

Munitions Response Site Prioritization

Former Vieques Naval Facilities

Vieques, Puerto Rico

Restoration Advisory Board Meeting

October 27, 2010



Munitions Response Prioritization Protocol (32 CFR Part 179)



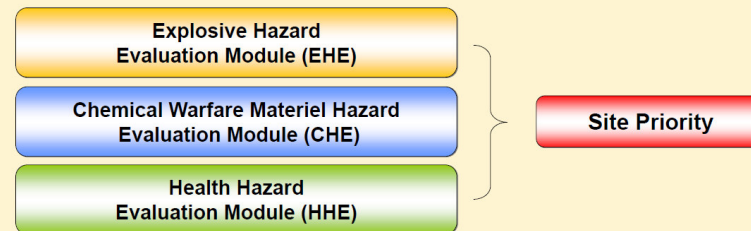
The Munitions Response Site Prioritization Protocol

Congress required the U.S. Department of Defense to set priorities for investigating all munitions response sites.

The Protocol:

- Provides a method for scoring and ranking each munitions response site
- Allows sites to be consistently scored and ranked
- Is used to set priorities for long-term munitions response actions on Vieques and at other Navy munitions response sites nationwide

Priority scores are based on the results of one or more of these Hazard Evaluation modules:



The Protocol allows for early and continuous community and stakeholder participation in the process, including consideration of:

- Cultural and social factors
- Economic factors
- Potential future land use
- Short- and long-term ecological effects
- Availability of appropriate technology
- Other potential environmental impacts

Site Identification

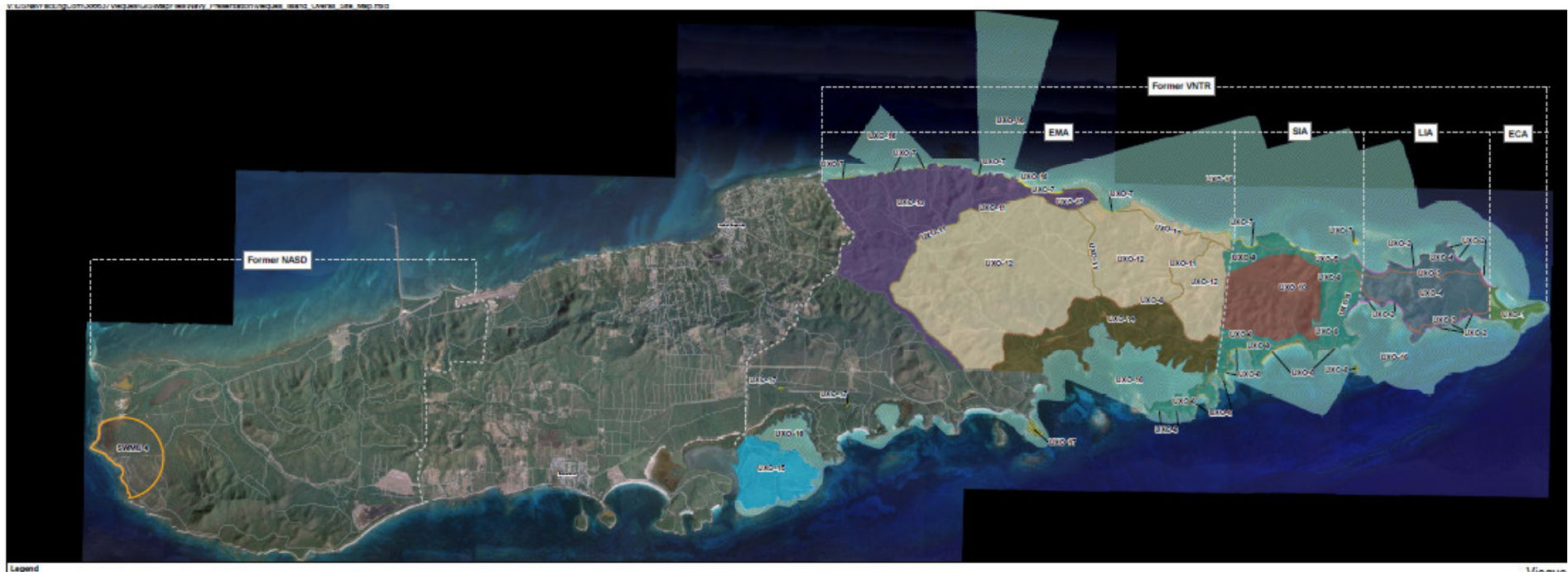


- **In April, 2010 the former site was divided into 18 munitions sites**
 - Munitions response sites were established based on geographic parcels and future land use rather than as operational units
 - Sites prioritized to achieve site closure sooner within the CERCLA process

