

APRA HARBOR, GUAM GEOGRAPHIC RESPONSE PLAN

UNITED STATES COAST GUARD SECTOR GUAM

GUAM COMPONENT

**MARIANA ISLANDS AREA CONTINGENCY PLAN
COMMITTEE**



29 October 2019

Apra Harbor Geographic Response Plan (GRP)

Introduction

In response to the 1989 *Exxon Valdez* oil spill in Alaska, the U.S. government quickly enacted legislation to address many of the deficiencies identified in the response system at that time. These included the lack of a unified and coordinated effort between local, state and federal stakeholders; no commonly defined federal, state or local response structure; poor management of information given to the press, public and other affected parties; and minimal information exchange between all parties. The federal government addressed these deficiencies by passing the Oil Pollution Act of 1990, which required the development of Area Contingency Plans (ACP) for all U.S. coastal areas through area committees composed of regional federal, state and local stakeholders.

The Mariana Islands Area Contingency Plan (MIACP) Committees of both Guam and the Commonwealth of the Northern Mariana Islands (CNMI) have developed an ACP to address removal of oil and hazardous substances from Guam and CNMI waterways. The ACP geographically defines risks to regional environmental and socioeconomic resources that require priority protection. The identified areas receive further in-depth planning with development of a site specific Geographic Response Plan (GRP). This planning process is necessary to reduce response lag time and help direct limited local response resources to areas of higher sensitivity.

Apra Harbor, Guam is the island's highest risk and priority protection area. The GRP contains maps, booming strategies, environmental considerations, and other site-specific response locations for first responders. At each location, the resources at risk and specific response strategies define the priority protection point.

To facilitate the planning process, the GRP is reviewed and updated periodically, and presented to the appropriate MIACP committee for a consensus on the priority of environmentally sensitive areas and protection strategies for approval and adoption. The protection strategies developed are not an exact strategy to be deployed during an oil spill, but guidance for deploying the necessary assets to protect any given area. Weather, tides, currents and storms, as well as the availability of resources, all play a role in the final strategy agreed upon by Unified Command and deployed.

First responders, the FOSC, and the FOSCR must become familiar with the entire content of this GRP prior to a response. The size of Apra Harbor and the prevailing winds do not allow for responders, the FOSC, and the FOSCR to learn this plan during an incident.

Approved and adopted by the Guam Component, Mariana Islands Area Contingency Plan Committee on October 29, 2019.

Please forward any notes, comments or suggestions for changes to USCG Sector Guam Emergency Management & Force Protection, (671) 355-4863/4941.

Apra Harbor

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Guam

Currents and Weather Considerations

1. Climate and Winds

“The dominant winds on Guam are the easterly trade winds. There is a distinct seasonality to the wind conditions in Guam. The trades are stronger and steadier in the winter (January to April), while light and variable winds periodically interrupt the trades in the summer typhoon season (July to October). The spring and fall months are transition periods.”¹

“A west wind condition known as a monsoon surge has also been recognized on Guam. During these conditions, tropical low-pressure troughs intensify southeast of the island, and cause periods of westerly winds. They are typically of short duration, and occur with low frequency during the summer months.”²

The below table shows the occurrence of winds in Apra Harbor. East-northeast through southeast winds occur 70% of the time.³

<i>Wind Direction</i>	<i>Wind Speed (knots = 0.5 m/s)</i>				
	<i>3-7</i>	<i>8-12</i>	<i>13-20</i>	<i>21-30</i>	<i>Total</i>
N	0.7	0.3	-	-	1.1
NNE	0.8	0.5	0.1	-	1.5
NE	3.6	2.3	0.6	-	6.5
ENE	7.6	7.1	2.1	-	16.7
E	9.6	12.1	4.5	0.1	26.4
ESE	5.7	9.3	4.2	0.1	19.2
SE	3.2	3.6	1.2	0.1	8.0
SSE	1.4	1.3	0.4	0.1	3.2
S	1.5	0.8	0.2	-	2.6
SSW	0.5	0.3	0.1	-	1.0
SW	0.4	0.2	0.1	-	0.7
WSW	0.2	0.2	-	-	0.4
W	0.3	0.2	0.1	-	0.5
WNW	0.3	0.2	-	-	0.5
NW	0.4	0.2	-	-	0.6
NNW	0.4	0.2	-	-	0.6
CALM					10.5
Total	36.7	38.5	13.8	0.4	100.0

(Source: US Dept. of Agriculture, www.wcc.nrcs.usda.gov/climate/windrose.html)

2. Waves

“There are three types of waves that occur in Apra Harbor: 1) Trade wind and other locally generated waves, 2) Ocean swell, and, 3) Waves generated by tropical storms and typhoons.

Trade wind waves. Trade wind waves are locally generated within Apra Harbor. The factors that govern wave generation - wind speed, duration and fetch (the distance over which the wind blows) - are limited for these waves generated within the Harbor. There is a limited fetch distance for waves to be generated due to the location of the project site on the east side of the Harbor and the approach direction of the northeast trade winds. Duration is limited for normal conditions, as the trade winds tend to diminish in intensity during the evening and night. Trade wind speeds in Guam are rarely greater than 20 knots (10.3 m/s), and waves would rarely exceed 2 feet (0.6 m) in height.

¹ Habitat Equivalency Analysis & Supporting Studies: Section E Current Measurement and Numerical Model Study for CVN Berthing. Prepared by: Mark Ericksen, Sea engineering, Inc., pg 5

² Ibid, page 5

³ Ibid, page 5

Guam

Currents and Weather Considerations

Ocean Swell. Ocean swell is generated by storms some distance from the island, in particular mid-latitude winter storms that cross the Pacific Ocean. Ocean swell can also be generated by distant typhoons and tropical storms.

Typhoon Waves. Guam is subject to strong winds associated with tropical storms and typhoons. Due to its proximity to typhoon breeding grounds, the island is threatened year-round with the passage of developing tropical storms and typhoons. Based on information from the US Fleet Weather Central, Guam (now the Joint Typhoon Warning Center), at least 19 typhoons typically occur annually across the western North Pacific and South China Sea.”⁴

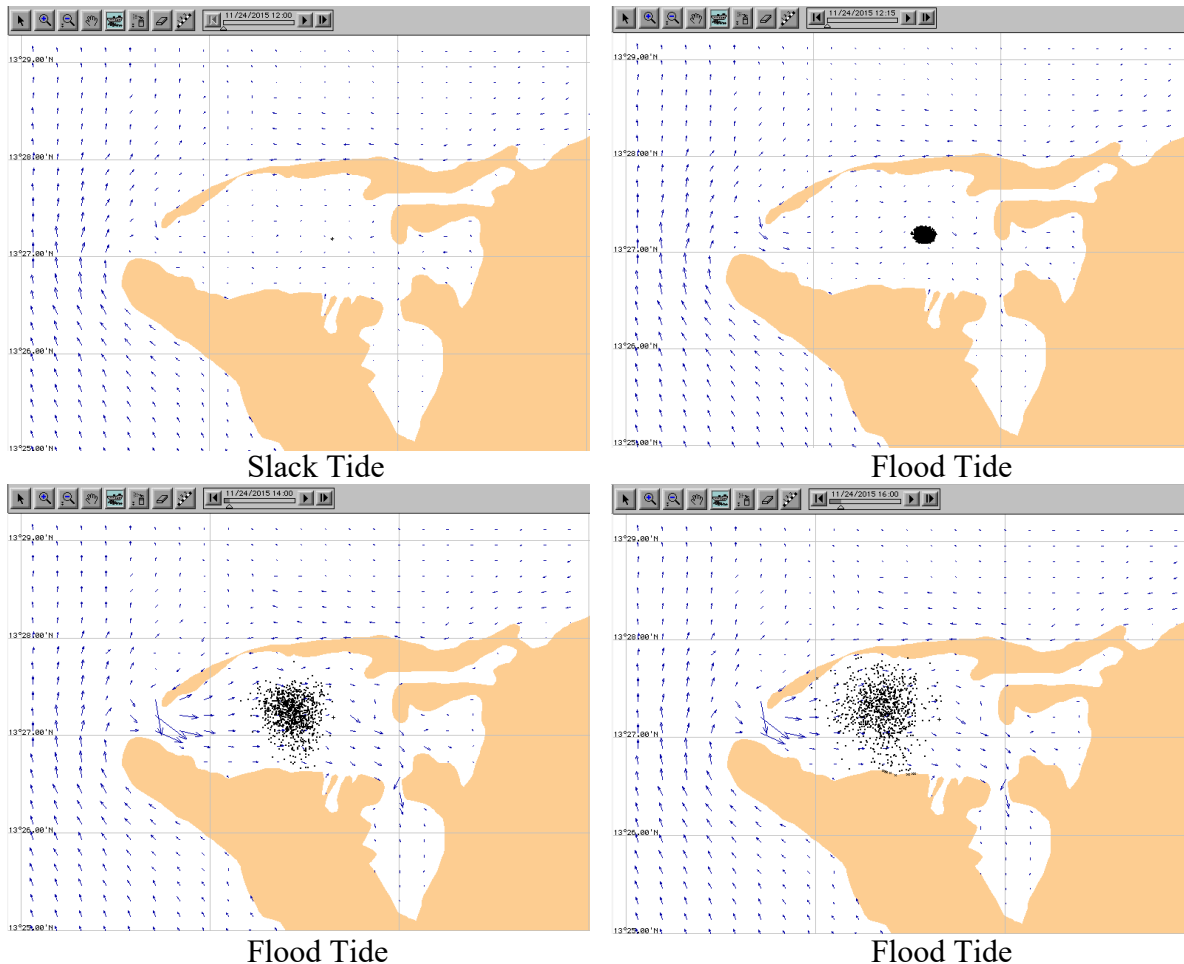
3. Tides and Currents

Guam has two unequal high tides and two unequal low tides each day with a mean tide range of 1.6 feet and a maximum tide range of 2.3 feet.⁵

A 2004 detailed current and modeling study conducted by Sea Engineering confirmed that the currents in Apra Harbor are primarily wind driven.⁶

4. Tidal Currents

Tidal impact to a ENE wind:



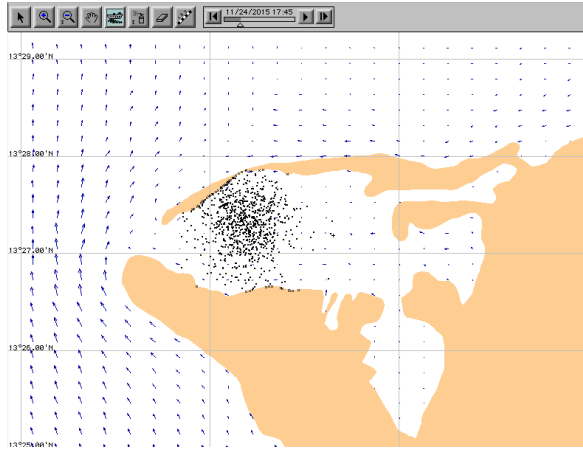
⁴ Ibid, pg 7

⁵ Ibid, pg 8

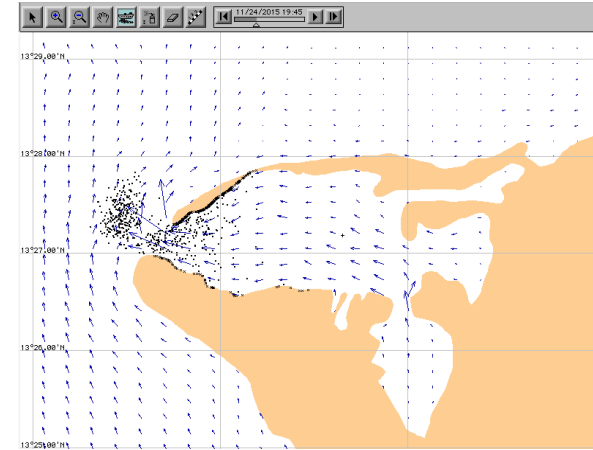
⁶ Ibid, pg8

Guam

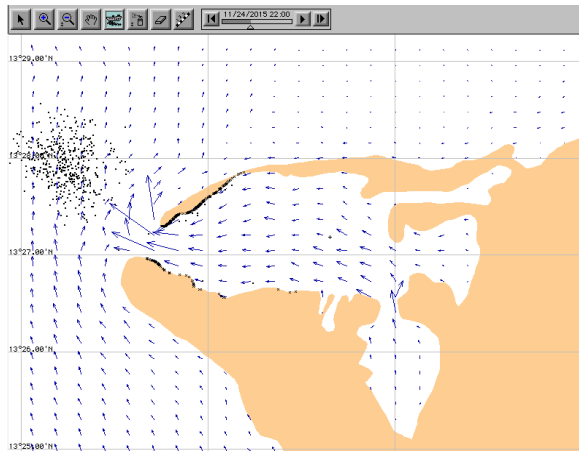
Currents and Weather Considerations



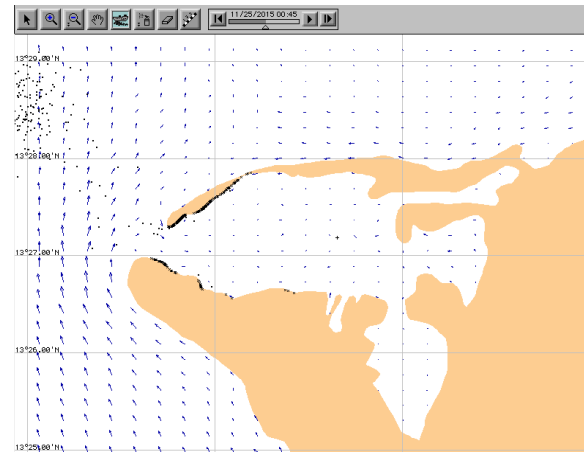
Slack Tide (High Tide)



Ebb Tide

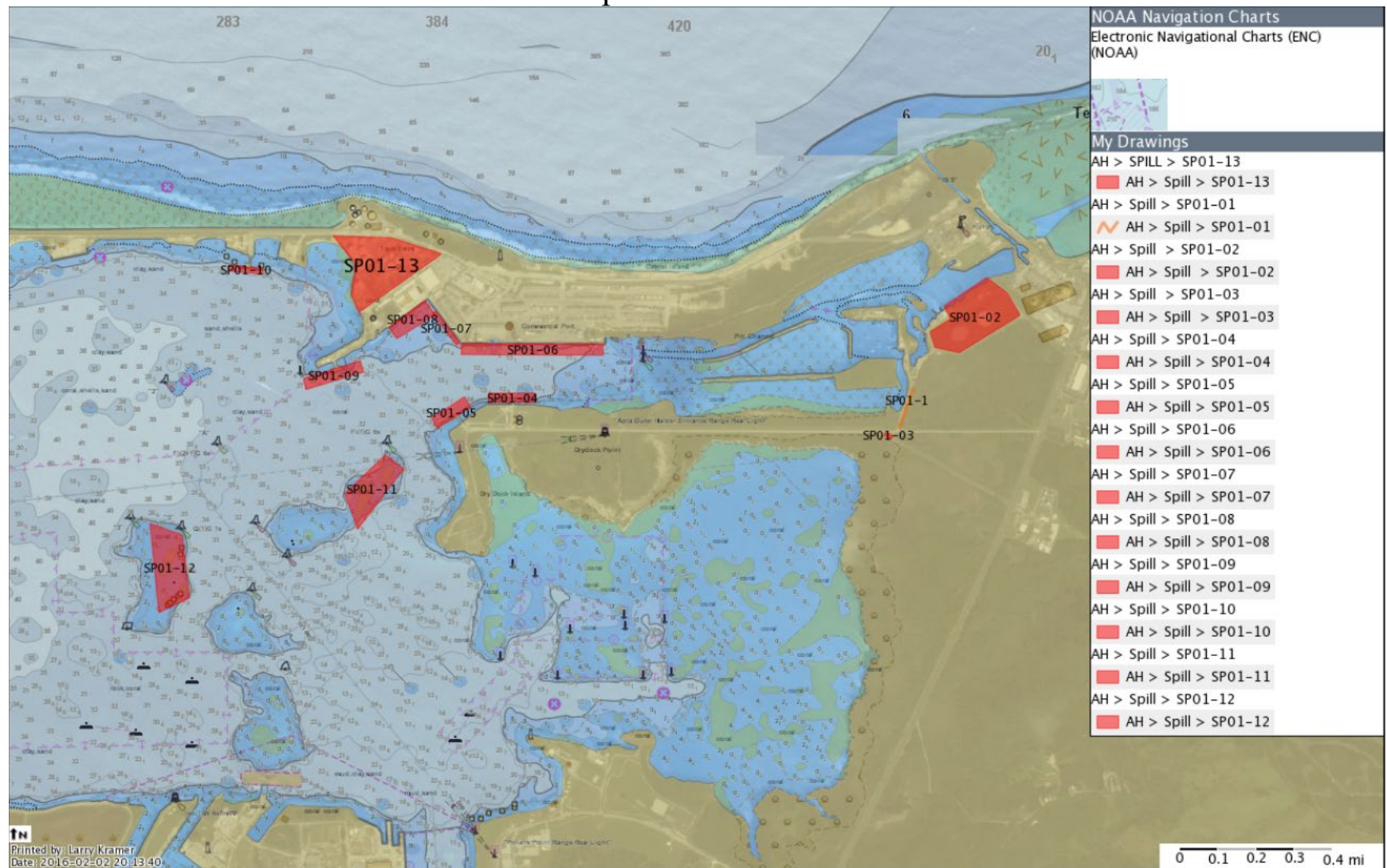


Ebb Tide



Slack Tide

Apra Harbor Spill Areas



AH-SP-1

Apra Harbor Spill Areas

Spill Area	Description	Product(s)	WCD	Location	Protection Strategies
SP01-01	2,490' 24" Pipeline from Navy Tie-in Valve to GPA Fuel Oil Storage. High Risk Spill Area. Owner: Guam Power Authority Contractor: IP&E Tank Farm Operator & Security - 671.477.6333	High and Low Sulfur Fuel Oil	1,393 BBLs	13.45734,144.68340 to 13.45878,144.98393	Contain spill / recovery oil using boom B01-9-04 followed by booms B01-9-01, B01-9-02, and B01-9-03
SP01-02	Guam Power Authority fuel storage tanks (2). Owner: Guam Power Authority Contractor: IP&E Tank Farm Operator & Security - 671.477.6333	High and Low Sulfur Fuel Oil 250,000 BBLs per tank	500,000 BBLs	13.46135,144.68535 to 13.46183,144.68514 to 13.46286,144.68676 to 13.46149,144.68798 to 13.46012,144.68569 to 13.46030,144.68475 to 13.46087,144.68459	Contain spill / recovery oil using booms B01-9-01, B01-9-02, and B01-9-03
SP01-03	Navy Tie-in valve. Distributes products from F1, D, E wharfs to GPA Storage, Tristar Storage, Navy Storage, Anderson AB Storage and from Navy Storage to D and E Wharfs	Diesel, JET A, High and Low Sulfur fuel oil GPA.	5,900 BBLs	13.45707,144.68299	Contain spill on shore
SP01-04	Navy Echo Wharf. Off-loading / On-Loading DOD tankers and DOD Charters. High Risk Spill Area	Jet A, Diesel		13.45829,144.66774 to 13.45828,144.66949 to 13.45862,144.66948 to 13.45861,144.66774	1. Contain the spill with booming around the vessel, 2. Deploy boom B01-9-05 to deflect spill to middle of Apra Harbor for Skimming Operations

Apra Harbor Spill Areas

Spill Area	Description	Product(s)	WCD	Location	Protection Strategies
SP01-05	Navy Delta Wharf. Off-loading / On-Loading DOD tankers and DOD Charters. High Risk Spill Area	Jet A, Diesel		13.45829,144.66774 to 13.45828,144.66949 to 13.45862,144.66948 to 13.45861,144.66774	1. Contain the spill with booming around the vessel, 2. Deploy boom B01-9-05 to deflect spill to middle of Apra Harbor for Skimming Operations
SP01-06	Apra Harbor Off-load / On-load Wharfs - Break Bulk and Containers	Bunker C, Other Hazardous Materials		13.46002,144.67209 to 13.46044,144.67209 to 13.46046,144.66669 to 13.46005,144.66668	1. Contain the spill with booming around vessel, 2. Keep spill shoreside
SP01-07	IP&E Bunker Operations.	Diesel		13.46174,144.66565 to 13.46112,144.66611 to 13.46105,144.66598 to 13.46168,144.66553	1. Contain the spill with booming around vessel, 2. Deflect spill to middle of Apra Harbor with boom B01-9-05
SP01-08	F3 Wharf - Cabras Marine - Dry Dock.	Solvents, Diesel, Lubricants.		13.46205,144.66528 to 13.46105,144.66391 to 13.46063,144.66422 to 13.46.153,144.66569	1. Contain the spill with booming around vessel, 2. Deflect spill to middle of Apra Harbor with boom B01-9-05

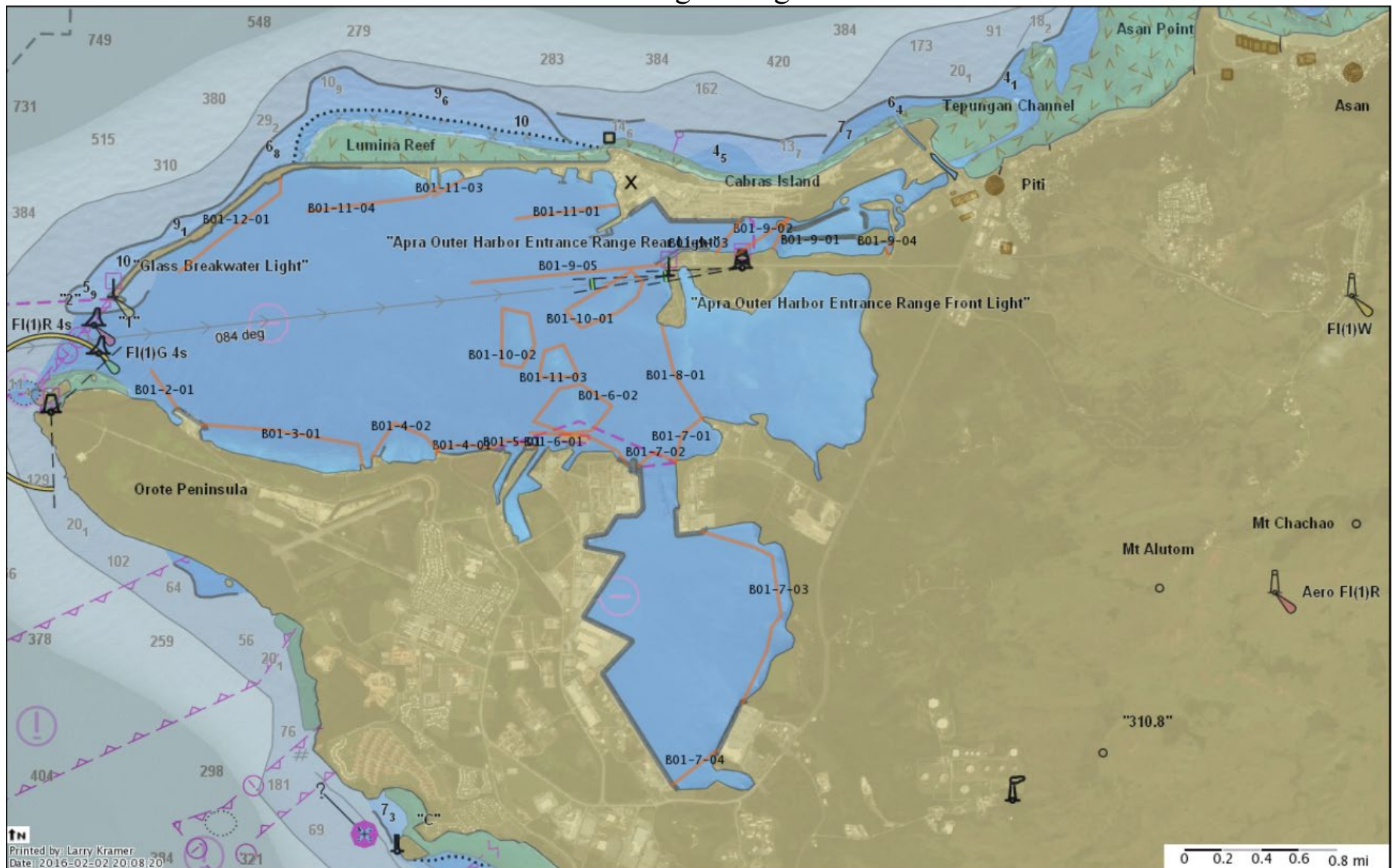
Apra Harbor Spill Areas

Spill Area	Description	Product(s)	WCD	Location	Protection Strategies
SP01-09	F1 Off-load / on-Load operations for IP&E, Tristar, DOD. High Risk Spill Area	Diesel, MOGAS, Jet A, Bunker C, LPG	500,000 BBLs	13.45914,144.66067 to 13.45875,144.66076 to 13.45940,144.66296 to 13.45981,144.66283	1. Contain the spill with booming around vessel, 2. Deflect spill to middle of Apra Harbor with boom B01-9-05, 3. Place protective/deflection boom on south side of Apra Harbor and Sasa Bay. Wind and tides will determine priority
SP01-10	Mobil Off-load / On-load for the Mariana Islands. G Wharf. High Risk Spill Area	Diesel, Jet A, MOGAS	10,079 Gal	13.46324,144.65912 to 13.46302,144.65912 to 13.46316,144.65782 to 13.46337,144.65784	1. Contain the spill with booming around vessel, 2. Deflect spill to middle of Apra Harbor with boom B01-9-05, 3. Place protective/deflection boom on south side of Apra Harbor and Sasa Bay
SP01-11	Jade Shoals - Risk is vessel running aground. High Risk Spill Area	Diesel, MOGAS, Jet A, Bunker C	500,000 BBLs Bunker C	13.45578,144.66450 to 13.45630,144.66380 to 13.45489,144.66224 to 13.45358,144.66274	1. Contain the spill with booming around vessel, 2. Place protective/deflection boom on south side of Apra Harbor and Sasa Bay

Apra Harbor Spill Areas

Spill Area	Description	Product(s)	WCD	Location	Protection Strategies
SP01-12	Western Shoal - Spill risk is vessels running aground. High Risk Spill Area	Diesel, MOGAS, Jet A, Bunker C	500,000 BBLs Bunker C	13.45335,144.65603 to 13.45377,144.65481 to 13.45048,144.65516 to 13.45102,144.65632	1. Contain the spill with booming around vessel, 2. Place protective/deflection boom on south side of Apra Harbor and Sasa Bay
SP01-13	Mobil, SPPC Terminals	Diesel, Jet A, MOGAS	67,901 BBL - Diesel 78,510 BBL – Jet A-1 105,168 BBL - MOGAS	13.46.445,144.66180 to 13.46439,144.66405 to 13.46379,144.66593 to 13.46164,144.66279 to 13.46232,144.66246 to 13.46345,144.66259 to 13.46445,144.66180	1. Contain the Spill. 2. Place protective deflection boom B01-11-01 out

Apra Harbor Booming Strategies



AH-B-1

Apra Harbor Booming Strategies

Boom Id	ESA Area	General Description	Boom Length / # Anchors / Anchor Line	General Location
B01-2-01	ESI01-2	Boom Type: Ocean Boom; Booming Method: Deflection; Considerations: Deploy Anchors trip line and Marker Buoy to minimize Coral Damage	1700' / 9 Anchors / Anchor line 5X depth	13.44938, 144.62737 to 13.44664, 144.62933
B01-3-01	ESI01-3	Boom Type: Ocean Boom; Booming Method: Deflection; Considerations: Deploy Anchors trip line and Marker Buoy to minimize Coral Damage	5000' / 26 Anchors / Anchor line 5X depth	13.44541, 144.63123 to 13.44503, 144.63657 to 13.44393, 144.64304 to 13.44241, 144.64340
B01-4-02	ESI01-4	Boom Type: Ocean Boom; Booming Method: Deflection/Protection; Considerations: Deploy Anchors trip line and Marker Buoy to minimize Coral Damage	3000' / 16 Anchors / Anchor Line 5X Depth	13.44301, 144.64408 to 13.44556, 144.64579 to 13.44455, 144.64814 to 13.44.369, 144.64898 to 13.44333, 144.64899
B01-4-01	ESI01-4	Boom Type: Ocean Boom; Booming Method: Deflection/Protection; Considerations: Deploy Anchors trip line and Marker Buoy to minimize Coral Damage	2000' / 11 Anchors / Anchor Line 5X Depth	13.44333, 144.64900 to 13.44373, 144.64938 to 13.44395, 144.65123 to 13.44368, 144.65304
B01-5-01	ESI01-5	Boom Type: Ocean Boom; Booming Method: Deflection/Protection; Considerations: Deploy Anchors trip line and Marker Buoy to minimize Coral Damage	1500' / 8 Anchors / Anchor Line 5X Depth	13.44368, 144.65318 to 13.44428, 144.65436 to 13.44372, 144.65654
B01-6-01	ESI01-	Boom Type: Ocean Boom; Booming Method: Deflection/Protection; Considerations: Deploy Anchors trip line and Marker Buoy to minimize Coral Damage	3200' / 17 Anchors / Anchor Line 5X Depth	13.44256, 144.66344 to 13.44345, 144.66278 to 13.44458, 144.66043 to 13.44480, 144.65615

