FINAL REPORT

Santa Monica Bay Trash TMDL

Annual Monitoring Report – 2016

Los Angeles County
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Table of Contents

Section 1 Introduction 1-1
1.1 TMDL Background 1-1
1.2 Objectives 1-1
Section 2 Summary of Non-Point Source Monitoring 2-1
2.1 Monitoring Locations 2-1
2.2 MFAC Assessments 2-3
2.2 Source Area Evaluations 2-4
Section 3 Non-Point Source Compliance Assessment 3-1
3.1 MFAC Assessments 3-1
3.2 Source Area Evaluations 3-2
3.3 Program Effectiveness 3-5
Section 4 Summary of Point Source Implementation 4-1
Section 5 Summary of Plastic Pellet Monitoring 5-1
5.1 Plastic Pellet Definition 5-1
5.2 PMRP Requirements 5-1
5.3 Monitoring Locations 5-2
5.4 Spill Response Plan 5-3
Section 6 Proposed Changes 6-1

List of Figures

Figure 2-1 MFAC Assessment and Source Area Evaluation Monitoring Sites 2-2
Figure 6-1 Proposed New Nicholas Canyon Beach MFAC Assessment Site 6-1

List of Tables

Table 2-1 MFAC Assessment Sites 2-3
Table 2-2 Source Area Evaluation Sites 2-5
Table 3-1 Trash Rates at MFAC Assessment Sites 3-1
Table 3-2 Trash Generation Rates at Source Area Evaluation Sites 3-4
Table 5-1 PMRP Inspection Results 5-3

Appendices

Appendix A Field Monitoring Logs
Appendix B Field Data
Appendix C Site Maps and Monitoring Photos
Appendix D Plastic Pellet Inspection Logs

Section 1
Introduction

1.1 TMDL Background

Santa Monica Bay (SMB) nearshore and offshore has a history of being impacted by trash and other debris. As a result, the Environmental Protection Agency (EPA) 303(d) has included the SMB on its list of impaired waters in 1998, 2002, and 2006. Marine debris not only negatively impacts habitats and environments for aquatic life, but it can also harbor bacteria and viruses that may impact human health through exposure when visiting the beaches, harbors and parks. The SMB Nearshore and Offshore Debris Total Maximum Daily Load (Trash TMDL) was developed by the California Regional Water Quality Control Board (RWQCB) and adopted by the State Water Resources Control Board (SWRCB) to manage this debris and reduce the impact. Effective March 20, 2012, the Trash TMDL specifies a numeric target of zero for both trash and plastics resulting from point and non-point sources to be achieved by 2017. Zero trash and plastics are defined by the Trash TMDL as follows[1]:

- Trash from point sources: "No trash discharged into waterbodies within the Santa Monica Bay Watershed and into Santa Monica Bay or on the shoreline of Santa Monica Bay."
- Trash from non-point sources: "No trash on the shoreline or beaches, or in harbors adjacent to Santa Monica Bay, immediately following each assessment and collection event consistent with an established Minimum Frequency of Assessment and Collection Program (MFAC Program)."
- Plastics from point sources: "No plastic pellets discharged from the premises of industrial facilities that import, manufacture, process, transport, store, recycle or otherwise handle plastic pellets."

The Trash TMDL requires implementation of best management practices (BMPs) to capture and reduce trash in the SMB, as well as, monitoring to quantify the amount of trash in the SMB and assess whether numeric targets are being met. Monitoring requirements are detailed in the *Santa Monica Bay Watershed (SMB) Trash Monitoring and Reporting Plan (TMRP) - Final* (September 2012), developed by Los Angeles County Department of Public Works (LACDPW) for this TMDL.

1.2 Objectives

The objectives of the 2016 Annual Monitoring Report are:

- Summarize point source and non-point source control efforts
- Describe non-point source monitoring activities per MFAC/BMP Program requirements,

[1] SMB Trash TMDL

- Establish site-specific load allocations (LA),
- Evaluate compliance with the following Trash TMDL metrics:
  - Beaches and Harbors: 113,150 pounds per mile per year (310 lbs/mi/day)
  - Parks: 162,468 pounds per square mile per year (640 gal/mi^2/year)
- Provide recommendations for future Trash TMDL implementation efforts.

Section 2

Summary of Non-Point Source Monitoring

The Minimum Frequency of Assessment and Collection/Best Management Practice (MFAC/BMP) Program is implemented to manage non-point sources, as described in the Trash TMDL. The MFAC/BMP Program includes the following components[2]:

- "An initial minimum frequency of trash assessment and collection that includes collection and disposal of all trash found in the source areas and along the shoreline." Source areas include beaches, harbors, and non-beach open-space (parks). Monitoring will be conducted to provide site-specific trash generation rates.
- Implementation of a "suite of structural and/or non-structural BMPs"

Per the Trash Monitoring and Reporting Plan (TMRP) developed in accordance with Trash TMDL requirements, MFAC Assessments and Source Area Evaluations were conducted. The non-point source area monitoring approach was based on the approach outlined in the TMRP.

MFAC Assessments are conducted one time per year. Field staff visually survey a defined area after daily beach cleanups and collect all remaining trash. The remaining trash can include food waste, plastic, and cigarette butts.

Source Area Evaluations are conducted twice a year. Field staff visually survey a defined area that has been identified as a potential source of trash. The surveys are conducted four hours after cleanups on average and any trash present at the sites is collected.

2.1 Monitoring Locations

Non-point source monitoring sites were selected in land areas that may be generating or contributing trash to the SMB. MFAC monitoring sites are limited to areas owned and operated by the County of Los Angeles (County). State beaches, privately owned areas, and beaches belonging to other jurisdictions were not included as part of this project. Source Area Evaluation monitoring sites are limited to areas that can be contributing trash to beaches owned and operated by the County.[3] Twelve MFAC Assessment and eleven Source Area Evaluation sites in County nonpoint source areas were selected as part of the TMRP. These 23 sites are shown in Figure 2-1, with aerial maps included in Appendix C.

[2] Resolution No. R10-010

[3] The Latigo Shores Beach source area evaluation site is owned and maintained by Caltrans but may be a source of trash to Latigo Shores Beach, which is owned and operated by the County.

Figure 2-1 MFAC Assessment and Source Area Evaluation Monitoring Sites

The length of each monitoring section was 100 feet including curves to reflect actual site conditions (e.g., shorelines are not straight lines). The width of each monitoring site varied based on site conditions as follows:

- MFAC Assessment Sites
  - Beaches: The width of the monitoring area is the distance between the "current visible high-water line or beach crest and the lowest level to which the water recedes."[4] For the purposes of this project, the high-water line or high tide line is defined as the location where loose sand transitions into smooth, compacted sand at the beach crest.
  - Harbor: The width of the monitoring area is limited to the water areas that extend five feet to each side of the dock.

[4] TMRP

- Park: The width of the monitoring area is limited to five feet and "represents the areas within which trash can be carried to the waterbody by wind or water."[5]
- Source Area Evaluation Sites
- Beaches, Harbor, and Park: The width of the monitoring area does not exceed ten feet and is specified in Trash Monitoring Logs.

Monitoring sites are described in detail in the Monitoring Plan.[6]

2.2 MFAC Assessments

The MFAC Collection and Assessment Program involves daily cleanups conducted by Los Angeles County Department of Beaches and Harbors (DBH) at all MFAC Assessment sites. Following cleanups, the field staff implements the monitoring component of the MFAC Program to evaluate attainment of zero-trash goals. MFAC Assessments are required annually per Trash TMDL requirements and were conducted at the twelve sites, listed in Table 2-1 and shown in Figure 2-1, between September 19 through 22, 2016. During MFAC Assessments, field staff visually assessed the monitoring areas for the presence of trash, recreation activities, wildlife presence, and potential sources of trash. Trash that was present in the defined monitoring area was collected, weighed and documented as general, hazardous, or intractable. Refer to Appendix A for the completed field forms from each monitored site.

Trash found at beach sites were mostly located along the crest line and consisted primarily of food-related items, including straws, plastic wrappers, Styrofoam, food, and water bottles (Appendix C). Other types of trash also include toys, clothes, and cigarettes. Small strings of plastic were often found tied to kelp masses. The monitoring area at Marina Beach included the rip rap along the edge of the beach, which contained relatively high amounts of trash. No trash was found in the water along the boat dock at the harbor sites, while minimal amounts of trash were found in the park sites.

At all sites, potential sources of the trash appear to be associated with the visitors to the beaches, harbors, and parks.

Table 2-1 MFAC Assessment Sites

Site Location	Site ID	Site Description	Site Length (ft)	Average Site Width (ft)
Nicholas Canyon Beach[1]	MFAC1_NIC	Rocky shoreline south of the staircase	50	7.0
Zuma Beach	MFAC2_ZUM	Shoreline north of storm drain marker northwest of Zuma Café	100	33.5
Point Dume Beach	MFAC3_PTD	Shoreline extending south of light post #2 past the parking kiosk, south of lifeguard tower 4	100	19.3

[5] Resolution No. R10-010

[6] Monitoring Plan for SMB Trash TMDL Implementation of the Trash Monitoring and Reporting Plan

Site Location	Site ID	Site Description	Site Length (ft)	Average Site Width (ft)
Dan Blocker Beach	MFAC4_DBL	Shoreline extending east of lifeguard tower 2, from outfall pipe (at given GPS coordinates) to channel outflow underpass/bridge west of lifeguard tower 2	100	14.0
Malibu/Surfrider Beach	MFAC5_MLS	Shoreline extending northeast of the telephone pole north of lifeguard tower 2	100	11.2
Topanga Beach	MFAC6_TOP	Shoreline extending northwest of the west wall of the Lifeguard Headquarters building	100	11.0
Marina Beach	MFAC8_MAR	Shoreline extending northwest of Circulator Dock bordered by riprap	100	17.3
Marina del Rey Harbor	MFAC9_MDR	Water in harbor parallel to floating dock. Width extends 5 ft in the water on both sides of the floating dock.	100	5.0
Burton Chace Park	MFAC10_BCP	Sidewalk along fence line extending west past the restroom	100	10.0
Manhattan Beach	MFAC11_MAN	Shoreline extending north towards lifeguard tower 42	100	24.5
Redondo Beach	MFAC12_RED	Shoreline extending north towards the DBH maintenance yard	100	6.0
Torrance Beach	MFAC13_TOR	Shoreline extending couth towards the cobble area	100	6.9

1 Due to hazardous conditions from rocky terrain and high tides, site length of 100 ft was reduced to what can be safely monitored (50 ft).

2.2 Source Area Evaluations

To estimate trash generation rates, Source Area Evaluations are conducted at locations likely to generate trash that may enter the SMB. The field evaluations are conducted in the afternoon to allow for trash to generate after daily morning cleanups. Source Area Evaluations are required semi-annually per Trash TMDL requirements and were conducted at the eleven sites, listed in Table 2-2 and shown in Figure 2-1, during the weeks of August 22, 2016 and September 26, 2016. Like MFAC Assessments, field staff visually assessed the monitoring areas for the presence of trash, recreation activities, wildlife presence, and potential sources of trash. Trash that was present in the area was collected and weighed and documented as general, hazardous, or intractable. Refer to Appendix A for the completed field forms from each monitored site and survey.

Trash at Source Area beach shoreline sites were similar to MFAC beach sites, with trash located primarily near the high-tide line and consisting of food-related items (Appendix C). The Marina del Rey Harbor Source Area site is similar to the MFAC Marina Beach site in that the monitoring area includes rip rap along the circulation dock. Relatively high amounts of trash were extracted from the rip rap during the first survey. Some Source Area beach sites are in the parking areas instead of shorelines such as Nicholas Canyon Beach, Las Tunas Beach, and Marina Beach. At these sites, trash was located primarily along the edge of the curb and consisted of high amounts

of cigarette butts. Additionally, the Latigo Shores Beach site is a Caltrans roadway for parking, which also had high amounts of cigarette butts as well as broken glass. The one park site, Burton Chace Park, was especially clean during both evaluations with minimal to no trash in the park.

At beach shoreline and park sites, potential sources appear to be associated with the visitors. In parking lots, sources include both beach users as well as picknickers and surfers who stop to look at the surf. At Marina del Rey Harbor, boaters that use the boat slips and launch may also contribute trash. The amount of trash is relatively heavy at Latigo Shores Beach and is likely attributed to both people going to the beach as well as cars littering as they pass by.

Table 2-2 Source Area Evaluation Sites

Site Location	Site ID	Site Description	Site Length (ft)	Average Site Width (ft)
Nicholas Canyon Beach	EVAL1_NIC	Parking lot along curb starting from southeast corner of parking lot	100	10.0
Zuma Beach	EVAL2_ZUM	Shoreline extending north of volleyball courts southeast of Zuma Café	100	56.6
Point Dume Beach	EVAL3_PTD	Shoreline extending south of light post #2 past the parking kiosk, south of lifeguard tower 4	100	44.3
Latigo Shores Beach[1]	EVAL4_LTS	Roadside along PCH parking area, east of intersection of PCH and Latigo Shores Dr.	100	10.0
Las Tunas Beach	EVAL5_LTN	Parking lot extending east of lifeguard tower 1 along the concrete safety barrier	100	10.0
Topanga Beach	EVAL6_TOP	Shoreline extending northwest of the west wall of the Lifeguard Headquarters building	100	46.2
Marina Beach	EVAL8_MAR	Parking lot extending south from the light post at the northeast corner of Parking Lot 10	100	10.0
Marina del Rey Harbor	EVAL9_MDR	Water and rock (rip rap) area in harbor extending south, parallel to Circulator Dock	100	13.5
Burton Chace Park	EVAL10_BCP	Sidewalk along fence line extending west past the restroom	100	5.0
Redondo Beach	EVAL11_RED	Shoreline extending north towards lifeguard tower AVE H	100	28.1
Torrance Beach	EVAL12_TOR	Shoreline extending north towards lifeguard tower HR	100	36.1

1 Per the requirements of the TMRP, this site does not qualify as an Evaluation site as it is not owned by the County and not maintained by DBH. This site was monitored during 2016 but is recommended for removal/relocation for future years.

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Section 3

Non-Point Source Compliance Assessment

Trash collected from each site during MFAC Assessments and Source Area Evaluations was weighed. These weights were compared to Trash TMDL zero-trash targets and metrics to assess compliance.

3.1 MFAC Assessments

The purpose of MFAC Assessments is to evaluate the attainment of zero-trash load allocations after cleanup events. The weights of trash collected in each MFAC monitoring area are divided by site lengths (or site areas in the case of parks) to estimate the unit trash values in pounds per mile (lbs/mi) or pounds per square mile (lbs/mi^2). The weights and unit weights are presented in Table 3-1.

Table 3-1 Trash Rates at MFAC Assessment Sites

Site	Site Type	Collected Trash Weight[1] (lbs)	Unit Trash Amount (lbs/mi)
Nicholas Canyon Beach	Beach (Shoreline)	0.006	0.66
Zuma Beach	Beach (Shoreline)	0.094	5.0
Point Dume Beach	Beach (Shoreline)	0.075	4.0
Dan Blocker Beach	Beach (Parking Lot)	0	0
Malibu/Surfrider Beach	Beach (Shoreline)	0.056	3.0
Topanga Beach	Beach (Shoreline)	0.056	3.0
Marina Beach	Beach (Shoreline)	0.519	27.4
Marina del Rey Harbor	Harbor (Water)	0	0
Burton Chace Park	Park (Sidewalk)	0.025	697 lbs/mi^2
Manhattan Beach	Beach (Shoreline)	1.77	93.4
Redondo Beach	Beach (Shoreline)	< 0.003	0.17
Torrance Beach	Beach (Shoreline)	0.044	2.3

[1] The "<" qualifiers indicate that although trash was collected, the weight of trash was not measurable. If the weight of standard, hazardous, or intractable trash was not measurable, then the "<" qualifier is applied. In these cases, the weight of the trash is assumed to be one-half of the scale's minimum detection limit for calculation purposes.

Site-specific assessments show that cleanup at Dan Blocker Beach and Marina del Rey Harbor achieved zero-trash goals, while beach and park monitoring sites contained minor amounts of trash even after cleanups. The maximum amount of trash collected at one site weighed 0.5 lbs.

The sites with the highest trash amounts included Zuma Beach, Point Dume Beach, Marina Beach, and Manhattan Beach. The source of the relatively high amounts of trash found at Marina Beach is the rip rap section. The rip rap needs to be manually cleaned and, therefore, may not be cleaned as often as the beach. The trash collected at Zuma and Point Dume Beaches were primarily plastic water bottles, while the weight of the trash at Manhattan Beach, which had the highest total weight for all individual assessments, was impacted by a 1.7 lb piece of 2x4 wood block. If the

wood block was excluded from trash collected at Manhattan Beach, the total weight would be 0.069 lbs with a much lower unit trash amount of 3.6 lbs/mi.

3.2 Source Area Evaluations

The purpose of Source Area Evaluations is to estimate trash generation rates to compare these rates against Trash TMDL metrics. The trash generation rates are calculated by dividing the weight of trash collected at each Source Area monitoring area by the site's length (or the site's area in the case of parks) and the time between cleaning and monitoring. Trash generation rates presented in this section represent peak trash generation rates as evaluations only occurred during periods of peak usage (afternoons). To estimate the average daily trash generation rate, Source Area Evaluations should be performed just prior to cleanup activities. Trash collected just prior to cleanup would represent the daily amount of trash generated since the previous day's cleanup, including both peak (daylight) and non-peak (nighttime) periods.

Table 3-2 presents the collected weights, time between the cleaning and the monitoring, and the calculated trash generation rates for both surveys. The generation rates are compared to the following Trash TMDL assessment metrics:

- Beaches and Harbors: 113,150 pounds per mile per year (310 lbs/mi/day)
- Parks: 162,468 pounds per square mile per year (640 gal/mi^2/year)

Shorelines (beaches) generally exhibited compliant trash generation rates. Eight of the nine beach sites had rates below the metric of 113,150 lbs/mi/year during each of the evaluation events. Three sites, Latigo Shores Beach, Marina del Rey Harbor, and Burton Chace Park, exceeded the Trash TMDL metrics during one or both evaluation events. The average trash generation rate at Marina del Rey is 227,000 lbs/mi/yr. This rate appears to be influenced by the amount of trash trapped by the rip rap. Typical machinery used in cleanups cannot be used along the rip rap, which must be manually cleaned. It is likely that the first evaluation event removed trash that might have been trapped in the rip rap for an extended period of time, while less trash was collected in the rip rap during the second evaluation event (2.38 and 0.06 lbs, respectively). Removing trash from the rip rap during the first event resulted in a 97 percent reduction in trash weight during the second event. Although the trash generation rate during the first event at the harbor (440,000 lbs/mi/yr) exceeded the TMDL metric, the generation rate calculated from the trash weight collected during the second survey (13,600 lbs/mi/yr) is less than the TMDL metric and may represent a more realistic generation rate for this site.

Latigo Shores Beach also exhibited a high average trash generation rate of 899,000 lbs/mi/yr. The high levels of trash at this site, a roadway, is likely due to the high volume of cars that drive along Pacific Coast Highway. During the first evaluation event, there was a large piece of mirror in the monitoring area and was estimated to weigh 20 lbs. This piece of mirror skewed the trash generation rate from the first event. Without that piece of mirror, the event 1 trash generation rate would be approximately 251,000 lbs/mi/yr, resulting in an average trash generation rate of 128,000 lbs/mi/yr for that site. Typical trash found at Latigo Shores Beach are cigarette butts, broken glass, and rubber and plastic pieces that could originate from cars. Although Latigo Shores

Beach does not appear to be a highly visited beach, the volume of trash (bottles and food trash) suggests its sources may be from people stopping in the parking area or passing by.

The highest exceedance occurred at Burton Chace Park, which had an average trash generation rate of 2,310,000 lbs/mi^2/yr despite having one of the lowest weight of collected trash. This trash generation rate is more than ten times greater than the park metric of 162,468 lbs/mi^2/yr. The park appears to receive a relatively high number of visitors. In the summers, the park also holds special events such as concerts and plays, which result in particularly high park usage. However, to meet the metric at the 500 ft^2 monitoring area in the park would require the presence of less than 0.001 lbs or 0.02 ounces of trash. This weight may be the equivalent of two or three cigarette butts.

Although the average trash generation rate at Point Dume Beach (109,000 lbs/mi/yr) was below the TMDL metric, the rate during the second evaluation event (175,000 lbs/mi/yr) exceeded the TMDL metric. During the second event, more trash was present in the form of clothing and shoes left behind by visitors to the beach or homeless presence and resulted in the additional weight. Trash was minimal during the first evaluation event as well as the MFAC Assessment.

Table 3-2 Trash Generation Rates at Source Area Evaluation Sites

Site	Site Type	Collected Trash Weight[1] (lbs)		Time Between Cleanup and Evaluation (hrs)		Trash Generation Rate[2] (lbs/mi/yr) or (lbs/mi²/yr)	
		Event 1	Event 2	Event 1	Event 2	Event 1	Event 2
Nicholas Canyon Beach	Beach (Parking Lot)	0.20	0.32	3.2	2.7	29,200	54,600
Zuma Beach	Beach (Shoreline)	< 0.05	0.05	3.8	3.3	< 61,70	7,080
Point Dume Beach	Beach (Shoreline)	0.40	1.58	4.4	4.2	42,500	175,000
Latigo Shores Beach[3]	Beach (Parking Lot)	23.3	0.056	6.0	6.0	1,790,000	4,340
Las Tunas Beach	Beach (Parking Lot)	0.36	0.21	5.8	5.4	28,500	18,100
Topanga Beach	Beach (Shoreline)	0.62	< 0.003	6.3	5.8	45,500	< 248
Marina Beach	Beach (Parking Lot)	0.025	0.044	2.0	2.6	5,880	7,940
Marina del Rey Harbor	Harbor (Shoreline)	2.38	0.064	2.5	2.2	440,000	13,600
Burton Chace Park	Park (Sidewalk)	0.031	< 0.003	3.7	3.1	4,130,000	< 500,000
Redondo Beach	Beach (Shoreline)	0.12	< 0.003	3.1	4.6	18,100	< 317
Torrance Beach	Beach (Shoreline)	0.038	0.27	4.1	3.3	4,250	38,200

[1] The "<" qualifiers indicate that although trash was collected, the weight of trash was not measurable. If the weight of standard, hazardous, or intractable trash was not measurable, then the "<" qualifier is applied. In these cases, the weight of the trash is assumed to be one-half of the scale's detection limit for calculation purposes.
[2] Units for Burton Chace Park are lbs/mi²/yr.
[3] During the first event at Latigo Shores Beach, there was a large piece of mirror at the site with an estimated weight of 20 lbs. If this mirror were excluded, the weight of trash collected at Latigo Shores Beach would be 0.26 lbs and the trash generation rate would be 251,000 lbs/mi/yr.

3.3 Program Effectiveness

The MFAC/BMP Program, comprised of collection and monitoring components, suggests that the MFAC Collection Program is effective at reducing trash in the SMB. Source Area Evaluations showed that trash is generated in a day at most sites. However, through daily cleanups, the amount of trash is significantly reduced. MFAC Assessments indicated that only two sites, Dan Blocker Beach and Marina del Rey Harbor, were compliant with the zero-trash TMDL target during 2016. The presence of trash after cleanups may be partially attributed to the types of trash found at the sites. Trash collected during assessments were generally small in size (e.g., cigarette butts, paper and plastic pieces), which may be difficult to be cleaned by typical cleanup machinery. Additionally, some trash was found associated with kelp masses. For example, trash mixed with kelp cannot be removed during typical cleanups as kelp masses require additional measures prior to cleanup and disposal.

Average trash generation rates from Source Area Evaluations indicated that three of eleven sites did not meet the trash generation TMDL metrics. These sites are Latigo Shores Beach, Marina del Rey Harbor, and Burton Chace Park.

- Marina del Rey Harbor (227,000 lbs/mi/yr) – The trash generation rate at Marina del Rey Harbor was approximately twice as high as the TMDL beach and harbor metric of 113,150 lbs/mi/yr. This was largely due to the higher amount of trash collected (2.38 lbs) during the first evaluation event, as much of the trash collected was lodged in the rip rap along the circulation dock. The trash in the rip rap may have not been removed during regular cleanups due to high tides. The amount of trash during the second evaluation event was much lower (0.064 lbs) at approximately 3 percent of the amount collected during the first evaluation event and resulted in a generation rate below the TMDL metric.. Trash in the rip rap was visibly reduced after the first evaluation event.

- Latigo Shores Beach (899,000 lbs/mi/yr) – The trash generation rate at Latigo Shores Beach was notably higher than the TMDL beach metric. The presence of a large piece of mirror weighing approximately 20 lbs during the first evaluation event resulted in an especially high trash generation rate during the first event (1,790,000 lbs/mi/yr). If the mirror were excluded, the trash generation rate would be reduced by 85 percent to 251,000 lbs/mi/yr. The site is also adjacent to a highly used roadway, Pacific Coast Highway, with cars that could be contributing to the high amount of trash (e.g., cigarette butts, small pieces of rubber and plastic, etc.). Similar to Marina del Rey Harbor, the trash generation rate during the second evaluation event was much lower (13,700 lbs/mi/yr) and within the TMDL metric.

- Burton Chace Park (2,310,000 lbs/mi^2/yr) – The trash generation rate at Burton Chace Park was significantly higher than the TMDL park metric of 168,458 lbs/mi^2/yr. This site is impacted by heavy usage in summer months. However, very little trash needs to be present before the TMDL metric for parks is exceeded and may be as little as two or three cigarette butts.

During the 2016 monitoring period, 80 percent of the Source Area Evaluations are currently meeting the TMDL metrics for the monitoring sites. Additionally, the majority of the sites had

lower trash generation rates during the second evaluation event. Excluding Burton Chace Park, where the TMDL metric only allows for 0.02 ounces of trash before exceedances are observed, only one site exceeded the TMDL metric during the second evaluation event. Based on these results, no new or additional BMPs are recommended for 2017.

Section 4

Summary of Point Source Implementation

The wasteload allocation (WLA) for point sources is zero trash in the SMB. Compliance with the WLA may be achieved through implementation of full capture systems, partial capture systems, and/or institutional controls. Full capture systems must treat a minimum of a peak flow rate from a one-year, one-hour storm and retains particles greater than 5 mm. The County has retrofitted 100 percent of all identified catch basins in the Santa Monica Bay watershed with full capture devices. This includes:

- 716 catch basins within the Los Angeles County unincorporated areas
- 29 catch basins in SMB Jurisdictional Group 2 and 3 watersheds
- 218 catch basins in the Malibu Creek watershed
- 40 catch basins in the North Santa Monica Bay coastal watersheds
- 429 catch basins in the Ballona Creek and Marina del Rey watersheds

Per the TMDL, Los Angeles County is assumed to have achieved 20 percent reduction of trash from Baseline WLA compliance. Installation of full captures systems is not planned for 2017 as 100 percent of identified catch basins have been retrofitted.

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Section 5

Summary of Plastic Pellet Monitoring

The purpose of this section is to detail the results of the Plastic Pellet Monitoring and Reporting Plan (PMRP) per the Santa Monica Bay Nearshore and Offshore Debris Total Maximum Daily Load, effective March 20, 2012. The PMRP covers the entire Santa Monica Bay Watershed Management Area (WMA) including Ballona Creek, Malibu Creek, and the Marina del Rey watersheds.

5.1 Plastic Pellet Definition

For the purposes of the PMRP, a plastic pellet is a piece of pre-production plastic that is typically formed into a spherical or cylindrical shape measuring less than five millimeters in diameter or length. Varying widely in composition, plastic pellets often incorporate different types of plastic as well as colorants and other additives. Plastic pellets are the base material used in manufacturing plastic products.

