Dolly Sods Region/ Former WV Maneuver Area

Public Meeting
Tuesday, August 19, 2003
Seneca Rocks Discovery Center
Seneca Rocks, WV

Public Meeting Agenda

- Site and Project History
- Previous Corps of Engineers actions
- Recent Technologies Application
- Overview of the Recurring Review Process for Ordnance and Explosives
- Discussion of Public Awareness and Community Relations Plans
- Other business
- Questions and open discussion

Site Location Map

- Located in Grant, Tucker, and Randolph Co.
- Part of the Monongahela National Forest

Background

- Area named for pioneer Dahle (Dolly) family which formerly owned and cleared the area for grazing
- Logging occurred in 1880's, ended between 1910 - 1913
- Logging caused massive soil erosion, changing the environment
- Purchased by the Forest Service in 1930
- Civilian Conservation Corps planted red pine and conifers and constructed Forest Service Road 75
- Military maneuvering/training 1943 to 1944; both live and inert mortars were fired
- Property returned to the Forest Service in 1950
- Congress created Dolly Sods Wilderness Area (DSWA) in 1975
- DSWA makes up a portion of the 2,181,000 AC. former WVMA
- Extensively searched and cleared of ordnance following WWII, but many pieces have been found since that time

Troops at Seneca Rocks

Background, cont'd

- Ordnance project authorized under the Defense Environmental Restoration Program for Formerly Used Defense Sites (DERP-FUDS)
- Huntington District USACE is the Geographic District and has project management responsibilities.
- For management purposes, the site was divided into:
  - Dolly Sods Wilderness Area (DSWA), 10,215 acres
  - Dolly Sods North (DSN), 6,169.5 acres
- The following project activities have occurred:
  - Findings and Determination of Eligibility (DERP-FUDS) 1991-92
  - Feasibility Study, 1991-92; OE located, RA project conceived
    - 28.1 of 10,215 acres searched, 13 pieces of ordnance located within 6-24 inches of ground surface
  - Environmental Assessment and FONSI, 1995
  - DSWA Ordnance Removal Project, May 97 – Oct 97
  - DSN Ordnance Removal Project, Oct 97 – Oct 98

Partners in Restoration
The Dolly Sods "Team"

- US Forest Service
- US Fish and Wildlife Service
- WV Division of Natural Resources
- WV Department of Environmental Protection
- US Army Corps of Engineers
  - Huntington District – USACE Project Manager
  - Huntsville Center – OE Center of Expertise
- Support Contractors
- Local law enforcement
- The Public

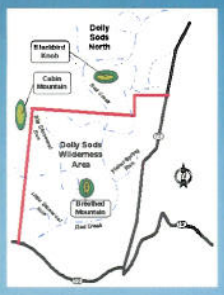
Partnering in Action

- Corps and Forest Service evaluated areas most likely to contain ordnance that posed a threat to the public (trails, campsites, cabins)
- Forest Service marked trails for the RA contractor to improve removal efficiency
- Forest Service trained RA contractor to act for the service in identifying and protecting the Cheat Mt. Salamander
- The result: The Environmental Assessment was expedited and the North Area RA was completed at least one year ahead of schedule

Removal Action Scope

- Dolly Sods Wilderness Area
  - 21 miles of trails; search and clear 20 feet each side of trail to 1 foot depth
  - 101 campsites; cleared to 4 foot depth
- Dolly Sods North
  - 23 miles of trails; search and clear 20 feet each side of trail to 1 foot depth
  - Blackbird Knob, 99 acres open land; search and clear to 1 foot depth
  - 75 campsites and 4 hunter structures; search and clear to 4 foot depth
- Concern not so much stepping on ordnance as it is building a fire near or driving a tent spike thru

