type: none"> • Estimated 3.0 miles of SR-1 • 5 priority discharges identified
	<p>ASBS 34: Carmel Bay</p> <p><i>This ASBS encompasses the city of Carmel with the southern boundary occurring at the Carmel River mouth. The Pebble Beach Golf Course and the highly visited Carmel Beach are also located within the boundaries of this ASBS.</i></p> <ul style="list-style-type: none"> • Estimated 4.5 miles of SR-1 • 2 priority discharges identified

2. Non-Authorized Non-Stormwater Discharges

The Permit prohibits the discharge of non-authorized non-storm water discharges. The Permit has authorized non-stormwater discharges from certain categories of discharges not composed entirely of stormwater but which do not pose a threat to water quality. In some cases, they may require the implementation of BMPs. Requirements or exemptions of separate NPDES permits are not addressed in this plan.

The following non-stormwater discharges are allowed under the general exception if essential for emergency response purposes, structural stability, slope stability, or if occur naturally:

- Discharges or flows from emergency firefighting activities;
- Foundation and Footing drains;
- Water from crawl space or basement pumps;
- Hillside dewatering;
- Naturally occurring groundwater seepage via a storm drain; and
- Non-anthropogenic flows from a naturally occurring stream via a culvert or storm drain provided there are no contributions of anthropogenic runoff.

Additional non-storm water discharges to a segment of the Department's MS4 with a direct discharge to an ASBS are allowed only to the extent the relevant Regional Water Board finds that the discharge does not alter natural ocean water quality in the ASBS.

2.1. Non-Authorized Non-Stormwater Discharge Elimination

The permit requires the elimination of all non-authorized non-stormwater discharges. Currently there are no non-authorized non-stormwater discharges. Caltrans will continue to efforts to eliminate non-authorized non-stormwater discharges by prevention, identification and correction of the source of non-stormwater discharge. This will be achieved with the IC/ID and Illegal Dumping Response Plan required by the Permit. Additionally the following Caltrans Maintenance personnel tasks are implemented:

- Determine where the flow of a leak, spill or other runoff will travel;
- Identify drain inlets and watercourses, both upstream and downstream of the work site;
- Ensure that vehicles and equipment are clean and in good operating condition by conducting pre-operational inspections of vehicles and equipment;
- Set up work areas to minimize the tracking of material by vehicles and equipment in and out of the work area;
- Collect and properly dispose of wastes, materials removed as a result of equipment and system maintenance, and litter and debris;
- Secure lids on containers of liquids when not in use;
- Control Caltrans' spills promptly and transport collected materials back to a maintenance facility or approved storage site; and
- Have appropriate spill cleanup material on site and protect drainage systems and watercourses from spilled material.

Maintenance Supervisors will report non-stormwater discharges to their District Maintenance Stormwater Coordinators. The District Maintenance Stormwater Coordinators will coordinate the reporting of prohibited non-stormwater discharges to the RWQCBs through the District Stormwater Coordinator using the Incident Report Form (Attachment 1 of the Permit).

3. Inspection Frequencies

Caltrans will inspect all construction sites within ASBS weekly during the rainy season (October 1st through April 30th) and will inspect all Caltrans industrial facilities within the ASBS monthly during the rainy season. The categories of industrial facilities are provided in Attachment 1 of the Industrial General Permit (NPDES Permit No. CAS000001; the current Order No. 97-03-DWQ). To ensure trash and other anthropogenic debris are removed, Caltrans will inspect all stormwater outfall drains equal to or greater than 18 inches (457 mm) in diameter or width within ASBS at the following frequency:

- once before the beginning of the rainy season; and
- once during the rainy season.

Inspections will be conducted in accordance with the SWMP and Construction Enforcement Response Plan.

4. Structural Best Management Practices

This section describes the structural BMPs, including low impact development (LID) measures, currently employed and planned for priority discharges.

Treatment BMPs are measures designed to remove pollutants from stormwater runoff prior to discharging to receiving waters. The process for establishing compliance within the ASBS relies on the comparison of water quality at the receiving water site to the appropriate reference site to determine exceedance of natural water quality as illustrated in Figure 2 of the Permit. Caltrans will be monitoring at the ASBS Priority Discharge locations (as modified) to determine compliance and the need for installation for structural Best Management Practices. Additional information on monitoring compliance will be available in the Final ASBS Compliance Plan.

Potential structural BMPs based on pollutant treated that will be considered if exceedance of natural water quality is determined are listed in Table 2. Considerations for deployment of treatment BMPs are based on but not limited to; safety, available funding, field conditions, contaminant levels, sources, space available, etc.

Table 2 Pollutants of Concern and Applicable Treatment BMPs

Pollutant	Biofiltration Systems	Infiltration Devices	Detention Devices	Dry Weather Flow ¹ Diversion	Gross Solids Removal Devices	Multi Chambered Treatment Trains	Media Filters	Wet Basins	Traction Sand Traps
TSS	√	√	√	√		√	√	√	√
Nutrients		√	√ ²	√			√ ³	√ ⁴	
Pesticides		√		√					
Particulate Metals	√	√	√	√		√	√	√	
Dissolved Metals	√	√		√			√		
Pathogens		√		√				√	
Litter	√	√	√	√	√	√	√	√	
BOD		√		√				√	
TDS		√		√					

¹Dry Weather Flow Diversions address non-stormwater flows only.

² Phosphorus only.

³Phosphorus and Nitrogen for the Austin Sand Filter; Phosphorus only for the Delaware Sand Filter

⁴ Reduction observed for dry weather flow only.

The following sections describe the structural BMPs, including low impact development (LID) measures, currently employed and planned for priority discharges.

4.1. Vegetated Biofiltration Strips and Swales

Biofiltration strips and biofiltration swales are mainly effective at removing debris and solid particles, although some dissolved constituents are removed by infiltration onto the soil. A vegetation mix for the biofiltration swales and biofiltration strips should be approved by the District Landscape Architect to ensure the appropriate vegetation for the local climate.

Biofiltration swales have been designed and installed along the northbound shoulder of ASBS 33 (Irvine Coast) to treat the runoff from SR-1. The maps located in Appendix A show the location of these swales.

4.2. Infiltration Devices

An infiltration device is a device designed to remove pollutants from surface discharges by capturing stormwater runoff and infiltrating it directly through the soil rather than discharging to receiving waters. Infiltration devices are preferred over detention basins because they effectively remove a wider range of pollutants, including total suspended solids, nutrients, pesticides, particulate metals, dissolved metals, pathogens, litter, biochemical oxygen demand, and total dissolved solids. Currently no infiltration devices have been installed along the shoulder of the highway in any of the ASBS.

4.3. Media Filters

Media filters primarily remove TSS pollutants (sediments and metals) from runoff by sedimentation and filtering, and they are effective for dissolved metals and litter. Media filters are configured using two chambers. An “Austin” sand filter is usually open and at grade, and has no permanent water pool; a “Delaware” sand filter is always configured with closed chambers and below grade, and has a permanent pool of water. Currently no media filters devices have been installed along the shoulder of the highway in any of the ASBS.

4.4. Innovative Technologies & Low impact Development BMPs

Caltrans continually identifies and evaluates the need for innovative pollutant control technologies for potential use in the highway environment. To qualify for use, these BMPs must be tested and proven to be compatible with the linear nature of highway infrastructure and efficiently remove roadway pollutants. As part of this process, Caltrans performs a desktop evaluation of each BMP; and develops a BMP fact sheet summarizing key design elements, advantages and constraints. BMP fact sheets serve as a preliminary screening tool for selection of pilot BMPs when approved BMPs cannot meet project-specific treatment performance requirements or cannot be deployed due to other constraints. Fact sheets for BMPs are presented in the Treatment BMP Technology Report (Caltrans, 2010b). Some innovative LID technologies

proposed for future evaluation are linear filtration trenches, media filter drains, linear sand filters, bioretention trenches, open graded permeable friction course, and pervious asphalt pavement.

5. Erosion and Sediment Control

This section addresses erosion control and the prevention of anthropogenic sedimentation in ASBS. Natural habitat conditions in the ASBS must not be altered because of anthropogenic sedimentation. Projects that have a high probability of discharging sediment to ASBS merit the application of temporary or permanent sediment and erosion control BMPs.

5.1. Maintenance Slope Inspections

The Permit Provision E.2.h.3) requires Caltrans to develop and implement runoff management programs and systems for existing roads, highways, and bridges to reduce runoff pollutant concentrations and volumes entering surface waters. This includes:

- i. Identify priority and watershed pollutant reduction opportunities (e.g., improvements to existing urban runoff control structures). Priority is given to sites in sensitive watersheds or where there is an existing or potential threat to water quality (e.g. TMDL sediment impaired water bodies and slopes within the right-of way in ASBS);
- ii. Establish schedules for implementing appropriate controls; and
- iii. Identify road segments with slopes that are prone to erosion and sediment discharge and stabilize these slopes to control the discharge of pollutants to the MEP. An inventory of vulnerable road segments to be maintained in the District Work Plans. Stabilization activities are reported in the Annual Report.

Road segments within each ASBS are identified in Table 3 and Appendix B. Three of the ASBSs (Julia Pfeiffer Burns, Salmon Creek Coast and Laguna Point to Latigo Point) have slopes identified as prone to erosion (Caltrans, 2013).

Table 3 Areas Prone to Erosion within ASBS

ASBS	County	Hwy	ASBS PM start	ASBS PM end	Areas within ASBS prone to Erosion
5	Mendocino	1	9.8	10.8	None
8	Del Norte	101	11.3	15.4	None
8	Humboldt	101	117.3	123.8	None
9	San Mateo	1	33.8	36.3	None
15	San Mateo	1	0.0	3.0	None
16	Monterey	1	70.0	71.0	None
18	Monterey	1	35.0	38.0	PM 35.0-38.0
20	Monterey	1	0.0	4.0	PM 0.0-4.0
24	Ventura	1	0.0	11.0	PM 0.0-10.0
24	Los Angeles	1	50.0	63.0	None
33	Orange	1	12.0	15.0	none
34	Monterey	1	71.0	75.5	None

6. Non-Structural Best Management Practices

This section describes the non-structural BMPs currently employed and planned in the future (including those for construction activities). Non-structural BMPs are incorporated in all Caltrans design, operations and maintenance projects.

6.1. Currently Employed Procedures

6.1.1. Accidental Spills

Accidental spills are illicit discharges resulting from one-time deposits of materials or wastes onto roadways or the right of way, which could threaten water quality by potential discharge to water conveyances. Caltrans notifies the appropriate agencies of reported or discovered spills as defined in the *Incident Report Form* in Attachment I of the Permit.

6.1.1.1. Spill Response

Generally, the responsible party (transporter, etc.) is required by state law to report any spill that threatens public health or the environment. When spills are known to have occurred on the state right of way, properly credentialed personnel are mobilized to assess the circumstances. Depending on the magnitude and type of spill, the proper agencies are notified. For large incidents where Incident Command is required the agency with jurisdiction assumes authority as the incident commander; normally the California Highway Patrol for spills retained on the highway and California Department of Fish and Wildlife for spills that reach water bodies.