5.2 PMRP Requirements

For the County, the PMRP requirements apply to areas within County jurisdiction, in particular,

MS4 outfalls connected to sites associated with industrial facilities that are related to the manufacturing, handling, or transportation of plastic pellets. As defined in the TMDL, the WLA for plastic pellets is zero. Facilities associated with plastic pellets include but are not limited to Standard Industry Classification (SIC) codes 282X, 305X, 308X, 39XX, 25XX, 3261, 3357, 373X, and 2893. Additionally, industrial facilities with the term “plastic” in the facility or operator name will be subject to the WLA for plastic pellets. For the County, meeting the WLA will be achieved through implementing the PMRP. For plastic pellet-related facilities within the jurisdiction of the County, meeting the WLA will be achieved through applicable permits and orders. The PMRP is designed to address the following requirements:

- Monitoring the amount of plastic pellets being discharged from the MS4 where relevant industrial facilities are identified
- Establishing triggers for increased industrial facility inspections and enforcement of Stormwater Pollution Prevention Plan (SWPPP) requirements
- Spill Response Plan

In County jurisdictional areas with potential plastic pellet-related industrial facilities, the following proposed procedures will be used for the PMRP plastic pellet monitoring program:

- Inspect the industrial facilities where potential plastic pellet use has been identified

- Monitor the amount of plastic pellets discharged from facility areas draining to the MS4 if plastic pellets are found during an industrial facility inspection. Dispose of any captured plastic pellets in accordance with all applicable laws and regulations.

The County does not use or transport plastic pellets. Entities within County jurisdiction that use plastic pellets are presumed to be subject to the Industrial General Permit (IGP) and required to implement BMPs to prevent the discharge of plastic pellets per their SWPPPs developed specifically to address the pellet use by the entity. Discharge of plastic pellets to the MS4 system would occur through entities in violation of their IGPs or through spill during transport. The County PMRP procedures for meeting the TMDL requirements to identify entities discharging plastic pellets include the following:

1. Conduct industrial facility inspections and if relevant, plastic pellet monitoring
2. In the event of a spill, implement Spill Response Plan and notify the Regional Board within 24 hours of the County, responsible agency, or jurisdiction becoming aware of the spill
3. Submit a monitoring report that provides the following information:
    a. Summary of all industrial facility inspection and monitoring efforts
    b. Results of any plastic pellet monitoring, and whether additional inspections were triggered
    c. Results, including enforcement actions, from additional inspections triggered through monitoring
    d. If necessary, proposed revisions to the PMRP, including:
        i. Inspection triggers
        ii. Monitoring frequency, procedures, or site revisions
        iii. Spill response protocol revisions
        iv. Description of additional MS4 outfalls and/or industrial facilities to be addressed the following year.

The PMRP was developed to prevent and, in the case of a release during transport, oversee the capture of plastic pellets in areas under the County jurisdiction within the Santa Monica Bay WMA. There is no plastic pellet usage by any County facilities.

5.3 Monitoring Locations

The three facilities shown below have been identified in the PMRP to have the potential to manufacture, handle, or transport plastic pellets, however, the County is not aware of any current or recent activities at these facilities involving plastic pellets.

Table 5-1 PMRP Inspection Results

Facility Name	Address	Date of Inspection	Result
Windward Yacht and Repair, Inc.	13645 Fiji Way, Marina del Rey, CA 90202	February 8, 2016	▪ All BMPs in place ▪ No Plastic Pellets found on-site ▪ No planned future use of Plastic Pellets
The Boat Yard	13555 Fiji Way, Marina del Rey, CA 90202	February 8, 2016	▪ All BMPs in place ▪ No Plastic Pellets found on-site ▪ No planned future use of Plastic Pellets
Seamark Marine	13441 Mindanao Way, Marina del Rey, CA 90202	February 8, 2016	▪ All BMPs in place ▪ No Plastic Pellets found on-site ▪ No planned future use of Plastic Pellets

There was no evidence of plastic pellets found at any of the three facilities and all their BMPs were in place and functioning (See Appendix D for inspection report).

Per the PMRP, since there was no evidence of plastic pellet use during the annual inspection and the operator confirmed that there was no plastic pellet use, no future monitoring was conducted during this reporting season at these facilities.

5.4 Spill Response Plan

Accidental spills during transfer and transportation contribute to plastic pellets entering storm drains and, ultimately, the Santa Monica Bay. The PMRP includes protocols for a timely and appropriate response to possible plastic pellet spills within County jurisdiction to address containment of spilled plastic pellets.

During the 2015-2016 reporting year, there were no reports of a plastic pellet spill or illegal dumping/discharge incidents within the County jurisdiction in the Santa Monica Bay.

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Section 6
Proposed Changes

Based on the first year of monitoring and Trash TMDL specifications, the following changes are recommended:

- Relocate Nicholas Canyon Beach MFAC site – The site cannot be accessed as the roadway is washed out and high tides prevent safe access along the beach. The high tides and strong surf also causes unsafe conditions for visitors, DBH staff, and field staff. An alternate beach site would be more valuable for assessments.
    - The proposed replacement MFAC site is located at 34°02'33.0"N, 118°54'58.0"W, where the site will extend 100 feet north of the beach access stairwell (Figure 6-1). This site can only be accessed during low tide and should only be monitored under safe conditions.

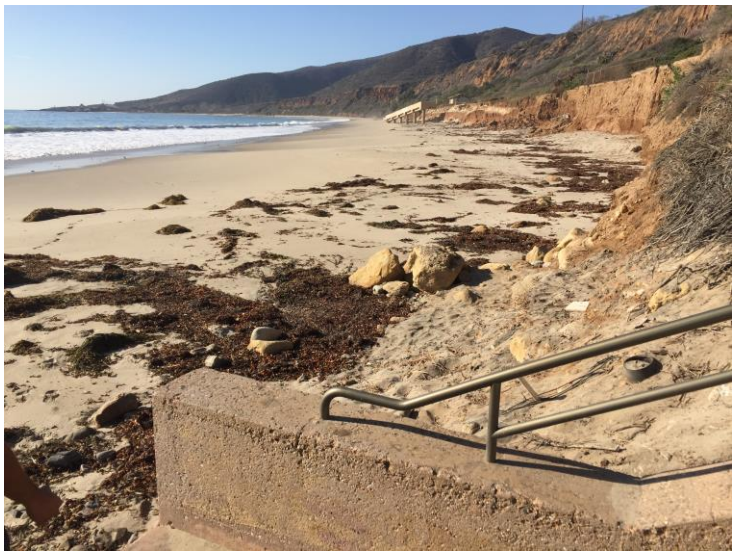


Figure 6-1 Proposed New Nicholas Canyon Beach MFAC Assessment Site

- Remove Latigo Shores Source Area Evaluation site – The current Latigo Shores site is the roadway along Pacific Coast Highway, which is owned, operated and maintained by Caltrans. As the beach is located at the base of a bluff, there is currently no safe access to Latigo Shores Beach. There is no County-maintained access to Latigo Shores Beach from the roadway and there are no future plans to install access to this beach. Although there is access through privately-owned stairwells, this is located approximately 500 feet northeast of the site and can only be safely accessed during low tide. As such, Latigo Shores Beach is considered unsafe and inaccessible for the purposes of the TMRP.

- The value of the TMDL trash generation metric for parks needs to be re-visited with the Regional Board. The existing metric appears to provide very little flexibility. Several cigarette butts found in the 500 ft^2 monitoring area may be all is necessary to exceed the metric.

- The timing of the Source Area Evaluation monitoring should be re-visited. Right now, the monitoring occurs in the afternoon. The period between cleanup and monitoring probably represents the peak time for public usage of the beaches, marinas and parks. The resulting trash generation during this period represents the peak generation rates for the day. If the monitoring occurred in the early morning prior to the daily cleaning, the resulting rate would represent the average daily rate over a 24-hour period from the previous day's cleaning that includes both the peak and non-peak usage periods.

Appendix A

Field Monitoring Logs

TRASH MONITORING WORKSHEET

General Information

Date/Time of Arrival (24 hr clock): 09/19/2016 12:00

Monitoring Type (circle one): MFAC Assessment / Source Area Evaluation

Location Name: Nicholas Canyon Beach Location ID: MFAC1_NIC

Location Type (circle one): Beach / Harbor / Park

Field Crew Names: TL / JR

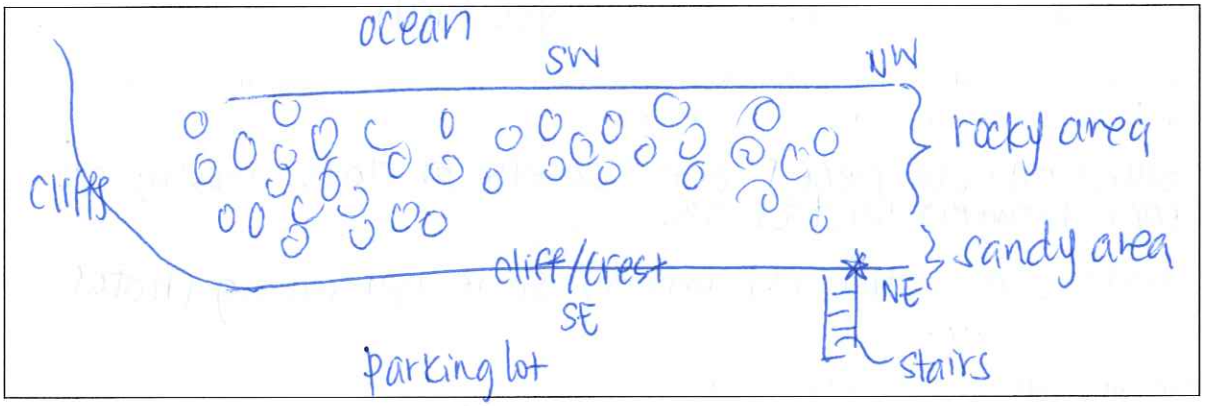
Site Information

GPS Coordinates: NW 34°02.580' -118°54.965' NE 34°02.549' -118°54.964'

SW 34°02.542' -118°54.959' SE 34°02.543' -118°54.958'

☆ Reference Point edge of stairs

Sketch of Site: (label directions – eg north, shoreline, docks, major streets, reference point, etc.)



Site Description: (reference point, street names, other structures, homeless presence, recreation presence, etc.)

Reference: N edge of bottom of stairs. no homeless. 1 RV & 1 van camper. ~ 8 ppl in parking lot. all surfers/campers.

TRASH MONITORING WORKSHEET

Monitoring Information

Event Start Time: 12:22 Event Stop Time: 12:28

Time Spent Monitoring

Total (Stop – Start): 6 min

Cumulative (Total Time * # of Crew Members): 12 min

Weight of Trash (lbs to one decimal point): empty bag: 0.1 oz

Standard Trash: 0.2 oz

Hazardous Material: ∅

Intractable Trash (estimated): ∅

Trash Types:

Are hazardous materials present? Types? no

Is intractable trash present? Types? no

Is kelp present? High or low presence? yes. high.

Monitoring Observations: (trash types and relative locations, relative proportion of trash types, spatial/temporal trash patterns, possible sources, etc)

styrofoam cup pieces. one cigarette at stairs. mostly at edge between sand & rocks.

sources: recreationers (surfers). some ppl taking photos.

Additional Notes: (weather, wildlife, etc.)

sunny. no wildlife. high tide. strong surf. splashes to stairs. nobody in water but ~3 ppl taking pictures by LG tower

Post Event Check

Was photograph taken? Yes / No

Is worksheet complete? Yes / No

TRASH MONITORING WORKSHEET

General Information

Date/Time of Arrival (24 hr clock): 09/19/2016 12:50

Monitoring Type (circle one): MFAC Assessment / Source Area Evaluation

Location Name: Zuma Beach Location ID: MFAC2_ZUM

Location Type (circle one): Beach / Harbor / Park

Field Crew Names: TL / JR

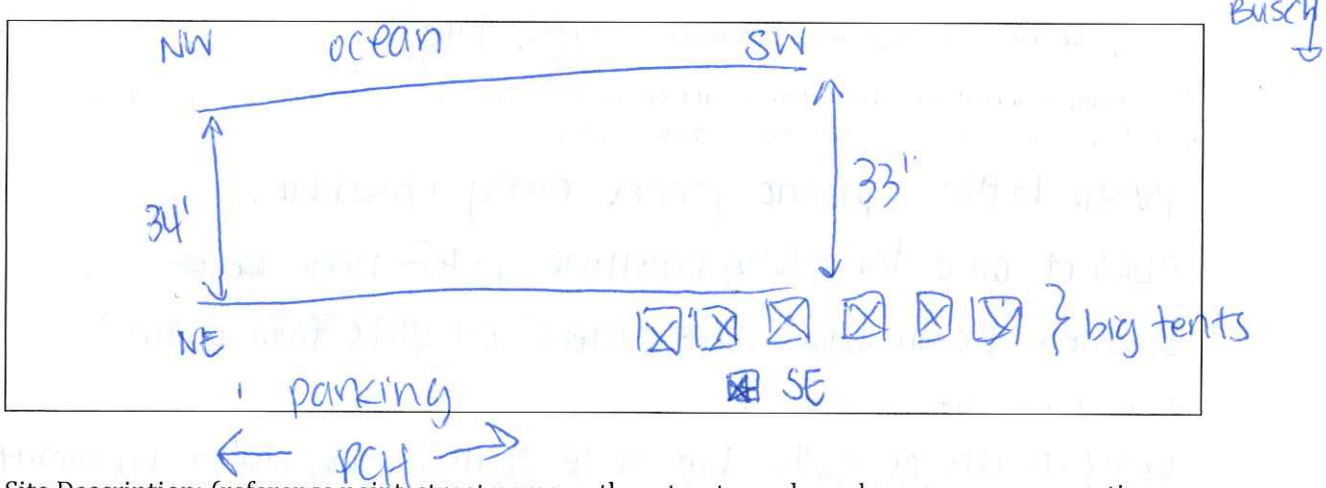
Site Information

GPS Coordinates: NW 34°01.353' -118°49.975' NE 34°01.347' -118°49.970'

SW 34°01.342' -118°49.961' SE 34°01.347' -118°49.956'

☆ Reference Point yellow storm drain pole btw LG 9 & LG 10

Sketch of Site: (label directions – eg north, shoreline, docks, major streets, reference point, etc.)



Site Description: (reference point, street names, other structures, homeless presence, recreation presence, etc.)

Reference: yellow SD pole between LG Tower 9 & 10

no homeless. no ppl or items in monit area. 2 ppl walked past ~5 ppl recreating immed upstream & downstream of monit area. many more downstream

TRASH MONITORING WORKSHEET

Monitoring Information

Event Start Time: 15:58 Event Stop Time: 13:04

Time Spent Monitoring

Total (Stop – Start): 8 min

Cumulative (Total Time * # of Crew Members): 16 min

Weight of Trash (lbs to one decimal point): Empty bag: 0.1 oz

Standard Trash: 1.6 oz

Hazardous Material: ~~ϕ~~ 4.2 oz

Intractable Trash (estimated): ϕ

Trash Types:

Are hazardous materials present? Types? yes. globs of oil

Is intractable trash present? Types? no

Is kelp present? High or low presence? yes. high.

Monitoring Observations: (trash types and relative locations, relative proportion of trash types, spatial/temporal trash patterns, possible sources, etc)

plastic bottle & plastic pieces along crestline.
globs of oil or tar along crestline. often near kelp
sources: plastic from recreationers. oil globs from ocean?

Additional Notes: (weather, wildlife, etc.)

overcast. lots of gulls. big white tents coming down by monit site btw LG 9 & 10. maintenance vehicles in parking lot.
still trash by parking lot wall on sand.

Post Event Check

Was photograph taken? Yes / No

Is worksheet complete? Yes / No

TRASH MONITORING WORKSHEET

General Information

Date/Time of Arrival (24 hr clock): 09/19/2016 13:23

Monitoring Type (circle one): MFAC Assessment / Source Area Evaluation

Location Name: Point Dume Beach Location ID: MFAC3-PTD

Location Type (circle one): Beach / Harbor / Park

Field Crew Names: TL / JR

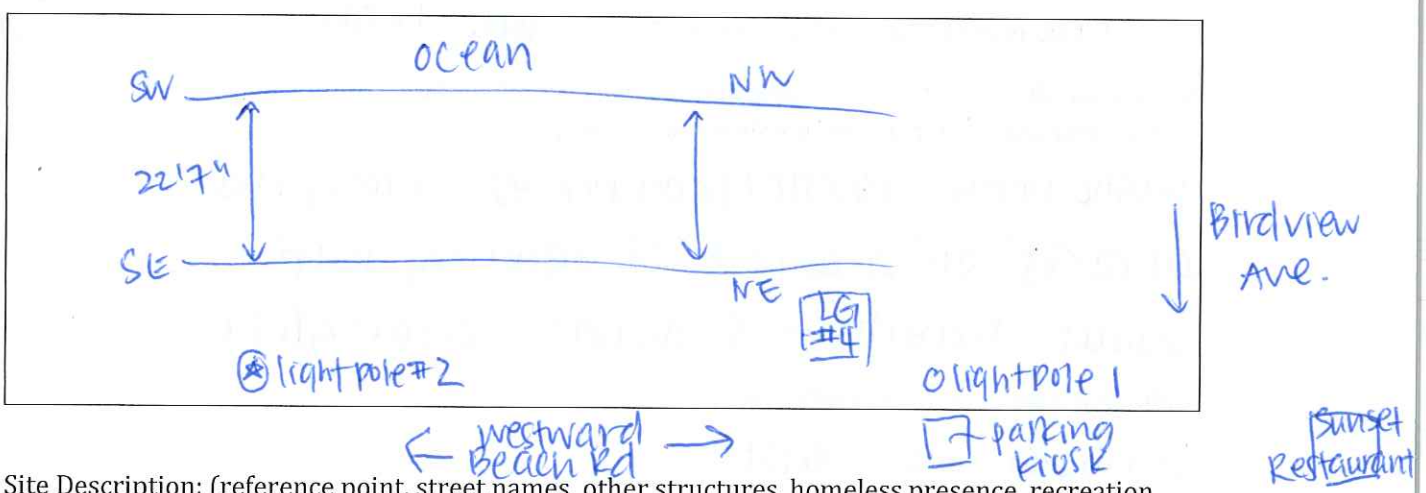
Site Information

GPS Coordinates: NW 34° 00.610' -118°48.990' NE 34'00.611' -118°48.987'

SW 34° 00.596' -118°48.979' SE 34° 00.598' -118°48.974'

Reference Point light pole # 2 south of parking kiosk

Sketch of Site: (label directions – eg north, shoreline, docks, major streets, reference point, etc.)



Site Description: (reference point, street names, other structures, homeless presence, recreation presence, etc.)

Reference: light pole # 2 south of parking kiosk. at intersection of westward Beach Rd & Birdview Ave.

no homeless. 7-10 ppl recreating near LG Tower 4 or walking through.

TRASH MONITORING WORKSHEET

Monitoring Information

Event Start Time: 13:32 Event Stop Time: 13:37

Time Spent Monitoring

Total (Stop – Start): 5 min

Cumulative (Total Time * # of Crew Members): 10 min

Weight of Trash (lbs to one decimal point): empty Bag 0.1oz

Standard Trash: 1.3 oz

Hazardous Material: 2.3 oz

Intractable Trash (estimated): ∅

Trash Types:

Are hazardous materials present? Types? yes. oil globs.

Is intractable trash present? Types? no.

Is kelp present? High or low presence? yes. high.

Monitoring Observations: (trash types and relative locations, relative proportion of trash types, spatial/temporal trash patterns, possible sources, etc)

plastic bottle. plastic/paper pieces along crest.
oil globs along crest & in sand by kelp.
sources: recreationers, diner. ocean globs.

Additional Notes: (weather, wildlife, etc.)

overcast. no wildlife.

Post Event Check

Was photograph taken? Yes / No

Is worksheet complete? Yes / No

TRASH MONITORING WORKSHEET

General Information

Date/Time of Arrival (24 hr clock): 09/19/2016 13:56

Monitoring Type (circle one): MFAC Assessment / Source Area Evaluation

Location Name: Dan Blocker Beach Location ID: MFAC4-DBL

Location Type (circle one): Beach / Harbor / Park

Field Crew Names: TL / JR.

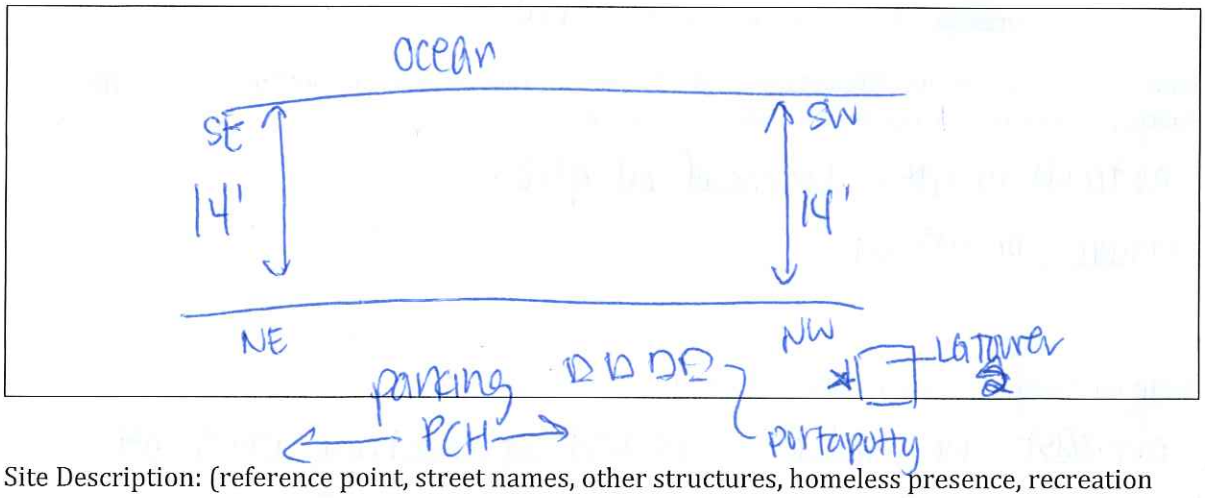
Site Information

GPS Coordinates: NW 34°01.987' -118°44.002' NE 34°01.985' -118°44.002'

SW 34°01.985' -118°44.022' SE 34°01.983' -118°44.022'

* Reference Point East wall of LG Tower 2

Sketch of Site: (label directions – eg north, shoreline, docks, major streets, reference point, etc.)



Site Description: (reference point, street names, other structures, homeless presence, recreation presence, etc.)

Reference: East wall of LG Tower 2

no homeless. 2 recreationers.

TRASH MONITORING WORKSHEET

Monitoring Information

Event Start Time: 14:05 Event Stop Time: 14:08

Time Spent Monitoring

Total (Stop – Start): 3 min

Cumulative (Total Time * # of Crew Members): 6 min

Weight of Trash (lbs to one decimal point): Empty Bag 0.1 oz

Standard Trash: ϕ

Hazardous Material: ~~0.01~~ 0.1 oz (BDL)

Intractable Trash (estimated): ϕ

Trash Types:

Are hazardous materials present? Types? yes. 1 piece of oil glob

Is intractable trash present? Types? no

Is kelp present? High or low presence? no.

Monitoring Observations: (trash types and relative locations, relative proportion of trash types, spatial/temporal trash patterns, possible sources, etc)

no trash at site. 1 piece of oil glob.
source: ocean oil.

Additional Notes: (weather, wildlife, etc.)

overcast. no wildlife. started sprinkling on & off

Post Event Check

Was photograph taken? Yes / No

Is worksheet complete? Yes / No

TRASH MONITORING WORKSHEET

General Information

Date/Time of Arrival (24 hr clock): 09/20/2016 12:21

Monitoring Type (circle one): MFAC Assessment / Source Area Evaluation

Location Name: Malibu/Surfrider Beach Location ID: MFAC 5_MLS

Location Type (circle one): Beach / Harbor / Park

Field Crew Names: TL / JR

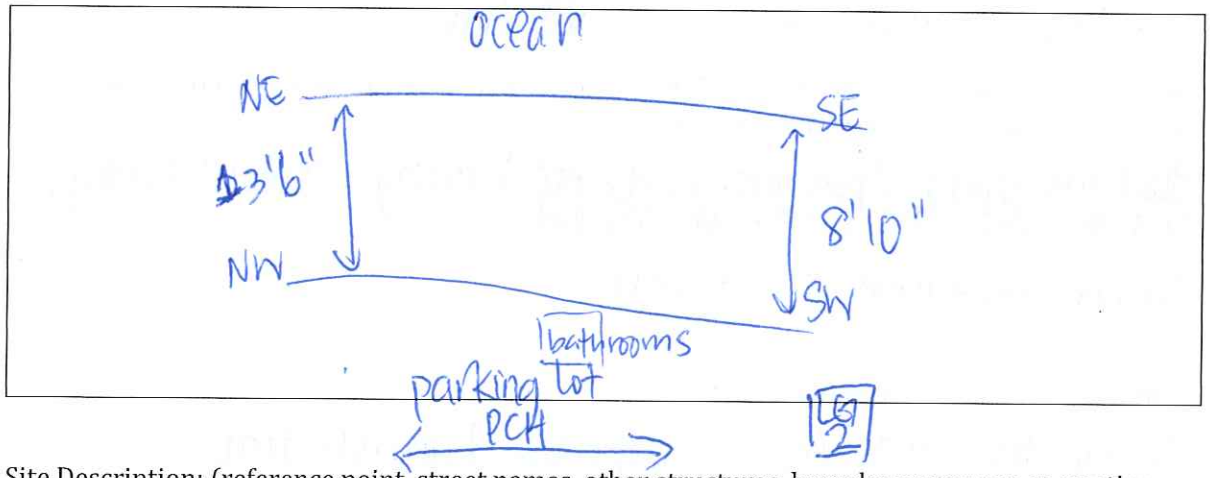
Site Information

GPS Coordinates: NW 34°02.103' -118°40.717' NE 34°02.103' -118°40.714'

SW 34°02.089' -118°40.724' SE 34°02.088' -118°40.724'

☆ Reference Point Telephone pole by LG Tower 2

Sketch of Site: (label directions – eg north, shoreline, docks, major streets, reference point, etc.)



Site Description: (reference point, street names, other structures, homeless presence, recreation presence, etc.)

Reference: Telephone pole behind LG Tower 2 ~~light~~ Tele. Pole 2

1 homeless person under LG Tower 2. Some by bathrooms
~1 dozen ppl recreating by minitanea. ~50 @ surfrider.

TRASH MONITORING WORKSHEET

Monitoring Information

Event Start Time: 12:36 Event Stop Time: 12:41

Time Spent Monitoring

Total (Stop – Start): 5 min

Cumulative (Total Time * # of Crew Members): 10 min

Weight of Trash (lbs to one decimal point): Empty bag 0.1 oz

Standard Trash: 1.0 oz

Hazardous Material: ϕ

Intractable Trash (estimated): ϕ

Trash Types:

Are hazardous materials present? Types?

Is intractable trash present? Types? no.

Is kelp present? High or low presence? yes. low.

Monitoring Observations: (trash types and relative locations, relative proportion of trash types, spatial/temporal trash patterns, possible sources, etc)

food & wrappers (peanuts, labels, etc.) along "crest" pretty flat loc. but near where ppl lay out.

sources: recreationers. homeless.

Additional Notes: (weather, wildlife, etc.)

sunny. few birds (gulls & pigeons). highish tide.