Apra Harbor Booming Strategies

Boom Id	ESA Area	General Description	Boom Length / # Anchors / Anchor Line	General Location
B01-6-02	ESI01-6	Boom Type: Ocean Boom; Booming Method: Deflection/Protection; Considerations: Deploy Anchors trip line and Marker Buoy to minimize Coral Damage	6000' / 31 Anchors / Anchor Line 5X Depth	13.44562, 144.65640 to 13.44805, 144.65832 to 13.44839, 144.65999 to 13.44679, 144.66235 to 13.44495, 144.66081 to 13.44475, 144.65899 to 13.44562, 144.65640
B01-7-01	ESI01-7	Boom Type: Ocean Boom; Booming Method: Deflection/Protection; Considerations: Deploy Anchors trip line and Marker Buoy to minimize Coral Damage	1700' / 10 Anchors / Anchor Line 5X Depth	13.44586, 144.66916 to 13.44467, 144.66762 to 13.44267, 144.66718
B01-7-02	ESI01-7	Boom Type: Ocean Boom; Booming Method: Deflection/Protection; Considerations: Deploy Anchors trip line and Marker Buoy to minimize Coral Damage	1500' / 9 Anchors / Anchor Line 5X Depth	13.44268, 144.66718 to 13.44339, 144.66559 to 13.44233, 144.66429
B01-7-03	ESI01-7	Boom Type: Harbor Boom; Booming Method: Deflection/Protection; Considerations: Deploy Anchors trip line and Marker Buoy to minimize Coral Damage	6800' / 35 Anchors / Anchor Line 3-5X Depth	13.43742, 144.66918 to 13.43629, 144.67311 to 13.43567, 144.67450 to 13.43124, 144.67521 to 13.43039, 144.67448 to 13.42874, 144.67407 to 13.42488, 144.67225
B01-7-04	ESI01-7	Boom Type: Harbor Boom; Booming Method: Deflection/Protection; Considerations: Deploy Anchors trip line and Marker Buoy to minimize Coral Damage	1700' / 10 Anchors / Anchor Line 3-5X Depth	13.42130, 144.67031 to 13.41876, 144.66695
B01-8-01	ESI01-8	Boom Type: Ocean Boom; Booming Method: Deflection/Protection; Considerations: Deploy Anchors trip line and Marker Buoy to minimize Coral Damage	3200' / 17 Anchors / Anchor Line 3-5X Depth	13.45269, 144.66612 to 13.44919, 144.66706 to 13.44593, 144.66918

Apra Harbor Booming Strategies

Boom Id	ESA Area	General Description	Boom Length / # Anchors / Anchor Line	General Location
B01-9-01	ESI01-9	Boom Type: Harbor Boom; Booming Method: Containment/Protection; Considerations: Deploy Anchors trip line and Marker Buoy to minimize Coral Damage	1600' / 9 Anchors / Anchor line 3X Depth	13.46064, 144.67570 To 13.45841, 144.67453
B01-9-02	ESI01-9	Boom Type: Harbor Boom; Booming Method: Containment/Protection; Considerations: Deploy Anchors trip line and Marker Buoy to minimize Coral Damage	2600' / 14 Anchors / Anchor Line 3X Depth.	13.46064, 144.67570 to 13.45801, 144.67182.
B01-9-03	ESI01-9	Boom Type: Harbor Boom; Booming Method: Containment/Protection; Considerations: Deploy Anchors trip line and Marker Buoy to minimize Coral Damage	3200' / 17 Anchors / Anchor Line 3X Depth.	13.46064, 144.67570 to 13.45811, 144.67025
B01-9-04	ESI01-9	Boom Type: Shallow water boom and Sorbent Boom; Booming Method: Containment for HR01-1 pipeline rupture, pipeline capacity 1,393 BBLs. Considerations: Have vacuum truck in area to recover products.	600' / 4 Anchors or stakes to secure boom / Anchor line 3X depth	13.45800, 144.68336 to 13.45830, 144.68311 to 13.45864, 144.68329 to 13.45878, 144.68367.
B01-9-05	ESI01-9	Boom Type: Ocean Boom; Booming Method: Deflection away from Jade and Western Shoals; Considerations: Deploy Anchors trip line and Marker Buoy to minimize Coral Damage, immediately deploy first for spill at Wharfs D, E, F3, F4, F5, F6 to divert	5400' / 28 Anchors / Anchor Line 5X Depth	13.45712, 144.66609 to 13.45593, 144.64165

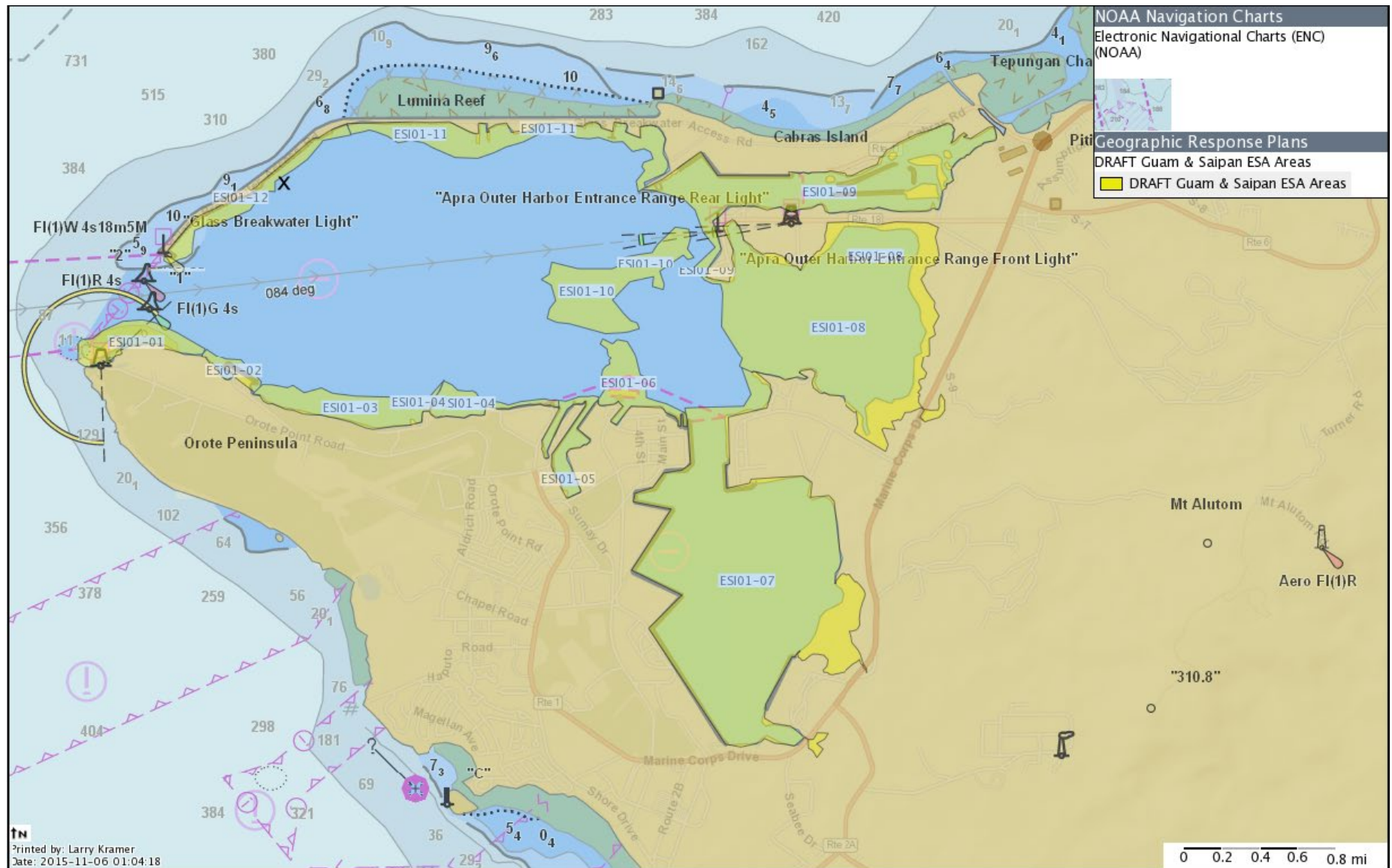
Apra Harbor Booming Strategies

Boom Id	ESA Area	General Description	Boom Length / # Anchors / Anchor Line	General Location
B01-10-01	ESI01-10	Boom Type: Ocean Boom; Booming Method: Deflection/Protection; Considerations: Deploy Anchors trip line and Marker Buoy to minimize Coral Damage	5600' / 29 Anchors / Anchor Line 5X Depth	13.45595, 144.66465 To 13.45680, 144.66378 to 13.45385, 144.65879 to 13.45255, 144.65998 to 13.45380, 144.66291 to 13.45486, 144.66424 to 13.45595, 144.66465
B01-10-02	ESI01-10	Boom Type: Ocean Boom; Booming Method: Deflection/Protection; Considerations: Deploy Anchors trip line and Marker Buoy to minimize Coral Damage	4600' / 24 Anchors / Anchor Line 5X Depth	13.45361, 144.65597 to 13.45399, 144.65398 to 13.44989, 144.65392 to 13.44965, 144.65544 to 13.45128, 144.65644 to 13.45361, 144.65597
B01-10-03	ESI01-10	Boom Type: Ocean Boom; Booming Method: Deflection/Protection; Considerations: Deploy Anchors trip line and Marker Buoy to minimize Coral Damage	3600' / 19 Anchors / Anchor Line 5X Depth	13.45132, 144.65864 to 13.45087, 144.65721 to 13.44894, 144.65674 to 13.44898, 144.65978 to 13.45132, 144.65864
B01-11-01	ESI01-11	Boom Type: Ocean Boom; Booming Method: Protection ; Considerations: Deploy Anchors trip line and Marker Buoy to minimize coral damage	1800' / 10 Anchors / Anchor Line 5X Depth	13.46371, 144.65843 to 13.46386, 144.65243
B01-11-02	ESI01-11	Boom Type: Ocean Boom; Booming Method: Protection / Deflection; Considerations: Deploy Anchors trip line and Marker Buoy to minimize coral damage	2800' / 15 Anchors / Anchor Line 5X Depth	13.45981, 144.66109 to 13.45974, 144.65575
B01-11-03	ESI01-11	Boom Type: Ocean Boom; Booming Method: Deflection/Protection; Considerations: Deploy Anchors trip line and Marker Buoy to minimize Coral Damage	1000' / 6 Anchors / Anchor line 5X depth	13.46356, 144.65103 to 13.46232, 144.64881

**Apra Harbor
Booming Strategies**

Boom Id	ESA Area	General Description	Boom Length / # Anchors / Anchor Line	General Location
B01-11-04	ESI01-11	Boom Type: Ocean Boom; Booming Method: Deflection/Protection; Considerations: Deploy Anchors trip line and Marker Buoy to minimize Coral Damage.	4000' / 21 Anchors / Anchor line 5X depth	13.46300, 144.64914 to 13.46228, 144.64812 to 13.46120, 144.63925
B01-11-05	ESI01-11	Boom Type: Ocean Boom Booming Method: Deflection/Protection Considerations: Deploy Anchors trip line and Marker Buoy to minimize Coral Damage	4000' / 21 Anchors / Anchor Line 5X depth	
B01-12-01	ESI01-12	Boom Type: Ocean Boom; Booming Method: Deflection / Protection; Considerations: Deploy Anchors trip line and Marker Buoy to minimize Coral Damage.	4400' / 23 Anchors / Anchor Line 5X Depth	13.46383, 144.63711 to 13.46257, 144.63713 to 13.45675, 144.62949

Environmental Sensitive and Economical Significant Areas



ESA01-1

Environmental Sensitive and Economical Significant Areas

ESI Map	ID	Name	Wind Protection Priority*				Latitude	Longitude
			N Wind	E Wind	S Wind	W Wind		
ESI01	ESI01-1	Orote Point	A	A	C	C	13.44890 N	144.62286 E
ESI01	ESI01-2	KILO Wharf	A	A	C	C	13.44588°N	144.63036°E
ESI01	ESI01-3	Gab Gab	A	A	C	C	13.44325°N	144.63813°E
ESI01	ESI01-4	San Luis	A	A	C	C	13.44358°N	144.64791°E
ESI01	ESI01-5	Sumay	A	A	C	C	13.44108°N	144.65543°E
ESI01	ESI01-6	Guam Shipyard (GSY)	A	A	C	C	13.44426°N	144.65967°E
ESI01	ESI01-7	Inner Apra Harbor	A	A	C	C	13.43164°N	144.66714°E
ESI01	ESI01-8	Sasa Bay	A	B	C	A	13.45034°N	144.67469°E
ESI01	ESI01-9	Cabras Island / Piti Channel	A	A	A	A	13.45948°N	144.66937°E
ESI01	ESI01-10	Western / Jade Shoals	A	A	B	B	13.45214°N	144.65779°E
ESI01	ESI01-11	HOTEL Wharf / Glass Breakwater	B	B	A	B	13.46341°N	144.65182°E
ESI01	ESI01-12	Glass Breakwater 2	B	B	A	A	13.45873°N	144.63071°E

NOTE: Locations are in the approximate center of the Areas.

*Wind Protection Priority: A > C. See page CW-1 for seasonal information.

OIL SPILL SENSITIVE AREA REPORT SECTOR GUAM**PORT: Guam**

Site Name: Orote Point

Site ID: ESI01-01

Latitude (DMS): 13°26'56.0400"N

Longitude (DMS): 144°37'22.2960"E

Latitude (DD): 13.44890 N

Longitude (DD): 144.62286 E

Priority: North Winds: A

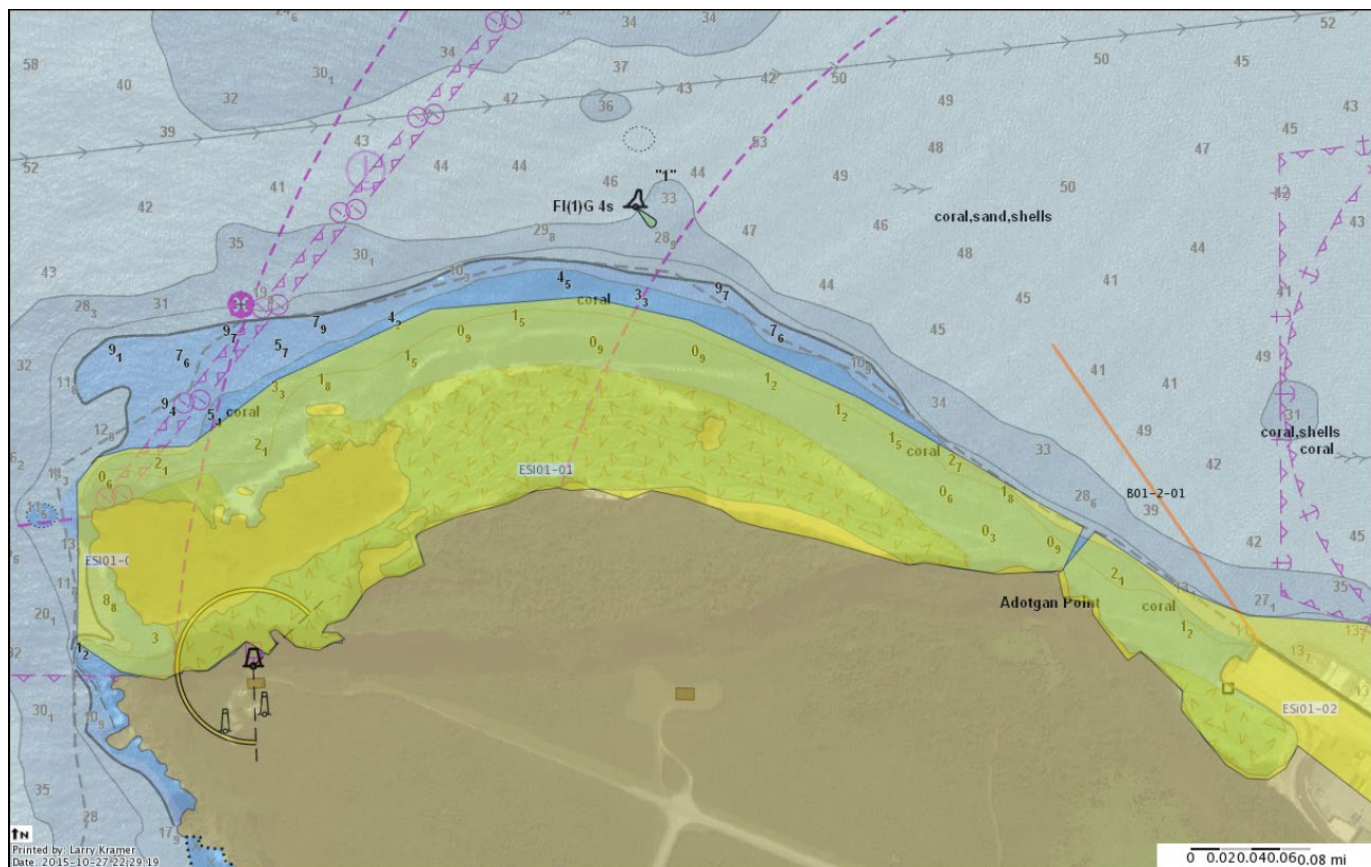
East Winds: A

South Winds: C

West Winds: C

General Location: Area between Orote Point and Adotgan Point. This area includes the Spanish Steps.

Managed Area: Shoreside - US Naval Base Guam

**Map Information**

GRP Map: ESI01-01

ESI Map: ESI01

NOAA Chart: 81054

UTM: 55P 242624mE 1488021mN

Operational Area: Apra Harbor

NOAA Chart Name: Apra Harbor

MGRS / USNG: 55PBQ4262488021

Legend

- ▲ Collection Point
- General Booming
- SP Oil Spill Risk Sites

- SA – Staging Areas
- ES – Equipment Storage Locations
- SK – Skimmer

ESI01-01-1

OIL SPILL SENSITIVE AREA REPORT SECTOR GUAM**PORT: Guam****Contact List – Contact – Expertise – Phone**

USCG Sector Guam – (671) 355-4824, National Response Center (NRC) – (800) 424-8802, Navy Base Guam – (671) 339-6141/6144 / (671) 777-1809 NBG Command Duty Officer, Navy Base Guam Port Operations – (671) 339-6141, Joint Region Marianas ROC – (671) 349-4000/4004, Guam Environmental Protection Agency – (671) 300-4751/4752/4753, Guam Homeland Security / Office of Civil Defense – (671) 475-9600, NOAA Office of Response and Restoration Emergency Hotline – (808) 725-5000, NOAA Pacific Islands Regional Office (Guam) – (671) 646-1904 / after hours (671) 488-4032, US Fish and Wildlife – (808) 792-9400 / Local (671) 989-6746 / after hours (671) 787-5708, Guam DAWR Admin Office – (671) 735-0288/0294, Guam DAWR Conservation Officers – (671) 864-8652, Guam State Historic Preservation Office – (671) 475-9294

Resources at Risk

Shoreline Type (S): 8A - Sheltered scarps in bedrock, mud, or clay; 1A - Exposed rocky shores; 5 - Mixed sand and gravel beaches; and 3A - Fine to medium grained sand beaches.

Wildlife resources to be protected:

- Fish: Bigeye Scad, Small-toothed Whiptail
- Birds: Brown Noddy, Red-footed booby, White Tern
- Reptiles: Green Sea Turtle, Hawksbill Sea Turtle
- Coral Species: Seriatopora Aculeate, Acropora Globiceps, Acropora Retusa
- Mammals: Spinner Dolphin

Socioeconomic: Diving

Habitat to be protected: Bird Habitat, Fish Habitat, Coral Reef Habitat, Reptile Habitat/Turtle Nesting (All beach areas)

Endangered/Threatened Species: Hawksbill Sea Turtle (F-E/S-E), Green Sea Turtle (F-T/S-E), Coral Species – Seriatopora Aculeate (F-T), Acropora Globiceps (F-T), Acropora Retusa (F-T).

Response Considerations

Staging Areas: KILO Wharf (SA01-3); Gab Gab Recreation Area (SA01-5)

Collection Points: KILO Wharf, Gab Gab

Area Access: Boat, PWC

Potential Spill Sources / Risk: Low – if B01-2-01 can be deployed within 2 hours

Types of Oil: Gasoline, Jet A, Diesel, Bunker C

Protection Strategies

Tidal Range: 3 FT

Max Current: 4 KTS

Nearest Available Resource: NBG Spill Response Equipment

Other Resources Available: OSROCO

Point of Contact/Agency: NBG Spill Manager (671) 339-4100; OSROCO (671) 477-1818 / (671) 688-2933 / (671) 688-2933

<u>Boom ID</u>	<u>Boom Length</u>	<u>Boom Type</u>	<u>Booming Method</u>	<u>Protection Strategy</u>

<u>Skimmer Type</u>	<u>Collection Point</u>	<u>Remarks</u>

Notes

Site Name: KILO Wharf

Site ID: ESI01-02

Latitude (DMS): 13°26'45.1680"

Longitude (DMS): 144°37'49.2960"

Latitude (DD): 13.44588°N

Longitude (DD): 144.63036°E

Priority: North Winds: A

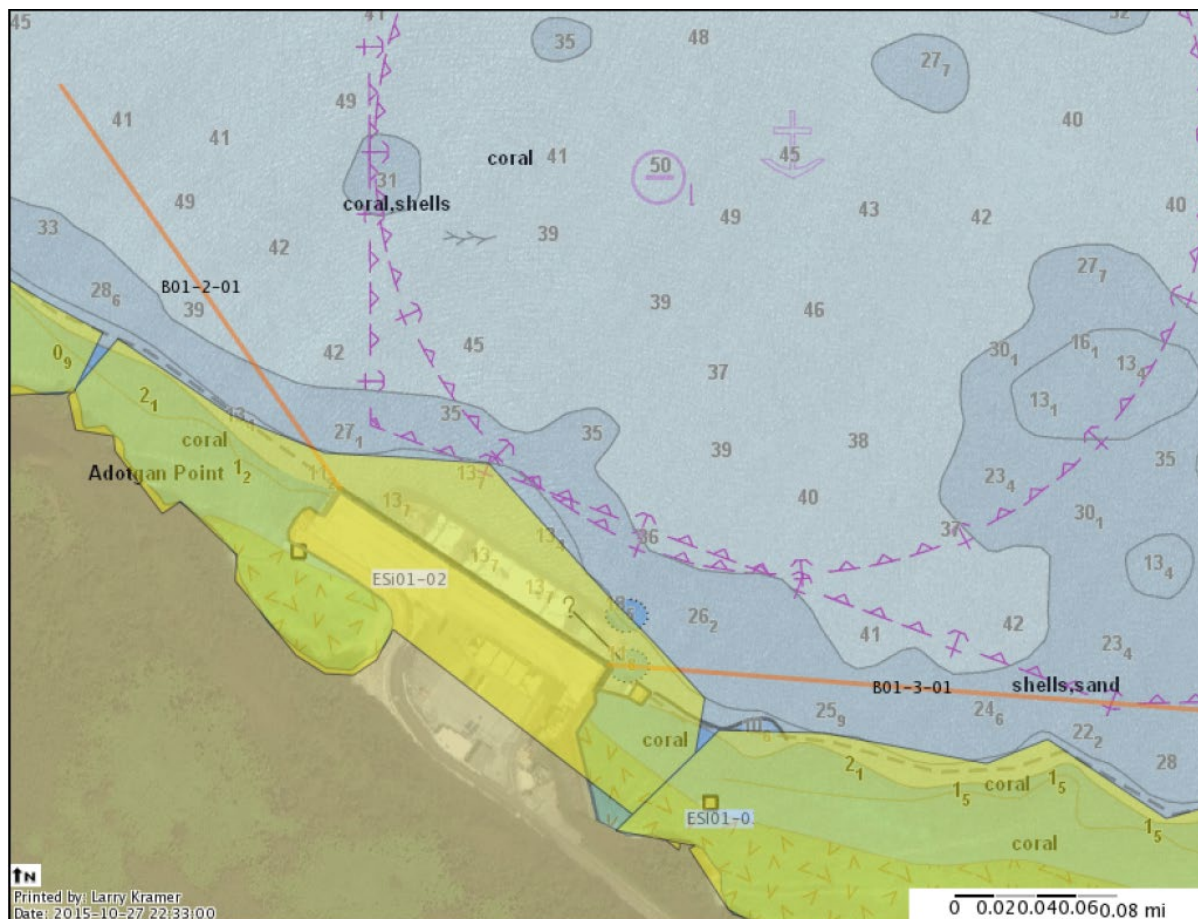
East Winds: A

South Winds: C

West Winds: C

General Location: KILO Wharf

Managed Area: Shoreside - US Naval Base Guam



Map Information

GRP Map: ESI01-02

ESI Map: ESI01

NOAA Chart: 81054

UTM: 55P 243433mE 1487678mN

Operational Area: Apra Harbor

NOAA Chart Name: Apra Harbor

MSGRS / USGS: 55PBQ4343387678

Legend

- ▲ Collection Point
- General Booming
- SP Oil Spill Risk Sites

- SA – Staging Areas
- ES – Equipment Storage Locations
- SK – Skimmer

OIL SPILL SENSITIVE AREA REPORT SECTOR GUAM**PORT: Guam****Contact List – Contact – Expertise – Phone**

USCG Sector Guam – (671) 355-4824, National Response Center (NRC) – (800) 424-8802, Navy Base Guam – (671) 339-6141/6144 / (671) 777-1809 NBG Command Duty Officer, Navy Base Guam Port Operations – (671) 339-6141, Joint Region Marianas ROC – (671) 349-4000/4004, Guam Environmental Protection Agency – (671) 300-4751/4752/4753, Guam Homeland Security / Office of Civil Defense – (671) 475-9600, NOAA Office of Response and Restoration Emergency Hotline – (808) 725-5000, NOAA Pacific Islands Regional Office (Guam) – (671) 646-1904 / after hours (671) 488-4032, US Fish and Wildlife – (808) 792-9400 / Local (671) 989-6746 / after hours (671) 787-5708, Guam DAWR Admin Office – (671) 735-0288/0294, Guam DAWR Conservation Officers – (671) 864-8652, Guam State Historic Preservation Office – (671) 475-9294

Resources at Risk

Shoreline Type (S): 3A – Fine to medium grained sand beaches, 8A – Sheltered scarps in bedrock, mud, or clay, 8C – Sheltered riprap, 1A – Exposed rocky shores, 1A – Exposed rocky shores, 8B – Sheltered, solid man-made structures

Wildlife resources to be protected:

- Birds: Brown Noddy, White Tern
- Fish: Bigeye Scad, Small-toothed Whiptail
- Reptiles: Green Sea Turtle, Hawksbill Sea Turtle
- Coral Species: Seriatopora Aculeate, Acropora Globiceps, Acropora Retusa
- Mammals: Spinner Dolphin.

Socioeconomic: Navy Ammunition Off-load Wharf

Habitat to be protected: Bird Habitat, Fish Habitat, Coral Reef Habitat, Reptile Habitat/Turtle Nesting (All beach areas)

Threatened Species: Hawksbill Sea Turtle (F-E/S-E), Green Sea Turtle (F-T/S-E), Coral Species – Seriatopora Aculeate (F-T), Acropora Globiceps (F-T), Acropora Retusa (F-T).

Response Considerations

Staging Areas: KILO Wharf (SA01-03); Gab Gab Recreation Area (SA01-05)

Collection Points: KILO Wharf

Area Access: Vehicle, Boat, PWC

Potential Spill Sources / Risk: Low to Medium to species and habitat – if B01-9-05, B01-2-01, B01-3-01 can be deployed within 2 hours. Oil is deflected to the wharf for skimming and vacuum truck oil recovery.

