



**Draft Decision Document
Waikane Valley Impact Area**
Kaneohe, Oahu, Hawaii
March 2012

1 Declaration

Site Name and Location

This Decision Document presents the Selected Remedy for Waikane Valley Impact Area (WVIA) Munitions Response Site (MRS) located in Waikane Valley, Kaneohe, Oahu, Hawaii. As a result of munitions and explosives of concern (MEC) remaining onsite from historical military activities, a Remedial Investigation and Feasibility Study (RI/FS) was conducted in 2010 to characterize the nature and extent of MEC and associated munitions constituents (MC).

Statement of Basis and Purpose

The remedy was selected in accordance with the Comprehensive Environmental Reclamation, Compensation, and Liability Act (CERCLA), as amended by the Superfund Amendments and Reauthorization Act of 1986, and to the extent practicable, the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). This decision is based on information contained in the Administrative Record file for the site. Information not specifically summarized in this Decision Document or its references but contained in the Administrative Record has been considered and is relevant to the selection of the remedy at WVIA. Thus, the Decision Document is based upon and relies upon the entire Administrative Record file in making the decision.

The Navy is the lead agency and provides funding for site cleanups at WVIA. The remedy set forth in this Decision Document has been selected by the Navy, Marine Corps Base (MCB) Hawaii, and Hawaii Department of Health (HDOH). HDOH, the lead regulatory agency, actively participated throughout the investigation process and hence, has reviewed this Decision Document and the materials on which it is based and concurs with this Selected Remedy (Appendix B).

Scope and Purpose of Selected Remedy

Human health and ecological risk assessments conducted during the RI resulted in a determination that risks to human health and the environment associated with MC were below regulatory threshold values or action levels. The selected remedy addresses potential MEC hazards over the entire 187-acre site.

1.1 Selected Remedy

Assessment of the Site

The former WVIA has been investigated under the Munitions Response Program to determine what types of cleanup actions are needed to reduce risks from MEC or MC remaining from past training activities. MEC includes unexploded ordnance and other munitions items that may pose an explosive hazard, and MC are chemical components of munitions which may pose human health or ecological risks if left on the site. Previous investigations have identified the presence of MEC in the Northern Target Area, a potential for MEC in the Northern Non-Target Area, and a low potential for MEC in the Southern Area.

Decision Document Waikane Valley Impact Area Marine Corps Base Hawaii, Kaneohe Bay

**RAB Meeting
April 18, 2012**



Topics



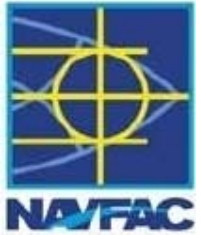
- **Site History and Background**
- **Decision Document**
- **Responsiveness Summary**
- **Project schedule**



Waikane Valley Impact Area (2008)