Post Event Check

Was photograph taken? Yes / No

Is worksheet complete? Yes / No

TRASH MONITORING WORKSHEET

General Information

Date/Time of Arrival (24 hr clock): 09/20/2016 13:05

Monitoring Type (circle one): MFAC Assessment / Source Area Evaluation

Location Name: Topanga Beach Location ID: MFAC6-TOP

Location Type (circle one): Beach / Harbor / Park

Field Crew Names: TL / JR

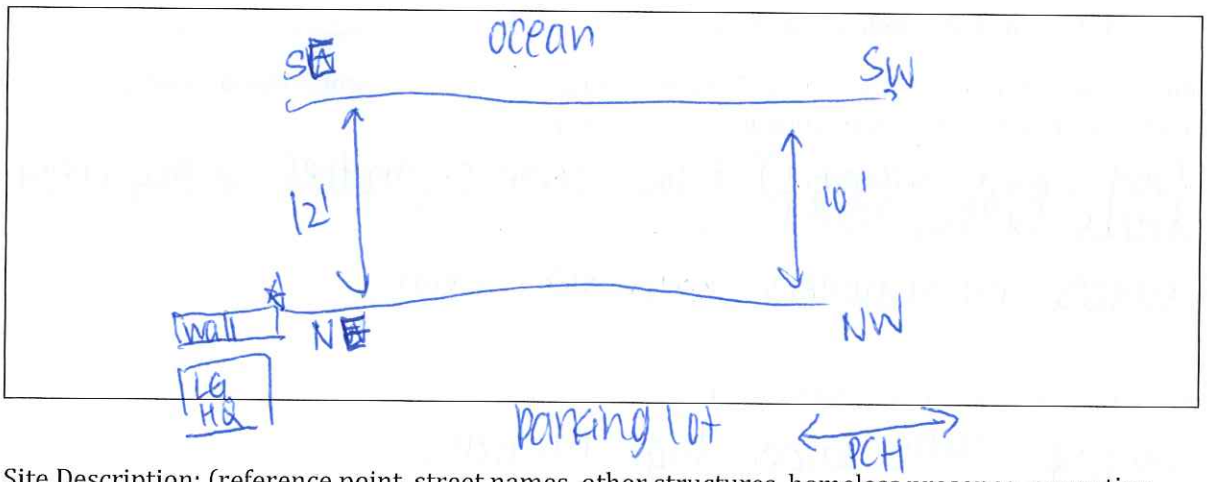
Site Information

GPS Coordinates: NW 34°02.309'-118°34.932' NE 34°02.317'-118°34.915'

SW 34°02.308'-118°34.931' SE 34°02.315'-118°34.914'

☆ Reference Point W edge of wall in front of LG HQ

Sketch of Site: (label directions – eg north, shoreline, docks, major streets, reference point, etc.)



Site Description: (reference point, street names, other structures, homeless presence, recreation presence, etc.)

Reference: West edge of wall in front of LG HQ

no homeless. ~6 ppl in/near monit area. ~15-20 pp on beach.

TRASH MONITORING WORKSHEET

Monitoring Information

Event Start Time: 13:11 Event Stop Time: 13:16

Time Spent Monitoring

Total (Stop – Start): 5min

Cumulative (Total Time * # of Crew Members): 10min

Weight of Trash (lbs to one decimal point): Empty bag 0.1 oz

Standard Trash: 1 oz.

Hazardous Material: Ø

Intractable Trash (estimated): Ø

Trash Types:

Are hazardous materials present? Types? No

Is intractable trash present? Types? no

Is kelp present? High or low presence? no

Monitoring Observations: (trash types and relative locations, relative proportion of trash types, spatial/temporal trash patterns, possible sources, etc)

food (peels, wrappers) & toys. some cigarettes. along crest & rocks (sitting areas)

sources: recreationers. bathroom users.

Additional Notes: (weather, wildlife, etc.)

sunny. some birds. high-ish tide.

Post Event Check

Was photograph taken? Yes / No

Is worksheet complete? Yes / No

TRASH MONITORING WORKSHEET

General Information

Date/Time of Arrival (24 hr clock): 09/21/2016 13:05

Monitoring Type (circle one): MFAC Assessment / Source Area Evaluation

Location Name: Marina Beach Location ID: MFAC8-MAR

Location Type (circle one): Beach / Harbor / Park

Field Crew Names: TL / JR

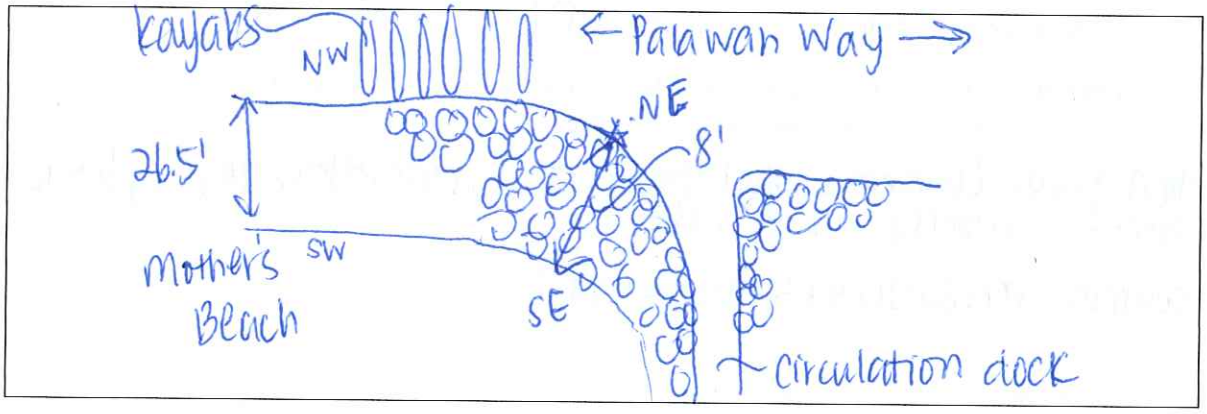
Site Information

GPS Coordinates: NW 33°58.910' -118°27.358' NE 33°58.884' -118°27.350'

SW 33°58.896' -118°27.361' SE 33°58.884 -118°27.352'

☆ Reference Point NE corner between Mothers Beach & circ dock

Sketch of Site: (label directions – eg north, shoreline, docks, major streets, reference point, etc.)



Site Description: (reference point, street names, other structures, homeless presence, recreation presence, etc.)

Reference: where the circulation dock ends & turns towards Mother's Beach.

3 ppl walking in monit area. ~ 15 ppl on beach overall

TRASH MONITORING WORKSHEET

Monitoring Information

Event Start Time: 13:38 Event Stop Time: 13:48

Time Spent Monitoring

Total (Stop – Start): 10 min

Cumulative (Total Time * # of Crew Members): 20 min

Weight of Trash (lbs to one decimal point): empty: 0.1, 0.1, 0.3 oz

Standard Trash: 2.6 oz + 2.1 oz + 4.1 oz (water)

Hazardous Material: ∅

Intractable Trash (estimated): ∅

Trash Types:

Are hazardous materials present? Types? no

Is intractable trash present? Types? no

Is kelp present? High or low presence? no

Monitoring Observations: (trash types and relative locations, relative proportion of trash types, spatial/temporal trash patterns, possible sources, etc)

food trash (wrappers, styrofoam, etc), cigarettes, toys (plastic pieces). mostly along rocks.

sources: recreationers. homeless?

Additional Notes: (weather, wildlife, etc.)

sunny. birds. high-ish tide. included edge of water by rocks. woman feeding birds. water was brown & foamy

homeless?

Post Event Check

Was photograph taken? Yes / No

Is worksheet complete? Yes / No

TRASH MONITORING WORKSHEET

General Information

Date/Time of Arrival (24 hr clock): 09/21/2016 14:00

Monitoring Type (circle one): MFAC Assessment / Source Area Evaluation

Location Name: Burton Chace Park Location ID: MFAC 10-BCP

Location Type (circle one): Beach / Harbor / Park

Field Crew Names: TL / JR

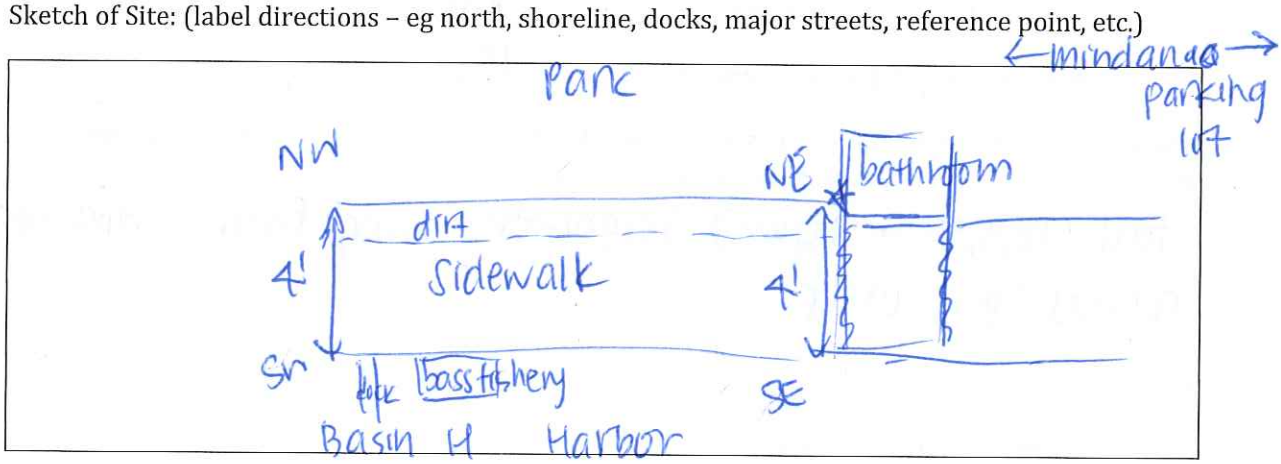
Site Information

GPS Coordinates: NW 33° 58.576' -118° 26.750' NE 33° 58.584' -118° 26.738'

SW 33° 58.575' -118° 26.749' SE 33° 58.583 -118° 26.732'

☆ Reference Point West edge of restrooms

Sketch of Site: (label directions – eg north, shoreline, docks, major streets, reference point, etc.)



Site Description: (reference point, street names, other structures, homeless presence, recreation presence, etc.)

Reference: ☆ west edge of restrooms

no homeless. no ppl in monit area. 3 ppl + dogs nearby

TRASH MONITORING WORKSHEET

Monitoring Information

Event Start Time: 14:07 Event Stop Time: 14:10

Time Spent Monitoring

Total (Stop – Start): 3 min

Cumulative (Total Time * # of Crew Members): 6 min

Weight of Trash (lbs to one decimal point): Empty bag: 0.1 oz

Standard Trash: 0.5 oz

Hazardous Material: ϕ

Intractable Trash (estimated): ϕ

Trash Types:

Are hazardous materials present? Types? no

Is intractable trash present? Types? no

Is kelp present? High or low presence? no

Monitoring Observations: (trash types and relative locations, relative proportion of trash types, spatial/temporal trash patterns, possible sources, etc)

food (caps, straws, gum) & cigarette. along fence & dirt areas.

sources: park users

Additional Notes: (weather, wildlife, etc.)

sunny. dogs walked by owners.

Post Event Check

Was photograph taken? Yes / No

Is worksheet complete? Yes / No

TRASH MONITORING WORKSHEET

94662

General Information

Date/Time of Arrival (24 hr clock): 09/21/2016 14:35

Monitoring Type (circle one): MFAC Assessment / Source Area Evaluation

Location Name: Marina del Rey Harbor Location ID: MFAC9-MDR

Location Type (circle one): Beach / Harbor / Park

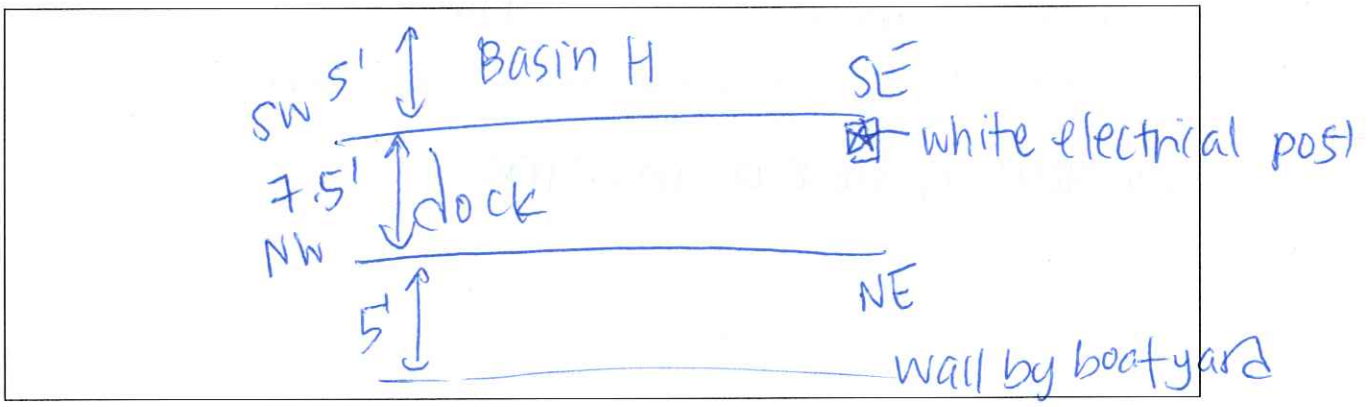
Field Crew Names: TL / JR

Site Information

GPS Coordinates: NW 33°58.651' -118°26.586' NE 33°58.660' -118°26.568'
SW 33°58.649' -118°26.585' SE 33°58.659' -118°26.568'

☆ Reference Point white electrical post at SE corner of dock

Sketch of Site: (label directions – eg north, shoreline, docks, major streets, reference point, etc.)



Site Description: (reference point, street names, other structures, homeless presence, recreation presence, etc.)

Reference: white electrical post @ SE corner of dock walkway
no homeless. no ppl. some ppl (2-3) in boatyard washing boat

TRASH MONITORING WORKSHEET

Monitoring Information

Event Start Time: 14:43 Event Stop Time: 14:45

Time Spent Monitoring

Total (Stop – Start): 2 min

Cumulative (Total Time * # of Crew Members): 4 min

Weight of Trash (lbs to one decimal point): Empty bag: 0.1 oz

Standard Trash: Ø

Hazardous Material: Ø

Intractable Trash (estimated): Ø

Trash Types:

Are hazardous materials present? Types? no

Is intractable trash present? Types? no

Is kelp present? High or low presence? no.

Monitoring Observations: (trash types and relative locations, relative proportion of trash types, spatial/temporal trash patterns, possible sources, etc)

no trash on dock or in water.

Additional Notes: (weather, wildlife, etc.)

no wildlife. sunny

Post Event Check

Was photograph taken? Yes / No

Is worksheet complete? Yes / No

TRASH MONITORING WORKSHEET

General Information

Date/Time of Arrival (24 hr clock): 09/22/2016 11:33

Monitoring Type (circle one): MFAC Assessment / Source Area Evaluation

Location Name: Manhattan Beach Location ID: MFAC11_MAN

Location Type (circle one): Beach / Harbor / Park

Field Crew Names: TL / JR

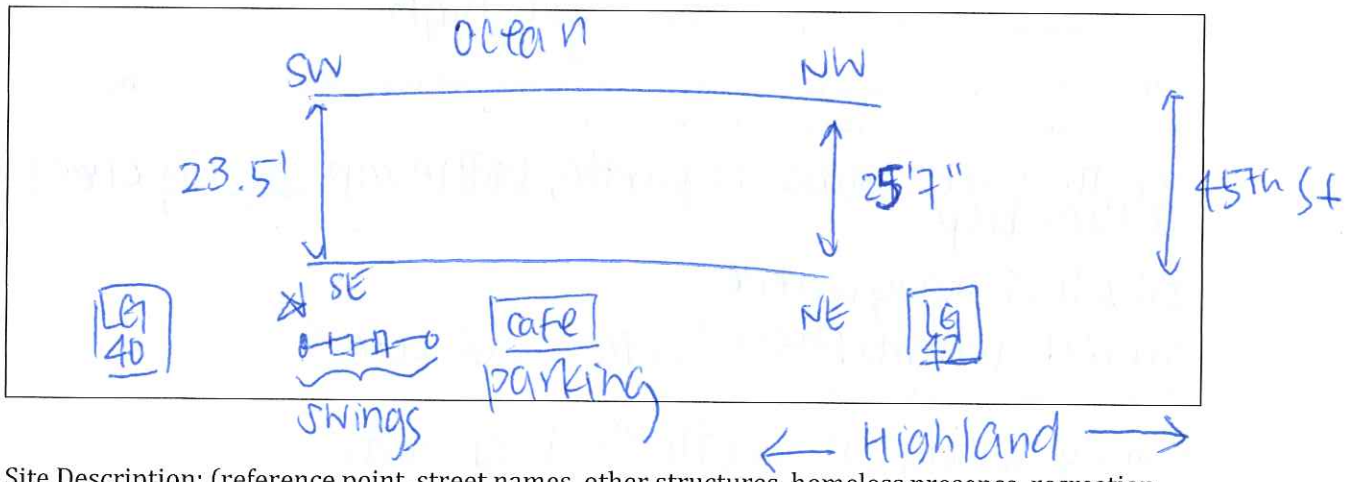
Site Information

GPS Coordinates: NW 33°54.166' -118°25.333' NE 33°54.166' -118°25.328'

SW 33°54.157' -118°25.325' SE 33°54.153' -118°25.321'

☆ Reference Point S pole of swingset btw LG Towers 40 & 42

Sketch of Site: (label directions – eg north, shoreline, docks, major streets, reference point, etc.)



Site Description: (reference point, street names, other structures, homeless presence, recreation presence, etc.)

Reference: South pole of swingset south of cafe between LG Towers 40 & 42

no homeless. ~8 ppl near monit area. ~20 ppl on beach. ~10 ppl at cafe.

TRASH MONITORING WORKSHEET

Monitoring Information

Event Start Time: 11:44 Event Stop Time: 12:01

Time Spent Monitoring

Total (Stop – Start): 17 min

Cumulative (Total Time * # of Crew Members): 34 min

Weight of Trash (lbs to one decimal point): Empty bag: 0.1 oz

Standard Trash: 1.2 oz + 1.7 lb 100g (wood 2x4 piece)

Hazardous Material: 5.6 oz

Intractable Trash (estimated): Ø

Trash Types:

Are hazardous materials present? Types? yes. oil globs

Is intractable trash present? Types? no.

Is kelp present? High or low presence? yes. high

Monitoring Observations: (trash types and relative locations, relative proportion of trash types, spatial/temporal trash patterns, possible sources, etc)

plastic pieces, straw, cigarette, bottle cap along crest or near kelp.

oil globs everywhere.

sources: recreationers & cafe and ocean

Additional Notes: (weather, wildlife, etc.)

sunny. windy. no wildlife. high tide.

Post Event Check

Was photograph taken? Yes / No

Is worksheet complete? Yes / No

TRASH MONITORING WORKSHEET

General Information

Date/Time of Arrival (24 hr clock): 09/22/2016 12:40

Monitoring Type (circle one): MFAC Assessment / Source Area Evaluation

Location Name: Redondo Beach Location ID: MFAC12-RED

Location Type (circle one): Beach / Harbor / Park

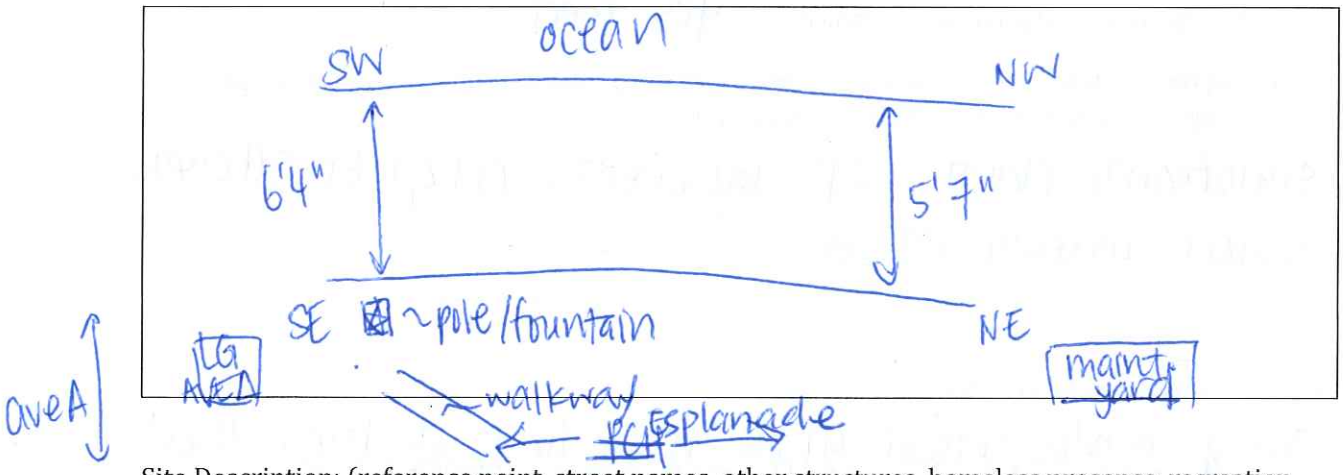
Field Crew Names: TL / JR

Site Information

GPS Coordinates: NW 33°49.614' -118°23.463' NE 33°49.615' -118°23.461'
SW 33°49.632' -118°23.464' SE 33°49.632' -118°23.462'

☆ Reference Point pole/fountain (white) at base of ramp walkway btw maint yard & LG Ave A

Sketch of Site: (label directions – eg north, shoreline, docks, major streets, reference point, etc.)



Site Description: (reference point, street names, other structures, homeless presence, recreation presence, etc.)

Reference: pole/fountain at base of walkway N of LG Tower Ave A
no homeless. 2 ppl recreating near mont area. lots on ped walkway.

TRASH MONITORING WORKSHEET

Monitoring Information

Event Start Time: 12:54 Event Stop Time: 12:58

Time Spent Monitoring

Total (Stop – Start): 4min

Cumulative (Total Time * # of Crew Members): 8min

Weight of Trash (lbs to one decimal point): empty bag: 0.1oz

Standard Trash: 0.1oz (BDL)

Hazardous Material: 1.1oz

Intractable Trash (estimated): ∅

Trash Types:

Are hazardous materials present? Types? yes. oil globs

Is intractable trash present? Types? no

Is kelp present? High or low presence? yes. med.

Monitoring Observations: (trash types and relative locations, relative proportion of trash types, spatial/temporal trash patterns, possible sources, etc)

styrofoam, plastic cap by crest. oil globs allover.
sources: recreationers.

Additional Notes: (weather, wildlife, etc.)

Sunny windy lots of gulls. high tide. so high that mont area was basically only the crestline.

Post Event Check

Was photograph taken? Yes / No

Is worksheet complete? Yes / No

TRASH MONITORING WORKSHEET

General Information

Date/Time of Arrival (24 hr clock): 09/22/2016 13:34

Monitoring Type (circle one): MFAC Assessment / Source Area Evaluation

Location Name: Torrance Beach Location ID: MFAC13_TOR

Location Type (circle one): Beach / Harbor / Park

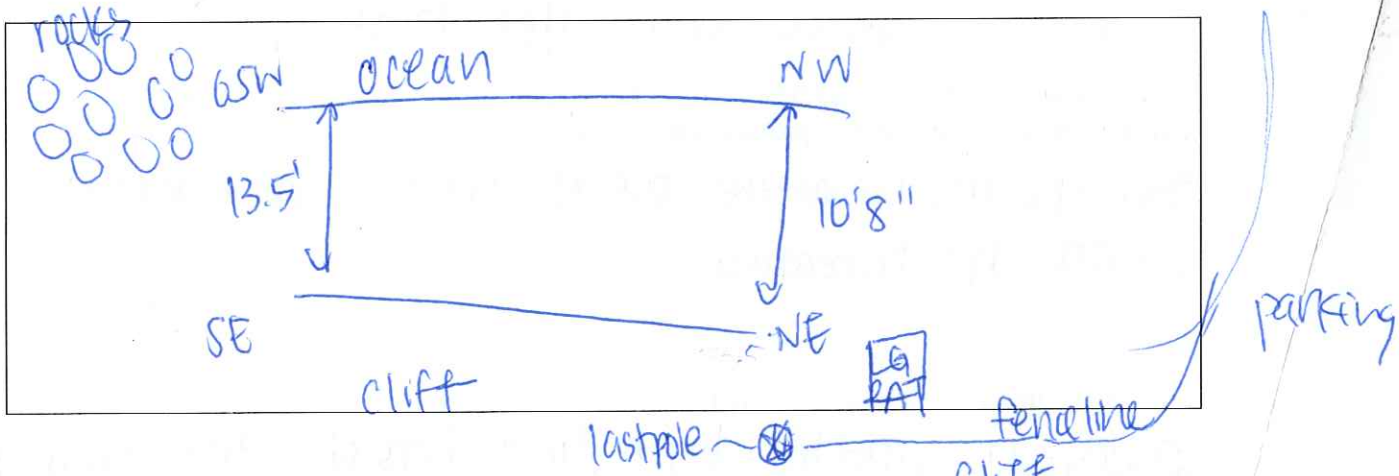
Field Crew Names: TL / JR

Site Information

GPS Coordinates: NW 33°48.280' -118°23.643' NE 33° 48.279' -118° 23.641'
SW 33°48.264' -118°23.650' SE 33° 48.264 -118°23.647'

✱ Reference Point last pole of fence along cliffs

Sketch of Site: (label directions – eg north, shoreline, docks, major streets, reference point, etc.)



Site Description: (reference point, street names, other structures, homeless presence, recreation presence, etc.)

Reference: last pole on fence along cliff.
no homeless. no ppl.

TRASH MONITORING WORKSHEET

Monitoring Information

Event Start Time: 13:39 Event Stop Time: 13:42

Time Spent Monitoring

Total (Stop – Start): 3 min

Cumulative (Total Time * # of Crew Members): 6min

Weight of Trash (lbs to one decimal point): Empty bag : 0.1 oz

Standard Trash: 0.8 oz

Hazardous Material: Ø

Intractable Trash (estimated): Ø

Trash Types:

Are hazardous materials present? Types? no

Is intractable trash present? Types? no.

Is kelp present? High or low presence? yes. high.

Monitoring Observations: (trash types and relative locations, relative proportion of trash types, spatial/temporal trash patterns, possible sources, etc)

food, plastic, cigarette along "crest" & near kelp.
sources: ppl hanging.

Additional Notes: (weather, wildlife, etc.)

sunny. no wildlife. high tide. lots of little flying bugs.
monit area basically all crestline due to high tide.

Post Event Check

Was photograph taken? Yes / No

Is worksheet complete? Yes / No

TRASH MONITORING WORKSHEET

General Information

Date/Time of Arrival (24 hr clock): 8/22/2016 14:40

Monitoring Type (circle one): MFAC Assessment / Source Area Evaluation

Location Name: Nicholas Canyon Beach Location ID: Eval 1 - NIC

Location Type (circle one): Beach / Harbor / Park

Field Crew Names: Tiffany Lin / Juan Ramirez

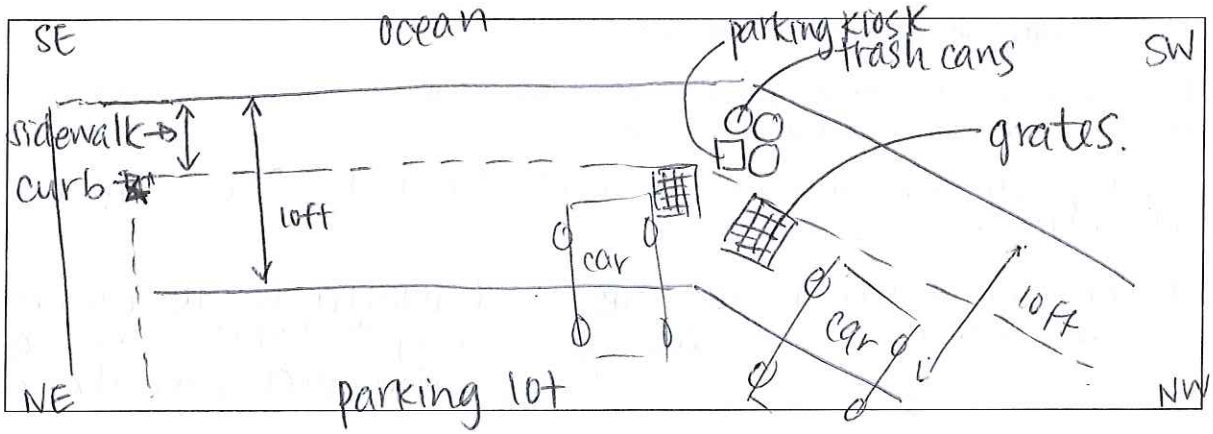
Site Information

GPS Coordinates: NW 34° 02.565' -118°54.932' NE 34°02.564' -118°54.912'

SW 34° 02.566' -118°54.931' SE 34° 02.562' -118°54.912'

Reference Point SE corner of parking lot @ curb. (*)

Sketch of Site: (label directions – eg north, shoreline, docks, major streets, reference point, etc.)



Site Description: (reference point, street names, other structures, homeless presence, recreation presence, etc.)