Types of Oil: Gasoline, Jet A, Diesel, Bunker C

Protection Strategies

Tidal Range: 3 FT

Max Current: 4 KTS

Nearest Available Resource: NBG Spill Response Equipment

Other Resources Available: OSROCO

Point of Contact/Agency: NBG Spill Manager (671) 339-4100; OSROCO (671) 477-1818 / (671) 688-2933 / (671) 688-2933

<u>Boom ID</u>	<u>Boom Length</u>	<u>Boom Type</u>	<u>Booming Method</u>	<u>Remarks</u>
B01-2-01	1700' / 9 Anchors / Anchor line 5X depth	Ocean Boom	Deflection	Deploy anchor trip line and marker buoy to minimize coral damage
B01-3-01	5000' / 26 Anchors / Anchor line 5X depth	Ocean Boom	Deflection	Deploy anchor trip line and marker buoy to minimize coral damage

<u>Skimmer Type</u>	<u>Collection Point</u>	<u>Remarks</u>

Notes

OIL SPILL SENSITIVE AREA REPORT SECTOR GUAM**PORT: Guam**

Site Name: Gab Gab

Site ID: ESI01-03

Latitude (DMS): 13°26'36.0240"

Longitude (DMS): 144°38'18.9960"

Latitude (DD): 13.4433400°

Longitude (DD): 144.6386100°

Priority: North Winds: A

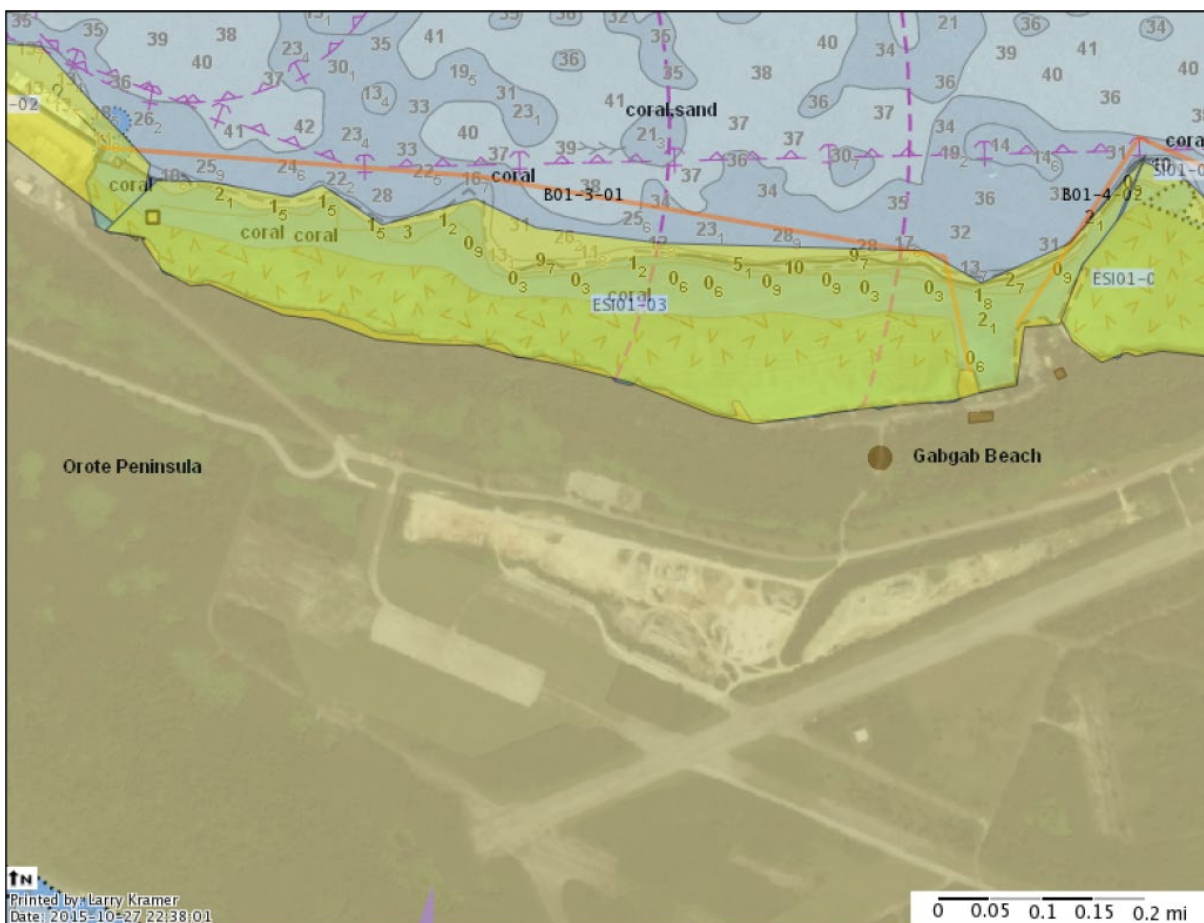
East Winds: A

South Winds: C

West Winds: C

General Location: KILO Wharf to Gab Gab Beach Recreation Area

Managed Area: Shoreside - US Naval Base Guam

**Map Information**

GRP Map: ESI1

ESI Map: ESI01

NOAA Chart: 81054

UTM: 55P 244324mE 1487389mN

Operational Area: Apra Harbor

NOAA Chart Name: Apra Harbor

MSGRS / USGS: 55PBQ4432487389

Legend

- ▲ Collection Point
- General Booming
- SP Oil Spill Risk Sites

- SA – Staging Areas
- ES – Equipment Storage Locations
- SK – Skimmer

Contact List – Contact – Expertise – Phone:

USCG Sector Guam – (671) 355-4824, National Response Center (NRC) – (800) 424-8802, Navy Base Guam – (671) 339-6141/6144 / (671) 777-1809 NBG Command Duty Officer, Navy Base Guam Port Operations – (671) 339-6141, Joint Region Marianas ROC – (671) 349-4000/4004, Guam Environmental Protection Agency – (671) 300-4751/4752/4753, Guam Homeland Security / Office of Civil Defense – (671) 475-9600, NOAA Office of Response and Restoration Emergency Hotline – (808) 725-5000, NOAA Pacific Islands Regional Office (Guam) – (671) 646-1904 / after hours (671) 488-4032, US Fish and Wildlife – (808) 792-9400 / Local (671) 989-6746 / after hours (671) 787-5708, Guam DAWR Admin Office – (671) 735-0288/0294, Guam DAWR Conservation Officers – (671) 864-8652, Guam State Historic Preservation Office – (671) 475-9294

Resources at Risk

Shoreline Type (S): 3A – Fine to medium grained sand beaches, 8A – Sheltered scarps in bedrock, mud, or clay, 8C – Sheltered riprap, 8B – Sheltered, solid man-made structures.

Wildlife resources to be protected:

- Birds: Brown Noddy, White Tern
- Fish: Bigeye Scad, Small-toothed Whiptail
- Reptiles: Green Sea Turtle, Hawksbill Sea Turtle
- Coral Species: Seriatopora Aculeate, Acropora Globiceps, Acropora Retusa.

Socioeconomic: Diving, Swimming

Habitat to be protected: Bird Habitat, Fish Habitat, Coral Reef Habitat, Reptile Habitat/Turtle Nesting (All beach areas)

Threatened Species: Hawksbill Sea Turtle (F-E/S-E), Green Sea Turtle (F-T/S-E), Coral Species – Seriatopora Aculeate (F-T), Acropora Globiceps (F-T), Acropora Retusa (F-T).

Response Considerations

Staging Areas: Gab Gab Recreation Area (SA01-05); KILO Wharf (SA01-03)

Collection Points: Gab Gab Recreational Area, KILO Wharf

Area Access: Vehicle, Boat, PWC

Potential Spill Sources / Risk: Low to medium to species and habitat – if B01-9-05, B01-3-01, B01-4-02 can be deployed within 2 hours. Oil is deflected to the swimming area for skimming and vacuum truck oil recovery.

Types of Oil: Gasoline, Jet A, Diesel, Bunker C

Protection Strategies

Tidal Range: 3 FT

Max Current: 4 KTS

Nearest Available Resource: NBG Spill Response Equipment

Other Resources Available: OSROCO

Point of Contact/Agency: NBG Spill Manager (671) 339-4100; OSROCO (671) 477-1818 / (671) 688-2933 / (671) 688-2933

<u>Boom ID</u>	<u>Boom Length</u>	<u>Boom Type</u>	<u>Booming Method</u>	<u>Protection Strategy</u>
B01-3-01	5000' / 26 Anchors / Anchor line 5X depth	Ocean Boom	Deflection	Deploy Anchor trip lines and Marker Buoy to minimize Coral Damage
B01-4-02	3000' /16 / anchor line 5X depth	Ocean Boom	Deflection / Protection	Deploy Anchor trip lines and Marker Buoy to minimize Coral Damage

<u>Skimmer Type</u>	<u>Number</u>	<u>Collection Point</u>	

Notes

OIL SPILL SENSITIVE AREA REPORT SECTOR GUAM**PORT: Guam**

Site Name: San Luis

Site ID: ESI01-04

Latitude (DMS): 13°26'35.8080"

Longitude (DMS): 144°38'56.4360"

Latitude (DD): 13.4432800°

Longitude (DD): 144.6490100°

Priority: North Winds: A

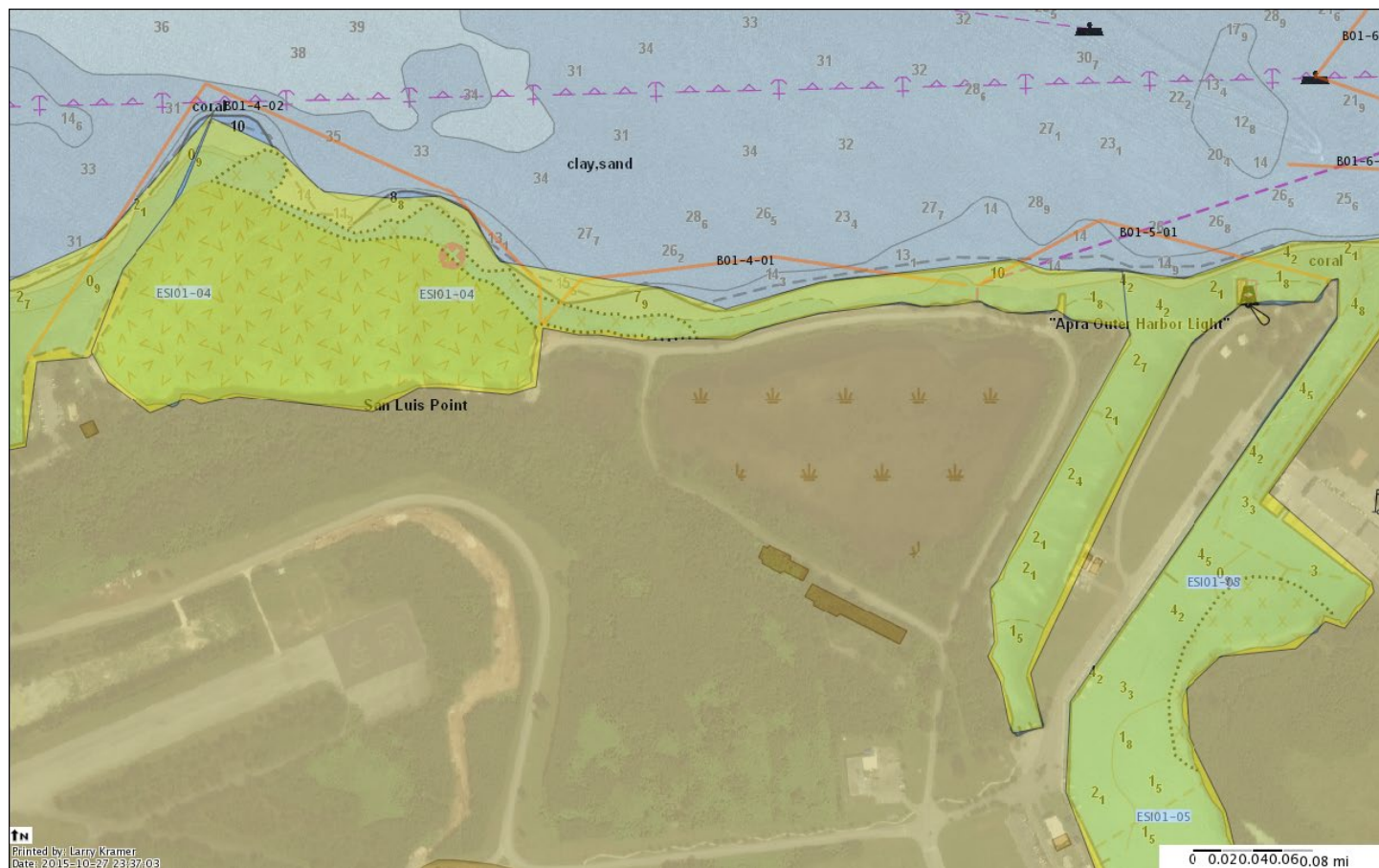
East Winds: A

South Winds: C

West Winds: C

General Location: Area between Gab Gab recreational areas to old fuel pier

Managed Area: Shoreside - US Naval Base Guam

**Map Information**

GRP Map: ESI01

ESI Map: ESI01

NOAA Chart: 81054

UTM: 55P 245451mE 1487371mN

Operational Area: Apra Harbor

NOAA Chart Name: Apra Harbor

MSGRS / USGS: 55PBQ4545187371

Legend

- ▲ Collection Point
- SA – Staging Areas
- ES – Equipment Storage Locations
- SK – Skimmer
- General Booming
- Oil Spill Risk Sites

Contact List – Contact – Expertise – Phone:

USCG Sector Guam – (671) 355-4824, National Response Center (NRC) – (800) 424-8802, Navy Base Guam – (671) 339-6141/6144 / (671) 777-1809 NBG Command Duty Officer, Navy Base Guam Port Operations – (671) 339-6141, Joint Region Marianas ROC – (671) 349-4000/4004, Guam Environmental Protection Agency – (671) 300-4751/4752/4753, Guam Homeland Security / Office of Civil Defense – (671) 475-9600, NOAA Office of Response and Restoration Emergency Hotline – (808) 725-5000, NOAA Pacific Islands Regional Office (Guam) – (671) 646-1904 / after hours (671) 488-4032, US Fish and Wildlife – (808) 792-9400 / Local (671) 989-6746 / after hours (671) 787-5708, Guam DAWR Admin Office – (671) 735-0288/0294, Guam DAWR Conservation Officers – (671) 864-8652, Guam State Historic Preservation Office – (671) 475-9294

Resources at Risk

Shoreline Type (S): 3A: Fine to medium grained sand beaches, 8A: Sheltered scarps in bedrock, mud, or clay, 8C: Sheltered riprap, 8B: Sheltered, solid man-made structures

Wildlife resources to be protected:

- Birds: Brown Noddy, White Tern
- Fish: Bigeye Scad, Small-toothed Whiptail
- Reptiles: Green Sea Turtle, Hawksbill Sea Turtle
- Coral Species: Seriatopora Aculeate, Acropora Globiceps, Acropora Retusa

Socioeconomic: Diving, Recreational Beaches, Archaeological Site

Habitat to be protected: Bird Habitat, Fish Habitat, Coral Reef Habitat, Reptile Habitat/Turtle Nesting (All beach areas)

Endangered/Threatened Species: Hawksbill Sea Turtle (F-E/S-E), Green Sea Turtle (F-T/S-E), Coral Species – Seriatopora Aculeate (F-T), Acropora Globiceps (F-T), Acropora Retusa (F-T)

Response Considerations

Staging Areas: San Luis Recreational Area (SA01-07)

Collection Points: Gab Gab Recreational Area, KILO Wharf

Area Access: Vehicle, Boat, PWC

Potential Spill Sources / Risk: Low to medium to species and habitat – if B01-9-05, B01-4-01, B01-4-02 can be deployed within 2 hours.

Types of Oil: Gasoline, Jet A, Diesel, Bunker C

Protection Strategies

Tidal Range: 3 FT

Max Current: 4 KTS

Nearest Available Resource: NBG Spill Response Equipment

Other Resources Available: OSROCO

Point of Contact/Agency: NBG Spill Manager (671) 339-4100; OSROCO (671) 477-1818 / (671) 688-2933 / (671) 688-2933

<u>Boom ID</u>	<u>Boom Length</u>		<u>Boo m Type</u>	<u>Booming Method</u>	<u>Remarks</u>
B01-4-01	2000' / 11 / anchor line 5X depth		Ocean Boom	Deflection / Protection	Deploy Anchor trip lines and Marker Buoy to minimize Coral Damage
B01-4-02	3000' /16 / anchor line 5X depth		Ocean Boom	Deflection / Protection	Deploy Anchor trip lines and Marker Buoy to minimize Coral Damage

<u>Skimmer Type</u>	<u>Number</u>	<u>Collection Point</u>	

Notes

OIL SPILL SENSITIVE AREA REPORT SECTOR GUAM**PORT: Guam**

Site Name: Sumay

Site ID: ESI01-05

Latitude (DMS): 13°26'37.2840"

Longitude (DMS): 144°39'20.4120"

Latitude (DD): 13.4436900°

Longitude (DD): 144.6556700°

Priority: North Winds: A

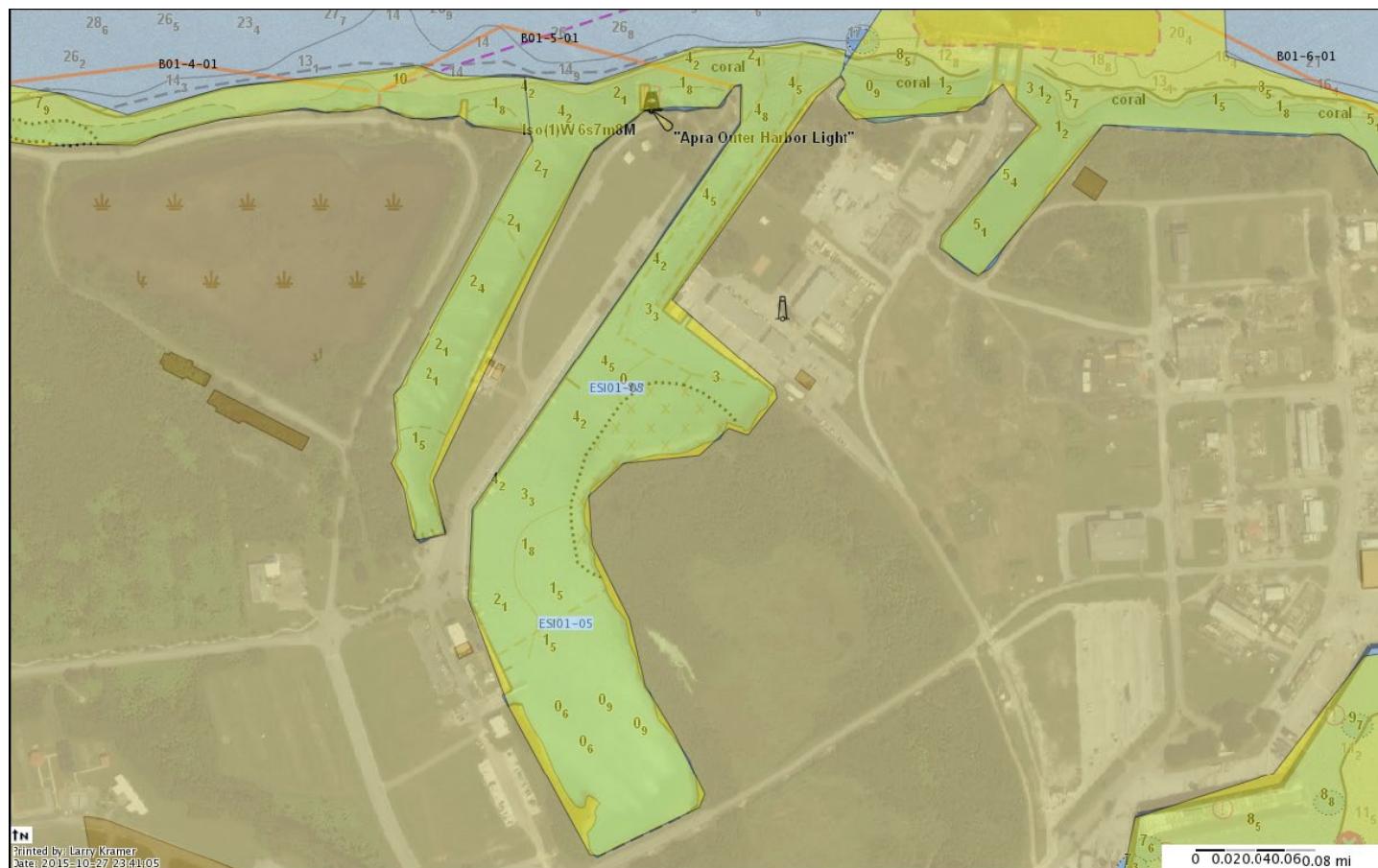
East Winds: A

South Winds: C

West Winds: C

General Location: Area covers from east old fuel pier to Sumay Marina

Managed Area: Shoreside - US Naval Base Guam

**Map Information**

GRP Map: ESI01

ESI Map: ESI01

NOAA Chart: 81054

UTM: 55P 246173mE 1487410mN

Operational Area: Apra Harbor

NOAA Chart Name:

MSGRS / USGS: 55PBQ4617387410

Legend

- ▲ Collection Point
- General Booming
- SP Oil Spill Risk Sites

- SA – Staging Areas
- ES – Equipment Storage Locations
- SK – Skimmer

Contact List – Contact – Expertise – Phone:

USCG Sector Guam – (671) 355-4824, National Response Center (NRC) – (800) 424-8802, Navy Base Guam – (671) 339-6141/6144 / (671) 777-1809 NBG Command Duty Officer, Navy Base Guam Port Operations – (671) 339-6141, Joint Region Marianas ROC – (671) 349-4000/4004, Guam Environmental Protection Agency – (671) 300-4751/4752/4753, Guam Homeland Security / Office of Civil Defense – (671) 475-9600, NOAA Office of Response and Restoration Emergency Hotline – (808) 725-5000, NOAA Pacific Islands Regional Office (Guam) – (671) 646-1904 / after hours (671) 488-4032, US Fish and Wildlife – (808) 792-9400 / Local (671) 989-6746 / after hours (671) 787-5708, Guam DAWR Admin Office – (671) 735-0288/0294, Guam DAWR Conservation Officers – (671) 864-8652, Guam State Historic Preservation Office – (671) 475-9294

Shoreline Type (S): 8B: Sheltered, solid man-made structures. 5: Mixed sand and gravel beaches, 9B: Vegetated low banks

Wildlife resources to be protected:

- Birds: Brown Noddy, White Tern, Micronesian Starling
- Fish: Bigeye Scad, Small-toothed Whiptail
- Reptiles: Green Sea Turtle, Hawksbill Sea Turtle
- Coral Species: Seriatopora Aculeate, Acropora Globiceps, Acropora Retusa

Socioeconomic: Boating, Mariana

Habitat to be protected: Bird Habitat, Fish Habitat, Coral Reef Habitat, Reptile Habitat/Turtle Nesting (All beach areas)

Threatened Species: Hawksbill Sea Turtle (F-E/S-E), Green Sea Turtle (F-T/S-E), Coral Species – Seriatopora Aculeate (F-T), Acropora Globiceps (F-T), Acropora Retusa (F-T). Micronesian Starling is a bird of conservation concern.

Response Considerations

Staging Areas: Sumay Marina (SA01-09); San Luis Recreational Area (SA01-07)

Collection Points: Gab Gab Recreational Area, KILO Wharf

Area Access: Vehicle, Boat, PWC

Potential Spill Sources / Risk: Medium to species and habitat – if B01-9-05, B01-5-01, B01-6-01 can be deployed within 2 hours.

Types of Oil: Gasoline, Jet A, Diesel, Bunker C

Protection Strategies

Tidal Range: 3 FT

Max Current: 4 KTS

Nearest Available Resource: NBG Spill Response Equipment

Other Resources Available: OSROCO

Point of Contact/Agency: NBG Spill Manager, (671) 339-4100; NBG Port Operations (671) 339-6141

<u>Boom ID</u>	<u>Boom Length</u>	<u>Boom Type</u>	<u>Booming Method</u>	<u>Remarks</u>
B01-5-01	1500' / 8 anchors / anchor line 5X depth	Ocean Boom	Deflection / Protection	Deploy Anchors trip line and Marker Buoy to minimize Coral Damage
B01-6-01	3200' / 17 anchors / anchor line 5X depth	Ocean Boom	Deflection / Protection	Deploy Anchors trip line and Marker Buoy to minimize Coral Damage

<u>Skimmer Type</u>	<u>Number</u>	<u>Collection Point</u>	

Notes

OIL SPILL SENSITIVE AREA REPORT SECTOR GUAM**PORT: Guam**

Site Name: Guam Shipyard (GSY)

Site ID: ESI01-06

Latitude (DMS): 13°26'39.5520"

Longitude (DMS): 144°39'33.9120"

Latitude (DD): 13.4443200°

Longitude (DD): 144.6594200°

Priority: North Winds: A

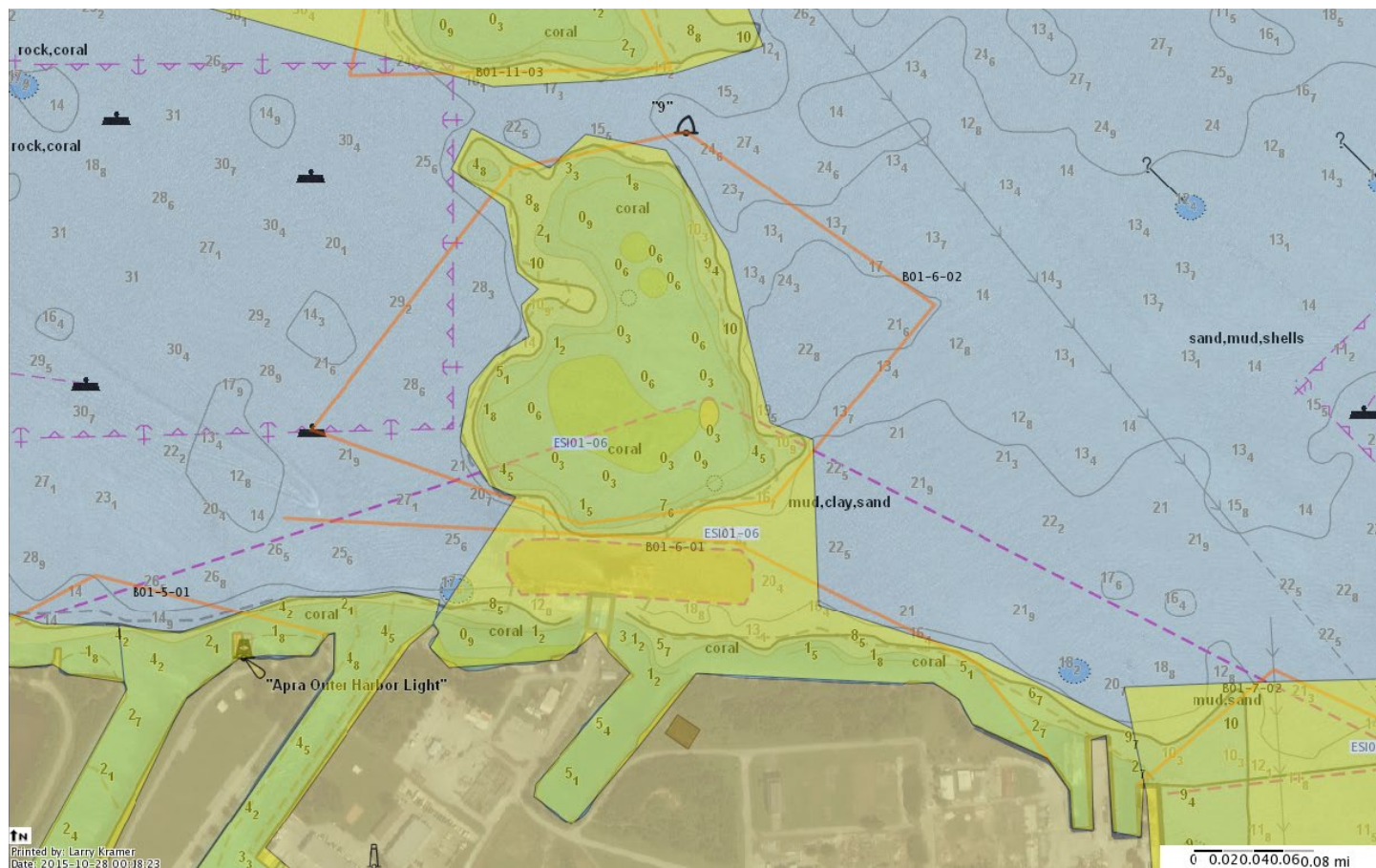
East Winds: A

South Winds: C

West Winds: C

General Location: East of Sumay Marina entrance to NBG LIMA Pier

Managed Area: Shoreside - US Naval Base Guam

**Map Information**

GRP Map: ESI01

ESI Map: ESI01

NOAA Chart: 81054

UTM: 55P 246580mE 1487476mN

Operational Area: Apra Harbor

NOAA Chart Name: Apra Harbor

MSGRS / USGS: 55PBQ4658087476

Legend

- ▲ Collection Point
- General Booming
- SP Oil Spill Risk Sites

- SA – Staging Areas
- ES – Equipment Storage Locations
- SK – Skimmer

Contact List – Contact – Expertise – Phone

USCG Sector Guam – (671) 355-4824, National Response Center (NRC) – (800) 424-8802, Navy Base Guam – (671) 339-6141/6144, Joint Region Marianas ROC – (671) 349-4000/4004, Guam Environmental Protection Agency – (671) 300-4751/4752/4753, Guam Homeland Security / Office of Civil Defense – (671) 475-9600, NOAA Office of Response and Restoration Emergency Hotline – (808) 725-5000, NOAA Pacific Islands Regional Office (Guam) – (671) 646-1904 / after hours (671) 488-4032, US Fish and Wildlife – (808) 792-9400 / Local (671) 989-6746 / after hours (671) 787-5708, Guam Shipyard – (671) 339-3222, , Guam DAWR Admin Office – (671) 735-0288/0294, Guam DAWR Conservation Officers – (671) 864-8652, Guam State Historic Preservation Office – (671) 475-9294

Resources at Risk

Shoreline Type (S): 8B: Sheltered, solid man-made structures, 6A: Gravel beaches, 5: Mixed sand and gravel beaches, 3A: Fine to medium grained sand beaches

Wildlife resources to be protected:

- Birds: Brown Noddy, White Tern
- Fish: Bigeye Scad, Small-toothed Whiptail, Scalloped Hammerhead
- Reptiles: Green Sea Turtle, Hawksbill Sea Turtle
- Coral Specie: Seriatopora Aculeate, Acropora Globiceps, Acropora Retusa

Socioeconomic: Shipyard, Archeological

Habitat to be protected: Bird Habitat, Fish Habitat, Coral Reef Habitat, Reptile Habitat/Turtle Nesting (All beach areas)

Threatened Species: Hawksbill Sea Turtle (F-E/S-E), Green Sea Turtle (F-T/S-E), Coral Species – Seriatopora Aculeate (F-T), Acropora Globiceps (F-T), Acropora Retusa (F-T), Scalloped Hammerhead (F-T).

