

## Dolly Sods Region Ordnance Project Public Meeting - June 2, 2004

### Agenda

- Dolly Sods Region Background
- Previous Ordnance and Explosives Removal Action
- Recurring Review of Ordnance and Explosives RA
- Recent Public Awareness and Education Efforts
- Questions and Open Discussion

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## Site Location Map



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

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## Site 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; wildfires also burned off soil cover; changing the environment
- Purchased by the Forest Service in 1930
- Civilian Conservation Corps planted red pine and conifers and constructed Forest Service Road 75

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## Troops at Seneca Rocks





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## Site Background, cont'd

- Military maneuvering/training 1943 to 1944; both live and inert mortars were fired
- Property returned to the Forest Service in 1950
- Congressional act '75 - "Dolly Sods Wilderness Area"
- DSWA is a portion of the 2,181,000 AC. former West Virginia Maneuver Area
- Extensively searched and cleared of ordnance following WWII; many pieces have been found since that time

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## Ordnance Project - Background

- Ordnance project authorized in 1990
  - 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
  - Dolly Sods Scenic Area (DSSA), 2,268 acres

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## Ordnance Project - Background

**Ordnance Project activities have included:**

- Findings and Determination of Eligibility for the DERP-FUDS program 1991-92
- Feasibility Study, 1991-92; Ordnance and Explosives (OE) located, Removal Action (RA) project conceived
  - 281 of 10,215 acres searched, 13 pieces of ordnance located within 6-24 inches of ground surface
- Environmental Assessment and FONSI, 1995
- DSWA OE RA Project, June 97 – Oct 97
- DSN DSSA OE RA Project, Oct 97 – Aug 98

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## OE Project "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 Engineering and Support Center
- Support Contractors
- Local law enforcement
- The Public

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## Removal Action Partnering

- USACE and USFS evaluated areas most likely to contain ordnance (trails and campsites)
- USFS marked trails for the OE RA contractor to improve removal efficiency
- USFS trained contractor in identifying and protecting the Cheat Mt. Salamander
- Result: The Environmental Assessment was expedited and the North Area RA was completed at least one year ahead of schedule

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## 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
  - Campsites not permanently marked, little restrictions
  - Undocumented trails continue to be used
  - Hunters roam throughout the area
- Majority of the area is rugged, forested
- Threatened species - Cheat Mt. Salamander

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## Removal Action Limitations

The RA could not entirely negate risk:

- Vast acreage; greater than 18,000 acres
- Grid-by-grid search of entire area would not reduce risk to "zero".
  - as expensive as it is environmentally damaging
- No records of targets and firing lines located; maneuvers were random
- Ever-changing environment: erosion can dislodge ordnance and cause migration

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## Ordnance Removal Action Scope

### DSWA

- June 4, 1997 – October 17, 1997
- 26.14 miles of trails; 20 feet each side, depth of one foot
- 112 campsites; cleared to a depth of four feet
- 32,594 "digs"
  - Railroad spikes
  - Artifacts such as axes, hammers, picks, and stove parts
  - Magnetic rocks
  - Items were returned to original location
- 14 live mortars found and destroyed by detonation
- 108 lb. OE-related scrap

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## Ordnance Removal Action Scope

### DSN and DSSA

- October 20, 1997 – August 18, 1998
- 29.65 miles of trails; 20 feet each side, one foot depth
- 66 campsites and 6 cabins; four foot depth
- 23,191 "digs"
- 8 live mortars found and destroyed by detonation
- 19 inert rounds also located
- 1,043.5 lb. OE-related scrap

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## Trails and Campsites Cleared