6.1.1.2. Cleanup Activities

Caltrans' District Hazardous Materials Manager within District Maintenance is in charge of the spill cleanup activity unless directed otherwise by the incident commander (e.g., CHP for highways, etc.). Caltrans has trained in-house and contract hazardous response staff with the responsibility to manage and cleanup spills to protect public safety and the environment. Caltrans coordinates with local, state, and federal agencies (e.g., County Environmental Health, County Agriculture, Department of Fish and Wildlife, Coast Guard, RWQCB, etc.) as appropriate to determine the approach and level of cleanup needed. Depending on the circumstances or significance of the spill, this coordination is made directly or through the Office of Emergency Services (OES). Each district prepares and implements a District Hazardous Spill Contingency Plan on an annual basis for describing the details of the above activities.

6.1.1.3. Construction Projects

Accidental spills occurring on a construction project are reported by the Resident Engineer to the District Hazardous Waste Coordinator, the District NPDES Coordinator, and/or the District HazMat Manager as appropriate.

6.1.2. Illegal Connections and Illegal Dumping

Maintenance, Construction, or Encroachment Permit staff report illegal connections to the District NPDES Coordinator. The District NPDES Coordinator reports any discharges that threaten public health or the environment to OES and other agencies as appropriate. In addition,

illegal connections outside the right of way and up gradient flows entering Caltrans' stormwater conveyances are reported to the RWQCB for enforcement.

Illegal dumping is a type of discharge characterized by one or multiple occasions of intentional dumping of trash, debris, or other wastes on state highways or facilities. Such activity is prohibited by state and local laws and is enforced by the Highway Patrol or local law enforcement agencies. Caltrans relies primarily upon the CHP for investigation, surveillance, and apprehension of suspects believed to have illegally dumped wastes within the highway system and other Caltrans facilities. If an investigation reveals sufficient evidence, the case will be referred to the District Attorney or County Environmental Health Department is referred to for enforcement. Responsible parties are billed for cleanup and disposal costs incurred.

Caltrans is developing an *IC/ID and Illegal Dumping Response Plan* (due January 1, 2014) that includes the following:

- Procedures for investigating reports or discoveries of IC/IDs or incidents of illegal dumping, for remediating or eliminating the IC/IDs, and for clean up of illegal dumpsites.
- Procedures for prevention of illegal dumping at sites subject to repeat or chronic incidents of illegal dumping.
- Procedures for educating the public, raising awareness and changing behaviors regarding illegal dumping, and encouraging the public to contact the appropriate local authorities if they witness illegal dumping.

6.1.3. Public Education and Outreach

Revisions to the public education strategy are based on the results of a litter reduction study discussed in the *District 7 Litter Management Pilot Study Final Report* (Caltrans, 2000). "Don't Trash California" is Caltrans' largest public education campaign to promote actions to reduce the amount of highway litter entering the highway storm drain systems. Caltrans collaborates with various organizations at both the state and local levels. Joint public education initiatives are continuously evaluated to maximize use of educational materials developed from Caltrans' Public Education Research Study.

Caltrans participates in additional statewide and District-specific public education campaigns. Statewide programs include anti-litter campaigns, such as Adopt-A-Highway, anti-litter signs, and regular employee training about stormwater management. District programs typically include collaborating with local agencies, participating in state and county fairs, sponsoring clean up events, and distributing educational materials to local agencies and the public.

6.1.4. MAINTENANCE BMPs

Maintenance BMPs are implemented to ensure that maintenance activities are conducted in a manner that reduces or eliminates the potential for pollutants being discharged to surface waters via stormwater drainage systems. Potential pollutants from Caltrans maintenance activities include petroleum products, sediment, trash and debris, metals, caustic and acidic substances, nutrients, solvents, paint, pesticides, and other materials. Many of these potential pollutants can be prevented from being discharged via stormwater drainage systems by selecting and implementing BMPs appropriate for the activity and task being conducted.

Maintenance activities are grouped into “families” based on crew assignment (e.g., asphalt paving is in the ‘A’ Family, which covers Flexible Pavement). Caltrans’ Division of Maintenance develops stormwater BMPs for each activity and provides training to staff on proper implementation. Maintenance Supervisors are responsible for implementation of BMPs for all maintenance activities.

6.2. BMPs for Future Consideration

6.2.1. Public Education and Outreach

To expand its public education and outreach effort within ASBS, Caltrans will investigate additional public education outreach targeting the problem of ocean waste within the boundaries of each ASBS. Frequency of public education considers the aesthetic appearance of the ASBS areas, and ensures travelers will have multiple opportunities to learn the message. Kiosks will also be considered at Rest Areas and Vista Points within the ASBS. This effort will be coordinated with the Division of Traffic Operations.

6.2.2. Construction Site Controls

Caltrans will implement Construction Site BMPs on every project within ASBS locations by including details and specification requirements in the project’s contract documents. Construction Site BMPs are implemented in conformance with the project SWPPP. Construction site BMPs that Caltrans will implement, as appropriate, on construction sites are listed in the *Caltrans Construction Site BMP Manual* (Caltrans, 2003). These BMPs are required under the Statewide Construction General Permit and are intended to implement its technical requirements. The selected BMPs are directed at reducing or eliminating pollutants in stormwater discharges.

7. Implementation Schedule

Caltrans has developed a time schedule to implement appropriate non-structural and structural controls (implementation schedule) to comply with the Permit and the Special Protections. The Permit requires within 18 months of the effective date of the Exception, Caltrans implement non-structural controls that are necessary to comply with the Special Protections. Caltrans routine operation and maintenance incorporate non-structural controls. Within four years of the effective date of the Exception, structural controls will be identified that are necessary to comply with the Special Protections. Based on the results of the monitoring, modifications necessary to non-structural and structural controls will be implemented as soon as practically possible.

7.1. Environmental Planning Process

For any planned activity within the coastal zone, a series of permits must be obtained. They include approval from the California Coastal Commission or local coastal program, and before construction, local jurisdiction's approval. Additional agencies that may have jurisdiction over the aforementioned may include:

- California Department of Fish and Wildlife
- California Department of Parks and Recreation
- County Governments
- National Marine Sanctuaries
- Regional Water Quality Control Boards
- US Army Corps of Engineers
- USDA Forest Service
- US Fish and Wildlife Service

The processing time for permits can vary from a couple months to more than a year.

8. Reporting

Caltrans is required to report monitoring results and exceedance of water quality standards annually in the Monitoring Results Report. If the results of the receiving water monitoring indicate that stormwater runoff is causing or contributing to an alteration of natural ocean water quality in the ASBS, Caltrans will submit a report to the SWRCB and RWQCB within 30 days of receiving the results. This report will

- identify the constituents that are altering natural water quality and their sources;
- describe the BMPs currently being implemented to treat the runoff containing these constituents;
- describe the BMPs that may be added to this ASBS Compliance Plan in the future to address the alteration of natural water quality; and
- include a new or modified implementation schedule for the BMPs.

Within 30 days of report approval by the SWRCB Executive Director, Caltrans will revise this ASBS Compliance Plan to incorporate any new or modified BMPs that have been or will be implemented, the implementation schedule, and any additional monitoring required.

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Appendix A: ASBS Maps

Maps of Caltrans ASBS Current Discharge Locations and existing Best Management Practices are presented. Each map shows the priority discharge locations listed in Attachment III of the Caltrans NPDES Permit as green circles. Tributary drainage areas to the priority discharge locations are identified in red. Sheet flow from the highway is shown in blue. Areas that drain to discharge points that were identified as a safety hazard are identified in grey. Other areas that drain to non-priority discharge points are shown in green. These areas discharge indirectly to ASBSs either through vegetation, infiltration into surrounding soil or to adjacent streams.

Table A-1: ASBS Priority Discharge Locations (Caltrans Permit, Attachment III)


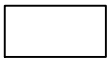



SampleID	RWQCB	ASBS Name	Longitude	Latitude	Comment
SAU020	1	Saunders Reef	-123.65329	38.86177	
SAU019	1	Saunders Reef	-123.65328	38.86161	
SAU016	1	Saunders Reef	-123.65178	38.85683	
SAU017	1	Saunders Reef	-123.65164	38.85692	
SAU012	1	Saunders Reef	-123.65019	38.8543	
SAU011	1	Saunders Reef	-123.64983	38.85387	
SAU021	1	Saunders Reef	-123.64868	38.85176	
SAU008	1	Saunders Reef	-123.6478	38.8521	
SAU006	1	Saunders Reef	-123.64727	38.85041	
SAU002	1	Saunders Reef	-123.64709	38.84988	
RED026	1	Redwoods National Park	-124.10221	41.59516	
RED027	1	Redwoods National Park	-124.10126	41.59657	
RED028	1	Redwoods National Park	-124.10101	41.59729	
RED029	1	Redwoods National Park	-124.10046	41.59976	
RED030	1	Redwoods National Park	-124.1003	41.60084	
RED031	1	Redwoods National Park	-124.10026	41.6013	
RED065	1	Redwoods National Park	-124.09299	41.28217	
FIT011	2	James V. Fitzgerald	-122.51771	37.53154	Replace with site FIT012
ANO030	3	Ano Nuevo	-122.30121	37.11334	
ANO033	3	Ano Nuevo	-122.29881	37.11202	
ANO032	3	Ano Nuevo	-122.29764	37.1113	No outfall at these coordinates, replace with ANO001.
ANO034	3	Ano Nuevo	-122.297	37.11084	
ANO035	3	Ano Nuevo	-122.29297	37.10714	
MUG002	4	Laguna Point to Latigo Point	-119.0618833	34.08635	Non-Caltrans discharge, State Park discharge
MUG005	4	Laguna Point to Latigo Point	-119.0382833	34.08393	
MUG009	4	Laguna Point to Latigo Point	-119.0367000	34.08367	No outfall at