Response Considerations

Staging Areas: GSY/NBG Port Operations (SA01-05); Sumay Marina (SA01-09)

Collection Points: GSY/NBG Port Operations

Area Access: Vehicle, Boat, PWC

Potential Spill Sources / Risk: Medium to species and habitat – if B01-9-05 and B01-6-01 can be deployed within 2 hours. If time permits, deploy boom B01-6-02.

Types of Oil: Gasoline, Jet A, Diesel, Bunker C

Protection Strategies

Tidal Range: 3 FT

Max Current: 4 KTS

Nearest Available Resource: NBG Spill Response Equipment

Other Resources Available: OSROCO

Point of Contact/Agency: NBG Spill Manager (671) 339-4100; NBG Port Operations (671) 339-6141

<u>Boom ID</u>	<u>Boom Length</u>	<u>Boom Type</u>	<u>Booming Method</u>	<u>Remarks</u>
B01-6-01	3200' / 17 anchors / anchor line 5X depth	Ocean Boom	Deflection / Protection	Deploy Anchors trip line and Marker Buoy to minimize Coral Damage
B01-6-02	6000' / 31 anchors / anchor Line 5X depth	Ocean Boom	Deflection / Protection	Deploy Anchors trip line and Marker Buoy to minimize Coral Damage

<u>Skimmer Type</u>	<u>Collection Point</u>	<u>Remarks</u>

Notes

OIL SPILL SENSITIVE AREA REPORT SECTOR GUAM**PORT: Guam**

Site Name: Inner Apra Harbor

Site ID: ESI01-07

Latitude (DMS): 13°25'49.9800"

Longitude (DMS): 144°40'04.8360"

Latitude (DD): 13.4305500°

Longitude (DD): 144.6680100°

Priority: North Winds: A

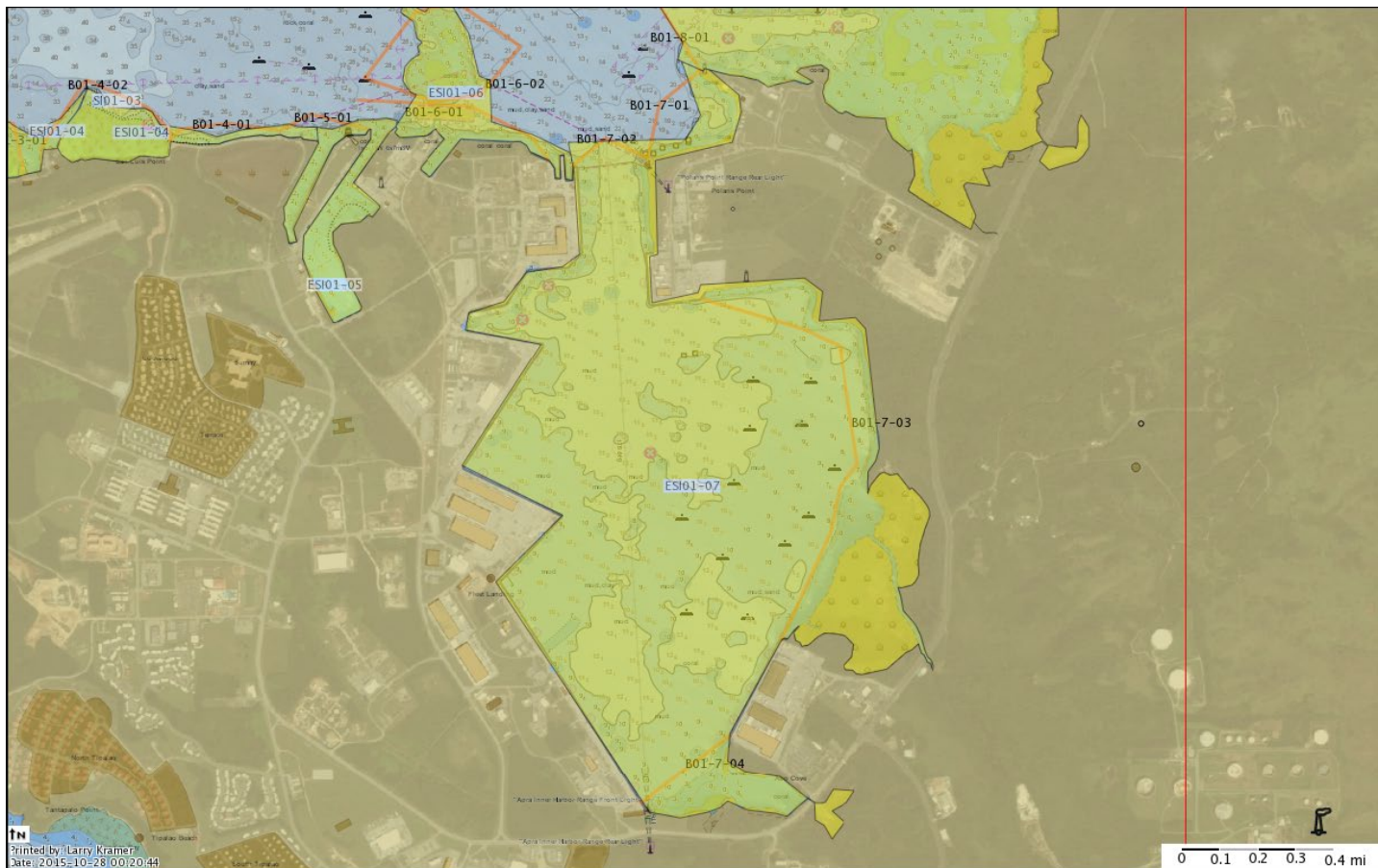
East Winds: A

South Winds: C

West Winds: C

General Location: Navy Base Guam's Inner Apra Harbor

Managed Area: US Naval Base Guam

**Map Information**

GRP Map: ESI01

ESI Map: ESI01

NOAA Chart: 81054

UTM: 55P 247496mE 1485943mN

Operational Area: Apra Harbor

NOAA Chart Name: Apra Harbor

MSGRS / USGS: 55PBQ4749685943

Legend

- ▲ Collection Point
- General Booming
- SP Oil Spill Risk Sites

- SA – Staging Areas
- ES – Equipment Storage Locations
- SK – Skimmer

Contact List – Contact – Expertise – Phone

USCG Sector Guam – (671) 355-4824, National Response Center (NRC) – (800) 424-8802, Navy Base Guam – (671) 339-6141/6144 / (671) 777-1809 NBG Command Duty Officer, Navy Base Guam Port Operations – (671) 339-6141, Joint Region Marianas ROC – (671) 349-4000/4004, Guam Environmental Protection Agency – (671) 300-4751/4752/4753, Guam Homeland Security / Office of Civil Defense – (671) 475-9600, NOAA Office of Response and Restoration Emergency Hotline – (808) 725-5000, NOAA Pacific Islands Regional Office (Guam) – (671) 646-1904 / after hours (671) 488-4032, US Fish and Wildlife – (808) 792-9400 / Local (671) 989-6746 / after hours (671) 787-5708, Guam DAWR Admin Office – (671) 735-0288/0294, Guam DAWR Conservation Officers – (671) 864-8652

Resources at Risk

Shoreline Type (S): 8B: Sheltered, solid man-made structures, 5: Mixed sand and gravel beaches, 10D: Scrub-shrub wetlands, 6A: Gravel beaches, 8C: Sheltered riprap, 8A: Sheltered scarps in bedrock, mud, or clay

Wildlife resources to be protected:

- Birds: Brown Noddy, White Tern, Micronesian Starling
- Fish: Bigeye Scad, Small-toothed Whiptail, Barracuda, Emperor, Goatfish, Grouper, Mullet, Parrotfish, Puffer, Scalloped Hammerhead, Snapper, Surgeonfish, Wrasse
- Reptiles: Green Sea Turtle, Hawksbill Sea Turtle
- Invertebrates: Octopus, Sea cucumber, Spiny Lobster, Swimming Crab
- Coral Species: Seriatopora Aculeate, Acropora Globiceps, Acropora Retusa

Socioeconomic: DOD Facility

Habitat to be protected: Bird Habitat, Fish Habitat, Coral Reef Habitat, Reptile Habitat/Turtle Nesting (All beach areas)

Threatened Species: Hawksbill Sea Turtle (F-E/S-E), Green Sea Turtle (F-T/S-E), Coral Species – Seriatopora Aculeate (F-T), Acropora Globiceps (F-T), Acropora Retusa (F-T). Micronesian Starling is a bird of conservation concern.

Response Considerations

Staging Areas: GSY/NBG Port Operations (SA01-05); Sumay Marina (SA01-09)

Collection Points: GSY/NBG Port Operations

Area Access: Vehicle, Boat, PWC

Potential Spill Sources / Risk: Medium to species and habitat – if B01-9-05, B01-7-01, B01-7-02 can be deployed within 2 hours.

Types of Oil: Gasoline, Jet A, Diesel, Bunker C

Protection Strategies

Tidal Range: 3 FT

Max Current: 2 KTS

Nearest Available Resource: NBG Spill Response Equipment

Other Resources Available: OSROCO

Point of Contact/Agency: NBG Spill Manager (671) 339-4100; NBG Port Operations (671) 339-6141.

<u>Boom ID</u>	<u>Boom Length</u>	<u>Boom Type</u>	<u>Booming Method</u>	<u>Remarks</u>
B01-7-01	1700' / 10 Anchors / Anchor Line 5X Depth	Ocean Boom	Protection	Deploy Anchors trip line and Marker Buoy to minimize Coral Damage
B01-7-02	1500' / 9 Anchors / Anchor Line 5X Depth	Ocean Boom	Protection	Deploy Anchors trip line and Marker Buoy to minimize Coral Damage
B01-7-03	6800' / 35 Anchors / Anchor Line 3-5X Depth	Harbor Boom	Deflection / Protection	Deploy Anchors trip line and Marker Buoy to minimize Coral Damage
B01-7-04	1700' / 10 Anchors / Anchor Line 3-5X Depth	Harbor Boom	Protection	Deploy Anchors trip line and Marker Buoy to minimize Coral Damage

<u>Skimmer Type</u>	<u>Number</u>	<u>Collection Point</u>	

Notes

OIL SPILL SENSITIVE AREA REPORT SECTOR GUAM**PORT: Guam**

Site Name: Sasa Bay

Site ID: ESI01-08

Latitude (DMS): 13°26'52.0080"

Longitude (DMS): 144°40'33.0240"

Latitude (DD): 13.4477800°

Longitude (DD): 144.6758400°

Priority: North Winds: A

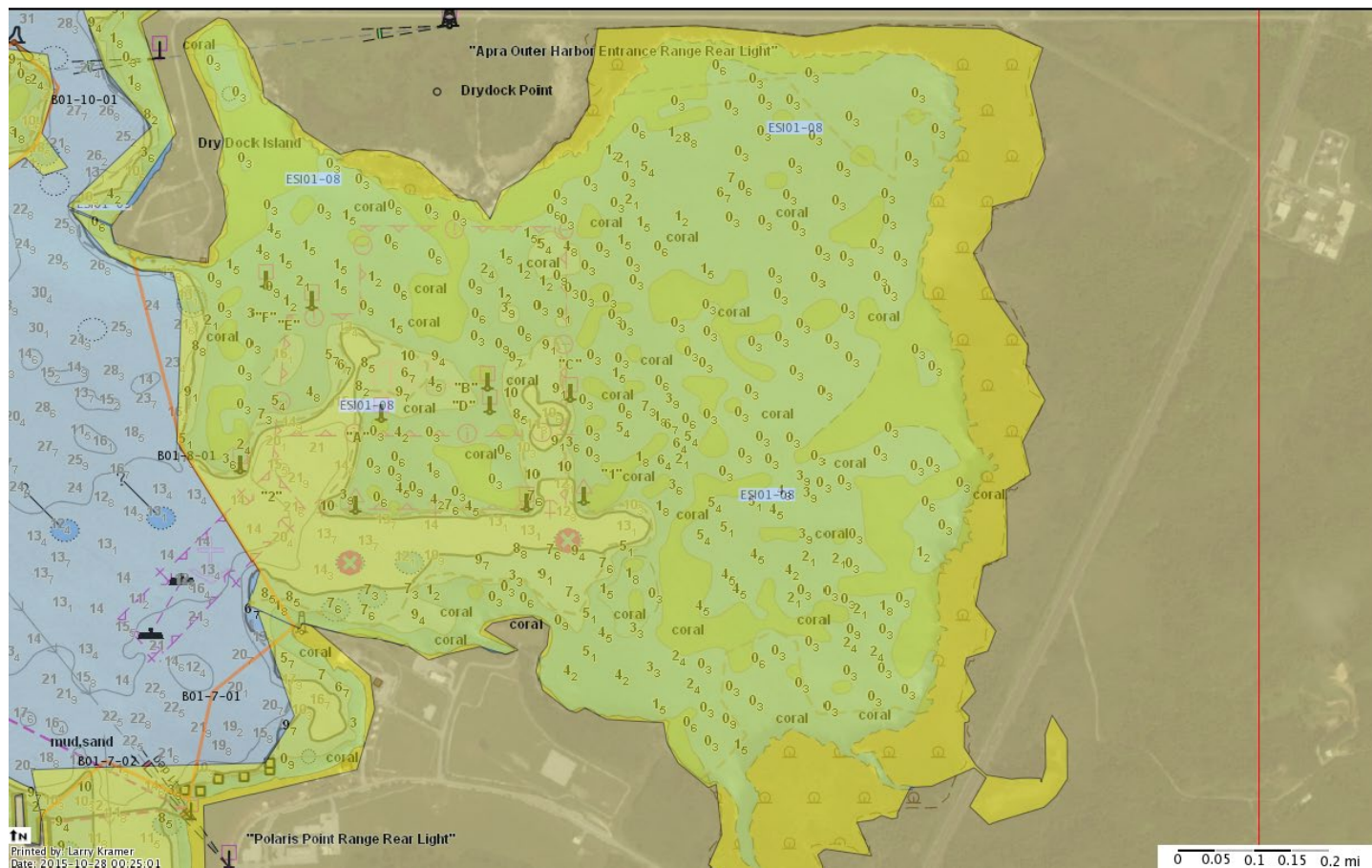
East Winds: B

South Winds: C

West Winds: A

General Location: Sasa Bay / Apra Harbor

Managed Area: Sasa Bay Marine Protected Area / South Shoreside - US Naval Base Guam

**Map Information**

GRP Map: ESI01

ESI Map: ESI-01 / ESI-13

Operational Area: Sasa Bay / Apra Harbor

NOAA Chart: 81054

NOAA Chart Name: Apra Harbor

UTM: 55P 248362mE 1487842mN

MSGRS / USGS: 55PBQ4836287842

Legend

- ▲ Collection Point
- General Booming
- SP Oil Spill Risk Sites

- SA – Staging Areas
- ES – Equipment Storage Locations
- SK – Skimmer

Contact List – Contact – Expertise – Phone

USCG Sector Guam – (671) 355-4824, National Response Center (NRC) – (800) 424-8802, Navy Base Guam – (671) 339-6141/6144 / (671) 777-1809 (NBG Command Duty Officer), Joint Region Marianas ROC – (671) 349-4000/4004, Port Authority of Guam Harbormaster (671) 477-8697, Guam Environmental Protection Agency – (671) 300-4751/4752/4753, Guam Homeland Security / Office of Civil Defense – (671) 475-9600, NOAA Office of Response and Restoration Emergency Hotline – (808) 725-5000, NOAA Pacific Islands Regional Office (Guam) – (671) 646-1904 / after hours (671) 488-4032, US Fish and Wildlife – (808) 792-9400 / Local (671) 989-6746 / after hours (671) 787-5708, Guam DAWR Admin Office – (671) 735-0288/0294, Guam DAWR Conservation Officers – (671) 864-8652, Guam State Historic Preservation Office – (671) 475-9294

Resources at Risk

Shoreline Type (S): 10D: Scrub-shrub wetlands, 5: Mixed sand and gravel beaches, 3A: Fine to medium grained sand beaches, 8C: Sheltered riprap, 8B: Sheltered, solid man-made structures

Wildlife resources to be protected:

- Birds: Brown Noddy, White Tern, Mariana Common Moorhen;
- Fish: Bigeye Scad, Small-toothed Whiptail, Barracuda, Emperor, Goatfish, Grouper, Mullet, parrotfish, Puffer, Scalloped Hammerhead, Snapper, Surgeonfish, Wrasses; Reptiles – Green Sea Turtle, Hawksbill Sea Turtle
- Invertebrates: Bivalves, Mangrove Crab, Octopus, Sea Cucumber, Spiny Lobster, Swimming Crab
- Vegetation: Mangroves, Seagrass
- Coral Species: Seriatopora Aculeate, Acropora Globiceps, Acropora Retusa

Socioeconomic: Marianas Yacht Club, boating

Habitat to be protected: Fish Habitat, Vegetation Habitat, Coral Reef Habitat, Reptile Habitat/Turtle Nesting (All beach areas)

Threatened Species: Hawksbill Sea Turtle (F-E/S-E), Green Sea Turtle (F-T/S-E), Coral Species – Seriatopora Aculeate (F-T), Acropora Globiceps (F-T), Acropora Retusa (F-T), Scalloped Hammerhead (F-T), Mariana Common Moorhen (S-E/F-E). Micronesian Starling is a bird of conservation concern

Response Considerations

Staging Areas: Polaris Point (SA01-06); Navy Fuel Piers/Drydock Island (SA01-07)

Collection Points: Polaris Point

Area Access: Vehicle, Boat, PWC

Potential Spill Sources / Risk: Low to medium to species and habitat – if B01-9-05 and B01-8-01 can be deployed within 2 hours. Wind direction and tide determines risk and priorities.

Types of Oil: Gasoline, Jet A, Diesel, Bunker C

Protection Strategies

Tidal Range: 3 FT

Max Current: 2 KTS

Nearest Available Resource: NBG spill response equipment

Other Resources Available: OSROCO

OIL SPILL SENSITIVE AREA REPORT SECTOR GUAM	PORT: Guam
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Point of Contact/Agency: USCG Sector Guam Command Center (671) 355-4824 / 355-4826, (671) 339-4100; OSROCO (671) 477-1818 / (671) 688-2933.

<u>Boom ID</u>	<u>Boom Length</u>	<u>Boom Type</u>	<u>Booming Method</u>	<u>Remarks</u>
B01-8-01	3200' / 17 Anchors / Anchor Line 3-5X Depth	Ocean Boom	Deflection / Protection	Deploy Anchors, trip line and Marker Buoy to minimize Coral Damage

<u>Skimmer Type</u>	<u>Number</u>	<u>Collection Point</u>	

Notes

OIL SPILL SENSITIVE AREA REPORT SECTOR GUAM**PORT: Guam**

Site Name: Cabras Island / Piti Channel

Site ID: ESI01-09

Latitude (DMS): 13°27'34.2360"

Longitude (DMS): 144°40'22.1160"

Latitude (DD): 13.4595100°

Longitude (DD): 144.6728100°

Priority: North Winds: A

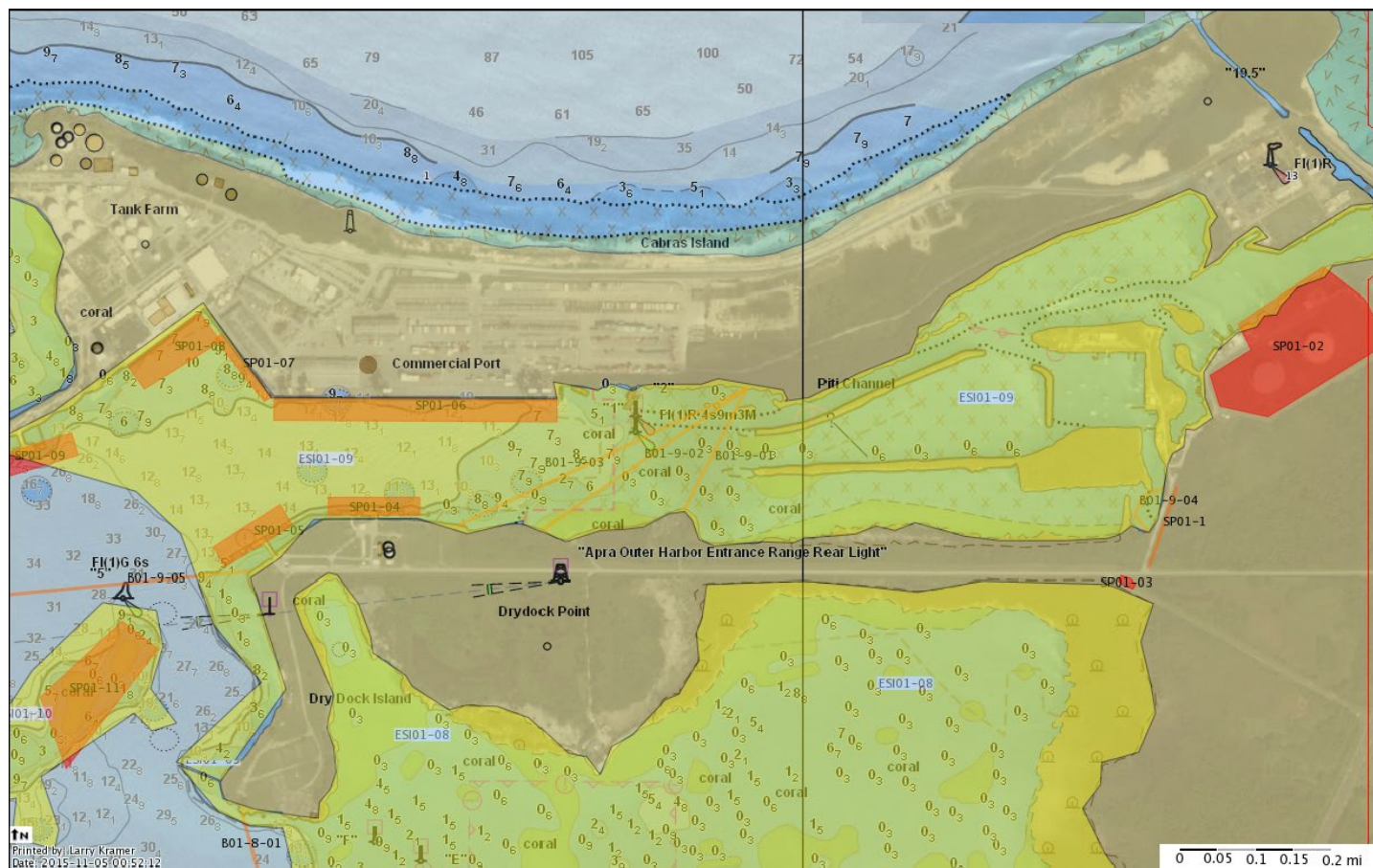
East Winds: A

South Winds: A

West Winds: A

General Location: Cabras Island Channel, Piti Channel, Harbor of Refuge

Managed Area: Drydock Island, Piers D/E – US Navy Base Guam

**Map Information**

GRP Map: ESI01

ESI Map: ESI-01

NOAA Chart: 81054

UTM: 55P 248046mE 1489143mN

Operational Area: Apra Harbor / Cabras Island / Piti Channel

NOAA Chart Name: Apra Harbor

MSGRS / USGS: 55PBQ4804689143

Legend

- ▲ Collection Point
- General Booming
- SP Oil Spill Risk Sites

- SA – Staging Areas
- ES – Equipment Storage Locations
- SK – Skimmer

Contact List – Contact – Expertise – Phone

USCG Sector Guam – (671) 355-4824, National Response Center (NRC) – (800) 424-8802, Navy Base Guam – (671) 339-6141/6144 / (671) 777-1809 NBG (Command Duty Officer), Navy Base Guam Port Operations – (671) 339-6141, Joint Region Marianas ROC – (671) 349-4000/4004, Port Authority of Guam Harbormaster – (671) 477-8697, Guam Environmental Protection Agency – (671) 300-4751/4752/4753, Guam Homeland Security / Office of Civil Defense – (671) 475-9600, NOAA Office of Response and Restoration Emergency Hotline – (808) 725-5000, NOAA Pacific Islands Regional Office (Guam) – (671) 646-1904 / after hours (671) 488-4032, US Fish and Wildlife – (808) 792-9400 / Local (671) 989-6746 / after hours (671) 787-5708, Guam DAWR Admin Office – (671) 735-0288/0294, Guam DAWR Conservation Officers – (671) 864-8652, Guam State Historic Preservation Office – (671) 475-9294

Resources at Risk

Shoreline Type (S): 5: Mixed sand and gravel beaches, 8C: Sheltered riprap, 8B: Sheltered, solid man-made structures, 10D: Scrub-shrub wetlands, 9B: Vegetated low banks

Wildlife resources to be protected:

- Birds: Brown Noddy, White Tern
- Fish: Bigeye Scad, Small-toothed Whiptail, Scalloped Hammerhead
- Reptiles: Green Sea Turtle, Hawksbill Sea Turtle
- Vegetation: Mangroves, Seagrass
- Coral Species: Seriatopora Aculeate, Acropora Globiceps, Acropora Retusa

Socioeconomic: Commercial Port / Recreational Marina

Habitat to be protected: Bird Habitat, Fish Habitat, Vegetation Habitat, Coral Reef Habitat, Reptile Habitat/Turtle Nesting (All beach areas)

Threatened Species: Hawksbill Sea Turtle (F-E/S-E), Green Sea Turtle (F-T/S-E), Coral Species – Seriatopora Aculeate (F-T), Acropora Globiceps (F-T), Acropora Retusa (F-T), Scalloped Hammerhead (F-T)

Response Considerations

Staging Areas: Port Authority Guam (SA01-08); Cabras Marine/OROSCO (SA01-09); Navy Fuel Piers/Drydock Island (SA01-07)

Collection Points: Port Authority Guam, OSROCO, Drydock Island

Area Access: Vehicle, Boat, PWC

Potential Spill Sources / Risk: Medium to high if Containment booms can be placed around spill in 1 hour

Types of Oil: Gasoline, Jet A, Diesel, Bunker C

Protection Strategies

Tidal Range: 3 FT

Max Current: 2 KTS

Nearest Available Resource: OSROCO

Other Resources Available: NBG Spill Response Equipment

Point of Contact/Agency: Port Authority of Guam Harbormaster (671) 477-8697; USCG Sector Guam Command Center (671) 355-4824 / 355-4826; OSROCO (671) 477-1818 / (671) 688-2933,
(Piers D/E, NBG Spill Manager (671) 339-4100)

<u>Boom ID</u>	<u>Boom Length</u>	<u>Boom Type</u>	<u>Booming Method</u>	<u>Remarks</u>
B01-9-01	1600' / 9 Anchors / Anchor line 3X Depth	Harbor Boom	Containment / Protection	Deploy Anchors, trip line and Marker Buoy to minimize Coral Damage
B01-9-02	2600' / 14 Anchors / Anchor Line 3X Depth.	Harbor Boom	Containment / Protection	Deploy Anchors, trip line and Marker Buoy to minimize Coral Damage
B01-9-03	3200' / 17 Anchors / Anchor Line 3X Depth	Harbor Boom	Containment / Protection	Deploy Anchors, trip line and Marker Buoy to minimize Coral Damage
B01-9-04	600' / 4 Anchors or stakes to secure boom / Anchor line 3X depth	Harbor Boom / Absorbent Boom	Containment	Deploy Anchors, trip line and Marker Buoy to minimize Coral Damage
B01-9-05	5400' / 28 Anchors / Anchor Line 5X Depth	Ocean Boom	Deflection away from Jade and Western Shoals	Deploy Anchors, trip line and Marker Buoy to minimize Coral Damage