Acronyms / Definitions



MPPEH

Material Potentially Presenting an Explosive Hazard

MEC

Munitions and Explosives of Concern

MC

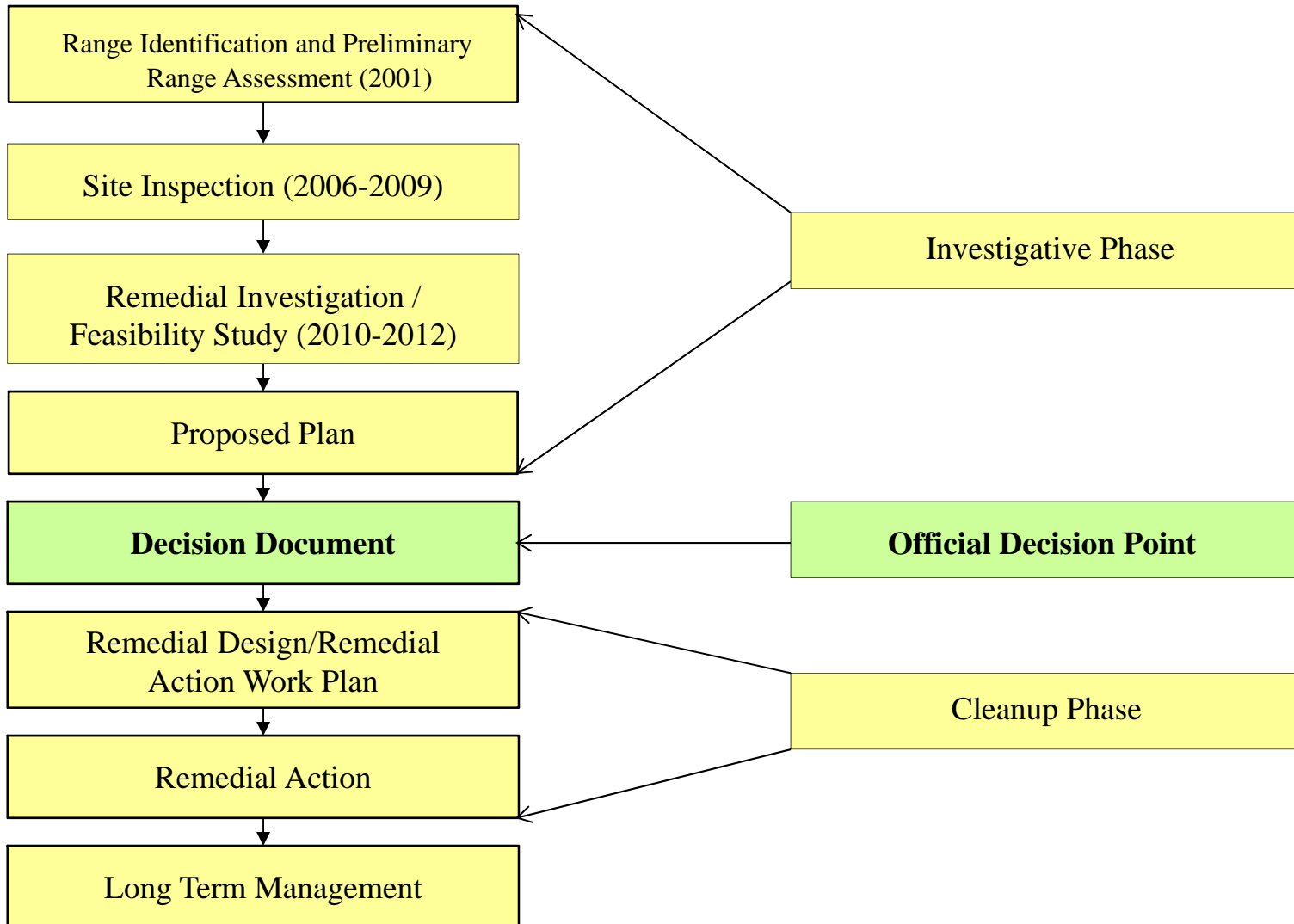