SampleID	RWQCB	ASBS Name	Longitude	Latitude	Comment
					these coordinates
MUG007	4	Laguna Point to Latigo Point	-119.0363667	34.08378	Non-Caltrans discharge
MUG008	4	Laguna Point to Latigo Point	-119.0363667	34.08378	
MUG010	4	Laguna Point to Latigo Point	-119.0149833	34.07098	Non-Caltrans discharge
MUG013	4	Laguna Point to Latigo Point	-118.9931667	34.06530	
MUG016	4	Laguna Point to Latigo Point	-118.9869833	34.06287	
MUG017	4	Laguna Point to Latigo Point	-118.9867500	34.06268	
MUG028	4	Laguna Point to Latigo Point	-118.9740500	34.05890	
MUG029	4	Laguna Point to Latigo Point	-118.9730167	34.05835	Outfall remove, drains to MUG028
MUG031	4	Laguna Point to Latigo Point	-118.9683000	34.05622	
MUG041	4	Laguna Point to Latigo Point	-118.9645	34.0534833	
MUG046	4	Laguna Point to Latigo Point	-118.9608500	34.05205	
MUG048	4	Laguna Point to Latigo Point	-118.9594833	34.05172	
MUG049	4	Laguna Point to Latigo Point	-118.9594333	34.05165	
MUG051	4	Laguna Point to Latigo Point	-118.9581000	34.05033	
MUG052	4	Laguna Point to Latigo Point	-118.9574333	34.04982	No outfall at these coordinates
MUG053	4	Laguna Point to Latigo Point	-118.9564500	34.04943	
MUG059	4	Laguna Point to Latigo Point	-118.9514167	34.04738	
MUG058	4	Laguna Point to Latigo Point	-118.9506000	34.04778	
MUG060	4	Laguna Point to Latigo Point	-118.9499000	34.04728	Non-Caltrans discharge
MUG061	4	Laguna Point to Latigo Point	-118.9498500	34.04723	Non-Caltrans discharge
MUG077	4	Laguna Point to Latigo Point	-118.9345833	34.04513	
MUG078	4	Laguna Point to Latigo Point	-118.9341	34.0451333	
MUG070	4	Laguna Point to Latigo Point	-118.9320000	34.04600	
MUG066	4	Laguna Point to Latigo Point	-118.9252333	34.04612	
MUG073	4	Laguna Point to Latigo Point	-118.9236833	34.04577	Non-Caltrans discharge
MUG135	4	Laguna Point to Latigo Point	-118.89858	34.0401	
MUG147	4	Laguna Point to Latigo Point	-118.89558	34.03921	
MUG150	4	Laguna Point to Latigo Point	-118.8919800	34.03906	
MUG187	4	Laguna Point to Latigo Point	-118.87051	34.0369	
SAD0950	4	Laguna Point to Latigo Point	-118.8385500	34.02699	
SAD0960	4	Laguna Point to Latigo Point	-118.8375000	34.02619	
SAD0970	4	Laguna Point to Latigo Point	-118.8364600	34.02535	
SAD0980	4	Laguna Point to Latigo Point	-118.8348600	34.02435	
MUG318	4	Laguna Point to Latigo Point	-118.8342000	34.02389	
SAD0990	4	Laguna Point to Latigo Point	-118.8326600	34.02302	
SAD1000	4	Laguna Point to Latigo Point	-118.8303400	34.02123	

SampleID	RWQCB	ASBS Name	Longitude	Latitude	Comment
MUG355	4	Laguna Point to Latigo Point	-118.8292000	34.02056	
SAD1030	4	Laguna Point to Latigo Point	-118.8263200	34.01810	
SAD1040	4	Laguna Point to Latigo Point	-118.8256600	34.01748	
SAD1050	4	Laguna Point to Latigo Point	-118.8249200	34.01700	
SAD1060	4	Laguna Point to Latigo Point	-118.8225400	34.01559	
MUG347	4	Laguna Point to Latigo Point	-118.7834300	34.02196	
MUG346	4	Laguna Point to Latigo Point	-118.7831400	34.02207	
MUG283	4	Laguna Point to Latigo Point	-118.7658600	34.02550	
IRV020	8	Irvine Coast	-117.8402333	33.5740167	
IRV009	8	Irvine Coast	-117.8312	33.5653	
IRV007	8	Irvine Coast	-117.8281667	33.5645	
IRV003	8	Irvine Coast	-117.823917	33.56195	Abandoned, Replace with Site IRV001.
IRV002	8	Irvine Coast	-117.8221	33.5606	
CAR007	3	Carmel Bay	-121.9247	36.52453	Replace with site CAR007B
CAR006	3	Carmel Bay	-121.92457	36.52469	

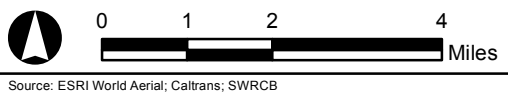
ASBS 8 - Redwood National and State Parks

Legend

-  Areas of Special Biological Significance (ASBS)
-  County Boundary
-  Creek/River
-  Highway
-  Sheet Border



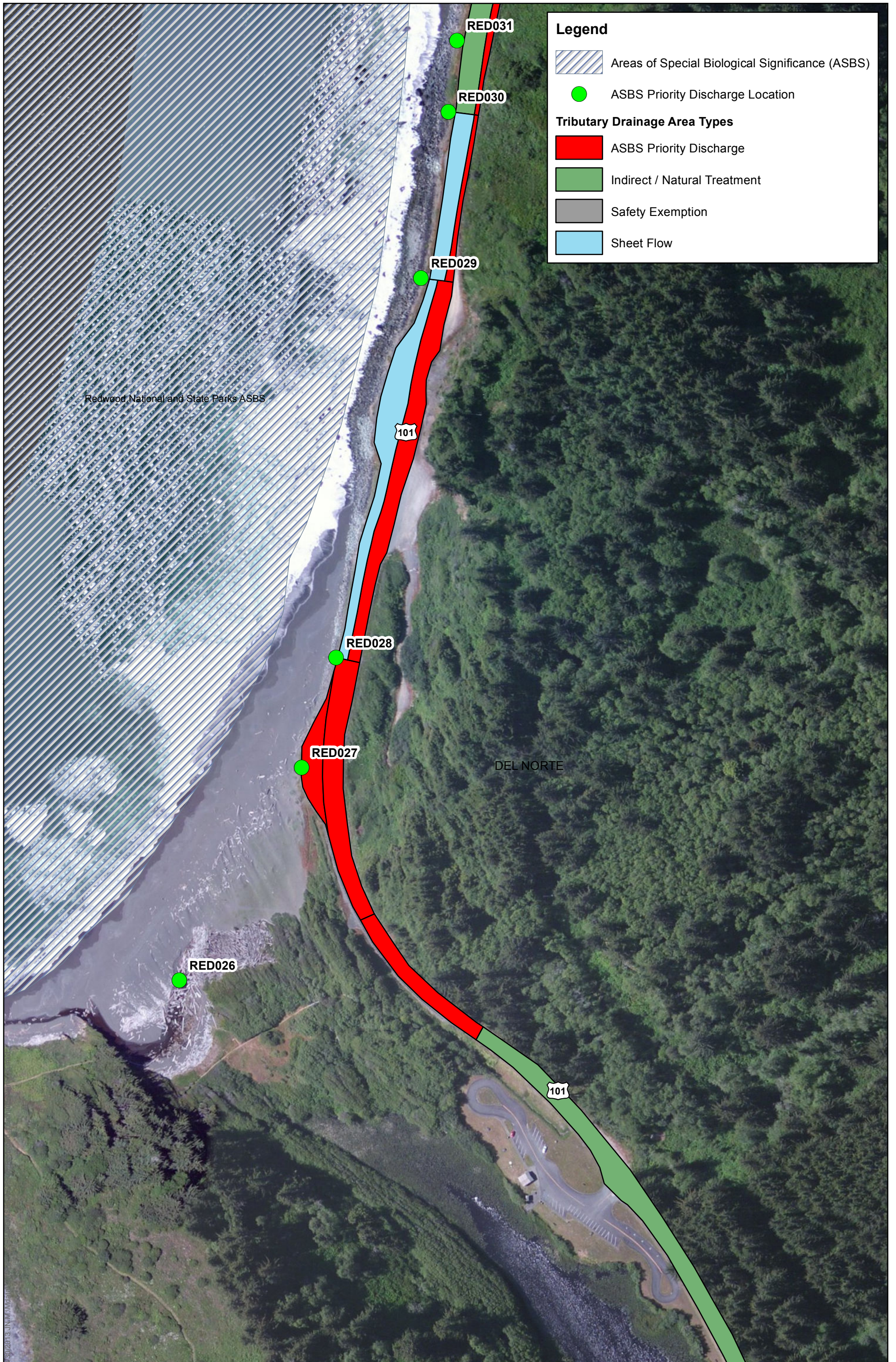
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Source: ESRI World Aerial; Caltrans; SWRCB

ASBS 8 Surface Drainage Map







Source: ESRI World Aerial; Caltrans; SWRCB





ASBS 8 Surface Drainage Map



Legend

-  Areas of Special Biological Significance (ASBS)
-  ASBS Priority Discharge Location

Tributary Drainage Area Types

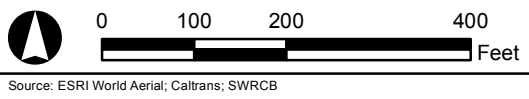
-  ASBS Priority Discharge
-  Indirect / Natural Treatment
-  Safety Exemption
-  Sheet Flow

Redwood National and State Parks ASBS

RED065

HUMBOLDT

101



Source: ESRI World Aerial; Caltrans; SWRCB

ASBS 5 - Kelp Beds at Saunders Reef







ASBS 5 Surface Drainage Map







ASBS 9 - James V Fitzgerald Marine Reserve



Legend

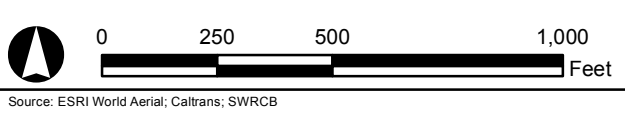
-  Areas of Special Biological Significance (ASBS)
-  ASBS Priority Discharge Location

Tributary Drainage Area Types

-  ASBS Priority Discharge
-  Indirect / Natural Treatment
-  Safety Exemption
-  Sheet Flow

James V Fitzgerald Marine Reserve ASBS

FIT011





Source: ESRI World Aerial; Caltrans; SWRCB





ASBS 15 - Ano Nuevo Point and Island



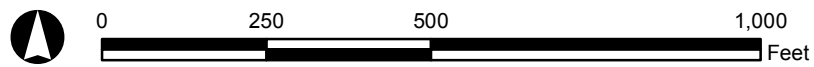
Legend

-  Areas of Special Biological Significance (ASBS)
-  ASBS Priority Discharge Location

