

Dolly Sods

Recurring Reviews

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G03WV006504_02.04_0021



Meadows, Richard L LRH

Dolly Sods
"Recurring Review"

From: Guy, Erich D LRH
Sent: Thursday, July 15, 2004 8:37 AM
To: Albert, Frank R JR LRH; Meadows, Richard L LRH; McHenry, Nickolas L LRH
Subject: FW: Dolly Sods

-----Original Message-----

From: Carol L Whetsell [mailto:cwhetsell@fs.fed.us]
Sent: Thursday, July 15, 2004 8:14 AM
To: Guy, Erich D LRH
Cc: Jeffery J Hammes
Subject: RE: Dolly Sods

Looks good Erich. Thanks for making the adjustments.

Carol

<p>"Guy, Erich D LRH" <Erich.D.Guy@Lrh01.usace.army.mil> <cwhetsell@fs.fed.us> <Richard.L.Meadows@Lrh01.usace.army.mil> <Frank.R.Albert.JR@Lrh01.usace.army.mil>, "Meadows, 07/14/2004 04:22 PM <David.F.Meadows@Lrh01.usace.army.mil>, "McHenry, Nickolas L LRH"</p>	<p>To: "'Carol L Whetsell'" cc: "Meadows, Richard L LRH" "Albert, Frank R JR LRH" David F LRH" <Nickolas.L.Mchenry@Lrh01.usace.army.mil> Subject: RE: Dolly Sods</p>
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Hi Carol:

Thanks for the comments on the Dolly Sods Recurring Review Draft Final Report. The report has been revised based upon your comments, and the responses to your comments are listed below in this email. The report will soon be finalized.

Today we mailed you three copies of a UXO map that you requested for Fire Suppression/Safety planning; you should receive the package by Monday 7/18/04.

If you have any questions about the map or need any further information please let us know.

Best of luck during your upcoming maternity leave!

E

RESPONSES TO COMMENTS

1. P. 9 4.4.2 Trailhead and Trail marking inspection. 2nd paragraph about midway. I don't necessarily agree that the lack of markings along certain trail sections has contributed to some of the recent ordnance-related incidents in DSN. I believe there is a traditional use especially by hunters and berry pickers of areas that are not designated trail. People have hunted and picked berries off of designated trails for years and it may take more education to get them to use the designated trails instead of going cross country. Also even though people may camp on cleared sites, that does not mean that they remain on cleared sites during their entire stay. Venturing out to use the restroom or brush their teeth could lead them off of a cleared site and into areas where there are ordnance.

Response: Concur. Section 4.4.2 was revised to state that it is "possible", rather than "likely", that the lack of markings along certain trail sections has contributed to some of the recent ordnance-related incidents in the DSN. Since USACE personnel had a difficult time maintaining course along certain trail sections due to lack of markings during the field assessment, and since USACE wishes to have visitors maintain course on the actual trails which were cleared for ordnance, the recommendation to have trail sections "well marked" remains in the report. Additional possible reasons for the recent ordnance finds by visitors, as suggested in the comment above, were also added to section 4.4.2. It is suggested in this section, and in the recommendations and conclusions section of this report, that educational tools which stress the importance of staying on cleared trails and at established campsites be developed and employed to ensure the use of cleared areas by visitors.

2. P. 12 6.4 Notification and reporting process maintenance. I will work with our dispatcher to ensure that persons operating the 24-hour reporting hotline are aware of the ordnance related incident reporting procedures.

Response: Concur; such efforts are in agreement with recommendations made in this report.

3. P. 13 6.5 Warning sign placement and monitoring. The Welcome sign at Bear Rocks Reserve is not a FS sign. That sign actually belongs to the Nature Conservancy so any changes to that sign would need to be worked out through them. The Northland Loop Trail is a one-way interpretative trail. A bomb sign should be placed at the southern end of the trail, but I do not believe that a sign should be placed at the end of the trail (north end) as we don't want to encourage people to walk the trail backwards because of the interpretative messages.

Response: Concur. Section 6.5 was revised to state that "It is recommended that the USFS and USACE suggest to Nature Conservancy that the ordnance reporting phone number be added to the welcome sign". Regarding the Northland Loop trail, the recommendation to add a warning sign to the northern end of the trail was removed from this report in response to the comment received. The recommendation to have a warning sign to the southern end of the Northland Loop trail remains in the report.

4. P. 13 6.6 Trailheads and Trail markings. Jim has 18 signs that need to be placed in the field in the Dolly Sods North area for trailheads and intersections of trails. That should help a lot with officially marking the trailheads and intersections. They should be placed this summer.

Response: Concur; such efforts are in agreement with recommendations made in this report. In Section 6.6, subsequent to the recommendation: "USFS should mark the heads of all trails that have been cleared for ordnance with signs containing the appropriate trail name", the following statement was added: "Note that a comment received from the USFS (Appendix G) indicates that steps towards meeting this recommendation should be accomplished during summer 2004."

5. I saw recommendations to enhance our wording on others signs and in brochures. I will work with my coworkers to ensure that in the future we try to include more of the bomb awareness messages.

Response: Concur; such efforts are in agreement with recommendations made in this report.

D. ...
1/2/04

Minutes of the Public Information Meeting
Concerning the Dolly Sods Area
Blackwater Falls Lodge, Davis, West Virginia
2 June 2004

Attendees:

Name	Organization	Phone Number
Rodger Ozburn	WV Div. of Forestry	304.293.2941x2475
Carol Whetsell	US Forest Service	304.478.3251x105
Wally Dean	CELRH-PM-PD-R	304.399.5868
Brian Ball	CELRH-PM-PP-P	304.399.5345
Nick McHenry	CELRH-EC-CE	304.399.5909
Frank Albert	CELRH-EC-CE	304.399.5760
Rick Meadows	CELRH-PM-PP-P	304.399.5388
Erich Guy	CELRH-EC-CE	304.399.5283
John Safstrom	WVDNR	304.478.2000x139
Jeff Holland	CELRH-EC-CE	304.478.5098

6:00pm – Setup for meeting begins, including preparing room, arranging handouts, and setting up projector and computer.

7:10pm – Rick Meadows introduces meeting presenters and introduces project.

7:15pm – Frank Albert presents the history of Dolly Sods ordnance project. Frank discusses the history of the area, enrollment in the FUDS program, and conception and implementation of the unexploded ordnance (UXO) Removal Action.

7:30pm – Erich Guy demonstrates the application of geographic information system (GIS) data to the Dolly Sods project, showing examples of mapping trails and ordnance locations with a possibility of finding firing ranges or locations. Erich then gives a presentation on Ordnance and Explosives (OE) Recurring Review, outlining the Aug. and Nov. field inspections. These inspections yielded minimal erosion problems, but provoked some concerns about properly marking trails. Some suggestions were made to mark some trails better and remove markings on trails that had not been cleared for ordnance. The review concluded that the 1997-98 ordnance removal action at Dolly Sods is still protective of human health and the environment. Recommendations for improving certain institutional controls and public awareness/education efforts were presented. Carol Whetsell asks for a new copy of the updated UXO warning sign, and for specific information on signs to be added and removed, which Erich was able to provide after the meeting.

8:10pm – Nick McHenry presents advocating public awareness and education on the Dolly Sods area. Nick discusses statistics of public use of the area and what risks the site presents to the public. A public awareness campaign had begun in 2003 for Dolly Sods.

8:15pm – Open forum was opened for questions and statements to be made

- Rick Meadows states that the contractor has been given the go-ahead to make informational video and area maps, but they will not be released until final assessment. 10,000 hard copies of the maps will be distributed. A digital version of the map will also be available for download from the USACE website.
- Rodger Ozburn asks whether Forest Service offices will get copies of map.
- Rick Meadows insures that all interested parties will receive copies of map.
- Erich Guy states that a hard copy of the “Draft Final Report,” of which a digital copy has already been provided, is available. A hard copy is also available in the public repository located at the USFS office in Elkins, WV, or by contacting USACE Huntington District.
- Rick Meadows inquires whether everybody received a copy of the Public Awareness Plan. Public replies affirmatively, but Rick gives John Safstrom a copy, just in case. Rick then asks if anybody would like a copy of the Recurring Review, and also gives John a copy of the Recurring Review.
- Nick McHenry passes out CDs of the May 25th 2004 version of the West Virginia Maneuver Area Dolly Sods Region Administrative Record.
- Rick Meadows passes out promotional items, such as whistles and water bottles with warning messages, designed as part of the public awareness/education campaign.

8:25pm – Meeting Adjourned



DEPARTMENT OF THE ARMY
HUNTINGTON DISTRICT, CORPS OF ENGINEERS
502 EIGHTH STREET
HUNTINGTON, WEST VIRGINIA 25701-2070

*Dolly Sods
Recurring
Review*

REPLY TO
ATTENTION OF:

May 7, 2004

Engineering and Construction Division
Construction Management and Field Support Branch
Environmental and Remediation Section

Subject: Public Meeting for Recurring Review Study, Dolly Sods-Former West Virginia
Maneuver Area, Davis, West Virginia

Grant County Chamber of Commerce
P.O. Box 1366
Petersburg, WV 26847

Dear Sir or Madam,

On behalf of the Huntington District of the U.S. Army Corps of Engineers, I would like to extend an invitation to you to attend a public meeting for the Dolly Sods, former West Virginia Maneuver Area project. The meeting will be held 2 June 2004 at 7:00pm at Blackwater Falls State Park Conference Center near Davis, West Virginia. This meeting is being held in order to present study findings, answer questions, and solicit comments/input from the public and team members concerning the recent Ordnance and Explosives Recurring Review study and draft final report. This meeting will also be the start of the public comment period, which will last from June 2 through July 1, 2004. Comments from this meeting and the public comment period will be summarized and placed in a responsiveness summary section of the recurring review report.

If you have any questions or requests for further information please feel free to contact Erich Guy (304-399-5283) or myself (304-399-5388). Attached you will find an agenda for the public meeting and information concerning the public comment period for the draft final report; please share this information with others who may also be interested in attending.

Sincerely,

Richard L. Meadows
Project Manager

Enclosures

This letter was also sent to the following recipients:

Recipient	Organization	Street Address	City, State, Zip	Phone Number
	Grant County Chamber of Commerce	P.O. Box 1366	Petersburg, WV 26847	304-257-2722
Brenda Pritt, Executive Director	Randolph County Chamber of Commerce	315 Railroad Ave.	Elkins, WV 26241	800-422-3304
Mr. Kevin Bruny, President	WV Wesleyan College	59 College Ave.	Buchannon, WV 26201	304-473-8000
Angie Senic, Principal	Aldredge Academy	PO Box 310, William Ave.	Davis, WV 26260	(888) 468-1828
Dr. Mann	Davis & Elkins College	100 Campus Drive	Elkins, WV 26241	(304) 637-1900
Dr. Daniel J. Bradley, President	Fairmont State University, Office of the President	1201 Locust Ave.	Fairmont, WV 26554-1201	(304) 367-4000 800-641-5678
Dr. Thomas H. Powell, President	Glenville State College	200 High St.	Glenville, WV 26351	(304) 462-7361
Dr. Tom Pauley	Marshall University, Department of Biological Sciences	One John Marshall Dr.	Huntington, WV 25755	(304) 696-2376
Dr. Linda S. Dunn, President	Eastern WV Community & Technical College	HC 65 Box 402	Moorefield, WV 26836	(304) 434-8000 877-982-2322
Bill Grafton, Extension Specialist and Associate Professor	Center for Agriculture, Natural Resources, and Community Development	311 Percival Hall, PO Box 6125	Morgantown, WV 26506-6125	(304) 293-4797 x2493
Dr. David L. Dunlop, President	Shepherd College, Office of the President	Ikenberry 114, P.O. Box 3210	Shepherdstown, WV 25443-3210	(304) 876-5107
Dr. Richard Owens, President	West Virginia Liberty State College	P.O. Box 295	West Liberty, WV 26074-0295	(800) 732-6204
Joe Drenning	Mayor of Davis	P.O. Box 207	Davis, WV 26260	(304) 259-5302
Walt L. Schmidlen, Commission President	County Court House - Randolph County	P.O. Box 368	Elkins, WV 26241-0368	(304) 636-0543 or 2057

Recipient	Organization	Street Address	City, State, Zip	Phone Number
The Honorable Willard Herron, President	Randolph County Commission	P.O. Box 2092	Elkins, WV 26241	(304) 636-2057
The Honorable Walter Schmidlen III, Representative	Randolph County Commission	P.O. Box 2092	Elkins, WV 26241	(304) 636-2057
Judith Guye	Mayor of Elkins	401 Davis Ave.	Elkins, WV 26241	(304) 636-1414
Judith Lazeere	Assistant to the Mayor's Office	401 Davis Ave.	Elkins, WV 26241	(304) 636-1414
J. P. Bodkin, Commission President	County Court House - Pendleton County	P.O. Box 187	Franklin, WV 26807	(304) 358-2505 or 7573
Arlie Davis, Commission President	County Court House - Tucker County	215 1st St.	Parsons, WV 26287	(304) 478-2866
Jeffrey S. Barger, Commission President	County Court House - Grant County	5 Highland Ave.	Petersburg, WV 26847-1705	(304) 257-4550 or 4422
Peggy Alt, Director	Office of Emergency Services, Grant County	5 Highland Ave.	Petersburg, WV 26847	(304) 257-2140
Russ Murphy, Director	Office of Emergency Services, Pendleton County	P.O. Box 911	Franklin, WV 26807	(304) 358-2157
Marvin Hill, Director	Office of Emergency Services, Randolph County	25 High St.	Elkins, WV 26241	(304) 358-2157
Jim Propst, Director	Office of Emergency Services, Tucker County	116 7th St.	Parsons, WV 26278	(304) 478-3248
	U.S. Forest Service	HC 59 Box 240	Petersburg, WV 26847	(304) 257-4488 (888) 283-0303
Cesar Lee	U.S. Environmental Protection Agency, Region III	1650 Arch St.	Philadelphia, PA 19103-2029	(800) 438-2474

Recipient	Organization	Street Address	City, State, Zip	Phone Number
Donald Martin	WV Department of Environmental Protection, Office of Environmental Remediation	1356 Hansford St.	Charleston, WV 25301	(304) 924-6211
Jim Maurin	WV Department of Environmental Protection	2031 Pleasant Valley Road, suite 1	Fairmont, WV 26554-9295	(304) 368-3950
James Snyder, Environmental & Threat Preparedness	WV Office of Environmental Health Services	206 1/2 Third St.	Parsons, WV 26287	(304) 478-3572
Raymond Harr, Environmental & Threat Preparedness	WV Office of Environmental Health Services	P.O. Box 520	Franklin, WV 26807	(304) 358-7565
Robert Livingston, Environmental Sandria Glasscock, Threat Preparedness	WV Office of Environmental Health Services	P.O. Box 608, Rt. 28	Petersburg, WV 26847-0608	(304) 257-4922
Warren Elmer, Environmental & Threat Preparedness	WV Office of Environmental Health Services	201 Henry Ave.	Elkins, WV 26241	(304) 636-0396
	Canaan Valley Institute	Northgate Business Park, 1 Creative Place	Charleston, WV 25311	304-345-4550
	Canaan Valley Institute	P.O. Box 673	Davis, WV 26260	(800) 922-3601
<u>Susan Schneider,</u> <u>Acting President</u>	Mountaineer Audubon Society	P.O. Box 422	Morgantown, WV 26507-0422	(304) 291-3005
<u>Diana Mullis,</u> <u>President</u>	<u>Potomac Valley Audubon Society</u>	P.O. Box 578	Shepherdstown, WV 25443	(304) 267-3482
	Sierra Club Mid-Atlantic Field Office	200 N. Glebe Rd. #905	Arlington, VA 22203	(703) 312-0533
	Sierra Club WV Chapter	631 Jefferson Ave.	Charles Town, WV 25414	(304) 725-4360
Frank Slider	Sierra Club WV Chapter	Rt.1 Box 163A2	Middlebourne, WV 26149-9774	(304) 758-2500

Recipient	Organization	Street Address	City, State, Zip	Phone Number
<u>Frederick McCullough,</u> <u>President</u>	The Brooks Bird Club, Inc.	P.O. Box 4077	Wheeling, WV 26003	
	The Nature Conservancy of WV, Charleston Office	P.O. Box 3754	Charleston, WV 25337	(304) 345-4350
Rodney Bartgis, State Director	The Nature Conservancy of WV	P.O. Box 250	Elkins, WV 26241	(304) 637-0160
Julian Martin	WV Highlands Conservancy	1525 Hampton Road	Charleston, WV 25314	(304) 342-8989
Lisa Garland, Issues Coordinator	WV River Coalition	801 N. Randolph Ave.	Elkins, WV 26241	(304) 637-7201
Martha Ballman, Program Coordinator	WV Trails Coalition	P.O. Box 487	Nitro, WV 25143	(304) 755-4878
Grant County Fire Department	VFD Maysville	General Delivery	Maysville, WV 26833	(304) 749-7731
Grant County Fire Department	VFD Mount Storm	P.O. BOX 14	Mount Storm, WV 26739	(304) 693-7157
Grant County Fire Department	VFD Petersburg	49 S. Main St.	Petersburg, WV 26847	(304) 257-1122
Pendleton County Fire Department	VFD South Fork	P.O. BOX 297	Brandywine, WV 26802	(304) 249-5232
Pendleton County Fire Department	VFD Circleville	P.O. BOX 29	Circleville, WV 26804	(304) 567-2440
Pendleton County Fire Department	VFD Franklin	P.O. BOX 902	Franklin, WV 26807	(304) 358-7911
Pendleton County Fire Department	VFD Seneca Rocks	P.O. BOX 68	Seneca Rocks, WV 26884	(304) 567-2242
Pendleton County Fire Department	VFD Upper Tract	HC 62 BOX 74	Upper Tract, WV 26866	(304) 249-6390
Randolph County Fire Department	VFD Beverly	P.O. BOX 135	Beverly, WV 26253	(304) 636-5032
Randolph County Fire Department	VFD Coalton	P.O. BOX 201	Coalton, WV 26257	(304) 636-8112

Recipient	Organization	Street Address	City, State, Zip	Phone Number
Randolph County Fire Department	VFD Tygart Valley	P.O. BOX 50	Dailey, WV 26259	(304) 338-2090
Randolph County Fire Department	VFD Elkins	216 4TH ST	Elkins, WV 26241	(304) 636-3449
Randolph County Fire Department	VFD Harman	P.O. BOX 131	Harman, WV 26270	(304) 227-4500
Randolph County Fire Department	VFD Huttonsville/Mill Creek	P.O. BOX 66	Huttonsville, WV 26273	(304) 335-2385
Randolph County Fire Department	VFD Leading Creek	P.O. BOX 158	Kerens, WV 26276	(304) 636-7414
Randolph County Fire Department	VFD Pickens	P.O. BOX 75	Pickens, WV 26230	(304) 924-6637
Randolph County Fire Department	VFD Valley Head	P.O. BOX 36	Valley Head, WV 26294	(304) 339-4343
Randolph County Fire Department	VFD Whitmer	P.O. BOX 68	Whitmer, WV 26296	(304) 227-4444
Tucker County Fire Department	VFD Canaan Valley	P.O. BOX 545	Davis, WV 26260	(304) 866-7450
Tucker County Fire Department	VFD Parsons	216 Main St.	Parsons, WV 26287	(304) 478-4949
Tucker County Fire Department	VFD Thomas	P.O. BOX 27	Thomas, WV 26292	(304) 463-4260
Sterling Lewis, Fire Marshall	WV State Fire Marshall's Office	1207 Quarrier St., (2nd Floor)	Charleston, WV 25301	(304) 558-2191 ext. 4 800-233-3473
Donald Simon, Law Enforcement Officer	U.S. Forest Service	200 Sycamore St.	Elkins, WV 26241	(304) 636-1800
Randolph County Sheriff	Randolph County Court House	P.O. Box 368	Elkins, WV 26241-0368	(304) 636-0543 or 2057
	WV State Police, Troop 3 Command Headquarters, Randolph Co.	1300 Harrison Ave.	Elkins WV, 26241-3323	(304) 637-0285
Dick Hall, Wildlife Management	WV DNR	Ward Road, P.O. Box 67	Elkins, WV 26241	(304) 637-0245

Recipient	Organization	Street Address	City, State, Zip	Phone Number
Gary Foster, Wildlife Management	WV DNR	1304 Goose Run Road	Fairmont, WV 26554-1392	(304) 367-2720
Pendleton County Sheriff	Pendleton County Court House	P.O. Box 187	Franklin, WV 26807	(304) 358-2505 or 7573
	WV State Police, Troop 3 Command Headquarters, Pendleton Co.	P.O. Box 278	Franklin, WV 26807-0278	(304)358-2200
	WV State Police, Troop 3 Command Headquarters, Tucker Co.	P.O. Box 113	Parsons, WV 26287-0113	(304)478-3101
Tucker County Sheriff	Tucker County Court House	215 1st St.	Parsons, WV 26287	(304) 478-2866
Grant County Sheriff	Grant County Court House	5 Highland Ave.	Petersburg, WV 26847-1705	(304) 257-4550 or 4422
Tom Ennist, Law Enforcement Officer	U.S. Forest Service	HC 59, Box 240	Petersburg, WV 26847	(304) 257-4488
Gary Strawn, Wildlife Management	WV DNR	1 Depot Street	Romney, WV 26757-1400	(304) 822-3551
Roy G. Jones, Principal	Grant County, Petersburg High School	207 Jefferson Ave.	Petersburg, WV 26847	(304) 257-1444
Mark E. Nicol, Principal	Grant County, Maysville Elementary School	7147 Highway 42s	Maysville, WV 26833	(304) 749-7441
Robert H. Sisk, Principal	Grant County, South Branch Vocational School	401 Pier Point St.	Petersburg, WV 26847	(304) 257-1331
Harold J Cunningham, Principal	Grant County, Petersburg Elementary School	333 Rig St.	Petersburg, WV 26847	(304) 257-1110
Richard H. Hicks, Principal	Grant County, Union Educational Complex	Hc 76 Box 750	Mount Storm, WV 26839	(304) 693-7612
Mitchell D. Webster, Principal	Grant County, Dorcas Elementary School	Hc 33 Box 1060	Petersburg, WV 26847	(304) 257-1220

Recipient	Organization	Street Address	City, State, Zip	Phone Number
Lincoln Propst, Principal	Pendleton County, Brandywine Elementary School	Hc 74, Box 33-A P.O. Box 247	Brandywine, WV 26802	(304) 249-5381
Robert Knighton, Principal	Pendleton County, North Fork Elementary School	P.O. Box 9 One School Lane	Circleville, WV 26804- 0009	(304) 567-3193
John R. Marra, Principal	Pendleton County, Franklin Elementary School	409 Evick Drive P.O. Box 848	Franklin, WV 26807- 0848	(304) 358-2206
Douglas S. Lambert, Principal	Pendleton County Middle/High School	P.O. Box 40 147 Maple Ave.	Franklin, WV 26807- 0040	(304) 358-2573
Diana Lynn Arbogast, Principal	Randolph County, Beverly Elementary School	P.O. Box 209	Beverly, WV 26253- 0209	(304) 636-9162
Barry S. Band, Principal	Randolph County, Elkins Third Ward Elementary School	111 Nathan St.	Elkins, WV 26241- 3399	(304) 636-9183
Terry M. Nelson, Principal	Randolph County, Coalton Elementary School	P.O. Box 129	Coalton, WV 26257- 0129	(304) 636-9164
Franklin Henry Collier, Principal	Randolph County, George Ward Elementary School	P.O. Box 278	Mill Creek, WV 26280 0278	(304) 335-4975
Thomas Edwin Pritt, Principal	Randolph County, Elkins High School	100 Kennedy Drive	Elkins, WV 26241- 9547	(304) 636-9170
C. Paul Gowers, Principal	Randolph County, Harman Elementary/High School	General Delivery	Harman, WV 26270- 9999	(304) 227-4114
Donley Teter	Randolph County, Harman Elementary/High School	General Delivery	Harman, WV 26270- 9999	(304) 227-4114
David F. Roth, Principal	Randolph County, Elkins Middle School	308 Robert E. Lee Ave.	Elkins, WV 26241- 3299	(304) 636-9176
Diane K. Hull, Principal	Randolph County, Homestead Elementary School	P.O. Box 33	Dailey, WV 26259- 0158	(304) 338-4903
Rebecca Baker Whiteman, Principal	Randolph County, Jennings Randolph Elementary School	101 Scott Ford Road	Elkins, WV 26241- 3099	(304) 636-9181

Recipient	Organization	Street Address	City, State, Zip	Phone Number
Donald William Johnson, Principal	Randolph County, Randolph County Vocational-Technical Center	200 Kennedy Drive	Elkins, WV 26241-9527	(304) 636-9195
Bruce Alan Kolsun, Principal	Randolph County, Midland Elementary School	150 Kennedy Drive	Elkins, WV 26241-9547	(304) 636-9186
Pamela Sue-Isner Hewitt, Principal	Randolph County, North Elementary School	Rt. 2, Box 320	Elkins, WV 26241-9629	(304) 636-9188
James Holland Biggs, Principal	Randolph County, Pickens Elementary/High School	Rt. 45	Pickens, WV 26230-9999	(304) 924-5525
Paul Garlow Zickefoose, Principal	Randolph County, Valley Head Elementary School	Rt. 219 South	Valley Head, WV 26294-9999	(304) 339-4950
Wilbert Vernon Smith, Principal	Randolph County, Tygart Valley Middle/High School	P.O. Box 68	Mill Creek, WV 26280-0068	(304) 335-4575
Carol M. Gwinn, Principal	Tucker County, Davis Thomas Elementary Middle School	P.O. Box 250	Thomas, WV 26292	(304) 463-4422
Joseph T. Michael, Principal	Tucker County High School	Rt. 1 Box 153	Hambleton, WV 26269	(304) 478-3111
Joyce Carrico, Principal	Tucker Valley Elementary Middle School	100 Crest Ave.	Hambleton, WV 26269	(304) 478-3606
Debbie Horst	Pendleton County, Convention & Visitors Bureau	P.O. BOX 187	Franklin, WV 26807	(304) 358-7068 or 7573
Brenda Pritt	Randolph County, Convention & Visitors Bureau	315 Railroad Ave.	Elkins, WV 26241	(304) 636-2717 800-422-3304
Bill Smith	Tucker County, Convention & Visitors Bureau	PO Box 565, William Ave. & 4th St.	Davis, WV 26260	(304) 259-5315 800-782-2775
Bonnie Branciaroli	WV Mountain Highlands (Regional Travel Association)	P.O. Box 1456	Elkins, WV 26241	(304) 636-8400 877-WVA-MTNS

Recipient	Organization	Street Address	City, State, Zip	Phone Number
David Arnold, Chairman	WV Division of Tourism	90 MacCorkle Ave. SW	South Charleston, WV 25303	(304) 558-2200 800- 225-5982
District Ranger	<u>Cheat Ranger District</u>	P.O. Box 368	Parsons, WV 26287	(304) 478-3251
District Ranger	Gauley Ranger District	HC 80, Box 117	Richwood, WV 26261	(304) 846-2695
District Ranger	Greenbrier Ranger District	Box 67	Bartow, WV 24920	(304) 456-3335
District Ranger	Marlinton Ranger District	P.O. Box 210	Marlinton, WV 24954- 0210	(304) 799-4334
District Ranger, Special Use Manager	Potomac Ranger District, US Forest Service	HC 59 - Box 240	Petersburg, WV 26847	(304) 257-4488 x.16
District Ranger	Potomac Ranger District	HC 59, Box 240	Petersburg, WV 26847	(304) 257-4488
Jeffery J. Hammes, District Ranger	U.S. Forest Service	P.O. Box 368	Parsons, WV 26287	(304) 642-1860
Kate Goodrich, Public & Legeslative Affairs	U.S. Forest Service	200 Sycamore St.	Elkins, WV 26241	(304) 636-1800 x220
Carol Whetsell	U.S. Forest Service	P.O. Box 368	Parsons, WV 26287	(304) 478-3251 x105
District Ranger	White Sulphur Springs District	410 E. Main St.	White Sulphur Springs, WV 24986	(304) 536-2144
Steve Upton	WV Division of Forestry	1900 Kanawha Blvd., East	Charleston, WV 25305-0180	(304) 558-2788
Matt Dillon	WV Division of Forestry	1900 Kanawha Blvd., East	Charleston, WV 25305-0180	(304) 558-2788
Rudy Williams	WV Division of Forestry	1900 Kanawha Blvd., East	Charleston, WV 25305-0180	(304) 558-2788
M. Rodger Ozburn,	WV Division of Forestry	P.O. Box 6125	Morgantown, WV 26506	(304) 293-2941 x2475
Ronald L. Brownfield		4054 Blue Sulphur Road	Ona, WV 25545	

DOLLY SODS REGION
FORMER WEST VIRGINIA
MANEUVER AREA



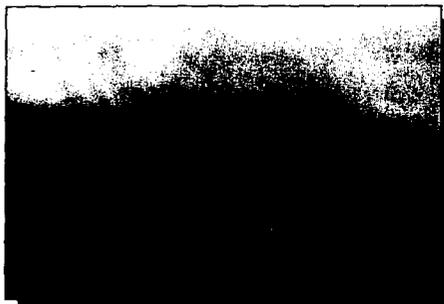
PUBLIC MEETING

WEDNESDAY, JUNE 2, 2004 AT 7:00 PM

THE MEETING WILL BE HELD AT THE CONFERENCE CENTER OF THE BLACKWATER LODGE
LOCATED IN BLACKWATER FALLS STATE PARK OFF OF ROUTE 32 IN DAVIS, WV

MEETING AGENDA

- * WELCOME
- * INTRODUCTION - PROJECT HISTORY
- * PREVIOUS U.S. ARMY CORPS OF ENGINEERS ACTIONS SUMMARY
- * GIS TECHNOLOGY DEMONSTRATION
- * RECURRING REVIEW STUDY: CONCLUSIONS, AND RECOMMENDATIONS
- * RECENT PUBLIC AWARENESS AND EDUCATION EFFORTS
- * OTHER BUSINESS
- * QUESTIONS AND DISCUSSION



IF YOU HAVE ANY QUESTIONS
REGARDING THE MEETING, PLEASE
CONTACT: RICK MEADOWS
THE U.S. ARMY CORPS OF ENGINEERS
AT 304-399-5388



**US Army Corps
of Engineers**
Huntington District

RECURRING REVIEW
PUBLIC COMMENT PERIOD AND
PUBLIC MEETING NOTICE

**DOLLY SODS REGION,
FORMER WEST VIRGINIA MANEUVER AREA**

The U.S. Army Corps of Engineers (USACE) solicits input from the community on the conclusions and recommendations resulting from a recent recurring review study. The study purpose is to ensure that an implemented 1997 to 1998 ordnance removal action in the Dolly Sods region continues to minimize explosives safety risks, and continues to be protective of human health, safety, and the environment.