<u>Skimmer Type</u>	<u>Number</u>	<u>Collection Point</u>	

Notes

OIL SPILL SENSITIVE AREA REPORT SECTOR GUAM**PORT: Guam**

Site Name: Western / Jade Shoals

Site ID: ESI01-10

Latitude (DMS): 13°27'09.3600"

Longitude (DMS): 144°39'29.0880"

Latitude (DD): 13.4526000°

Longitude (DD): 144.6580800°

Priority: North Winds: A

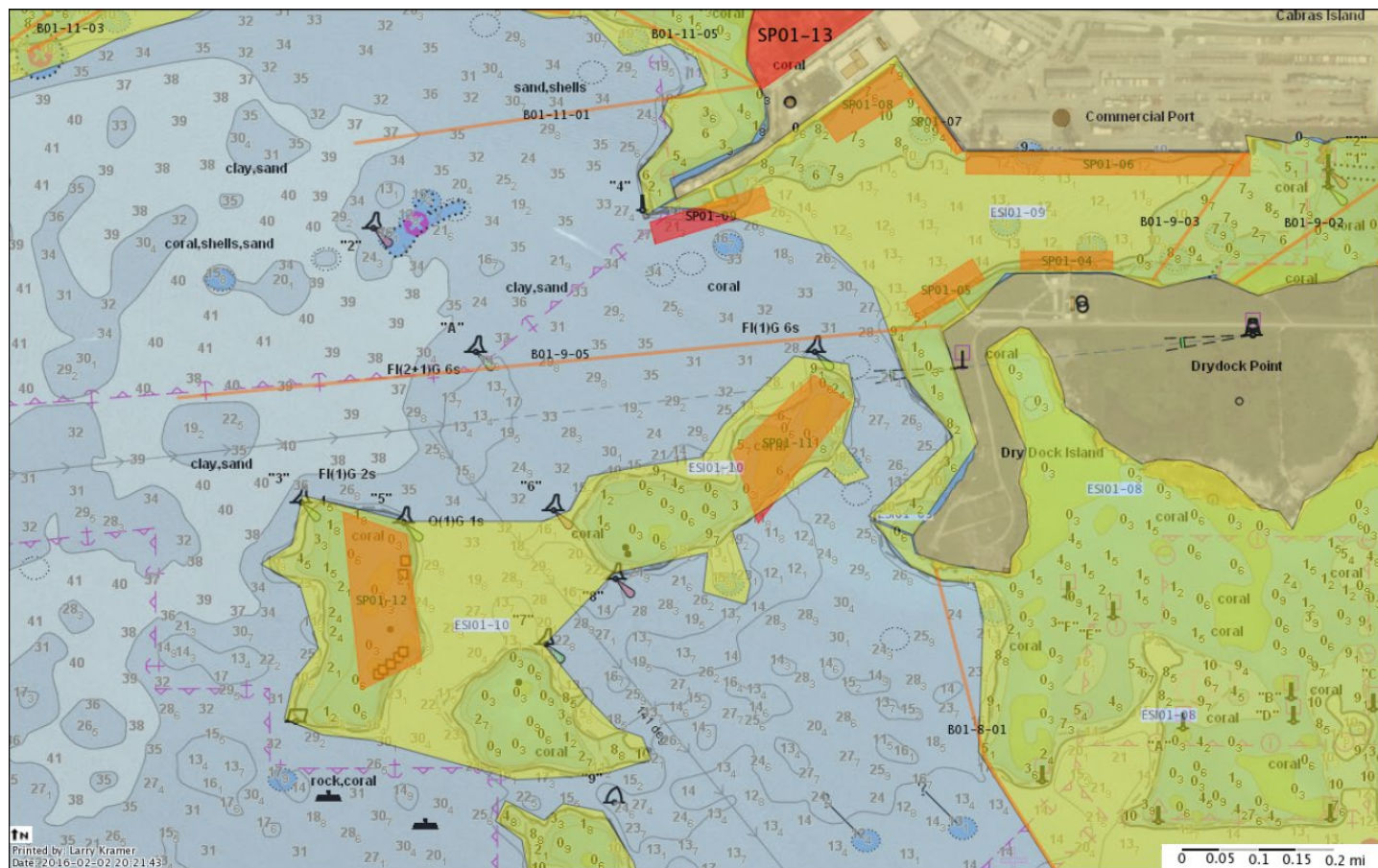
East Winds: A

South Winds: B

West Winds: B

General Location: Western and Jade Shoals

Managed Area: No

**Map Information**

GRP Map: ESI01

ESI Map: ESI-01

NOAA Chart: 80154

UTM: 55P 246443mE 1488393mN

Operational Area: Apra Harbor

NOAA Chart Name: Apra Harbor

MSGRS / USGS: 55PBQ4644388393

Legend

- ▲ Collection Point
- General Booming
- SP Oil Spill Risk Sites

- SA – Staging Areas
- ES – Equipment Storage Locations
- SK – Skimmer

Contact List – Contact – Expertise – Phone

USCG Sector Guam – (671) 355-4824, National Response Center (NRC) – (800) 424-8802, Navy Base Guam – (671) 339-6141/6144 / (671) 777-1809 NBG (Command Duty Officer), Navy Base Guam Port Operations – (671) 339-6141, Joint Region Marianas ROC – (671) 349-4000/4004, Port Authority of Guam Harbormaster – (671) 477-8697, Guam Environmental Protection Agency – (671) 300-4751/4752/4753, Guam Homeland Security / Office of Civil Defense – (671) 475-9600, NOAA Office of Response and Restoration Emergency Hotline – (808) 725-5000, NOAA Pacific Islands Regional Office (Guam) – (671) 646-1904 / after hours (671) 488-4032, US Fish and Wildlife – (808) 792-9400 / Local (671) 989-6746 / after hours (671) 787-5708, Guam DAWR Admin Office – (671) 735-0288/0294, Guam DAWR Conservation Officers – (671) 864-8652, Guam State Historic Preservation Office – (671) 475-9294

Resources at Risk

Shoreline Type (S):

Wildlife resources to be protected:

- Birds: Brown Noddy, White Tern
- Fish: Bigeye Scad, Small-toothed Whiptail, Scalloped Hammerhead
- Reptiles: Green Sea Turtle, Hawksbill Sea Turtle
- Coral Species: Seriatopora Aculeate, Acropora Globiceps, Acropora Retusa

Socioeconomic: Boating, Diving

Habitat to be protected: Bird Habitat, Fish Habitat, Coral Reef Habitat, Reptile Habitat/Turtle Nesting (All beach areas)

Threatened Species: Hawksbill Sea Turtle (F-E/S-E), Green Sea Turtle (F-T/S-E), Coral Species – Seriatopora Aculeate (F-T), Acropora Globiceps (F-T), Acropora Retusa (F-T), Scalloped Hammerhead (F-T)

Response Considerations

Staging Areas: Port Authority Guam (SA01-08); Cabras Marine/OROSCO (SA01-09)

Collection Points: Port Authority of Guam, OSROCO

Area Access: Boat, PWC

Potential Spill Sources / Risk: High risk to resources due to location and area being spill risk

Types of Oil: Gasoline, Jet A, Diesel, Bunker C

Protection Strategies

Tidal Range: 3 FT

Max Current: 2 KTS

Nearest Available Resource: OSROCO

Other Resources Available: NBG Spill Response Equipment

Point of Contact/Agency: Port Authority of Guam Harbormaster (671) 477-8697; USCG Sector Guam Command Center (671) 355-4824 / 355-4826; OSROCO (671) 477-1818 / (671) 688-2933

<u>Boom ID</u>	<u>Boom Length</u>	<u>Boom Type</u>	<u>Booming Method</u>	<u>Remarks</u>
B01-10-01	5600' / 29 Anchors / Anchor Line 5X Depth	Ocean Boom	Deflection / Protection	Deploy Anchors, trip line and Marker Buoy to minimize Coral Damage, immediately deploy first for spill at Wharfs D, E, F3, F4, F5, F6 to divert
B01-10-02	4600' / 24 Anchors / Anchor Line 5X Depth	Ocean Boom	Deflection / Protection	Deploy Anchors, trip line and Marker Buoy to minimize Coral Damage, immediately deploy first for spill at Wharfs D, E, F3, F4, F5, F6 to divert
B01-10-03	3600' / 19 Anchors / Anchor Line 5X Depth	Ocean Boom	Deflection / Protection	Deploy Anchors, trip line and Marker Buoy to minimize Coral Damage, immediately deploy first for spill at Wharfs D, E, F3, F4, F5, F6 to divert

<u>Skimmer Type</u>	<u>Number</u>	<u>Collection Point</u>	

Notes

Site Name: HOTEL Wharf / Glass Breakwater

Site ID: ESI01-11

Latitude (DMS): 13°27'50.6160"

Longitude (DMS): 144°39'04.6800

Latitude (DD): 13.4640600°

Longitude (DD): 144.6513000°

Priority: North Winds: B

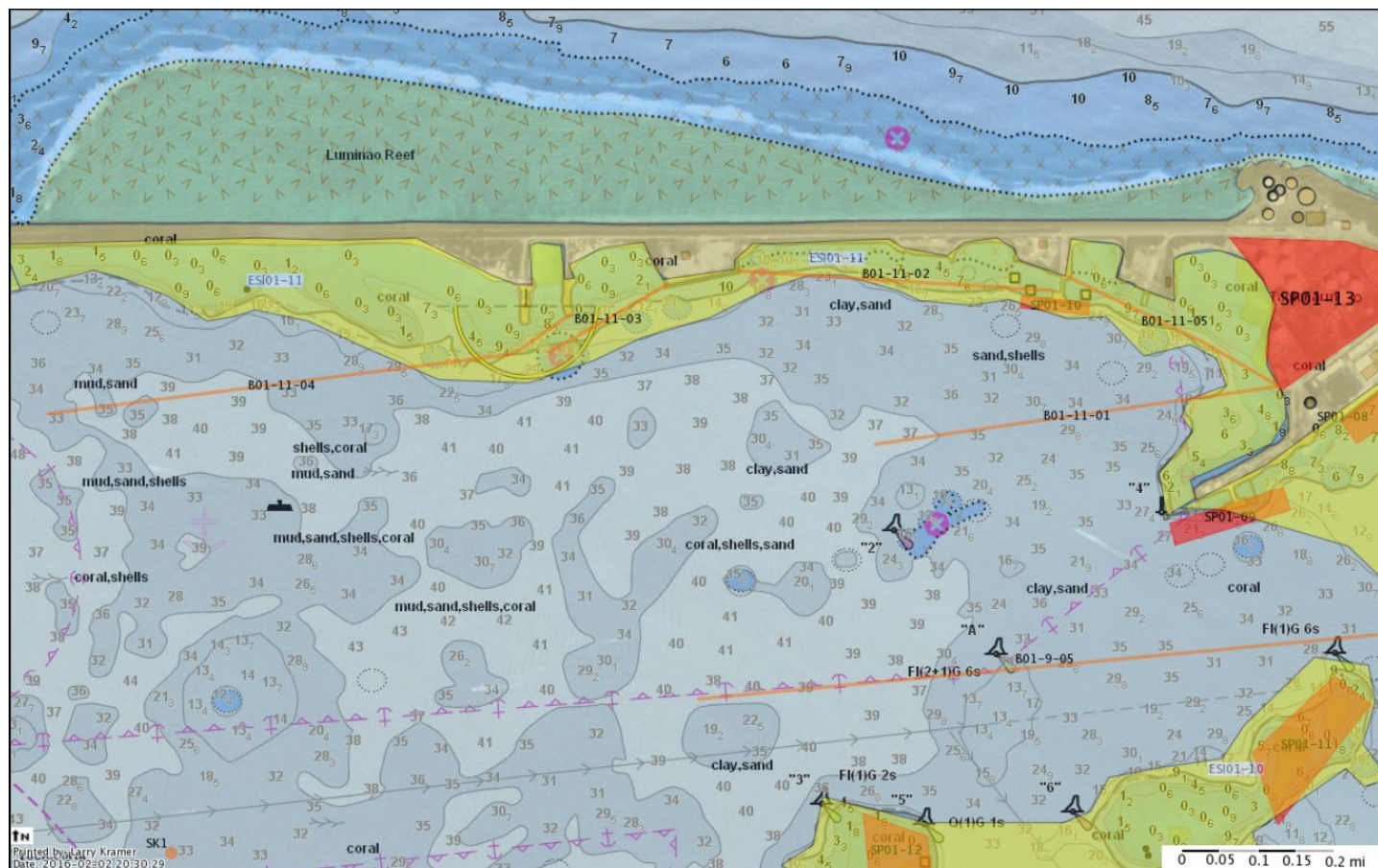
East Winds: B

South Winds: A

West Winds: B

General Location: HOTEL Wharf

Managed Area: No



Map Information

GRP Map: ESI01

ESI Map: ESI-01

NOAA Chart: 81054

UTM: 55P 245721mE 1489669mN

Operational Area: Apra Harbor

NOAA Chart Name: Apra Harbor

MSGRS / USGS: 55PBQ4572189669

Legend

- | | | |
|----|----------------------|----------------------------------|
| ▲ | Collection Point | SA – Staging Areas |
| ⚡ | General Booming | ES – Equipment Storage Locations |
| SP | Oil Spill Risk Sites | SK – Skimmer |

Contact List – Contact – Expertise – Phone

USCG Sector Guam – (671) 355-4824, National Response Center (NRC) – (800) 424-8802, Navy Base Guam – (671) 339-6141/6144 / (671) 777-1809 NBG (Command Duty Officer), Navy Base Guam Port Operations – (671) 339-6141, Joint Region Marianas ROC – (671) 349-4000/4004, Port Authority of Guam Harbormaster – (671) 477-8697, Guam Environmental Protection Agency – (671) 300-4751/4752/4753, Guam Homeland Security / Office of Civil Defense – (671) 475-9600, NOAA Office of Response and Restoration Emergency Hotline – (808) 725-5000, NOAA Pacific Islands Regional Office (Guam) – (671) 646-1904 / after hours (671) 488-4032, US Fish and Wildlife – (808) 792-9400 / Local (671) 989-6746 / after hours (671) 787-5708, Guam DAWR Admin Office – (671) 735-0288/0294, Guam DAWR Conservation Officers – (671) 864-8652, Guam State Historic Preservation Office – (671) 475-9294

Resources at Risk

Shoreline Type (S): 8C: Sheltered riprap, 3A: Fine to medium grained sand beaches, 8B: Sheltered, solid man-made structures

Wildlife resources to be protected:

- Birds: Brown Noddy, White Tern
- Fish: Bigeye Scad, Small-toothed Whiptail
- Reptiles: Green Sea Turtle, Hawksbill Sea Turtle
- Coral Species: Seriatopora Aculeate, Acropora Globiceps, Acropora Retusa

Socioeconomic: Diving, Beaches, Tourist access, HOTEL Wharf

Habitat to be protected: Bird Habitat, Fish Habitat, Coral Habitat, Reptile Habitat/Turtle Nesting (All beach areas)

Threatened Species: Hawksbill Sea Turtle (F-E/S-E), Green Sea Turtle (F-T/S-E), Coral Species – Seriatopora Aculeate (F-T), Acropora Globiceps (F-T), Acropora Retusa (F-T)

Response Considerations

Staging Areas: Seaplane Ramp (SA01-10); HOTEL Wharf (SA01-11); DOG Pier (SA01-12)

Collection Points: Seaplane Ramp, HOTEL Wharf, DOG Pier

Area Access: Vehicle, Boat, PWC

Potential Spill Sources / Risk: High for east winds. Early deployments of Booms B01-11-1 to B01-11-4 will minimize spill damage

Types of Oil: Gasoline, Jet A, Diesel, Bunker C

Protection Strategies

Tidal Range: 3 FT

Max Current: 4 KTS

Nearest Available Resource: OSROCO

Other Resources Available: NBG Spill Response Equipment

Point of Contact/Agency: Port Authority of Guam Harbormaster (671) 477-8697; USCG Sector Guam Command Center (671) 355-4824 / 355-4826; OSROCO (671) 477-1818 / (671) 688-2933

<u>Boom ID</u>	<u>Boom Length</u>	<u>Boom Type</u>	<u>Booming Method</u>	<u>Remarks</u>
B01-11-01	1800' / 10 Anchors / Anchor Line 5X Depth	Ocean Boom	Protection	Deploy Anchors, trip line and Marker Buoy to minimize coral damage
B01-11-02	2800' / 15 Anchors / Anchor Line 5X Depth	Ocean Boom	Protection / Deflection	Deploy Anchors, trip line and Marker Buoy to minimize coral damage
B01-11-03	1000' / 6 Anchors / Anchor line 5X depth	Ocean Boom	Protection / Deflection	Deploy Anchors, trip line and Marker Buoy to minimize coral damage
B01-11-04	4000' / 21 Anchors / Anchor line 5X depth	Ocean Boom	Protection / Deflection	Deploy Anchors, trip line and Marker Buoy to minimize coral damage
B01-11-05	1800' / 10 Anchors / Anchor Line 5X Depth	Ocean Boom	Protection / Deflection	Deploy Anchors, trip line and Marker Buoy to minimize coral damage

<u>Skimmer Type</u>	<u>Number</u>	<u>Collection Point</u>	

Notes

OIL SPILL SENSITIVE AREA REPORT SECTOR GUAM

PORT: Guam

Site Name: Glass Breakwater 2

Site ID: ESI01-12

Latitude (DMS): 13°27'33.9120"

Longitude (DMS): 144°37'53.7600"

Latitude (DD): 13.4594200°

Longitude (DD): 144.6316000°

Priority: North Winds: B

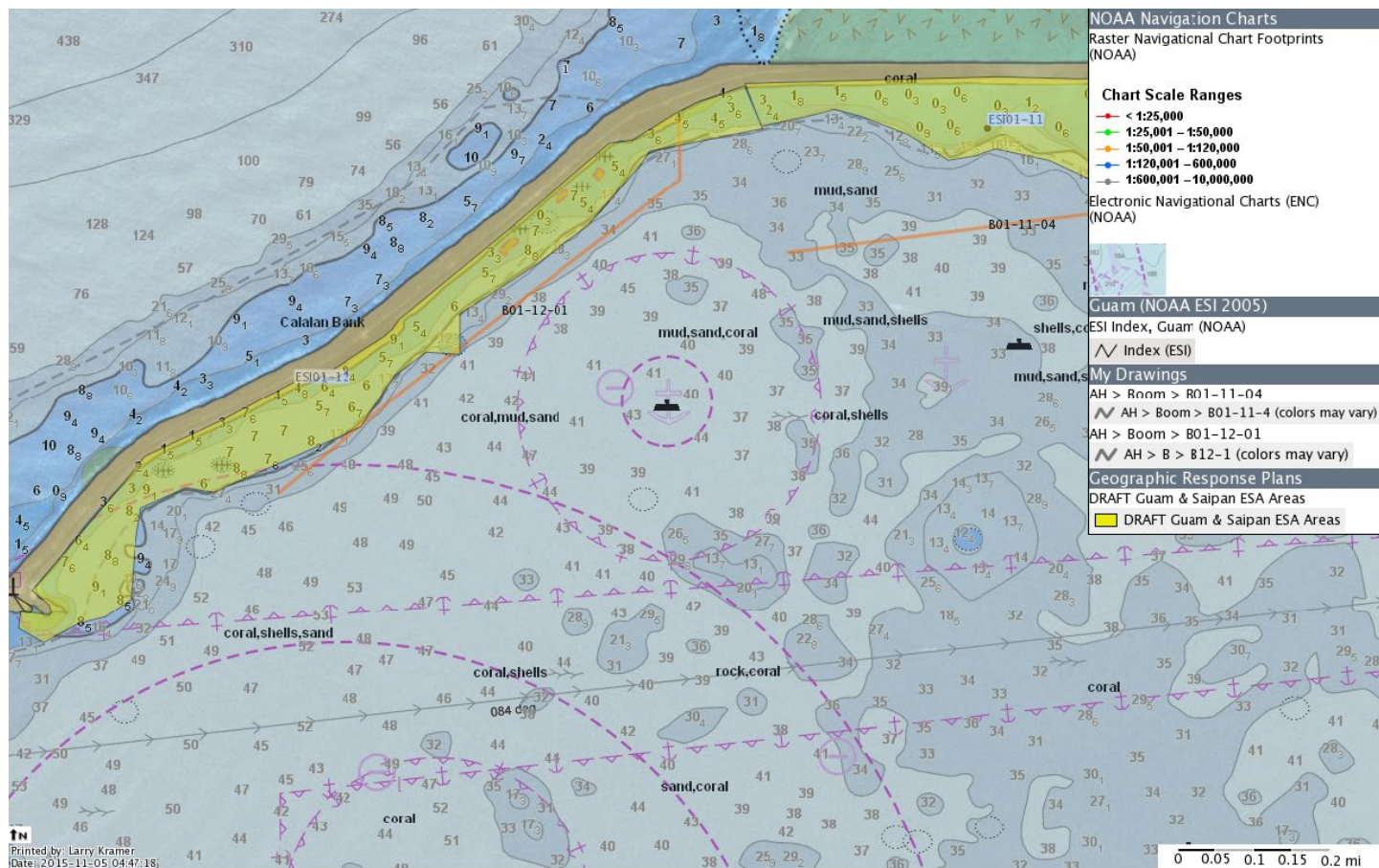
East Winds: B

South Winds: A

West Winds: A

General Location: Glass Break Wall

Managed Area: No



Map Information

GRP Map: ESI01-12

ESI Map: ESI-01

NOAA Chart: 81054

UTM: 55P 243582mE 1489176mN

Operational Area: Apra Harbor

NOAA Chart Name: Apra Harbor

MSGRS / USGS: 55PBQ4358289176

Legend

- ▲ Collection Point
- General Booming
- SP Oil Spill Risk Sites

- SA – Staging Areas
- ES – Equipment Storage Locations
- SK – Skimmer

Contact List – Contact – Expertise – Phone

USCG Sector Guam – (671) 355-4824, National Response Center (NRC) – (800) 424-8802, Navy Base Guam – (671) 339-6141/6144 / (671) 777-1809 NBG (Command Duty Officer), Navy Base Guam Port Operations – (671) 339-6141, Joint Region Marianas ROC – (671) 349-4000/4004, Port Authority of Guam Harbormaster – (671) 477-8697, Guam Environmental Protection Agency – (671) 300-4751/4752/4753, Guam Homeland Security / Office of Civil Defense – (671) 475-9600, NOAA Office of Response and Restoration Emergency Hotline – (808) 725-5000, NOAA Pacific Islands Regional Office (Guam) – (671) 646-1904 / after hours (671) 488-4032, US Fish and Wildlife – (808) 792-9400 / Local (671) 989-6746 / after hours (671) 787-5708, Guam DAWR Admin Office – (671) 735-0288/0294, Guam DAWR Conservation Officers – (671) 864-8652, Guam State Historic Preservation Office – (671) 475-9294

Resources at Risk

Shoreline Type (S): 8C: Sheltered riprap, 3A: Fine to medium grained sand beaches

Wildlife resources to be protected:

- Birds: Brown Noddy, White Tern
- Fish: Bigeye Scad, Small-toothed Whiptail
- Reptiles: Green Sea Turtle, Hawksbill Sea Turtle
- Coral Species: Seriatopora Aculeate, Acropora Globiceps, Acropora Retusa

Socioeconomic: Archaeological Site, Diving

Habitat to be protected: Bird Habitat, Fish Habitat, Reptile Habitat/Turtle Nesting (All beach areas), Coral Habitat

Threatened Species: Hawksbill Sea Turtle (F-E/S-E), Green Sea Turtle (F-T/S-E), Coral Species – Seriatopora Aculeate (F-T), Acropora Globiceps (F-T), Acropora Retusa (F-T)

Response Considerations

Staging Areas: Seaplane Ramp (SA01-10); HOTEL Wharf (SA01-11); DOG Pier (SA01-12)

Collection Points: Seaplane Ramp, HOTEL Wharf, DOG Pier

Area Access: Vehicle (limited), Boat, PWC

Potential Spill Sources / Risk: High for east winds. Early deployments of Booms B01-11-3 and B01-12-1 will minimize spill damage

Types of Oil: Gasoline, Jet A, Diesel, Bunker C

Protection Strategies

Tidal Range: 3 FT

Max Current: 4 KTS

Nearest Available Resource: OSROCO

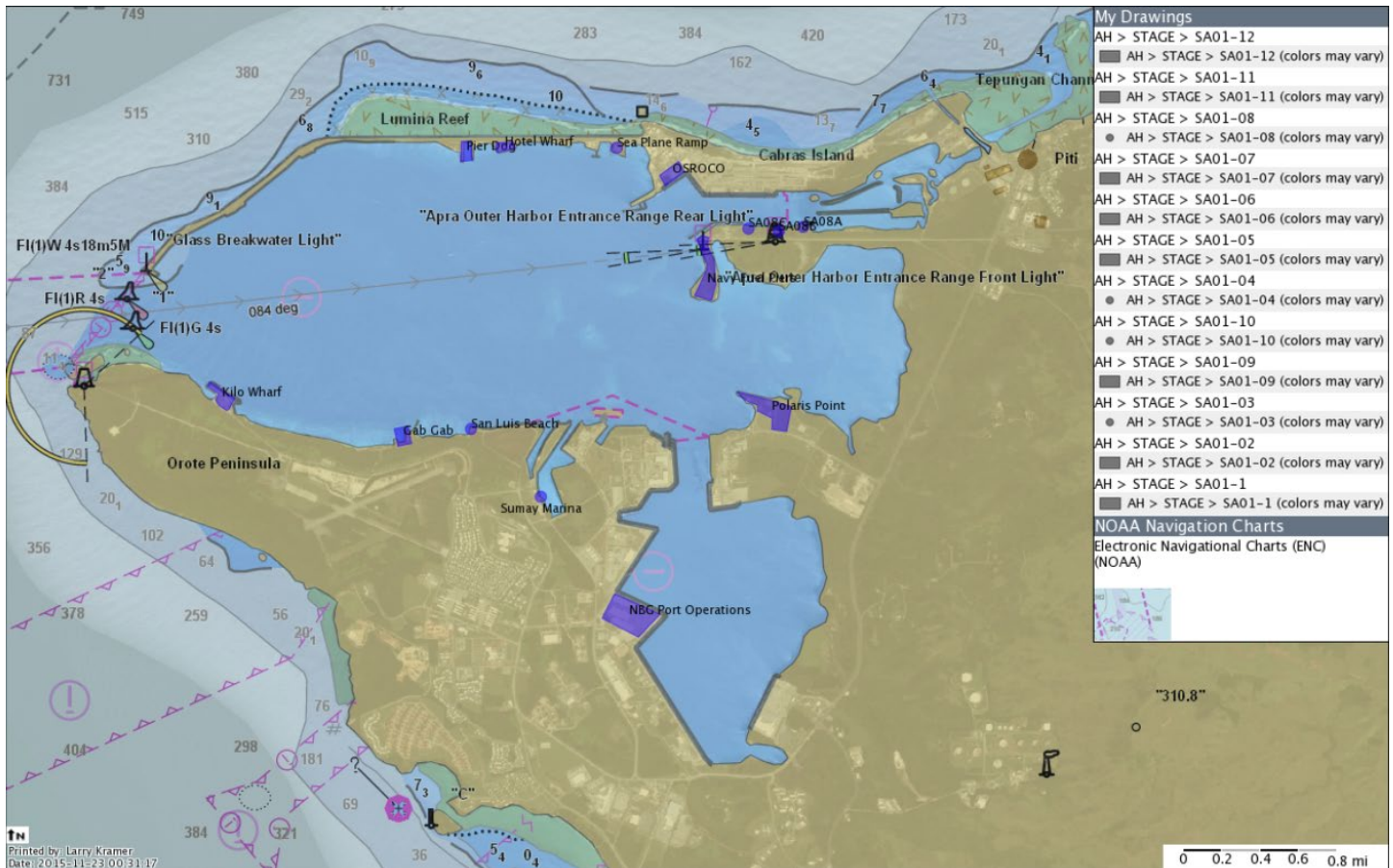
Other Resources Available: NBG Spill Response Equipment

Point of Contact/Agency: USCG Sector Guam Command Center (671) 355-4824 / 355-4826; OSROCO (671) 477-1818 / (671) 688-2933.