Removal Action Areas



Removal Action Obstacles

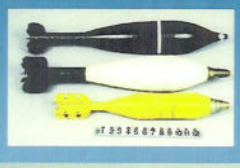
- 45,000-76,000 visitors annually use the area to hike, fish, camp, picnic, and hunt
  - Course of trails change over time due to erosion, landslides, and public movement
  - Campsites not permanently marked, little restriction on camping
  - Undocumented trails continue to be used
  - Hunters roam throughout the area
- Majority of the area is rugged, forested
- Vast acreage, DSWA and DSNA comprise 16,384 acres
- Threatened species present - Cheat Mt. Salamander
- Records of targets and firing lines either destroyed or never recorded; troop movements

Removal Action Risk Reduction

- Ordnance removal focused on trails and campgrounds
- The action was chosen based on factors such as cost, environmental impact, and reduction of public risk
- The project significantly reduced the public hazard
  - Trail risk reduced by 47.6%; campsite risk reduced 58.9%
  - Twelve HE 81 mm and two 60 mm HE live mortars found and safely detonated in DSWA; 32,594 areas excavated
  - One HE 60 mm, one HE 4.2-inch, and six 4.2-inch chemical live mortars detonated in DSNA
  - Nineteen 4.2-inch inert detonated in DSNA
  - 108 lb scrap removed from WA and 1,043 lb removed

Removal Action

Types of Mortars



Removal Action Limitations

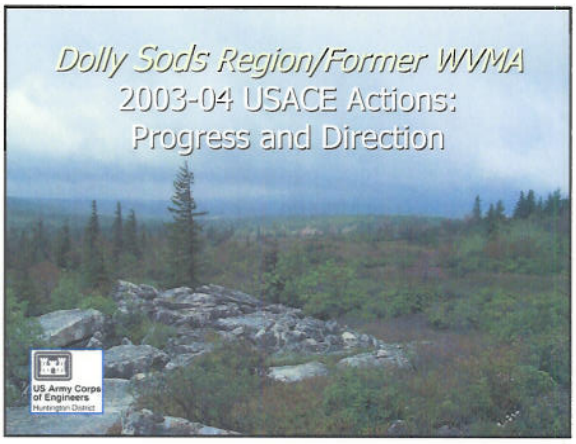
It is noted that the removal action could not and was not expected to, negate risk entirely

- Vast acreage; greater than 16,000 acres
- Grid-by-grid search of entire area would not reduce risk to "zero", could be as expensive as it is environmental damaging
- Numerous undocumented trails
- Clearance based upon assumed past maneuvers and locations of targets and emplacements
- Ever changing environment: rains, erosion, landslides, can dislodge ordnance and cause migration

What if Ordnance is discovered?

- Do not touch, move, or dig near or around
- Walk away in the direction you came
- Identify on a map or by terrain features
- Report the discovery immediately to:
  - Potomac Ranger District – (304) 257-4488
  - Seneca Rocks Visitor Center – (304) 567-2827
  - West Virginia State Police – (304) 257-1411

Dolly Sods Region/Former WVMA
2003-04 USACE Actions: Progress and Direction

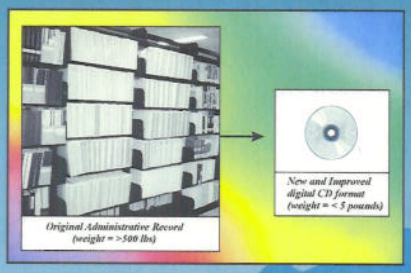


USACE 2003-04 Actions: Overview

- Technologies Application
  - Digital AR/PR and Website
  - GPS and GIS
- OE Recurring Review Process
  - Purpose and Objectives
  - Multi-Phased Research Approach

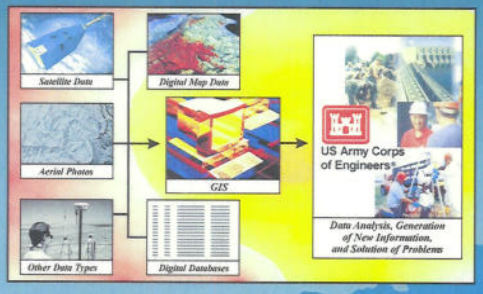
Technologies Application

- Digital AR/PR
  - Available via CD, FTP, and New Website

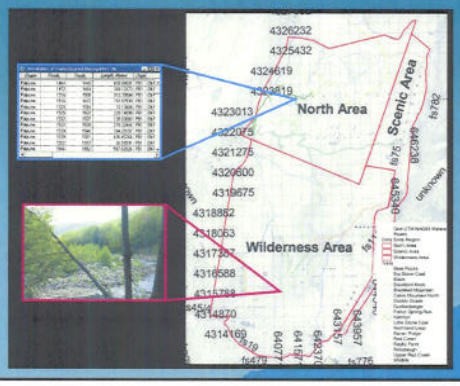


- Global Positioning System (GPS)
  - What is GPS?
  - New GPS system for Dolly Sods