The USACE has set a public comment period for the draft final recurring review report from June 2 to July 1, 2004 to encourage public participation in the process. The report is available for public review at the U.S. Forest Service Office, and the project public repository, which are located at:

Monongahela National Forest Headquarters
200 Sycamore Street
Elkins, WV 26241

The report is also available by contacting the USACE Huntington District:

U.S. Army Corps of Engineers
Attn: Erich Guy (CELRH-EC-CE)
502 Eighth Street
Huntington, WV 25701
Phone: 304-399-5283

The comment period includes one meeting, open to the general public, at which the USACE will present study findings, answer questions, and accept both oral and written comments. The public meeting is scheduled for June 2, 2004 at 7:00 p.m., and will be held at the conference center of the Blackwater Lodge, located in Blackwater Falls State Park, Davis, WV. Comments from the public will be summarized and responses provided in the responsiveness summary section of the final recurring review report. The report presents the USACE's conclusions and recommendations for further action at the site. To send written comments or obtain further information, contact:

U.S. Army Corps of Engineers
Attn: Rick Meadows (CELRH-PM-P)
502 Eighth Street
Huntington, WV 25701

*Dolly Sods
Recurring Review*

Meadows, Richard L LRH

From: Guy, Erich D LRH
Sent: Wednesday, March 24, 2004 2:38 PM
T Meadows, Richard L LRH; Meadows, David F LRH
C Albert, Frank R JR LRH; McHenry, Nickolas L LRH
Subject: Dolly Sods Recurring Review Proposed Schedule

Rick and Dave:

Within a couple of weeks our in-house QC review process will be done for the draft Dolly Sods Recurring Review report. Below are proposed plans for finishing up this review process:

- 1) On ~April 9, the 2nd version of the draft report will be given to Office of Council and the CX (Bill Veith) for their review. Wally Dean will also be given a copy at this time. After receiving and accomodating their comments/concerns, a draft final version will be done by ~May 20 (hopefully sooner).
- 2) Notification of a 30 day public comment period for the draft final version, and notification of a public meeting will be published in a local paper. The draft final version will be placed in the public repository in Elkins. Courtesy copies of the draft final version will be provided to team members (WVDEP, USFS, WFDofF). The public meeting will be held during the public comment period, e.g. ~first week in June. We will give presentations concerning the project, the recurring review study and recommendations, and ongoing public awareness efforts at the meeting. We will also complete necessary repository updating and the next bi-annual monitoring event during this visit to the site.
- 3) Upon completion of the public comment period, we will prepare a responsiveness summary. The report, after comments are addressed, will be finalized before the end of June; it will need to have a signed determination by the District Commander regarding the report conclusions. We will then seek concurrence on the final report from regulators, and then distribute final copies.

Do you want to proceed as such, or do you have suggested modifications?

E

Meadows, Richard L LRH

*Dolly Sods
Recurring Review*

From: Guy, Erich D LRH
Sent: Tuesday, September 09, 2003 3:18 PM
To: Albert, Frank R JR LRH; Meadows, Richard L LRH; Veith, William D HNC
Subject: recent ordnance find at Dolly Sods

I spoke to the USFS ranger today that verified the 7/28/03 4.2" HE round that was found by a camper in DS North. He informed me that the round was found when the camper was setting up camp about 50' north of the trail (what we have been referring to as the Raven's Ridge trail; the one that we hiked on 8/19/03). The camper noticed the round when he laid his head down; the baseplate of the round was sticking half-way out of the ground next to him.

So, it's good news that the round wasn't located within 20' of the trail which was previously cleared through USACE removal action during 1998.

Erich

*Dolly Sods
New Mountain
"Recovery"
Action*

**Minutes of the Public Information Meeting
Concerning the Dolly Sods Area
Seneca Rocks Discovery Center, Seneca Rocks, West Virginia
August 19, 2003**

Attendees:

Name	Organization	Phone Number
Rick Meadows	USACE-Huntington	304-529-5388
Nick McHenry	USACE-Huntington	304-399-5909
Wally Dean	USACE-Huntington	304-529-5712
Diana White	S&C Advertising	614-436-3058
Erich Guy	USACE-Huntington	304-399-5283
Bill Veith	USACE-Huntsville	256-895-1592
Thomas K. Pauley	Marshall University	304-696-2376
Will Stevens	USACE-Huntington	304-399-5941
Earline Lagueruela	S&C Advertising	210-614-7000 x305
Carol L. Whetsell	US Forest Service	304-478-3251 x105
Thomas L. Bass	WVDEP	304-558-2508
Donley Teter	Harman School	304-227-4594
Frank Albert	USACE-Huntington	304-399-5760
John Grevera	S&C Advertising	210-614-7000

6:45pm - Setup for meeting began. (This included film crew setup and projector setup.)

7:35 - Frank Albert discussed the public meeting agenda and presented a brief history of the Dolly Sods/Former WV Maneuver area and USACE actions to date.

7:50 - Erich Guy discussed the application of new technologies (including the use of digital Administrative Record/Public Repository, website design, GPS and GIS) on this project and the Ordnance and Explosives Recurring Review Process that USACE is conducting.

8:10 - Earline Lagueruela discussed Public Awareness and Community Relations Plans. She said that S&C had recently conducted a community and hiker survey pertaining to awareness of ordnance in the Dolly Sods Area. Earline also said that the various agencies need to discuss ways to better inform the public of the dangers that are present in this area.

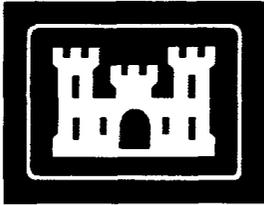
8:15 - Open forum was opened; questions asked/statements made were:

- Rick Meadows invited everyone present to the Partnering Meeting that was to be held on August 20, 2003, at 8:30 am at the Canaan Valley Lodge.
- Wally Dean said that the USACE should provide the Forest Service with an accurate trail map for use at the Dolly Sods Area.
Response – Carol Whetsell of the US Forest Service said that there are numerous trails in the Dolly Sods North Area that are not "Official Trails",

but are used by hikers. These are either old Jeep or logging truck roads, or wildlife trails.

- Rick Meadows said that hikers he had talked to on the trail suggested that trash bags should be provided so they can bring out their trash.
- Wally Dean said that there is another endangered species in the Dolly Sods Area besides the Cheat Mountain Salamander; the Virginia Flying Squirrel.
- Wally Dean said that an archeological/cultural resources investigation was also conducted during the 1997-98 ordnance removal action.

8:35pm - Meeting was adjourned.



**U.S. ARMY CORPS
OF ENGINEERS**



ORDNANCE AND EXPLOSIVES RECURRING REVIEW

**DOLLY SODS PROJECT, FORMER WEST VIRGINIA MANEUVER AREA
MONONGAHELA NATIONAL FOREST, WEST VIRGINIA
FINAL REPORT - JULY 2004**

5 Aug 2004

Memorandum Thru: PM-PP (T. Wohig), EC (J. Jeger), OC (Iarrusso), PM (Miller), DD (Graham), DE (Bulen)

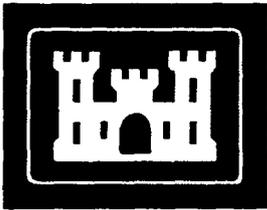
Subject: Approval of Dolly Sods Recurring Review Report

1. The Formerly Used Defense Sites Program Policy (ER 200-3-1, dated 10 May 04) defines the requirements for five-year reviews at FUDS projects. In accordance with CERCLA, as amended by SARA, and the NCP, remedial actions that do not allow unlimited use and unrestricted exposure (UU/UE) must be reviewed no less than every 5 years after the start of the remedial action, or more frequently if required by the ROD/DD. The requirement for five-year reviews applies to all HTRW, MMRP, and CON/HTRW projects (except for CON/HTRW projects involving only petroleum) where the implemented response does not allow for unlimited use and unrestricted exposure. Geographic Districts are responsible for assuring that all five-year reviews are conducted in accordance with CERCLA and the NCP.
2. The attached Ordnance and Explosives Recurring Review Report for the Dolly Sods project was prepared in accordance with ER 200-3-1 and EP 75-1-4 which provides specific procedures for developing and implementing five-year review requirements on military munitions response actions. The purpose of five-year reviews is to determine if the implemented response action continues to minimize explosives safety risks and continues to be protective of human health, safety, and the environment.
3. The Dolly Sods Recurring Review Report concludes that the ordnance removal actions completed in 1997 and 1998 in Dolly Sods Wilderness, Dolly Sods North and Dolly Sods Scenic Area of the former West Virginia Maneuver Area are functioning as intended, and are still protective of human health, safety and the environment. Geographic District Commander approval of this report is required.
4. Request you provide your approval of this report by signature on the 1st page in the designated area.
5. If you have any questions or need additional information, please contact me at (304) 399-5388.

FOR COMMANDER



Richard L. Meadows
Project Manager



**U.S. ARMY CORPS
OF ENGINEERS**



**ORDNANCE AND EXPLOSIVES RECURRING REVIEW
DOLLY SODS PROJECT, FORMER WEST VIRGINIA MANEUVER AREA
FUDS PROPERTY #G03WV0013
GRANT, RANDOLPH, AND TUCKER COUNTIES, WEST VIRGINIA
FINAL REPORT - JULY 2004**

Prepared by:
U.S. Army Corps of Engineers, Huntington District

Approved by:


WILLIAM E. BULEN Date

Colonel, Corps of Engineers
Commanding

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LIST OF ACRONYMS

AP	Armor-Piercing
AR	Administrative Record
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
DERP	Defense Environmental Restoration Program
DoD	Department of Defense
DOQQ	Digital Orthophoto Quarter Quads
DSN	Dolly Sods North
DSSA	Dolly Sods Scenic Area
DSW	Dolly Sods Wilderness
EA	Environmental Assessment
EOD	Explosive Ordnance Disposal
FONSI	Finding of No Significant Impact
FR 19	Forest Road 19
FR 75	Forest Road 75
FUDS	Formerly Used Defense Sites
GIS	Geographic Information System
GPS	Global Positioning System
HE	High Explosive
HFA	Human Factors Applications, Inc.
HQDoA	Headquarters, Department of the Army
NBE	New Bold Enterprises
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
OE	Ordnance and Explosives
PAP	Public Awareness and Organizational Plan
PIP	Public Involvement Plan
PR	Public Repository
RAB	Restoration Advisory Board
RI/FS	Remedial Investigation/Feasibility Study
SCPR	S&C Advertising and Public Relations
SSHP	Site Safety and Health Plan
SR	Smoke Round
USACE	United States Army Corps of Engineers
USAESC	United States Army Engineering and Support Center
USDoA	United States Department of the Army
USFS	United States Forest Service
USGS	United States Geological Survey
UXO	Unexploded Ordnance
WVDEP	West Virginia Department of Environmental Protection
WVDoF	West Virginia Division of Forestry
WVMA	West Virginia Maneuver Area
WWII	World War II

EXECUTIVE SUMMARY

The U.S. Army Corps of Engineers (USACE), Huntington District, Environmental and Remediation Section, with technical support provided by the U.S. Army Engineering and Support Center (USAESC), Ordnance and Explosives Center of Expertise, Huntsville, conducted an Ordnance and Explosives (OE) recurring review of the Dolly Sods region of the former West Virginia Maneuver Area (WVMA). The purpose of this review was to ensure that an implemented 1997 to 1998 ordnance removal action continues to minimize explosives safety risks and continues to be protective of human health, safety, and the environment. The review process consisted of the following activities: the notification and involvement of stakeholders, the review of existing and relevant documentation and data, the identification and review of recent and new information, a community survey and public interviews, and an assessment of site conditions. This report documents employed review process methodologies, and presents the findings, conclusions, and recommendations attained.

This review concludes that the 1997 to 1998 ordnance removal action completed in the Dolly Sods Wilderness, Dolly Sods North, and Dolly Sods Scenic Area of the former WVMA is functioning as intended; it is still protective of human health, safety, and the environment. No unexploded ordnance (UXO) or OE-related scrap were identified during the site assessment, nor were any OE concerns due to erosion, storm damage, changes in land-use, or recreational use found. Vegetation provides soil stability across most of the region, and site conditions and usage have not changed noticeably since the removal action. Mountainous and rugged terrain along with dense vegetation makes human access to many portions of the region that were not cleared for ordnance difficult. If high amounts of erosion occur (e.g., due to a severe storm), if vegetation is removed (e.g., due to fire), or if recreational or land-use changes occur (e.g., if new campsites, roads, or trails are made), then an increased potential of encountering OE items in these areas may result.

Prior to the 1997 to 1998 removal action there were many instances (e.g. an average of ten per year during one ten year period) in which UXO was encountered along designated trails and at inventoried campsites. Since 1998, there have been seven cases of encountered UXO by recreational visitors. In each case, UXO was found in an area that receives little visitor traffic, nobody was injured, and the U.S. Army Explosive Ordnance Disposal (EOD) conducted disposal after being contacted through established notification and reporting processes. No UXO has been found since 1998 in the highly used areas of Dolly Sods (i.e. along the trails or at the campsites that were cleared for ordnance), and this indicates that the removal action is functioning as intended. Recent incidents have occurred because visitors have wandered away from cleared trails, and because a complete detection and removal of ordnance in the region could not be accomplished due to the environmental damage that would occur, the extremely high estimated cost, and technology limitations. The 1997 to 1998 removal action was not expected to negate ordnance-related risk entirely, therefore, continued periodic reviews of the site and the education of individuals who use the region, are necessary.

Institutional controls are currently in place; however, certain controls require improvement, and additional controls are necessary to increase public awareness and ensure continued safety. Based on the site assessment, signs warning visitors of the potential to encounter ordnance do exist in the region, but they are not present at many highly used locations. While certain trail sections are well marked and maintained, many designated trail sections are not, and it is therefore difficult to remain only in areas that have been cleared for ordnance when hiking. Based on community survey results, roughly half of the region's visitors do not see any information regarding the potential to find hazardous ordnance items, most are unaware of the proper locations to hike and/or camp, and most are unaware of proper ordnance-related incident reporting procedures. More than half of the individuals surveyed feel that additional measures should be taken to ensure that the community is aware of existing ordnance-related risk. It is recommended that several programs focused on educating the community be continued and in some cases improved, and that several new such programs be established.

1.0 INTRODUCTION

This report presents the methods, findings, conclusions, and recommendations for the Ordnance and Explosives (OE) recurring review of a region of the former West Virginia Maneuver Area (WVMA) known as Dolly Sods. Field-based portions of this recurring review were conducted at Dolly Sods, West Virginia during the months of August and November 2003. The review was performed by the U.S. Army Corps of Engineers (USACE), Huntington District, with support provided by the U.S. Army Engineering and Support Center (USAESC), Ordnance and Explosives Center of Expertise, Huntsville. Work was conducted under the Defense Environmental Restoration Program (DERP).

1.1 Recurring Review Purpose

This was the first recurring review of the June 1997 through August 1998 ordnance removal action (HFA, 1998; HFA, 1999a) conducted in the Dolly Sods region (Appendix A: Map A1). The removal action was conducted consistent with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). Designated and maintained trails in the Dolly Sods Wilderness (DSW), Dolly Sods North (DSN), and Dolly Sods Scenic Area (DSSA) were cleared of ordnance and 20 feet each side, to a depth of one foot. Inventoried campsites and cabins in the region were cleared to a depth of four feet. The 1997 to 1998 removal action resulted in the removal/disposal of 22 live mortars, 19 inert mortars, and 1151.5 pounds of OE-related scrap; it therefore significantly reduced public risk.

The purpose of this recurring review was to ensure that the implemented 1997 to 1998 ordnance removal action continues to minimize explosives safety risks and continues to be protective of human health, safety, and the environment. Protectiveness is achieved when the potential for harm is reduced or managed, and is maximized when the potential for harm is minimized (Appendix B). To assure sustained functional effectiveness, and in accordance with CERCLA, the review of a previous response action, the identification of any issues of concern, and the recommendation of remedies to address any issues of concern should occur at least every five years (USACE, 2003a).

2.0 SITE DESCRIPTION AND HISTORY

2.1 Location and Pre-WWII Site Status

The Dolly Sods region is located between Canaan Valley and Seneca Rocks within the Monongahela National Forest in Grant, Randolph and Tucker counties of West Virginia (Appendix A: Map A1). High upon the Allegheny Plateau, with elevations ranging from 2,600 to 4,100 feet, the region of more than 18,500 acres is well known for its extensive rocky plains, upland bogs and sweeping vistas. In recent years, 45,000 to 76,000 people have visited the Dolly Sods region annually (USACE, 2003b). The remoteness, natural experience and limited human influences attract adventurous hikers, mountain bikers, anglers, hunters and berry pickers.

The area is named for the pioneer Dahle (pronounced "Dolly") family, which formerly owned and cleared some of the area for grazing. Logging occurred in the area during the late 1800s and came to an end between 1910 and 1913. Fires from logging operations burned so hot that the local topsoil and humus layers were destroyed; this contributed to the formation of the unique environment found in the Dolly Sods region. The U.S. Forest Service (USFS) purchased the land, and during the 1930s the Civilian Conservation Corps planted red pine and other conifers, and aided in the construction of Forest Service Road 75 (FR 75) (USACE, 1995).

2.2 WWII Military Operations

Many of the lands now referred to as Dolly Sods were acquired by the U.S. Federal Government between 1916 and 1939, under authority of the Weeks Act of 1911. This act sanctioned the purchase of lands for natural resource management purposes. During 1943 and 1944, military maneuver exercises and artillery/mortar practice were conducted in the Dolly Sods region by the U.S. Department of the Army (USDoA), as training for involvement in World War II (WWII). The Dolly Sods region was a part of the 2,180,742 total acres of land (USACE, 1991) that comprised the former WVMA. Of this acreage, 350,416 were public lands (all part of the Monongahela National Forest), 48,557 were leased, and 1,781,769 were so-called “lesser interests”. According to a warning order notice dated 26 March 1945; these “lesser interests” were covered by “trespass agreements.” Apparently, the land owners had given use of these lands to the Army verbally; there are no records that describe the “trespass agreements” or the area that they covered (USACE, 1991). Within the former WVMA, artillery/mortar practice activities were reported to have been confined to an area of approximately 50,000 acres at most, in the eastern side of the former WVMA about 12 to 15 miles west of Petersburg (USACE, 2004b).

It is documented (based upon found UXO and OE-related scrap) that rounds fired during the 1943 to 1944 military training included 40 mm, 57 mm armor-piercing (AP) and 105 mm and 155 mm high explosive (HE) projectiles, and 60 mm HE, 81 mm HE and smoke round (SR), and 4.2 inch inert (sand-loaded rounds), HE, and SR mortars (USACE, 2004a). The SR that used, were reported to contain a solution of sulphur trioxide in chlorosulfonic acid (FS) as the filler (USACE, 2004b), and were intended for marking and smoke screen purposes. It is documented (USACE, 2004b) that 75 mm artillery fire occurred in the region, although no physical evidence of such activity has been found. It is also documented (USACE, 2004b) that the Allegany Ballistics Laboratory of George Washington University fired a few experimental rocket mortars; the rocket mortars contained no explosive components, the laboratory completed its firing in November 1945, and no physical evidence of such activity has been found. Information concerning the actual amount of ordnance used for regional training purposes is not available; records regarding military operations in the area are scarce because the majority of pertinent documents have been lost or destroyed over time.

Records regarding training operations are scarce, but it is reported that targets of artillery fire at least included the southern face of Blackbird Knob and the eastern face of Cabin Mountain (USACE, 1995). “Concentrations of fire” were reported to have fallen in the general area of Bear Rocks and Stack Rock (located north of Bear Rocks) (USACE, 2004b). The location of found UXO suggests that there were additional artillery and mortar targets in the region. A map showing the locations of found UXO is not contained in this report due to safety- and security-related issues; this course of action was agreed upon by the project team (see below for team members). Three groups of gun emplacements were reportedly located somewhere in Canaan Valley, along FR 75 from “a point near the Bell Knob tower, north to the end of the road”, and “on the east side of the mountain on the Allegheny Front, in the north part of the Dolly Sods region” (USACE, 1995). A map contained in a recent USACE memorandum (USACE, 2004b) indicates that guns may have also been positioned in the southeast and northeast regions of the DSW, and the southwest region of the DSN. Previous reports, locations of found UXO (USACE, 2004a), and a feasibility study (Metcalf & Eddy, 1992) suggest that rounds were fired from a multitude of locations and at numerous targets in the Dolly Sods region.

2.3 Post-WWII Site Status

Property that had been acquired by the USDoA was returned to the U.S. Department of Agriculture in 1950. In 1970, 10,200 acres of the current Dolly Sods region were designated a National Forest Scenic Area to protect their unique scenic qualities. The DSW was created by an act of Congress in

1975 to preserve and protect the area with special opportunities for solitude, primitive recreation and other scientific, educational, scenic and historical values (NBE, 1997). Management efforts within the 10,215 acre DSW (its boundaries do not coincide with the 1970 Scenic Area boundaries) focus on allowing the forces of nature to reclaim the land, returning it to a natural appearing state. During 1992 and 1993, 6,168.5 acres located north of the DSW were purchased by the USFS from The Nature Conservancy (USACE, 1995); this area is known as the DSN. Lands to the west, north, and northeast of DSN are still privately owned. To the immediate east and southeast of DSN (and to the immediate east of DSW), 2,268 acres along FR 75 have the designation of National Scenic Area. The three tracts: DSW, DSN, and DSSA (Appendix A: Map A1) comprise the region currently known and referred to as Dolly Sods.

3.0 ORDNANCE RESPONSE ACTIONS

3.1 Pre-1997 Response Actions

Following the 1943 to 1944 military maneuvers in the Dolly Sods region, and prior to returning the land to the USFS in 1950, the USDoA (i.e., the Engineer Bomb and Shell Disposal Team No. 6) conducted an ordnance clearance during May 1946 (USACE, 2004b). The team completed a “thorough reconnaissance of the entire WVMA.” Records indicate that the team found and destroyed 189 4.2 inch SR mortars, one 155 mm HE projectile, three 105 mm HE projectiles, two 40 mm projectiles, and “12 or 14” inert (sand-loaded) rounds in the Dolly Sods region; information concerning the locations of all of these found items is not available. All suspected impact areas (which were pointed out to the team by USFS personnel), with the exception of certain regions to the north and northeast of the DSN and DSSA (which were too rough or overgrown to be searched) were thoroughly searched during the 1946 clearance effort; all lands except for the regions not searched were “recommended as safe for grazing, lumbering, or hunting” subsequent to the clearance. During May of 1953, the 549 Ordnance EOD from Baltimore, Maryland conducted a follow-up reconnaissance and disposal mission of suspected impact areas (see above) in the Dolly Sods region. Six live rounds were located and destroyed during this mission, and from the field work it was determined that “previous clearance operations were good.” Additional information concerning these clearance operations is not available; records regarding military operations in the area are scarce because the majority of pertinent documents have been lost or destroyed over time.