Ref: SE corner of curb. Monit area extends the width of the sidewalk to the parking lot (total width = 10 ft).

3 trash cans + 1 parking meter in monit area. also 2 cars in area. total 9 cars in parking lot. ~ 10 ppl looking at surf or at picnic tables. no homeless ppl. also 2 grates in monit area where trash can fall through & collect.

TRASH MONITORING WORKSHEET

Monitoring Information

Event Start Time: 14:27 Event Stop Time: 14:41

Time Spent Monitoring

Total (Stop – Start): 14 min

Cumulative (Total Time * # of Crew Members): 28 min

Weight of Trash (lbs to one decimal point): Empty bag: 0.00lb.

Standard Trash: 0.20lb

Hazardous Material: ∅

Intractable Trash (estimated): ∅

Trash Types:

Are hazardous materials present? Types? NO.

Is intractable trash present? Types? No.

Is kelp present? High or low presence? NO.

Monitoring Observations: (trash types and relative locations, relative proportion of trash types, spatial/temporal trash patterns, possible sources, etc)

mostly collected against the curb & corners. some by base of trash can.

mostly cigarettes, bottle caps, food-related waste (wrappers, straws, etc.) sources: ppl going to beach/checking surf/ using portapotties. parked cars. picnictables.

Additional Notes: (weather, wildlife, etc.)

sunny. no wildlife. picnic ppl by west side of parking lot. surfers on sidewalk watching surf (eating & drinking).

also trash past the sidewalks in bushes, prob from wind

Post Event Check

Was photograph taken? Yes / No

Is worksheet complete? Yes / No

TRASH MONITORING WORKSHEET

General Information

Date/Time of Arrival (24 hr clock): 8/22/2016 15:15

Monitoring Type (circle one): MFAC Assessment / Source Area Evaluation

Location Name: Zuma Beach Location ID: Eval 2-Zum

Location Type (circle one): Beach / Harbor / Park

Field Crew Names: Tiffany Lin / Juan Ramirez

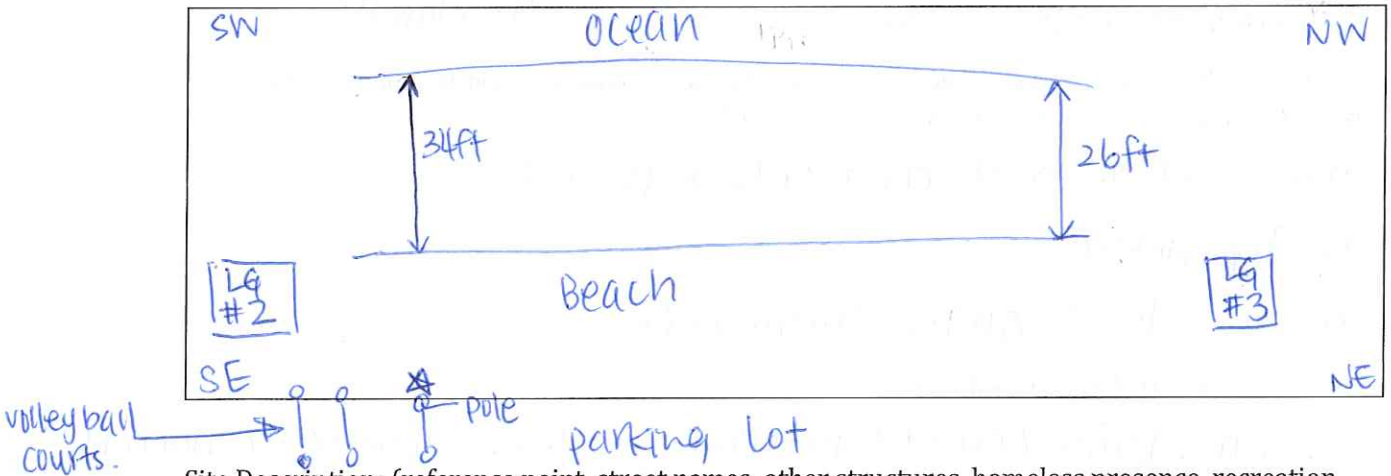
Site Information

GPS Coordinates: NW 34°00.907' -118°49.369' NE 34°00.909' -118°49.365'

SW 34°00.893' -118°49.355' SE 34°00.897' -118°49.351'

Reference Point First volleyball court past zuma cafe (✱)

Sketch of Site: (label directions – eg north, shoreline, docks, major streets, reference point, etc.)



Site Description: (reference point, street names, other structures, homeless presence, recreation presence, etc.)

Ref: 1st volleyball pole (5) past zuma cafe closest to water. monit. area btw Lifeguard Towers #2 & #3.

birds in general area, not in monit area. lots of beachgoers 1 set of belongings in monit area.

TRASH MONITORING WORKSHEET

Monitoring Information

Event Start Time: 15:21 Event Stop Time: 15:31

Time Spent Monitoring

Total (Stop – Start): 10 min

Cumulative (Total Time * # of Crew Members): 20 min

Weight of Trash (lbs to one decimal point): Empty 0.001b

Standard Trash: BDL (0.001b) – only 1 piece of plastic & 1 popped balloon

Hazardous Material: Ø

Intractable Trash (estimated): Ø

Trash Types:

Are hazardous materials present? Types? no

Is intractable trash present? Types? no

Is kelp present? High or low presence? yes. ~ 10 clumps.

Monitoring Observations: (trash types and relative locations, relative proportion of trash types, spatial/temporal trash patterns, possible sources, etc)

mostly along beach crest (where ppl sit)

mostly plastic.

sources: beach gvers. Zuma Cafe

Additional Notes: (weather, wildlife, etc.)

sunny. birds (crows) present. ~ 15 ppl immed adjacent to monit area but many more at beach

Post Event Check

Was photograph taken? Yes / No

Is worksheet complete? Yes / No

TRASH MONITORING WORKSHEET

General Information

Date/Time of Arrival (24 hr clock): 8/22/2016 15:57

Monitoring Type (circle one): MFAC Assessment / Source Area Evaluation

Location Name: Point Dume Location ID: Eval 3 - PTD

Location Type (circle one): Beach / Harbor / Park

Field Crew Names: TL / SR

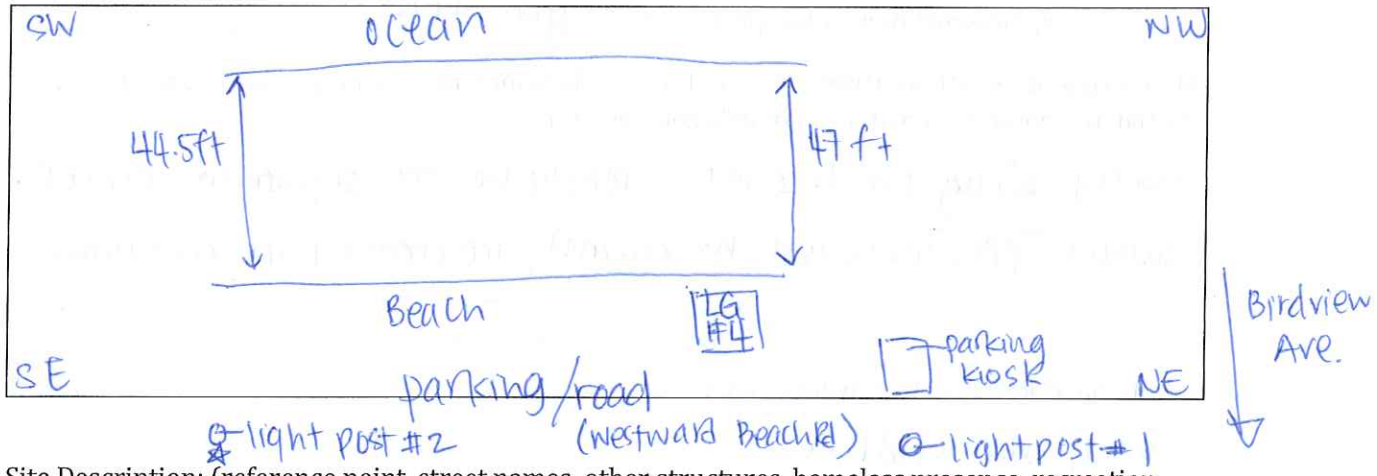
Site Information

GPS Coordinates: NW 34° 00.619' -118°49.005' NE 34° 00.624' -118°48.998'

SW 34° 00.606' -118°48.993' SE 34° 00.611' -118°48.986'

★ Reference Point light post #2

Sketch of Site: (label directions – eg north, shoreline, docks, major streets, reference point, etc.)



Site Description: (reference point, street names, other structures, homeless presence, recreation presence, etc.)

Ref: light post #2 S of parking kiosk @ intersection of Birdview Ave & Westward Beach Rd by The Sunset Restaurant

1 homeless person laying under LG Tower #4. ~9 ppl in/around monit area. more beach recreation North of Birdview ave ~~closer to point~~ ice cream truck drove by N. of Birdview Ave.

TRASH MONITORING WORKSHEET

Monitoring Information

Event Start Time: 15:55 Event Stop Time: 16:06

Time Spent Monitoring

Total (Stop – Start): 11 min

Cumulative (Total Time * # of Crew Members): 22 min

Weight of Trash (lbs to one decimal point): Empty: 0.00lb

Standard Trash: 0.40 lb

Hazardous Material: none

Intractable Trash (estimated): none

Trash Types:

Are hazardous materials present? Types? no

Is intractable trash present? Types? no

Is kelp present? High or low presence? yes. low.

Monitoring Observations: (trash types and relative locations, relative proportion of trash types, spatial/temporal trash patterns, possible sources, etc)

mostly along beach crest. plastic bottles. styrofoam pieces.
sources: ppl, the sunset restaurant, ice cream truck consumers.

Additional Notes: (weather, wildlife, etc.)

sunny. no wildlife.

Post Event Check

Was photograph taken? Yes / No

Is worksheet complete? Yes / No

TRASH MONITORING WORKSHEET

General Information

Date/Time of Arrival (24 hr clock): 8/22/2016 16:23

Monitoring Type (circle one): MFAC Assessment / Source Area Evaluation

Location Name: Latigo Shores Location ID: Eval4-LTS

Location Type (circle one): Beach / Harbor / Park

Field Crew Names: TL / JR

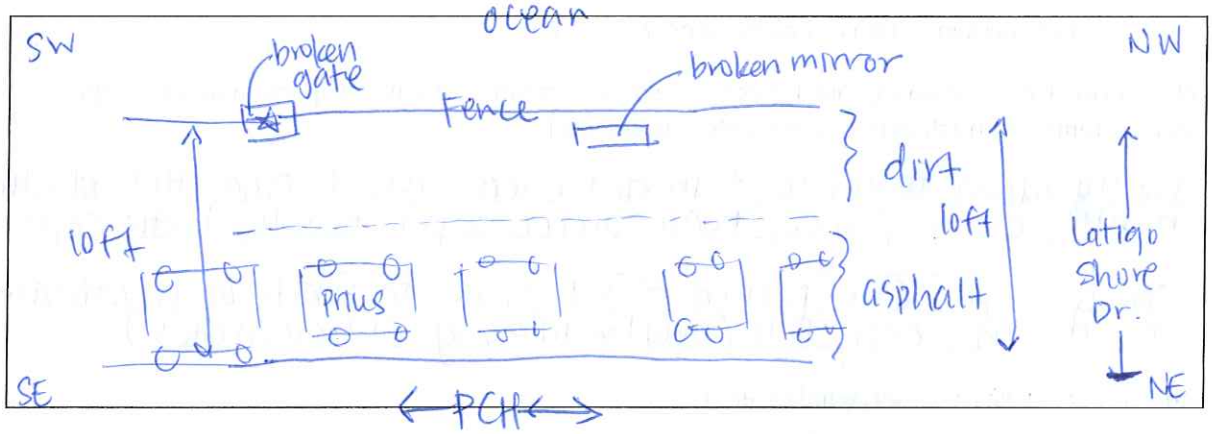
Site Information

GPS Coordinates: NW 34° 01.872' -118°44.978' NE 34° 01.875' -118°44.978'

SW 34°01.879' -118°44.964' SE 34° 01.880' -118° 44.960'

☆ Reference Point Broken gate in fence (see SW GPS)

Sketch of Site: (label directions – eg north, shoreline, docks, major streets, reference point, etc.)



Site Description: (reference point, street names, other structures, homeless presence, recreation presence, etc.)

Ref: broken gate (from site visit) along fence S of Latigo Shore Dr. monit area is asphalt + dirt parking area along PCH.

no homeless. many parked cars in & around monit area w/ ppl coming & going to cars.

TRASH MONITORING WORKSHEET

Monitoring Information

Event Start Time: 16:30 Event Stop Time: 16:52

Time Spent Monitoring

Total (Stop – Start): 22 min

Cumulative (Total Time * # of Crew Members): 44 min

Weight of Trash (lbs to one decimal point): Empty: 0.00 lb

Standard Trash: 1.16 lb

Hazardous Material: 2.10 lb

Intractable Trash (estimated): ~ 20 lb est. (broken glass mirror)

Trash Types:

Are hazardous materials present? Types? Yes. broken glass pieces.

Is intractable trash present? Types? Yes. large piece of mirror. 34° 01.874' -118° 44.971'

Is kelp present? High or low presence? No.

Monitoring Observations: (trash types and relative locations, relative proportion of trash types, spatial/temporal trash patterns, possible sources, etc)

mostly along fenceline & in dirt area. lots of cigarettes, plastic bottles, glass pieces, foam pieces, paper towels, bottle caps.

sources: ppl / cars parked @ PCH going to beach or private area. cars driving along PCH (maybe littering esp cigarettes)

Additional Notes: (weather, wildlife, etc.)

sunny. no wildlife. 5 cars in monit area, more along road ~ 5 ppl walked by.

did not inspect trash underneath parked cars

Post Event Check

Was photograph taken? Yes / No

Is worksheet complete? Yes / No

TRASH MONITORING WORKSHEET

General Information

Date/Time of Arrival (24 hr clock): 8/22/2016 17:20

Monitoring Type (circle one): MFAC Assessment / Source Area Evaluation

Location Name: Los Tunas Beach Location ID: EvalS-LTN

Location Type (circle one): Beach / Harbor / Park

Field Crew Names: TL / JR

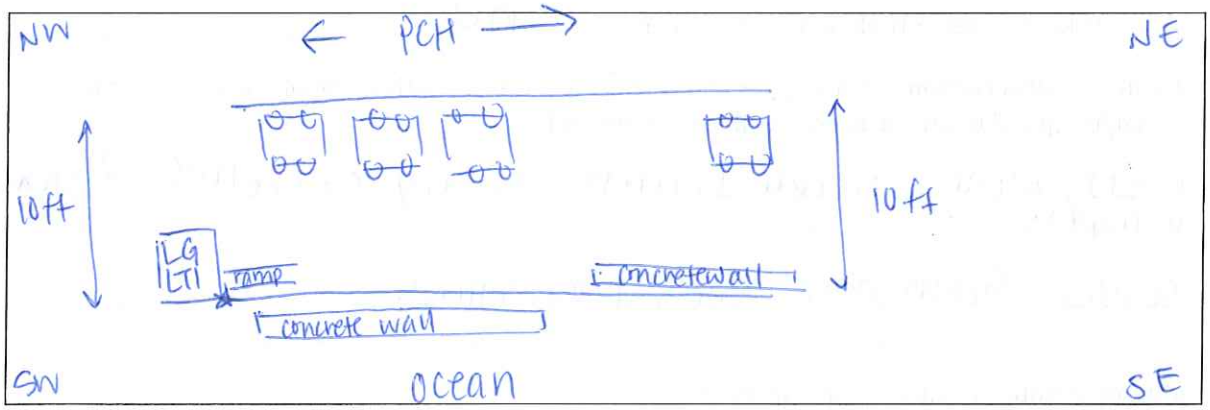
Site Information

GPS Coordinates: NW 34°02.361' -118°35.834' NE 34°02.363' -118°35.814'

SW 34°02.357' -118°35.832' SE 34°02.361' -118°35.814'

☆ Reference Point E edge of LG LTI excl. ramp.

Sketch of Site: (label directions – eg north, shoreline, docks, major streets, reference point, etc.)



Site Description: (reference point, street names, other structures, homeless presence, recreation presence, etc.)

Ref: E face of LG Tower LTI (not ramp). Monit area is parking area along concrete wall.

no homeless. 5-6 cars in lot, none in monit area. some came & went. ppl using porta potties on lot also. 2 bicyclists.

TRASH MONITORING WORKSHEET

Monitoring Information

Event Start Time: 17:28 Event Stop Time: 17:40

Time Spent Monitoring

Total (Stop – Start): 12 min

Cumulative (Total Time * # of Crew Members): 24 min

Weight of Trash (lbs to one decimal point): Empty 0.00 lb

Standard Trash: 0.36 lb

Hazardous Material: none

Intractable Trash (estimated): none

Trash Types:

Are hazardous materials present? Types? no.

Is intractable trash present? Types? no.

Is kelp present? High or low presence? no.

Monitoring Observations: (trash types and relative locations, relative proportion of trash types, spatial/temporal trash patterns, possible sources, etc)

mostly along concrete barriers. mostly cigarettes & straw wrappers.

sources: beach goers, cars, portapotties.

Additional Notes: (weather, wildlife, etc.)

sunny. no homeless. no wildlife. other food trash present ~~outsi~~ outside monit area but not collected (fast food wrappers.).

Post Event Check

Was photograph taken? Yes / No

Is worksheet complete? Yes / No

TRASH MONITORING WORKSHEET

General Information

Date/Time of Arrival (24 hr clock): 8/22/2016 17:48

Monitoring Type (circle one): MFAC Assessment / Source Area Evaluation

Location Name: Topanga Beach Location ID: Eval 6 _ TOP

Location Type (circle one): Beach / Harbor / Park

Field Crew Names: TL / JR

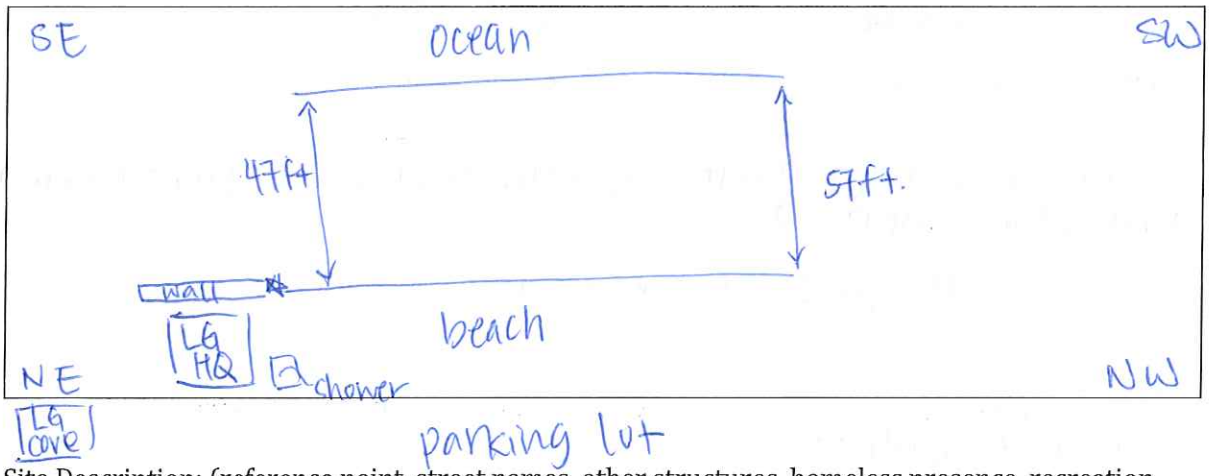
Site Information

GPS Coordinates: NW 34°02.305' -118°34.930' NE 34°02.315' -118°34.914'

SW 34°02.298' -118°34.923' SE 34°02.308' -118°34.910'

☆ Reference Point W. edge of wall in front of LG HQ

Sketch of Site: (label directions – eg north, shoreline, docks, major streets, reference point, etc.)



Site Description: (reference point, street names, other structures, homeless presence, recreation presence, etc.)

Ref: West edge of wall in front of LG HQ. monit area includes rocky area & sandy area.

no homeless ~10 ppl in/around monit area. more in other areas of beach. more ppl coming as we left.

TRASH MONITORING WORKSHEET

Monitoring Information

Event Start Time: 18:01 Event Stop Time: 18:09

Time Spent Monitoring

Total (Stop – Start): 8 min

Cumulative (Total Time * # of Crew Members): 16 min

Weight of Trash (lbs to one decimal point): Empty 0.00 lb

Standard Trash: 0.62 lb

Hazardous Material: none

Intractable Trash (estimated): none

Trash Types:

Are hazardous materials present? Types? no

Is intractable trash present? Types? no

Is kelp present? High or low presence? yes. low.

Monitoring Observations: (trash types and relative locations, relative proportion of trash types, spatial/temporal trash patterns, possible sources, etc)

mostly along beach crest. mostly food waste (watermelon rinds, food wrappers)

sources: beach goers. LG HQ. shower

Additional Notes: (weather, wildlife, etc.)

sunny. seagulls.

Post Event Check

Was photograph taken? Yes / No

Is worksheet complete? Yes / No

TRASH MONITORING WORKSHEET

General Information

Date/Time of Arrival (24 hr clock): 8/23/2016 14:58

Monitoring Type (circle one): MFAC Assessment / Source Area Evaluation

Location Name: Marina Beach (Lot 10) Location ID: Eval8_Mar

Location Type (circle one): Beach / Harbor / Park

Field Crew Names: TL / JR

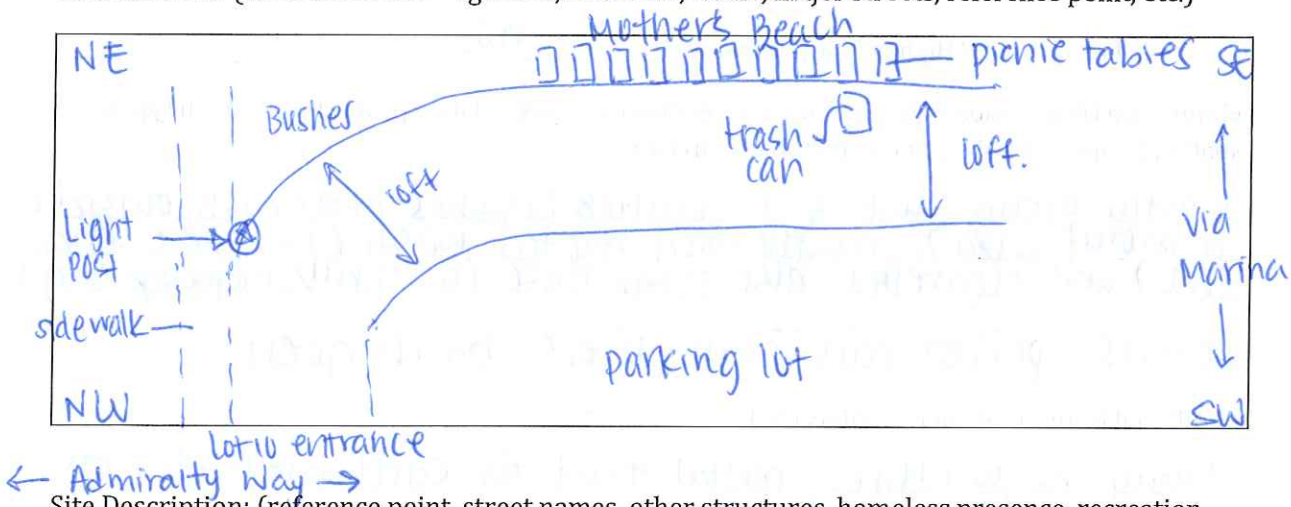
Site Information

GPS Coordinates: NW 33°58.902' -118°27.515' NE 33°58.903' -118°27.513'

SW 33°58.890' -118°27.521' SE 33°58.890' -118°27.520'

☆ Reference Point Light pole @ end of lot 10 entry

Sketch of Site: (label directions – eg north, shoreline, docks, major streets, reference point, etc.)



Site Description: (reference point, street names, other structures, homeless presence, recreation presence, etc.)

Ref: light pole along sidewalk at end of entryway just before road curves. monit area is 10 ft of roadway in parking lot by picnic tables

~10 ppl at picnic tables. ~2 dozen beachgoers. ~50 parked cars. no homeless.

TRASH MONITORING WORKSHEET

Monitoring Information

Event Start Time: 15:16 Event Stop Time: 15:25

Time Spent Monitoring

Total (Stop – Start): 9 min

Cumulative (Total Time * # of Crew Members): 18 min

Weight of Trash (lbs to one decimal point): Empty 0.00lb

Standard Trash: BDL [0.08 lb using kitchen scale]

Hazardous Material: none

Intractable Trash (estimated): none

Trash Types:

Are hazardous materials present? Types? no

Is intractable trash present? Types? no

Is kelp present? High or low presence? no.

Monitoring Observations: (trash types and relative locations, relative proportion of trash types, spatial/temporal trash patterns, possible sources, etc)

mostly along curb & in bushes (bushes above curb outside of monit area). mostly food related waste (wrappers, straws, fork) and cigarettes. also some misc (hairball, luggage tag)

sources: parked cars. picnic users. beach goers.

Additional Notes: (weather, wildlife, etc.)

Sunny. no wildlife. rental tent for surfboards etc. on sidewalk by monit area.

Post Event Check

Was photograph taken? Yes / No

Is worksheet complete? Yes / No

TRASH MONITORING WORKSHEET

General Information

Date/Time of Arrival (24 hr clock): 8/23/2016 15:30

Monitoring Type (circle one): MFAC Assessment / Source Area Evaluation

Location Name: MDR Harbor Location ID: Eval 9-MDR

Location Type (circle one): Beach / Harbor / Park

Field Crew Names: TL / JR

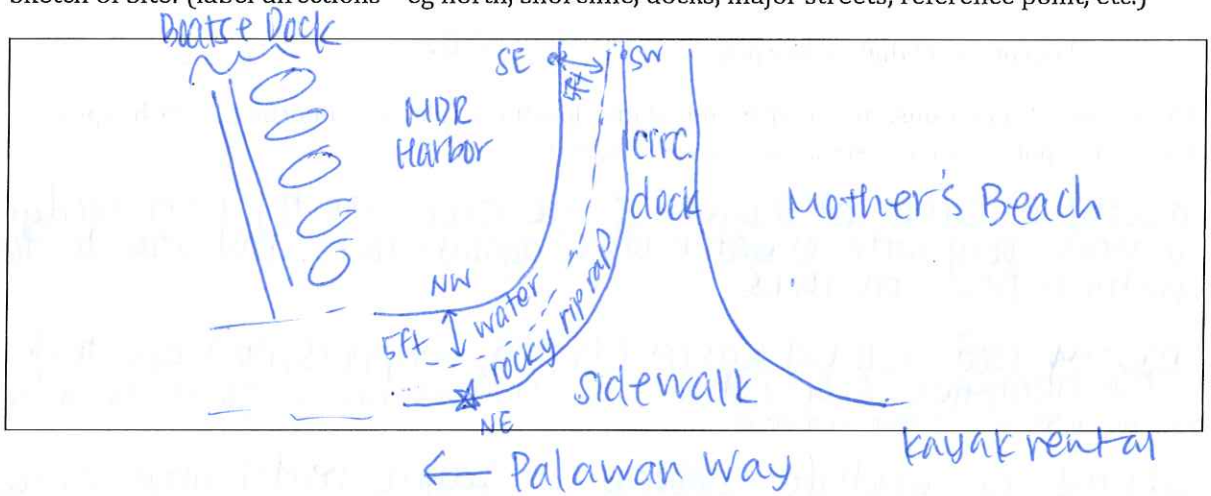
Site Information

GPS Coordinates: NW 33°58.880' -118°27.348' NE 33°58.881' -118°27.347'

SW 33°58.872' -118°27.361' SE in water. no GPS.

★ Reference Point NE edge of fence that runs along circulation dock

Sketch of Site: (label directions – eg north, shoreline, docks, major streets, reference point, etc.)



Site Description: (reference point, street names, other structures, homeless presence, recreation presence, etc.)