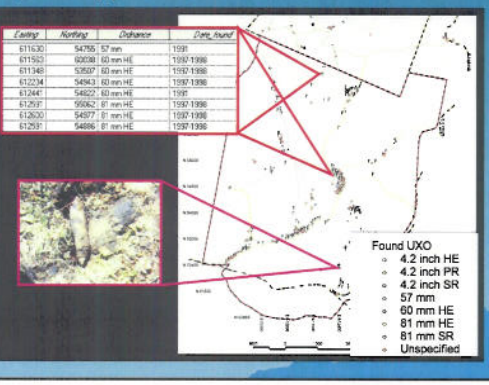
- Geographic Information System (GIS)
  - What is GIS?
  - New GIS developed for Dolly Sods



GPS/GIS Application: Ex. #1



GPS/GIS Application: Ex. #2



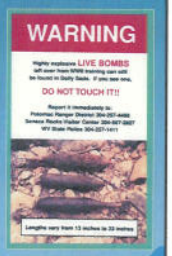
Technologies Application: Future Plans

- Digital AR/PR
  - Apply new classification scheme
- Website
  - More information online, make user friendly
- GIS/GPS
  - Add more attributes to existing data
  - Create surface photography theme
  - Incorporate/analyze historical aerial photography
  - 3D imaging/modeling/analysis
  - Utilize spatial analysis capabilities
  - Use as a decision-making and problem-solving tool

OE Recurring Review Process

- Purpose

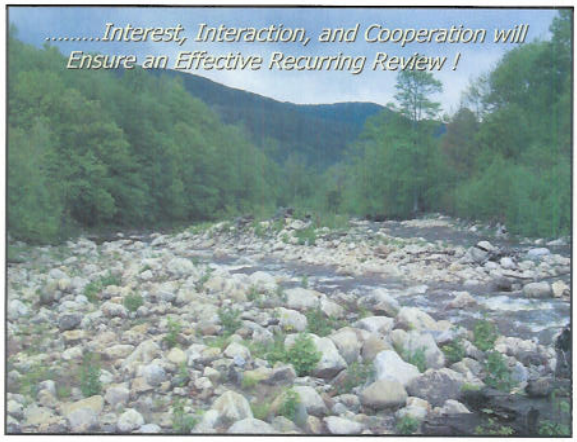
  Ensure public health, safety, and the environment continue to be protected by the 1997-98 USACE response action



- Objectives
  - Answer 3 questions:
    - 1) Is response functioning as intended?
    - 2) Are assumptions used during response still valid?
    - 3) Any new information or technology that indicates response no longer minimizes ordnance-related risk?
  - Reach conclusions regarding the functional effectiveness of the recent response
  - Recommendations for further actions to ensure continued project success may be presented – if warranted

- Multi-phased Research Approach
  - Review historical data
  - Conduct interviews and surveys
  - Site investigation – have conditions changed?
  - Institutional Controls Evaluation – are they working?
  - Preparation of pre-draft report by project delivery team
  - Preparation of draft report and presentation to the public for comments

- Keys to Recurring Review Success
  - There needs to be a joint effort and commitment between Federal, State, Local, and individual resources
  - Discussions between stakeholders need to be open and candid
  - All reasonable concerns and suggestions must be considered
  - *And……*



Remaining Meeting Agenda Items……..

- Discussion of Public Awareness and Community Relations Plans
- Other Business
- Questions and Open Discussion

Cheat Mountain Salamander
Photograph by:
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