The exact amount of ordnance remaining in the Dolly Sods region is undetermined. However, ordnance-related risk is illustrated by a sporadic but continuous discovery of UXO, between the initial USDoA clearance and the year 2003, by recreational visitors. One ordnance-related injury occurred in the region. During December 1951, when Wallace Dean, a current USACE employee and project team member was a teenager, one of his friends picked up a piece of live ordnance and then set it down, at which point it exploded and caused severe damage to Wallace’s legs. Fortunately, Wallace received prompt treatment and was able to walk again within a year. Information concerning the amount and types of OE-related scrap and UXO that have been found and removed/disposed of since 1983 is well documented (USACE, 2004a) and maintained by the USACE Huntington District.

To address ordnance-related concerns in the Dolly Sods region, an ordnance response project was authorized under the DERP for Formerly Used Defense Sites (FUDS). Such projects are authorized for sites that were contaminated while under the control of the Department of Defense (DoD), but were transferred out of DoD control prior to 1986. DoD delegated authority for executing ordnance response activities at FUDS to the USACE through Headquarters, Department of the Army (HQDoA). The USACE Huntington District is the Geographic District with Dolly Sods project management responsibilities, and project technical support is provided by the USAESC in Huntsville.

A remedial investigation/feasibility study (RI/FS) was authorized during 1990 (Vandeveld, 1990). During 1991, the USACE conducted field work to estimate the extent of ordnance contamination in the Dolly Sods region. Sixteen areas totaling 281 acres in the DSW were searched using hand-held magnetometers (Metcalf & Eddy, 1991). The sixteen areas were selected to provide a distribution of investigation, and because they were suspected to likely contain ordnance (based on topography and information obtained during a records search and site investigation). The areas consisted of hilltops (e.g., Breathed Mountain and Cabin Mountain); as they were considered to be likely targets, as well as locations which were considered to likely contain undershots from firing at Blackbird Knob (which is located in DSN and just north of DSW). A "surface sweep" (within six inches of the surface) was conducted and seven pieces of UXO were found. A "subsurface sweep" (between six and 24 inches depth) was also conducted, and six pieces of UXO were found. The 13 total UXO included a 57 mm AP projectile, and 60 mm HE, 81 mm HE and SR, and 4.2 inch inert, HE, and SR mortars. Nine fragments were found in addition to these items. Some of the found ordnance was exploded in place while some was moved a short distance and then exploded (Metcalf & Eddy, 1992).

3.2 1997 to 1998 Response Action

Based on information obtained during the 1991 feasibility study (see above), an Environmental Assessment (EA) was initiated by USACE in 1995 to address remediation alternatives for the Dolly Sods project. An EA and Finding of No Significant Impact (FONSI) were completed for both DSW and DSN in 1995 and 1997 respectively (NBE, 1995; NBE, 1997). An ordnance removal action, focused on significant reduction of public risk in DSW, DSN and DSSA, which considered factors such as cost and environmental impact, was then conducted by USACE during 1997 and 1998.

Ordnance removal activities in DSW occurred between 4 June 1997 and 17 October 1997. Using hand-held magnetometers, Human Factors Applications, Inc. (HFA) cleared 26.14 miles of designated and maintained trails (Appendix A: Map A2) and 20 feet each side (126.7 total acres), to a depth of one foot depth. Inventoried campsites (112 campsites; 8.83 total acres) were cleared to a depth of four feet. Magnetic anomalies resulted in 32,594 digs. Most anomalies resulted from railroad debris and spikes, artifacts such as axes, hammers, picks, and stove parts, and magnetic rocks; such items were returned to their original location. A total of 14 live mortars, including 60 mm HE and 81 mm HE, were found and destroyed by detonation. OE-related scrap (a total of 108 pounds) was recovered in DSW, inspected, and certified then turned over to ENVIRCO Inc. of Baker, WV (HFA, 1998).

DSN and DSSA ordnance removal activities occurred between 20 October 1997 and 18 August 1998 (field work did not occur between November 1997 and May 1998 due to inclement weather). Using hand-held magnetometers, HFA cleared 29.65 miles of designated and maintained trails (Appendix A: Map A2) and 20 feet each side (143.76 total acres), to a depth of one foot. Inventoried campsites and cabins (66 campsites and 6 cabins; 2.18 total acres) were cleared to a depth of four feet. Magnetic anomalies resulted in 23,191 digs. Most anomalies were found to result from railroad debris and spikes, artifacts (see above), and magnetic rocks; such items were returned to their original location. A total of eight live mortars, including 60 mm HE and 4.2 inch SR and HE, were found and destroyed by detonation. Inert (19, 4.2 inch mortars) rounds were also located during the clearance and properly disposed of. OE-related scrap (a total of 1043.5 pounds) was recovered in DSN and DSSA, inspected, and certified then turned over to Champs Salvage of Petersburg, WV (HFA, 1999a).

The 1997 to 1998 ordnance removal action was the most feasible alternative based on the influencing factors of cost, environmental impact, and reduction of public risk. The removal/disposal of 22 live mortars, 19 inert mortars, and 1151.5 pounds of OE-related scrap, significantly reduced the quantity of items posing a hazard to the public in the most widely used areas of the Dolly Sods region. Due to the following conditions and facts, the action could not, and was not expected to, negate ordnance-related

risk entirely: 1) the environment has changed over the course of sixty years since World War II training; 2) movements of military forces in the area were random in nature and undocumented, and cleared areas were chosen based upon speculation of past military maneuvers and locations of targets and firing positions; 3) the region consists of a vast amount of mountainous and rugged terrain, and heavy rains could dislodge ordnance which coupled with the mountain slopes could cause migration; 4) the course of the cleared trails could change over time due to public movement and/or erosion, hunters and adventurous explorers are apt to roam without regard to existing trails, and throughout the region there are numerous trails that are not designated or maintained but have been and could continue to be used; 5) campsites are not permanently marked and there is not restriction upon where camping can occur; and 6), a comprehensive search of the entire region would not reduce potential risk to zero (current technology cannot provide a 100 percent certainty that all ordnance and explosives have been removed), and would likely prove as environmentally damaging as it would be expensive.

4.0 RECURRING REVIEW METHODS AND FINDINGS

This recurring review consisted of the following activities: the notification and involvement of stakeholders, the review of existing and relevant documentation and data, the identification and review of recent and new information, a community survey and public interviews, an assessment of site conditions, and the preparation of this report.

4.1 Administrative Components

This recurring review was led by the USACE, Huntington District, Environmental and Remediation Section (CELRH-EC-CE), with technical support provided by the USAESC, Ordnance and Explosives Center of Expertise, Huntsville (CEHNC-OE-CX). The following individuals from CELRH-EC-CE and CEHNC-OE-CX conducted the site assessment, technical tasks, and report preparation:

Frank Albert	Environmental Engineer	CELRH-EC-CE
Erich Guy	Hydrogeologist	CELRH-EC-CE
Nick McHenry	Environmental Engineer	CELRH-EC-CE
William Stevens	Engineering Aid	CELRH-EC-CE
William Veith	OE Safety Specialist	CEHNC-OE-CX

The following individuals from the U.S. Army Corps of Engineers, Huntington District, Project Management Branch (CELRH-PM-P), Environmental Analysis Section (CELRH-PM-PD-R), and CELRH-EC-CE, and S&C Advertising and Public Relations (SCPR) conducted management and technical tasks:

Wallace Dean	Ecologist	CELRH-PM-PD-R
John Grevera	Production Manager	SCPR
Earline Lagueruela	President	SCPR
Richard Meadows	Project Manager	CELRH-PM-P
David Meadows	Supervisory Civil Engineer	CELRH-EC-CE
Diana White	Account Executive	SCPR

Kate Goodrich, Jeffrey Hammes, Sam Lammie, Jim Markley, William Schauman, Sara Schell, and Carol Whetsell from the USFS, Jim Maurin from the West Virginia Department of Environmental Protection (WVDEP), and Steve Upton from the West Virginia Division of Forestry (WVDoF) assisted in this recurring review.

4.2 Stakeholder Notification and Involvement

A notice regarding the forthcoming recurring review, and announcing a public meeting regarding the recurring review, was placed in local newspapers during August 2003. Specifically, the notice was published in the Grant County Press on August 12, 2003, in the Parson's Advocate on August 13, 2003, and in the Elkins Inter-Mountain on August 15 and 16, 2003. The public meeting, during which USACE representatives made project- and recurring review-related presentations, was held on August 19, 2003 at the Seneca Rocks Discovery Center in Seneca Rocks, West Virginia. Representatives from the organizations listed in the previous section (see above) and the general public attended the meeting. Copies of the USACE Huntington District's 2003 FUDS Newsletter (USACE, 2003b) which contained two articles regarding the Dolly Sods project and recurring review process were distributed.

The draft and final versions of this recurring review report were and will be available in the public repository (PR), which is located at the USFS office in Elkins, West Virginia. The PR is currently up to date; it is kept up to date and maintained by the USACE Huntington District. The final version of the report will also be available in the project administrative record (AR) and available for download from the USACE Huntington District's website. Notice of the draft recurring review report completion, announcement of a 30-day public review and comment period, and announcement of a public meeting to discuss findings of the recurring review were presented in local newspapers (i.e. the Pendleton Times on 20 May 2004 and the Inter-Mountain on 21 May 2004. The public meeting, at which USACE representatives made presentations and discussed recurring review conclusions and recommendations, was held at the Blackwater Lodge in Blackwater Falls State Park, Davis, West Virginia, on 2 June 2004. Subsequent to the 30-day public review and comment period (i.e. 2 June to 2 July 2004), a Responsiveness Summary (Appendix G) was prepared to discuss any significant public comments received on the report and the actions taken to address any such comments.

4.3 Documentation and Data Review

4.3.1 Post-1998 Ordnance-Related Incidents Research

The quantity and nature of ordnance-related incidents (e.g. a visitor finding UXO in the Dolly Sods region) that had occurred since completion of the 1997 to 1998 USACE response action were researched. Since 1998, there have been seven instances in which UXO was found in the Dolly Sods region by recreational visitors and contractors; no one was injured during any of these incidents.

During 1999, HFA was contracted by Virginia Power to provide UXO avoidance and identification services in support of their survey crew at Bear Rocks. In October 1999, one 105 mm HE projectile was identified by HFA (HFA, 1999b) at a location northeast of DSN and north of DSSA (2900 m north of the eastern extent of the Bear Rocks trail).

In July 2000, three, 4.2 inch HE mortars were found in DSN by visitors (Schell, 2003). The mortars were located 25 m, 70 m, and 90 m respectively to the northwest of the Dobbin Grade trail, and west of the junction between the Beaver Dam trail and the Dobbin Grade trail. In July 2001, one 4.2 inch HE mortar was found in DSN by a visitor (Schell, 2003). The mortar was located 265 meters east of the Dobbin Grade trail, and between the Beaver Dam trail and the Bear Rocks trail. It is worth noting that during the site assessment (see below), the recurring review field team experienced difficulty maintaining its desired course along cleared trails in these areas, because the trail sections were not marked. It is therefore likely that the lack of markings along these trail sections may have contributed to these recent encounters with ordnance by recreational visitors.

During July 2003, a visitor found one 4.2 inch HE mortar in DSN (Hammes, 2003). The mortar was located 225 meters south of the Bear Rocks trail, and between the Raven Ridge trail and Dobbin Grade trail. During June 2004, a visitor found one 4.2 inch SR mortar casing in the DSN (Hammes, 2004); the mortar had been detonated and posed no threat to the public in its found condition. The mortar casing was found 8 meters west of the Dobbin Grade trail between the Dobbin Grade and Bear Rocks trails. The locations of trails relative to DSW, DSN, and DSSA boundaries are shown on Map A2 (Appendix A). Distances and bearings of found UXO from previously cleared trails were calculated using the interactive project database (see below).

None of the UXO found subsequent to 1998 were located in areas that were covered during the 1997 to 1998 response action (see above). In all cases, UXO were found on the ground surface (i.e., UXO were not unearthed through digging, or dislodged from beneath rocks by prying), and were not found in areas where high rates of erosion have occurred (see below). When encountered, the UXO were not moved from their found position until the U.S. Army EOD from Fort Meade, Maryland arrived and conducted proper disposal (HFA, 1999b; Hammes, 2003; Schell, 2003).

4.3.2 GIS Development and Data Review

A Geographic Information System (GIS) was developed for the Dolly Sods project during the recurring review. A GIS is a computer system that enables the capturing, storing, analyzing, and displaying or mapping of spatially-referenced data; a GIS therefore facilitates effective project management and decision-making.

Dolly Sods project-related data (i.e. multi-source data consisting of base maps, mapped trails, previous ordnance-related information, photographs, etc.) were spatially referenced and assigned attributes in the GIS. This allowed data such as that regarding previously located ordnance, or previously cleared trails to be more effectively analyzed, and viewed in multiple ways. It was possible for instance, to quickly view different maps which showed locations of past ordnance: one map showed the type of ordnance that was found at each location, while another map showed the date information. Data were overlaid onto digital aerial photography and topographic maps, and this allowed quick assessments of the type of terrain that certain trails passed over for example. GIS was used to review and assess existing project-related data, and to plan the recurring review field work. GIS also served as a useful tool for archiving and evaluating data (e.g. photographs, Global Positioning System (GPS) coordinates, and institutional controls-related data) that were acquired during field work (see below).

4.4 Site Assessment

Members of the recurring review site assessment team (see above) conducted field operations in the Dolly Sods region during 18 to 21 August 2003, and on 4 November 2003. A site safety and health plan (SSHP) was implemented and followed (Appendix C), and daily safety meetings were led by an OE safety specialist team member. One objective of the field operations was to determine whether site conditions had changed since the 1997 to 1998 ordnance removal action; such changes could potentially impact public safety. Specific factors of concern that had the potential to substantially change site conditions included erosion, vegetation loss, changes in land-use, and recreational use. The team visually inspected and evaluated the terrain for evidence of such factors and ordnance, from approximately 25 linear miles worth of observations points in DSW, DSN, and DSSA. The inspection of on-site institutional controls (e.g., the presence and condition of trailhead and trail markers and warning signs) was another objective that was accomplished during field operations.

Areas were chosen for inspection based on the following criteria: quantities and types of ordnance discovered during the 1997 to 1998 removal action, quantities and types of ordnance discovered prior

to and subsequent to the removal action, location of areas with respect to accessibility and public use, and the potential for public exposure to ordnance hazards. The specific areas of terrain covered during the site assessment can be inferred from a plot showing the locations of photographs that were taken during field operations (Appendix D: Map D1). A photographic log was developed by the team to document this assessment, and to allow changes to be monitored as a function of time during future reviews. A GPS unit and a Brunton compass were used to measure the location and bearing of photographs; these data were then incorporated into the project GIS. All photographs, along with relevant data and observations, are presented in Appendix D. Detailed discussion concerning the terrain and on-site institutional control inspections are presented in the following sub-sections.

4.4.1 Terrain Inspection

A three-person field crew inspected DSW terrain while hiking from the eastern extent of the Fisher Spring Run trail (Appendix D: photograph 1) to its junction with the Red Creek trail (Appendix D: photographs 41 through 46) on 18 August 2003. The crew then followed the Red Creek trail southwest (Appendix D: photographs 47 through 49) to its trailhead (Appendix D: photograph 24). Dense vegetation was abundant along this entire route, with only minor erosion observed at isolated stream bank and hill slope locations. Such erosion was deemed non-problematic because it was not extensive or excessive, it did not appear to be occurring at an accelerated rate, and it did not extend to the one-foot ordnance removal depth of the 1997 to 1998 removal action. No areas of vegetation loss or land-use changes were observed along this route.

While driving and walking along FR 75 on 18 August 2003, a two-person field crew inspected DSW, DSN, and DSSA terrain. This phase of inspection started at the eastern extent of the Fisher Spring Run trail (Appendix D: photograph 1) and progressed northward, with frequent stops and observations made along FR 75 (Appendix D: photographs 2 through 13) to Bear Rocks (Appendix D: photograph 14). The crew then followed FR 75 southward, and inspected areas along FR 75 and FR 19 (Appendix D: photographs 15 through 23) to the southwest trailhead of the Red Creek trail (Appendix D: photograph 24). Healthy vegetation was present along this entire route, with no areas of erosion, vegetation loss, or land-use changes observed.

A five person field crew inspected terrain in the northeast and central portions of DSN and the northern portion of DSSA on 19 August 2003. The crew started at the eastern extent of the Beaver Dam trail, then headed southwest and followed the Dobbin Grade trail west past the Beaver View trail (Appendix D: photographs 25 through 29). The crew then headed back eastward on Dobbin Grade, took the Raven Ridge trail northward (Appendix D: photograph 30) to where it intersected the Bear Rocks trail, and then headed east on Bear Rocks trail to FR 75 (Appendix D: photographs 31 through 35). Dense vegetation was abundant along this entire route, with minor erosion observed at isolated stream bank locations, and at one location adjacent to the Bear Rocks trail (Appendix D: photograph 34). Erosion along Bear Rocks trail was limited to this isolated occurrence; it appeared to result from an intermittent stream that has flowed through this location during heavy rainfall events. No concerns due to excessive erosion or vegetation loss, or land-use changes were observed along this route.

On 21 August 2003, a three-person field crew hiked from the Big Stonecoal and Breathed Mountain trailheads in DSW (Appendix D: photograph 37) northward along the Blackbird Knob trail in DSN (Appendix D: photographs 37 through 40); the crew then headed back southward to its point of origin. The field crew observed thick vegetative cover adjacent to all sections of the trails in this region. Further, the bases of trails were composed predominantly of erosion-resistant rock. No concerns due to vegetation loss, erosion, or land-use changes were apparent along the route which was inspected.

A three-person field crew began hiking northward in the DSW from the Red Creek trailhead (Appendix D: photograph 24) on 4 November 2003. The team followed the Red Creek trail northward to a location near its juncture with the Little Stonecoal trail, and then followed the Red Creek stream bed northward. The team then hiked westward to the Little Stonecoal trail, and followed this trail southward back towards the point of origin. Discharge was low enough in Red Creek to observe its entire bed, which is predominately composed of boulder-sized rocks. The banks of Red Creek and areas adjacent to Little Stonecoal trail contained thick vegetation which provided stability at most locations. On this same date, the crew passed through the area that was inspected during 21 August 2003 (see above), to its final destination much farther northward, at the northwestern-most portion of the DSN. While hiking along the Rocky Ridge trail, which follows the western border of the DSN, healthy vegetation was observed, although much of the ridge consists of rock outcrops with no vegetative cover. The trail base was erosion-resistant rock along most of the trail, with only one isolated area of erosion observed (Appendix D: photographs 57 and 58); this minor erosion appeared to result from previous heavy rainfall events. No concerns due to vegetation loss, land-use changes, or excessive erosion were noted along the routes hiked on this date.

No UXO or OE-related scrap were identified during the August and November 2003 field operations, nor were any OE concerns due to severe erosion (e.g., due to a severe storm), severe vegetation loss (e.g., due to fire), or major land-use changes (e.g., new campsite, roads, or trails construction) found. Vegetation was found to provide soil stability across most of the region, and site conditions and usage have not changed noticeably since the 1997 to 1998 removal action. Further, mountainous and rugged terrain along with dense vegetation makes human access to many portions of the region that were not previously cleared for ordnance difficult. Based upon the terrain inspection, the field team determined that the previous ordnance removal action had been successful and is still protective.

4.4.2 Trailhead and Trail Markings Inspection

Many of the DSW, DSN, and DSSA trails that were cleared for ordnance during the 1997 to 1998 removal action were found to have a sign marking their trailhead location (Appendix D: photographs: 1, 2, 6, 16, 23, 24, 37, 43, 44, 54, and 63). However, it was found that the trailhead locations for four trails which had been cleared were not indicated with a sign (Appendix D: photographs: 10, 12, 38, and 62). Note that the USFS does not wish to have a sign marking the northern end of the Northland Loop trail (Appendix D: photograph 4) because it is a one-way interpretive trail which originates at its southern end. Information was not located at any of the trailheads which would make visitors aware that they should remain on designated trails which had been cleared for ordnance, and camp only at inventoried campsites that were cleared. Five trails that were not cleared for ordnance during the 1997 to 1998 removal action appeared to be receiving at least occasional use by visitors (Appendix D: photographs 7, 8, 15, 18, and 22); two such trails currently have posts (the team recommends they be removed, see below) marking their trailheads (Appendix D: photographs 18 and 22). Other than a phone number for ordnance-related incident reporting (which was contained on a warning sign if one was present), visitors are currently not receiving any information regarding the notification process (i.e. how they should specifically behave if UXO is encountered, see below) at trailheads.

In certain areas of the region, the field team was able to easily follow along trails when conducting the site assessment, as a worn path was visible or stacks of rocks were present which marked spots along trails (Appendix D: photographs 29, 33, 35, 39, 41, 43, 55, 56, 57, and 59). However, the team frequently had to rely upon GPS measurements and a (currently unpublished) USACE trails map in order to follow and remain on trails. Such tactics were necessary to maintain the desired course, because along many trail sections a worn path was not visible, nor were any type of trail section markers present (Appendix D: photographs 25 through 28, 30, 31, 52, and 60). As previously mentioned (see above), it is possible that the lack of markings along certain trail sections has

contributed to some of the recent ordnance-related incidents in the DSN. Based on conditions observed during the site assessment, most recreational users likely would experience difficulty maintaining course on such trail sections because they would probably not have an accurate trails map or GPS unit (note that even with a GPS unit, maintaining course can be difficult when trails aren't marked, because high topographic relief and thick vegetative cover can prevent adequate GPS signal receipt). It is also possible that a traditional use, especially by hunters and berry pickers of areas that are not designated trails has contributed to some of the recent ordnance-related incidents in the DSN. People have hunted and picked berries off of designated trails for years and more educational efforts are necessary to get them to use the designated trails instead of going cross country. Also, even though people may camp on cleared sites, it doesn't mean that they remain on cleared sites during their entire stay; venturing out to use the restroom or brush their teeth could lead them off of a cleared site and into areas where there are ordnance; more educational efforts are necessary to ensure that visitors to remain on cleared sites.

4.4.3 Warning Signs Inspection

Signs warning visitors to the Dolly Sods region about the potential to find hazardous ordnance items were found to exist at several of the DSW, DSN, and DSSA trailheads, and at a few other locations. Signs that were present contained a warning message, a photograph of UXO, and a phone number for ordnance-related incident reporting. There were seven locations in the region where color warning signs remained intact (Appendix D: photographs 1, 3, 6, 16, 19, 23, and 24), and four locations where gray warning signs were intact (Appendix D: photographs 11 through 13, and 17). Colored warning signs were noted to be more visible and they captured attention better.

According to the USFS (Schell, 2003), there has been a problem with warning signs being stolen in recent years (Appendix D: photograph 10). Some of the stolen color signs have been replaced with gray signs by the USFS; the USFS periodically replaces signs at some locations when it is noticed that they are missing. The field team observed that a color sign had been stolen from the Big Stonecoal and Breathed Mountain trailheads location sometime between August 2003 and November 2003 (Appendix D: photographs 37 and 63). The following wording (the team recommends it be removed, see below) was present on the trailhead sign for the Big Stonecoal and Breathed mountain trails: "camp out of sight and sound of trails and other campsites" and "bury human waste in cat holes."

There were 12 locations observed (comprising trailheads, the information display located to the northeast of the Dolly Sods picnic area, and the Red Creek campground) which receive relatively high visitor traffic and should have a color warning sign present (Appendix D: photographs 1, 2, 3, 6, 10, 12, 16, 19, 23, 24, 62, and 37/63 [the same location is shown in photographs 37 and 63]). Several of these locations did not have a warning sign present during the site assessment. For instance, a warning sign was not present at the Northland Loop (southern end) trailhead (Appendix D: photograph 2), at the Beaver Dam trailhead (Appendix D: photograph 10), or at the heads of the Rocky Ridge and Raven Ridge trails (Appendix D: photograph 62). Note that the USFS does not wish to have a sign marking the northern end of the Northland Loop trail (Appendix D: photograph 4) because it is a one-way interpretive trail which originates at its southern end. Three existing warning signs (Appendix D: photographs 11, 13, and 17) should or can be removed since they would either encourage use of a non-designated trail (see above section for further discussion regarding this matter) or are immediately adjacent to another recommended warning sign location.

4.4.4 Notification and Reporting Processes Evaluation

Notification and reporting processes for any ordnance-related incidents in the Dolly Sods region currently exist, are updated annually, and are outlined in the Public Awareness and Organizational

Plan (PAP) (SCPR, 2004a). The notification process details how one should behave when suspected ordnance is found (i.e., one should not touch the item, should walk away from the item, should identify the location and mark a location more than 50 feet away from of the item, and should then promptly report the incident). The reporting process details the procedures which should occur once an individual provides notification of an ordnance-related find (i.e., the USFS should verify the find, should contact an EOD, and should then report the incident to other agencies).

The 24-hour notification phone number for an ordnance-related incident is currently provided on warning signs present (see above), but it not provided anywhere else or by any other means in the region. On 29 January 2004, this phone number was dialed by USACE Huntington District personnel to ensure that it was operational. The phone number was functional, but the operator on duty was not immediately aware of how to handle ordnance-related incident information when it was provided. The operator was not well-aware of the proper reporting process, but through research the operator was able to determine the appropriate USFS personnel to contact/inform. USFS personnel, who would receive ordnance-related incident information from the 24-hour notification office, were found to be well aware of the proper processes to follow if and when they receive such information.

4.5 Community Survey

From 28 July 2003 to 1 August 2003, SPCR conducted 72 personal interviews at and within close proximity to Dolly Sods to determine public awareness of ordnance-related issues. Specifically, interviews were conducted at the Canaan Valley Resort, Dolly Sods, the Elkins/Randolph Visitors Bureau and Chamber of Commerce, Seneca Rocks Visitor Center, the Tucker County Convention and Visitors Bureau, and at various local businesses and residences. A number of local opinion leaders (e.g. city and government employees) were also consulted to obtain their insight regarding residents' and visitors' awareness of ordnance-related issues. Details regarding interviews, opinion leader consultations, and results and statistics of the community survey are contained in Appendix E.

5.0 CONCLUSIONS

This review concludes that the ordnance removal action completed during 1997 and 1998 in the DSW, DSN, and DSSA of the former WVMA is functioning as intended, and is still protective of human health, safety, and the environment. No UXO or OE-related scrap were identified during the site assessment, nor were any OE concerns due to erosion, storm damage, changes in land-use, or recreational use found. Vegetation provides soil stability across most of the region, and site conditions and usage have not changed noticeably since the removal action. Mountainous and rugged terrain along with dense vegetation makes human access to many portions of the region that were not cleared for ordnance difficult. If high amounts of erosion occur (e.g., due to a severe storm), if vegetation is removed (e.g., due to fire), or if recreational or land-use changes occur (e.g., if new campsites, roads, or trails are made), then an increased potential of encountering OE items in these areas may result.