Munitions Constituents

Accessible Land

Slope of less than 30 degrees

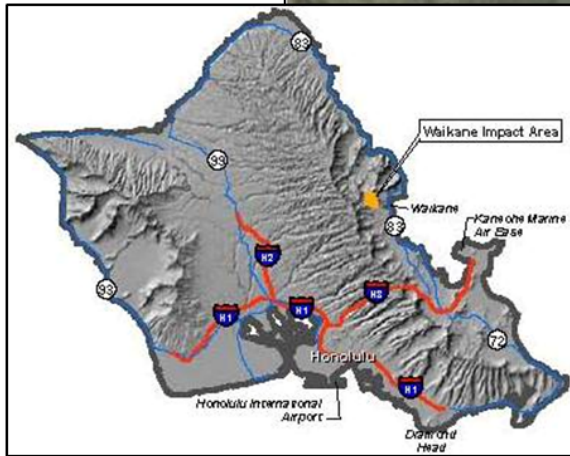
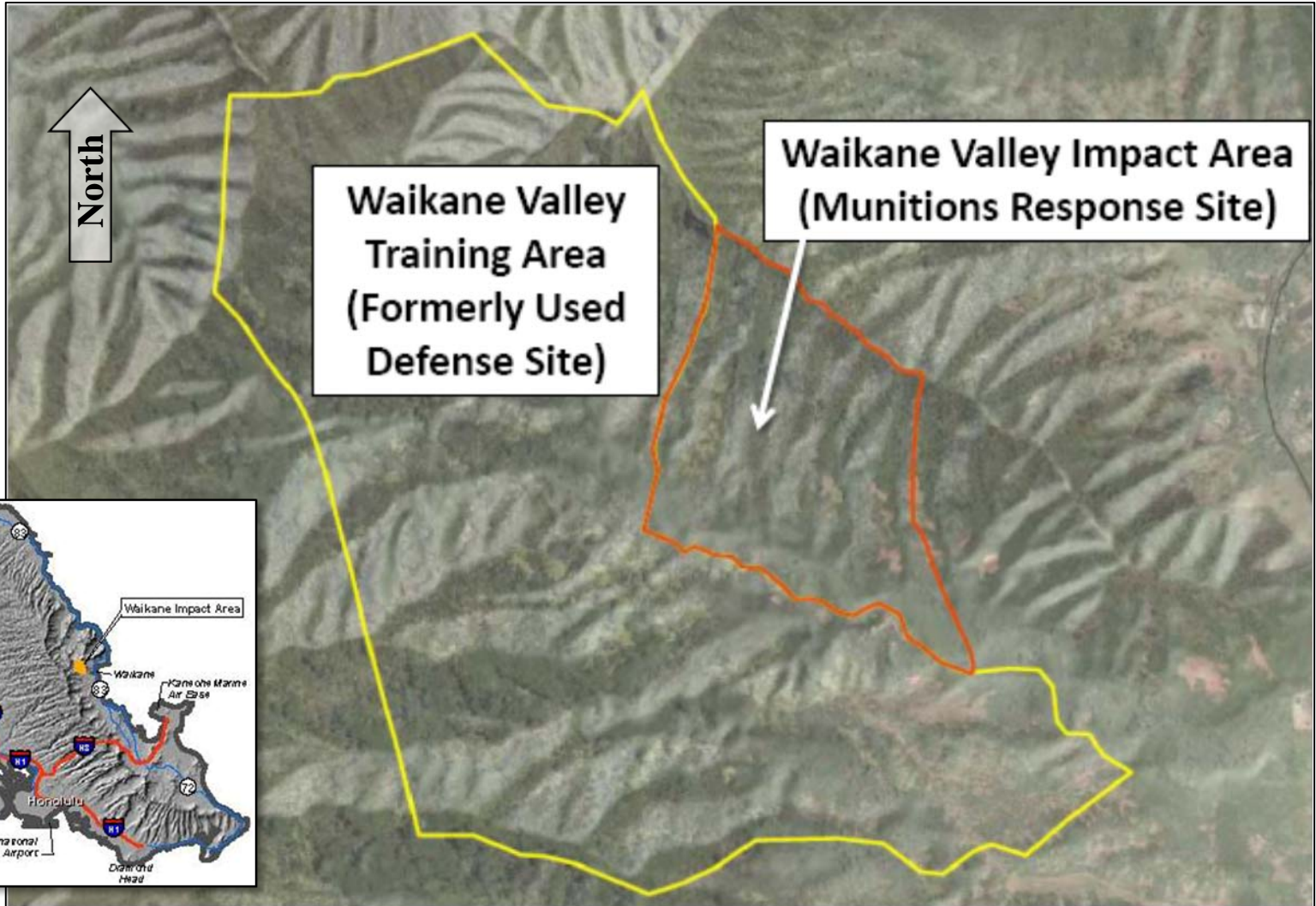


