



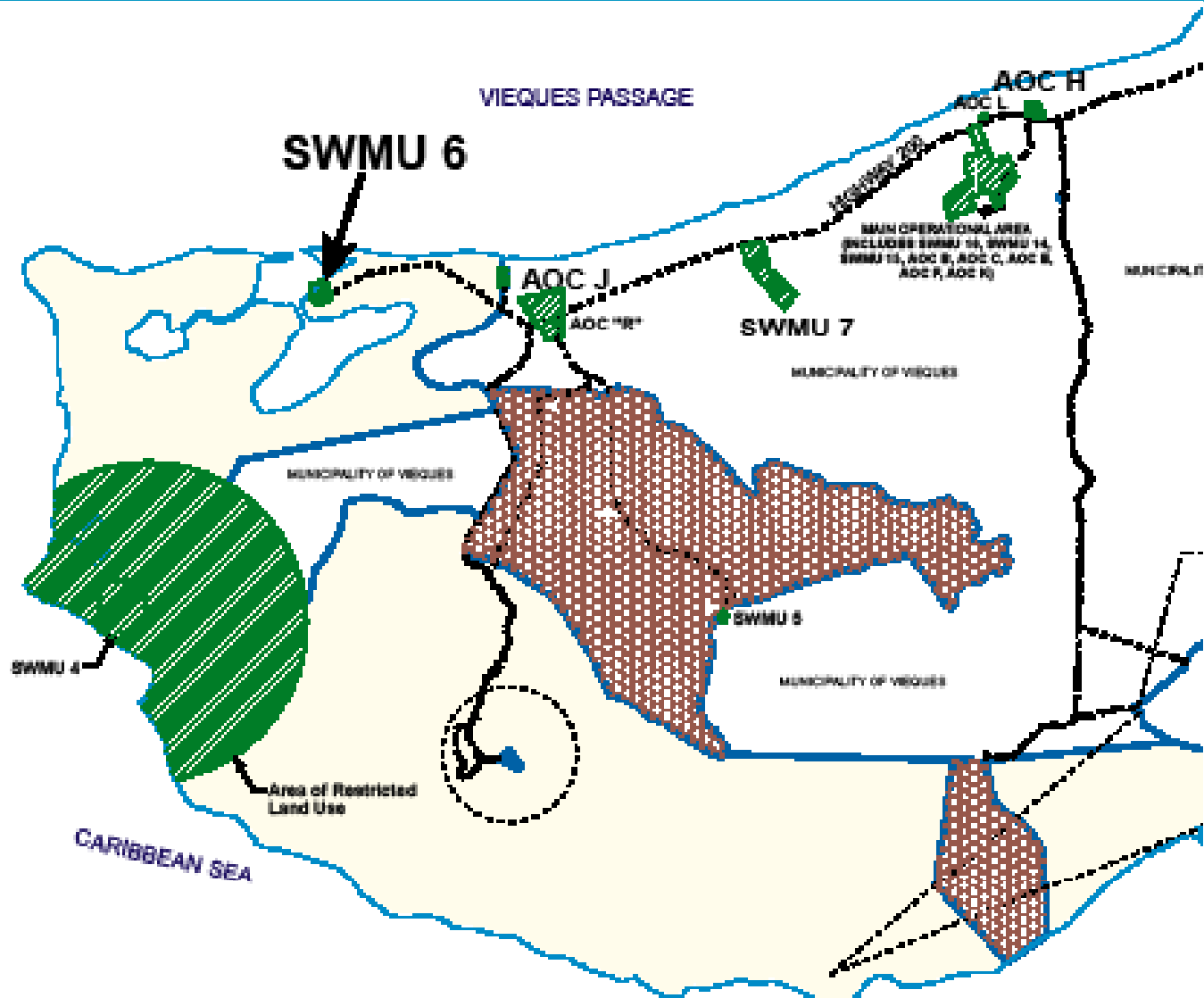
**Vieques
Restoration Advisory Board Meeting
Environmental Restoration Program Update**