Ref: end of fence on NE side along dock/Palawan Way on Harbor side. monit area includes rip rap e 5ft of water

boat docks on the east. Mother's Beach on west. no homeless. no ppl on walkway or nearby on beach. 3 ppl on one of the boats.

TRASH MONITORING WORKSHEET

Monitoring Information

Event Start Time: 15:51 Event Stop Time: 16:05

Time Spent Monitoring

Total (Stop – Start): 14 min

Cumulative (Total Time * # of Crew Members): 28 min

Weight of Trash (lbs to one decimal point): Empty 0.00 lb

Standard Trash: 2.38 lb

Hazardous Material: none

Intractable Trash (estimated): none

Trash Types:

Are hazardous materials present? Types? no.

Is intractable trash present? Types? no.

Is kelp present? High or low presence? no.

Monitoring Observations: (trash types and relative locations, relative proportion of trash types, spatial/temporal trash patterns, possible sources, etc)

mostly @ corner of Palawan & circ dock. mostly on or wedged in rocks. very little in water unless against rocks. prob due to tides pushing trash on rocks.

mostly food-related waste (bottles, wrappers, etc) and toys. some cigarettes. socks/shoe. sources: beach goers. boat dock/users.

Additional Notes: (weather, wildlife, etc.)

sunny. no wildlife. nobody in kayak rental area. some maintenance ppl by bathroom.

Post Event Check

Was photograph taken? Yes / No

Is worksheet complete? Yes / No

TRASH MONITORING WORKSHEET

General Information

Date/Time of Arrival (24 hr clock): 8/23/2016 16:42

Monitoring Type (circle one): MFAC Assessment / Source Area Evaluation

Location Name: Burton Chace Park Location ID: Eval 10 _ BCP

Location Type (circle one): Beach / Harbor / Park

Field Crew Names: TL / JR

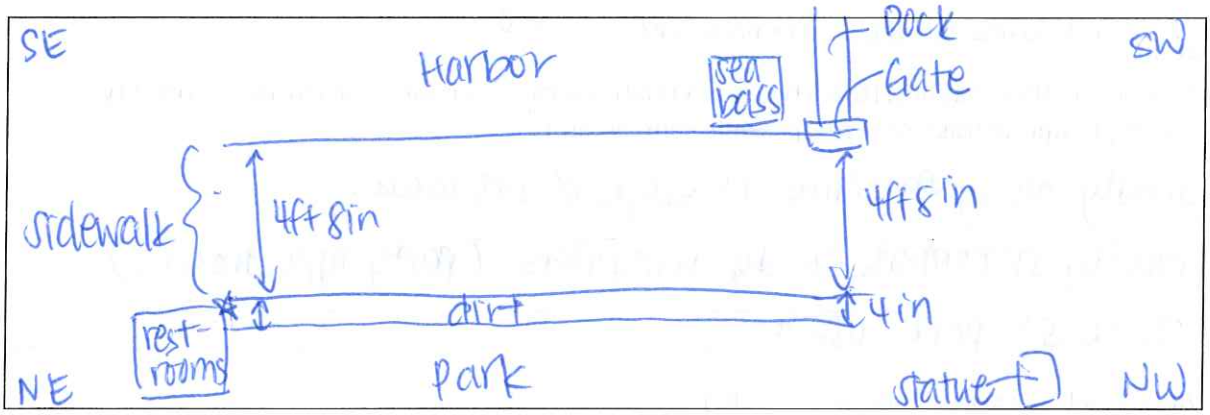
Site Information

GPS Coordinates: NW 33°58.575' -118°26.749' NE 33° 58.584' -118° 26.732'

SW 33°58.574' -118°26.749' SE 33°58.583' -118°26.732'

☆ Reference Point W face of restroom

Sketch of Site: (label directions – eg north, shoreline, docks, major streets, reference point, etc.)



Site Description: (reference point, street names, other structures, homeless presence, recreation presence, etc.)

Ref: West face of restrooms. monit area incl sidewalk only.

no homeless. 2 ppl in monit area many more around or passing by. 2 dogs passed area. many more nearby.

TRASH MONITORING WORKSHEET

Monitoring Information

Event Start Time: 16:48 Event Stop Time: 17:00

Time Spent Monitoring

Total (Stop – Start): 12 min

Cumulative (Total Time * # of Crew Members): 24 min

Weight of Trash (lbs to one decimal point): empty 0.00lb

Standard Trash: BDL [0.09 lb using kitchen scale]

Hazardous Material: none

Intractable Trash (estimated): none

Trash Types:

Are hazardous materials present? Types? no

Is intractable trash present? Types? no

Is kelp present? High or low presence? no

Monitoring Observations: (trash types and relative locations, relative proportion of trash types, spatial/temporal trash patterns, possible sources, etc)

mostly along fenceline or edge of sidewalk.
mostly streamers, candy wrappers (party type trash?)
sources: park users

Additional Notes: (weather, wildlife, etc.)

sunny. ~6 dogs.

Post Event Check

Was photograph taken? Yes / No

Is worksheet complete? Yes / No

TRASH MONITORING WORKSHEET

General Information

Date/Time of Arrival (24 hr clock): 8/24/2016 14:34

Monitoring Type (circle one): MFAC Assessment / Source Area Evaluation

Location Name: Redondo Beach Location ID: Eval 11- Red

Location Type (circle one): Beach / Harbor / Park

Field Crew Names: TL / JR

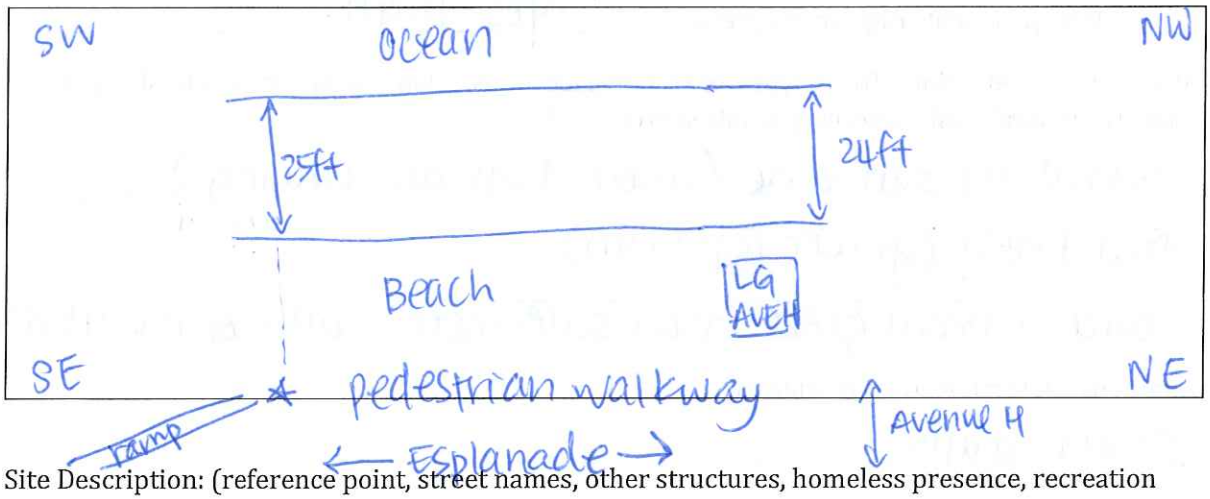
Site Information

GPS Coordinates: NW 33° 49.214' -118°23.455' NE 33°49.214' -118°23.450'

SW 33°49.198' -118°23.457' SE 33°49.197'-118°23.451'

☆ Reference Point pole @ bottom of access ramp

Sketch of Site: (label directions – eg north, shoreline, docks, major streets, reference point, etc.)



Site Description: (reference point, street names, other structures, homeless presence, recreation presence, etc.)

Ref: Pole @ bottom of access ramp btw Ave H & Ave I.
monit area extends from ref pole twd LG Tower Ave H.
no homeless. many beach goers (adults & kids). ~5 kids w/toys in monit area.

TRASH MONITORING WORKSHEET

Monitoring Information

Event Start Time: 14:45 Event Stop Time: 14:53

Time Spent Monitoring

Total (Stop – Start): 8 min

Cumulative (Total Time * # of Crew Members): 16 min

Weight of Trash (lbs to one decimal point): Empty 0.001b

Standard Trash: 0.12 lb

Hazardous Material: Ø

Intractable Trash (estimated): Ø

Trash Types:

Are hazardous materials present? Types? no.

Is intractable trash present? Types? no.

Is kelp present? High or low presence? yes. high.

Monitoring Observations: (trash types and relative locations, relative proportion of trash types, spatial/temporal trash patterns, possible sources, etc)

mostly by surf zone (where kids are playing)
food trash (juices-capri sun)
sources: beach goers. food sales/cafe south of monit area

Additional Notes: (weather, wildlife, etc.)

sunny. gulls.

Post Event Check

Was photograph taken? Yes / No

Is worksheet complete? Yes / No

TRASH MONITORING WORKSHEET

General Information

Date/Time of Arrival (24 hr clock): 8/24/2016 15:22

Monitoring Type (circle one): MFAC Assessment / Source Area Evaluation

Location Name: Torrance Beach Location ID: Eval 12 – TOR

Location Type (circle one): Beach / Harbor / Park

Field Crew Names: TL / JR

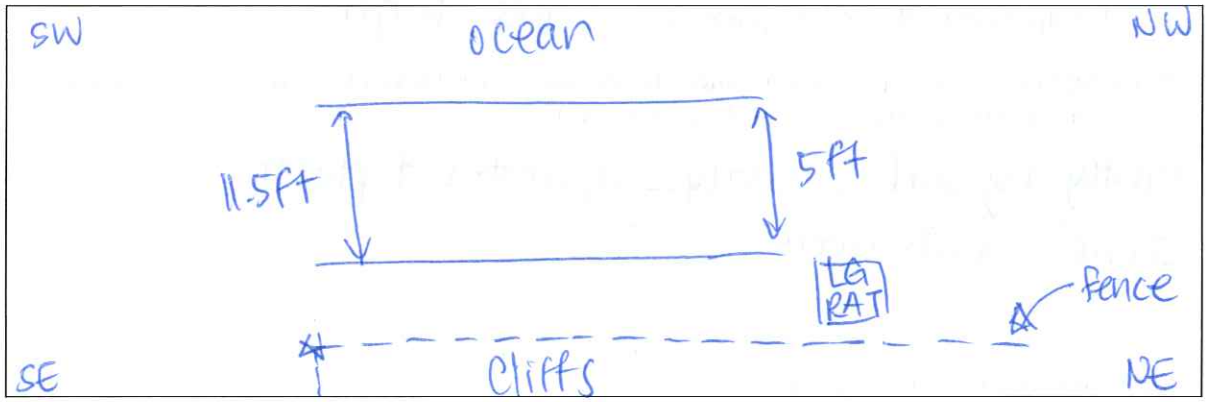
Site Information

GPS Coordinates: NW 33°48.295' -118°23.638' NE 33°48.295' -118°23.638'

SW 33°48.280' -118°23.643' SE 33°48.280' -118°23.642'

★ Reference Point end of fence @ bottom of cliff

Sketch of Site: (label directions – eg north, shoreline, docks, major streets, reference point, etc.)



Site Description: (reference point, street names, other structures, homeless presence, recreation presence, etc.)

Ref: end of fencing (S) @ bottom of residences/cliff near LG Tower RAT.

no homeless. 4 ppl in area. ~15 ppl in vicinity.

TRASH MONITORING WORKSHEET

Monitoring Information

Event Start Time: 15:29 Event Stop Time: 15:35

Time Spent Monitoring

Total (Stop – Start): 6 min

Cumulative (Total Time * # of Crew Members): 12 min

Weight of Trash (lbs to one decimal point): Empty : 0.00 lb

Standard Trash: 0.12 lb

Hazardous Material: Ø

Intractable Trash (estimated): Ø

Trash Types:

Are hazardous materials present? Types? no

Is intractable trash present? Types? no

Is kelp present? High or low presence? yes. high.

Monitoring Observations: (trash types and relative locations, relative proportion of trash types, spatial/temporal trash patterns, possible sources, etc)

mostly by surf. mostly cigarettes & plastic.
source: beach goers.

Additional Notes: (weather, wildlife, etc.)

sunny. no wildlife. short dist btw HTL & LTL.

Post Event Check

Was photograph taken? Yes / No

Is worksheet complete? Yes / No

TRASH MONITORING WORKSHEET

General Information

Date/Time of Arrival (24 hr clock): 09/28/2016 14:12

Monitoring Type (circle one): MFAC Assessment / Source Area Evaluation

Location Name: Nicholas Canyon Beach Location ID: Eval1_NIC

Location Type (circle one): Beach / Harbor / Park

Field Crew Names: TL / JR

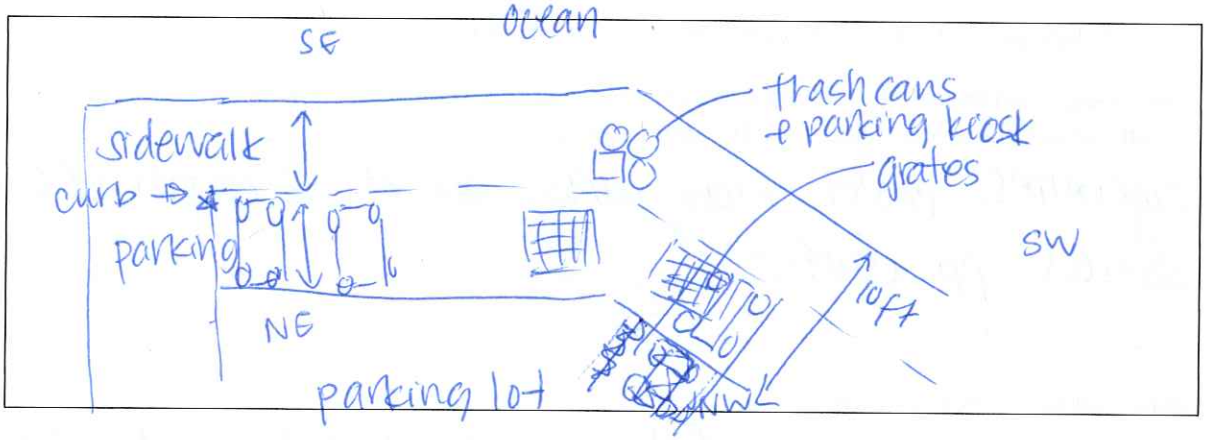
Site Information

GPS Coordinates: NW 34°02.565' -118°54.929' NE 34°02.564' -118°54.913'

SW 34°02.563' -118°54.928' SE 34°02.560' -118°54.912'

✱ Reference Point SE corner of parking lot @ curb

Sketch of Site: (label directions – eg north, shoreline, docks, major streets, reference point, etc.)



Site Description: (reference point, street names, other structures, homeless presence, recreation presence, etc.)

Reference: SE corner of parking lot @ curb.

no homeless. 12 cars. 3 in monit area

TRASH MONITORING WORKSHEET

Monitoring Information

Event Start Time: 14:22 Event Stop Time: 14:29

Time Spent Monitoring

Total (Stop – Start): 7min

Cumulative (Total Time * # of Crew Members): 14 min

Weight of Trash (lbs to one decimal point):

Standard Trash: 5.2 oz. empty: 0.3 oz

Hazardous Material: ϕ

Intractable Trash (estimated): ϕ

Trash Types:

Are hazardous materials present? Types? no

Is intractable trash present? Types? no

Is kelp present? High or low presence? no.

Monitoring Observations: (trash types and relative locations, relative proportion of trash types, spatial/temporal trash patterns, possible sources, etc)

cigarettes, paper along curb, esp at SE corner of curb
sources: ppl (surfers)

Additional Notes: (weather, wildlife, etc.)

sunny. 1 dog. lots of trash in bushes beyond sidewalk.

Post Event Check

Was photograph taken? Yes / No

Is worksheet complete? Yes / No

TRASH MONITORING WORKSHEET

General Information

Date/Time of Arrival (24 hr clock): 09/28/2016 14:46

Monitoring Type (circle one): MFAC Assessment / Source Area Evaluation

Location Name: Zuma Beach Location ID: Eval 2 - Zum

Location Type (circle one): Beach / Harbor / Park

Field Crew Names: TL / JR

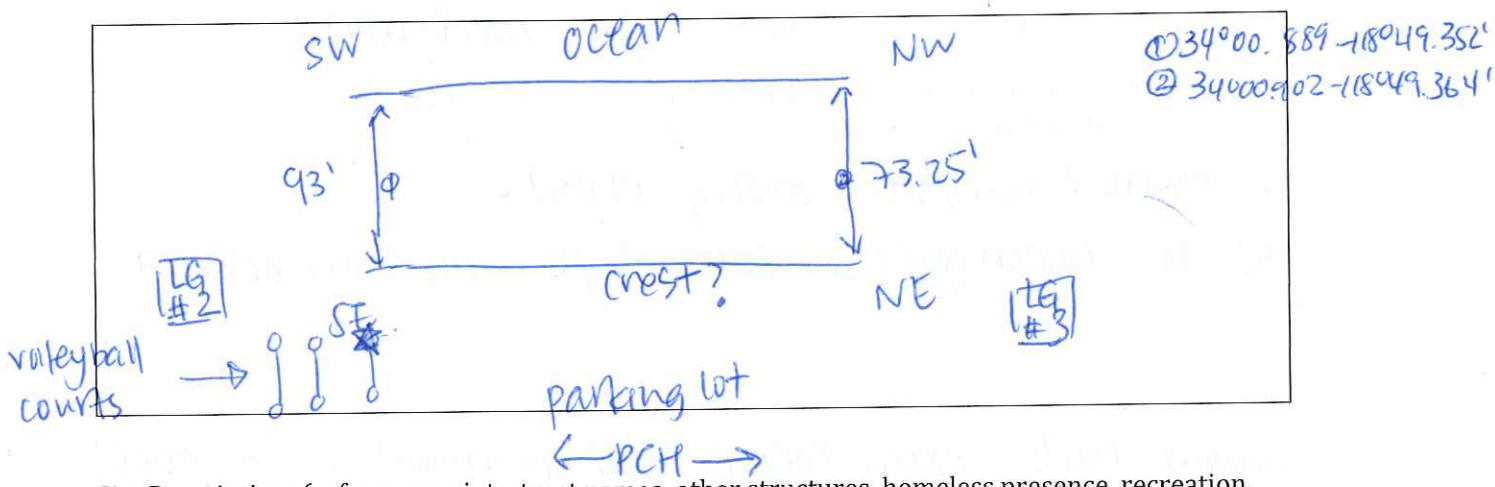
Site Information

GPS Coordinates: NW 34° 00.898 -118°49.372' NE 34°00.907' -118°49.361'

SW 34°00.884 -118°49.357' SE 34°00.895' -118°49.346'

☆ Reference Point First volleyball court ~~past~~ SE of Zuma Cafe

Sketch of Site: (label directions – eg north, shoreline, docks, major streets, reference point, etc.)



Site Description: (reference point, street names, other structures, homeless presence, recreation presence, etc.)

Reference: 1st volleyball court south of Zuma Cafe between LG towers 2 & 3

no homeless. ~5 ppl in monit area. ~25 on beach

TRASH MONITORING WORKSHEET

Monitoring Information

Event Start Time: 15:11 Event Stop Time: 15:16

Time Spent Monitoring

Total (Stop – Start): 5min

Cumulative (Total Time * # of Crew Members): 10min

Weight of Trash (lbs to one decimal point):

Standard Trash: 1.1 oz empty: 0.3 oz

Hazardous Material: 1.3 oz empty: 0.1 oz

Intractable Trash (estimated): ϕ

Trash Types:

Are hazardous materials present? Types? yes. oil globs.

Is intractable trash present? Types? no.

Is kelp present? High or low presence? yes. medium.

Monitoring Observations: (trash types and relative locations, relative proportion of trash types, spatial/temporal trash patterns, possible sources, etc)

napkins & wrappers along crest.
source: beachgoers. zuma cafe. oil from ocean.

Additional Notes: (weather, wildlife, etc.)

sunny. birds. extra coarse sand in monit area. crest seems further back. perhaps due to recent high tides. lifeguard said major erosion & rebuild lately.

Post Event Check

Was photograph taken? Yes / No

Is worksheet complete? Yes / No

TRASH MONITORING WORKSHEET

General Information

Date/Time of Arrival (24 hr clock): 09/28/2016 ~~03~~:15:40

Monitoring Type (circle one): MFAC Assessment / Source Area Evaluation

Location Name: Point Dume Beach Location ID: Eval3_PTD

Location Type (circle one): Beach / Harbor / Park

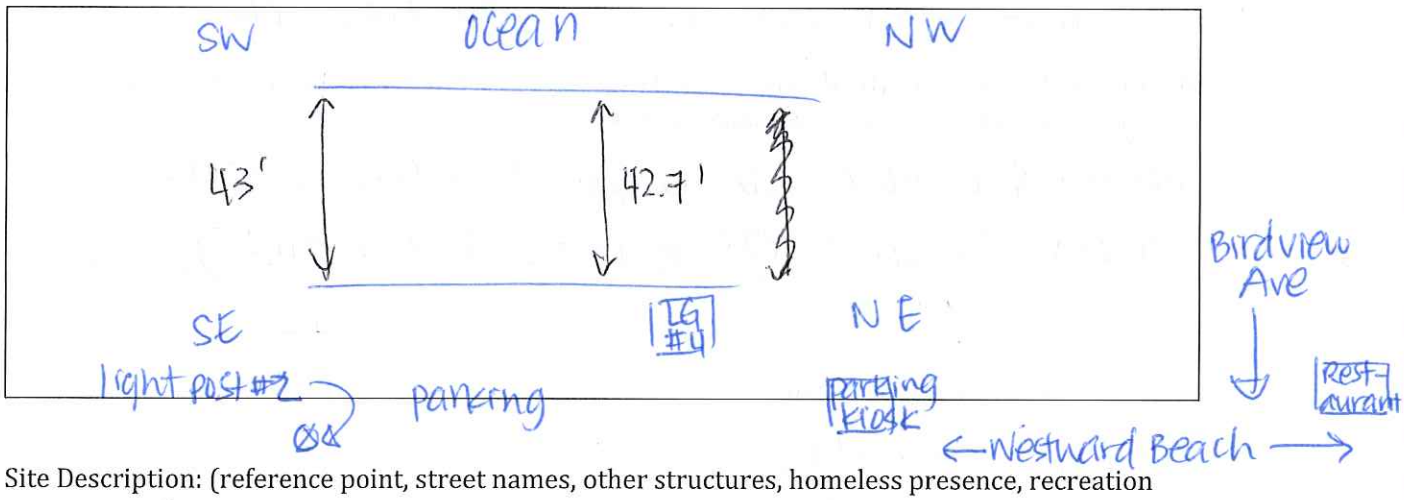
Field Crew Names: TL / JR

Site Information

GPS Coordinates: NW 34°00.618' -118°49.004' NE 34°00.623' -118°48.997'
SW 34°00.607' -118°48.994' SE 34°00.610' -118°48.985'

Reference Point light post #2

Sketch of Site: (label directions – eg north, shoreline, docks, major streets, reference point, etc.)



Site Description: (reference point, street names, other structures, homeless presence, recreation presence, etc.)

Reference: light post #2 south of parking kiosk
no homeless. 1 person in monit area. 20+ ppl on beach.

TRASH MONITORING WORKSHEET

Monitoring Information

Event Start Time: 15:48 Event Stop Time: 15:54

Time Spent Monitoring

Total (Stop – Start): 6 min

Cumulative (Total Time * # of Crew Members): 12 min

Weight of Trash (lbs to one decimal point):

Standard Trash: 8.7oz + 1lb 1.1oz - 2x empty 0.3

Hazardous Material: ϕ

Intractable Trash (estimated): ϕ

Trash Types:

Are hazardous materials present? Types? no

Is intractable trash present? Types? no

Is kelp present? High or low presence? ~~no~~. yes. low.

Monitoring Observations: (trash types and relative locations, relative proportion of trash types, spatial/temporal trash patterns, possible sources, etc)

clothes & sandals. food wrappers - along crest.
sources: beach goers. & restaurant nearby.

Additional Notes: (weather, wildlife, etc.)

sunny. no wildlife.

Post Event Check

Was photograph taken? Yes / No

Is worksheet complete? Yes / No

TRASH MONITORING WORKSHEET

General Information

Date/Time of Arrival (24 hr clock): 09/28/2016 16:12

Monitoring Type (circle one): MFAC Assessment / Source Area Evaluation

Location Name: Latigo Shores Location ID: Eval4-LTS

Location Type (circle one): Beach / Harbor / Park

Field Crew Names: TL / JR

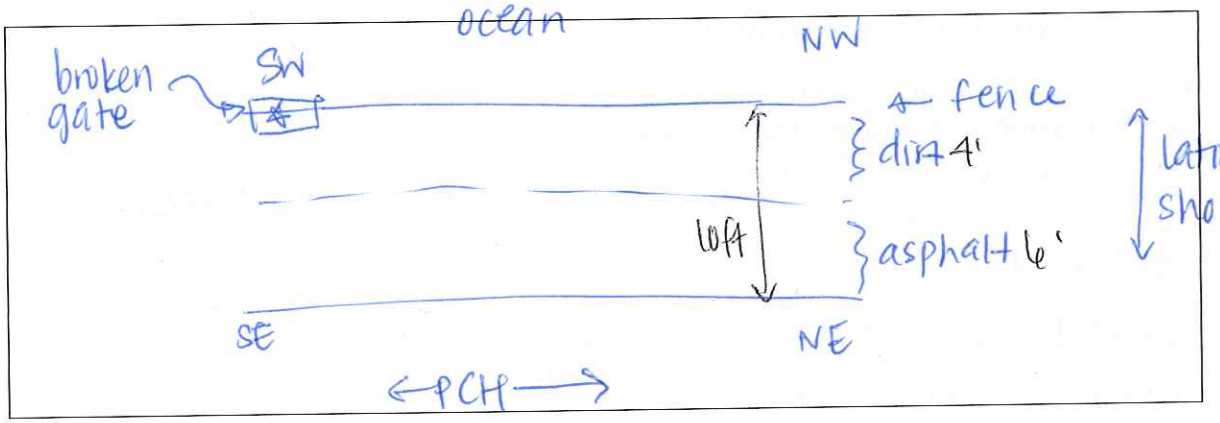
Site Information

GPS Coordinates: NW 34° 01.874' -118° 44.979' NE 34° 01.873' -118° 44.978'

SW 34° 01.877' -118° 44.960 SE 34° 01.879' -118° 44.961'

Reference Point broken gate in fence

Sketch of Site: (label directions – eg north, shoreline, docks, major streets, reference point, etc.)



Site Description: (reference point, street names, other structures, homeless presence, recreation presence, etc.)

Reference: broken gate in fence.
no homeless. no ppl ~3 cars parked in area

TRASH MONITORING WORKSHEET

Monitoring Information

Event Start Time: 16:17 Event Stop Time: 16:31

Time Spent Monitoring

Total (Stop – Start): 14 min

Cumulative (Total Time * # of Crew Members): 28 min

Weight of Trash (lbs to one decimal point):

Standard Trash: 0.88lb empty ∅ (0.4 oz)

Hazardous Material: 0.82lb ∅

Intractable Trash (estimated): ∅

Trash Types:

Are hazardous materials present? Types? yes. broken glass.

Is intractable trash present? Types? no

Is kelp present? High or low presence? no.

Monitoring Observations: (trash types and relative locations, relative proportion of trash types, spatial/temporal trash patterns, possible sources, etc)

cigarettes, rubber & plastic pieces. along fence.
broken glass.
sources: cars on PCH & cars parked/ppl.

Additional Notes: (weather, wildlife, etc.)

sunny. no wildlife.