CERCLA Process Overview





Site Location Map





Site History



- **1943-1953 –US Army training area.**
- **1953 -1976 – Leased to Marine Corps for small arms and rocket firing.**
- **1976 and 1984 Marine Corps ordnance clearance**
 - Explosive risks remained
- **2005 – Range closed. Added to the Navy and Marine Corps Munitions Response Program**



**U.S. troops training in Waikane Valley
circa 1943**



Previous Investigation Results - MC



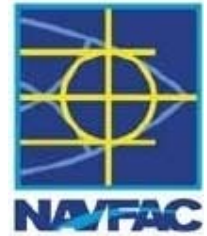
- **Soil / sediment sampling during Site Inspection and Remedial Investigation**
- **No unacceptable risks to human health or ecological risks were identified.**



Surface soil sampling



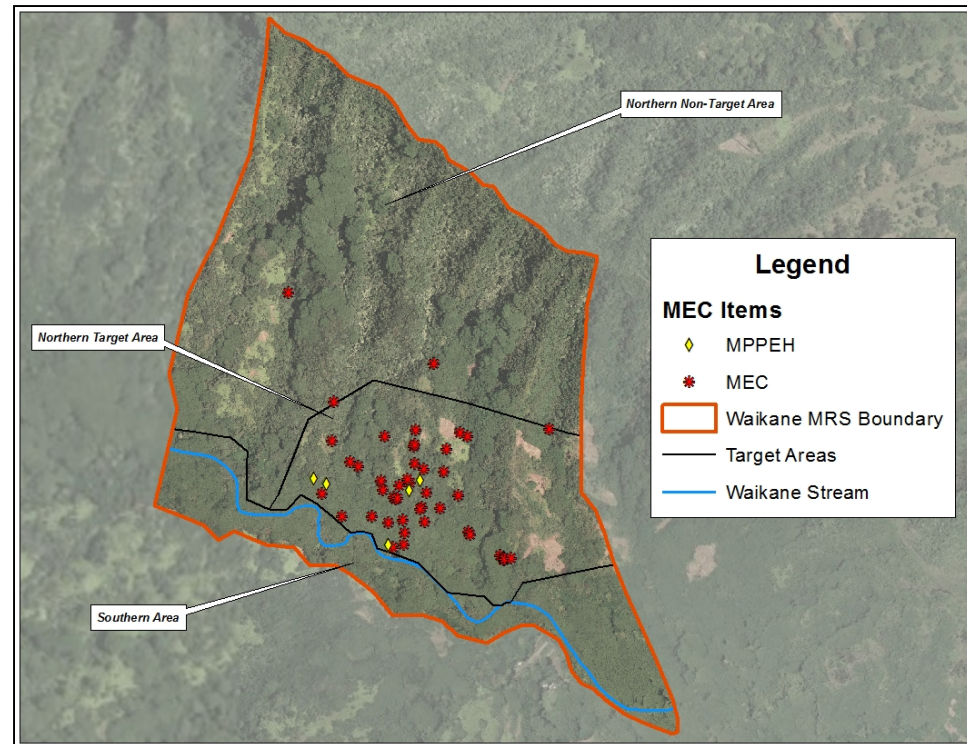
Previous Investigation Results - MEC



- SI identified areas w/potential surface MEC

- RI conducted surface clearance and subsurface investigation

1. 92 MEC items and 26 MPPEH items identified
2. All but 2 found on ground surface
3. No MPPEH found in Southern Area
4. Defined areas for MEC Hazard Assessment/Feasibility Study (Southern Area, Northern Target Area, Northern Non-Target Area)



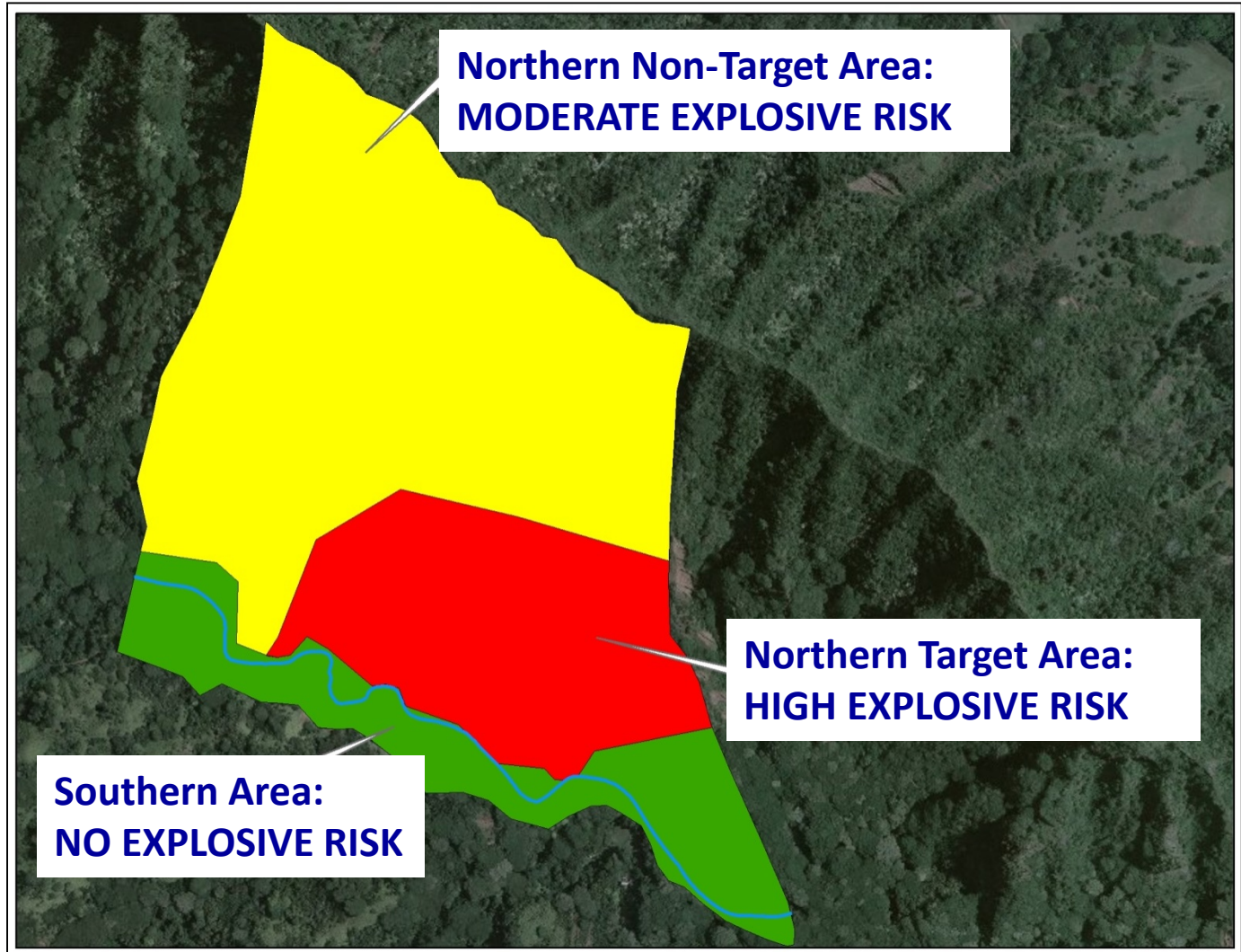
MEC removed in 2010



MEC Hazard Assessment



Uses MEC Investigation Results to estimate explosive risks





Feasibility Study and Proposed Plan

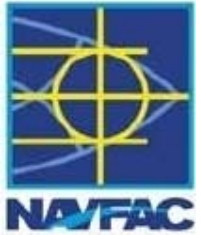


- **Developed Remedial Action Objectives**
 1. Prevent current and future exposure to MEC through reduction of MEC hazards
 2. Restore the site to support existing and future land use
 3. Protect and provide access to cultural sites
 4. Prevent migration of MEC into accessible areas.