August 2011



SWMU 6 Post-Removal Supplemental Confirmation Sampling Results

SWMU 6 – Location



SWMU 6 – Before Removal Action



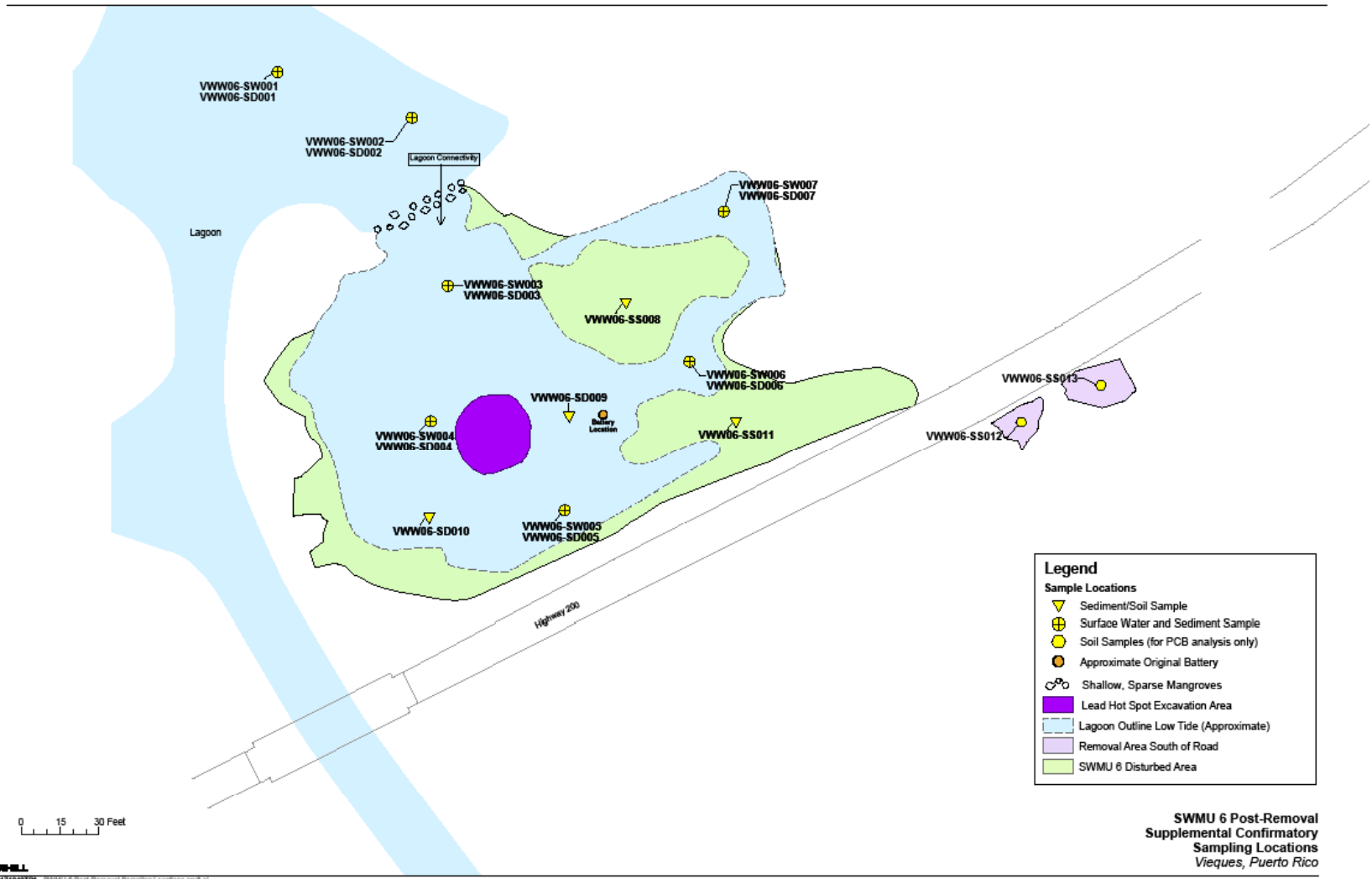
SWMU 6 – November 2010



SWMU 6 – Collecting Sediment with a Ponar Dredge (like a clam shell)



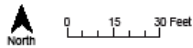
Post-Removal Supplemental Confirmatory Sampling Locations