Trail/Campsite	Length/Depth	Notes
Trail 1	0.5 miles	1 foot depth
Trail 2	0.5 miles	1 foot depth
Trail 3	0.5 miles	1 foot depth
Trail 4	0.5 miles	1 foot depth
Trail 5	0.5 miles	1 foot depth
Trail 6	0.5 miles	1 foot depth
Trail 7	0.5 miles	1 foot depth
Trail 8	0.5 miles	1 foot depth
Trail 9	0.5 miles	1 foot depth
Trail 10	0.5 miles	1 foot depth
Trail 11	0.5 miles	1 foot depth
Trail 12	0.5 miles	1 foot depth
Trail 13	0.5 miles	1 foot depth
Trail 14	0.5 miles	1 foot depth
Trail 15	0.5 miles	1 foot depth
Trail 16	0.5 miles	1 foot depth
Trail 17	0.5 miles	1 foot depth
Trail 18	0.5 miles	1 foot depth
Trail 19	0.5 miles	1 foot depth
Trail 20	0.5 miles	1 foot depth
Trail 21	0.5 miles	1 foot depth
Trail 22	0.5 miles	1 foot depth
Trail 23	0.5 miles	1 foot depth
Trail 24	0.5 miles	1 foot depth
Trail 25	0.5 miles	1 foot depth
Trail 26	0.5 miles	1 foot depth
Trail 27	0.5 miles	1 foot depth
Trail 28	0.5 miles	1 foot depth
Trail 29	0.5 miles	1 foot depth
Trail 30	0.5 miles	1 foot depth
Trail 31	0.5 miles	1 foot depth
Trail 32	0.5 miles	1 foot depth
Trail 33	0.5 miles	1 foot depth
Trail 34	0.5 miles	1 foot depth
Trail 35	0.5 miles	1 foot depth
Trail 36	0.5 miles	1 foot depth
Trail 37	0.5 miles	1 foot depth
Trail 38	0.5 miles	1 foot depth
Trail 39	0.5 miles	1 foot depth
Trail 40	0.5 miles	1 foot depth
Trail 41	0.5 miles	1 foot depth
Trail 42	0.5 miles	1 foot depth
Trail 43	0.5 miles	1 foot depth
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Trail 58	0.5 miles	1 foot depth
Trail 59	0.5 miles	1 foot depth
Trail 60	0.5 miles	1 foot depth
Trail 61	0.5 miles	1 foot depth
Trail 62	0.5 miles	1 foot depth
Trail 63	0.5 miles	1 foot depth
Trail 64	0.5 miles	1 foot depth
Trail 65	0.5 miles	1 foot depth
Trail 66	0.5 miles	1 foot depth




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## Removal Action Photographs




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## **Removal Action Risk Reduction**

- **OE RA 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 47.6%; campsite risk reduced 58.9%

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**Stakeholder notification and involvement:**

- Several meetings were held
  - Team and public meetings during 2003 and 2004
- Public information needs were served
  - Public repository updated
  - FUDS newsletter published
  - Newspaper notices about project activities published
- Community interviews were conducted
- Public comment period for the recurring review report

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**Documentation and data review:**

- Administrative record thoroughly reviewed
- GIS developed to facilitate data management and review
  - Also benefited field work, map making, and decision-making activities




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**Documentation and data review (continued):**

- Post 1998 ordnance-related incidents research:
  - There have been 6 such ordnance finds (five 4.2" HE, and one 105 mm HE)



- No one was injured; proper reporting and demolition processes occurred
- The closest found ordnance to a previously cleared area was 25 meters away
- Finds occurred in low-usage areas of the DSN (where trails that were cleared for ordnance are not well marked)

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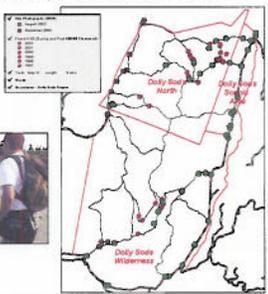
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**Site assessment:**

- Field operations conducted during Aug. and Nov. 2003:
- The team inspected the site from 25 linear miles of observations points
- Objectives were to determine if site conditions had changed since 1997-98, and to evaluate on-site institutional controls





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**Site assessment (continued):**

➤ Findings from the inspection:

- No UXO or OE-related scrap identified
- No OE concerns due to severe erosion, vegetation loss, or major land-use changes were found
- Vegetation was found to provide soil stability across most of the region, and site conditions and usage have not changed noticeably since 1997-98
- Rugged terrain and vegetation make human access to many portions of the region not cleared for ordnance difficult






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**Site assessment (continued):**

- Many trailheads of cleared trails are marked, but many are not well marked
- Information is not located at trailheads which would make visitors aware that they should remain only on designated trails and only camp at inventoried sites
- Six trails not cleared for ordnance appear to be receiving at least occasional use; three have posts marking their trailhead
- Visitors are not receiving enough information regarding the notification process