Prior to the 1997 to 1998 removal action there were many instances (e.g. an average of ten per year during one ten year period) in which UXO was encountered along designated trails and at inventoried campsites (USACE, 2004a). Since 1998, there have been seven cases of encountered UXO by recreational visitors. In each case, UXO was found in an area that receives little visitor traffic, nobody was injured, and the U.S. Army EOD conducted disposal after being contacted through established notification and reporting processes. No UXO has been found since 1998 in the highly used areas of Dolly Sods (i.e. along the trails or at the campsites that were cleared for ordnance), and this indicates that the removal action is functioning as intended. Recent incidents have occurred because visitors have wandered away from cleared trails, and because a complete detection and removal of ordnance in the region could not be accomplished due to the environmental damage that would occur, the

extremely high estimated cost, and technology limitations. The 1997 to 1998 removal action was not expected to negate ordnance-related risk entirely, therefore, continued periodic reviews of the site and the education of individuals who use the region, are necessary.

Institutional controls are currently in place; however, certain controls require improvement, and additional controls are necessary to increase public awareness and ensure continued safety. Based on the site assessment, signs warning visitors of the potential to encounter ordnance do exist in the region, but they are not present at many highly used locations. While certain trail sections are well marked and maintained, many designated trail sections are not, and it is therefore difficult to remain only in areas that have been cleared for ordnance when hiking. Based on community survey results, roughly half of the region's visitors do not see any information regarding the potential to find hazardous ordnance items, most are unaware of the proper locations to hike and/or camp, and most are unaware of proper ordnance-related incident reporting procedures. More than half of the individuals surveyed feel that additional measures should be taken to ensure that the community is aware of existing ordnance-related risk. It is recommended that several programs focused on educating the community be continued and in some cases improved, and that several new such programs be established.

6.0 RECOMMENDATIONS

Recommendations provided in this section are based upon the results obtained and the conclusions drawn from the recurring review process. USACE and other involved agencies should attempt to execute responsibilities associated with these recommendations in accordance with overall fiscal responsibilities and the receipt of appropriate funding. These recommendations do not commit USACE or other involved agencies to any activity for which funding is not made available for through their respective budgetary processes.

6.1 Public Information Needs Service

Up to date project-related information should continue to be provided to the public through the PR which is located at the USFS office in Elkins, West Virginia, and the AR which is located on the USACE Huntington District's website. The USACE Huntington District's annual FUDS Newsletter, which contains project-related articles, should also continue to be provided to the public. During the community survey, 40 people asked to receive future project status updates; a mailing list may be established to ensure that they are kept well informed. Results of the community survey indicate that 17 individuals would be interested in serving on a Restoration Advisory Board (RAB); USACE should consider local interest and evaluate the potential net benefits of establishing a project RAB.

6.2 Public and Organizational Plan and Public Involvement Plan Updating

The project PAP (SCPR, 2004a) provides a process to educate the public on the hazards of UXO and the organizational procedures associated with the management of these hazards. An objective of this plan is to manage the risk to public safety from the hazards of any UXO resulting from past DoD activities in the Dolly Sods region. Other objectives of this plan are to support Federal and State fire suppression objectives in potential ordnance areas, and to maintain ordnance-related incident notification and reporting processes. Public education activities are implemented through the project Public Involvement Plan (PIP) (SCPR, 2004b). The PIP identifies and evaluates community concerns, and outlines specific communication and education strategies. The PAP and PIP should continue to be reviewed annually by USACE, USAESC, USFS, WVDEP, and WVDoF, and updated as necessary to ensure that procedures, phone numbers, and contacts continue to remain current and be effective.

6.3 Fire Suppression/Safety Plan Maintenance

The USFS should continue to maintain a functional fire suppression/safety plan, and should notify the USACE Huntington District in the event of any large fire in the DSW, DSN, or DSSA. The protection of private property, the Monongahela National Forest, public safety, and important resource values are priorities which should continue to be balanced in the plan.

6.4 Notification and Reporting Processes Maintenance

Up to date notification and reporting processes as provided in the project PAP should continue to be followed. The 24-hour notification phone number for an ordnance-related incident is currently provided on warning signs, but nowhere else and by no other means in the region. USACE and USFS should ensure that visitors to the Dolly Sods region are educated regarding proper notification processes for the case of an ordnance-related incident. USFS should ensure that persons operating the 24-hour reporting hotline are aware of ordnance-related incident reporting procedures. The USFS should continue to follow proper ordnance-related incident response procedures, and should report any incidents to the USACE Huntington District.

6.5 Warning Signs Placement and Monitoring

Highly visible, colored signs warning visitors about the potential to find hazardous ordnance items should be placed at regional locations which receive high visitor traffic. Currently, many highly used areas of the region have a gray sign or no sign present; signs should initially be re-placed or placed in these areas by USACE. Signs should contain a warning message and a phone number for reporting any possible ordnance-related incidents. Since theft of signs has been a recurring problem in the region, bi-annual monitoring and any necessary replacement of signs should be conducted by USACE and USFS. Specifically, it is recommended that colored warning signs exist at the 12 locations comprising designated trailhead entry points, the information display located to the northeast of the Dolly Sods picnic area, and the Red Creek campground (Appendix D: photographs 1, 2, 3, 6, 10, 12, 16, 19, 23, 24, 62, and 37/63 [the same location is shown in photographs 37 and 63]). Three existing warning signs (Appendix D: photographs 11, 13, and 17) should be removed since they would either encourage use of a non-designated trail or are immediately adjacent to another recommended warning sign location. At Bear Rocks Preserve (Appendix D: photograph 14), the text of a welcome sign contained an UXO warning message, but it didn't contain information regarding who to contact in the case of an ordnance-related incident. It is recommended that the USFS and USACE suggest to Nature Conservancy that the ordnance reporting phone number be added to the welcome sign.

6.6 Trailheads and Trails Marking

It is currently difficult for visitors to remain only in areas that have been cleared for ordnance when using the region for hiking. This is due to the facts that certain designated trailhead locations are not currently indicated with a sign, and many trail sections are not currently well maintained or marked. USFS should mark the heads of all trails that have been cleared for ordnance with signs containing the appropriate trail name. Note that a comment received from the USFS (Appendix G) indicates that steps towards meeting this recommendation should be accomplished during summer 2004. Such signs should not contain information which encourages visitors to stray from cleared trails and/or perform excavations (for instance, the following message currently on the trailhead sign for the Big Stonecoal and Breathed mountain trails should be removed: "camp out of sight and sound of trails and other campsites" and "bury human waste in cat holes"). Rather, trailhead signs should contain a message recommending that visitors not stray from designated trails and camp only at inventoried campsites.

Trailhead locations for four trails which have been cleared for ordnance were not indicated with a sign at the time of the site assessment (Appendix D: photographs: 10, 12, 38, and 62). Note that the USFS does not wish to have a sign marking the northern end of the Northland Loop trail (Appendix D: photograph 4) because it is a one-way interpretive trail which originates at its southern end. Any regional trail that was not cleared for ordnance should not have any type of marking (e.g. a sign, or a pile of stones) at its trailhead; such markings that currently exist (i.e. the two locations shown in Appendix D: photographs 18 and 22) should be removed to discourage visitor use. Regardless of any wilderness protocol aspects, all trail sections which have been cleared for ordnance in the DSW, DSN, and DSSA should be maintained and effectively marked in some way by the USFS to encourage their use by visitors and allow them to be easily followed. USACE and USFS should conduct bi-annual monitoring to ensure that trailhead signs and trail markers remain in place.

6.7 Trails Map Distribution

An accurate map of designated DSW, DSN, and DSSA trails that have been cleared for ordnance is not currently available to the public. To facilitate usage of cleared trails and campsites, and assist hikers in maintaining their course on the cleared trails, such a map should be generated and distributed to the public by USACE. Distribution could be accomplished by placing hard copies of the map at the most highly visited trailheads and at other local visitor centers and offices, and by placing a digital copy on the USACE Huntington District website and the USFS website for download. Notifying the public when such a map becomes available could be facilitated through the publication of a short article in a magazine oriented towards hiking/outdoor communities.

6.8 Brochures, Promotional Items, and Presentations Distribution

To better educate the public on the hazards of UXO and to continue to effectively manage the risk to public safety, the USACE should generate and make informational brochures, promotional items, and presentations available to the public. Distribution of such materials could be accomplished by placing brochure hard copies at the most highly visited trailheads and at other local visitor centers and offices, and by placing digital copies of the brochures and presentations on the Huntington District website for download. The USACE and USFS should perform public outreach at a local community event, to local schools, and facilitate ordnance training for local fire departments, by providing them with, or directing them to such materials. Such materials should also be distributed at any future public meetings held by USACE in the region.

6.9 Media Information and Publications Review

Because the Dolly Sods region is a popular tourist destination, many non-federal and non-state publications regarding the region are generated each year. Such publications often encourage readers to visit and enjoy the region without making them aware of ordnance-related concerns (making readers aware of such concerns when publishing articles is not a requirement). For instance, a recent book entitled "Dolly Sods" (Venable, 2001) doesn't mention the potential for finding UXO in the region. Another recent article, by the West Virginia Mountain Highlands (2003), states that "You can pick (blueberries) just about anywhere. Park along Forest Road 75, walk into the Sods and pick to your hearts content." When such publications are noticed or reviewed by USACE, USAESC, USFS, WVDEP, or WVDoF personnel, the publication's author should be contacted, and a request should be respectfully made that the author consider including a short message regarding the potential to find ordnance in any similar future publications for the purpose of increasing tourist industry awareness.

6.10 GIS Application

The project GIS should continue to be updated, applied, and further developed by USACE. Such efforts will allow a current database of project information (e.g., all ordnance-related incidents) to be maintained, and will facilitate future project management, site monitoring, and site reviews.

6.11 Next Recurring Review

The next (i.e. second) recurring review of the 1997 to 1998 ordnance response action conducted in the Dolly Sods region should occur within five years of the completion of the final version of this report.

7.0 REFERENCES

Hammes, J., 2003, Letter dated 5 August 2003 concerning found UXO at Dolly Sods, USFS, Monongahela National Forest, Petersburg, WV.

Hammes, J., 2004, Letter dated 6 July 2004 concerning found UXO at Dolly Sods, USFS, Monongahela National Forest, Petersburg, WV.

Human Factors Applications, Inc. (HFA), 1998, Final Removal Report: Ordnance and Explosives Removal Action Dolly Sods Wilderness, Monongahela National Forest. Prepared for USAESC, Huntsville, AL.

HFA, 1999a, Final Removal Report: Ordnance and Explosives Removal Action Dolly Sods North, Monongahela National Forest. Prepared for USAESC, Huntsville, AL.

HFA, 1999b, Final UXO Avoidance Report for the Bear Rocks Property, Monongahela National Forest. Prepared for Virginia Power.

Metcalf & Eddy, Inc., 1991, Feasibility Study Dolly Sods Wilderness: Final Work Plan for Surface and Subsurface Investigation and On-Site Disposal of Ordnance. Prepared for USACE, Huntsville District, Huntsville, AL.

Metcalf & Eddy, Inc., 1992, Feasibility Study Dolly Sods Wilderness: Engineering Report for Extent of OEW Contamination and Evaluation of Remedial Action Alternatives. Prepared for USACE, Huntsville District, Huntsville, AL.

New Bold Enterprises (NBE), 1995, Dolly Sods Wilderness Ordnance Removal Project Environmental Assessment. Prepared for USACE, Huntington District, Huntington, WV.

NBE, 1997, Dolly Sods North Ordnance Removal Project Environmental Assessment. Prepared for USACE, Huntington District, Huntington, WV.

Schell, S., 2003, Personal communications during September 2003 regarding found UXO at Dolly Sods, USFS, Monongahela National Forest, Petersburg, WV.

S&C Advertising and Public Relations (SCPR), 2004a, Public Awareness and Organizational Plan of Unexploded Ordnance at Dolly Sods. Prepared for USACE, Huntington District, Huntington, WV.

SCPR, 2004b, Draft Public Involvement Plan: Dolly Sods Region, Former West Virginia Maneuver Area. Prepared for USACE, Huntington District, Huntington, WV.

U.S. Army Corps of Engineers (USACE), 1991, Inventory Project Report for West Virginia Maneuver Area, Davis, WV. Prepared by USACE, Ohio River Division.

USACE, 1995, Archives Search Report: Findings for the Former Dolly Sods North. Prepared by USACE, Rock Island District, Rock Island, IL. Prepared for USACE, Huntsville District, Huntsville, AL.

USACE, 2003a, Recurring Reviews on Ordnance and Explosives (OE) Response Actions, EP 75-1-4, 31 Washington, DC.

USACE, 2003b, Formerly Used Defense Sites Newsletter. Prepared by USACE, Huntington District, Huntington, WV.

USACE, 2004a, Database containing information regarding OE-related scrap and UXO found in the Dolly Sods region. Developed and maintained by USACE, Huntington District, Huntington, WV.

USACE, 2004b, CEMVS-ED-P Memorandum dated 26 April 2004, Subject: Potential DERP FUDS Projects – West Virginia Maneuver Area.

U.S. Army Engineering and Support Center (USAESC), 2003, Ordnance and Explosives Recurring Review: Mission Trails Regional Park (located in San Diego, CA), Huntsville, AL.

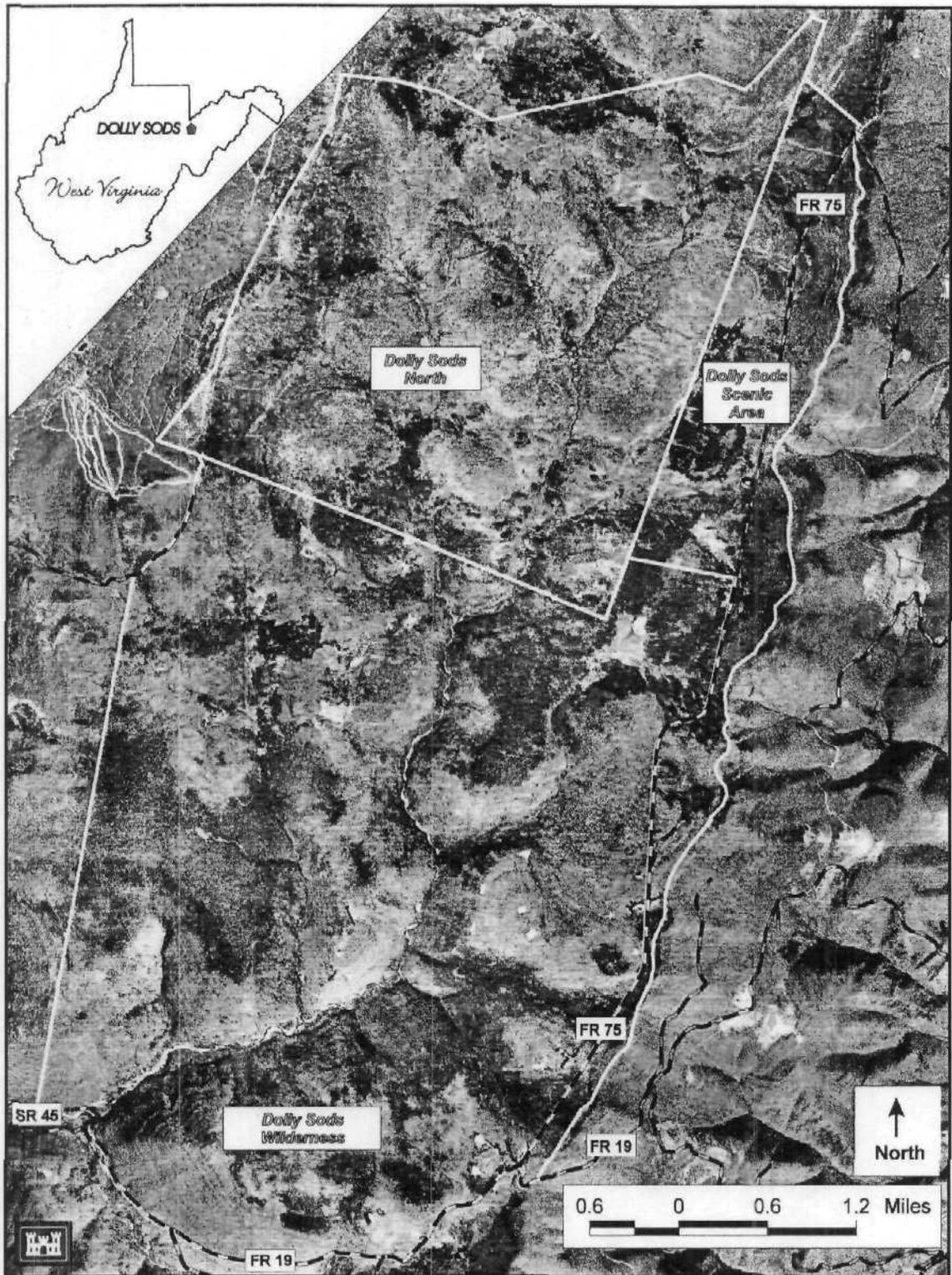
U.S. Geological Survey (USGS), 1996-1999, West Virginia statewide (1:12,000) Digital Orthophoto Quarter Quads.

Vandavelde, C., 1990, Letter dated 9 August 1990 concerning approval of remedial investigation/feasibility study for Dolly Sods Wilderness, USACE, Huntington District, WV.

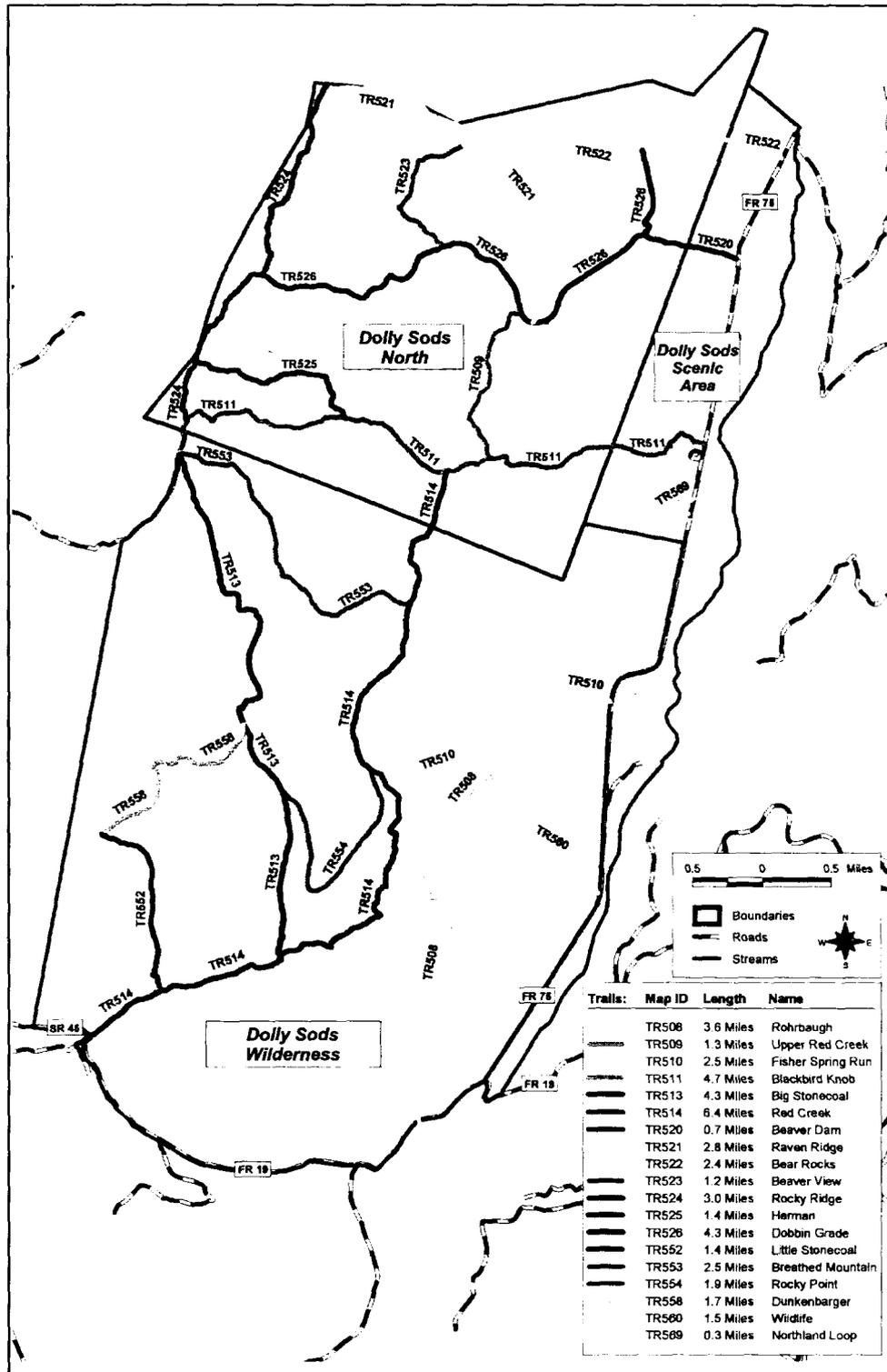
Venable, N.J., 2001, Dolly Sods, West Virginia University Extension Service, Morgantown, WV, and McClain Printing Company, Parsons, WV, 24 p.

West Virginia Mountain Highlands, 2003, Brochure article: Family-Fun Treks & Overnights in the Monongahela National Forest, p. 14.

Appendix A: SITE MAPS



Map A1: Location of the Dolly Sods region relative to the state of West Virginia. The Dolly Sods Wilderness, Dolly Sods North and Dolly Sods Scenic Area boundaries are overlaid on USGS (1996-1999) Digital Orthophoto Quarter Quads (DOQQ).



Map A2: Trails in the Dolly Sods Wilderness, Dolly Sods North, and Dolly Sods Scenic Area that were cleared during the 1997 to 1998 ordnance removal action. See text for discussion and details regarding the removal action.

Appendix B: PROTECTIVENESS ASSESSMENT

PROTECTIVENESS

A site contaminated with ordnance has three major factors that must be considered when evaluating the potential for harm and protectiveness. These factors are ordnance, site, and people. Each of these factors has components, which are used to give an accurate assessment of protectiveness. Protectiveness is achieved when the potential for harm is reduced and/or managed.

ORDNANCE



Ordnance Density
How much?

Ordnance Distribution
Where is it?

Ordnance Sensitivity
How stable?

Ordnance Density – Ordnance density is an estimate of how many ordnance items (i.e. mortars, rockets, grenades, etc.) exist per acre. Ordnance reduction can be used as a direct measure of project benefits.

Ordnance Distribution – Ordnance distribution is an estimate of where the highest concentrations of ordnance items exist. This is beneficial only if the response action (i.e. removal, surface clearing, etc.) leaves a safer condition than before the project is completed. For example, removal of ordnance above one foot below ground surface may be protective for only a surface use of the site.

Ordnance Sensitivity – Some ordnance is more sensitive (easier to accidentally detonate) than others. This characteristic is useful to describe the seriousness of the problems caused by ordnance contamination. There is little potential for improvement of this component.

SITE



Site Access
Ease of use

Site Use
Current/Planned

Site Stability
*Potential for
ordnance exposure*

Site Access – A measure of how easy it is to access the site and use it for personal or group activities. This component may indicate a direct improvement if limited site access is compatible with local needs. Limited access may also be an indicator of the seriousness of ordnance contamination, such as ordnance sensitivity.

Site Use – An indication of how site use may be dangerous. A modification of site use may be very protective if it is compatible with local needs. Use will determine potential site dangers especially when coupled with ordnance density and distribution.

Site Stability – Erosion or other dynamic forces may expose ordnance that would otherwise be totally inaccessible. A stable site is safer than a site prone to erosion. Other factors affecting stability include: frost heave, littoral processes (coastal forces), or human modifications to the existing condition (i.e. tillage techniques, capping or land-use modifications).

PEOPLE



Individual Behavior
Compliance

Institutional Behavior
Spread of information

Commitment
Working together

Individual Behavior – If people are willing to use the site in accordance with safety plans and respond to found ordnance in accordance with contingency plans, nearly all of the potential for harm would be eliminated. The availability of information, proactive planning and cooperation are key indicators of benefits.

Institutional Behavior – Local institutions such as Building Departments, Zoning Boards, etc. are the best choice for disseminating vital site information, requiring compliance, and initiating enforcement actions in accordance with safety and contingency plans. Local agencies may also be able to discourage reckless development plans based on site contamination knowledge.

Commitment – The ability of individuals, local agencies, state and local regulators, along with the U.S. Army Corps of Engineers to commit to maximizing the protectiveness of the continuing ordnance response. A commitment to work together is far more protective than unilateral action by any single group.

By evaluating a combination of these factors and components, we can assess the relative protectiveness of a response and detect deterioration or improvement over time at any specific ordnance contaminated site. Individually, these factors will not give an accurate assessment of protectiveness. Considered together they paint a picture that can be the basis for corrective actions and proactive planning to avoid future harm or to serve as documentation that all is well.

Appendix C: SITE SAFETY AND HEALTH PLANS

24 April 2003

MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: Standing Operating Procedure (SOP) for Abbreviated Site Safety and Health Plans (ASSHP)

1. This memorandum provides the U.S. Army Engineering and Support Center, Huntsville (USAESCH), Ordnance and Explosives (OE) Directorate, the SOP regarding requirements for the ASSHP for visits to USAESCH project sites. This SOP applies to all USAESCH personnel and its contractors who visit USAESCH project sites with potential OE presence. The Corps of Engineers Districts performing archive searches under USAESCH direction will also follow this SOP.

2. Effective immediately, a copy of the attached ASSHP, dated April 2003, will be completed and approved prior to traveling to a USAESCH OE project site. Sites operating under an existing site safety and health plan (SSHP) do not require an ASSHP. The existing SSHP will be used.

3. ASSHP: The ASSHP is valid for site visits where only non-intrusive activities will occur. When the purpose of the site visit is to conduct soil sampling, OE sampling, intrusive investigations, or construct a geophysical test plot a comprehensive SSHP shall be developed.

a. All members of the site visit shall read, sign, and comply with the ASSHP, and will attend all safety briefings. Personnel who fail to comply with these requirements shall not be permitted to accompany the team. If any individual insists on accompanying the team and yet refuses to comply with these requirements, the site visit shall be cancelled and the circumstances reported to the Chief, OE Safety immediately.

CEHNC-OE-S (200-1c)

SUBJECT: Standing Operating Procedure (SOP) for Abbreviated Site Safety and Health Plans (ASSHP)

b. At Formerly Used Defense Sites (FUDS), the property owner is often needed to guide the team over the site. Since the owner cannot be expected to comply with our ASSHP on their property, they should instead be politely asked to participate in the safety briefings and then asked to lead the way.

c. The site visit shall not be conducted with less than 2 people, one of which shall be first aid/CPR trained. The site safety and health officer (SSHO) shall not have responsibility for more than eight (8) other team members.

d. The team leader, assigned by the USAESCH project manager, is responsible for ensuring the ASSHP is completed. They may delegate completion of the document to someone more familiar with the site or with the necessary safety procedures.

e. The site safety and health officer (SSHO) is the individual designated to conduct safety briefings, enforce the ASSHP and ensure the team leader can safely fulfill their objectives. The SSHO shall be an unexploded ordnance qualified individual. The SSHO is required to keep the team grouped together and under close control (individuals must be able to communicate verbally and be in line-of-sight with each other).