Tributary Drainage Area Types

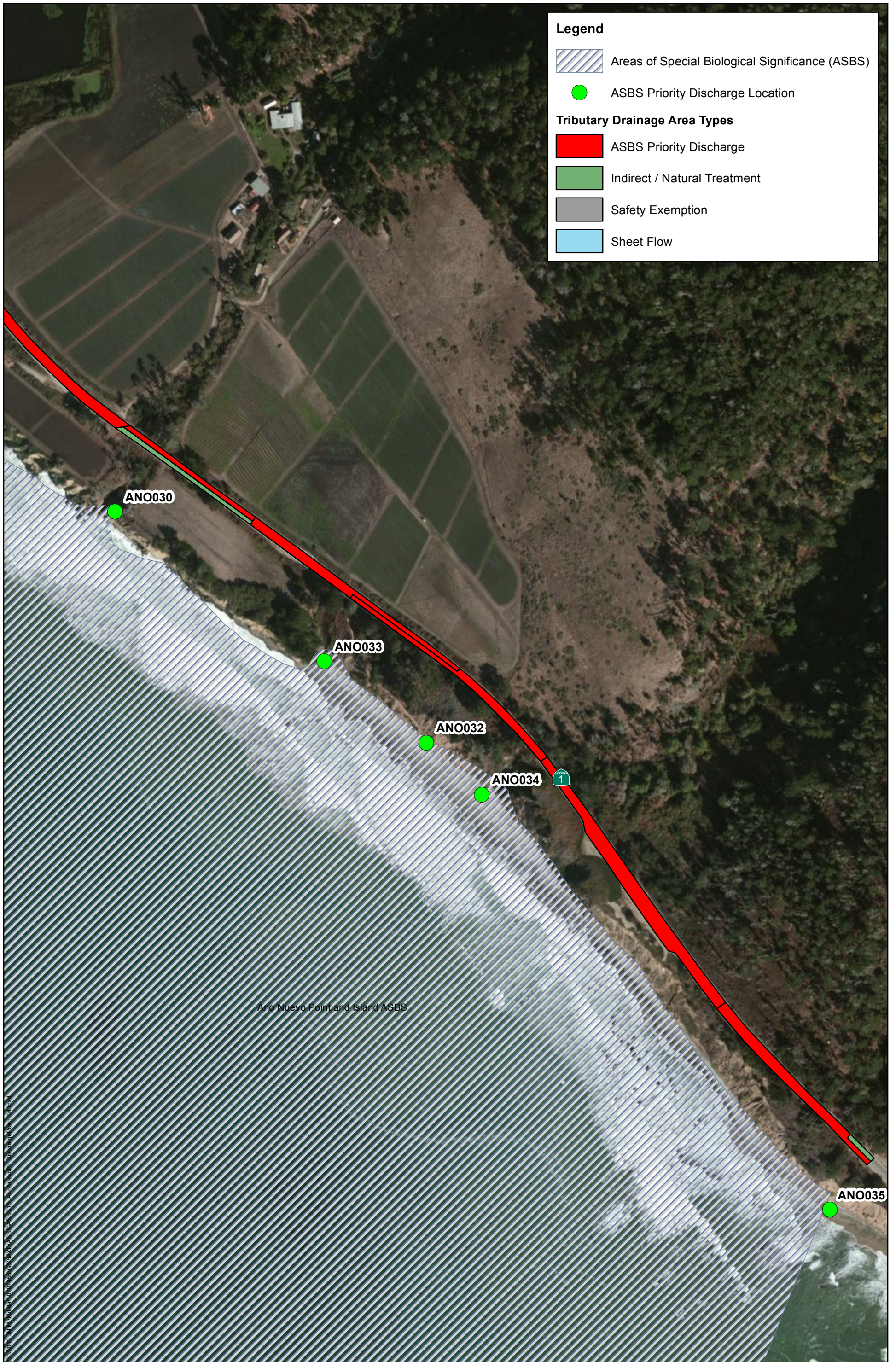
-  ASBS Priority Discharge
-  Indirect / Natural Treatment
-  Safety Exemption
-  Sheet Flow

Ano Nuevo Point and Island ASBS



Source: ESRI World Aerial; Caltrans; SWRCB

ASBS 15 Surface Drainage Map



Source: ESRI World Aerial; Caltrans; SWRCB

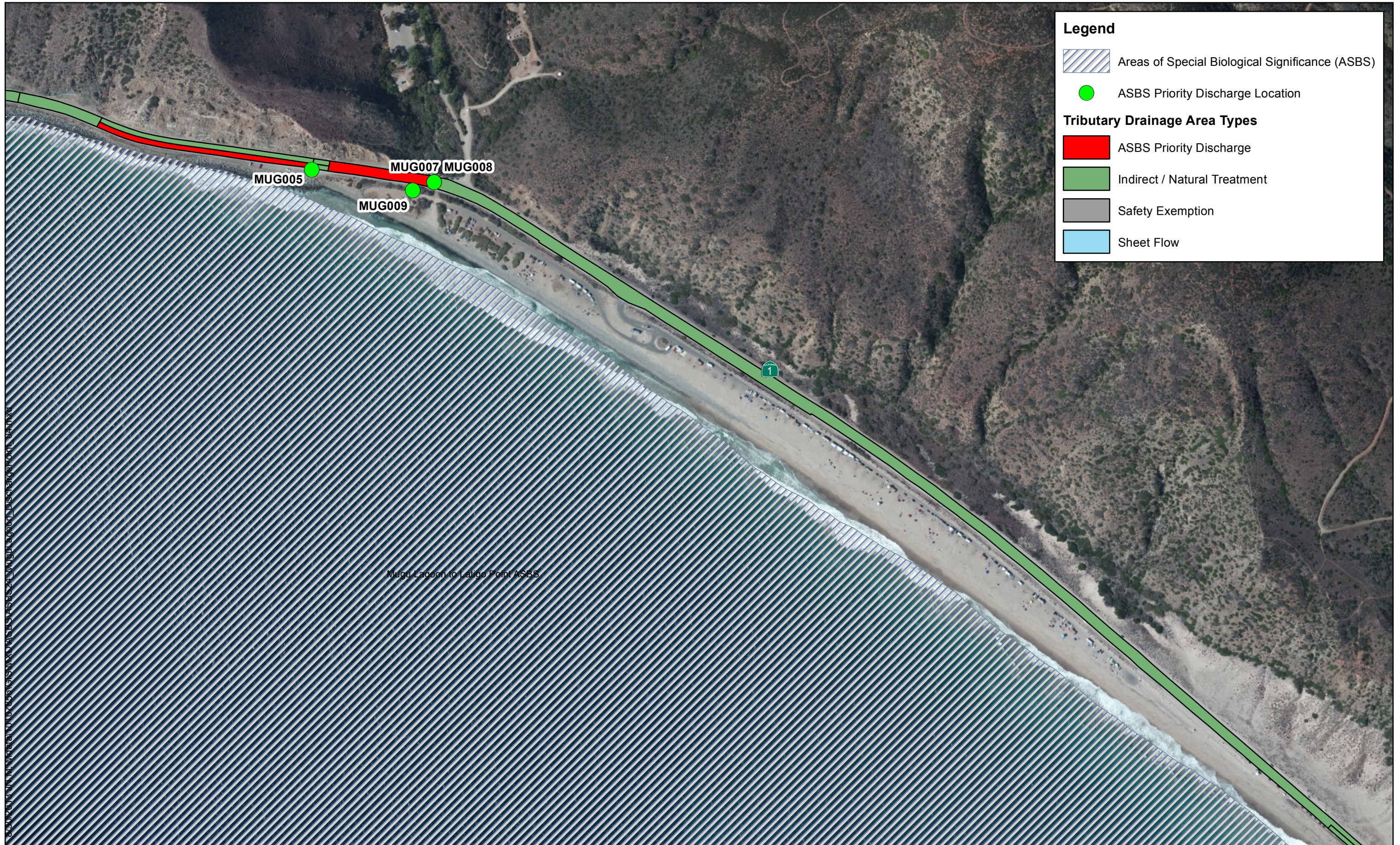
ASBS 15 Surface Drainage Map

ASBS 34 - Carmel Bay





ASBS 24 - Mugu Lagoon to Latigo Point







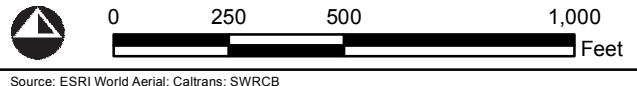


Legend

-  Areas of Special Biological Significance (ASBS)
-  ASBS Priority Discharge Location

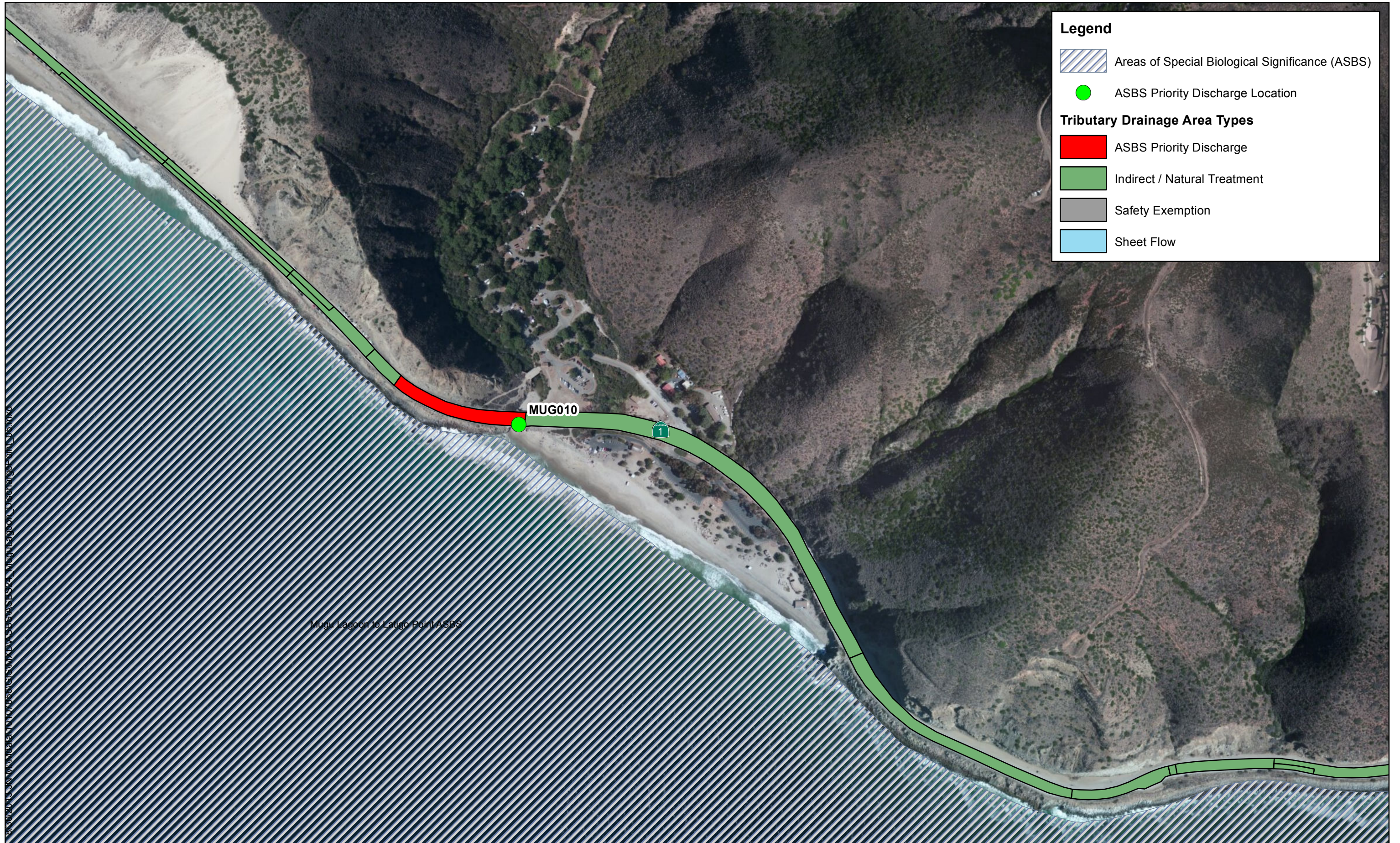
Tributary Drainage Area Types

-  ASBS Priority Discharge
-  Indirect / Natural Treatment
-  Safety Exemption
-  Sheet Flow