<u>Boom ID</u>	<u>Boom Length</u>	<u>Boom Type</u>	<u>Booming Method</u>	<u>Remarks</u>
B01-11-04	4000' / 21 Anchors / Anchor line 5X depth	Ocean Boom	Protection / Deflection	Deploy Anchors trip line and Marker Buoy to minimize coral damage
B01-12-01	4400' / 23 Anchors / Anchor Line 5X Depth	Ocean Boom	Protection / Deflection	Deploy Anchors, trip line and Marker Buoy to minimize coral damage

<u>Skimmer Type</u>	<u>Number</u>	<u>Collection Point</u>	

Notes



Site Name	Contact Information	Response Strategies	Page
KILO Wharf SA01-01	Navy Base Guam – (671) 339-6141/6144 / (671) 777-1809 NBG Command Duty Officer, Navy Base Guam Port Operations – (671) 339-6141, Joint Region Marianas (JRM) ROC – (671) 349-4000/4004	Boom Staging / Vacuum Truck / Temporary Storage - no containers / Collection Point	ESI01-SA01-3
Gab Gab SA01-02	Navy Base Guam – (671) 339-6141/6144 / (671) 777-1809 NBG Command Duty Officer, Navy Base Guam Port Operations – (671) 339-6141, JRM ROC – (671) 349-4000/4004	Staging of equipment / Vacuum Tuck - oil recovery / Collection Point	ESI01-SA01-5
San Luis Beach SA01-03	Navy Base Guam – (671) 339-6141/6144 / (671) 777-1809 NBG (Command Duty Officer), Navy Base Guam Port Operations – (671) 339-6141, JRM ROC – (671) 349-4000/4004	Boom Storage / Deployment	ESI01-SA01-7

OIL SPILL STAGING AREA REPORT SECTOR GUAM**PORT: Guam**

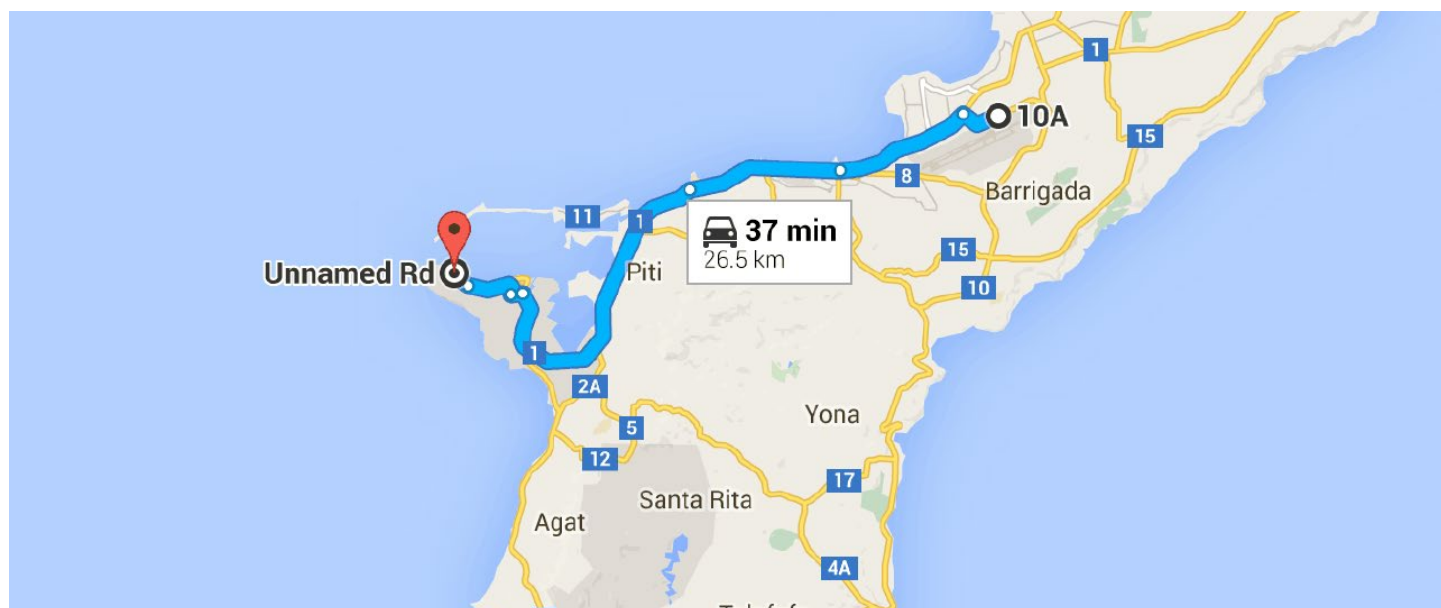
Site Name	Contact Information	Response Strategies	Page
Sumay Marina SA01-04	Navy Base Guam – (671) 339-6141/6144 / (671) 777-1809 NBG Command Duty Officer, Navy Base Guam Port Operations – (671) 339-6141, JRM ROC – (671) 349-4000/4004	Boat Launch	ESI01-SA01-9
GSY/NBG Port Operations SA01-05	Navy Base Guam – (671) 339-6141/6144 / (671) 777-1809 NBG Command Duty Officer, Navy Base Guam Port Operations – (671) 339-6141, JRM ROC – (671) 349-4000/4004	Storage	ESI01-SA01-11
Polaris Point SA01-06	Navy Base Guam – (671) 339-6141/6144 / (671) 777-1809 NBG Command Duty Officer, Navy Base Guam Port Operations – (671) 339-6141, JRM ROC – (671) 349-4000/4004	Boom Storage / Deployment / Oil Recovery / Collection / Vacuum Trucks / Waste Temporary Storage (bring containers)	ESI01-SA01-13
Drydock Island / Navy Fuel Piers SA01-07	Navy Base Guam – (671) 339-6141/6144 / (671) 777-1809 NBG Command Duty Officer, Navy Base Guam Port Operations – (671) 339-6141, JRM ROC – (671) 349-4000/4004, NAVSUP FLC Yokosuka, Guam Area Fuel Division, 339-7760	Boom Storage / Boom Deployment	ESI01-SA01-15
South Piti Channel Properties SA01-08	Port Authority of Guam Harbormaster - (671) 477-8697	Boom Deployment / Oil Recovery & Collection / Vacuum Truck (3 Locations)	ESI01-SA01-17
Cabras Marine/OSROCO SA01-09	OSROCO – (671) 477-1818 / (671) 688-2933	Boom Storage / Boom Deployment	ESI01-SA01-19
Sea Plane Ramp SA01-10	Port Authority of Guam Harbormaster - (671) 477-8697	Boom Deployment / Collection & Recovery	ESI01-SA01-21
HOTEL Wharf SA01-11	Port Authority of Guam Harbormaster - (671) 477-8697	Boom Deployment / Collection & Recovery / Vacuum Truck	ESI01-SA01-23
Pier DOG SA01-12	Port Authority of Guam Harbormaster - (671) 477-8697	Boom Deployment	ESI01-SA01-25

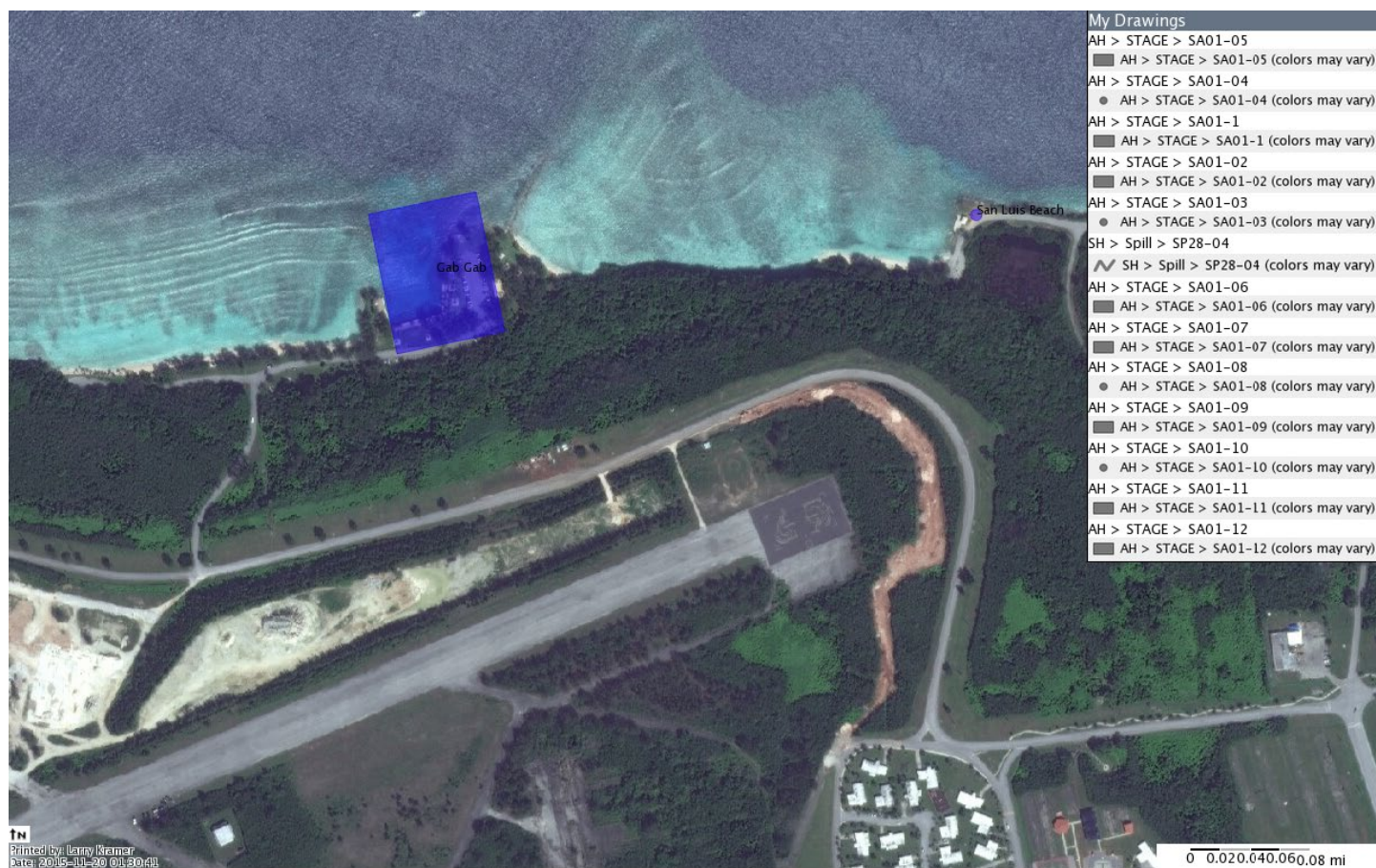
OIL SPILL STAGING AREA REPORT SECTOR GUAM**PORT: Guam****Site Name:** KILO Wharf**Site ID:** SA01-1**Latitude (DMS):** 13°26'42.9720"**Longitude (DMS):** 144°37'49.1520"**Latitude (DD):** 13.44527**Longitude (DD):** 144.63032**General Location:** Orote Point on Naval Base Guam**Map Information****GRP Map:** ESI01**ESI Map:** ESI01**NOAA Chart:** 81054**UTM:** 55P 243428mE 1487611mN**Operational Area:** Apra Harbor**NOAA Chart Name:** Apra Harbor**MGRS / USNG:** 55PBQ4342887611**Contact List – Contact – Expertise – Phone**

Navy Base Guam – (671) 339-6141/6144 / (671) 777-1809 NBG Command Duty Officer, Navy Base Guam
Port Operations – (671) 339-6141, Joint Region Marianas ROC – (671) 349-4000/4004

OIL SPILL STAGING AREA REPORT SECTOR GUAM**PORT: Guam****On-Site Information****Boat Ramp** ☐**Boat Dock** ☐**Boat Refueling Available** ☐**Depth:** 10 + feet**Restrooms** ☐**Power** ☒**Water** ☐**Car Parking** ☒**Trailer Parking** ☒**Waste Disposal** ☐**Telephones** ☐**Cell Phone Coverage** ☒**Cell Phone Limitations:****Covered Spaces** ☐**Perimeter Fence** ☒**Perimeter Fence Gate** ☒ (Access through NBG)**Boat Ramp Type****Estimated Lot Size (Sq Ft):****Covered Spaces Total Area (Sq Ft):****User Fee? If so, how much?****Response Strategies Served****Strategies that will use this area:** Boom Staging / Vacuum Truck / Temporary Storage - no containers / Collection Point**Driving Directions****Enter driving directions from nearest airport:**

1. Head southwest on Route 10A for 1.4 Km
2. Drive from Route 1 to Naval Base Guam for 22 Km
3. Drive to your destination for 3 Km

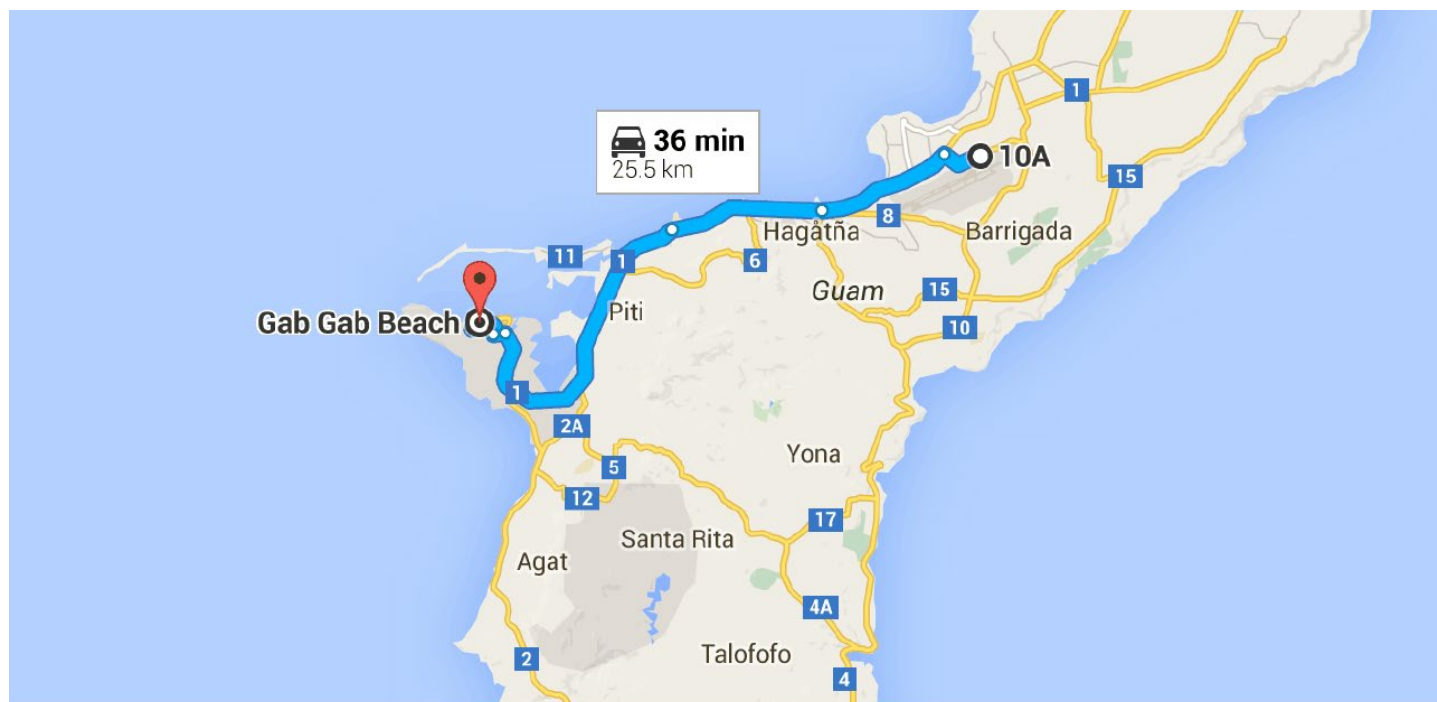
Driving Directions Map

OIL SPILL STAGING AREA REPORT SECTOR GUAM**PORT: Guam****Site Name:** Gab Gab Beach**Site ID:** SA01-02**Latitude (DMS):** 13°26'33.2520"**Longitude (DMS):** 144°38'39.3720"**Latitude (DD):** 13.44257°**Longitude (DD):** 144.64427°**General Location:** Orote Point, Naval Base Guam**Map Information****GRP Map:** ESI01**ESI Map:** ESI01**NOAA Chart:** 81054**UTM:** 55P 244937mE 1487298mN**Operational Area:** Apra Harbor**NOAA Chart Name:** Apra Harbor**MGRS / USNG:** 55PBQ4493787298**Contact List – Contact – Expertise – Phone**

Navy Base Guam – (671) 339-6141/6144 / (671) 777-1809 NBG Command Duty Officer, Navy Base Guam
Port Operations – (671) 339-6141, Joint Region Marianas ROC – (671) 349-4000/4004

OIL SPILL STAGING AREA REPORT SECTOR GUAM**PORT: Guam****On-Site Information****Boat Ramp** ☐**Boat Dock** ☐**Boat Refueling Available** ☐**Depth:** 10 + feet**Restrooms** ☒**Power** ☒**Water** ☒**Car Parking** ☒**Trailer Parking** ☒**Waste Disposal** ☐**Telephones** ☐**Cell Phone Coverage** ☒**Cell Phone Limitations:****Covered Spaces** ☐
Base Guam**Perimeter Fence** ☒**Perimeter Fence Gate** ☒ Access through Naval**Boat Ramp Type****Estimated Lot Size (Sq Ft):** 45,000 sq ft**Covered Spaces Total Area (Sq Ft):****User Fee? If so, how much?****Response Strategies Served****Strategies that will use this area:** Staging of equipment / Vacuum Tuck - oil recovery / Collection Point**Driving Directions****Enter driving directions from nearest airport:**

1. Head southwest on Route 10A for 1.4 Km
2. Drive from Route 1 to Naval Base Guam for 22 Km
3. Drive to your destination for 2.1 Km

Driving Directions Map

OIL SPILL STAGING AREA REPORT SECTOR GUAM

PORT: Guam

Site Name: San Luis Beach

Site ID: SA01-03

Latitude (DMS): 13°26'35.4480"

Longitude (DMS): 144°38'56.6520"

Latitude (DD): 13.44318

Longitude (DD): 144.64907

General Location: Naval Base Guam



Map Information

GRP Map: ESI01

ESI Map: ESI01

NOAA Chart: 81054

UTM: 55P 245457mE 1487360mN

Operational Area: Apra Harbor

NOAA Chart Name: Apra Harbor

MGRS / USNG: 55PBQ4545787360

Contact List – Contact – Expertise – Phone

Navy Base Guam – (671) 339-6141/6144 / (671) 777-1809 NBG Command Duty Officer, Navy Base Guam
Port Operations – (671) 339-6141, Joint Region Marianas ROC – (671) 349-4000/4004

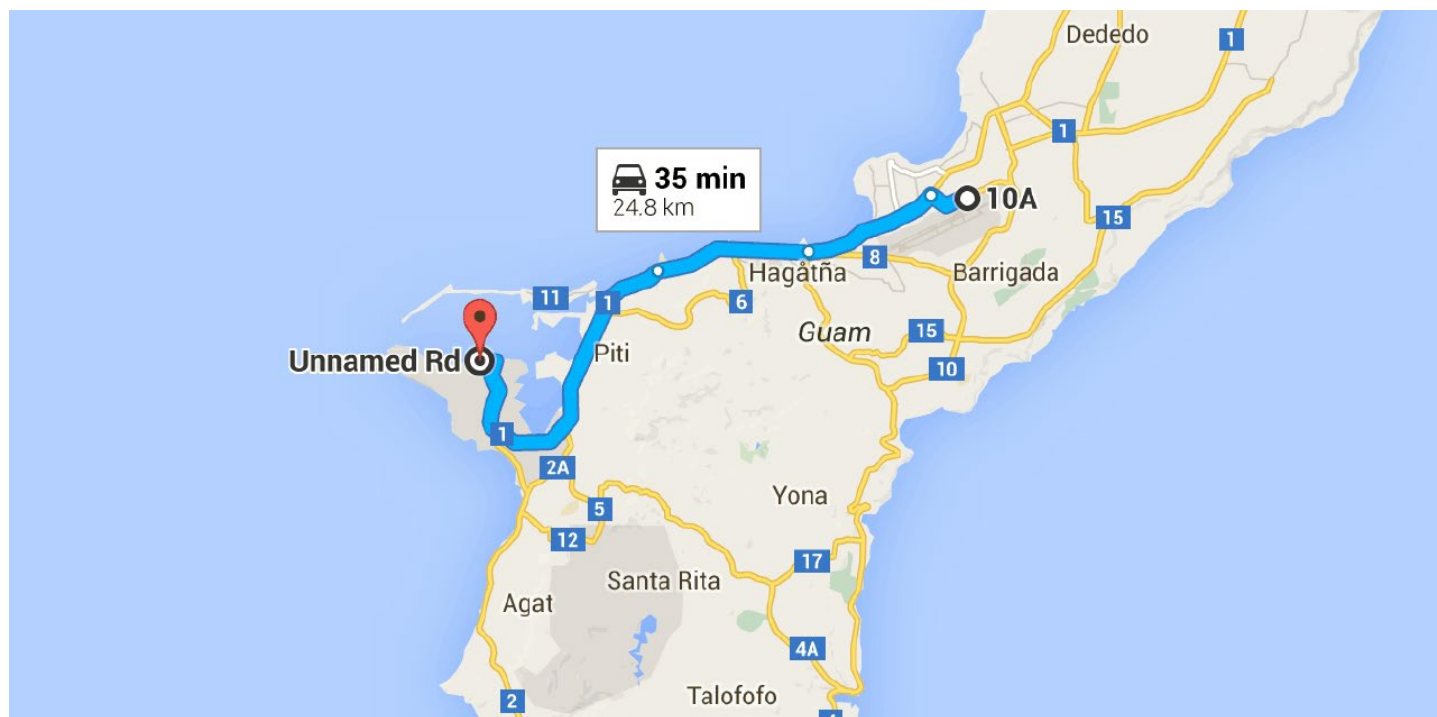
OIL SPILL STAGING AREA REPORT SECTOR GUAM**PORT: Guam****On-Site Information****Boat Ramp** ☐**Boat Dock** ☐**Boat Refueling Available** ☐**Depth:** 10 + feet**Restrooms** ☐**Power** ☒**Water** ☒**Car Parking** ☒**Trailer Parking** ☐**Waste Disposal** ☐**Telephones** ☐**Cell Phone Coverage** ☒**Cell Phone Limitations:** Will have to use local providers**Covered Spaces** ☐**Perimeter Fence** ☒**Perimeter Fence Gate** ☒

Base Guam

Access through Naval

Boat Ramp Type**Estimated Lot Size (Sq Ft):****Covered Spaces Total Area (Sq Ft):****User Fee? If so, how much?****Response Strategies Served****Strategies that will use this area:** Boom Storage / Deployment**Driving Directions****Enter driving directions from nearest airport:**

1. Head southwest on Route 10A for 1.4 Km
2. Drive from Route 1 to Naval Base Guam for 22 Km
3. Drive to your destination for 2.1 Km

Driving Directions Map

OIL SPILL STAGING AREA REPORT SECTOR GUAM

PORT: Guam

Site Name: Sumay Marina

Site ID: SA01-04

Latitude (DMS): 13°26'17.3400"

Longitude (DMS): 144°39'15.7680"

Latitude (DD): 13.43815°

Longitude (DD): 144.65438°

General Location: Naval Base Guam



Map Information

GRP Map: ESI01

ESI Map: ESI01

NOAA Chart: 81054

UTM: 55P 246027mE 1486798mN

Operational Area: Apra Harbor

NOAA Chart Name: Apra Harbor

MGRS / USNG: 55PBQ4602786798

Contact List – Contact – Expertise – Phone

Navy Base Guam – (671) 339-6141/6144 / (671) 777-1809 NBG Command Duty Officer, Navy Base Guam
Port Operations – (671) 339-6141, Joint Region Marianas ROC – (671) 349-4000/4004

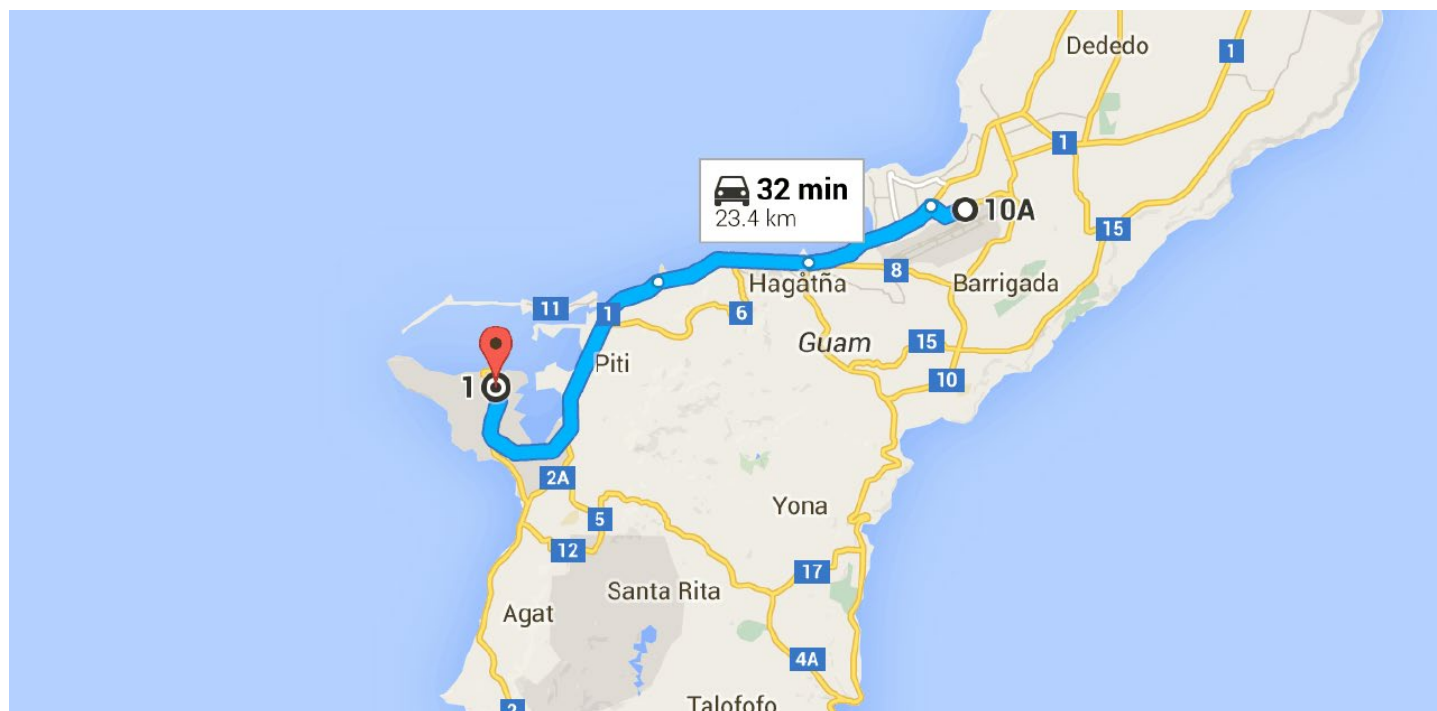
OIL SPILL STAGING AREA REPORT SECTOR GUAM**PORT: Guam****On-Site Information****Boat Ramp** ☒**Boat Dock** ☒**Boat Refueling Available** ☐**Depth:** 10 + feet**Restrooms** ☒**Power** ☒**Water** ☒**Car Parking** ☒**Trailer Parking** ☒**Waste Disposal** ☐**Telephones** ☐**Cell Phone Coverage** ☒**Cell Phone Limitations:****Covered Spaces** ☐**Perimeter Fence** ☒**Perimeter Fence Gate** ☒

Access is through

Naval Base Guam

Boat Ramp Type**Estimated Lot Size (Sq Ft):** 395,000 sq ft**Covered Spaces Total Area (Sq Ft):****User Fee? If so, how much?****Response Strategies Served****Strategies that will use this area:** Boat Launch**Driving Directions****Enter driving directions from nearest airport:**

1. Head southwest on Route 10A for 1.4 Km
2. Drive from Route 1 to Naval Base Guam for 22 Km
3. Drive to your destination for 2.1 Km