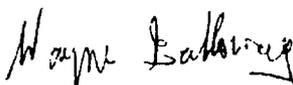
5. The ASSHP for site visits shall be approved by the Chief, OE Safety Group before the team leaves for the site. Upon completion of the site visit, the project manager shall submit a completed copy of the ASSHP to our office. Other U.S. Army Corps of Engineers Districts performing archive searches under our direction shall approve their own ASSHPs and shall provide a copy to our office.

CEHNC-OE-S (200-1c)

SUBJECT: Standing Operating Procedure (SOP) for Abbreviated Site Safety and Health Plans (ASSHP)

6. Our POC for this action is the OE Safety Group, 256-895-1598.

FOR THE DIRECTOR OF
ORDNANCE AND EXPLOSIVES DIRECTORATE:



WAYNE H. GALLOWAY
Chief, Safety Group for
Ordnance and Explosives Team

DISTRIBUTION:

OE-S Read/File/Bayuga

OE Read

OE-CX Read

OE-DC Read

OE-CW Read

ED Read/File

 Bayuga/jc/5-1596/ASSHP Form-SOP

Date:

ABBREVIATED SITE-SPECIFIC SAFETY AND HEALTH PLAN (ASSHP)

FOR

Site name:	Former West Virginia Maneuver Area, Dolly Sods Wilderness + North Areas
Site location:	Tucker County, West Virginia
Purpose of Visit:	Conduct a Recurring Review
Date(s) of site visit:	18-22 August 2003
ASSHP prepared by:	Bill Veith CEHMC-OE-CX

Office:	CEHMC-OE-CX
Address:	4820 University Sq., Huntsville, AL 35816
Telephone:	Commercial: (256) 893-1552 Extension DSN: -

Date Prepared: 15 August 2003

SIGNATURE Bill Veith DATE 8/15/03

ASSHP REVIEWED/APPROVED BY (OE Design Center Safety Administrator or OE Safety Manager, as appropriate):

OE-Safety [Signature] 8/15/03
Title: DATE

NOTE: This ASSHP is to be used only for non-intrusive site visits and it must be approved by the Safety Office prior to the start of the field visit. All team members must read and comply with the ASSHP, and attend the safety briefings. The SSO shall ensure the Safety Briefing Checklist and the plan acceptance forms are filled out prior to the start of the site visit.

SITE DESCRIPTION AND PREVIOUS INVESTIGATIONS

(Attach a site map to this ASSHP)

A. SITE DESCRIPTION

- o Size: Approximately *16385* acres
- o Present usage (Check all that apply)

<input type="checkbox"/> Military	<input checked="" type="checkbox"/> Recreational	<input type="checkbox"/> Agricultural
<input type="checkbox"/> Residential	<input type="checkbox"/> Commercial	<input type="checkbox"/> Landfill
<input type="checkbox"/> Natural Area	<input type="checkbox"/> Industrial	
<input type="checkbox"/> Other Specify		

<input type="checkbox"/> Secured	<input checked="" type="checkbox"/> Active	<input type="checkbox"/> Unknown
<input checked="" type="checkbox"/> Unsecured	<input type="checkbox"/> Inactive	

B. PAST USES: (Attach a summary to the historic uses of this site. Identify specific areas if possible.) *See attached explanation of past uses*

C. SURROUNDING POPULATION

<input checked="" type="checkbox"/> Rural	<input type="checkbox"/> Residential	<input type="checkbox"/> Commercial
<input type="checkbox"/> Urban	<input type="checkbox"/> Industrial	
<input type="checkbox"/> Other specify		

D. PREVIOUS SAMPLING/INVESTIGATION RESULTS

1. OE ENCOUNTERED

Location:	Description:
<i>See attached list</i>	

2. SAMPLES (Air, Water, Soil, Vegetation)

Chemical	Concentration	Media	Location
<i>NA</i>			

II. DESCRIPTION OF ON-SITE ACTIVITIES

<input checked="" type="checkbox"/> Walk-through	<input type="checkbox"/> Drive-through	<input type="checkbox"/> Fly over
<input type="checkbox"/> On road	<input type="checkbox"/> Off road	<input checked="" type="checkbox"/> On path
<input type="checkbox"/> Off path		
<input type="checkbox"/> Other Specify		

Activities/Tasks to be Performed (Summarize): *Check to make sure past response is still protective.*

III. SITE PERSONNEL AND RESPONSIBILITIES

A. USACE PROJECT MANAGER

NAME: <i>Erich Guy</i>	
OFFICE: <i>CELRH-EC-CE</i>	
ADDRESS: <i>Huntsville District</i>	P.O. Box 1600, Huntsville, AL 35807-4301
PHONE: <i>304 399-5283</i>	

RESPONSIBILITIES: *Conduct the recurring review*

B. TEAM LEADER:

NAME: Erich Guy	Frank Albert, Jr.
OFFICE: Huntington District	CELRH-EC-CE Huntington District
ADDRESS: Huntington District	Huntington District
PHONE: 304 399 5283	304-399-5760

RESPONSIBILITIES:

Lead field effort

C. SITE SAFETY AND HEALTH OFFICER (SSHO)

NAME: Bill Veith	
OFFICE: CEHR-OC-CT	
ADDRESS: Hunkville, Center	
PHONE: 256 895-1592	

RESPONSIBILITIES: Brief this ASSHP. Ensure the ASSHP guidelines are followed. Provide UXO escort duties.

D. FIRST AID/CPR Certified

NAME: William Stevens	
OFFICE: CELRH-EC-CE	
ADDRESS: Huntington District	
PHONE: 304 399-5941	

RESPONSIBILITIES: Administer First Aid in the event of an emergency

E. TEAM MEMBERS (other than those listed above)

NAME: Nick McHenry	
OFFICE: CELRH-EC-CE	
ADDRESS: Huntington District	
PHONE: 304 399-5909	

RESPONSIBILITIES: To treat any medical emergency that may arise

IV. HAZARD ANALYSIS

A. Safety and health hazards anticipated:

Chemical

Ordnance (specify): *The area was cleared of all OE. None expected*

<input checked="" type="checkbox"/> Heat Stress	<input type="checkbox"/> Cold Stress	<input checked="" type="checkbox"/> Tripping Hazard
<input type="checkbox"/> Noise	<input type="checkbox"/> Electrical	<input type="checkbox"/> Falling Object
<input checked="" type="checkbox"/> Foot hazard	<input checked="" type="checkbox"/> Biological	<input type="checkbox"/> Overhead Hazard
<input type="checkbox"/> Radiological	<input type="checkbox"/> Confined Space	<input type="checkbox"/> Water
<input checked="" type="checkbox"/> Explosive	<input type="checkbox"/> Climbing	<input type="checkbox"/> Flammable
<input type="checkbox"/> Other specify:		

B. Overall Hazard Evaluation:

High Moderate Low Unknown

JUSTIFICATION: (Provide a brief justification supporting the overall rating.) *A response action was completed at this site. Trades are open to the public.*

V. ACCIDENT PREVENTION

A. General Precautions:

Prior to the on-site visit, all team members are required to read this ASSHP and sign the form acknowledging that they have read and will comply with it. In addition, the SSHO shall hold a brief tailgate meeting in which site specific topics regarding the day's activities will be discussed. The buddy system will be enforced at all times. If unanticipated hazardous conditions arise, team members are to stop work, evacuate the area and notify the SSHO.

VI. STANDARD OPERATION SAFETY PROCEDURES, ENGINEERING CONTROLS AND WORK PRACTICES

A. SITE RULES/PROHIBITIONS: At any sign of hazardous conditions, stop tasks, evacuate area and notify the SSHO. Smoking, eating and drinking allowed in designated areas only.

B. MATERIAL HANDLING PROCEDURES: Do not handle

- C. DRUM HANDLING PROCEDURES: Do not handle
- D. CONFINED SPACE ENTRY: Do not enter
- E. IGNITION SOURCE AND ELECTRICAL PROTECTION: Do not smoke
- F. SPILL CONTAINMENT: N/A
- G. EXCAVATION SAFETY: Do not enter trenches/excavations
- H. ILLUMINATION: Work during daylight hours only.
- I. SANITATION: Use existing sanitary facilities.
- J. BUDDY SYSTEM: Two persons on-site maintaining constant contact with each other. To be adhered to at all times.
- K. ENGINEERING CONTROLS: N/A
- L. HEAT/COLD STRESS: Dress appropriately. Take sufficient breaks and drink plenty of fluids. Watch for signs/symptoms of cold/heat stress. Monitoring may be applicable depending on the site weather conditions and type of PPE worn.
- M. ORDNANCE:
 - I. General Information
 - a. The cardinal principle to be observed involving explosives, ammunition, severe fire hazards or toxic materials is to limit the exposure to a minimum of personnel, for the minimum amount of time, to a minimum amount of hazardous material consistent with a safe and efficient operation.
 - b. The age or condition of an ordnance item does not decrease its effectiveness. Ordnance that has been exposed to the elements for extended periods of time become more sensitive to shock, movement, and friction, because the stabilizing agent in the explosives may be degraded.
 - c. When chemical agents may be present, further precautions are necessary. If the munition item has green markings leave the area immediately, since it may contain a chemical filler.

d. Consider ordnance that has been exposed to fire as extremely hazardous. Chemical and physical changes may have occurred to the contents which render it more sensitive than it was in its original state.

2. On-Site Instructions

a. DO NOT touch or move any ordnance items regardless of the marking or apparent condition.

b. DO NOT visit an ordnance site if an electrical storm is occurring or approaching. If a storm approaches during a site visit leave the site immediately and seek shelter.

c. DO NOT use radio or cellular phones in the vicinity of suspect ordnance items.

d. DO NOT walk across an area where the ground cannot be seen. If dead vegetation or dead animals are observed, leave the area immediately due to potential chemical agent contamination.

e. DO NOT drive vehicles into suspected OE areas; use clearly marked lanes.

f. DO NOT carry matches, lighted cigarettes, lighters or other flame producing devices into an OE site.

g. DO NOT rely on color codes for positive identification of ordnance items or their contents.

h. Approach ordnance items from the side, avoid approaching the front and rear areas.

i. Always assume ordnance items contain a live charge until it can be determined otherwise.

3. Specific Action Upon Locating Ordnance

a. DO NOT touch, move or jar any ordnance item, regardless of its apparent condition.

b. Approach the item cautiously, take photographs and a full description. Take notes of the markings or any other identifiers/features.

c. DO NOT be misled by markings on the ordnance item stating "practice", "dummy", or "inert". Even practice bombs have explosive charges that are used to mark/spot the point of impact; or the item could be mismarked.

d. DO NOT roll an ordnance item over or scrape the item to identify the markings.

- e. The location of any ordnance items found during the site investigation should be clearly marked so it can be easily located and avoided.
- f. The U.S. Army Engineering and Support Center, Huntsville, (256) 895-1598 shall be notified upon location of any UXO.

N. POISONOUS SNAKES OR INSECTS

- a. DO NOT handle any snake even those that appear to be dead.
- b. Avoid areas of limited visibility such as tall grass or heavy vegetation.
- c. Roll sleeves down and use insect repellent.

O. POISONOUS PLANTS

- a. Avoid areas of limited visibility such as tall grass or heavy vegetation.
- b. Roll sleeves down and use barrier cream and wear gloves.

P. OTHER (specify)

VII. SITE CONTROL AND COMMUNICATIONS:

- A. SITE MAP: See Attached.
- B. SITE WORK ZONES:
- C. BUDDY SYSTEM: To be adhered to at all times.
- D. COMMUNICATIONS:

I. ON-SITE: Verbal communications will be used among team members to communicate to each other on-site. If this communication is not possible, the following hand signals will be used.

GRIP PARTNER'S WRIST OR BOTH HANDS AROUND WAIST --
Leave the area immediately.

HAND GRIPPING NOSE -- Unusual smell detected

THUMBS UP -- OK, I am alright or I understand

THUMBS DOWN -- No, negative

2. OFF-SITE: Off-site communications shall be established on every site. Communications may be established by using an on-site cellular phone or by locating the nearest public phone or private phone which may be readily accessed.

Cellular Phone: (304) 633-1716, (304) 544-7093

Public/Private phone

Other. TBD on-site before commencing site visit.

3. EMERGENCY SIGNALS: In the case of small groups, a verbal signal for emergencies shall suffice. The emergency signal for large groups should be incorporated at the discretion of the SSHO.

Verbal

Nonverbal (Specify)

VIII. EMERGENCY RESPONSE

A. Team members are to be alert to the dangers associated with the site at all times. If a hazardous condition arises, stop work, evacuate the immediate area and notify the SSHO.

B. FIRST AID. A first aid kit and emergency eye wash (as applicable) will be located in the SSHO's field car. If qualified persons (i.e. a fire department, medical facility or physician) is not accessible within five minutes of the site at least one team member shall be qualified to administer first aid and CPR.

C. EMERGENCY TELEPHONE NUMBERS.

1. MEDICAL FACILITY:	304 637-3337
2. FIRE DEPARTMENT:	304 257-4488 or 911
3. POLICE DEPARTMENT:	304 637-0200 or 911
4. POISON CONTROL CENTER:	800-424-9300
5. USAESCH OE SAFETY OFFICE:	(256) 895-1598.

6. FORSCOM EOD: <i>48th EON</i>	<i>803 751-1562</i>
7. TEU:	<i>(401) 671-2773.</i>
8. PROJECT MANAGER:	<i>304 633 1716</i>
9. Other (list):	

D. DIRECTIONS TO THE NEAREST HOSPITAL/MEDICAL FACILITY:

EMS will transport Contact at 304 637-3337 Davis Memorial Hospital

IX. MONITORING EQUIPMENT AND PROCEDURES:

A. Exposure Monitoring: For non-intrusive on-site activities such as site visits, air monitoring is normally not required. However, if the site situation dictates the need for monitoring, complete the following information on a separate page and attach the page to the ASSHP.

- Monitoring equipment to be used.
- Documentation of equipment calibration and results.
- Action Levels.

B. Heat/Cold Stress Monitoring: If heat stress monitoring is necessary, the monitoring criteria published in Ch. 8 of the NIOSH/OSHA/USCG/EPA "Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities" (Oct '85) shall be followed. If Cold stress monitoring is necessary, it shall be conducted IAW the most current published American Conference of Governmental Industrial Hygienist (ACGIH) cold stress standards.

X. PERSONAL PROTECTIVE EQUIPMENT:

A. GENERAL

Typically, for non-intrusive site visits, Level D is required. Team members should avoid wearing outer or undergarments made of wool, silk or synthetic textiles such as rayon or nylon. These materials can generate sufficient static charge to ignite explosives. Hard hats will be worn if an overhead hazard exists, safety glasses if an eye hazard is present and safety shoes will be worn if a foot hazard exists.

B. NON-INTRUSIVE SITE VISIT

Level of Protection:

Initial: Level D Modified (specify)

--

Contingency: Evacuate site if higher level of protection is needed.

XI. DECONTAMINATION PROCEDURES

Decontamination procedures are not anticipated for this site investigation. Team members are cautioned not to walk, kneel or sit on any surface with potential leaks, spills or contamination.

XII. TRAINING

All site personnel shall have completed the training required by EM 385-1-1 and 29 CFR 1910.120 (e). The USACE Project Manager shall ensure and the SSHO shall verify that all on-site personnel have completed the appropriate training prior to submitting the plan to the Safety Office for review. Additionally, the SSHO shall inform personnel before entering, of any potential site-specific hazards and procedures.

XIII. MEDICAL SURVEILLANCE PROGRAM

The USACE Project Manager shall ensure and the SSHO shall verify that all on-site personnel are on the Medical Surveillance Program meeting the requirements of 29 CFR 1910.120 and ANSI Z-88.2, as appropriate, depending on the PPE and the site specific tasks.

NAME	COURSE DATE (40 hr / 8 hr)	PROVIDER	MEDICAL EXAM DATE

PLAN ACCEPTANCE FORM
 ABBREVIATED SAFETY AND HEALTH PLAN

FOR

Site name:

Location:

I have read and agree to abide by the contents of the Safety and Health Plan and I have attended the Safety Briefing for the aforementioned site.

NAME (PRINTED)	OFFICE	SIGNATURE	DATE
NICKOLAS M HENRY	CELRIH EL-CE	<i>Nickolas M Henry</i>	8/18/2003
Will Stevens	CELRIH EL-CE	<i>Will Stevens</i>	8/18/2003
Erin D. Guy	CELRIH EL-CE	<i>Erin D Guy</i>	8/18/2003
FRANK R. AUSTIN	CELRIH EL-CE	<i>Frank R Austin</i>	8/18/2003
Bill Veith	CEHMC-OF-CX	<i>Bill Veith</i>	8/18/03
JOHN GREVERA	SIC PR	<i>John Grevera</i>	8/19/03

Person presenting the safety briefing:

Bill Veith
 SIGNATURE

8/18/03
 DATE

24 April 2003

MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: Standing Operating Procedure (SOP) for Abbreviated Site Safety and Health Plans (ASSHP)

1. This memorandum provides the U.S. Army Engineering and Support Center, Huntsville (USAESCH), Ordnance and Explosives (OE) Directorate, the SOP regarding requirements for the ASSHP for visits to USAESCH project sites. This SOP applies to all USAESCH personnel and its contractors who visit USAESCH project sites with potential OE presence. The Corps of Engineers Districts performing archive searches under USAESCH direction will also follow this SOP.
2. Effective immediately, a copy of the attached ASSHP, dated April 2003, will be completed and approved prior to traveling to a USAESCH OE project site. Sites operating under an existing site safety and health plan (SSHP) do not require an ASSHP. The existing SSHP will be used.
3. ASSHP: The ASSHP is valid for site visits where only non-intrusive activities will occur. When the purpose of the site visit is to conduct soil sampling, OE sampling, intrusive investigations, or construct a geophysical test plot a comprehensive SSHP shall be developed.
 - a. All members of the site visit shall read, sign, and comply with the ASSHP, and will attend all safety briefings. Personnel who fail to comply with these requirements shall not be permitted to accompany the team. If any individual insists on accompanying the team and yet refuses to comply with these requirements, the site visit shall be cancelled and the circumstances reported to the Chief, OE Safety immediately.

CEHNC-OE-S (200-1c)

SUBJECT: Standing Operating Procedure (SOP) for Abbreviated Site Safety and Health Plans (ASSHP)

b. At Formerly Used Defense Sites (FUDS), the property owner is often needed to guide the team over the site. Since the owner cannot be expected to comply with our ASSHP on their property, they should instead be politely asked to participate in the safety briefings and then asked to lead the way.

c. The site visit shall not be conducted with less than 2 people, one of which shall be first aid/CPR trained. The site safety and health officer (SSHO) shall not have responsibility for more than eight (8) other team members.

d. The team leader, assigned by the USAESCH project manager, is responsible for ensuring the ASSHP is completed. They may delegate completion of the document to someone more familiar with the site or with the necessary safety procedures.

e. The site safety and health officer (SSHO) is the individual designated to conduct safety briefings, enforce the ASSHP and ensure the team leader can safely fulfill their objectives. The SSHO shall be an unexploded ordnance qualified individual. The SSHO is required to keep the team grouped together and under close control (individuals must be able to communicate verbally and be in line-of-sight with each other).

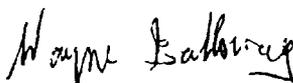
5. The ASSHP for site visits shall be approved by the Chief, OE Safety Group before the team leaves for the site. Upon completion of the site visit, the project manager shall submit a completed copy of the ASSHP to our office. Other U.S. Army Corps of Engineers Districts performing archive searches under our direction shall approve their own ASSHPs and shall provide a copy to our office.

CEHNC-OE-S (200-1c)

SUBJECT: Standing Operating Procedure (SOP) for Abbreviated
Site Safety and Health Plans (ASSHP)

6. Our POC for this action is the OE Safety Group,
256-895-1598.

FOR THE DIRECTOR OF
ORDNANCE AND EXPLOSIVES DIRECTORATE:



WAYNE H. GALLOWAY
Chief, Safety Group for
Ordnance and Explosives Team

DISTRIBUTION:
OE-S Read/File/Bayuga
OE Read
OE-CX Read
OE-DC Read
OE-CW Read
ED Read/File

207 Bayuga/jc/5-1596/ASSHP Form-SOP

Date:

ABBREVIATED SITE-SPECIFIC SAFETY AND HEALTH PLAN (ASSHP)

FOR

Site name:	Former West Virginia Maneuver Area, Dolly Sods Wilderness + North Areas
Site location:	Tucker County, West Virginia
Purpose of Visit:	Conduct a Recurring Review
Date(s) of site visit:	4 November 2003
ASSHP prepared by:	Bill Keith, CEHMC-OE-CX

Office:	CEHMC-OE-CX
Address:	4820 University Sq., Huntsville, AL 35816
Telephone:	Commercial: (256) 898-1552 Extension DSN: -

Date Prepared: 15 August 2003

SIGNATURE Bill Keith DATE 8/15/03

ASSHP REVIEWED/APPROVED BY (OE Design Center Safety Administrator or OE Safety Manager, as appropriate):

OE-Safety [Signature] 8/15/03
Title: DATE

NOTE: This ASSHP is to be used only for non-intrusive site visits and it must be approved by the Safety Office prior to the start of the field visit. All team members must read and comply with the ASSHP, and attend the safety briefings. The SSHO shall ensure the Safety Briefing Checklist and the plan acceptance forms are filled out prior to the start of the site visit.

SITE DESCRIPTION AND PREVIOUS INVESTIGATIONS

(Attach a site map to this ASSHP)

A. SITE DESCRIPTION

- o Size: Approximately *16385* acres
- o Present usage (Check all that apply)

<input type="checkbox"/> Military	<input checked="" type="checkbox"/> Recreational	<input type="checkbox"/> Agricultural
<input type="checkbox"/> Residential	<input type="checkbox"/> Commercial	<input type="checkbox"/> Landfill
<input type="checkbox"/> Natural Area	<input type="checkbox"/> Industrial	
<input type="checkbox"/> Other Specify		

<input type="checkbox"/> Secured	<input checked="" type="checkbox"/> Active	<input type="checkbox"/> Unknown
<input checked="" type="checkbox"/> Unsecured	<input type="checkbox"/> Inactive	

B. PAST USES: (Attach a summary to the historic uses of this site. Identify specific areas if possible.) *See attached explanation of past uses*

C. SURROUNDING POPULATION

<input checked="" type="checkbox"/> Rural	<input type="checkbox"/> Residential	<input type="checkbox"/> Commercial
<input type="checkbox"/> Urban	<input type="checkbox"/> Industrial	
<input type="checkbox"/> Other specify		

D. PREVIOUS SAMPLING/INVESTIGATION RESULTS

I. OE ENCOUNTERED

Location:	Description:
<i>See attached list</i>	

2. SAMPLES (Air, Water, Soil, Vegetation)

Chemical	Concentration	Media	Location
<i>NA</i>			

II. DESCRIPTION OF ON-SITE ACTIVITIES

<input checked="" type="checkbox"/> Walk-through	<input type="checkbox"/> Drive-through	<input type="checkbox"/> Fly over
<input type="checkbox"/> On road	<input type="checkbox"/> Off road	<input checked="" type="checkbox"/> On path
<input type="checkbox"/> Off path		
<input type="checkbox"/> Other Specify		

Activities/Tasks to be Performed (Summarize): *Check to make sure past response is still protective.*

III. SITE PERSONNEL AND RESPONSIBILITIES

A. USACE PROJECT MANAGER

NAME: <i>Erich Guy</i>	
OFFICE: <i>CELRH-EC-CE</i>	
ADDRESS: <i>Huntsville District</i>	P.O. Box 1600, Huntsville, AL 35807-4301
PHONE: <i>304 399-5283</i>	

RESPONSIBILITIES: *Conduct the recurring review*

B. TEAM LEADER:

NAME: <i>Erich Guy</i>		<i>Frank Albert, Jr.</i>
OFFICE: <i>Huntington District</i>	<i>CELRH-EC-CE</i>	<i>Huntington District</i>
ADDRESS: <i>Huntington District</i>		<i>Huntington District</i>
PHONE: <i>304 399 5283</i>		<i>304-399-5760</i>

RESPONSIBILITIES:

Lead field effort

C. SITE SAFETY AND HEALTH OFFICER (SSHO)

NAME: <i>Bill Veith</i>	
OFFICE: <i>CELRH-EC-CE</i>	
ADDRESS: <i>Hunkville Center</i>	
PHONE: <i>256 895-1592</i>	

RESPONSIBILITIES: Brief this ASSHP. Ensure the ASSHP guidelines are followed. Provide UXO escort duties.

D. FIRST AID/CPR Certified

NAME: <i>Erich Guy</i>	<i>Frank Albert Jr.</i>
OFFICE: <i>CELRH-EC-CE</i>	<i>CELRH-EC-CE</i>
ADDRESS: <i>Huntington District</i>	<i>Huntington District</i>
PHONE: <i>304-399-5283</i>	<i>304-399-5760</i>

RESPONSIBILITIES: Administer First Aid in the event of an emergency

E. TEAM MEMBERS (other than those listed above)

NAME:	
OFFICE:	
ADDRESS:	
PHONE:	

RESPONSIBILITIES: *To treat any medical emergency that may arise*

IV. HAZARD ANALYSIS

A. Safety and health hazards anticipated:

Chemical

Ordnance (specify): *The area was cleared of all OE. None expected*

<input checked="" type="checkbox"/> Heat Stress	<input type="checkbox"/> Cold Stress	<input checked="" type="checkbox"/> Tripping Hazard
<input type="checkbox"/> Noise	<input type="checkbox"/> Electrical	<input type="checkbox"/> Falling Object
<input checked="" type="checkbox"/> Foot hazard	<input checked="" type="checkbox"/> Biological	<input type="checkbox"/> Overhead Hazard
<input type="checkbox"/> Radiological	<input type="checkbox"/> Confined Space	<input type="checkbox"/> Water
<input checked="" type="checkbox"/> Explosive	<input type="checkbox"/> Climbing	<input type="checkbox"/> Flammable
<input type="checkbox"/> Other specify:		

B. Overall Hazard Evaluation:

High Moderate Low Unknown

JUSTIFICATION: (Provide a brief justification supporting the overall rating.) *A response action was completed at this site. Trades are open to the public.*

V. ACCIDENT PREVENTION

A. General Precautions:

Prior to the on-site visit, all team members are required to read this ASSHP and sign the form acknowledging that they have read and will comply with it. In addition, the SSHO shall hold a brief tailgate meeting in which site specific topics regarding the day's activities will be discussed. The buddy system will be enforced at all times. If unanticipated hazardous conditions arise, team members are to stop work, evacuate the area and notify the SSHO.