Post Event Check

Was photograph taken? (Yes) / No

Is worksheet complete? (Yes) / No

TRASH MONITORING WORKSHEET

General Information

Date/Time of Arrival (24 hr clock): 09/28/2016 14:56

Monitoring Type (circle one): MFAC Assessment / Source Area Evaluation

Location Name: Las Tunas Beach Location ID: Eval5-LTN

Location Type (circle one): Beach / Harbor / Park

Field Crew Names: TL / JR

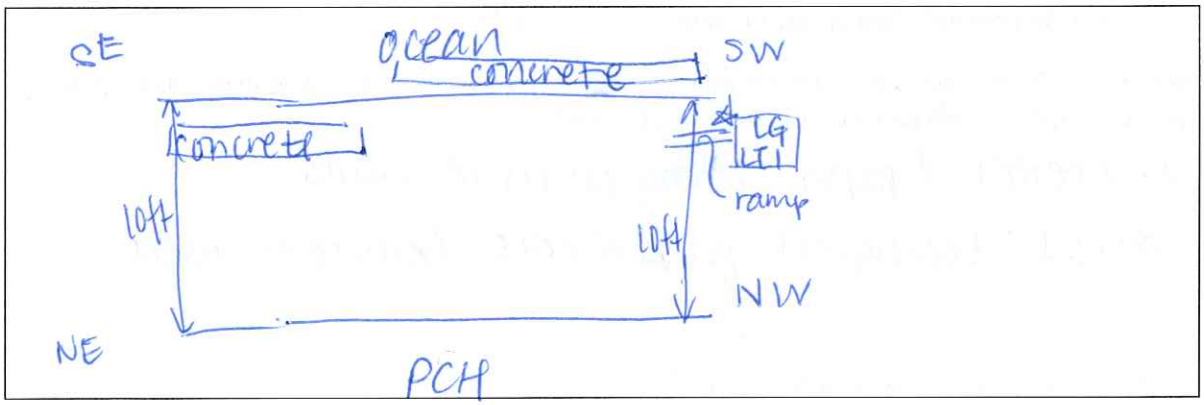
Site Information

GPS Coordinates: NW 34°02.359' -118°35.834' NE 34°02.361' -118°35.814'

SW 34°02.357' -118°35.834' SE 34°02.360' -118°35.815'

☆ Reference Point East edge of LG LTI excl. ramp

Sketch of Site: (label directions – eg north, shoreline, docks, major streets, reference point, etc.)



Site Description: (reference point, street names, other structures, homeless presence, recreation presence, etc.)

Reference: east edge of LG LTI excluding ramp.

no homeless. 2 ppl. 3 cars w/ ppl inside.

TRASH MONITORING WORKSHEET

Monitoring Information

Event Start Time: 17:04 Event Stop Time: 17:11

Time Spent Monitoring

Total (Stop – Start): 7min

Cumulative (Total Time * # of Crew Members): 14min

Weight of Trash (lbs to one decimal point):

Standard Trash: 3.7 oz.

Hazardous Material: ∅

Intractable Trash (estimated): ∅

Trash Types:

Are hazardous materials present? Types? no.

Is intractable trash present? Types? no.

Is kelp present? High or low presence? no.

Monitoring Observations: (trash types and relative locations, relative proportion of trash types, spatial/temporal trash patterns, possible sources, etc)

cigarettes & paper along concrete walls.
sources: beachgoers. parked cars. bathroom users.

Additional Notes: (weather, wildlife, etc.)

sunny. no wildlife.

Post Event Check

Was photograph taken? Yes / No

Is worksheet complete? Yes / No

TRASH MONITORING WORKSHEET

General Information

Date/Time of Arrival (24 hr clock): 09/28/2016 17:20

Monitoring Type (circle one): MFAC Assessment / Source Area Evaluation

Location Name: Topanga Beach Location ID: Eval6_Top

Location Type (circle one): Beach / Harbor / Park

Field Crew Names: TL / JR

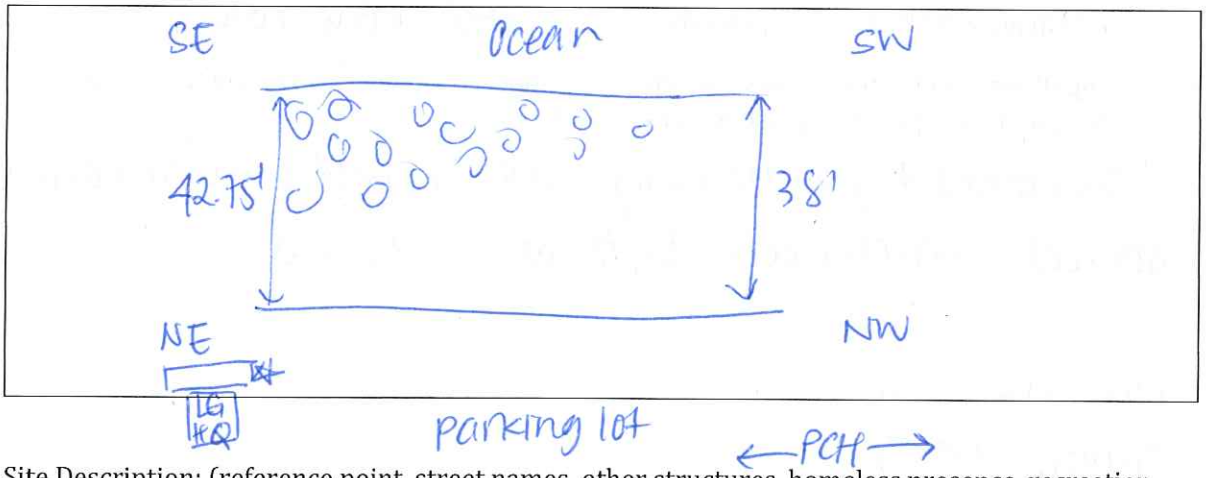
Site Information

GPS Coordinates: NW 34° 02.305' -118°34.930 NE 34° 02.315' -118°34.915'

SW 34° 02.308' -118°34.924' SE 34° 02.309' -118°34.911'

Reference Point west edge of wall in front of LG HQ

Sketch of Site: (label directions – eg north, shoreline, docks, major streets, reference point, etc.)



Site Description: (reference point, street names, other structures, homeless presence, recreation presence, etc.)

Reference: west edge of wall in front of LG HQ

no homeless. 4 ppl in monit area, ~10 ppt at beach

TRASH MONITORING WORKSHEET

Monitoring Information

Event Start Time: 17:25 Event Stop Time: 17:29

Time Spent Monitoring

Total (Stop – Start): 4min

Cumulative (Total Time * # of Crew Members): 8min

Weight of Trash (lbs to one decimal point):

Standard Trash: 0.3 oz (BDL)

Hazardous Material: Ø

Intractable Trash (estimated): Ø

Trash Types:

Are hazardous materials present? Types? no.

Is intractable trash present? Types? no.

Is kelp present? High or low presence? yes. very low.

Monitoring Observations: (trash types and relative locations, relative proportion of trash types, spatial/temporal trash patterns, possible sources, etc)

2 cigarettes & plastic ring. along crest or near rocks.
sources: beach goers. bathroom. LG HQ

Additional Notes: (weather, wildlife, etc.)

sunny. 1 dog.

Post Event Check

Was photograph taken? Yes / No

Is worksheet complete? Yes / No

TRASH MONITORING WORKSHEET

General Information

Date/Time of Arrival (24 hr clock): 09/27/2016 15:33

Monitoring Type (circle one): MFAC Assessment / Source Area Evaluation

Location Name: Marina Beach (Lot 10) Location ID: Eval8_Mar

Location Type (circle one): Beach / Harbor / Park

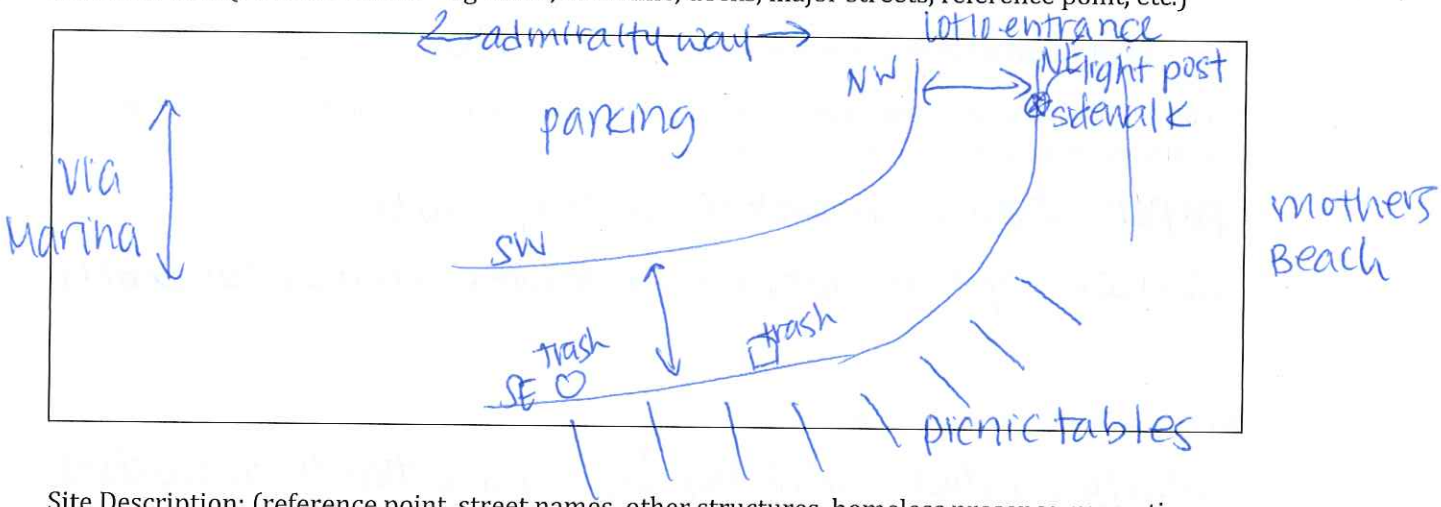
Field Crew Names: TL / JR

Site Information

GPS Coordinates: NW 33°58.902' -118°27.573' NE 33°58.903' -118°27.572'
SW 33°58.890 -118°27.521 SE 33°58.889' -118°27.575'

* Reference Point light pole @ end of lot 10 entry

Sketch of Site: (label directions – eg north, shoreline, docks, major streets, reference point, etc.)



Site Description: (reference point, street names, other structures, homeless presence, recreation presence, etc.)

Reference: light post @ end of Lot 10 entry

no homeless. ~10 ppl @ picnic tables. ~15 ppl @ mother's Beach
~15 cars in lot.

TRASH MONITORING WORKSHEET

Monitoring Information

Event Start Time: 15:46 Event Stop Time: 15:49

Time Spent Monitoring

Total (Stop – Start): 3 min

Cumulative (Total Time * # of Crew Members): 6 min

Weight of Trash (lbs to one decimal point): empty : 0.3 oz

Standard Trash: 1.0 oz.

Hazardous Material: ϕ

Intractable Trash (estimated): ϕ

Trash Types:

Are hazardous materials present? Types? no

Is intractable trash present? Types? no

Is kelp present? High or low presence? no.

Monitoring Observations: (trash types and relative locations, relative proportion of trash types, spatial/temporal trash patterns, possible sources, etc)

paper. straws. wrappers. along curb.
sources: ppl in lot, picnic tables, going to beach

Additional Notes: (weather, wildlife, etc.)

sunny. 1 dog walking by. more trash in bushes beyond curb.

Post Event Check

Was photograph taken? Yes / No

Is worksheet complete? Yes / No

TRASH MONITORING WORKSHEET

General Information

Date/Time of Arrival (24 hr clock): 09/27/2016 15:10

Monitoring Type (circle one): MFAC Assessment / Source Area Evaluation

Location Name: MDR Harbor Location ID: Eval9 - MDR

Location Type (circle one): Beach / Harbor / Park

Field Crew Names: TL / JR

Site Information

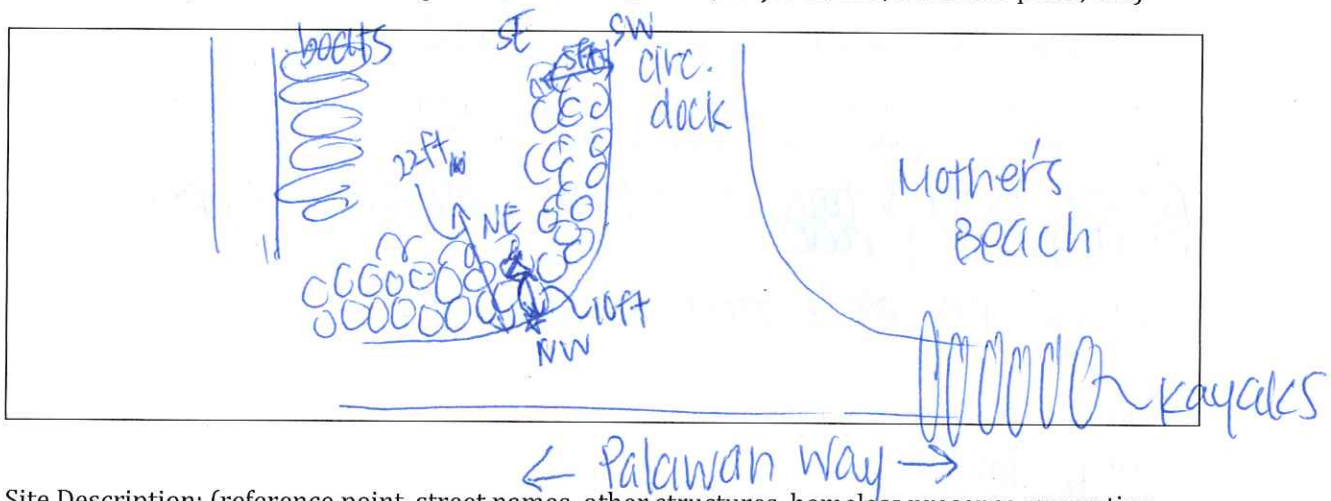
water @ N end: 33°58.8.761' -118°27.348'

GPS Coordinates: NW 33°58.882' -118°27.346' NE 33°58.881' -118°27.347'

SW 33°58.873' -118°27.359' SE in water. n/a

Reference Point NE edge of fence along circulation dock

Sketch of Site: (label directions – eg north, shoreline, docks, major streets, reference point, etc.)



Site Description: (reference point, street names, other structures, homeless presence, recreation presence, etc.)

Reference: NE edge of fence along circulation dock.
no homeless. no ppl. construction at adjacent apts

TRASH MONITORING WORKSHEET

Monitoring Information

Event Start Time: 15:16 Event Stop Time: 15:22

Time Spent Monitoring

Total (Stop – Start): 6min

Cumulative (Total Time * # of Crew Members): 12min

Weight of Trash (lbs to one decimal point): empty: 0.4 oz

Standard Trash: 1.42lb.

Hazardous Material: ϕ

Intractable Trash (estimated): ϕ

Trash Types:

Are hazardous materials present? Types? no

Is intractable trash present? Types? no

Is kelp present? High or low presence? no.

Monitoring Observations: (trash types and relative locations, relative proportion of trash types, spatial/temporal trash patterns, possible sources, etc)

plastic bottles, toys, flip flops, plastic wrappers mostly along rocks.

sources: ppl. boats. tide. beach users.

Additional Notes: (weather, wildlife, etc.)

sunny. birds

Post Event Check

Was photograph taken? Yes / No

Is worksheet complete? Yes / No

TRASH MONITORING WORKSHEET

General Information

Date/Time of Arrival (24 hr clock): 09/27/2016 16:03

Monitoring Type (circle one): MFAC Assessment / Source Area Evaluation

Location Name: Burton Chace Park Location ID: Eval 10 – BCP

Location Type (circle one): Beach / Harbor / Park

Field Crew Names: TL / JR

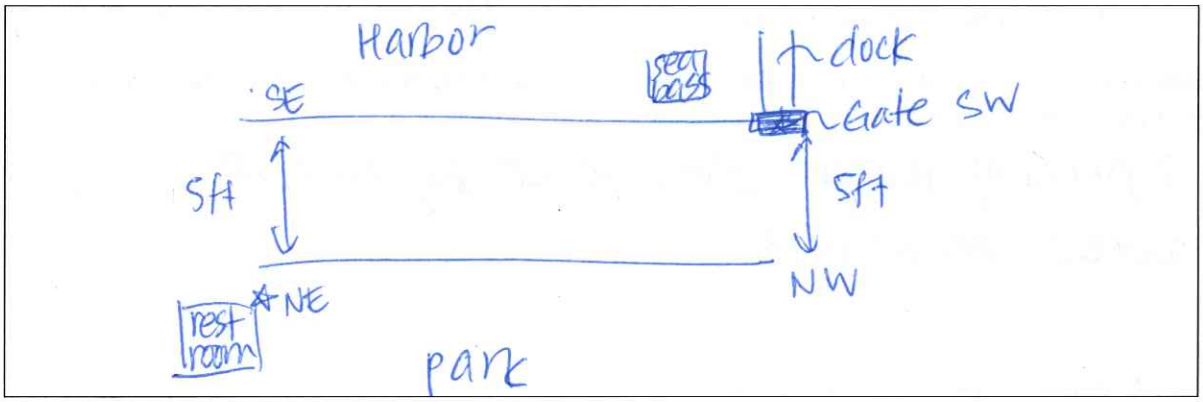
Site Information

GPS Coordinates: NW 33°58.576' -118°26.749' NE 33°58.584 -118°26.733'

SW 33°58.577' -118°26.749' SE 33°58.584' -118°26.732'

Reference Point west face of restrooms

Sketch of Site: (label directions – eg north, shoreline, docks, major streets, reference point, etc.)



Site Description: (reference point, street names, other structures, homeless presence, recreation presence, etc.)

Reference: west face of restrooms

no homeless. no ppl nearby. ~10 ppl in park

TRASH MONITORING WORKSHEET

Monitoring Information

Event Start Time: 16:06 Event Stop Time: 16:09

Time Spent Monitoring

Total (Stop – Start): 3 min

Cumulative (Total Time * # of Crew Members): 6 min

Weight of Trash (lbs to one decimal point):

Standard Trash: 0.3 oz (BDL)

Hazardous Material: Ø

Intractable Trash (estimated): Ø

Trash Types:

Are hazardous materials present? Types? no

Is intractable trash present? Types? no

Is kelp present? High or low presence? no.

Monitoring Observations: (trash types and relative locations, relative proportion of trash types, spatial/temporal trash patterns, possible sources, etc)

2 pieces of paper along fence by harbor

sources: ppl at park.

Additional Notes: (weather, wildlife, etc.)

sunny. no wildlife.

Post Event Check

Was photograph taken? Yes / No

Is worksheet complete? Yes / No

TRASH MONITORING WORKSHEET

General Information

Date/Time of Arrival (24 hr clock): 16:04 09/26/16

Monitoring Type (circle one): MFAC Assessment / Source Area Evaluation

Location Name: Redondo Beach Location ID: Eval11- Red

Location Type (circle one): Beach / Harbor / Park

Field Crew Names: TL / JR

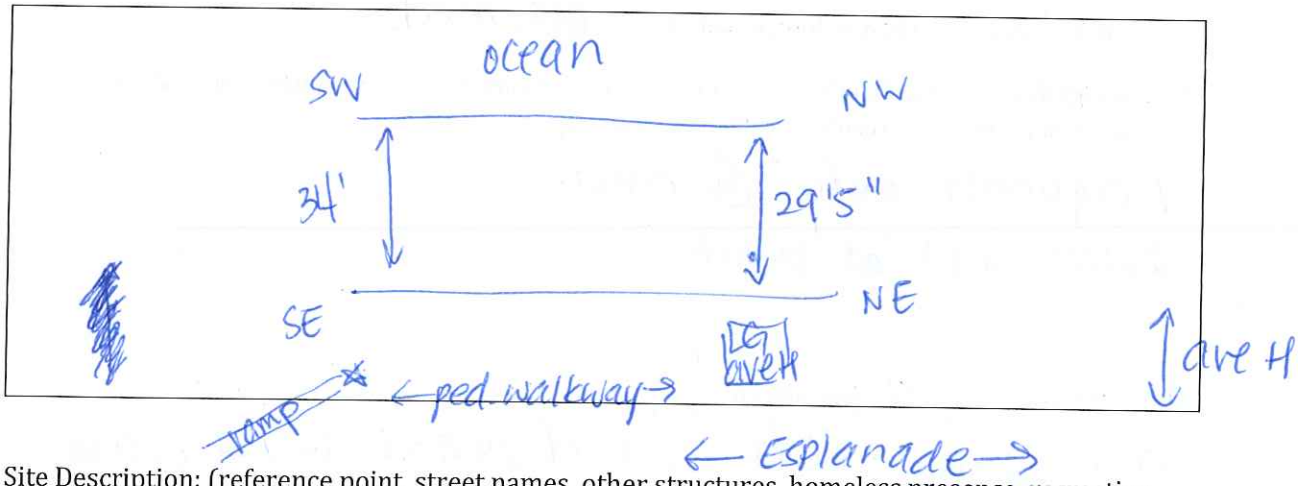
Site Information

GPS Coordinates: NW 33°49.215' -118°23.456' NE 33°49.215' -118°23.450'

SW 33°49.198' -118°23.457' SE 33°49.198' -118°23.451'

Reference Point pole at bottom of access ramp S of LG ave H

Sketch of Site: (label directions – eg north, shoreline, docks, major streets, reference point, etc.)



Site Description: (reference point, street names, other structures, homeless presence, recreation presence, etc.)

Reference: white pole/fountain at bottom of access ramp south of LG Tower H

No homeless. ~20ppl by mont area. >50 ppl @ beach

TRASH MONITORING WORKSHEET

Monitoring Information

Event Start Time: 16:17 Event Stop Time: 16:22

Time Spent Monitoring

Total (Stop – Start): 5min

Cumulative (Total Time * # of Crew Members): 10min

Weight of Trash (lbs to one decimal point): 0.1 oz empty

Standard Trash: 0.1oz (BDL) 1 cigarette

Hazardous Material: ϕ

Intractable Trash (estimated): ϕ

Trash Types:

Are hazardous materials present? Types? no

Is intractable trash present? Types? no

Is kelp present? High or low presence? yes. med.

Monitoring Observations: (trash types and relative locations, relative proportion of trash types, spatial/temporal trash patterns, possible sources, etc)

1 cigarette only @ crest
sources: ppl at beach.

Additional Notes: (weather, wildlife, etc.)

sunny, no wildlife. lots of peds & bikers along bike path.

Post Event Check

Was photograph taken? Yes / No

Is worksheet complete? Yes / No

TRASH MONITORING WORKSHEET

General Information

Date/Time of Arrival (24 hr clock): 09/26/2016 15:35

Monitoring Type (circle one): MFAC Assessment / Source Area Evaluation

Location Name: Torrance Beach Location ID: Eval12_TOR

Location Type (circle one): Beach / Harbor / Park

Field Crew Names: TL / JK

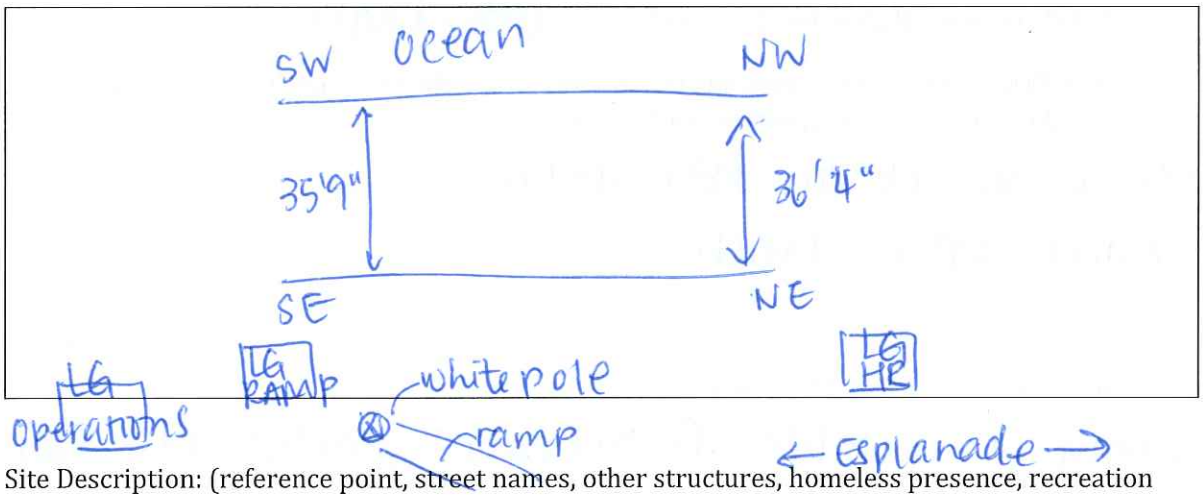
Site Information

GPS Coordinates: NW 33°48.804' -118°23.504' NE ~~34~~ 33°48.803' -118°23.518'

SW 33°48.788' -118°23.527' SE 33°48.786' -118°23.520'

Reference Point white pole @ bottom of ramp N of LG OPS building

Sketch of Site: (label directions – eg north, shoreline, docks, major streets, reference point, etc.)



Site Description: (reference point, street names, other structures, homeless presence, recreation presence, etc.)

Reference: white pole/fountain @ bottom of ramp between LG Towers Ramp & HR. North of LG operations building.

no homeless. ~10 ppl near monit area. >50 on beach.

TRASH MONITORING WORKSHEET

Monitoring Information

Event Start Time: 15:45 Event Stop Time: 15:52

Time Spent Monitoring

Total (Stop – Start): 7min

Cumulative (Total Time * # of Crew Members): 14min

Weight of Trash (lbs to one decimal point): Empty 0.1 oz

Standard Trash: 0.7 oz

Hazardous Material: 0.2 oz

Intractable Trash (estimated): ϕ

Trash Types:

Are hazardous materials present? Types? yes. oil globs

Is intractable trash present? Types? no.

Is kelp present? High or low presence? yes. high

Monitoring Observations: (trash types and relative locations, relative proportion of trash types, spatial/temporal trash patterns, possible sources, etc)

food waste / plastic near crest.

sources: ppl on beach.

Additional Notes: (weather, wildlife, etc.)

sunny. no wildlife. Perry's cafe nearby but closed.