Site Identification



- Includes 17 sites on east Vieques: UXO-1 through UXO-17
- Only 1 site on west Vieques ([NASD] UXO-1 aka SWMU4)



MRS Prioritization Protocol

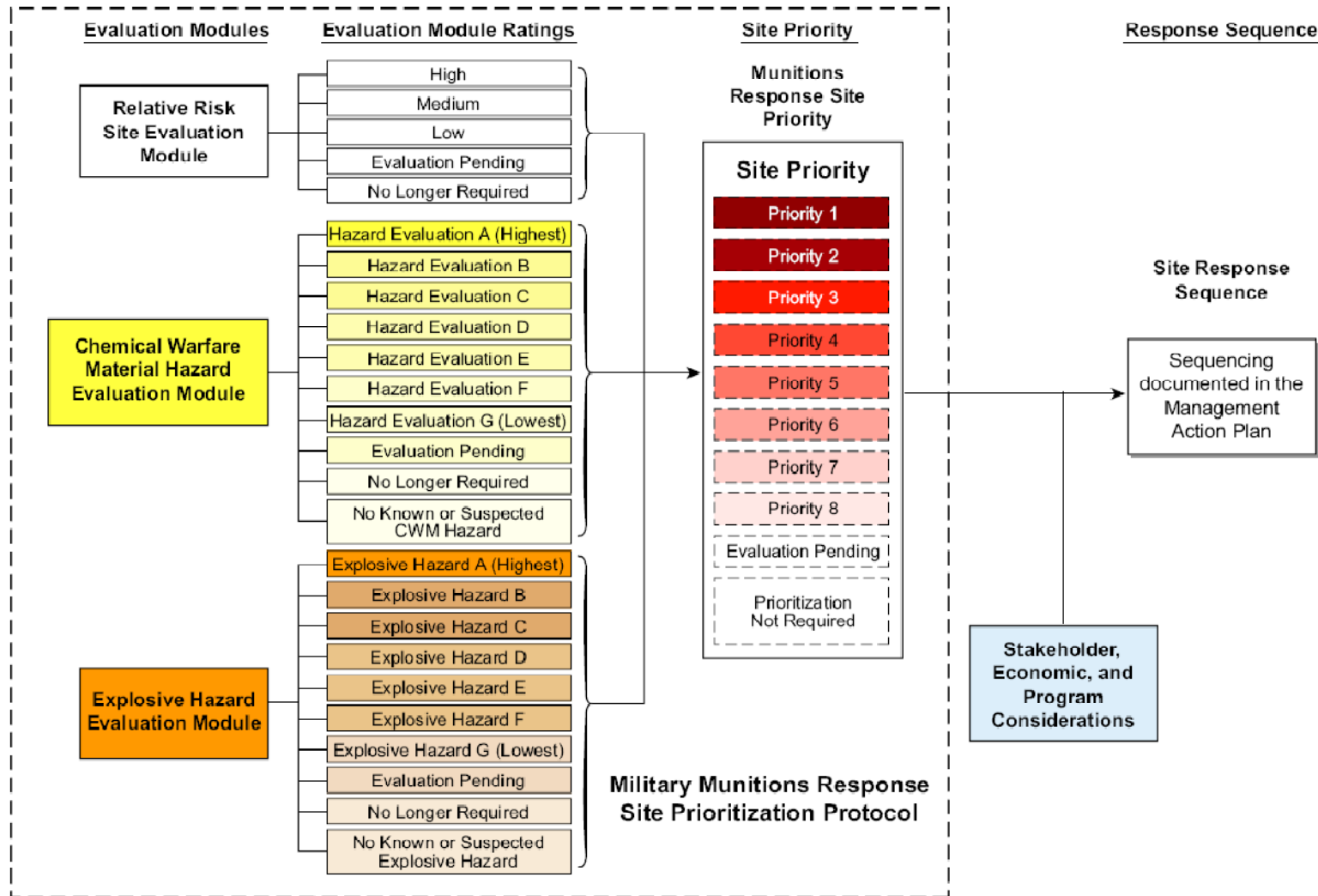


Figure 1-3
Munitions Site Prioritization
Site Management Plan, Vieques, Puerto Rico