VI. STANDARD OPERATION SAFETY PROCEDURES, ENGINEERING CONTROLS AND WORK PRACTICES

A. SITE RULES/PROHIBITIONS: At any sign of hazardous conditions, stop tasks, evacuate area and notify the SSHO. Smoking, eating and drinking allowed in designated areas only.

B. MATERIAL HANDLING PROCEDURES: Do not handle

C. DRUM HANDLING PROCEDURES: Do not handle

D. CONFINED SPACE ENTRY: Do not enter

E. IGNITION SOURCE AND ELECTRICAL PROTECTION: Do not smoke

F. SPILL CONTAINMENT: N/A

G. EXCAVATION SAFETY: Do not enter trenches/excavations

H. ILLUMINATION: Work during daylight hours only.

I. SANITATION: Use existing sanitary facilities.

J. BUDDY SYSTEM: Two persons on-site maintaining constant contact with each other. To be adhered to at all times.

K. ENGINEERING CONTROLS: N/A

L. HEAT/COLD STRESS: Dress appropriately. Take sufficient breaks and drink plenty of fluids. Watch for signs/symptoms of cold/heat stress. Monitoring may be applicable depending on the site weather conditions and type of PPE worn.

M. ORDNANCE:

1. General Information

a. The cardinal principle to be observed involving explosives, ammunition, severe fire hazards or toxic materials is to limit the exposure to a minimum of personnel, for the minimum amount of time, to a minimum amount of hazardous material consistent with a safe and efficient operation.

b. The age or condition of an ordnance item does not decrease its effectiveness. Ordnance that has been exposed to the elements for extended periods of time become more sensitive to shock, movement, and friction, because the stabilizing agent in the explosives may be degraded.

c. When chemical agents may be present, further precautions are necessary. If the munition item has green markings leave the area immediately, since it may contain a chemical filler.

d. Consider ordnance that has been exposed to fire as extremely hazardous. Chemical and physical changes may have occurred to the contents which render it more sensitive than it was in its original state.

2. On-Site Instructions

a. DO NOT touch or move any ordnance items regardless of the marking or apparent condition.

b. DO NOT visit an ordnance site if an electrical storm is occurring or approaching. If a storm approaches during a site visit leave the site immediately and seek shelter.

c. DO NOT use radio or cellular phones in the vicinity of suspect ordnance items.

d. DO NOT walk across an area where the ground cannot be seen. If dead vegetation or dead animals are observed, leave the area immediately due to potential chemical agent contamination.

e. DO NOT drive vehicles into suspected OE areas; use clearly marked lanes.

f. DO NOT carry matches, lighted cigarettes, lighters or other flame producing devices into an OE site.

g. DO NOT rely on color codes for positive identification of ordnance items or their contents.

h. Approach ordnance items from the side, avoid approaching the front and rear areas.

i. Always assume ordnance items contain a live charge until it can be determined otherwise.

3. Specific Action Upon Locating Ordnance

a. DO NOT touch, move or jar any ordnance item, regardless of its apparent condition.

b. Approach the item cautiously, take photographs and a full description. Take notes of the markings or any other identifiers/features.

c. DO NOT be misled by markings on the ordnance item stating "practice", "dummy", or "inert". Even practice bombs have explosive charges that are used to mark/spot the point of impact; or the item could be mismarked.

d. DO NOT roll an ordnance item over or scrape the item to identify the markings.

- e. The location of any ordnance items found during the site investigation should be clearly marked so it can be easily located and avoided.
- f. The U.S. Army Engineering and Support Center, Huntsville, (256) 895-1598 shall be notified upon location of any UXO.

N. POISONOUS SNAKES OR INSECTS

- a. DO NOT handle any snake even those that appear to be dead.
- b. Avoid areas of limited visibility such as tall grass or heavy vegetation.
- c. Roll sleeves down and use insect repellent.

O. POISONOUS PLANTS

- a. Avoid areas of limited visibility such as tall grass or heavy vegetation.
- b. Roll sleeves down and use barrier cream and wear gloves.

P. OTHER (specify)

--

VII. SITE CONTROL AND COMMUNICATIONS:

- A. SITE MAP: See Attached.
- B. SITE WORK ZONES:
- C. BUDDY SYSTEM: To be adhered to at all times.
- D. COMMUNICATIONS:

1. ON-SITE: Verbal communications will be used among team members to communicate to each other on-site. If this communication is not possible, the following hand signals will be used.

GRIP PARTNER'S WRIST OR BOTH HANDS AROUND WAIST --
Leave the area immediately.

HAND GRIPPING NOSE -- Unusual smell detected

THUMBS UP -- OK, I am alright or I understand

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2. OFF-SITE: Off-site communications shall be established on every site. Communications may be established by using an on-site cellular phone or by locating the nearest public phone or private phone which may be readily accessed.

Cellular Phone: (304) 633-1716, (304) 544-7093

Public/Private phone

Other. TBD on-site before commencing site visit.

3. EMERGENCY SIGNALS: In the case of small groups, a verbal signal for emergencies shall suffice. The emergency signal for large groups should be incorporated at the discretion of the SSHO.

Verbal

Nonverbal (Specify)

VIII. EMERGENCY RESPONSE

A. Team members are to be alert to the dangers associated with the site at all times. If a hazardous condition arises, stop work, evacuate the immediate area and notify the SSHO.

B. FIRST AID. A first aid kit and emergency eye wash (as applicable) will be located in the SSHO's field car. If qualified persons (i.e. a fire department, medical facility or physician) is not accessible within five minutes of the site at least one team member shall be qualified to administer first aid and CPR.

C. EMERGENCY TELEPHONE NUMBERS.

1. MEDICAL FACILITY:	304 637-3337
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6. FORSCOM EOD: <i>48th Eon</i>	<i>803 751-1562</i>
7. TEU:	<i>(401) 671-2773.</i>
8. PROJECT MANAGER:	<i>304 633 1716</i>
9. Other (list):	

D. DIRECTIONS TO THE NEAREST HOSPITAL/MEDICAL FACILITY:

EMS will transport Contact at 304 637-3337 Davis Memorial Hospital

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A. Exposure Monitoring: For non-intrusive on-site activities such as site visits, air monitoring is normally not required. However, if the site situation dictates the need for monitoring, complete the following information on a separate page and attach the page to the ASSHP.

- Monitoring equipment to be used.
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- Action Levels.

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A. GENERAL

Typically, for non-intrusive site visits, Level D is required. Team members should avoid wearing outer or undergarments made of wool, silk or synthetic textiles such as rayon or nylon. These materials can generate sufficient static charge to ignite explosives. Hard hats will be worn if an overhead hazard exists, safety glasses if an eye hazard is present and safety shoes will be worn if a foot hazard exists.

B. NON-INTRUSIVE SITE VISIT

Level of Protection:

Initial: Level D Modified (specify)

--

Contingency: Evacuate site if higher level of protection is needed.

XI. DECONTAMINATION PROCEDURES

Decontamination procedures are not anticipated for this site investigation. Team members are cautioned not to walk, kneel or sit on any surface with potential leaks, spills or contamination.

XII. TRAINING

All site personnel shall have completed the training required by EM 385-1-1 and 29 CFR 1910.120 (e). The USACE Project Manager shall ensure and the SSHO shall verify that all on-site personnel have completed the appropriate training prior to submitting the plan to the Safety Office for review. Additionally, the SSHO shall inform personnel before entering, of any potential site-specific hazards and procedures.

XIII. MEDICAL SURVEILLANCE PROGRAM

The USACE Project Manager shall ensure and the SSHO shall verify that all on-site personnel are on the Medical Surveillance Program meeting the requirements of 29 CFR 1910.120 and ANSI Z-88.2, as appropriate, depending on the PPE and the site specific tasks.

NAME	COURSE DATE (40 hr / 8 hr)	PROVIDER	MEDICAL EXAM DATE

XIV. LOGS, REPORTS AND RECORD KEEPING

Site logs are maintained by the Project Manager. This is to include historical data, personnel authorized to visit the site, all records, standard operating procedures and the ASSHP submitted. Any air monitoring logs, SOPs, and attachments to plans.

XV. GENERAL

The number of persons visiting the site shall be held to a minimum. No more than 8 persons per SSHO shall be allowed on-site. The more persons on-site, the greater potential for an accident. The SSHO may modify this ASSHP if site conditions warrant it and without risking the safety and health of the team members. This modification will be coordinated with the team members and the SSHO shall notify CEHNC-OE-S of the change as the situation allows.

SAFETY BRIEFING CHECKLIST
(Check subjects discussed)

SITE NAME:	DATE/TIME: /
------------	--------------

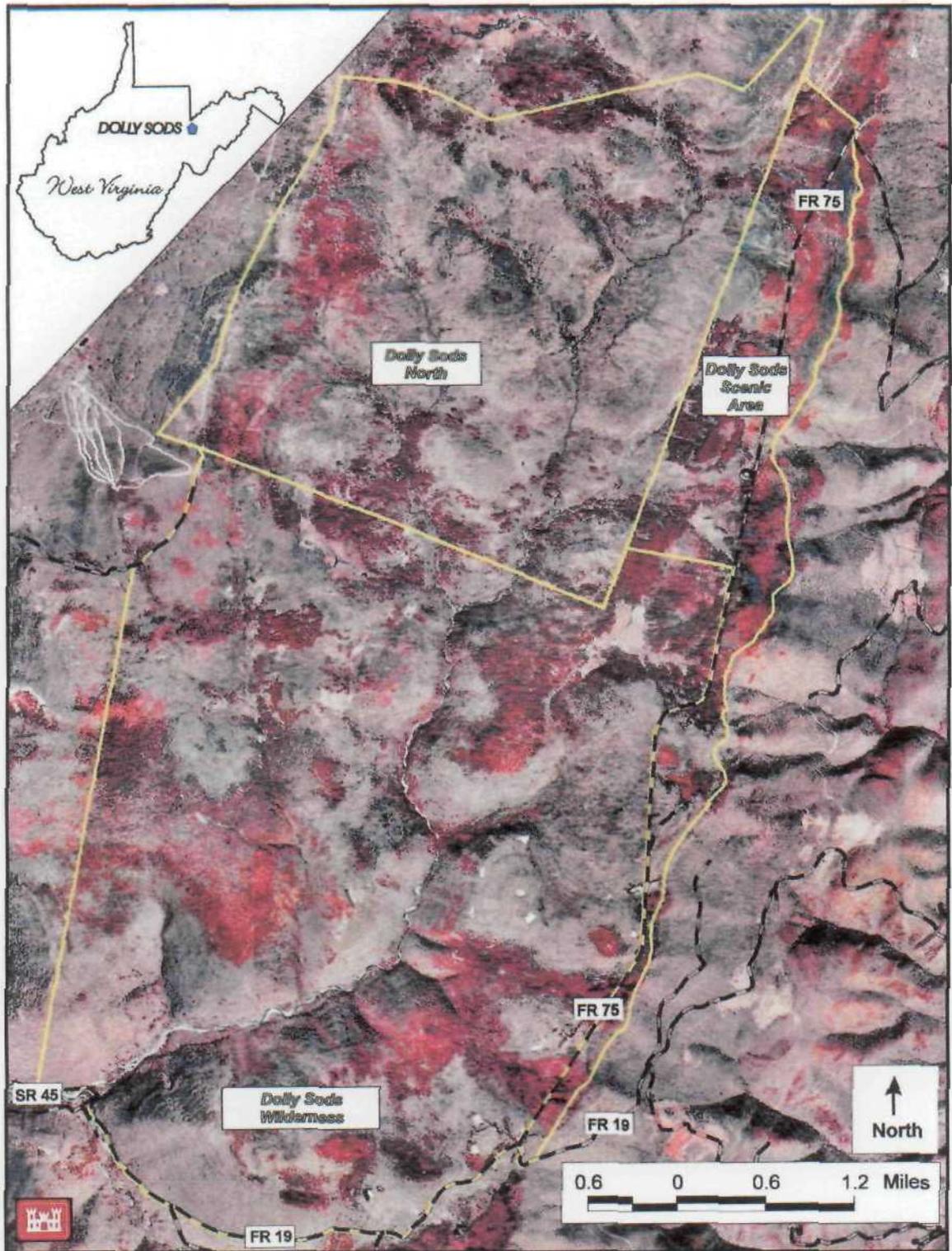
GENERAL INFORMATION

- PURPOSE OF VISIT
- IDENTIFY KEY SITE PERSONNEL
- TRAINING & MEDICAL REQ.

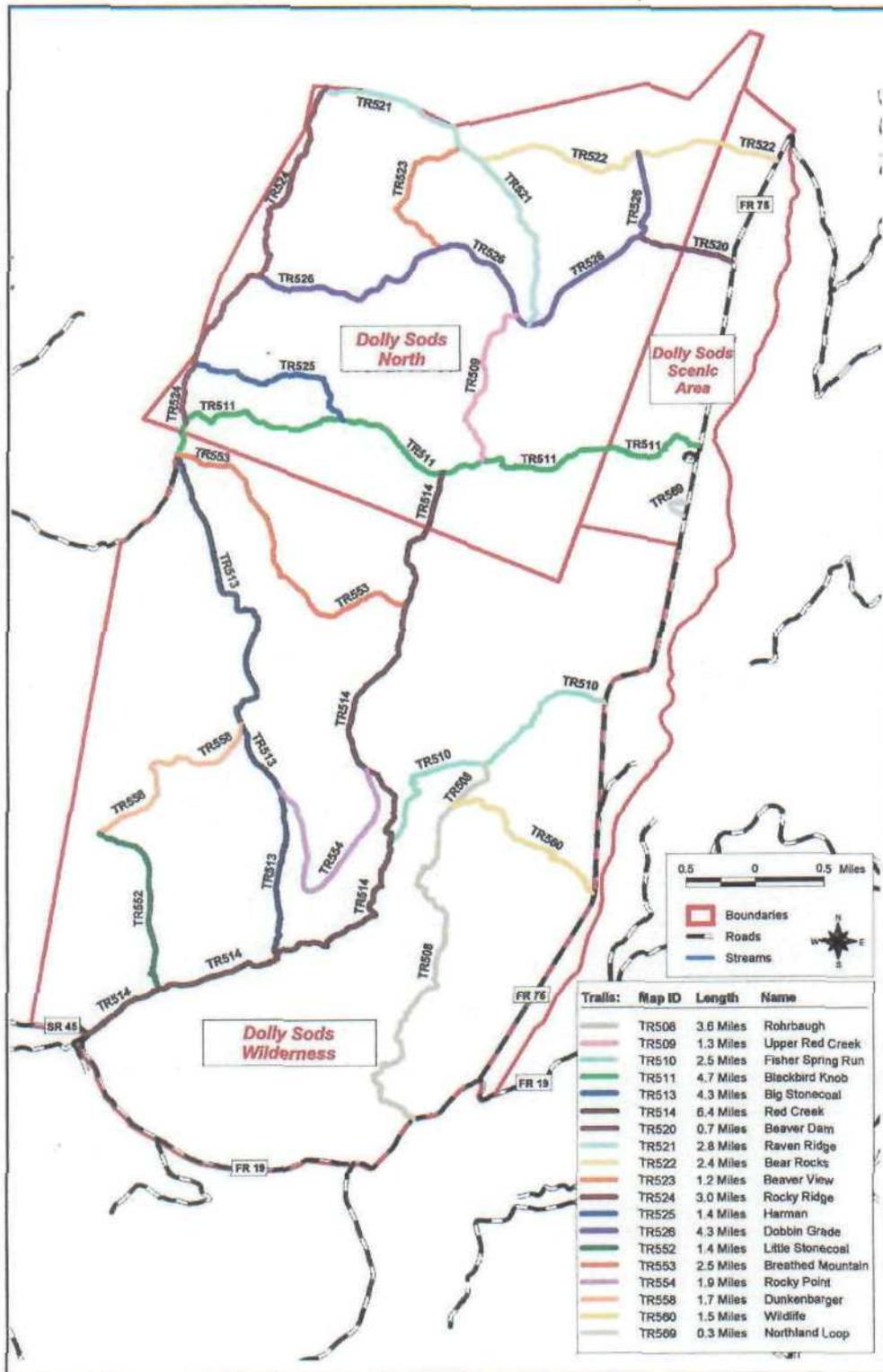
SPECIFIC INFORMATION

- Site description/past uses
- Results of previous studies
- Potential site hazards
- OE safety procedures
- Site SOPs
- Site control and communications
- Emergency hand signals
- Emergency response
 - () Location of first aid kit
 - () Emergency phone numbers & location
 - () Location of nearest medical facility & location of map to facility
- PPE and decontamination

Stress the following during the briefing: If hazardous conditions arise, stop work, evacuate the area and notify the SSIIO.

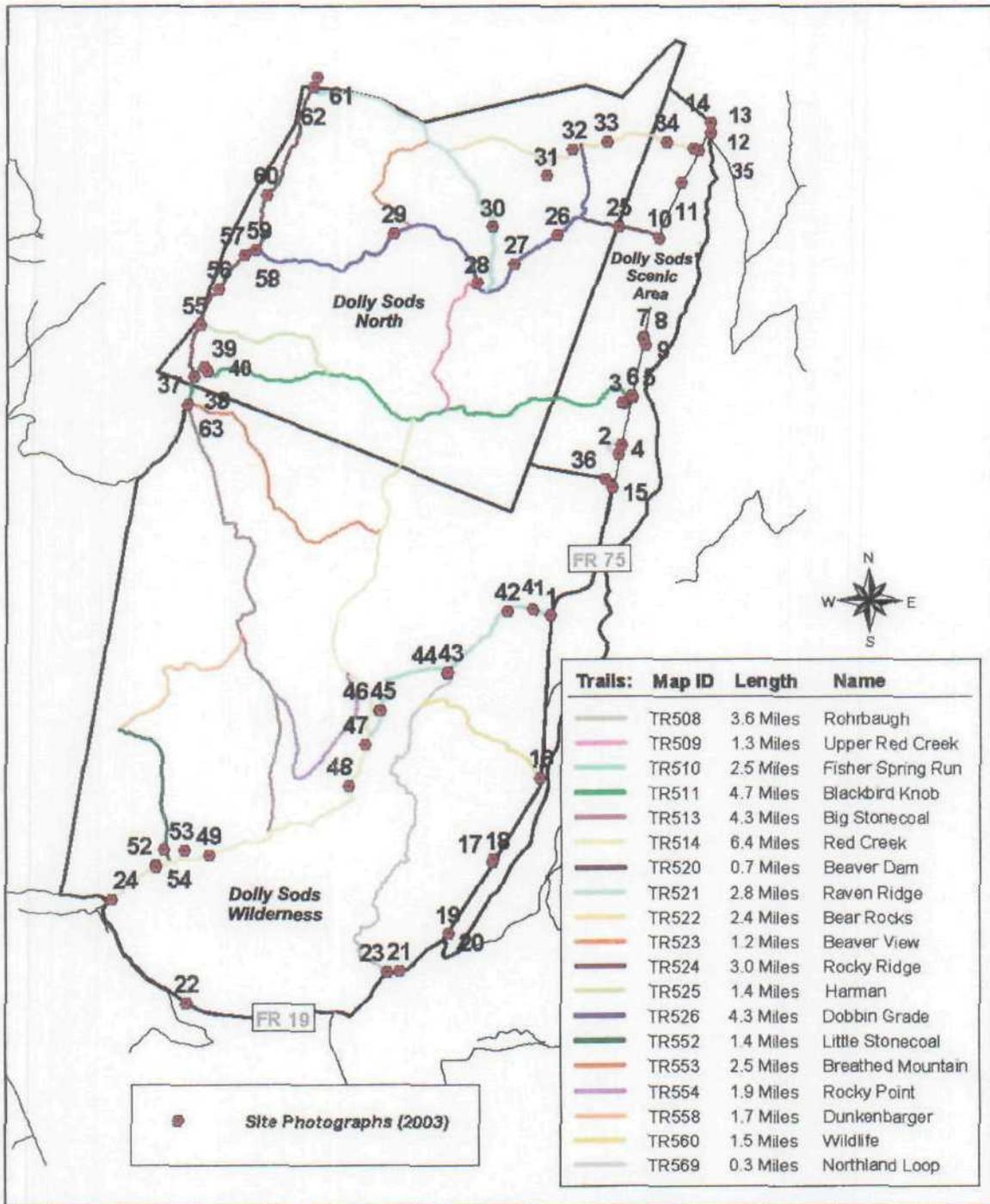


Map A1: Location of the Dolly Sods region relative to the state of West Virginia. The Dolly Sods Wilderness, Dolly Sods North and Dolly Sods Scenic Area boundaries are overlaid on USGS (1996-1999) Digital Orthophoto Quarter Quads (DOQQ).



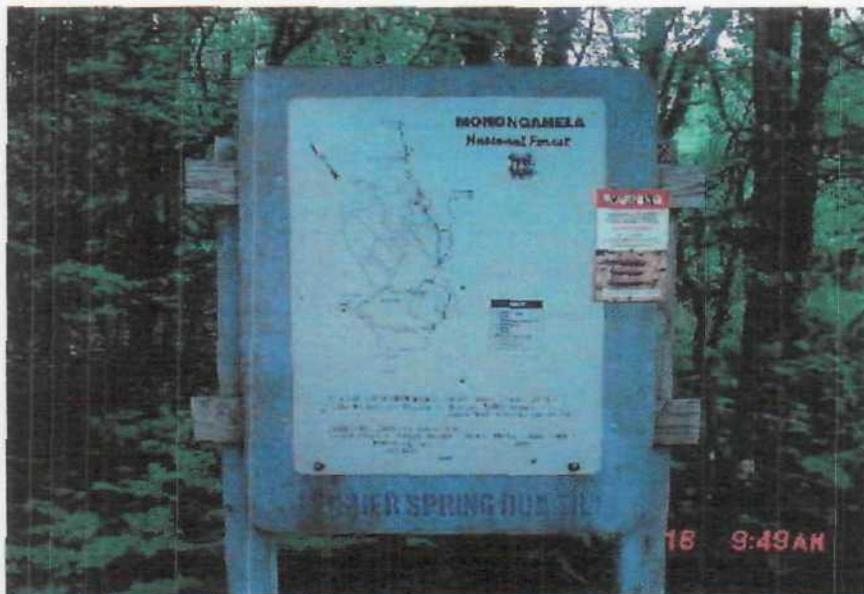
Map A2: Trails in the Dolly Sods Wilderness, Dolly Sods North, and Dolly Sods Scenic Area that were cleared during the 1997 to 1998 ordnance removal action. See text for discussion and details regarding the removal action.

Appendix D: SITE ASSESSMENT PHOTOGRAPHS

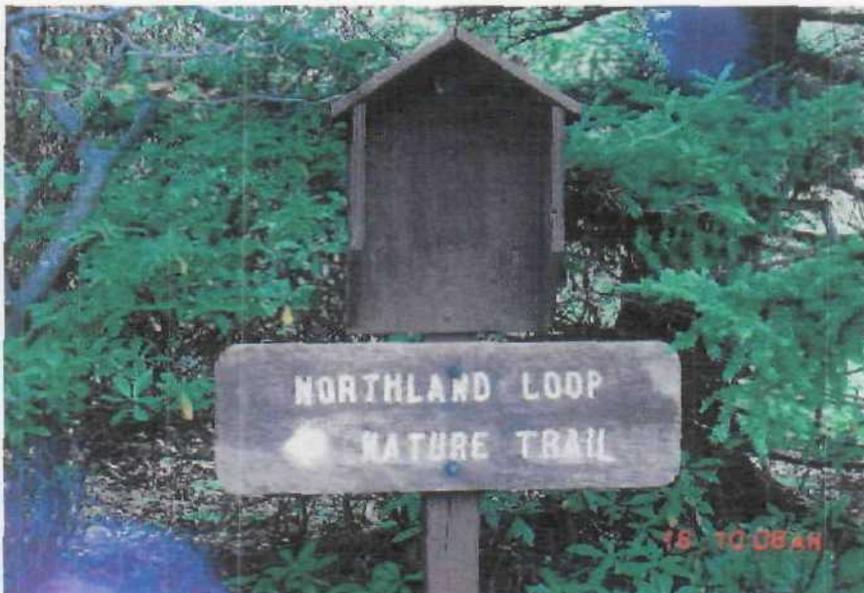


Map D1: Locations of photographs taken during the 2003 site assessment. The number next to each location corresponds to the photograph number in this appendix. The trails shown on this map are designated and maintained trails that were cleared for ordnance during the 1997 to 1998 removal action.

Photographs taken during the 2003 site assessment; refer to Map DI for photograph locations.



1. Fischer Spring Run Trailhead (East entrance of trail).
Bearing: N40°E Easting/Northing: 644801/4318857 Elevation: 1224
Easting, Northing, and Elevation values are in UTM NAD83 meters.
(Coordinates: GPS Based) Head of cleared trail appropriately designated (Y/N)? Y
UXO Warning Sign Status: Color sign intact Date of Inspection: 8-18-2003



2. Northland Loop Trailhead (South entrance of trail).
Bearing: N80°E Easting/Northing: 645721/4321050 Elevation: 1181
Easting, Northing, and Elevation values are in UTM NAD83 meters.
(Coordinates: GPS Based) Head of cleared trail appropriately designated (Y/N)? Y
UXO Warning Sign Status: No sign present Date of Inspection: 8-18-2003

Notes:

1. Elevations are in reference to global mean sea level (MSL).
2. N/A (not applicable) denotes that the location is not the head of a trail that was cleared of ordnance during the 1997 to 1998 removal action (i.e. it is not a designated and maintained trail location), or that a UXO warning sign is not recommended to be placed and maintained at this location.



3. Red Creek Campground sign.
 Bearing: S20°W Easting/Northing: 645772/4321763 Elevation: 1187
 Easting, Northing, and Elevation values are in UTM NAD83 meters.
 (Coordinates: GPS Based) Head of cleared trail appropriately designated (Y/N)? N/A
 UXO Warning Sign Status: Color sign intact Date of Inspection: 8-18-2003



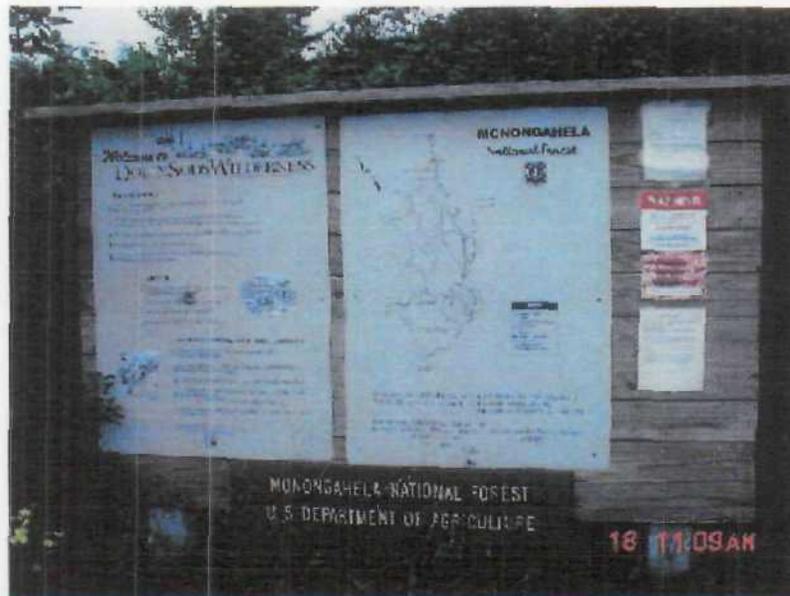
4. Northland Loop trailhead (North entrance of trail).
 Bearing: N40°W Easting/Northing: 645759/4321187 Elevation: 1179
 Easting, Northing, and Elevation values are in UTM NAD83 meters.
 (Coordinates: GPS Based) Head of cleared trail appropriately designated (Y/N)? N
 UXO Warning Sign Status: N/A* Date of Inspection: 8-18-2003

* Although this trail was cleared during 1997-98, the USFS does not wish to have a warning sign located at the northern end of the trail since the trail is a one-way interpretive trail which originates at its southern end (a warning sign should exist at the trail's southern end).