- **Identified and evaluated 4 potential remedial alternatives**
 1. No action
 2. Land use controls (LUCs)
 3. Surface clearance (accessible land) with LUCs
 4. Surface and subsurface clearance (accessible land) with LUCs



Decision Document



- **Present selected alternative**
- **Address public and stakeholder comments on the Proposed Plan (Responsiveness Summary)**
- **Document concurrence from the State of Hawaii Department of Health**
- **Place final Decision Document in Navy Information Repository and Administrative Records File**



Selected Alternative



Incorporates Community and Regulatory Input

Surface Clearance

- **Accessible land within Southern Area and Northern Area**

Subsurface Clearance

- **50 foot area around any MEC found in the Southern Area**
- **Widen corridors to and around the Kamaka Shrine and Waikane Spring**
- **10-foot wide buffer between the Northern and Southern Areas**



Selected Alternative



Incorporates Community and Regulatory Input

Land Use Controls

•Fencing

- Remove existing fence around the Southern Area**
- Erect new fence between Southern and Northern Areas**

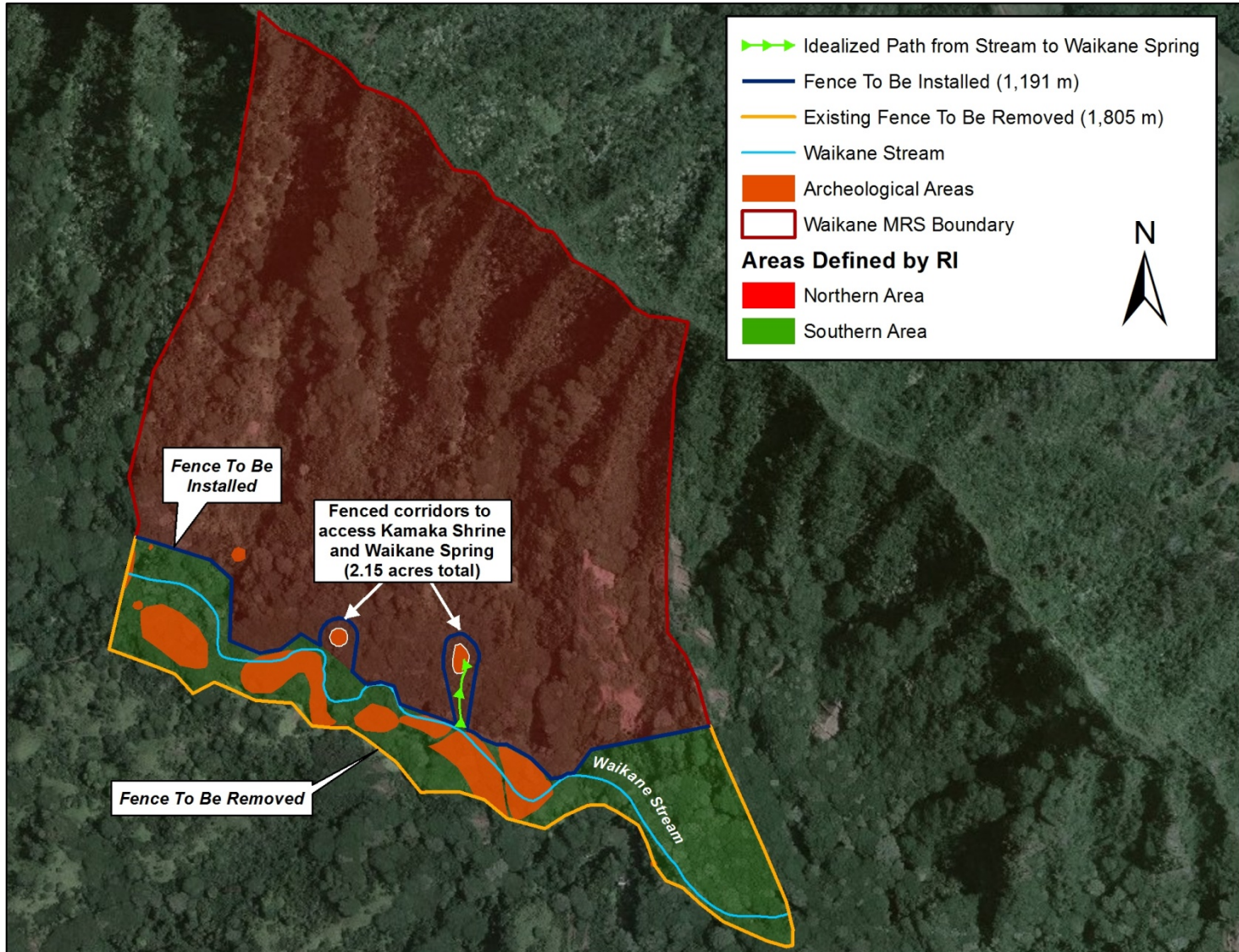
•Community Education and Awareness Program