Legend

Sample Locations

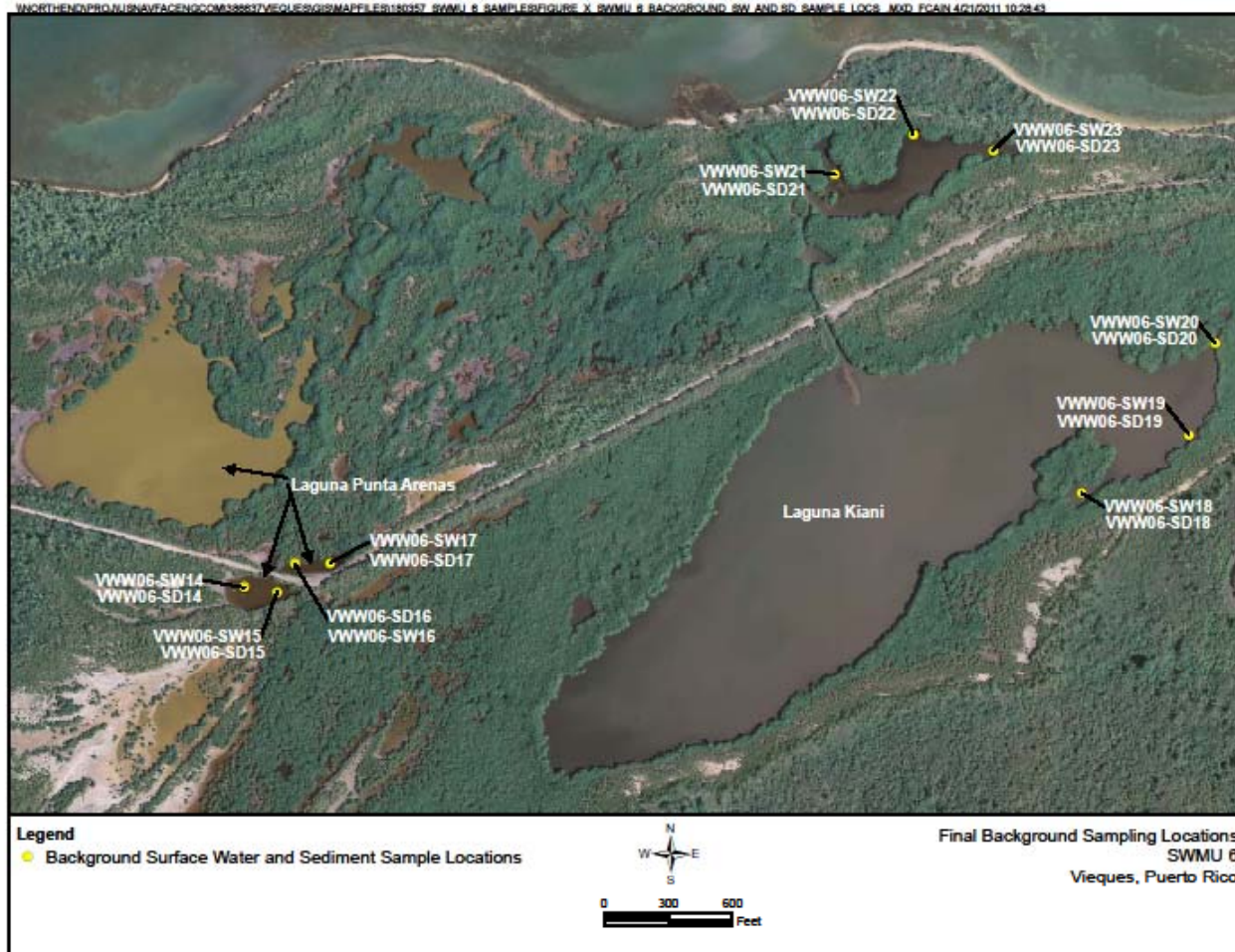
- ▼ Sediment/Soil Sample
- ⊕ Surface Water and Sediment Sample
- Soil Samples (for PCB analysis only)
- ★ Approximate Original Battery
- Shallow, Sparse Mangroves
- Lead Hot Spot Excavation Area
- Lagoon Outline Low Tide (Approximate)
- Removal Area South of Road
- SWMU 6 Disturbed Area



ES042101Y19407PA SWMU 6 Post-Removal Sampling Locations-rw3.ai

SWMU 6 Post-Removal Supplemental Confirmatory Sampling Locations
Vieques, Puerto Rico

Background Sample Locations



Post-Removal Supplemental Confirmatory Samples



- **SWMU 6**

- **13 soil/sediment samples**
- **7 surface water samples**
- **Samples analyzed for:**
 - volatile organic compounds (VOCs)
 - semi-volatile organic compounds (SVOCs)
 - pesticides
 - PCBs
 - inorganics (metals)

- **Background**

- **10 sediment samples**
- **10 surface water samples**
- **Samples analyzed for:**
 - pesticides
 - PCBs
 - inorganics (metals)

SWMU 6 Soil/Sediment Sample Results



- **No VOC exceedances**
- **Exceedances for 2 SVOCs**
 - Benzo(a)pyrene at 7 locations
 - Benzo(b)fluoranthene at 2 locations
- **Exceedances for 3 Pesticides**
 - 4,4-DDD at 8 locations
 - 4,4-DDE at 7 locations
 - 4,4-DDT at 2 locations
- **Exceedances for 1 PCB**
 - Aroclor 1254 at 3 locations
- **Exceedances for 8 metals**

SWMU 6 Surface Water Sample Results



- **No VOC exceedances**
- **No SVOC exceedances**
- **No pesticide exceedances**
- **No PCB detections**
- **Exceedances for 4 metals**

Preliminary Data Evaluation



- **Risk screening identified:**
 - **Potentially unacceptable risk to people who might eat fish from lagoon**
 - **Potentially unacceptable risk to aquatic animals living in lagoon or foraging in lagoon**

Preliminary Data Evaluation, continued



- **This risk screening is based on very conservative assumptions of contaminant concentrations in aquatic plants and/or animals (including fish)**
 - **These assumptions use the surface water and sediment data to predict the concentrations that may be in the aquatic plants and/or animals**
 - **These assumptions often overestimate actual risk**



Questions?