Post Event Check

Was photograph taken? Yes / No

Is worksheet complete? Yes / No

Appendix B

Field Data

Monitoring Site	Assessment Type	Site Type	Date	Time	NW Latitude	NW Longitude	SW Latitude	SW Longitude	NE Latitude	NE Longitude	SE Latitude	SE Longitude	Length	Width 1	Width 2	Average Width	Monitoring Area	Start Time	End Time	Time Lapsed	# of People	Total Time	Standard Trash Weight	Hazardous Trash Weight	Intractable Trash Weight	Total Trash Weight
Units													(ft)	(ft)	(ft)	(ft)	(sq ft)			(min)		(min)	(lbs)	(lbs)	(lbs)	(lbs)
Nicholas Canyon Beach	MFAC	Beach (Shoreline)	9/19/2016	12:00	34.0425	-118.9161	34.04237	-118.916	34.04248	-118.9161	34.04238	-118.916	50	5.0	9.0	7.0	350	12:22	12:28	6	2	12	0.006	0	0	0.006
Zuma Beach	MFAC	Beach (Shoreline)	9/19/2016	12:50	34.0226	-118.8329	34.0224	-118.8327	34.0225	-118.8328	34.0225	-118.8326	100	34.0	33.0	33.5	3350	12:58	13:06	8	2	16	0.094	0	0	0.094
Point Dume Beach	MFAC	Beach (Shoreline)	9/19/2016	13:23	34.0102	-118.8165	34.0099	-118.8163	34.0102	-118.8165	34.0100	-118.8162	100	22.6	16.1	19.3	1934	13:32	13:37	5	2	10	0.075	0	0	0.075
Dan Blocker Beach	MFAC	Beach (Parking Lot)	9/19/2016	13:56	34.0331	-118.7334	34.0331	-118.7337	34.0000	-118.7334	34.0331	-118.7334	100	14.0	14.0	14.0	1400	14:05	15:08	3	2	6	0	0	0	0.000
Malibu/Surfrider Beach	MFAC	Beach (Shoreline)	9/20/2016	12:21	34.0351	-118.6786	34.0348	-118.6787	34.0351	-118.6786	34.0348	-118.6787	100	13.5	8.8	11.2	1117	12:36	12:41	5	2	10	0.056	0	0	0.056
Topanga Beach	MFAC	Beach (Shoreline)	9/20/2016	13:05	34.0385	-118.5822	34.0385	-118.5822	34.0386	-118.5819	34.0386	-118.5819	100	12.0	10.0	11.0	1100	13:11	13:16	5	2	10	0.056	0	0	0.056
Marina Beach	MFAC	Beach (Shoreline)	9/21/2016	13:05	33.9817	-118.4560	33.9816	-118.4560	33.9814	-118.4558	33.9814	-118.4559	100	26.5	8.0	17.3	1725	13:38	13:48	10	2	20	0.519	0	0	0.519
Marina del Rey Harbor	MFAC	Harbor (Water)	9/21/2016	14:00	33.9763	-118.4458	33.9763	-118.4458	33.9764	-118.4456	33.9764	-118.4455	100	10.0	10.0	10.0	1000	14:07	14:10	3	2	6	0.000	0	0	0.000
Burton Chace Park	MFAC	Park (Sidewalk)	9/21/2016	14:35	33.9775	-118.4431	33.9775	-118.4431	33.9777	-118.4428	33.9777	-118.4428	100	10.0	10.0	10.0	1000	14:43	14:45	2	2	4	0.025	0	0	0.025
Manhattan Beach	MFAC	Beach (Shoreline)	9/22/2016	11:33	33.9028	-118.4222	87.1510	-118.4221	33.9028	-118.4221	33.9026	-118.4220	100	23.5	25.6	24.5	2454	11:44	12:01	17	2	34	1.769	0	0	1.769
Redondo Beach	MFAC	Beach (Shoreline)	9/22/2016	12:40	33.8269	-118.3911	33.8272	-118.3911	33.8269	-118.3910	33.8272	-118.3910	100	6.3	5.6	6.0	596	12:54	12:58	4	2	8	0.003	0	0	0.003
Torrance Beach	MFAC	Beach (Shoreline)	9/22/2016	13:34	33.8047	-118.3941	33.8044	-118.3942	33.8047	-118.3940	33.8044	-118.3941	100	13.5	0.3	6.9	692	13:39	13:42	3	2	6	0.044	0	0	0.044
Nicholas Canyon Beach	Source Area Eval	Beach (Parking Lot)	8/22/2016	14:40	34.0428	-118.9155	34.0428	-118.9155	34.0427	-118.9152	34.0427	-118.9152	100	10.0	10.0	10.0	1000	14:27	14:41	14	2	28	0.200	0	0	0.200
Zuma Beach	Source Area Eval	Beach (Shoreline)	8/22/2016	15:15	34.0151	-118.8228	34.0149	-118.8226	34.0152	-118.8228	34.0150	-118.8225	100	34.0	26.0	30.0	3000	15:21	15:31	10	2	20	0.050	0	0	0.050
Point Dume Beach	Source Area Eval	Beach (Shoreline)	8/22/2016	15:51	34.0103	-118.8168	34.0101	-118.8166	34.0104	-118.8166	34.0102	-118.8164	100	44.5	47.0	45.8	4575	15:55	16:06	11	2	22	0.400	0	0	0.400
Latigo Shores Beach	Source Area Eval	Beach (Parking Lot)	8/22/2016	16:23	34.0312	-118.7496	34.0313	-118.7494	34.0313	-118.7496	34.0313	-118.7493	100	10.0	10.0	10.0	1000	16:30	16:52	22	2	44	1.160	2.100	20	23.260
Las Tunas Beach	Source Area Eval	Beach (Parking Lot)	8/22/2016	17:20	34.0394	-118.5972	34.0393	-118.5972	34.0394	-118.5969	34.0394	-118.5969	100	10.0	10.0	10.0	1000	17:28	17:40	12	2	24	0.360	0	0	0.360
Topanga Beach	Source Area Eval	Beach (Shoreline)	8/22/2016	17:48	34.0384	-118.5822	34.0383	-118.5821	34.0386	-118.5819	34.0385	-118.5818	100	47.0	57.0	52.0	5200	18:01	18:09	8	2	16	0.620	0	0	0.620
Marina Beach	Source Area Eval	Beach (Parking Lot)	8/23/2016	14:58	33.9817	-118.4586	33.9815	-118.4587	33.9817	-118.4586	33.9815	-118.4587	100	10.0	10.0	10.0	1000	15:16	15:25	9	2	18	0.025	0	0	0.025
Marina del Rey Harbor	Source Area Eval	Harbor (Shoreline)	8/23/2016	15:30	33.9813	-118.4558	33.9812	-118.4560	33.9814	-118.4558	n/a	n/a	100	22.0	5.0	13.5	1350	15:51	16:05	14	2	28	2.380	0	0	2.380
Burton Chace Park	Source Area Eval	Park (Sidewalk)	8/23/2016	16:42	33.9763	-118.4458	33.9762	-118.4458	33.9764	-118.4455	33.9764	-118.4455	100	5.0	5.0	5.0	500	16:48	17:00	12	2	24	0.031	0	0	0.031
Redondo Beach	Source Area Eval	Beach (Shoreline)	8/24/2016	14:34	33.8202	-118.3909	33.8200	-118.3910	33.8202	-118.3908	33.8200	-118.3909	100	25.0	24.0	24.5	2450	14:45	14:53	8	2	16	0.120	0	0	0.120
Torrance Beach	Source Area Eval	Beach (Shoreline)	9/26/2016	15:35	33.8134	-118.3917	33.8131	-118.3905	33.8134	-118.3920	33.8131	-118.3920	100	35.8	36.3	36.0	3604	15:45	15:52	7	2	14	0.038	0	0	0.038
Nicholas Canyon Beach	Source Area Eval	Beach (Parking Lot)	9/28/2016	14:12	34.0428	-118.9155	34.0427	-118.9155	34.0427	-118.9152	34.0427	-118.9152	100	10.0	10.0	10.0	1000	14:22	14:29	7	2	14	0.319	0	0	0.319
Zuma Beach	Source Area Eval	Beach (Shoreline)	9/28/2016	14:46	34.0150	-118.8229	34.0147	-118.8226	34.0151	-118.8227	34.0149	-118.8224	100	93.0	73.3	83.1	8313	15:11	15:16	5	2	10	0.050	0	0	0.050
Point Dume Beach	Source Area Eval	Beach (Shoreline)	9/28/2016	15:40	34.0103	-118.8167	34.0101	-118.8166	34.0104	-118.8166	34.0102	-118.8164	100	43.0	42.6	42.8	4279	15:48	15:54	6	2	12	1.575	0	0	1.575
Latigo Shores Beach	Source Area Eval	Beach (Parking Lot)	9/28/2016	16:12	34.0312	-118.7497	34.0313	-118.7493	34.0312	-118.7496	34.0313	-118.7494	100	10.0	10.0	10.0	1000	16:17	16:31	14	2	28	0.030	0.026	0	0.056
Las Tunas Beach	Source Area Eval	Beach (Parking Lot)	9/28/2016	16:56	34.0393	-118.5972	34.0393	-118.5972	34.0394	-118.5969	34.0393	-118.5969	100	10.0	10.0	10.0	1000	17:04	17:11	7	2	14	0.213	0	0	0.213
Topanga Beach	Source Area Eval	Beach (Shoreline)	9/28/2016	17:20	34.0384	-118.5822	34.0383	-118.5821	34.0386	-118.5819	34.0385	-118.5819	100	42.8	38.0	40.4	4038	17:25	17:29	4	2	8	0.003	0	0	0.003
Marina Beach	Source Area Eval	Beach (Parking Lot)	9/27/2016	15:33	33.9817	-118.4586	33.9815	-118.4587	33.9817	-118.4585	33.9815	-118.4587	100	10.0	10.0	10.0	1000	15:46	15:49	3	2	6	0.044	0	0	0.044
Marina del Rey Harbor	Source Area Eval	Harbor (Shoreline)	9/27/2016	15:10	33.9814	-118.4558	33.9812	-118.4560	33.9814	-118.4558	n/a	n/a	100	22.0	5.0	13.5	1350	15:16	15:22	6	2	12	0.064	0	0	0.064
Burton Chace Park	Source Area Eval	Park (Sidewalk)	9/27/2016	16:03	33.9763	-118.4458	33.9763	-118.4458	33.9764	-118.4456	33.9814	-118.4455	100	5.0	5.0	5.0	500	16:06	16:09	3	2	6	0.003	0	0	0.003
Redondo Beach	Source Area Eval	Beach (Shoreline)	9/26/2016	16:04	33.8203	-118.3909	33.8200	-118.3910	33.8203	-118.3908	33.8200	-118.3909	100	34.0	29.5	31.8	3175	16:17	16:22	5	2	10	0.003	0	0	0.003
Torrance Beach	Source Area Eval	Beach (Shoreline)	10/10/2016	14:45	33.8134	-118.3921	33.8131	-118.3922	33.8134	-118.3920	33.8131	-118.3920	100	40.5	32.0	36.3	3625	14:52	14:58	6	2	12	0.269	0	0	0.269

Appendix C

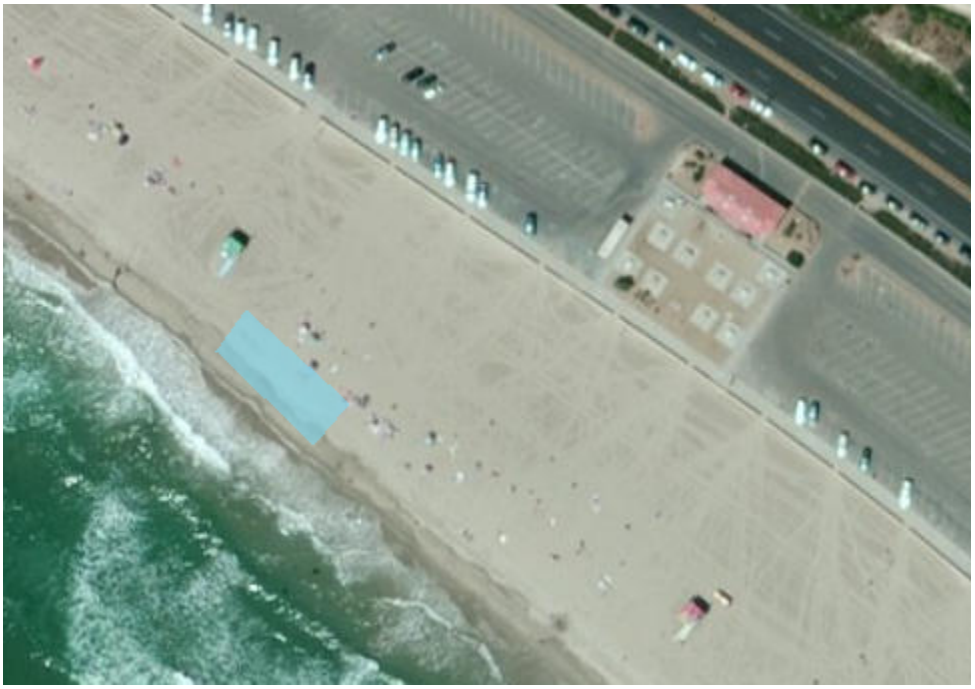
Site Maps and Monitoring Photos

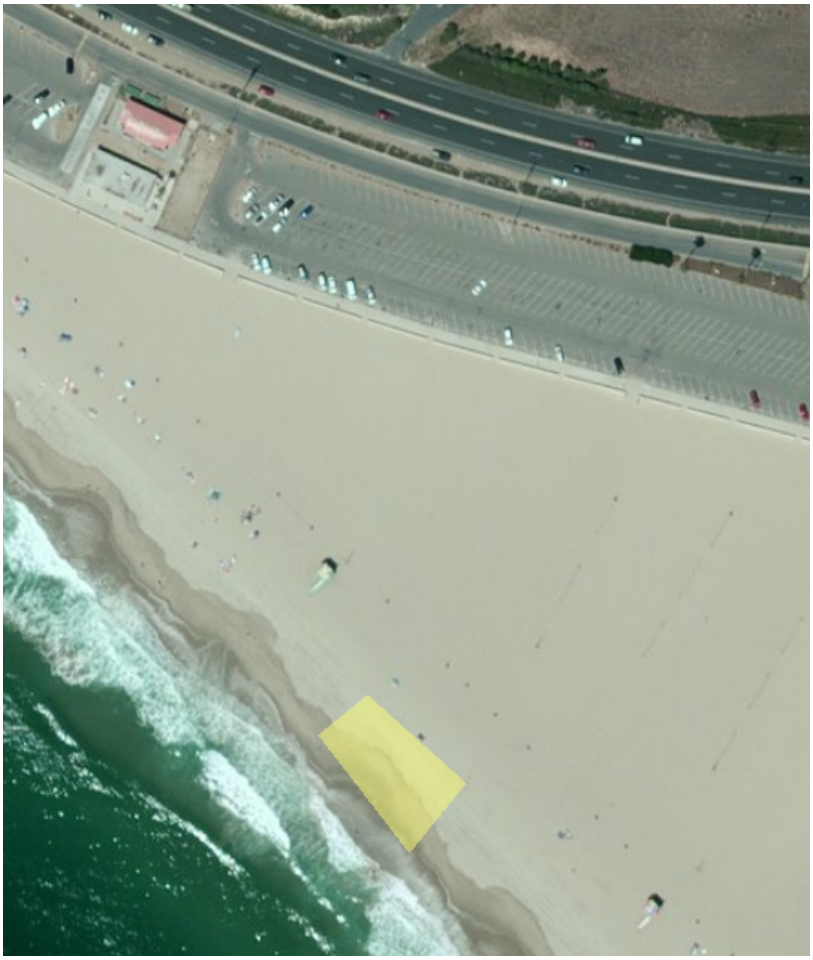
SITE AERIALS

- Blue = MFAC Assessment Site
- Yellow = Source Area Evaluation Site
- Green = MFAC Assessment and Source Area Evaluation Site