Driving Directions Map

OIL SPILL STAGING AREA REPORT SECTOR GUAM

PORT: Guam

Site Name: Guam Shipyard (GSY)/NBG Port Operations

Site ID: SA01-05

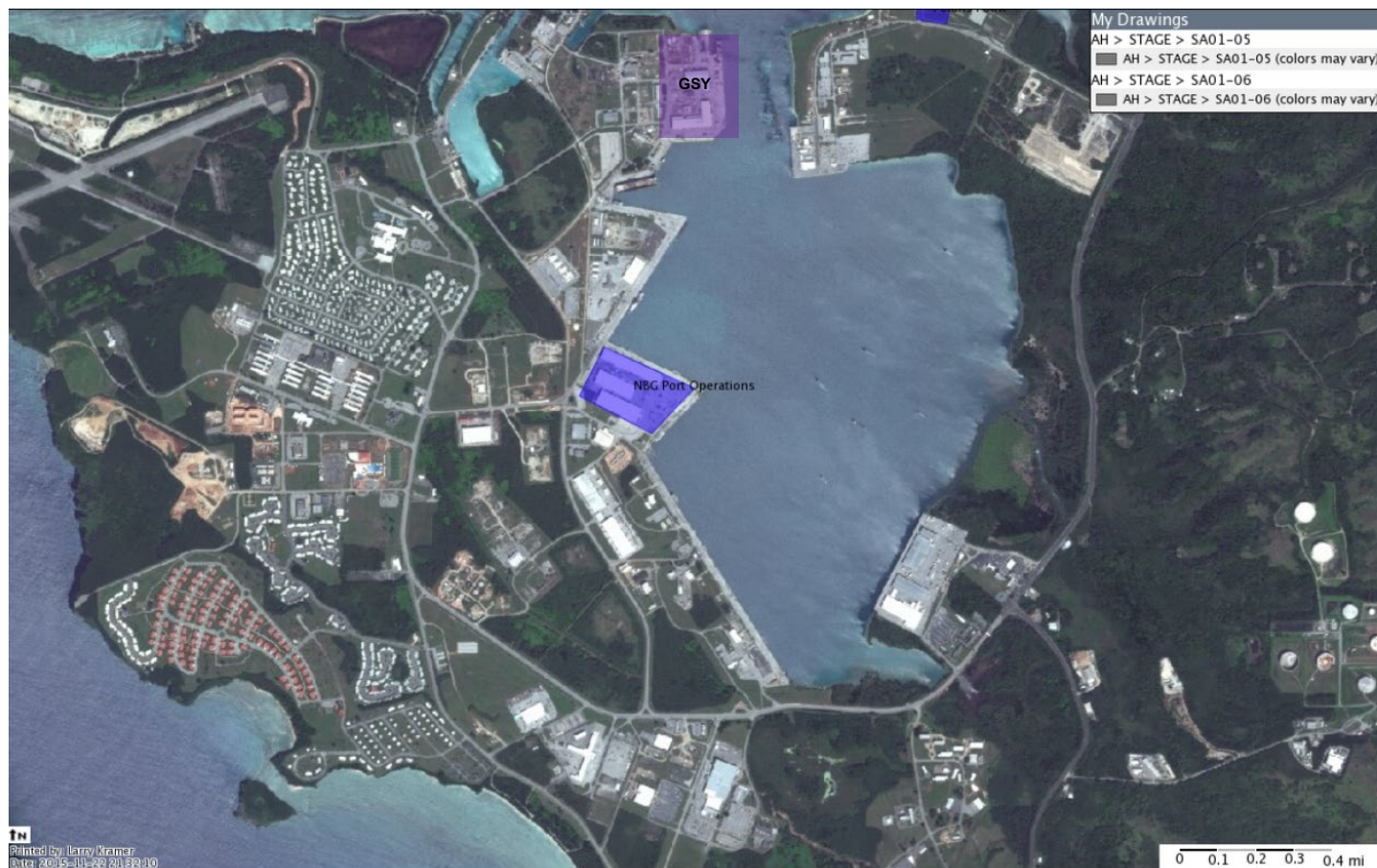
Latitude (DMS): 13°25'44.9040"

Longitude (DMS): 144°39'38.6280"

Latitude (DD): 13.42914°

Longitude (DD): 144.66073°

General Location: Navy Base Guam Port Operations



Map Information

GRP Map: ESI01

ESI Map: ESI01

NOAA Chart: 81054

UTM: 55P 246706mE 1485794mN

Operational Area: Apra Harbor

NOAA Chart Name: Apra Harbor

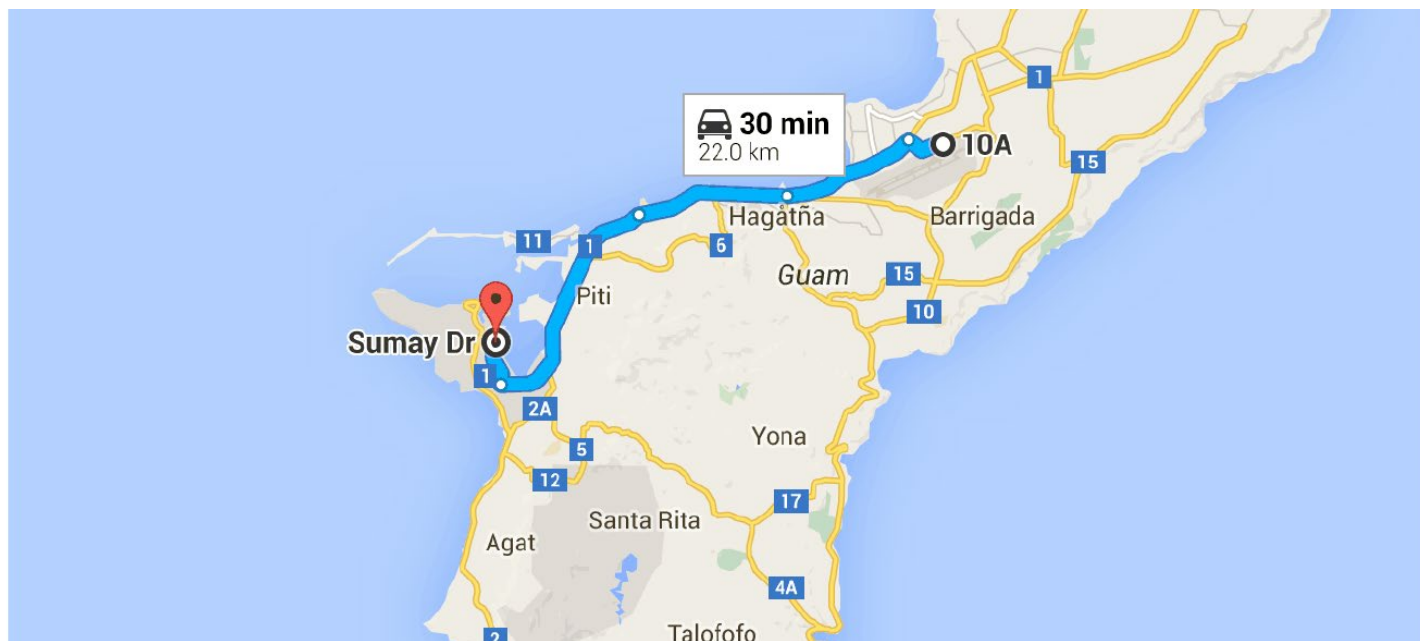
MGRS / USNG: 55PBQ4670685794

Contact List – Contact – Expertise – Phone

Navy Base Guam – (671) 339-6141/6144 / (671) 777-1809 NBG Command Duty Officer, Navy Base Guam
Port Operations – (671) 339-6141, Joint Region Marianas ROC – (671) 349-4000/4004

OIL SPILL STAGING AREA REPORT SECTOR GUAM**PORT: Guam****On-Site Information****Boat Ramp** ☐**Boat Dock** ☐**Boat Refueling Available** ☐**Depth:****Restrooms** ☒**Power** ☒**Water** ☒**Car Parking** ☒**Trailer Parking** ☒**Waste Disposal** ☐**Telephones** ☐**Cell Phone Coverage** ☒**Cell Phone Limitations:****Covered Spaces** ☐
Base Guam**Perimeter Fence** ☒**Perimeter Fence Gate** ☒ Access through Naval**Boat Ramp Type****Estimated Lot Size (Sq Ft):** 600,000 sq ft**Covered Spaces Total Area (Sq Ft):****User Fee? If so, how much?****Response Strategies Served****Strategies that will use this area:** Boom Storage**Driving Directions****Enter driving directions from nearest airport:**

1. Follow Route 10A to S Marine Corps Dr for 3 min (1.4 km)
2. Follow S Marine Corps Dr and Route 1 to Sumay Dr in Santa Rita for 25 min (18.9 km)
3. Continue on Sumay Dr to your destination for 2 min (1.6 km)

Driving Directions Map

OIL SPILL STAGING AREA REPORT SECTOR GUAM

PORT: Guam

Site Name: Polaris Point

Site ID: SA01-06

Latitude (DMS): 13°26'41.8920"

Longitude (DMS): 144°40'15.7440"

Latitude (DD): 13.44497°

Longitude (DD): 144.67104°

General Location: Polaris Point, Naval Base Guam



Map Information

GRP Map: ESI01

Operational Area: Apra Harbor

ESI Map: ESI01

NOAA Chart Name: Apra Harbor

NOAA Chart: 81054

MGRS / USNG: 55PBQ4783987536

UTM: 55P 247839mE 1487536mN

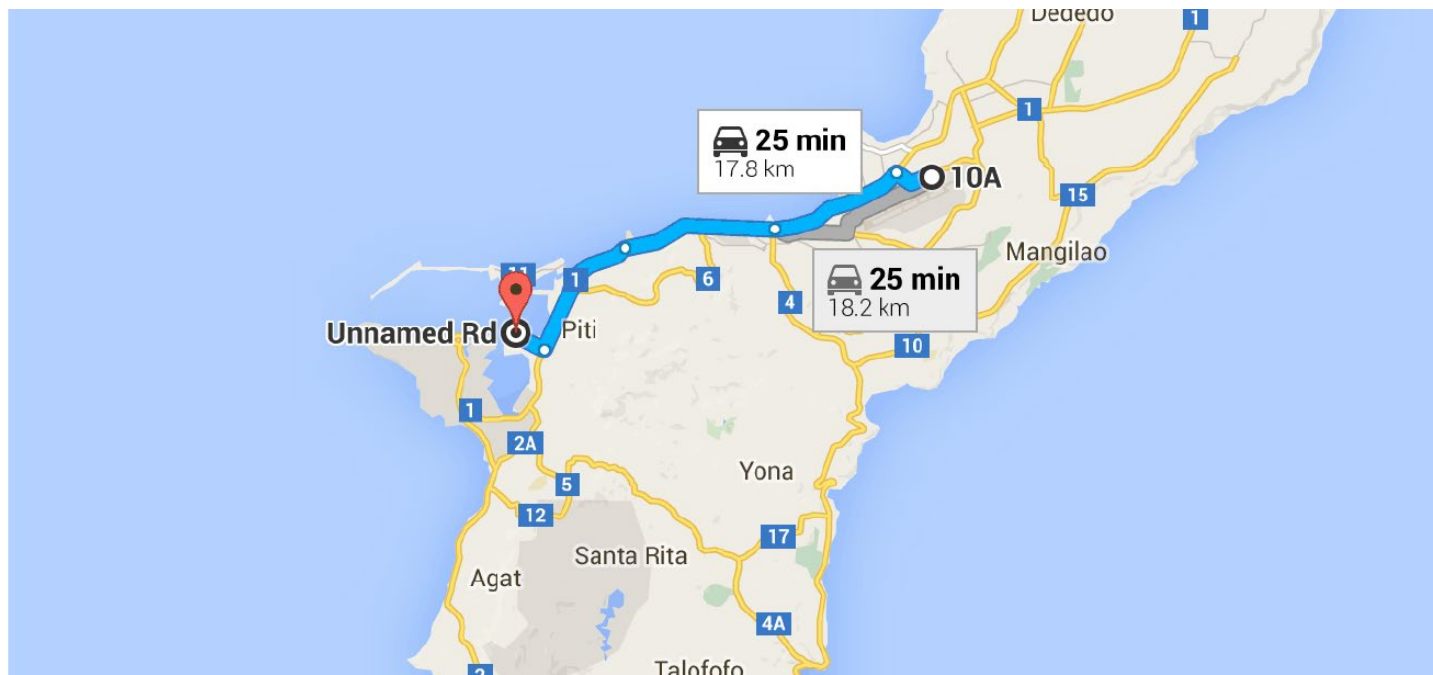
Contact List – Contact – Expertise – Phone

Navy Base Guam – (671) 339-6141/6144 / (671) 777-1809 NBG Command Duty Officer, Navy Base Guam

Port Operations – (671) 339-6141, Joint Region Marianas ROC – (671) 349-4000/4004

OIL SPILL STAGING AREA REPORT SECTOR GUAM**PORT: Guam****On-Site Information****Boat Ramp** ☐**Boat Dock** ☐**Boat Refueling Available** ☐**Depth:****Restrooms** ☒**Power** ☒**Water** ☒**Car Parking** ☒**Trailer Parking** ☒**Waste Disposal** ☐**Telephones** ☐**Cell Phone Coverage** ☒**Cell Phone Limitations:****Covered Spaces** ☐
Polaris Point Gate**Perimeter Fence** ☒**Perimeter Fence Gate** ☒ Access through**Boat Ramp Type****Estimated Lot Size (Sq Ft):** 560,000 sq ft**Covered Spaces Total Area (Sq Ft):****User Fee? If so, how much?****Response Strategies Served****Strategies that will use this area:** Staging of equipment / Vacuum Tuck - oil recovery / Collection Point**Driving Directions****Enter driving directions from nearest airport:**

1. Follow Route 10A to S Marine Corps Dr for 4 min (1.5 km).
2. Follow S Marine Corps Dr and Route 1 to Piti for 19 min (15.1 km).
3. Drive to your destination for 3 min (1.2 km).

Driving Directions Map

OIL SPILL STAGING AREA REPORT SECTOR GUAM

PORT: Guam

Site Name: Drydock Island/Navy Fuel Piers

Site ID: SA01-07

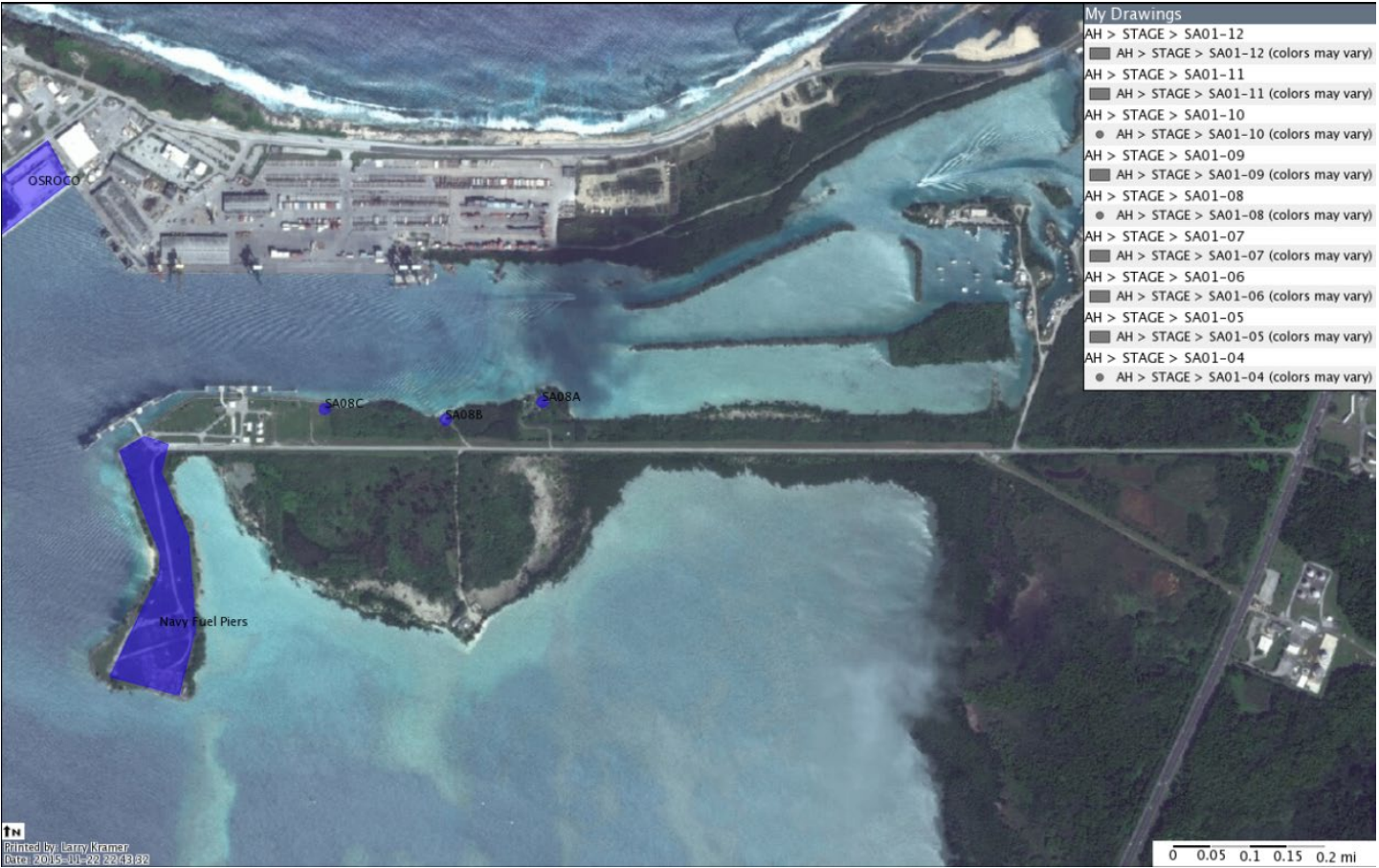
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Longitude (DMS): 144°40'00.6240"

Latitude (DD): 13.45708°

Longitude (DD): 144.66684°

General Location: Navy Fuel Piers



Map Information

GRP Map: ESI01

Operational Area: Apra Harbor

ESI Map: ESI01

NOAA Chart Name: Apra Harbor

NOAA Chart: 81054

MGRS / USNG: 55PBQ4739788880

UTM: 55P 247397mE 1488880mN

Contact List – Contact – Expertise – Phone

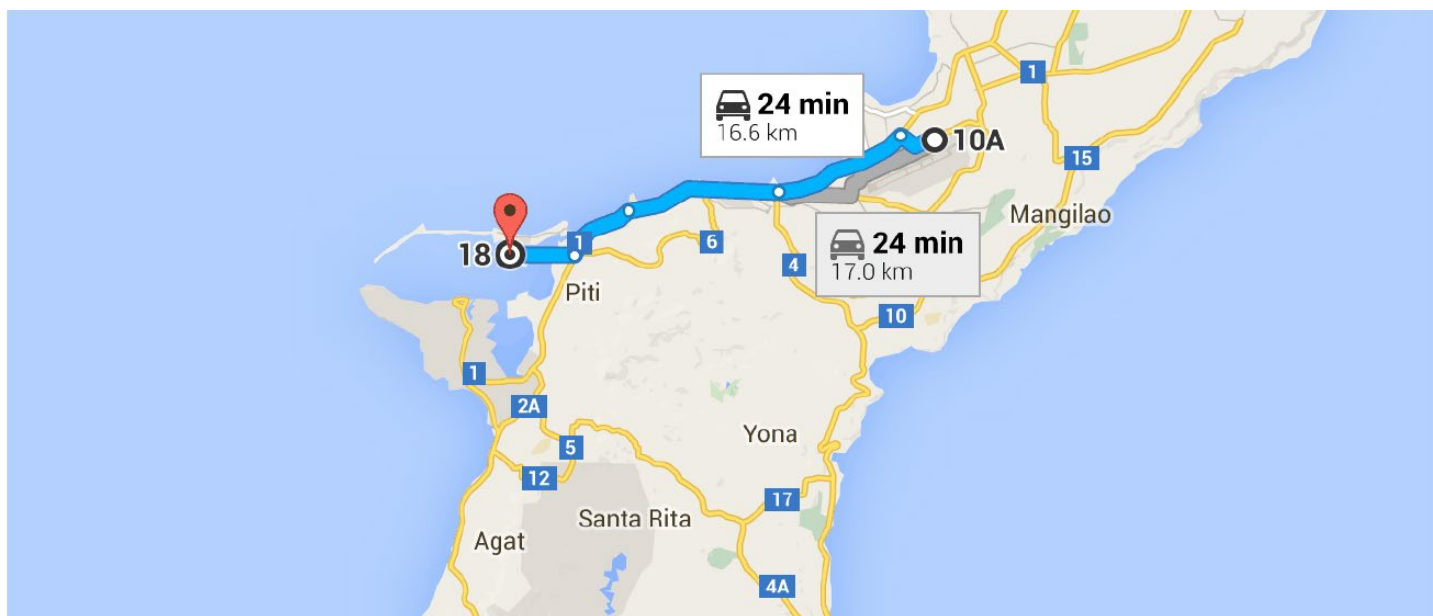
Navy Base Guam – (671) 339-6141/6144 / (671) 777-1809 NBG Command Duty Officer, Navy Base Guam

Port Operations – (671) 339-6141, Joint Region Marianas ROC – (671) 349-4000/4004, NAVSUP FLC

Yokosuka, Guam Area Fuel Division, 339-7760

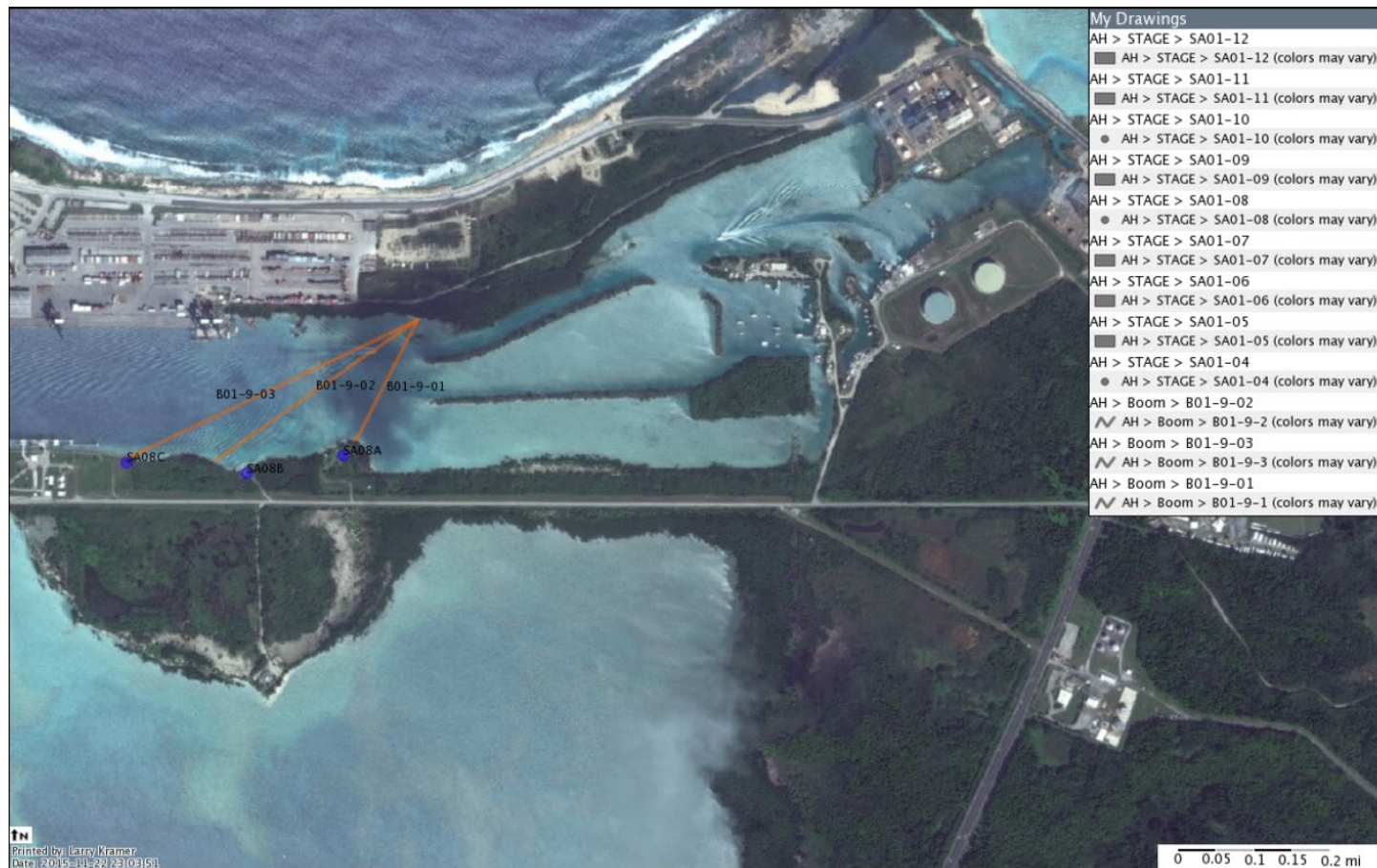
OIL SPILL STAGING AREA REPORT SECTOR GUAM**PORT: Guam****On-Site Information****Boat Ramp** ☐**Boat Dock** ☐**Boat Refueling Available** ☐**Depth:****Restrooms** ☐**Power** ☒**Water** ☒**Car Parking** ☒**Trailer Parking** ☒**Waste Disposal** ☐**Telephones** ☐**Cell Phone Coverage** ☒**Cell Phone Limitations:****Covered Spaces** ☐**Perimeter Fence** ☒**Perimeter Fence Gate** ☒**Boat Ramp Type****Estimated Lot Size (Sq Ft):** 220,000 sq ft**Covered Spaces Total Area (Sq Ft):****User Fee? If so, how much?****Response Strategies Served****Strategies that will use this area:**

1. Head northwest toward Route 10A for 67 m.
2. Turn left onto Route 10A for 1.4 km.
3. Turn left onto S Marine Corps Dr for 4.8 km.
4. Continue onto Route 1 for 56 m.
5. Continue onto Marine Corps Dr for 5.4 km.
6. Continue onto Route 1 for 2.6 km.
7. Turn right onto Route 18 for 2.3 km.

Driving Directions**Enter driving directions from nearest airport:****Driving Directions Map**

OIL SPILL STAGING AREA REPORT SECTOR GUAM**PORT: Guam****Site Name:** PAG South Piti Channel Properties**Site ID:** SA01-08**Latitude (DMS):** 13°27'28.2600"**Longitude (DMS):** 144°40'20.8560"**Latitude (DD):** 13.45785°**Longitude (DD):** 144.67246°

General Location: Port Authority of Guam South Piti Channel Property. Area consists of 3 sites. Sites will be used to support/deploy booming strategies B01-9-01 through B01-9-03.

**Map Information****GRP Map:** ESI01**ESI Map:** ESI01**NOAA Chart:** 81054**UTM:** 55P 248006mE 1488960mN**Operational Area:** Apra Harbor**NOAA Chart Name:** Apra Harbor**MGRS / USNG:** 55PBQ4800688960**Contact List – Contact – Expertise – Phone**

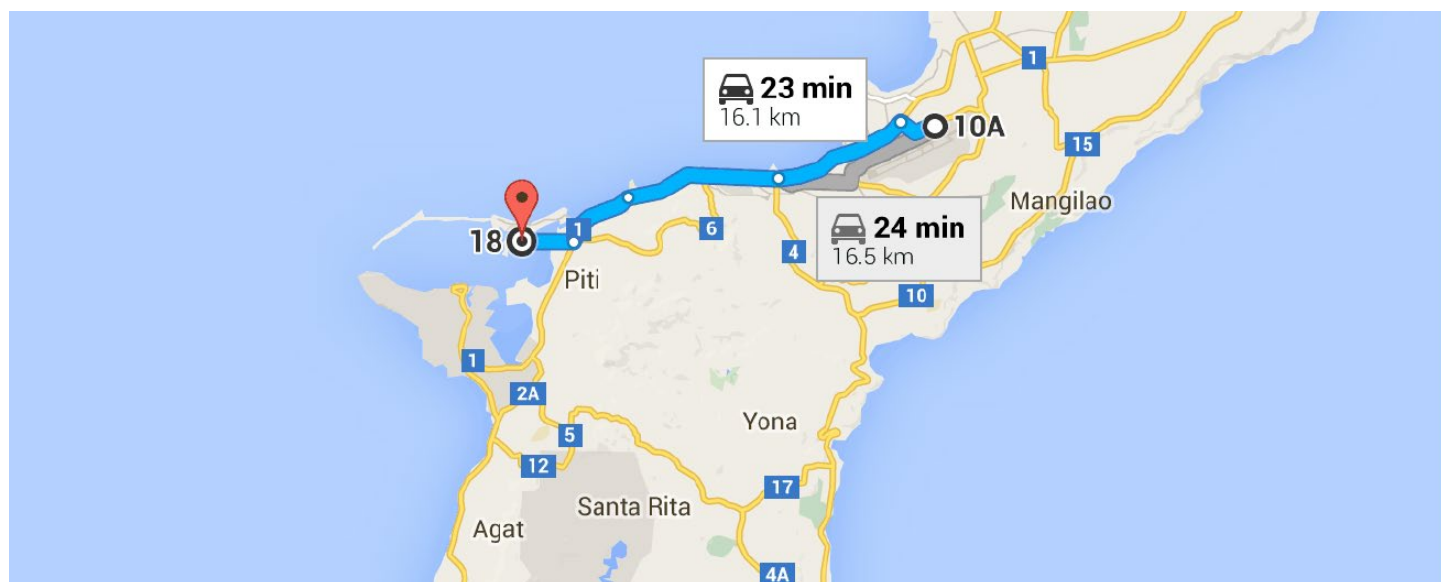
Port Authority of Guam - (671) 477-8697

OIL SPILL STAGING AREA REPORT SECTOR GUAM**PORT: Guam****On-Site Information**

Boat Ramp ☐ **Boat Dock** ☐ **Boat Refueling Available** ☐
Depth: **Restrooms** ☐ **Power** ☐ **Water** ☐
Car Parking ☒ **Trailer Parking** ☒ **Waste Disposal** ☐
Telephones ☐ **Cell Phone Coverage** ☒
Cell Phone Limitations:
Covered Spaces ☐ **Perimeter Fence** ☐ **Perimeter Fence Gate** ☐
Boat Ramp Type **Estimated Lot Size (Sq Ft):**
Covered Spaces Total Area (Sq Ft):
User Fee? If so, how much?