Prioritization Approach

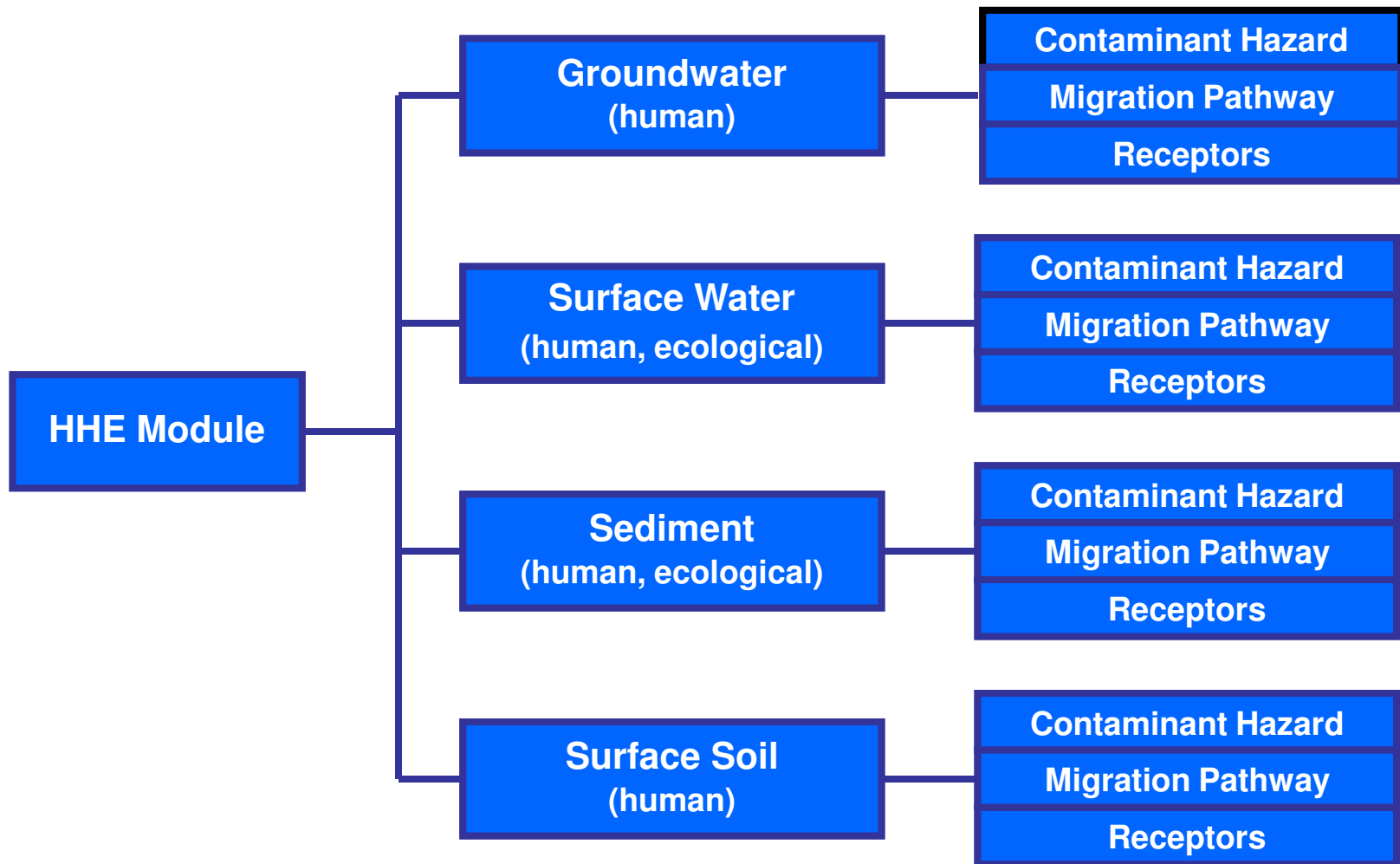


- **Cleanup will address both explosives hazards and human health / ecological risks**
- **Current prioritization is driven by:**
 - Explosive hazard module as main driver
 - Human health / ecological module is second driver
- **Chemical weapons module does not apply to Vieques based on historical information**