Long Term Management

- Annual inspections of land use controls and 5 year reviews**

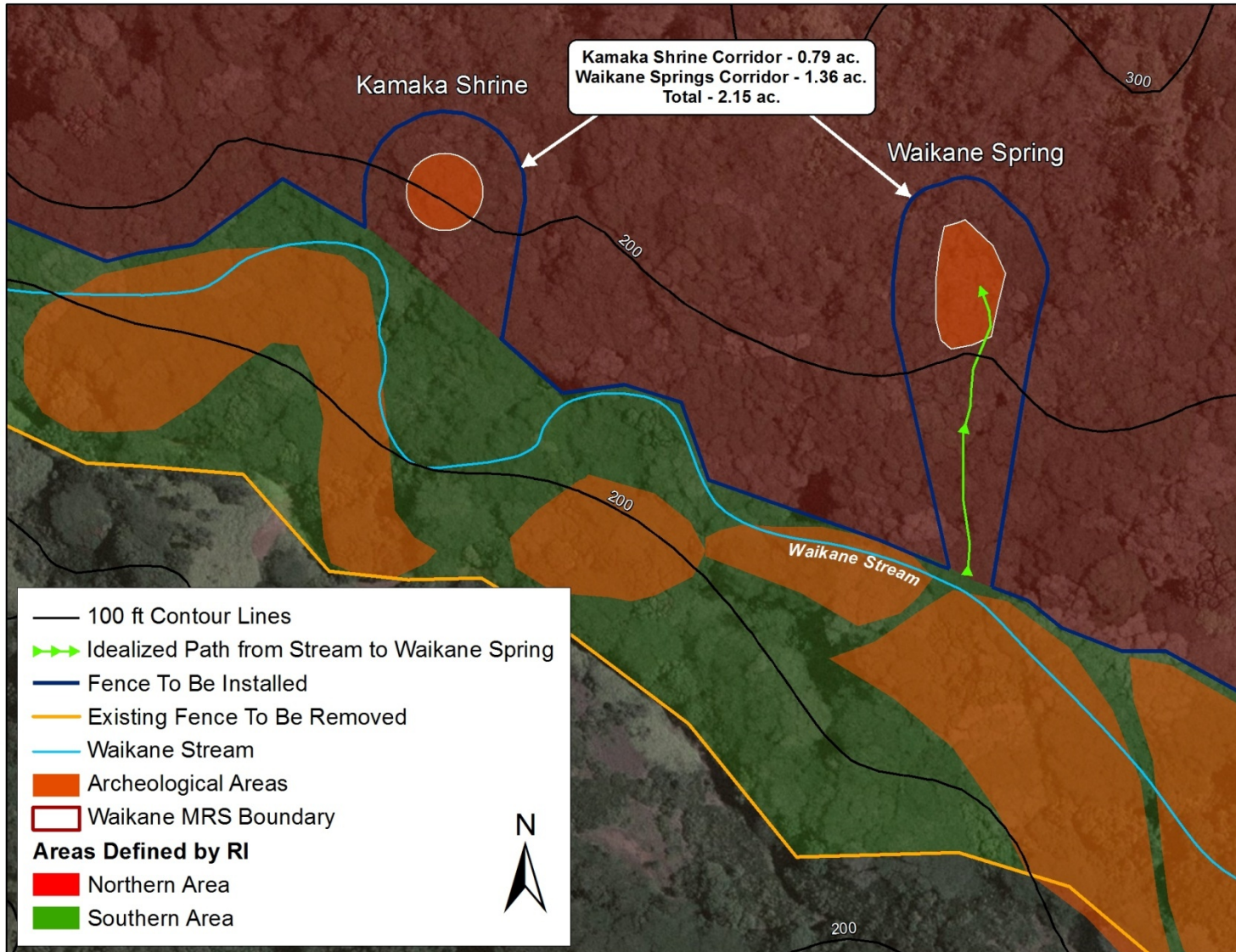


Selected Alternative



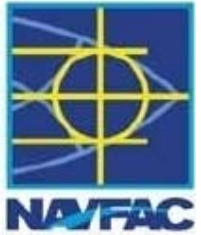


Selected Alternative (Southern Area)