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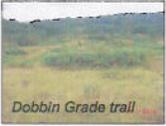
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**Site assessment (continued):**

- The team wasn't able to easily follow trails that were cleared for ordnance in certain areas because they aren't well marked
- Signs warning visitors about the potential to find ordnance do exist, but many need replaced with new higher-visibility signs, and signs need placed at new locations



Rocky Ridge trail



Dobbin Grade trail



Bear Rocks area



Big Stonecreek and Breathed Mtn. trailheads

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**Community survey:**

- Over seventy interviews were conducted by S&CPR:
  - Insight regarding residents' and visitors' awareness of ordnance-related issues was obtained
  - Findings from the survey:
    - Half of the region's visitors do not see any information regarding the potential to find ordnance items
    - Most are unaware of the proper locations to hike and camp
    - Most are unaware of proper ordnance-related incident reporting procedures
    - More than half feel that additional measures should be taken to ensure that the community is aware of existing ordnance-related risk

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**3) Conclusions of Review:**

- A) The 1997 to 1998 ordnance removal action is functioning as intended, and is still protective of human health, safety, and the environment
  - The number of found ordnance/year has decreased since 1997-98
  - Recent incidents have occurred because visitors have wandered from cleared, highly used areas, and because a complete removal was not possible
  - Note: if high amounts of erosion occur (e.g. due to a severe storm), if vegetation is removed (e.g. due to a fire), or if recreational or land-use changes occur (e.g. if new campsites or trails are made) then an increased potential for encountering ordnance could result
- B) Continued periodic reviews of the site are necessary
- C) Certain institutional controls require improvement, and public awareness needs to be increased

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**Remaining Meeting Agenda Items**

- Recent Public Awareness and Education Efforts
- Other Business
- Questions and Discussion



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## Recent Public Awareness and Education Efforts

Dolly Sods  
(Former West Virginia Maneuver Area)  
Project

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## Outline of Topics

- 1) Unique Public Education Challenges
- 2) Dolly Sods Team Efforts to Increase Public Awareness

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- Between 45,000 and 76,000 anglers, hikers, hunters, mountain bikers, and other outdoor enthusiasts use the Dolly Sods Region yearly.
- They are drawn to this pristine mountainous area to enjoy the solitude, natural beauty, and recreational opportunities.

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- Due to the military exercises described in the previous presentations, there is a potential that visitors could come in contact with unexploded ordnance (UXO) in certain areas of the region that have not been cleared for ordnance.
- It is the responsibility of the U.S. Army Corps of Engineers and other state and federal agencies to inform the public of the events that took place in the region and the inherent possible hazards in the region.

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- A new awareness and education campaign had been developed through recent (2003-2004) efforts by the project team.
- This campaign will implement new strategies to inform the public about past activities and possible regional hazards.
- Some of the new public awareness programs that have been recently initiated include the following:

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Passing out water bottles, key chains, and other merchandise, which have key contact and UXO response information on them, to hikers and other visitors in the area.

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WARNING

Highly explosive  
**LIVE BOMBS**  
from WWII training  
can still be found  
in Dolly Sods.

DO NOT TOUCH!



Report it immediately to:  
**1-888-283-0303**

WARNING

Highly explosive  
**LIVE BOMBS**  
from WWII training  
can still be found  
in Dolly Sods.

DO NOT TOUCH!



Report it immediately to:  
**1-888-283-0303**

Posting UXO warning signs in locations with high visitor traffic. The signs contain a warning, photos of UXO that have been found in the area, and a phone number to call if UXO is encountered.

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Creating brochures that contain a map of Dolly Sods Region trails that were cleared of UXO have been created and will soon be made available in local National Forest Service offices, local businesses, Huntington District website, etc

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Project and UXO notification information has been listed on the Huntington District website. Included with this information are the WVMA Administrative Record, historical information, brochures, maps, and safety procedures.

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Huntington District  
 Family and Extreme Site Newsletters

The Huntington District publishes an annual newsletter to interested parties to keep them up to date on the latest news and actions taking place in their community.

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Animations and videos, with Wally the Woodchuck, who is the newly developed project mascot, have been produced and will soon be distributed to teachers to help educate local school children regarding UXO safety and notification.

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Public meetings, such as this one, have been and will continue to be held to keep the public informed of project phases and progress.

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