Nicholas Canyon Beach

Zuma Beach



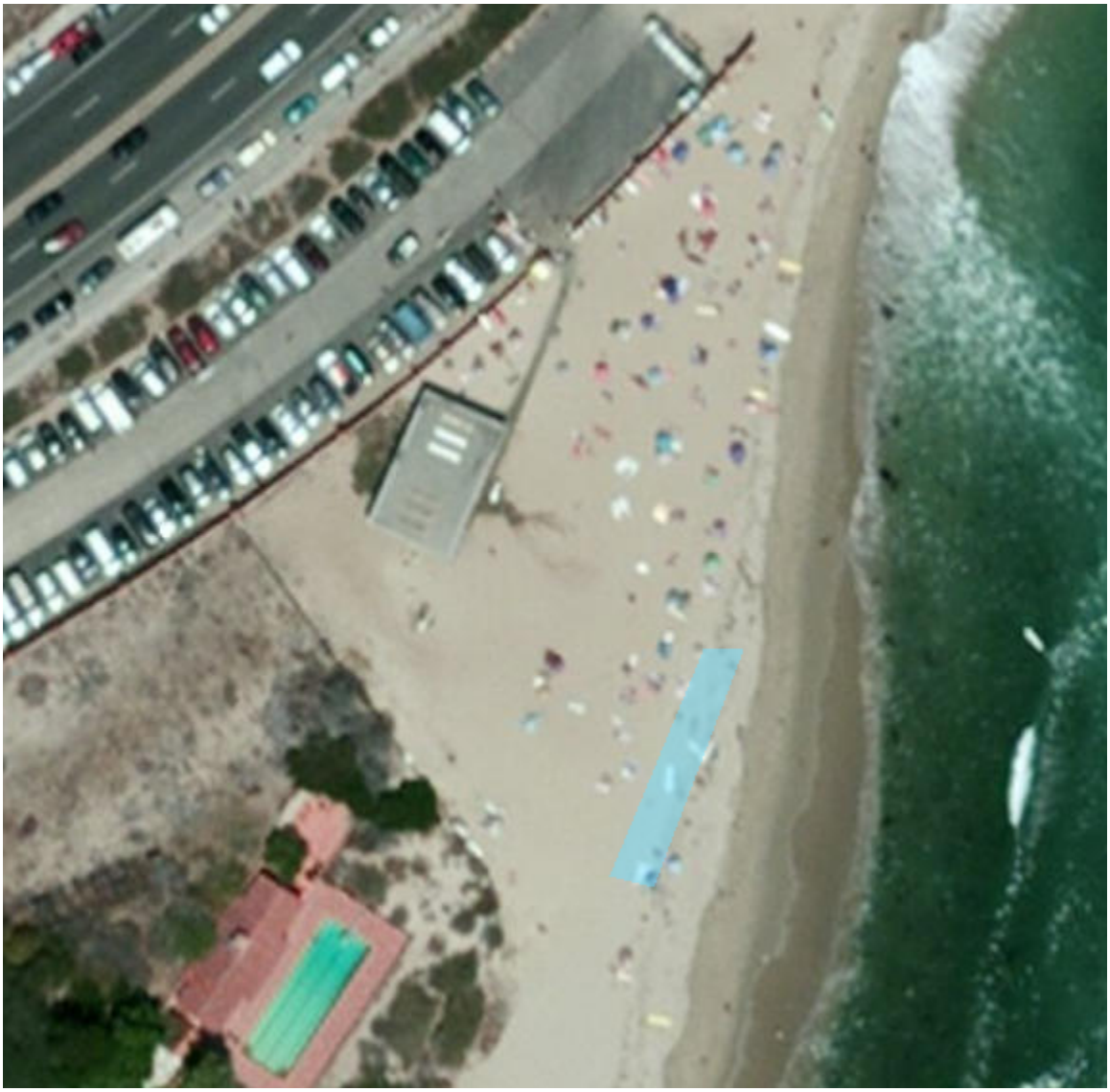


Point Dume Beach

Latigo Shores Beach

Dan Blocker Beach

Malibu/Surfrider

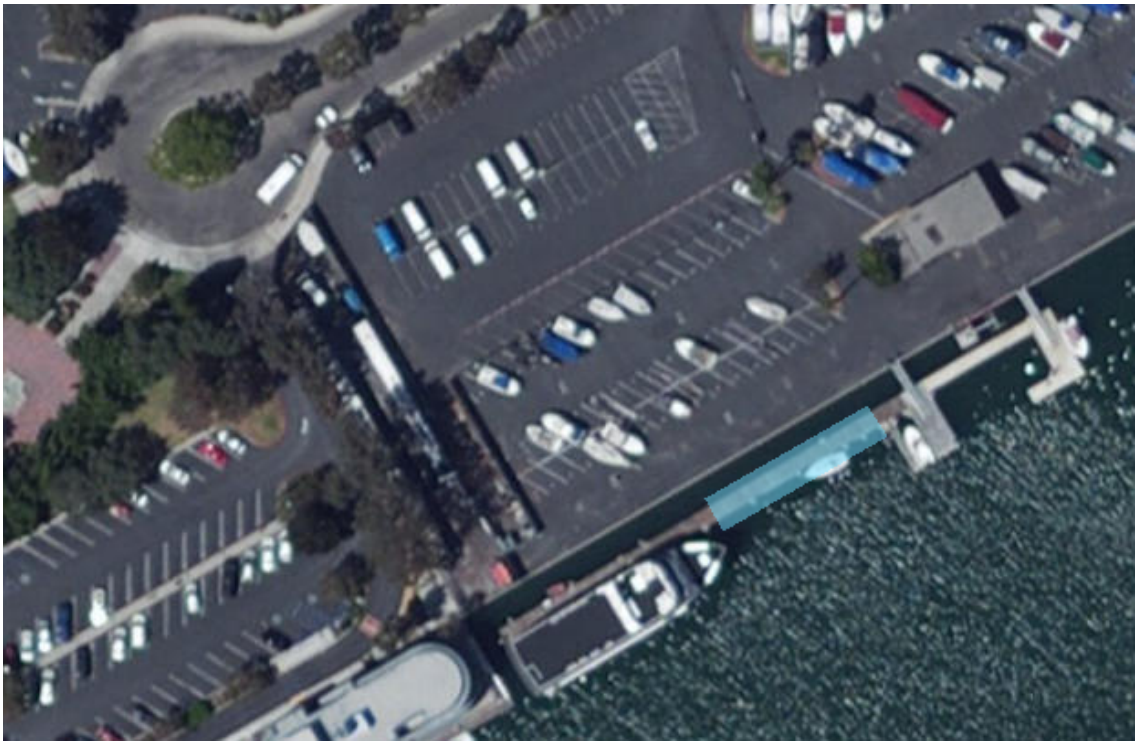


Las Tunas Beach

Topanga Beach

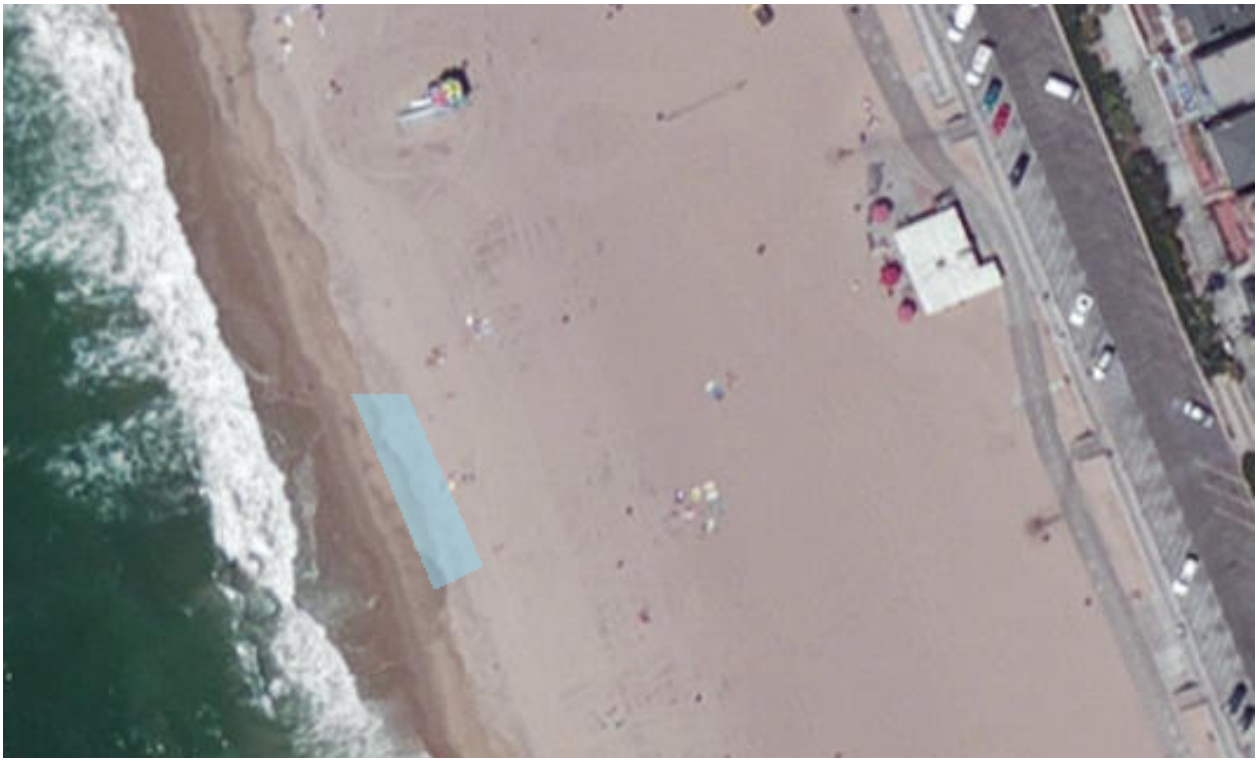
Marina Beach

Marina del Rey Harbor

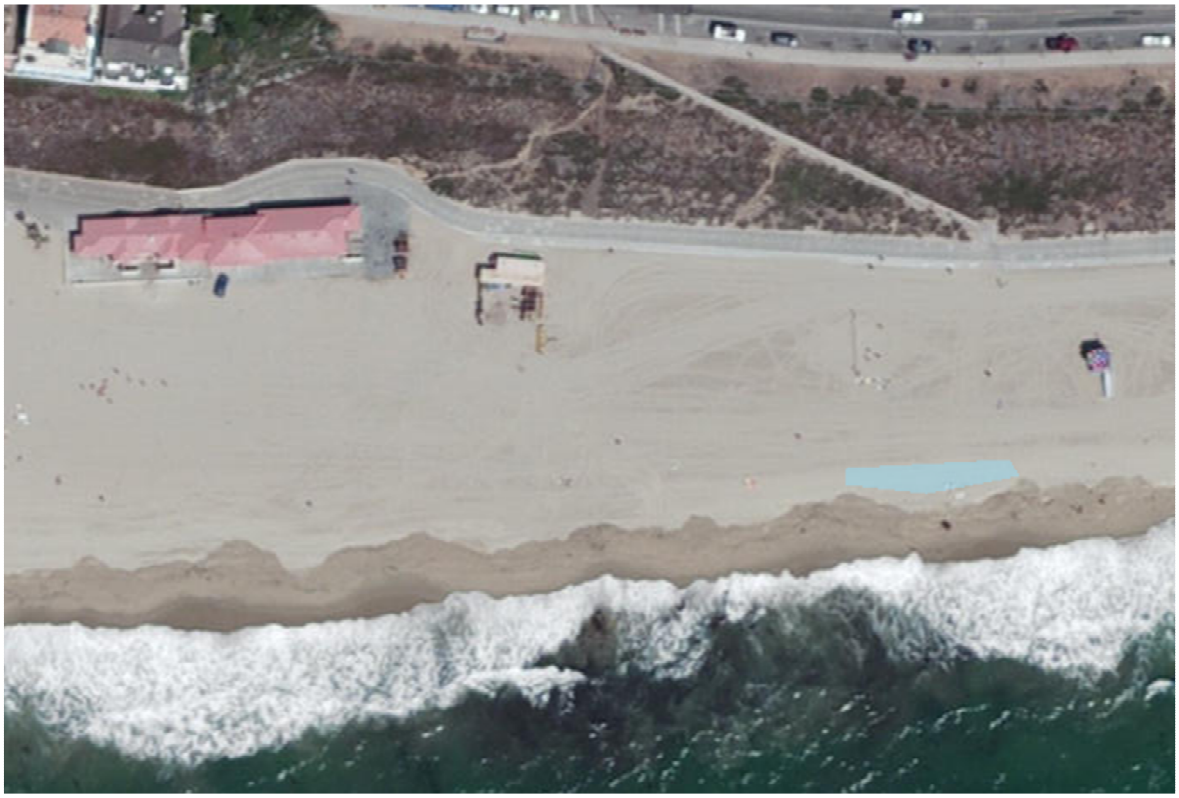


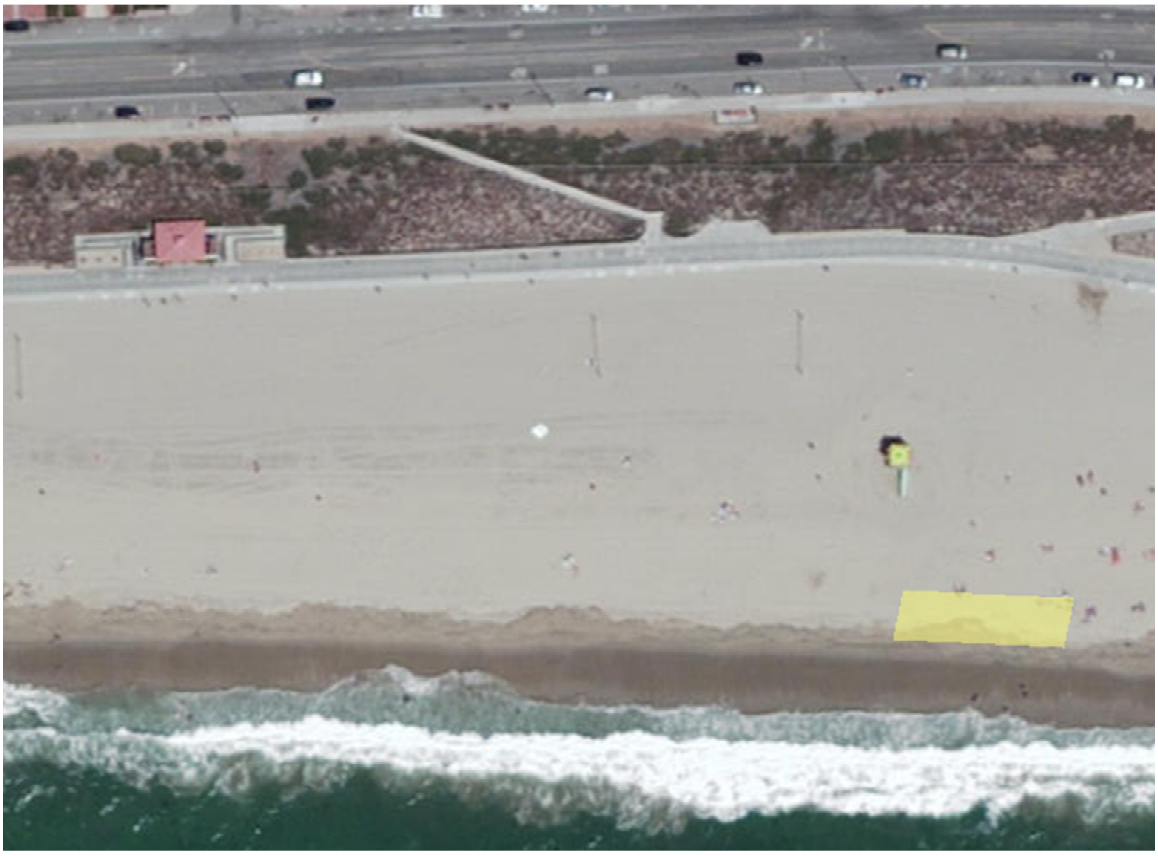
Burton Chace Park

Manhattan Beach

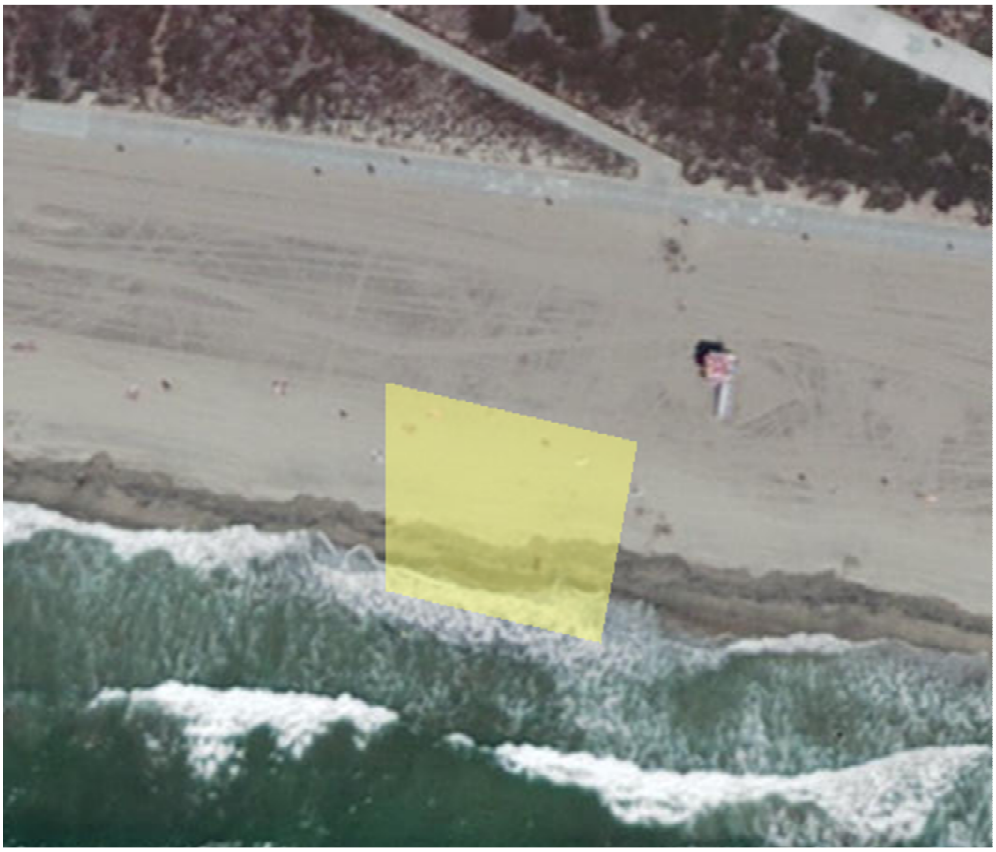


Redondo Beach





Torrance Beach



MONITORING PHOTOS

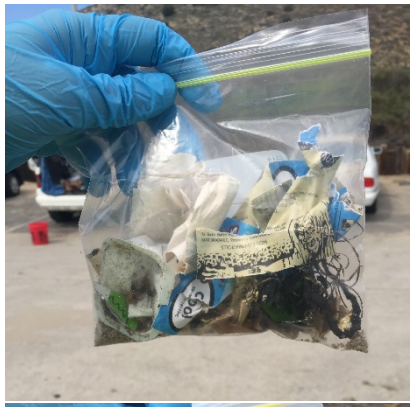
MFAC Assessment Photos

Site	Monitoring Area	Trash Collected
Nicholas Canyon Beach		

Site	Monitoring Area	Trash Collected
Zuma Beach		

Site	Monitoring Area	Trash Collected
Point Dume Beach		

Site	Monitoring Area	Trash Collected
Dan Blocker Beach		

Site	Monitoring Area	Trash Collected
Malibu/Surfrider Beach		

Site	Monitoring Area	Trash Collected
Topanga Beach		

Site	Monitoring Area	Trash Collected
Marina Beach		

Site	Monitoring Area	Trash Collected
Marina del Rey Harbor		0 trash
Burton Chace Park		

Site	Monitoring Area	Trash Collected
Manhattan Beach		

Site	Monitoring Area	Trash Collected
Redondo Beach		

Site	Monitoring Area	Trash Collected
Torrance Beach		

Source Area Evaluation Photos – Event 1

Site	Monitoring Area	Trash Collected
Nicholas Canyon Beach		n/a
Zuma Beach		n/a

Point Dume Beach		n/a

Latigo Shores Beach		n/a

Las Tunas Beach		n/a
Topanga Beach		n/a

Marina Beach		
Marina del Rey Harbor		

Burton Chace Park		
Redondo Beach		

Torrance Beach		

Source Area Evaluation Photos – Event 2

Site	Monitoring Area	Trash Collected
Nicholas Canyon Beach		

Zuma Beach		

Point Dume Beach		

Latigo Shores Beach		

Las Tunas Beach		
Topanga Beach		

Marina Beach		
Marina del Rey Harbor		

Burton Chace Park		
Redondo Beach		

Torrance Beach		

Appendix D

Plastic Pellet Inspection Logs

```
TRANS: INSP              HMS INSPECTION DISPLAY/UPDATE                OPER: E515180
 PROG: PWC160                                                         02/29/16 12:31:22

  ACTION: _ (A)DD  (C)HANGE  (D)ELETE  (B)ROWSE  A(S)SC # BROWSE
  FILE #: 018364 025655 NAME: SEAMARK                          SEC? N  STAT: PERM
STREET #: 13441 FR:       DR:     NAME: MINDANAO             SF: WAY  UN:
    CITY: MARINA DEL REY           ZIP: 90292 6307  AREA: 25  TEL: 310 301 8303
  INSP #: I 000824270    INSP TYPE: S SCHI    INSP DT: 020516   INSP DISP: COMP
  ASSC #: P CGI019476  ASSC # TYPE: S S6    ASSC # DT: 112706 ASSC # DISP: PERM

INSP PROC: GIASP_____       SAMP REQ? _     SELF MONT?

INSP INFO: WDID#_4_19I019476;8/21/12_NOI_-C000722236._____________________________
           WASTE LIQ/SPARE PARTS UNDER COVER/ELEVATED;STORMDRAINS CLEAN/MARKED;

  RESULTS: SPILL_RESPONSE_READILY_AVAILABLE;SWPPP_ON_SITE;PER_CONTACT,BUSINESS_
           BEING_RELOCATED,AREA_TO_BE_REDEVELOPED;BMPS_ADEQUATE_________________
           # OF VIOLS FOUND:   0                COMPLY DT:

ASSIGN DT: 020516              DUE DT: 022916        ASSIGN TO: 47913  JMDF
 START DT: ______             COMP DT: 020816          COMP BY: 47913  JMDF
 DMS LINK: HTTP://PWIIS01/SPDMS/HMS.ASPX?DOCNO=000824270&DOCTYPE=INSP
                                       LAST TRAN/DATE/OPER: INSP 022916 E515180
 UPDATE COMPLETED
```

COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS
STORMWATER CERTIFICATE OF INSPECTION
www.cleanla.com

Site-File No. 18364 - 25655

Inspection No. 824270

Business Name Seamark

Business Address 13441 Mindanao MDR 90292

Business Telephone No. 310 301 8303 **Business Owner** Ruben Flores

Permit status of facility:
☐ Coverage under Stormwater Certificate ☒ IASGP (filed NOI) ☐ No Exposure Certification ☐ NPDES Permit

Facility's WDID# 4 19I019476 SWPPP onsite ☒ Yes ☐ No Date of SWPPP 6/1/~~2016~~ 2015

CRITICAL SOURCES TRACKING SYSTEM FACILITY CLASSIFICATIONS: ☒ USEPA Phase I Facilities ☐ Not Elsewhere Classified
Commercial: ☐ Restaurants* ☐ Automotive Services* ☐ Retail Gasoline Outlet/Auto Dealerships* ☐ Nurseries
Federally Mandated Facilities: ☐ Municipal Landfill ☐ Hazardous Waste Treatment / Recovery Facilities ☐ EPCRA
*Must use additional BMPs noted on Critical Source Supplement
SIC 3731 Narrative Description: Boat Maint/Repair

Based on observations made during site inspection and document review, the following Best Management Practices (BMP) deficiencies were noted. Deficient BMPs must be corrected to this Department's satisfaction.

DEFICIENT BMPS OBSERVED

None

COMMENTS:

SW FEE DUE: $ **REINSPECTION NO.**

This report is furnished to the facility representative to be used as a measurement of the effectiveness of BMPs currently being implemented at the facility to prevent stormwater pollution. You are hereby directed to correct any violation(s) of the Los Angeles County Code Title 12 Chapter 12.80 noted in the deficiencies section above within fifteen (15) days from the date on this inspection form.
☐ Additional Notice of Violation Order to Comply attached. ☐ Referral RWQCB

Upon completion of corrective actions please contact _____

Monday through Friday 8 a.m. to 9:30 a.m. at ( ) _____ **for compliance verification.**

Facility Representative Signature: _____ Date: 2-8-2016

Print name of Facility Representative: Ruben Flores G. Inspector: Jason Monod de Froideville

STORMWATER CERTIFICATE ISSUED ☒ **YES** ☐ **NO**

A stormwater certificate will not be issued until all deficient BMPs have been corrected.
Issuance of a stormwater certificate indicates this site to be in compliance with all stormwater BMPs at the time of inspect

66-0001A DPW Rev. 05/14 Office Copy Page 1 of 2

INSPECTION NO. 8-9-16

BEST MANAGEMENT PRACTICE (BMP) CHECKLIST

The BMPs listed below are suggested measures to control the discharge of pollutants to the stormwater drainage system. It is encouraged to employ additional BMPs if they will control pollutants in an effective manner. If the inspector has lined out a BMP this indicates BMP is not applicable to the facility. If the inspector has circled a BMP this indicates BMP is not being implemented or is not being implemented properly

A. MINIMUM BMPs - APPLICABLE TO ALL FACILITIES

1. Termination of all non-stormwater discharge to storm drain.
2. General good housekeeping.
3. Spill prevention and control procedures in place.
4. ~~Soil erosion control~~
5. Employee training program on stormwater issues
6. Post on-site storm drains to indicate they are not to receive liquid or solid wastes
7. Regular cleaning of storm drainage system
8. Absorbent and cleaning materials on hand for use
9. Stormwater runoff routed around operating, processing, fueling, cleaning and storage areas
10. Hose bibs eliminated or posted
11. Proper disposal of air conditioning, cooling tower, and condensate drains

B. VEHICLE/EQUIPMENT FUELING

1. Fueling area design minimizes storm water exposure
2. Covered fueling area
3. Perimeter drain or pavement sloped to containment sump
4. UST equipped with spill and overfill protection
5. Above ground tanks within spill containment

C. VEHICLE & EQUIPMENT WASHING/STEAM CLEANING

1. Use offsite commercial washing and cleaning businesses
2. Covered designated wash area, sewered under permit
3. Exposed designated wash area, sewered w/RDS,permit
4. Covered designated wash area, containment sump, permit
5. Exposed designated wash area, containment sump, permit
6. Water recirculation/reclamation system used
7. Demineralized/ultra-pure water spray rinse, no runoff
8. Portable containment and vacuum collection of wastewater
9. Onsite washing by vendor, wastewater disposal offsite
10. Onsite washing by vendor, wastewater collected and disposed onsite, permit

D. GROUNDS MAINTENANCE

1. ~~Leaving or planting native vegetation to reduce maintenance~~
2. ~~Careful use of pesticides and fertilizers in landscaping~~
3. ~~Integrated pest management where appropriate~~
4. Sweeping of paved surfaces

E. VEHICLE & EQUIPMENT MAINTENANCE AND REPAIR

1. Equipment kept clean, build-up of oil and grease avoided
2. Drip pans or containers available where needed
3. ~~Covered designated maintenance area w/ spill containment~~
4. Exposed designated maintenance area w/ spill containment
5. Recycle greases, used oil, oil filters, antifreeze, cleaning solutions, automotive batteries, hydraulic and trans. fluids
6. Use non-toxic chemicals for maintenance when possible
7. Store idle equipment under cover

F. OUTDOOR LOADING AND UNLOADING OF MATERIALS

1. Operations withing designated area w/spill containment
2. Fully covered loading/unloading docks
3. Partially covered loading/unloading docks
4. Seal or door skirt between trailer and building
5. Truck well w/manual sump pump, spill procedure posted
6. Truck well w/RDS system and permit. Spill procedure posted
7. Drip pans or containers used under hoses or transfer operations

G. OUTDOOR PROCESS/EQUIPMENT

1. ~~Maintain activity indoors~~
2. ~~Cover the area with containment roof~~
3. Stormwater runoff routed around process area
4. ~~Process wastes piped directly to sewer pretreatment system~~
5. Spill containment for process areas
6. ~~Air emission control equipment under AQMD permit~~

H. OUTSIDE STORAGE

1. ~~Store materials indoors~~
2. ~~Cover storage area with fixed roof or temporary cover~~
3. Store materials on paved or impervious surfaces
4. Store materials within containment berms
5. Sweep and maintain routes to and from storage areas

I. WASTE HANDLING AND DISPOSAL

1. Recycle materials within plant or to offsite facilities
2. ~~Valid sewer file, valid permit or pretreatment system in place~~
3. Hazardous waste generator license or permit in place
4. Wastes segregated by type, labeled, and dated
5. Waste storage/pretreatment areas clean and free of spill or leaks
6. Proper records maintained on waste storage and disposal

WHITE: Office Copy PINK: Field Copy YELLOW: Owner Copy

```
TRANS: INSP              HMS INSPECTION DISPLAY/UPDATE                OPER: E515180
 PROG: PWC160                                                          02/29/16 12:47:02

  ACTION: _ (A)DD  (C)HANGE  (D)ELETE  (B)ROWSE  A(S)SC # BROWSE
  FILE #: 000194 045236 NAME: WINDWARD YACHT & REPAIR INC    SEC? N  STAT: PERM
STREET #: 13645 FR:       DR:     NAME: FIJI                SF: WAY  UN:
    CITY: MARINA DEL REY           ZIP: 90292 6986  AREA: 25  TEL: 310 823 4581
  INSP #: I 000824272    INSP TYPE: S SCHI    INSP DT: 020516   INSP DISP: COMP
  ASSC #: P CGI011278  ASSC # TYPE: S S6    ASSC # DT: 112706 ASSC # DISP: PERM

INSP PROC: GIASP_____       SAMP REQ? _     SELF MONT?

INSP INFO: ____________________________________________________________________
           INSPECT EVERY 2 YEARS W/IW FILE 000194-I00195 - WDID# 4 19I011278

  RESULTS: LOT_CLEAN;SPILL_RESPONSE_IN_PLACE,READILY_AVAILABLE;ALL_MATERIALS
           UNDER_COVER;DRAINS_MARKED;SWPPP_ON_SITE;BMPS_ADEQUATE_______________
           # OF VIOLS FOUND:   0                COMPLY DT:

ASSIGN DT: 020516              DUE DT: ______         ASSIGN TO: 47913  JMDF
 START DT: ______             COMP DT: 020816           COMP BY: 47913_ JMDF
 DMS LINK: HTTP://PWIIS01/SPDMS/HMS.ASPX?DOCNO=000824272&DOCTYPE=INSP
                                       LAST TRAN/DATE/OPER: INSP 022916 E515180
 UPDATE COMPLETED
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COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS
STORMWATER CERTIFICATE OF INSPECTION
www.cleanla.com

Site-File No. 194 - 452360

Inspection No. 824272

Business Name Winward Yacht & Repair Inc

Business Address 13645 Fiji Way 90292

Business Telephone No. 310 720 4303 **Business Owner** Simon Landt

Permit status of facility:
☐ Coverage under Stormwater Certificate ☒ IASGP (filed NOI) ☐ No Exposure Certification ☐ NPDES Permit

Facility's WDID# 4 19I011278 SWPPP onsite ☒ Yes ☐ No Date of SWPPP 6/29/2015

CRITICAL SOURCES TRACKING SYSTEM FACILITY CLASSIFICATIONS: ☐ USEPA Phase I Facilities ☐ Not Elsewhere Classified
Commercial: ☐ Restaurants* ☐ Automotive Services* ☐ Retail Gasoline Outlet/Auto Dealerships* ☐ Nurseries
Federally Mandated Facilities: ☐ Municipal Landfill ☐ Hazardous Waste Treatment / Recovery Facilities ☐ EPCRA
*Must use additional BMPs noted on Critical Source Supplement
SIC 3732 Narrative Description: Boat Repair/Maint

Based on observations made during site inspection and document review, the following Best Management Practices (BMP) deficiencies were noted. Deficient BMPs must be corrected to this Department's satisfaction.

DEFICIENT BMPS OBSERVED

NONE

COMMENTS:

SW FEE DUE: $ **REINSPECTION NO.**

This report is furnished to the facility representative to be used as a measurement of the effectiveness of BMPs currently being implemented at the facility to prevent stormwater pollution. You are hereby directed to correct any violation(s) of the Los Angeles County Code Title 12 Chapter 12.80 noted in the deficiencies section above within fifteen (15) days from the date on this inspection form.
☐ Additional Notice of Violation Order to Comply attached. ☐ Referral RWQCB

Upon completion of corrective actions please contact _____

Monday through Friday 8 a.m. to 9:30 a.m. at ( ) _____ **for compliance verification.**

Facility Representative Signature: [signature] Date: 2/8/16

Print name of Facility Representative: Hector Tobias Inspector: Jason Monod de Froideville

STORMWATER CERTIFICATE ISSUED ☒ **YES** ☐ **NO**

A stormwater certificate will not be issued until all deficient BMPs have been corrected.
Issuance of a stormwater certificate indicates this site to be in compliance with all stormwater BMPs at the time of inspect

BEST MANAGEMENT PRACTICE (BMP) CHECKLIST

The BMPs listed below are suggested measures to control the discharge of pollutants to the stormwater drainage system. It is encouraged to employ additional BMPs if they will control pollutants in an effective manner. If the inspector has lined out a BMP this indicates BMP is not applicable to the facility. If the inspector has circled a BMP this indicates BMP is not being implemented or is not being implemented properly

A. MINIMUM BMPs - APPLICABLE TO ALL FACILITIES

1. Termination of all non-stormwater discharge to storm drain.
2. General good housekeeping.
3. Spill prevention and control procedures in place.
4. ~~Soil erosion control~~
5. Employee training program on stormwater issues
6. Post on-site storm drains to indicate they are not to receive liquid or solid wastes
7. Regular cleaning of storm drainage system
8. Absorbent and cleaning materials on hand for use
9. Stormwater runoff routed around operating, processing, fueling, cleaning and storage areas
10. ~~Hose bibs eliminated or posted~~
11. Proper disposal of air conditioning, cooling tower, and condensate drains

B. VEHICLE/EQUIPMENT FUELING

1. Fueling area design minimizes storm water exposure
2. Covered fueling area
3. Perimeter drain or pavement sloped to containment sump
4. UST equipped with spill and overfill protection
5. Above ground tanks within spill containment

C. VEHICLE & EQUIPMENT WASHING/STEAM CLEANING

1. ~~Use offsite commercial washing and cleaning businesses~~
2. ~~Covered designated wash area, sewered under permit~~
3. Exposed designated wash area, sewered w/RDS,permit
4. ~~Covered designated wash area, containment sump, permit~~
5. ~~Exposed designated wash area, containment sump, permit~~
6. ~~Water recirculation/reclamation system used~~
7. Demineralized/ultra-pure water spray rinse, no runoff
8. ~~Portable containment and vacuum collection of wastewater~~
9. ~~Onsite washing by vendor, wastewater fully offsite~~
10. ~~Onsite washing by vendor, wastewater collected and disposed onsite, permit~~

D. GROUNDS MAINTENANCE

1. Leaving or planting native vegetation to reduce maintenance
2. Careful use of pesticides and fertilizers in landscaping
3. Integrated pest management where appropriate
4. Sweeping of paved surfaces

E. VEHICLE & EQUIPMENT MAINTENANCE AND REPAIR

1. Equipment kept clean, build-up of oil and grease avoided
2. Drip pans or containers available where needed
3. Covered designated maintenance area w/ spill containment
4. Exposed designated maintenance area w/ spill containment
5. Recycle greases, used oil, oil filters, antifreeze, cleaning solutions, automotive batteries, hydraulic and trans. fluids
6. Use non-toxic chemicals for maintenance when possible
7. Store idle equipment under cover

F. OUTDOOR LOADING AND UNLOADING OF MATERIALS

1. Operations withing designated area w/spill containment
2. ~~Fully covered loading/unloading docks~~
3. ~~Partially covered loading/unloading docks~~
4. ~~Seal or door skirt between trailer and building~~
5. ~~Truck well w/manual sump pump, spill procedure posted~~
6. ~~Truck well w/RDS system and permit. Spill procedure posted~~
7. ~~Drip pans or containers used under hoses or transfer operations~~

G. OUTDOOR PROCESS/EQUIPMENT

1. ~~Maintain activity indoors~~
2. ~~Cover the area with a permanent roof~~
3. Stormwater runoff routed around process area
4. Process wastes piped directly to sewer pretreatment system
5. Spill containment for process areas
6. Air emission control equipment under AQMD permit

H. OUTSIDE STORAGE

1. Store materials indoors
2. ~~Cover storage area with fixed roof or temporary cover~~
3. Store materials on paved or impervious surfaces
4. Store materials within containment berms
5. Sweep and maintain routes to and from storage areas

I. WASTE HANDLING AND DISPOSAL

1. Recycle materials within plant or to offsite facilities
2. Valid sewer disposal permit and pretreatment system in place
3. Hazardous waste generator license or permit in place
4. Wastes segregated by type, labeled, and dated
5. Waste storage/pretreatment areas clean and free of spill or leaks
6. Proper records maintained on waste storage and disposal

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TRANS: INSP              HMS INSPECTION DISPLAY/UPDATE              OPER: E515180
 PROG: PWC160                                                       02/29/16 13:06:08

  ACTION: _ (A)DD  (C)HANGE  (D)ELETE  (B)ROWSE  A(S)SC # BROWSE
  FILE #: 005707 045235 NAME: THE BOAT YARD                  SEC? N  STAT: PERM
STREET #: 13555 FR:       DR:     NAME: FIJI                 SF: WAY  UN:
    CITY: MARINA DEL REY           ZIP: 90292 9325  AREA: 25  TEL: 310 823 8964
  INSP #: I 000824271    INSP TYPE: S SCHI    INSP DT: 020516   INSP DISP: COMP
  ASSC #: P CGI020189  ASSC # TYPE: S S6    ASSC # DT: 122706 ASSC # DISP: PERM

INSP PROC: GIASP_____       SAMP REQ? _     SELF MONT? _

INSP INFO: SITE_HAS_ACIDIC_DISCHARGE_-_SEE_C_000653508,_VERIFY_GIASP_STTUS.____
           INSPECT_WITH_UST_FILE_EVERY_OTHER_YEAR_005707-053532_________________

  RESULTS: YARD_CLEAN;DRAINS_LABELED;SPILL_RESPONSE_READILY_AVAILABLE;MATERIALS
           INDOOR/UNDERCOVER;SWPPP_ON_SITE;BMPS_ADEQUATE_____________________________
           # OF VIOLS FOUND:   0                COMPLY DT:

ASSIGN DT: 020516              DUE DT: ______          ASSIGN TO: 47913_ JMDF__
 START DT: ______             COMP DT: 020816           COMP BY: 47913  JMDF
 DMS LINK: HTTP://PWIIS01/SPDMS/HMS.ASPX?DOCNO=000824271&DOCTYPE=INSP
                                       LAST TRAN/DATE/OPER: INSP 022916 E515180
 UPDATE COMPLETED
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COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS
STORMWATER CERTIFICATE OF INSPECTION
www.cleanla.com

Site-File No. 5707 - ~~32018~~ 45235

Inspection No. 824271

Business Name The Boat Yard

Business Address 13555 Fiji Way Marina Del Rey 90292

Business Telephone No. 310 823 8964 **Business Owner** Victor Espino

Permit status of facility:
☐ Coverage under Stormwater Certificate ☒ IASGP (filed NOI) ☐ No Exposure Certification ☐ NPDES Permit

Facility's WDID# 4 193020189 SWPPP onsite ☒ Yes ☐ No Date of SWPPP 7/1/2015

CRITICAL SOURCES TRACKING SYSTEM FACILITY CLASSIFICATIONS: ☐ USEPA Phase I Facilities ☐ Not Elsewhere Classified
Commercial: ☐ Restaurants* ☐ Automotive Services* ☐ Retail Gasoline Outlet/Auto Dealerships* ☐ Nurseries
Federally Mandated Facilities: ☐ Municipal Landfill ☐ Hazardous Waste Treatment / Recovery Facilities ☐ EPCRA
*Must use additional BMPs noted on Critical Source Supplement
SIC 3732 4493 Narrative Description: Boat maint & repair

Based on observations made during site inspection and document review, the following Best Management Practices (BMP) deficiencies were noted. Deficient BMPs must be corrected to this Department's satisfaction.

DEFICIENT BMPS OBSERVED

None

COMMENTS:

SW FEE DUE: $ **REINSPECTION NO.**

This report is furnished to the facility representative to be used as a measurement of the effectiveness of BMPs currently being implemented at the facility to prevent stormwater pollution. You are hereby directed to correct any violation(s) of the Los Angeles County Code Title 12 Chapter 12.80 noted in the deficiencies section above within fifteen (15) days from the date on this inspection form.
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Upon completion of corrective actions please contact _____

Monday through Friday 8 a.m. to 9:30 a.m. (at) _____ **for compliance verification.**

Facility Representative Signature: _____ Date: 2-8-16

Print name of Facility Representative: Scott Simmer Inspector: Jason Monod de Froideville

STORMWATER CERTIFICATE ISSUED ☐ YES ☐ NO

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66-0001A DPW Rev. 05/14 Office Copy Page ____ of ____

INSPECTION NO. [illegible]

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7. Regular cleaning of storm drainage system
8. Absorbent and cleaning materials on hand for use
9. ~~Stormwater runoff routed around operating, processing, fueling, cleaning and storage areas~~
10. ~~Hose bibs eliminated or posted~~
11. Proper disposal of air conditioning, cooling tower, and condensate drains

B. VEHICLE/EQUIPMENT FUELING

1. ~~Fueling area designed minimizes storm water exposure~~
2. ~~Covered fueling area~~
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C. VEHICLE & EQUIPMENT WASHING/STEAM CLEANING

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5. ~~Exposed designated wash area, containment sump, permit~~
6. ~~Water recirculation/reclamation system used~~
7. Demineralized/ultra-pure water spray rinse, no runoff
8. ~~Portable containment and vacuum collection of wastewater~~
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10. ~~Onsite washing by vendor, wastewater collected and disposed onsite, permit~~

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