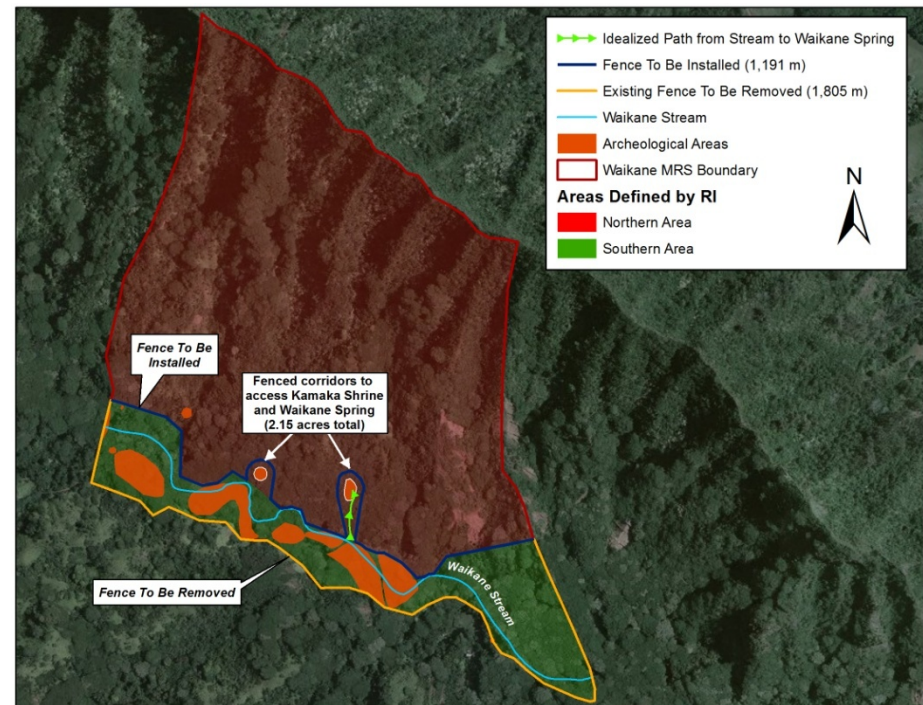




Selected Alternative



- Reduces explosive risk by removing MEC from accessible areas
- Provides a buffer zone between the northern area and the southern area
- Provides safe access to sites of known cultural significance
- Provides the best potential for unrestricted land use in Southern Area



Preferred alternative summary



Responsiveness Summary



Comments received grouped in to 5 categories:

- 1. The width of the corridors to the cultural sites.**
- 2. All terrain vehicle access to the Waikane Valley Impact Area**
- 3. Munitions surface clearance of all accessible areas**
- 4. Incorporation of new technology into the clean up process**
- 5. Start date for public education program**



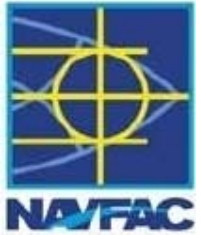
Responsiveness Summary (1)



- **Comment: Widen the corridors to Kamaka shrine and Waikane Springs**
- **Response:**
 - **Corridors widened to 50 feet**
 - **RAB & public will have input in fence design and location**
 - **Improve spiritual experience of a site visit**



Responsiveness Summary (2)



- **Comment: How can the Marine Corps help block ATVs from going into the area?**
- **Response:**
 - No jurisdiction outside fence
 - Can prosecute trespassers on WVIA
 - Request public to alert Military Police to trespassers (257-7114)
 - Appreciate input on fence maintenance plan



Responsiveness Summary (3)



- **Comment: Please clear the accessible area in Northern Non-Target Area.**
- **Response: The 2.9 acres of accessible area of Northern Non-Target Area was added back in.**



Responsiveness Summary (4)



- **Comment:** Process should be reopened if new technologies become available for clearing inaccessible areas suitable for unrestricted land use.
- **Response:** Evaluation of new technologies is covered by 5-year reviews.