Source: ESRI World Aerial; Caltrans; SWRCB





ASBS 24 Surface Drainage Map



Legend

-  Areas of Special Biological Significance (ASBS)
-  ASBS Priority Discharge Location

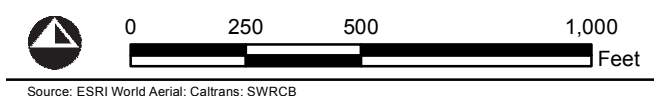
Tributary Drainage Area Types

-  ASBS Priority Discharge
-  Indirect / Natural Treatment
-  Safety Exemption
-  Sheet Flow

Mugu Lagoon to Laigo Point ASBS

MUG010

1





Source: ESRI World Aerial; Caltrans; SWRCB





ASBS 24 Surface Drainage Map



Legend

-  Areas of Special Biological Significance (ASBS)
-  ASBS Priority Discharge Location

Tributary Drainage Area Types

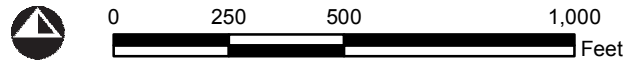
-  ASBS Priority Discharge
-  Indirect / Natural Treatment
-  Safety Exemption
-  Sheet Flow

Mugu Lagoon to Latigo Point ASBS

MUG013

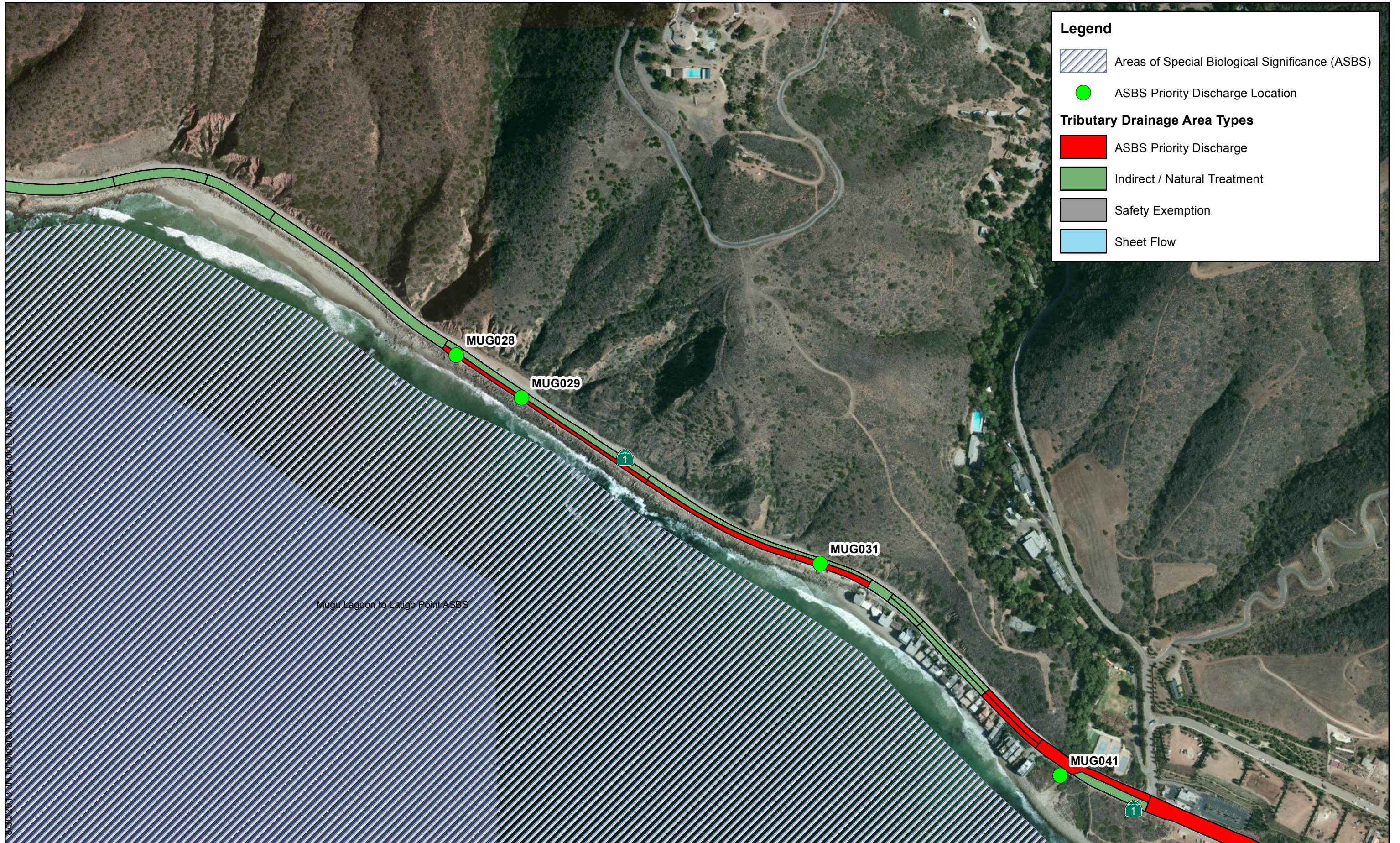
MUG016

MUG017





Source: ESRI World Aerial; Caltrans; SWRCB





ASBS 24 Surface Drainage Map



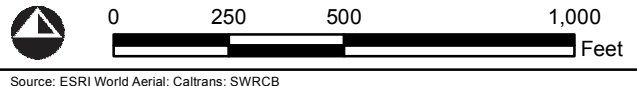
Legend

-  Areas of Special Biological Significance (ASBS)
-  ASBS Priority Discharge Location

Tributary Drainage Area Types

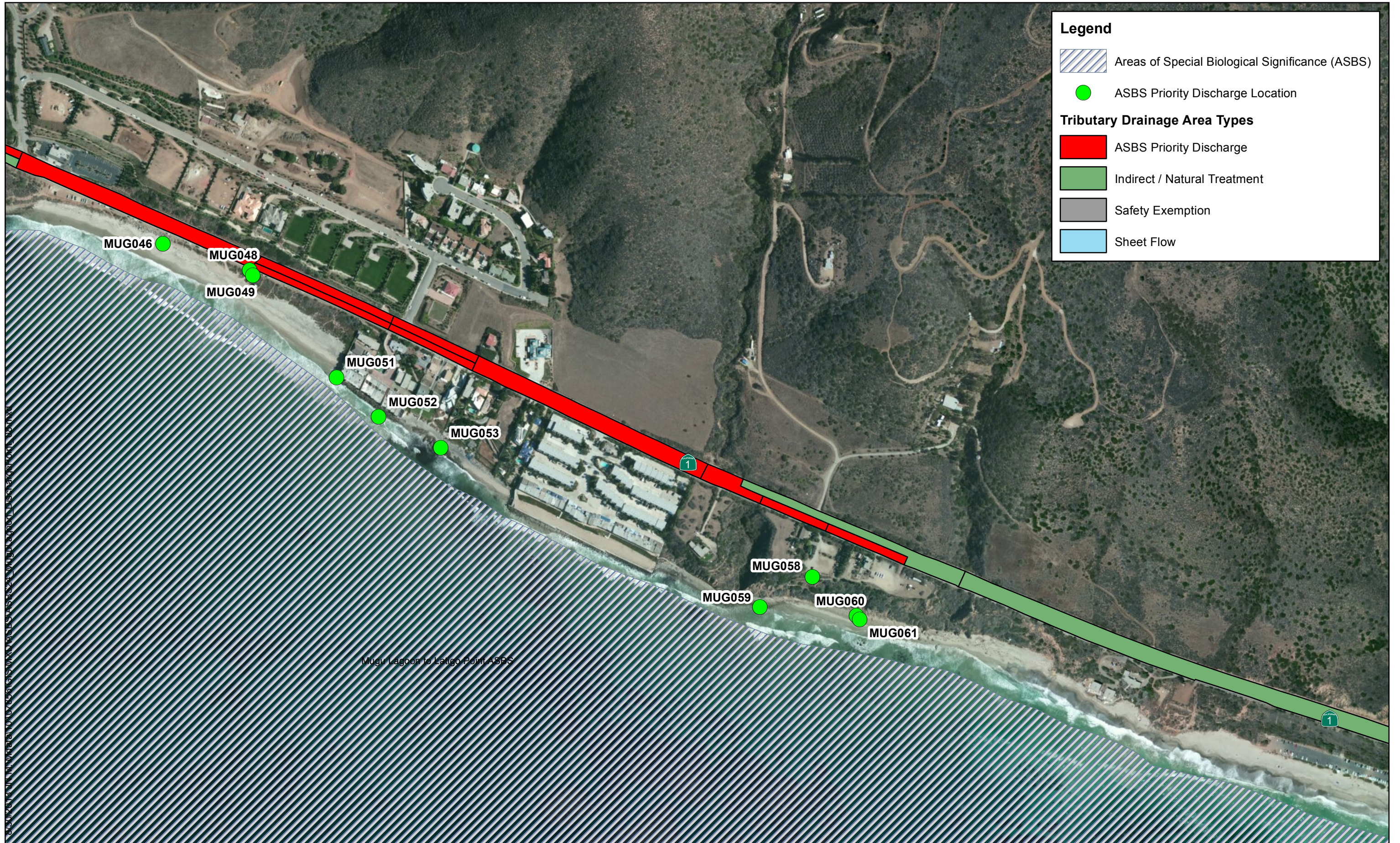
-  ASBS Priority Discharge
-  Indirect / Natural Treatment
-  Safety Exemption
-  Sheet Flow

G:\30\2013\IN\Mapdata\10107656\GIS\MXD\ASBS\ASBS24_MuguLagoon_DischargePoint_07.mxd





Source: ESRI World Aerial; Caltrans; SWRCB





ASBS 24 Surface Drainage Map

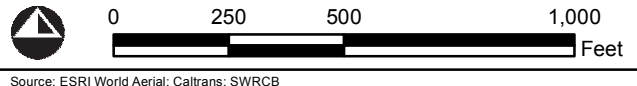


Legend

-  Areas of Special Biological Significance (ASBS)
-  ASBS Priority Discharge Location