Notes: 1. Elevations are in reference to global mean sea level (MSL).
 2. N/A (not applicable) denotes that the location is not the head of a trail that was cleared of ordnance during the 1997 to 1998 removal action (i.e. it is not a designated and maintained trail location), or that a UXO warning sign is not recommended to be placed and maintained at this location.



5. Unnamed, unmarked trail to a bird migration area (immediately east of Forest Rd. 75).
 Bearing: N70°W Easting/Northing: 645909/4321829 Elevation: 1186
 Easting, Northing, and Elevation values are in UTM NAD83 meters.
 (Coordinates: GPS Based) Head of cleared trail appropriately designated (Y/N)? N/A
 UXO Warning Sign Status: N/A Date of Inspection: 8-18-2003



6. Blackbird Knob trailhead (immediately west of Forest Road 75).
 Bearing: N10°W Easting/Northing: 645898/4321850 Elevation: 1186
 Easting, Northing, and Elevation values are in UTM NAD83 meters.
 (Coordinates: GPS Based) Head of cleared trail appropriately designated (Y/N)? Y
 UXO Warning Sign Status: Color sign intact Date of Inspection: 8-18-2003

Notes: 1. Elevations are in reference to global mean sea level (MSL).
 2. N/A (not applicable) denotes that the location is not the head of a trail that was cleared of ordnance during the 1997 to 1998 removal action (i.e. it is not a designated and maintained trail location), or that a UXO warning sign is not recommended to be placed and maintained at this location.



7. Unnamed, unmarked trail (immediately west of Forest Road 75).
Bearing: N60°W Easting/Northing: 646060/4322644 Elevation: 1213
Easting, Northing, and Elevation values are in UTM NAD83 meters.
(Coordinates: GPS Based) Head of cleared trail appropriately designated (Y/N)? N/A
UXO Warning Sign Status: N/A Date of Inspection: 8-18-2003



8. Unnamed, unmarked trail leading to campsite (immediately east of Forest Rd. 75).
Bearing: S10°E Easting/Northing: 646062/4322622 Elevation: 1211
Easting, Northing, and Elevation values are in UTM NAD83 meters.
(Coordinates: GPS Based) Head of cleared trail appropriately designated (Y/N)? N/A
UXO Warning Sign Status: N/A Date of Inspection: 8-18-2003

Notes:

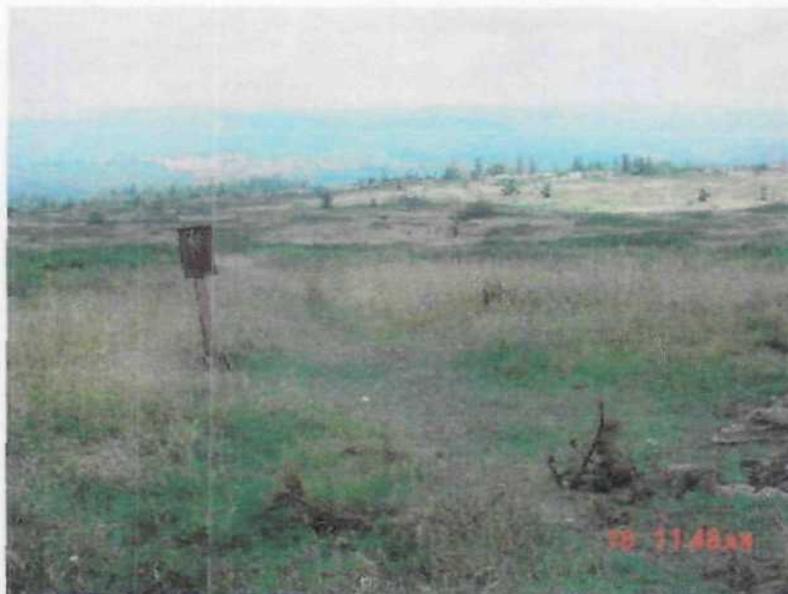
1. Elevations are in reference to global mean sea level (MSL).
2. N/A (not applicable) denotes that the location is not the head of a trail that was cleared of ordnance during the 1997 to 1998 removal action (i.e. it is not a designated and maintained trail location), or that a UXO warning sign is not recommended to be placed and maintained at this location.



9. Campsite (not cleared for ordnance) at the end of an unnamed, unmarked trail (immediately east of Forest Rd. 75).

Bearing: N80°E Easting/Northing: 646093/4322537 Elevation: 1211
Easting, Northing, and Elevation values are in UTM NAD83 meters.

(Coordinates: GPS Based) Head of cleared trail appropriately designated (Y/N)? N/A
UXO Warning Sign Status: N/A Date of Inspection: 8-18-2003



10. Beaver Dam trailhead (immediately west of Forest Rd. 75).

Bearing: N30°W Easting/Northing: 646275/4324014 Elevation: 1239
Easting, Northing, and Elevation values are in UTM NAD83 meters.

(Coordinates: GPS Based) Head of cleared trail appropriately designated (Y/N)? N
UXO Warning Sign Status: No sign present Date of Inspection: 8-18-2003

- Notes:
1. Elevations are in reference to global mean sea level (MSL).
 2. N/A (not applicable) denotes that the location is not the head of a trail that was cleared of ordnance during the 1997 to 1998 removal action (i.e. it is not a designated and maintained trail location), or that a UXO warning sign is not recommended to be placed and maintained at this location.



11. Unnamed, unmarked trailhead at road pulloff area.
Bearing: N30°E Easting/Northing: 646580/4324769 Elevation: 1201
Easting, Northing, and Elevation values are in UTM NAD83 meters.
(Coordinates: GPS Based) Head of cleared trail appropriately designated (Y/N)? N/A
UXO Warning Sign Status: Gray sign intact* Date of Inspection: 8-18-2003
*Existing sign at this location should be removed to reduce use of this non-designated trail.



12. Bear Rocks trailhead (immediately west of Forest Rd. 75).
Bearing: N30°W Easting/Northing: 646800/4325202 Elevation: 1208
Easting, Northing, and Elevation values are in UTM NAD83 meters.
(Coordinates: GPS Based) Head of cleared trail appropriately designated (Y/N)? N
UXO Warning Sign Status: Gray sign intact Date of Inspection: 8-18-2003

Notes: 1. Elevations are in reference to global mean sea level (MSL).
2. N/A (not applicable) denotes that the location is not the head of a trail that was cleared of ordnance during the 1997 to 1998 removal action (i.e. it is not a designated and maintained trail location), or that a UXO warning sign is not recommended to be placed and maintained at this location.



13. Location immediately southwest of Bear Rocks (in bend of Forest Rd. 75).
 Bearing: N60°W Easting/Northing: 646981/4325448 Elevation: 1203
 Easting, Northing, and Elevation values are in UTM NAD83 meters.
 (Coordinates: GPS Based) Head of cleared trail appropriately designated (Y/N)? N/A
 UXO Warning Sign Status: Gray sign intact* Date of Inspection: 8-18-2003
 *Existing sign at this location can be removed since a sign will be located at another nearby location.



14. Welcome sign at Bear Rocks Preserve; sign contains a UXO warning message but no contact information for a situation in which UXO is found by a visitor.
 Bearing: N15°W Easting/Northing: 646969/4325580 Elevation: 1206
 Easting, Northing, and Elevation values are in UTM NAD83 meters.
 (Coordinates: GPS Based) Head of cleared trail appropriately designated (Y/N)? N/A
 UXO Warning Sign Status: N/A Date of Inspection: 8-18-2003

Notes:

1. Elevations are in reference to global mean sea level (MSL).
2. N/A (not applicable) denotes that the location is not the head of a trail that was cleared of ordnance during the 1997 to 1998 removal action (i.e. it is not a designated and maintained trail location), or that a UXO warning sign is not recommended to be placed and maintained at this location.



15. Unnamed, unmarked trailhead at road pulloff area (immediately west of Forest Rd. 75).
 Bearing: N30°W Easting/Northing: 645634/4320600 Elevation: 1201
 Easting, Northing, and Elevation values are in UTM NAD83 meters.
 (Coordinates: GPS Based) Head of cleared trail appropriately designated (Y/N)? N/A
 UXO Warning Sign Status: N/A Date of Inspection: 8-18-2003



16. Wildlife trailhead.
 Bearing: N40°E Easting/Northing: 644668/4316639 Elevation: 1223
 Easting, Northing, and Elevation values are in UTM NAD83 meters.
 (Coordinates: GPS Based) Head of cleared trail appropriately designated (Y/N)? Y
 UXO Warning Sign Status: Color sign intact Date of Inspection: 8-18-2003

Notes: 1. Elevations are in reference to global mean sea level (MSL).
 2. N/A (not applicable) denotes that the location is not the head of a trail that was cleared of ordnance during the 1997 to 1998 removal action (i.e. it is not a designated and maintained trail location), or that a UXO warning sign is not recommended to be placed and maintained at this location.



17. Road pull off and parking area immediately west of Forest Road 75.

Bearing: N50°W Easting/Northing: 644006/431 5480 Elevation: 1210

Easting, Northing, and Elevation values are in UTM NAD83 meters.

(Coordinates: GPS Based) Head of cleared trail appropriately designated (Y/N)? N/A

UXO Warning Sign Status: Gray sign intact * Date of Inspection: 8-18-2003

*Existing sign at this location should be removed to reduce use of this non-designated trail.



18. Unnamed, unmarked trailhead (immediately north of a road pulloff and parking area).

Bearing: N25°W Easting/Northing: 644025/431 5522 Elevation: 1207

Easting, Northing, and Elevation values are in UTM NAD83 meters.

(Coordinates: GPS Based) Head of cleared trail appropriately designated (Y/N)? N/A

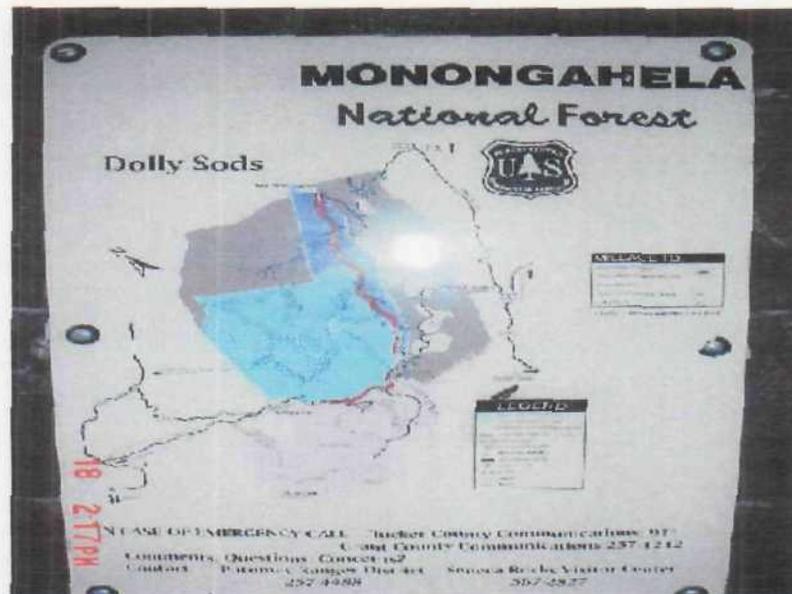
UXO Warning Sign Status: N/A Date of Inspection: 8-18-2003

**Existing post at this location should be removed to reduce use of non-designated trail.

- Notes:
1. Elevations are in reference to global mean sea level (MSL).
 2. N/A (not applicable) denotes that the location is not the head of a trail that was cleared of ordnance during the 1997 to 1998 removal action (i.e. it is not a designated and maintained trail location), or that a UXO warning sign is not recommended to be placed and maintained at this location.



19. Display at road pull-off area (east of Forest Road 75); (same location as photo #20).
 Bearing: E Easting/Northing: 643411 /431 4511 Elevation: 1207
 Easting, Northing, and Elevation values are in UTM NAD83 meters.
 (Coordinates: GPS Based) Head of cleared trail appropriately designated (Y/N)? N/A
 UXO Warning Sign Status: Color sign intact Date of Inspection: 8-18-2003

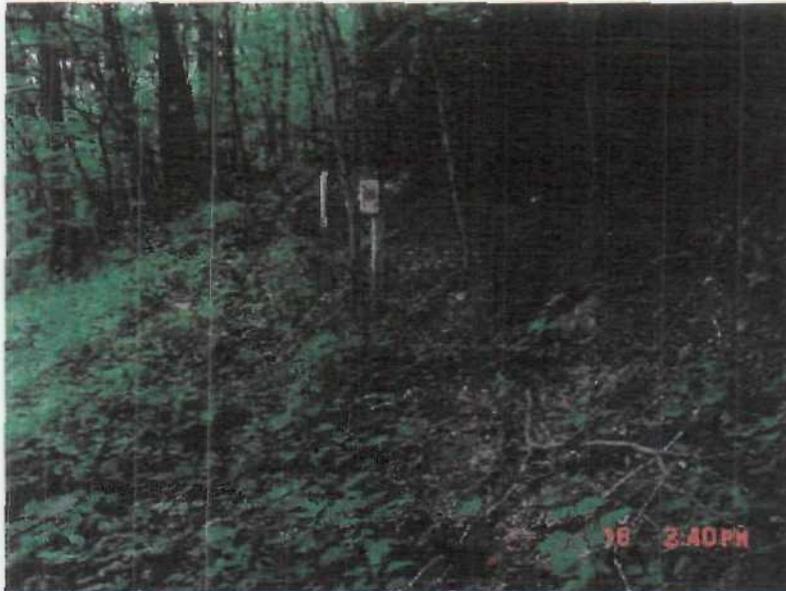


20. Close-up picture of Dolly Sods map on information display; (same location as photo #19).
 Bearing: E Easting/Northing: 643411 /431 4511 Elevation: 1207
 Easting, Northing, and Elevation values are in UTM NAD83 meters.
 (Coordinates: GPS Based) Head of cleared trail appropriately designated (Y/N)? N/A
 UXO Warning Sign Status: N/A Date of Inspection: 8-18-2003

Notes: 1. Elevations are in reference to global mean sea level (MSL).
 2. N/A (not applicable) denotes that the location is not the head of a trail that was cleared of ordnance during the 1997 to 1998 removal action (i.e. it is not a designated and maintained trail location), or that a UXO warning sign is not recommended to be placed and maintained at this location.



21. Unnamed, unmarked trailhead (immediately west of Forest Road 75).
Bearing: N20°W Easting/Northing: 642748/4313993 Elevation: 1228
Easting, Northing, and Elevation values are in UTM NAD83 meters.
(Coordinates: GPS Based) Head of cleared trail appropriately designated (Y/N)? N/A
UXO Warning Sign Status: N/A Date of Inspection: 8-18-2003



22. Unnamed, unmarked trailhead (immediately north of Forest Road 75).
Bearing: N10°W Easting/Northing: 639834/4313566 Elevation: 965
Easting, Northing, and Elevation values are in UTM NAD83 meters.
(Coordinates: GPS Based) Head of cleared trail appropriately designated (Y/N)? N/A
UXO Warning Sign Status: N/A Date of Inspection: 8-18-2003
**Existing posts at this location should be removed to reduce use of non-designated trail.

Notes: 1. Elevations are in reference to global mean sea level (MSL).
2. N/A (not applicable) denotes that the location is not the head of a trail that was cleared of ordnance during the 1997 to 1998 removal action (i.e. it is not a designated and maintained trail location), or that a UXO warning sign is not recommended to be placed and maintained at this location.



23. Rohrbaugh trailhead (east entrance of trail).
 Bearing: N70°W Easting/Northing: 642580/4313980 Elevation: 1237
 Easting, Northing, and Elevation values are in UTM NAD83 meters.
 (Coordinates: GPS Based) Head of cleared trail appropriately designated (Y/N)? Y
 UXO Warning Sign Status: Color sign intact Date of Inspection: 8-18-2003



24. Red Creek trailhead (south entrance of trail).
 Bearing: N100°E Easting/Northing: 638820/4314985 Elevation: 801
 Easting, Northing, and Elevation values are in UTM NAD83 meters.
 (Coordinates: GPS Based) Head of cleared trail appropriately designated (Y/N)? Y
 UXO Warning Sign Status: Color sign intact Date of Inspection: 8-18-2003

- Notes:
1. Elevations are in reference to global mean sea level (MSL).
 2. N/A (not applicable) denotes that the location is not the head of a trail that was cleared of ordnance during the 1997 to 1998 removal action (i.e. it is not a designated and maintained trail location), or that a UXO warning sign is not recommended to be placed and maintained at this location.



25. Beaver Dam trail; no problematic erosion evident; abundant vegetation evident.
Bearing: N80°E Easting/Northing: 645722/4324167 Elevation: 1205
Easting, Northing, and Elevation values are in UTM NAD83 meters.
(Coordinates: GPS Based) Head of cleared trail appropriately designated (Y/N)? N/A
UXO Warning Sign Status: N/A Date of Inspection: 8-19-2003



26. Dobbin Grade trail; no problematic erosion evident; abundant vegetation evident.
Bearing: N10°W Easting/Northing: 644881/4324051 Elevation: 1139
Easting, Northing, and Elevation values are in UTM NAD83 meters.
(Coordinates: GPS Based) Head of cleared trail appropriately designated (Y/N)? N/A
UXO Warning Sign Status: N/A Date of Inspection: 8-19-2003

Notes:

1. Elevations are in reference to global mean sea level (MSL).
2. N/A (not applicable) denotes that the location is not the head of a trail that was cleared of ordnance during the 1997 to 1998 removal action (i.e. it is not a designated and maintained trail location), or that a UXO warning sign is not recommended to be placed and maintained at this location.



27. Dobbin Grade trail; no problematic erosion evident; abundant vegetation evident.
Bearing: N30°E Easting/Northing: 644286/4323644 Elevation: 1131
Easting, Northing, and Elevation values are in UTM NAD83 meters.
(Coordinates: GPS Based) Head of cleared trail appropriately designated (Y/N)? N/A
UXO Warning Sign Status: N/A Date of Inspection: 8-19-2003



28. Intersection of Dobbin Grade trail and Upper Red Creek trail; no problematic erosion evident;
abundant vegetation evident.
Bearing: N80°W Easting/Northing: 643780/4323382 Elevation: 1131
Easting, Northing, and Elevation values are in UTM NAD83 meters.
(Coordinates: GPS Based) Head of cleared trail appropriately designated (Y/N)? N/A
UXO Warning Sign Status: N/A Date of Inspection: 8-19-2003

Notes: 1. Elevations are in reference to global mean sea level (MSL).
2. N/A (not applicable) denotes that the location is not the head of a trail that was cleared of ordnance during the 1997 to 1998 removal action (i.e. it is not a designated and maintained trail location), or that a UXO warning sign is not recommended to be placed and maintained at this location.



29. Dobbin Grade trail; no problematic erosion evident; abundant vegetation evident.
Bearing: N80°E Easting/Northing: 642643/4324066 Elevation: 1179
Easting, Northing, and Elevation values are in UTM NAD83 meters.
(Coordinates: GPS Based) Head of cleared trail appropriately designated (Y/N)? N/A
UXO Warning Sign Status: N/A Date of Inspection: 8-19-2003



30. Raven Ridge trail; no problematic erosion evident; abundant vegetation evident.
Bearing: S Easting/Northing: 643995/4324159 Elevation: 1179
Easting, Northing, and Elevation values are in UTM NAD83 meters.
(Coordinates: GPS Based) Head of cleared trail appropriately designated (Y/N)? N/A
UXO Warning Sign Status: N/A Date of Inspection: 8-19-2003

Notes: 1. Elevations are in reference to global mean sea level (MSL).
2. N/A (not applicable) denotes that the location is not the head of a trail that was cleared of ordnance during the 1997 to 1998 removal action (i.e. it is not a designated and maintained trail location), or that a UXO warning sign is not recommended to be placed and maintained at this location.



31. Bear Rocks trail; no problematic erosion evident; abundant vegetation evident.
Bearing: S45°E Easting/Northing: 644734/4324859 Elevation: 1183
Easting, Northing, and Elevation values are in UTM NAD83 meters.
(Coordinates: GPS Based) Head of cleared trail appropriately designated (Y/N)? N/A
UXO Warning Sign Status: N/A Date of Inspection: 8-19-2003



32. Bear Rocks trail; no problematic erosion evident; abundant vegetation evident.
Bearing: N10°E Easting/Northing: 645070/4325220 Elevation: 1153
Easting, Northing, and Elevation values are in UTM NAD83 meters.
(Coordinates: GPS Based) Head of cleared trail appropriately designated (Y/N)? N/A
UXO Warning Sign Status: N/A Date of Inspection: 8-19-2003

Notes: 1. Elevations are in reference to global mean sea level (MSL).
2. N/A (not applicable) denotes that the location is not the head of a trail that was cleared of ordnance during the 1997 to 1998 removal action (i.e. it is not a designated and maintained trail location), or that a UXO warning sign is not recommended to be placed and maintained at this location.



33. Bear Rocks trail; no problematic erosion evident; abundant vegetation evident.
Bearing: W Easting/Northing: 645550/4325314 Elevation: 1196
Easting, Northing, and Elevation values are in UTM NAD83 meters.
(Coordinates: GPS Based) Head of cleared trail appropriately designated (Y/N)? N/A
UXO Warning Sign Status: N/A Date of Inspection: 8-19-2003



34. Bear Rocks trail; isolated area of erosion (non-problematic) along trail evident.
Bearing: S Easting/Northing: 643995/4324159 Elevation: 1179
Easting, Northing, and Elevation values are in UTM NAD83 meters.
(Coordinates: GPS Based) Head of cleared trail appropriately designated (Y/N)? N/A
UXO Warning Sign Status: N/A Date of Inspection: 8-19-2003

Notes: 1. Elevations are in reference to global mean sea level (MSL).
2. N/A (not applicable) denotes that the location is not the head of a trail that was cleared of ordnance during the 1997 to 1998 removal action (i.e. it is not a designated and maintained trail location), or that a UXO warning sign is not recommended to be placed and maintained at this location.



35. Bear Rocks trail; no problematic erosion evident; abundant vegetation evident.
Bearing: N45°W Easting/Northing: 646740/4325228 Elevation: 1205
Easting, Northing, and Elevation values are in UTM NAD83 meters.
(Coordinates: GPS Based) Head of cleared trail appropriately designated (Y/N)? N/A
UXO Warning Sign Status: N/A Date of Inspection: 8-19-2003



36. Area where a "pit" was interpreted by the USEPA from a 1945 aerial photo; no problematic erosion evident; abundant vegetation evident.
Bearing: N50°W Easting/Northing: 645539/4320724 Elevation: 1189
Easting, Northing, and Elevation values are in UTM NAD83 meters.
(Coordinates: GPS Based) Head of cleared trail appropriately designated (Y/N)? N/A
UXO Warning Sign Status: N/A Date of Inspection: 8-19-2003

Notes:

1. Elevations are in reference to global mean sea level (MSL).
2. N/A (not applicable) denotes that the location is not the head of a trail that was cleared of ordnance during the 1997 to 1998 removal action (i.e. it is not a designated and maintained trail location), or that a UXO warning sign is not recommended to be placed and maintained at this location.



37. Big Stone Coal and Breathed Mountain trailheads (west entrances of trails); see photograph 63 taken during November 2003 in which UXO warning sign is not present.
 Bearing: N135°E Easting/Northing: 639832/4321736 Elevation: 1195
 Easting, Northing, and Elevation values are in UTM NAD83 meters.
 (Coordinates: GPS Based) Head of cleared trail appropriately designated (Y/N)? Y
 UXO Warning Sign Status: Color sign intact Date of Inspection: 8-21-2003



38. Blackbird Knob trail and Rocky Ridge trail intersection; no problematic erosion evident, abundant vegetation evident.
 Bearing: N10°E Easting/Northing: 639912/4322115 Elevation: 1223
 Easting, Northing, and Elevation values are in UTM NAD83 meters.
 (Coordinates: GPS Based) Head of cleared trail appropriately designated (Y/N)? N/A
 UXO Warning Sign Status: N/A Date of Inspection: 8-21-2003

Notes: 1. Elevations are in reference to global mean sea level (MSL).
 2. N/A (not applicable) denotes that the location is not the head of a trail that was cleared of ordnance during the 1997 to 1998 removal action (i.e. it is not a designated and maintained trail location), or that a UXO warning sign is not recommended to be placed and maintained at this location.



39. Blackbird Knob trail; split of trail into northward and southward legs; no problematic erosion evident; abundant vegetation evident.

Bearing: N90°E Easting/Northing: 640058/4322231 Elevation: 1233

Easting, Northing, and Elevation values are in UTM NAD83 meters.

(Coordinates: GPS Based) Head of cleared trail appropriately designated (Y/N)? N/A

UXO Warning Sign Status: N/A

Date of Inspection: 8-21-2003



40. Blackbird Knob Trail; campsite (cleared for ordnance during 1998) along trail; no problematic erosion evident.

Bearing: N100°W Easting/Northing: 640100/4322181 Elevation: 1232

Easting, Northing, and Elevation values are in UTM NAD83 meters.

(Coordinates: GPS Based) Head of cleared trail appropriately designated (Y/N)? N/A

UXO Warning Sign Status: N/A

Date of Inspection: 8-21-2003

- Notes:
1. Elevations are in reference to global mean sea level (MSL).
 2. N/A (not applicable) denotes that the location is not the head of a trail that was cleared of ordnance during the 1997 to 1998 removal action (i.e. it is not a designated and maintained trail location), or that a UXO warning sign is not recommended to be placed and maintained at this location.