Explosive Hazard Evaluation (EHE) Module

Explosive Hazard	Munitions Type 30		Source of Hazard 10		EHE Module Ratings Total Score from all data elements			
	<ul style="list-style-type: none"> • Sensitive 30 • High explosive (used or damaged) 25 • Pyrotechnic (used or damaged) 20 • High explosives (unused) 15 • Propellant 15 • Bulk secondary high explosives, pyrotechnics, or propellant 10 • Pyrotechnic (not used or damaged) 10 • Practice 5 • Riot control 3 • Small arms 2 • Evidence of no munitions 0 		<ul style="list-style-type: none"> • Former ranges 10 • Former munitions treatment (i.e., OB/OD) units 8 • Former practice munitions ranges 6 • Former maneuver area 5 • Former burial pit or other disposal area 5 • Former industrial operating facilities 4 • Former firing points 4 • Former missile or ADA emplacements 2 • Former storage or transfer points 2 • Former small arms range 1 • Evidence of no munitions 0 				<ul style="list-style-type: none"> • Priority A (Highest) >92 • Priority B 82 - 91 • Priority C 71 - 81 • Priority D 60 - 70 • Priority E 48 - 59 • Priority F 38 - 47 • Priority G (Lowest) 0 - 37 • Evaluation Pending • No Longer Required • No Known or Suspected Explosive Hazard 	
Accessibility	Location of Munitions 25		Ease of Access 10		Status of Property 5			
	<ul style="list-style-type: none"> • Confirmed surface 25 • Confirmed subsurface, active 20 • Confirmed subsurface, stable 15 • Suspected (physical evidence) 10 • Suspected (historical evidence) 5 • Subsurface, physical constraint 2 • Small arms (regardless of location) 1 • Evidence of no munitions 0 		<ul style="list-style-type: none"> • No barrier 10 • Barrier to MRS access is incomplete 8 • Barrier to MRS access is complete but not monitored 5 • Barrier to MRS is complete and monitored 0 	<ul style="list-style-type: none"> • Non-DoD control 5 • Scheduled for transfer from DoD control 3 • DoD control 0 				
Receptors	Population Density 5		Population Near Hazard 5		Types of Activities/Structures 5		Ecological and/or Cultural Resources 5	
	<ul style="list-style-type: none"> • > 500 5 • 100 - 500 3 • < 100 1 		<ul style="list-style-type: none"> • 26 or more 5 • 16 to 25 inhabited structures 4 • 11 to 15 inhabited structures 3 • 6 to 10 inhabited structures 2 • 1 to 5 inhabited structures 1 • 0 inhabited structures 0 	<ul style="list-style-type: none"> • Residential, educational, commercial, or subsistence 5 • Parks and recreational areas 4 • Agricultural, forestry 3 • Industrial or warehousing 2 • No known or recurring activities 1 	<ul style="list-style-type: none"> • Ecological and Cultural 5 • Ecological 3 • Cultural 3 • No ecological or cultural resources present 0 			

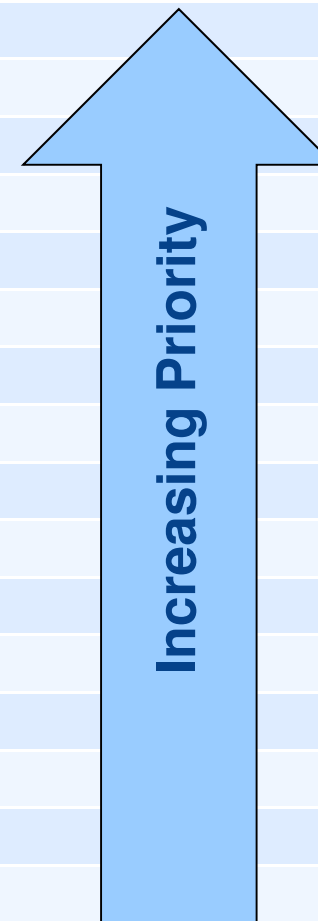
Health Hazard Evaluation (HHE)



MRS Priority Scoring For Vieques



MUNITIOS RESPONSE SITE	PRIORITY RANKING
UXO-1 Eastern Conservation Area	2
UXO-2 LIA Beaches	2
UXO-3 LIA Roads	2
UXO-4 LIA Interior	2
UXO-5 SIA Restricted Roads	2
UXO-6 EMA/SIA Public Roads	2
UXO-7 EMA/SIA North Beaches	2
UXO-8 SIA South Beaches	2
UXO-9 SIA Exterior	2
UXO-10 SIA Interior	2
UXO-11 EMA Public Roads	2
UXO-12 EMA Interior	2
UXO-13 EMA West	2
UXO-14 EMA South	2
UXO-16 Underwater Areas	2
(West Vieques) UXO-4 SWMU 4	2
UXO-15 Puerto Ferro	3
UXO-17 Other Sites (Camp Garcia)	4



Future Prioritization Process For Vieques



- **Sites will be re-scored annually as more site investigation data becomes available.**
- **Prioritization results will be available:**
 - At the outreach event on October 27, 2010
 - As part of the Site Management Plan
 - On the public website by November 5, 2010.