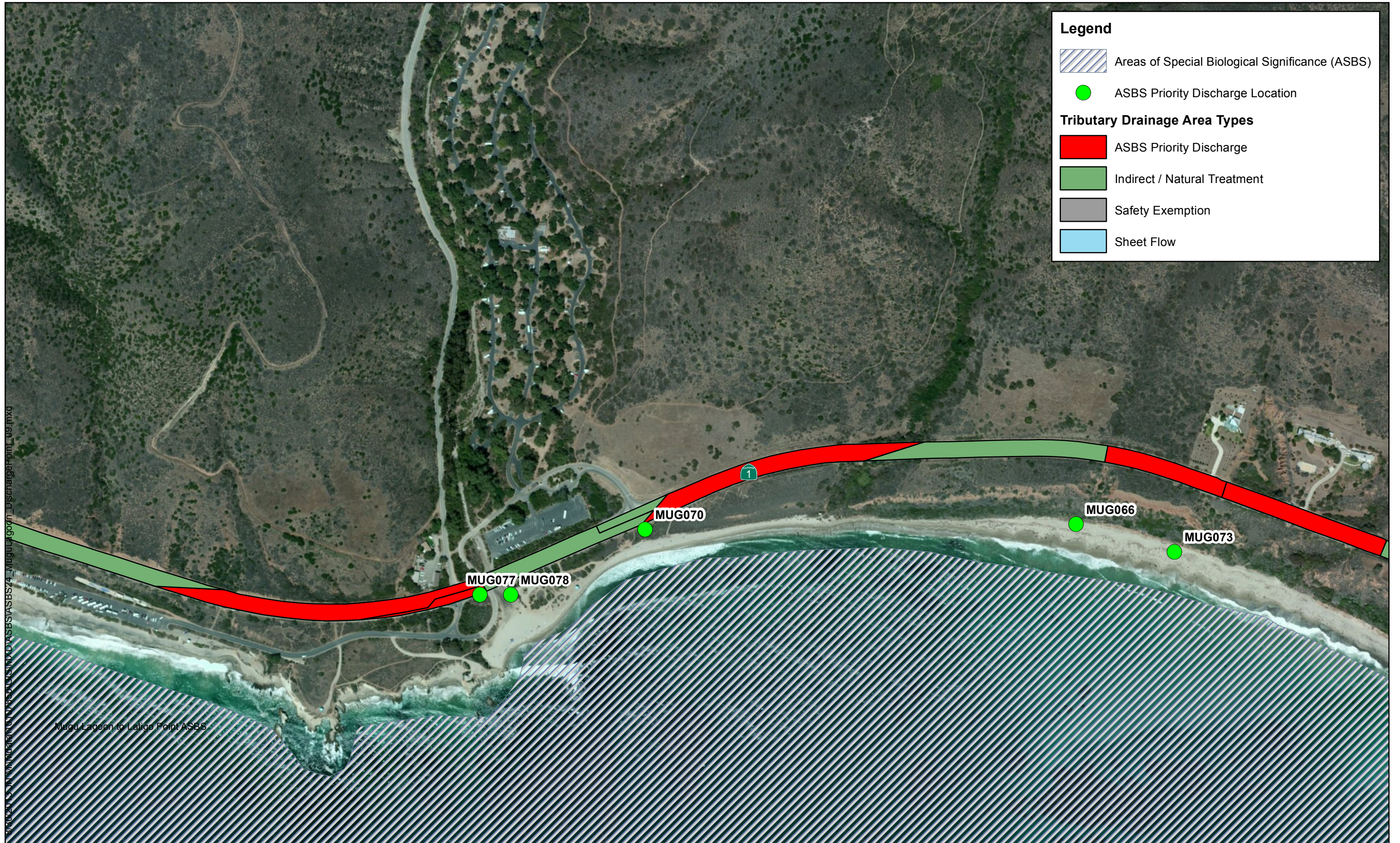
Tributary Drainage Area Types

-  ASBS Priority Discharge
-  Indirect / Natural Treatment
-  Safety Exemption
-  Sheet Flow





Source: ESRI World Aerial; Caltrans; SWRCB





ASBS 24 Surface Drainage Map



Legend

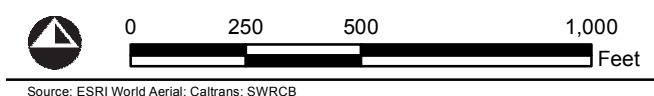
-  Areas of Special Biological Significance (ASBS)
-  ASBS Priority Discharge Location

Tributary Drainage Area Types

-  ASBS Priority Discharge
-  Indirect / Natural Treatment
-  Safety Exemption
-  Sheet Flow

9/20/2015 10:00 AM C:\Users\jmoore\Documents\ASBS\ASBS24_MUG\ASBS24_MUG_Lagoon_DischargePoint_09.mxd

Mud Lagoon to Lajita Point ASBS





Source: ESRI World Aerial; Caltrans; SWRCB

ASBS 24 Surface Drainage Map









Legend

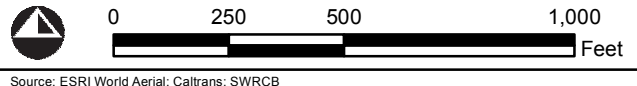
-  Areas of Special Biological Significance (ASBS)
-  ASBS Priority Discharge Location

Tributary Drainage Area Types

-  ASBS Priority Discharge
-  Indirect / Natural Treatment
-  Safety Exemption
-  Sheet Flow

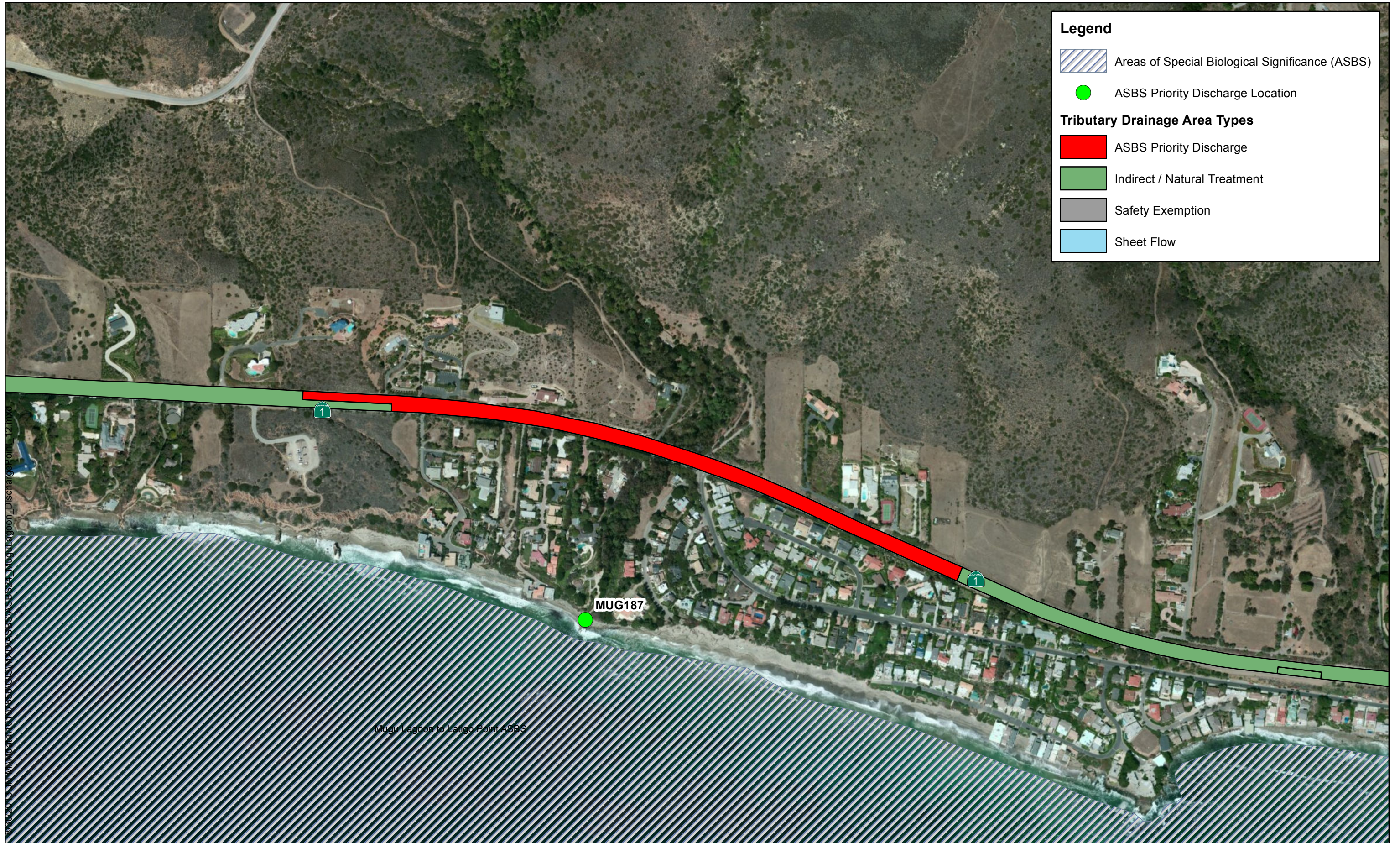
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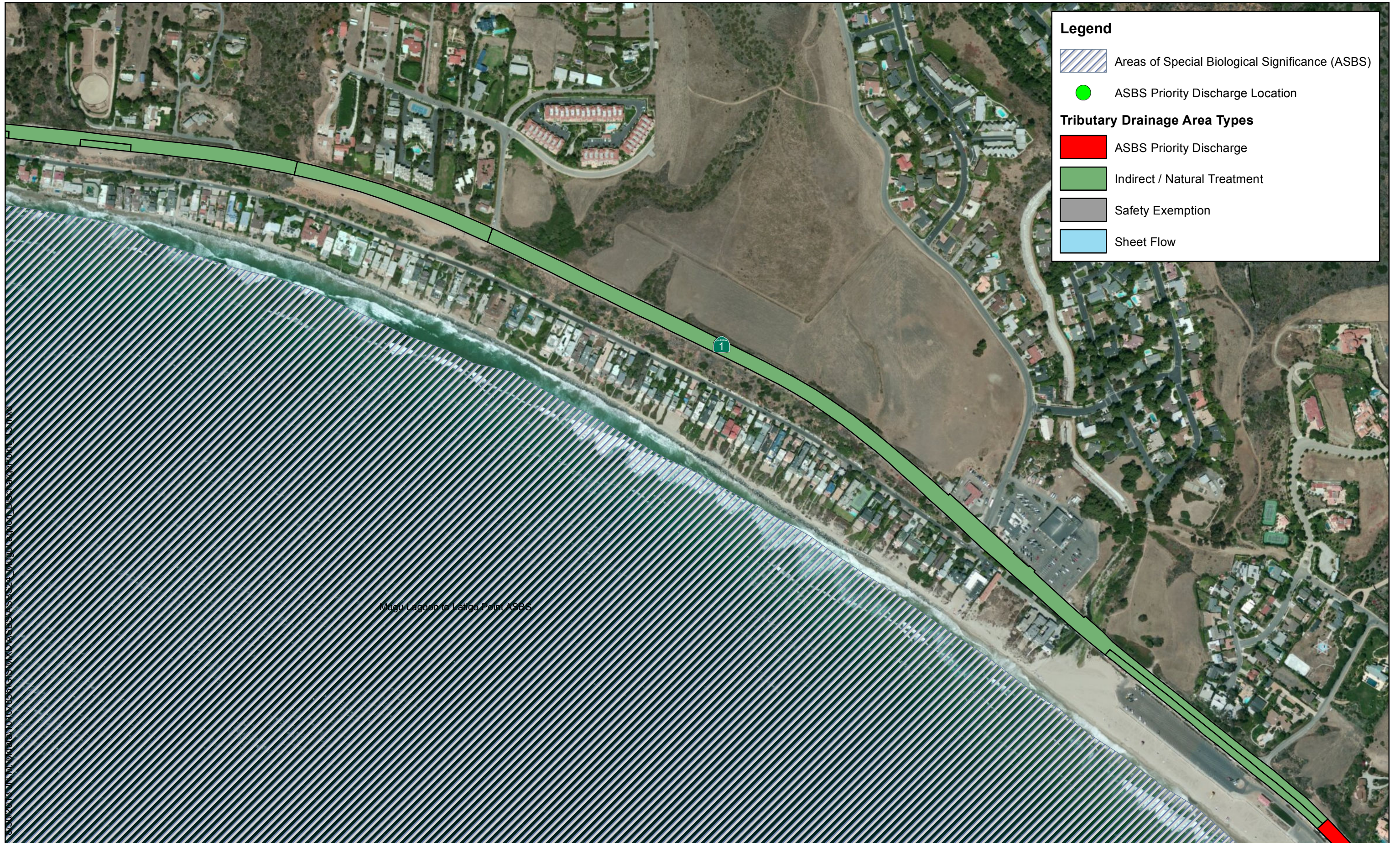
Mugu Lagoon to Latigo Point ASBS