Response Strategies Served**Strategies that will use this area:** Boom Deployment, Oil Recovery, Collection**Driving Directions****Enter driving directions from nearest airport:**

1. Head northwest toward Route 10A for 67 m.
2. Turn left onto Route 10A for 1.4 km.
3. Turn left onto S Marine Corps Dr for 4.8 km.
4. Continue onto Route 1 for 56 m.
5. Continue onto Marine Corps Dr for 5.4 km.
6. Continue onto Route 1 for 2.6 km.
7. Turn right onto Route 18 for 1.8 km – destination will be on the right.

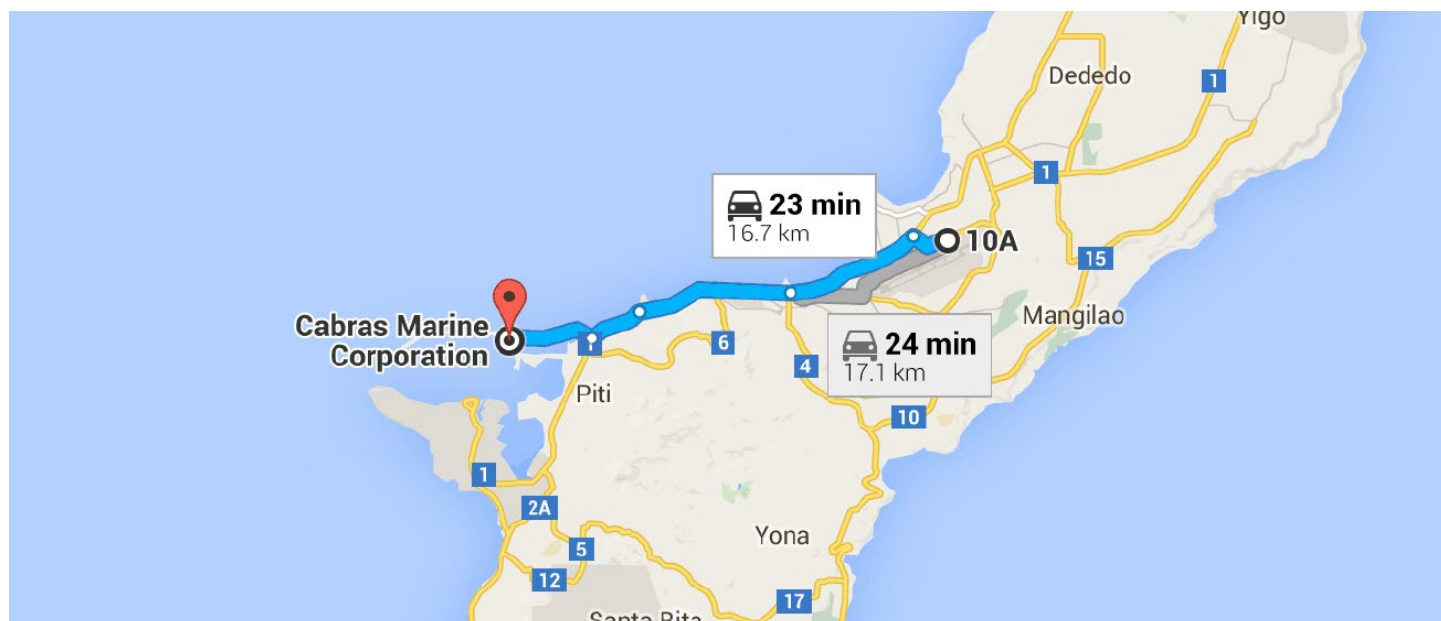
Driving Directions Map

OIL SPILL STAGING AREA REPORT SECTOR GUAM**PORT: Guam****Site Name:** Cabras Marine/OSROCO**Site ID:** SA01-09**Latitude (DMS):** 13°27'43.5600"**Longitude (DMS):** 144°39'51.8040"**Latitude (DD):** 13.46210°**Longitude (DD):** 144.66439°**General Location:** Port Authority of Guam – Cabras Marine Facility.**Map Information****GRP Map:** ESI01**ESI Map:** ESI01**NOAA Chart:** 81054**UTM:** 55P 247137mE 1489438mN**Operational Area:** Apra Harbor**NOAA Chart Name:** Apra Harbor**MGRS / USNG:** 55PBQ4713789438**Contact List – Contact – Expertise – Phone**

OSROCO – (671) 477-1818 / (671) 688-2933

OIL SPILL STAGING AREA REPORT SECTOR GUAM**PORT: Guam****On-Site Information****Boat Ramp** ☐**Boat Dock** ☒**Boat Refueling Available** ☐**Depth:** 10 + feet**Restrooms** ☐**Power** ☒**Water** ☒**Car Parking** ☒**Trailer Parking** ☒**Waste Disposal** ☐**Telephones** ☒**Cell Phone Coverage** ☒**Cell Phone Limitations:** Will have to use local providers**Covered Spaces** ☐**Perimeter Fence** ☒**Perimeter Fence Gate** ☒**Boat Ramp Type****Estimated Lot Size (Sq Ft):** 185,000 sq ft.**Covered Spaces Total Area (Sq Ft):****User Fee? If so, how much?****Response Strategies Served****Strategies that will use this area:** Boom Storage / Boom Deployment.**Driving Directions****Enter driving directions from nearest airport:**

1. Head northwest toward Route 10A for 67 m.
2. Turn left onto Route 10A for 1.4 km.
3. Turn left onto S Marine Corps Dr for 4.8 km.
4. Continue onto Route 1 for 56 m.
5. Continue onto Marine Corps Dr for 5.4 km.
6. Continue onto Route 1 for 1.9 km.
7. Turn right onto Route 11 for 3.0 km.
8. Turn Left onto 1026 Cabras Highway – OSROCO is on the left.

Driving Directions Map

OIL SPILL STAGING AREA REPORT SECTOR GUAM

PORT: Guam

Site Name: Sea Plane Ramp

Site ID: SA01-10

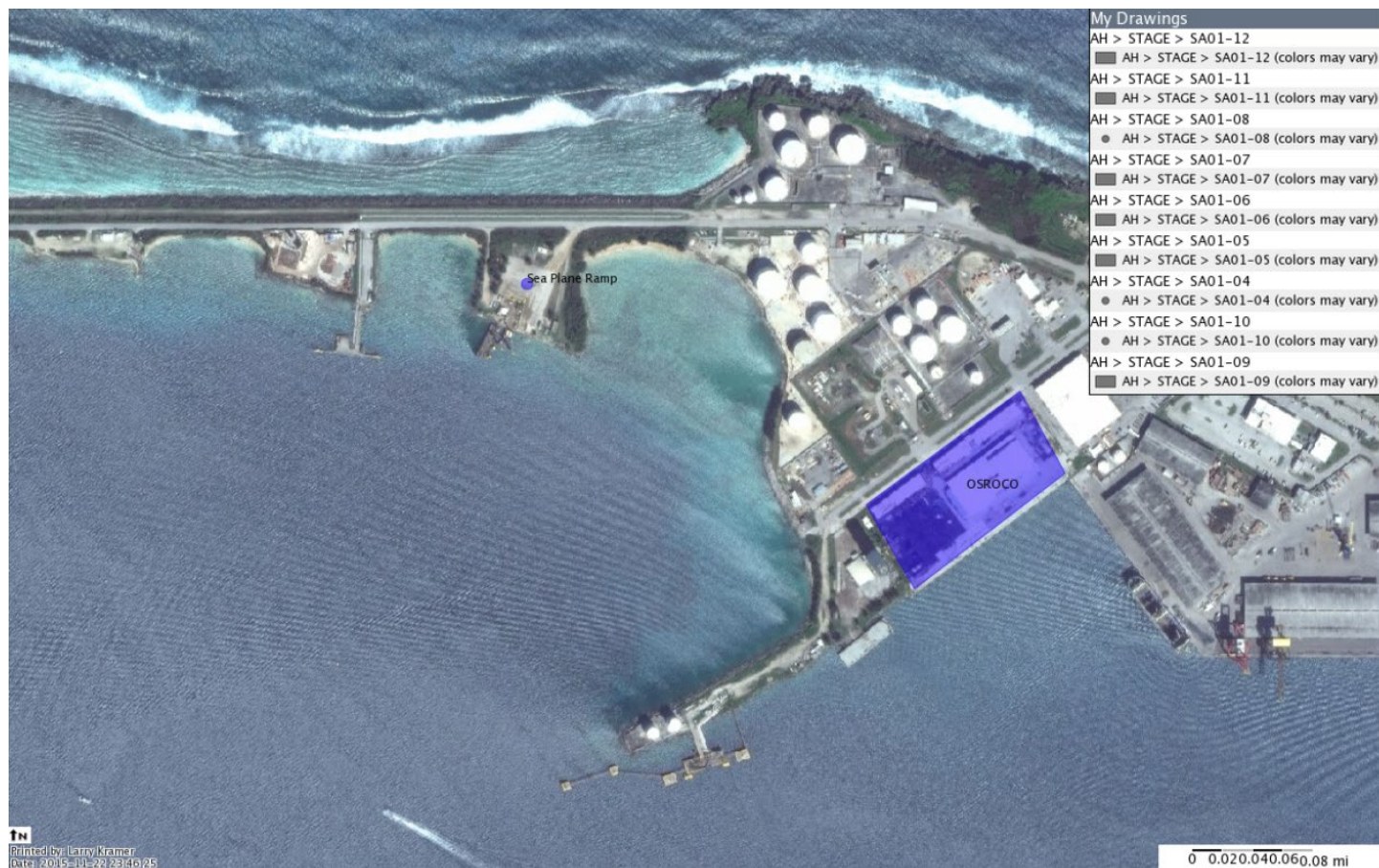
Latitude (DMS): 13°27'50.2560"

Longitude (DMS): 144°39'36.5400"

Latitude (DD): 13.46396°

Longitude (DD): 144.66015°

General Location: On Glass Breakwater between Mobil's terminal and Golf Wharf



Map Information

GRP Map: ESI01

ESI Map: ESI01

NOAA Chart: 81054

UTM: 55P 246679mE 1489649mN

Operational Area: Apra Harbor

NOAA Chart Name: Apra Harbor

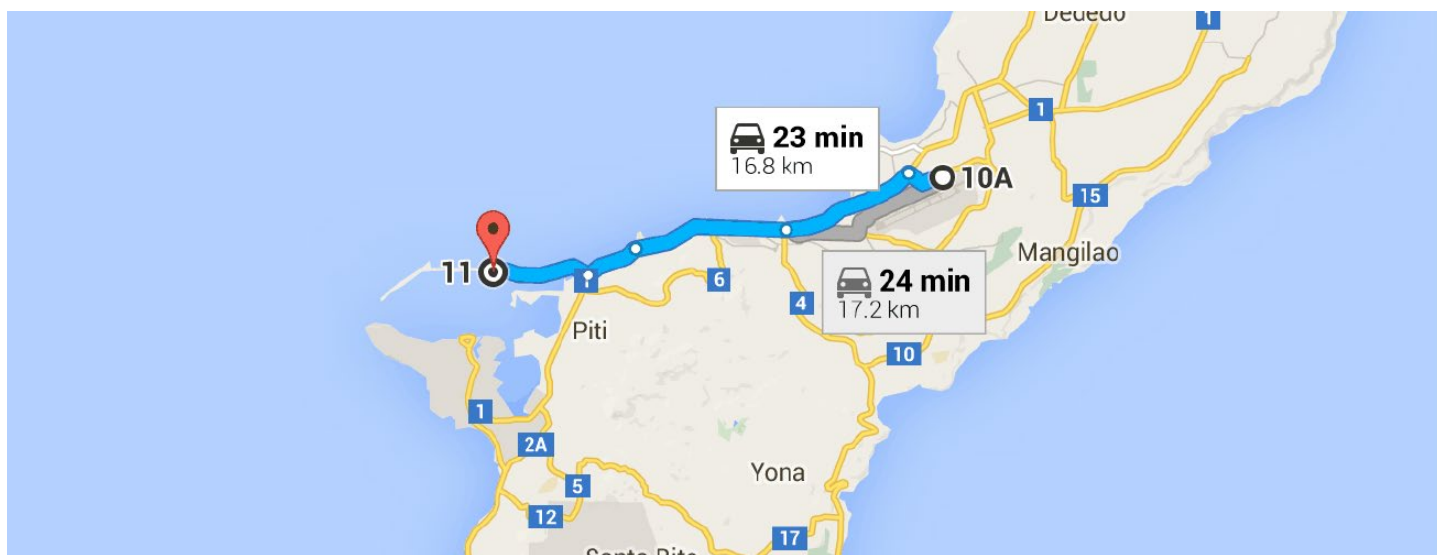
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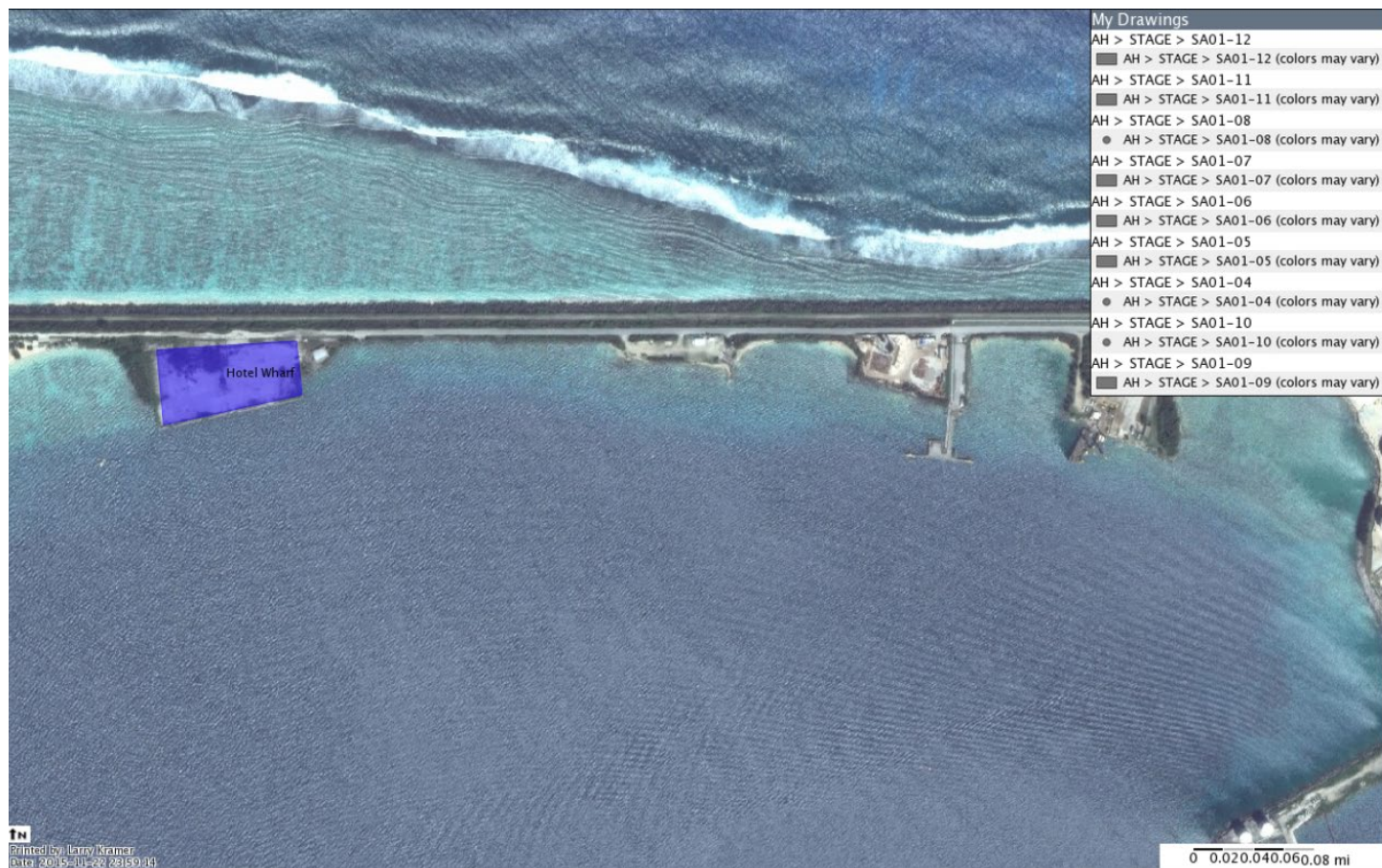
Contact List – Contact – Expertise – Phone

Port Authority of Guam - (671) 477-8697

OIL SPILL STAGING AREA REPORT SECTOR GUAM**PORT: Guam****On-Site Information****Boat Ramp** ☒**Boat Dock** ☒**Boat Refueling Available** ☐**Depth:** 10 + feet**Restrooms** ☐**Power** ☒**Water** ☐**Car Parking** ☒**Trailer Parking** ☒**Waste Disposal** ☐**Telephones** ☐**Cell Phone Coverage** ☒**Cell Phone Limitations:****Covered Spaces** ☐**Perimeter Fence** ☐**Perimeter Fence Gate** ☐**Boat Ramp Type****Estimated Lot Size (Sq Ft):** 40,000 sq ft**Covered Spaces Total Area (Sq Ft):****User Fee? If so, how much?****Response Strategies Served****Strategies that will use this area:** Boom Deployment / Collection & Recovery**Driving Directions****Enter driving directions from nearest airport:**

1. Head northwest toward Route 10A for 67 m.
2. Turn left onto Route 10A for 1.4 km.
3. Turn left onto S Marine Corps Dr for 4.8 km.
4. Continue onto Route 1 for 56 m.
5. Continue onto Marine Corps Dr for 5.4 km.
6. Continue onto Route 1 for 1.9 km.
7. Turn right onto Route 11 for 3.1 km – on the left.

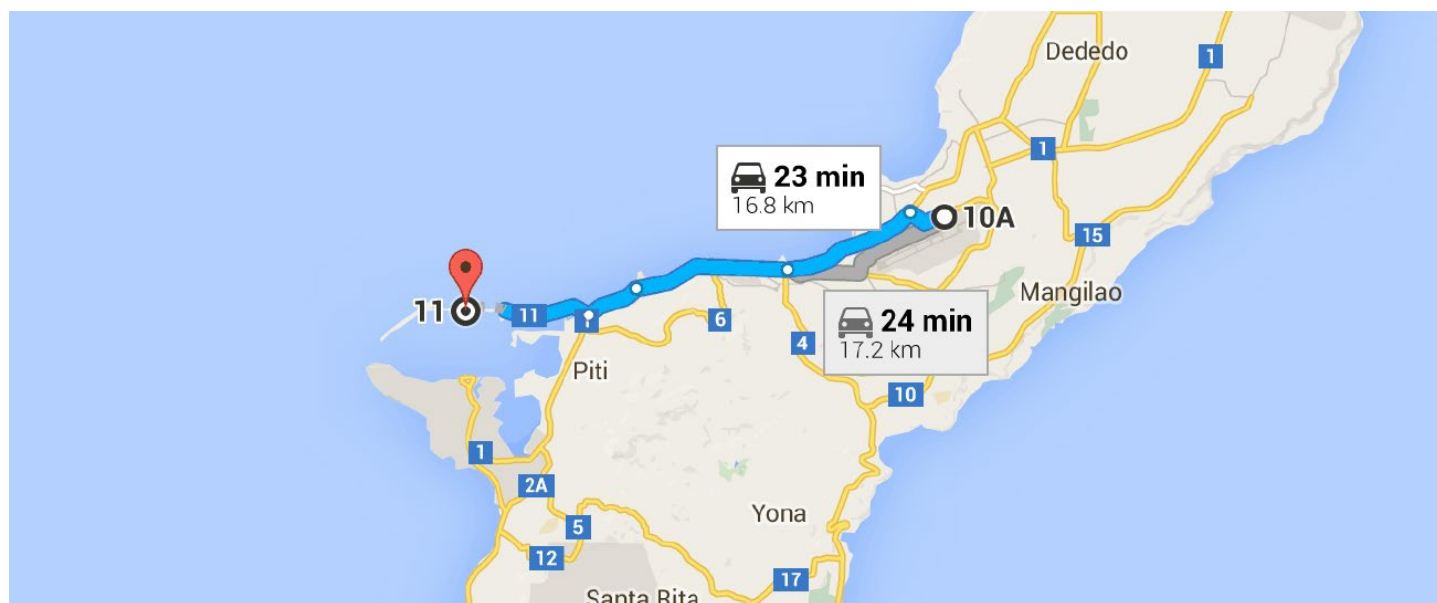
Driving Directions Map

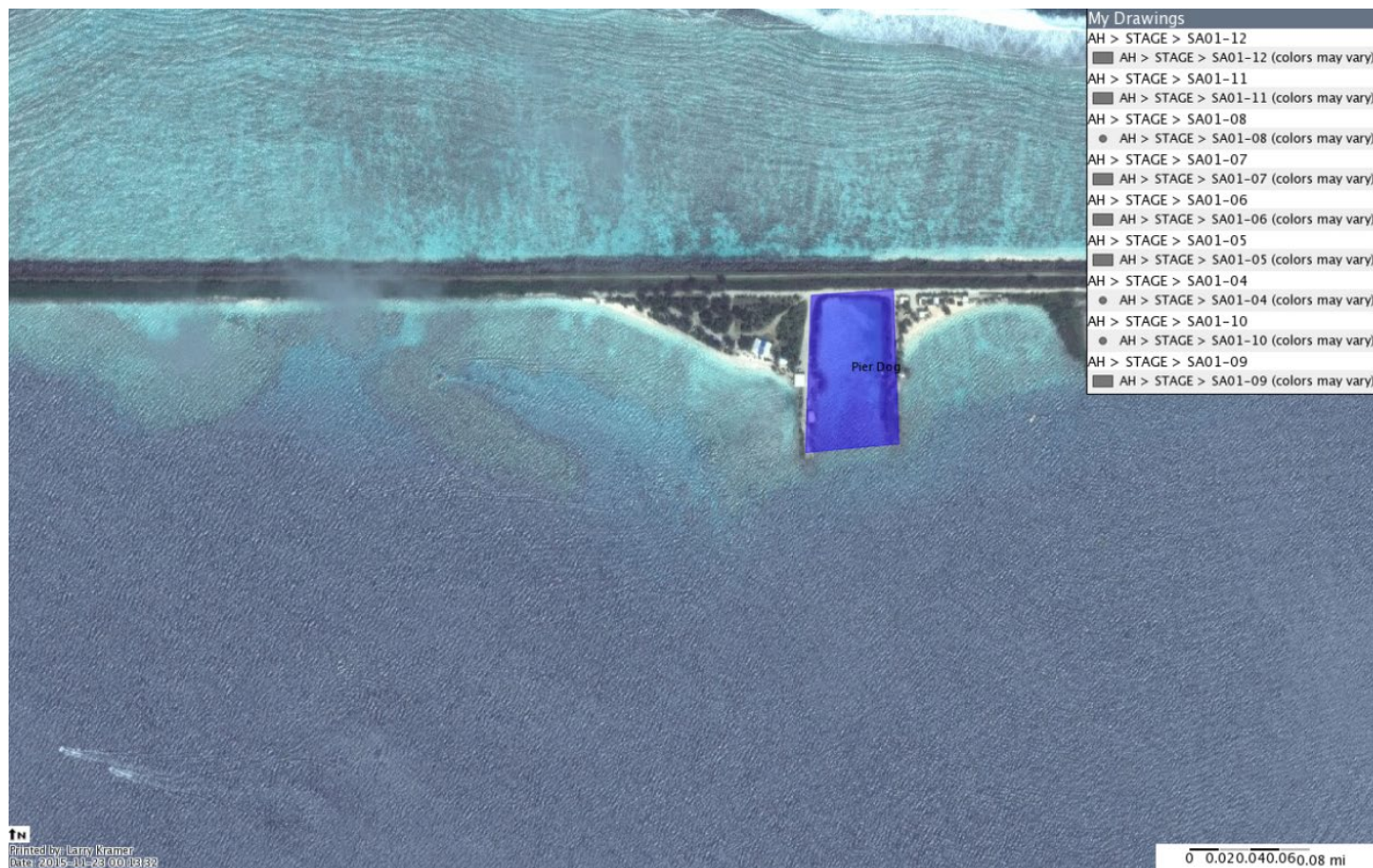
OIL SPILL STAGING AREA REPORT SECTOR GUAM**PORT: Guam****Site Name:** HOTEL Wharf**Site ID:** SA01-11**Latitude (DMS):** 13°27'50.5800"**Longitude (DMS):** 144°39'06.0480"**Latitude (DD):** 13.46405°**Longitude (DD):** 144.65168°**General Location:** On Glass Breakwater past Golf Wharf.**Map Information****GRP Map:** ESI01**ESI Map:** ESI01**NOAA Chart:** 81054**UTM:** 55P 245762mE 1489667mN**Operational Area:** Apra Harbor**NOAA Chart Name:** Apra Harbor**MGRS / USNG:** 55PBQ4576289667**Contact List – Contact – Expertise – Phone**

Port Authority of Guam - (671) 477-8697

OIL SPILL STAGING AREA REPORT SECTOR GUAM**PORT: Guam****On-Site Information****Boat Ramp** ☐**Boat Dock** ☒**Boat Refueling Available** ☐**Depth:** 10 + feet**Restrooms** ☐**Power** ☐**Water** ☐**Car Parking** ☒**Trailer Parking** ☒**Waste Disposal** ☐**Telephones** ☐**Cell Phone Coverage** ☒**Cell Phone Limitations:****Covered Spaces** ☐**Perimeter Fence** ☐**Perimeter Fence Gate** ☐**Boat Ramp Type****Estimated Lot Size (Sq Ft):** 110,000 sq ft**Covered Spaces Total Area (Sq Ft):****User Fee? If so, how much?****Response Strategies Served****Strategies that will use this area:** Boom Deployment / Collection & Recovery / Vacuum Truck**Driving Directions****Enter driving directions from nearest airport:**

1. Head northwest toward Route 10A for 67 m.
2. Turn left onto Route 10A for 1.4 km.
3. Turn left onto S Marine Corps Dr for 4.8 km.
4. Continue onto Route 1 for 56 m.
5. Continue onto Marine Corps Dr for 5.4 km.
6. Continue onto Route 1 for 1.9 km.
7. Turn right onto Route 11 for 3.1 km – on the left.

Driving Directions Map

OIL SPILL STAGING AREA REPORT SECTOR GUAM**PORT: Guam****Site Name:** Pier DOG**Site ID:** SA01-12**Latitude (DMS):** 13°27'49.4280"**Longitude (DMS):** 144°38'55.1760"**Latitude (DD):** 13.46373°**Longitude (DD):** 144.64866°**General Location:** Located on Glass Breakwater past HOTEL Wharf.**Map Information****GRP Map:** ESI01**ESI Map:** ESI01**NOAA Chart:** 81054**UTM:** 55P 245435mE 1489635mN**Operational Area:** Apra Harbor**NOAA Chart Name:** Apra Harbor**MGRS / USNG:** 55PBQ4543589635**Contact List – Contact – Expertise – Phone**

Port Authority of Guam - (671) 477-8697

OIL SPILL STAGING AREA REPORT SECTOR GUAM**PORT: Guam****On-Site Information****Boat Ramp** ☒**Boat Dock** ☒**Boat Refueling Available** ☐**Depth:** 10 + feet**Restrooms** ☐**Power** ☐**Water** ☐**Car Parking** ☒**Trailer Parking** ☒**Waste Disposal** ☐**Telephones** ☐**Cell Phone Coverage** ☒**Cell Phone Limitations:** Will have to use local providers**Covered Spaces** ☐**Perimeter Fence** ☐**Perimeter Fence Gate** ☐**Boat Ramp Type****Estimated Lot Size (Sq Ft):****Covered Spaces Total Area (Sq Ft):****User Fee? If so, how much?****Response Strategies Served****Strategies that will use this area:** Boom Deployment**Driving Directions****Enter driving directions from nearest airport:**

1. Head northwest toward Route 10A for 67 m.
2. Turn left onto Route 10A for 1.4 km.
3. Turn left onto S Marine Corps Dr for 4.8 km.
4. Continue onto Route 1 for 56 m.
5. Continue onto Marine Corps Dr for 5.4 km.
6. Continue onto Route 1 for 1.9 km.
7. Turn right onto Route 11 for 3.1 km – on the left.

Driving Directions Map