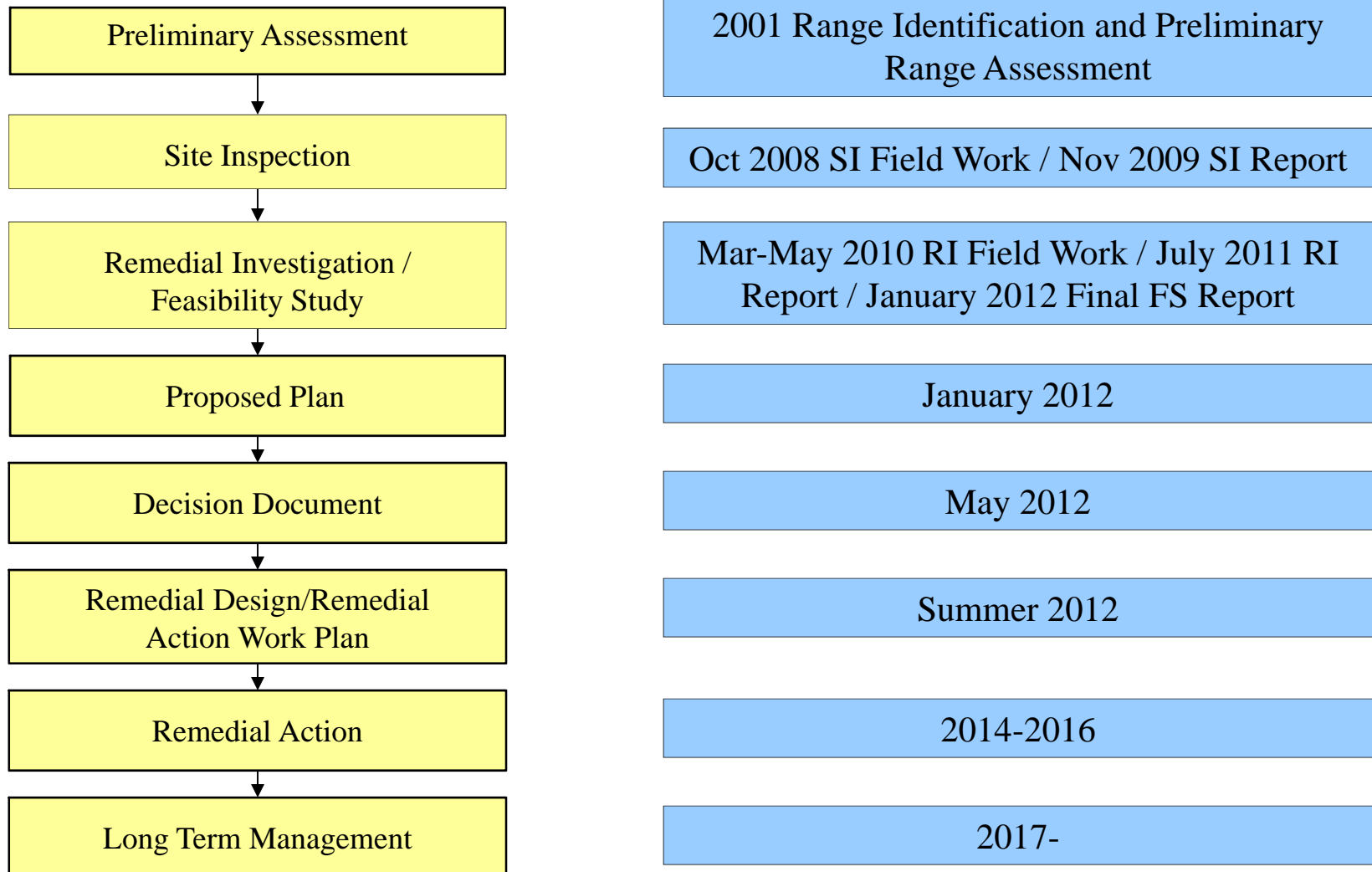
Responsiveness Summary (5)



- **Comment: Can public education program start before the process is complete.**
- **Response: Can start sooner.**
 - **Marine Corps will coordinate with Army Corps of Engineers education program.**
 - **Offer training program to schools & community groups.**



Waikane Valley Impact Area Timeline





Project Schedule

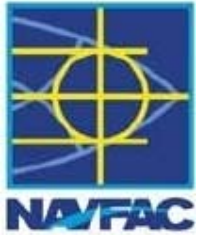


- **Draft Decision Document
April 10, 2012**
- **Final Decision Document
May 2012**
- **Award Remedial Design
June 2012**
- **Pending Dates:**
 - **Community Education
Program**
 - **Next RAB meeting pending
Remedial Design**





Information Repositories



- **University of Hawaii at Manoa
Hamilton Library, Hawaiian &
Pacific Collection**
2550 McCarthy Mall
Honolulu, HI 96822
Ms. Jean Kusano (ph. 956.8227)
- **Kaneohe Public Library**
45-829 Kamehameha Hwy.
Kaneohe, HI 96744
Ms. Cynthia Chow (ph. 233.5674)
- **KEY Project**
45-200 Waihee Road
Kaneohe, HI 96744
**Ms. Lanette Mahelona
(ph. 239.5777)**

**Lifelong Learning**

Marine Corps Base Hawaii
Supporting Readiness and Global Projection

Installations, Environment & Logistics Directorate (IE&L)
Environmental Compliance and Protection Department

Waikane Valley RAB

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<http://www.mcbh.usmc.mil/g4/environ/WaikaneRAB.htm>



Thank You