Source: ESRI World Aerial; Caltrans; SWRCB

ASBS 24 Surface Drainage Map









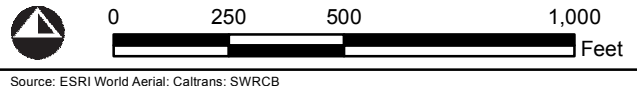
Legend

-  Areas of Special Biological Significance (ASBS)
-  ASBS Priority Discharge Location

Tributary Drainage Area Types

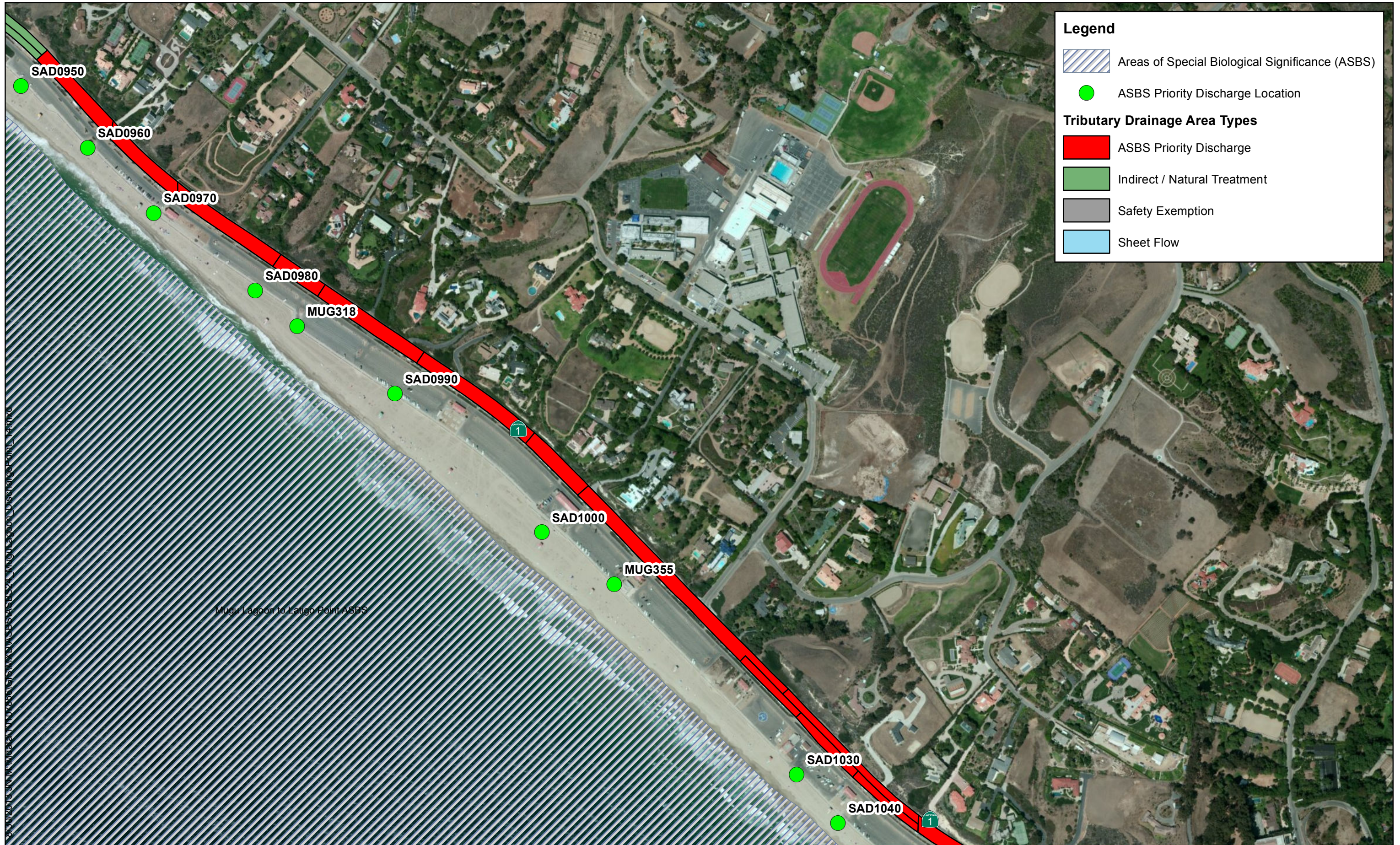
-  ASBS Priority Discharge
-  Indirect / Natural Treatment
-  Safety Exemption
-  Sheet Flow

Mugu Lagoon to Lakoo Point ASBS





Source: ESRI World Aerial; Caltrans; SWRCB

ASBS 24 Surface Drainage Map







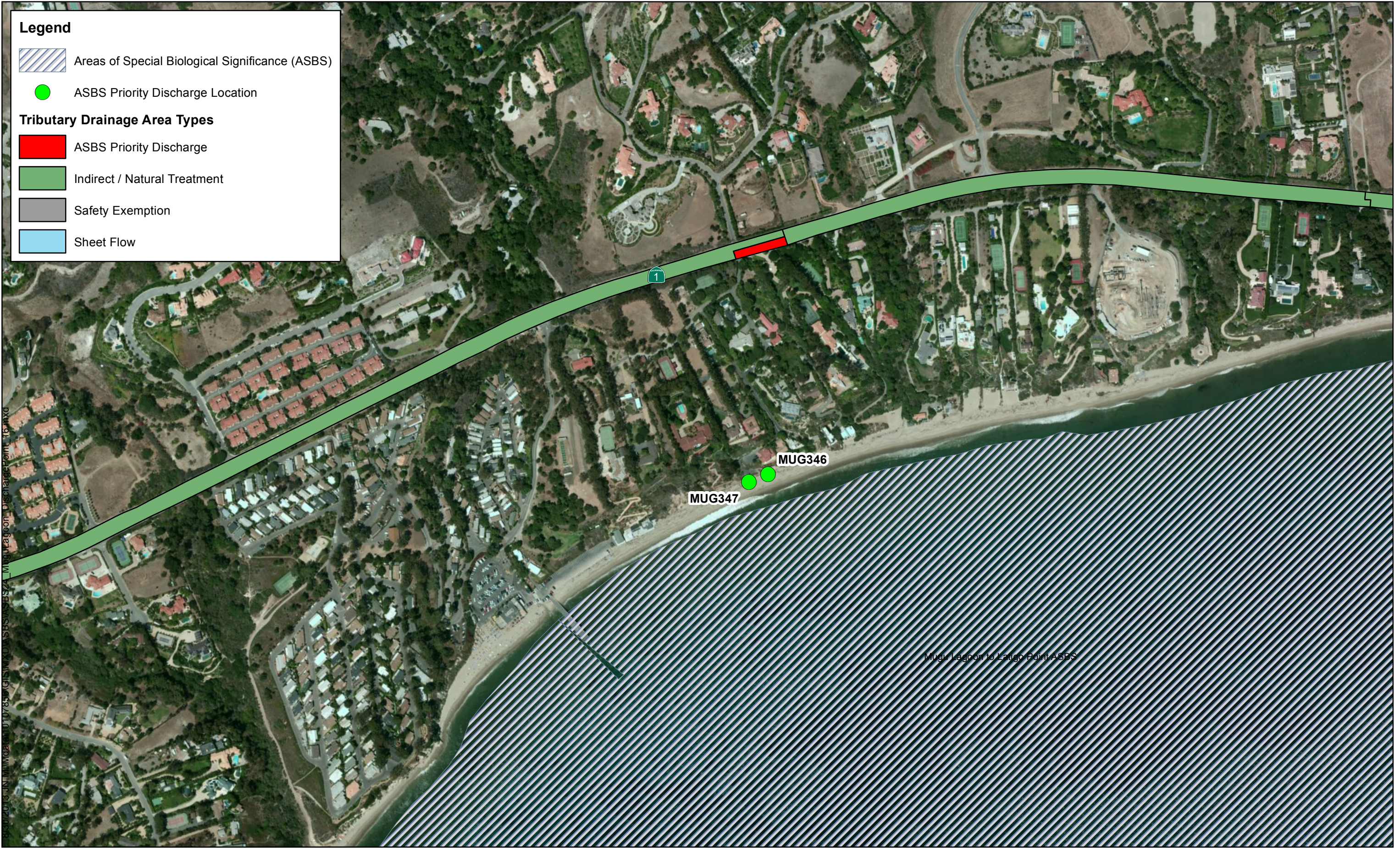


Legend



-  Areas of Special Biological Significance (ASBS)
-  ASBS Priority Discharge Location

Tributary Drainage Area Types





-  ASBS Priority Discharge
-  Indirect / Natural Treatment
-  Safety Exemption
-  Sheet Flow



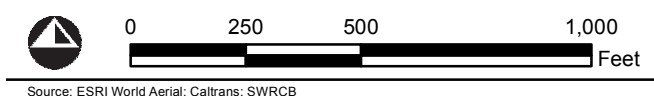
Legend

-  Areas of Special Biological Significance (ASBS)
-  ASBS Priority Discharge Location

Tributary Drainage Area Types

-  ASBS Priority Discharge
-  Indirect / Natural Treatment
-  Safety Exemption
-  Sheet Flow

8/20/2013 11:11 AM \\data\107656\GIS\SW\XVA\ASBS\ASBS24_MuguLagoon_DischargePoint_16.mxd




Source: ESRI World Aerial; Caltrans; SWRCB

ASBS 24 Surface Drainage Map





Legend

 Areas of Special Biological Significance (ASBS)


 ASBS Priority Discharge Location

Tributary Drainage Area Types

 ASBS Priority Discharge

 Indirect / Natural Treatment

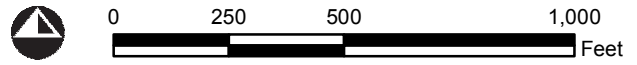
 Safety Exemption

 Sheet Flow

MUG283

Mud Lagoon to Lajita Point ASBS

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Source: ESRI World Aerial; Caltrans; SWRCB

ASBS 24 Surface Drainage Map

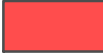



ASBS 33 - Irvine Coast Marine Life Refuge



Legend

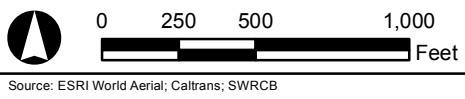
-  Areas of Special Biological Significance (ASBS)
-  ASBS Priority Discharge Location
-  Structural TBMP

Tributary Drainage Area Types

-  ASBS Priority Discharge
-  Indirect / Natural Treatment
-  Safety Exemption
-  Sheet Flow

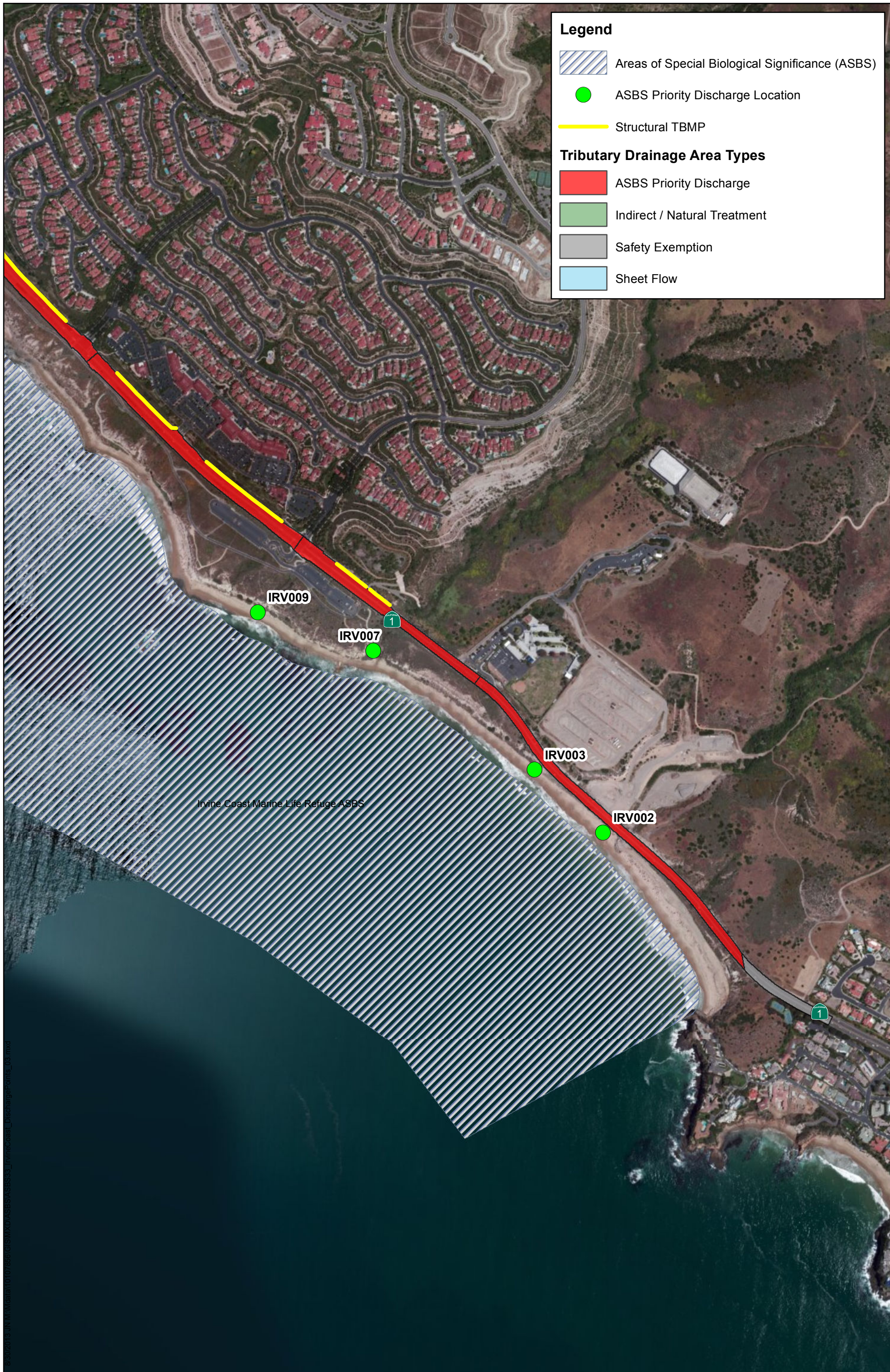
Irvine Coast Marine Life Refuge ASBS

IRV020






Source: ESRI World Aerial; Caltrans; SWRCB

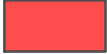



ASBS 33 Surface Drainage Map



Legend

-  Areas of Special Biological Significance (ASBS)
-  ASBS Priority Discharge Location
-  Structural TBMP

Tributary Drainage Area Types

-  ASBS Priority Discharge
-  Indirect / Natural Treatment
-  Safety Exemption
-  Sheet Flow

Irvine Coast Marine Life Refuge ASBS

IRV009

IRV007

IRV003

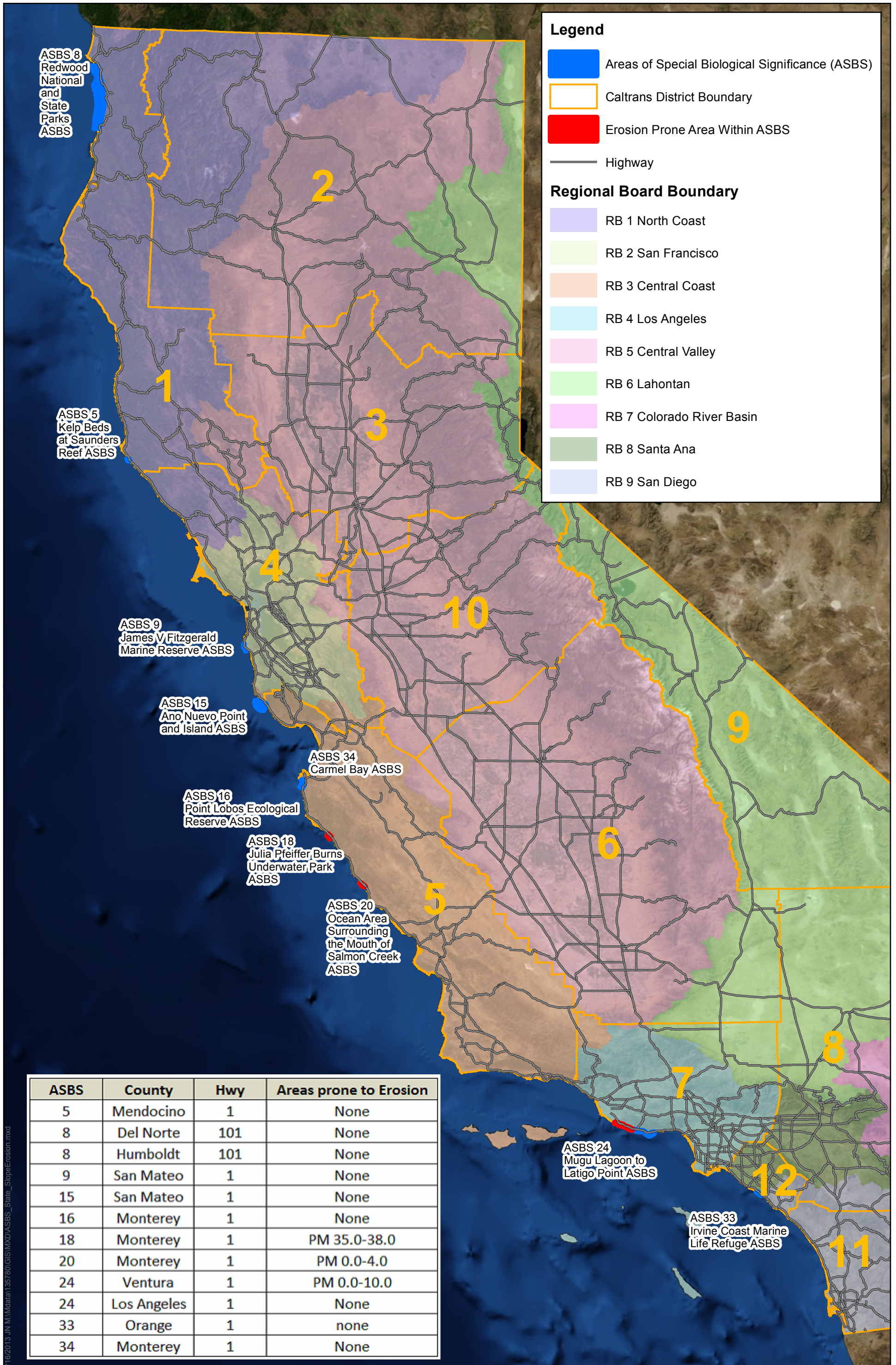
IRV002



Source: ESRI World Aerial; Caltrans; SWRCB

ASBS 33 Surface Drainage Map

Appendix B: Erosion Prone Area Map



Legend

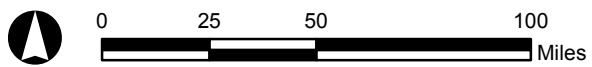
- Areas of Special Biological Significance (ASBS)
- Caltrans District Boundary
- Erosion Prone Area Within ASBS
- Highway

Regional Board Boundary

- RB 1 North Coast
- RB 2 San Francisco
- RB 3 Central Coast
- RB 4 Los Angeles
- RB 5 Central Valley
- RB 6 Lahontan
- RB 7 Colorado River Basin
- RB 8 Santa Ana
- RB 9 San Diego

ASBS	County	Hwy	Areas prone to Erosion
5	Mendocino	1	None
8	Del Norte	101	None
8	Humboldt	101	None
9	San Mateo	1	None
15	San Mateo	1	None
16	Monterey	1	None
18	Monterey	1	PM 35.0-38.0
20	Monterey	1	PM 0.0-4.0
24	Ventura	1	PM 0.0-10.0
24	Los Angeles	1	None
33	Orange	1	none
34	Monterey	1	None

9/16/2013 JN M:\Mdata\136780\GIS\MXD\ASBS_State_SlopeErosion.mxd



Source: ESRI World Aerial; Caltrans; SWRCB

ASBS Erosion Prone Areas