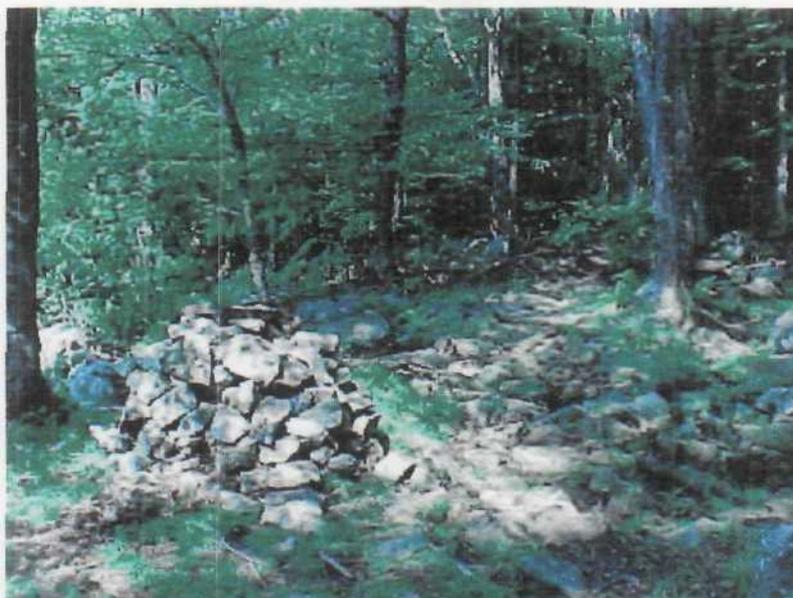
41. Fischer Spring Run trail; no problematic erosion evident; abundant vegetation evident.
Bearing: S85°E Easting/Northing: 644551/4318925
Easting, Northing, and Elevation values are in UTM NAD83 meters.
(Coordinates: Estimated) Head of cleared trail appropriately designated (Y/N)? N/A
UXO Warning Sign Status: N/A Date of Inspection: 8-18-2003



42. Fischer Spring Run trail; no problematic erosion evident; abundant vegetation evident.
Bearing: E Easting/Northing: 644207/4318901
Easting, Northing, and Elevation values are in UTM NAD83 meters.
(Coordinates: Estimated) Head of cleared trail appropriately designated (Y/N)? N/A
UXO Warning Sign Status: N/A Date of Inspection: 8-18-2003

Notes:

1. Elevations are in reference to global mean sea level (MSL).
2. N/A (not applicable) denotes that the location is not the head of a trail that was cleared of ordnance during the 1997 to 1998 removal action (i.e. it is not a designated and maintained trail location), or that a UXO warning sign is not recommended to be placed and maintained at this location.



43. Fischer Spring Run and Rohrbaugh trails intersection; no problematic erosion evident; abundant vegetation evident.

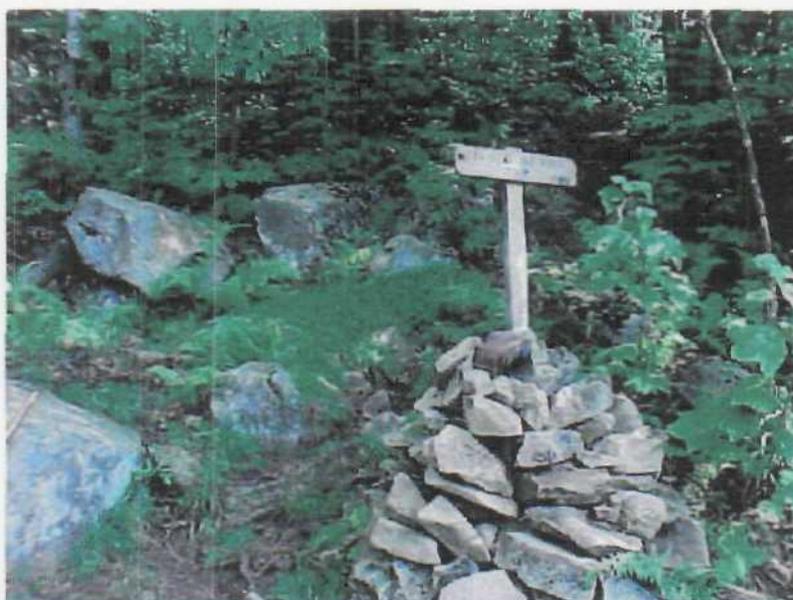
Bearing: N30°W Easting/Northing: 643403/4318075

Easting, Northing, and Elevation values are in UTM NAD83 meters.

(Coordinates: Estimated) Head of cleared trail appropriately designated (Y/N)? N/A

UXO Warning Sign Status: N/A

Date of Inspection: 8-18-2003



44. Fischer Spring Run and Rohrbaugh trails intersection; no problematic erosion evident; abundant vegetation evident.

Bearing: S45°E Easting/Northing: 643390/4318054

Easting, Northing, and Elevation values are in UTM NAD83 meters.

(Coordinates: Estimated) Head of cleared trail appropriately designated (Y/N)? N/A

UXO Warning Sign Status: N/A

Date of Inspection: 8-18-2003

- Notes:
1. Elevations are in reference to global mean sea level (MSL).
 2. N/A (not applicable) denotes that the location is not the head of a trail that was cleared of ordnance during the 1997 to 1998 removal action (i.e. it is not a designated and maintained trail location), or that a UXO warning sign is not recommended to be placed and maintained at this location.



45. Fischer Spring Run and Red Creek trails intersection; no problematic erosion evident; abundant vegetation evident.

Bearing: N30°W Easting/Northing: 642470/4317556

Easting, Northing, and Elevation values are in UTM NAD83 meters.

(Coordinates: Estimated) Head of cleared trail appropriately designated (Y/N)? N/A

UXO Warning Sign Status: N/A

Date of Inspection: 8-18-2003



46. Fischer Spring Run and Red Creek trails intersection; no problematic erosion evident; abundant vegetation evident.

Bearing: N40°E Easting/Northing: 642462/4317551

Easting, Northing, and Elevation values are in UTM NAD83 meters.

(Coordinates: Estimated) Head of cleared trail appropriately designated (Y/N)? N/A

UXO Warning Sign Status: N/A

Date of Inspection: 8-18-2003

- Notes:
1. Elevations are in reference to global mean sea level (MSL).
 2. N/A (not applicable) denotes that the location is not the head of a trail that was cleared of ordnance during the 1997 to 1998 removal action (i.e. it is not a designated and maintained trail location), or that a UXO warning sign is not recommended to be placed and maintained at this location.



47. Red Creek trail; isolated area of non-problematic erosion along trail evident.
Bearing: N60°W Easting/Northing: 642263/431 7089
Easting, Northing, and Elevation values are in UTM NAD83 meters.
(Coordinates: Estimated) Head of cleared trail appropriately designated (Y/N)? N/A
UXO Warning Sign Status: N/A Date of Inspection: 8-18-2003



48. Red Creek trail; hillside along trail with minor, but non-problematic erosion evident.
Bearing: N70°W Easting/Northing: 642052/431 6524
Easting, Northing, and Elevation values are in UTM NAD83 meters.
(Coordinates: Estimated) Head of cleared trail appropriately designated (Y/N)? N/A
UXO Warning Sign Status: N/A Date of Inspection: 8-18-2003

Notes: 1. Elevations are in reference to global mean sea level (MSL).
2. N/A (not applicable) denotes that the location is not the head of a trail that was cleared of ordnance during the 1997 to 1998 removal action (i.e. it is not a designated and maintained trail location), or that a UXO warning sign is not recommended to be placed and maintained at this location.



49. Red Creek trail; campsite (cleared for ordnance during 1997) along trail; no problematic erosion evident; abundant vegetation.

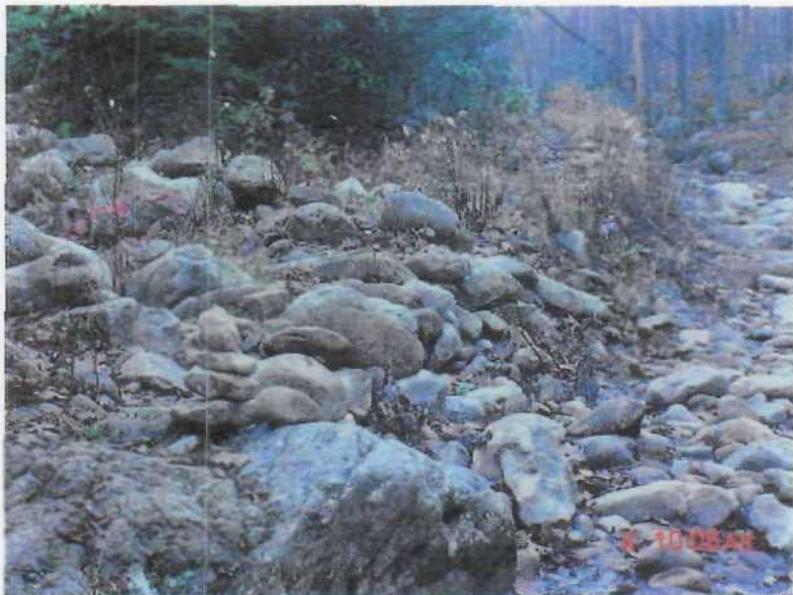
Bearing: N20°E Easting/Northing: 6401 47/431 5587

Easting, Northing, and Elevation values are in UTM NAD83 meters.

(Coordinates: Estimated) Head of cleared trail appropriately designated (Y/N)? N/A

UXO Warning Sign Status: N/A

Date of Inspection: 8-18-2003



50. Typical type of trail markers found along Red Creek trail.

Bearing: N70°E Easting/Northing: 63941 4/431 541 5 Elevation: 81 4

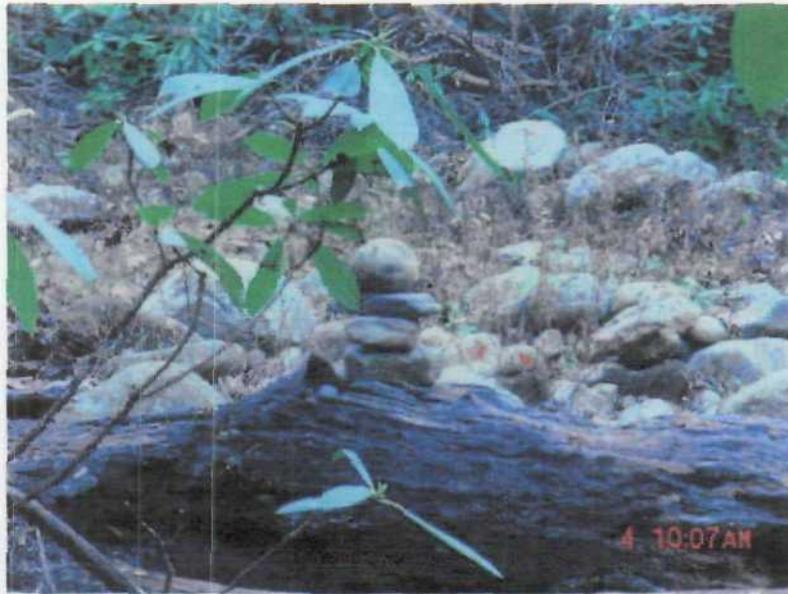
Easting, Northing, and Elevation values are in UTM NAD83 meters.

(Coordinates: GPS Based) Head of cleared trail appropriately designated (Y/N)? N/A

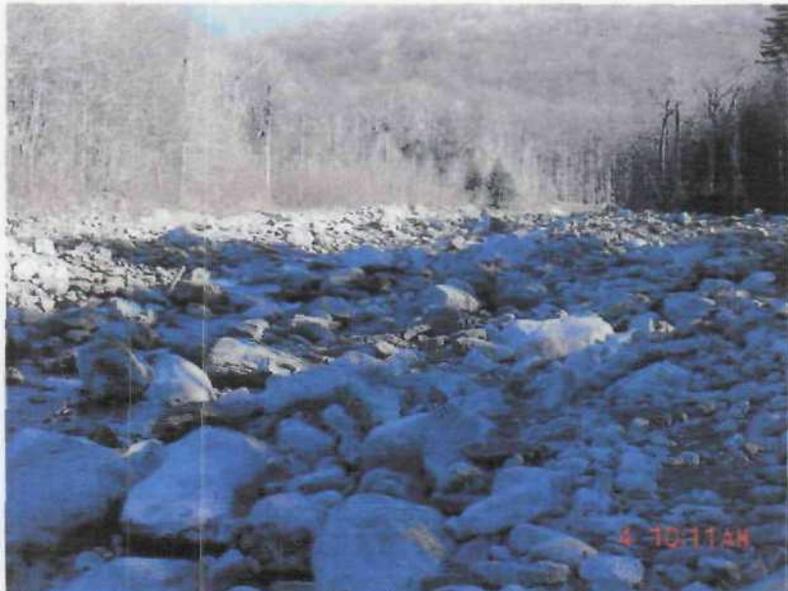
UXO Warning Sign Status: N/A

Date of Inspection: 11-4-2003

- Notes:
1. Elevations are in reference to global mean sea level (MSL).
 2. N/A (not applicable) denotes that the location is not the head of a trail that was cleared of ordnance during the 1997 to 1998 removal action (i.e. it is not a designated and maintained trail location), or that a UXO warning sign is not recommended to be placed and maintained at this location.

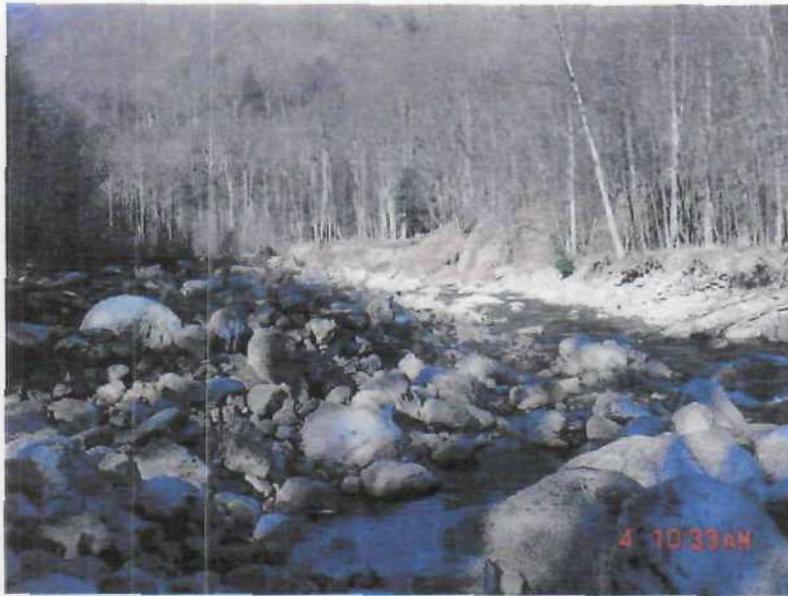


51. Typical type of trail markers found along Red Creek trail.
Bearing: N70°E Easting/Northing: 639414/4315415 Elevation: 814
Easting, Northing, and Elevation values are in UTM NAD83 meters.
(Coordinates: GPS Based) Head of cleared trail appropriately designated (Y/N)? N/A
UXO Warning Sign Status: N/A Date of Inspection: 11-4-2003



52. General view of Red Creek streambed in Dolly Sods Wilderness.
Bearing: N20°E Easting/Northing: 639409/4315443 Elevation: 813
Easting, Northing, and Elevation values are in UTM NAD83 meters.
(Coordinates: GPS Based) Head of cleared trail appropriately designated (Y/N)? N/A
UXO Warning Sign Status: N/A Date of Inspection: 11-4-2003

Notes: 1. Elevations are in reference to global mean sea level (MSL).
2. N/A (not applicable) denotes that the location is not the head of a trail that was cleared of ordnance during the 1997 to 1998 removal action (i.e. it is not a designated and maintained trail location), or that a UXO warning sign is not recommended to be placed and maintained at this location.



53. General view of Red Creek streambed in Dolly Sods Wilderness.
Bearing: N70°W Easting/Northing: 639804/431 5660 Elevation: 824
Easting, Northing, and Elevation values are in UTM NAD83 meters.
(Coordinates: GPS Based) Head of cleared trail appropriately designated (Y/N)? N/A
UXO Warning Sign Status: N/A Date of Inspection: 11-4-2003

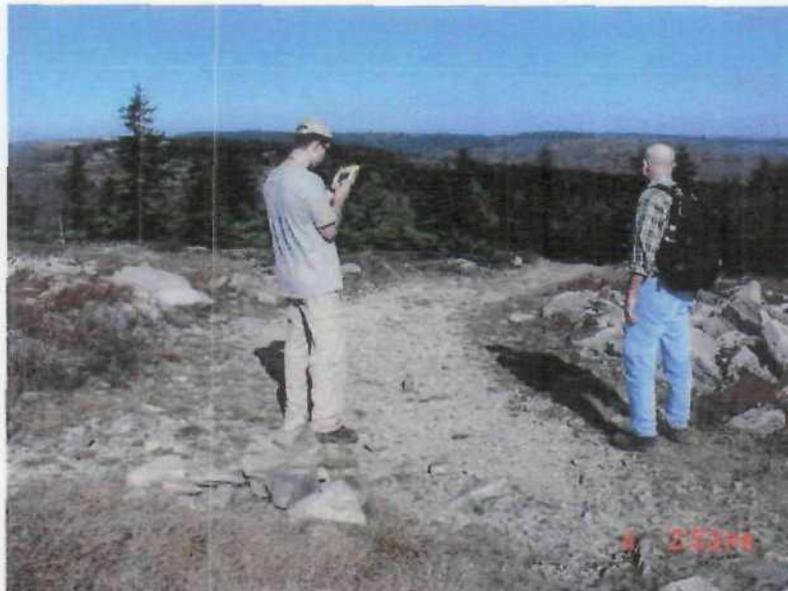


54. Little Stone Coal trailhead near Red Creek in Dolly Sods Wilderness.
Bearing: N20°W Easting/Northing: 639517/431 5659 Elevation: 820
Easting, Northing, and Elevation values are in UTM NAD83 meters.
(Coordinates: GPS Based) Head of cleared trail appropriately designated (Y/N)? Y
UXO Warning Sign Status: N/A Date of Inspection: 11-4-2003

Notes: 1. Elevations are in reference to global mean sea level (MSL).
2. N/A (not applicable) denotes that the location is not the head of a trail that was cleared of ordnance during the 1997 to 1998 removal action (i.e. it is not a designated and maintained trail location), or that a UXO warning sign is not recommended to be placed and maintained at this location.



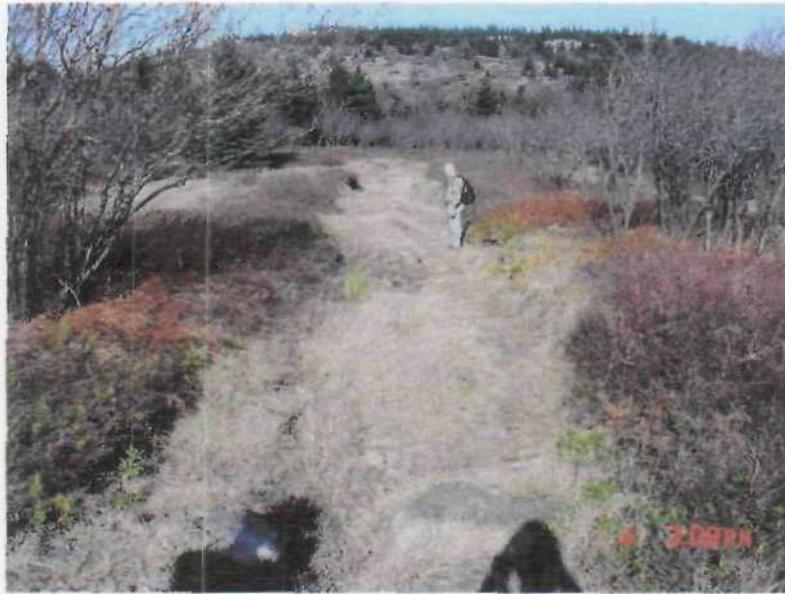
55. General view of Rocky Ridge trail and Harman trail intersections in Dolly Sods North.
 Bearing: S30°W Easting/Northing: 640010/4322810 Elevation: 1265
 Easting, Northing, and Elevation values are in UTM NAD83 meters.
 (Coordinates: GPS Based) Head of cleared trail appropriately designated (Y/N)? N/A
 UXO Warning Sign Status: N/A Date of Inspection: 11-4-2003



56. General type of trail marker encountered in Dolly Sods North (this is the Rocky Ridge trail).
 Bearing: N10°E Easting/Northing: 640260/4323306 Elevation: 1270
 Easting, Northing, and Elevation values are in UTM NAD83 meters.
 (Coordinates: GPS Based) Head of cleared trail appropriately designated (Y/N)? N/A
 UXO Warning Sign Status: N/A Date of Inspection: 11-4-2003

Notes:

1. Elevations are in reference to global mean sea level (MSL).
2. N/A (not applicable) denotes that the location is not the head of a trail that was cleared of ordnance during the 1997 to 1998 removal action (i.e. it is not a designated and maintained trail location), or that a UXO warning sign is not recommended to be placed and maintained at this location.



57. Area of isolated, erosion (non-problematic) along the Rocky Ridge trail (see photograph 58).
Bearing: N25°E Easting/Northing: 640598/4323769 Elevation: 1226
Easting, Northing, and Elevation values are in UTM NAD83 meters.
(Coordinates: GPS Based) Head of cleared trail appropriately designated (Y/N)? N/A
UXO Warning Sign Status: N/A Date of Inspection: 11-4-2003

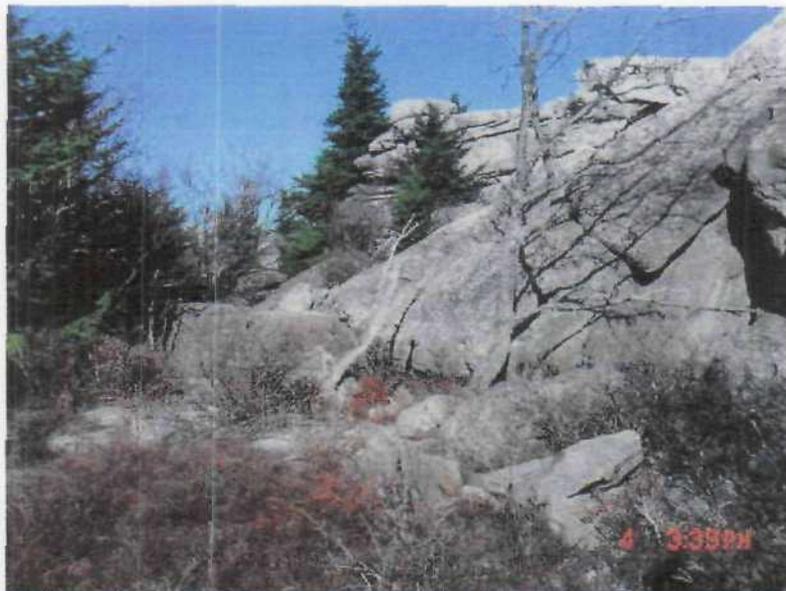


58. Close-up view of area of isolated erosion shown in photograph 57 (along Rocky Ridge trail).
Bearing: N25°E Easting/Northing: 640598/4323769 Elevation: 1226
Easting, Northing, and Elevation values are in UTM NAD83 meters.
(Coordinates: GPS Based) Head of cleared trail appropriately designated (Y/N)? N/A
UXO Warning Sign Status: N/A Date of Inspection: 11-4-2003

Notes: 1. Elevations are in reference to global mean sea level (MSL).
2. N/A (not applicable) denotes that the location is not the head of a trail that was cleared of ordnance during the 1997 to 1998 removal action (i.e. it is not a designated and maintained trail location), or that a UXO warning sign is not recommended to be placed and maintained at this location.



59. General view of marker at a trail split (Rocky Ridge trail and Dobbin Grade trail).
Bearing: N60°E Easting/Northing: 640761/4323836 Elevation: 1217
Easting, Northing, and Elevation values are in UTM NAD83 meters.
(Coordinates: GPS Based) Head of cleared trail appropriately designated (Y/N)? N/A
UXO Warning Sign Status: N/A Date of Inspection: 11-4-2003



60. General view of area along the Rocky Ridge trail in Dolly Sods North.
Bearing: N30°E Easting/Northing: 640911/4324583 Elevation: 1253
Easting, Northing, and Elevation values are in UTM NAD83 meters.
(Coordinates: GPS Based) Head of cleared trail appropriately designated (Y/N)? N/A
UXO Warning Sign Status: N/A Date of Inspection: 11-4-2003

Notes: 1. Elevations are in reference to global mean sea level (MSL).
2. N/A (not applicable) denotes that the location is not the head of a trail that was cleared of ordnance during the 1997 to 1998 removal action (i.e. it is not a designated and maintained trail location), or that a UXO warning sign is not recommended to be placed and maintained at this location.



61. View of trail section outside of (to the northwest of) Dolly Sods North.
Bearing: N10°E Easting/Northing: 641 602/4326201 Elevation: 1264
Easting, Northing, and Elevation values are in UTM NAD83 meters.
(Coordinates: GPS Based) Head of cleared trail appropriately designated (Y/N)? N/A
UXO Warning Sign Status: N/A Date of Inspection: 11-4-2003



62. Head of the Rocky Ridge trail entering the northwest-most part of Dolly Sods North.
Bearing: S20°W Easting/Northing: 641 543/4326066 Elevation: 1266
Easting, Northing, and Elevation values are in UTM NAD83 meters.
(Coordinates: GPS Based) Head of cleared trail appropriately designated (Y/N)? N
UXO Warning Sign Status: Sign not present Date of Inspection: 11-4-2003

Notes: 1. Elevations are in reference to global mean sea level (MSL).
2. N/A (not applicable) denotes that the location is not the head of a trail that was cleared of ordnance during the 1997 to 1998 removal action (i.e. it is not a designated and maintained trail location), or that a UXO warning sign is not recommended to be placed and maintained at this location.



63. Big Stone Coal and Breathed Mountain trailheads (west entrances of trails); see photograph 37 taken during August 2003 in which UXO warning sign was present.
Bearing: N1 35°E Easting/Northing: 639832/4321 736 Elevation: 1195
Easting, Northing, and Elevation values are in UTM NAD83 meters.
(Coordinates: GPS Based) Head of cleared trail appropriately designated (Y/N)? Y
UXO Warning Sign Status: Sign not present Date of Inspection: 11-4-2003

Notes:

1. Elevations are in reference to global mean sea level (MSL).
2. N/A (not applicable) denotes that the location is not the head of a trail that was cleared of ordnance during the 1997 to 1998 removal action (i.e. it is not a designated and maintained trail location), or that a UXO warning sign is not recommended to be placed and maintained at this location.

Appendix E: COMMUNITY SURVEY SUMMARY

Dolly Sods
Community Survey

(July 18 – August 1, 2003)

SUMMARY

Prepared for:
U.S. Army Corps of Engineers
Delivery order DACW69-03-0046
August 15, 2003

Prepared by: S&C Advertising and Public Relations
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DOLLY SODS COMMUNITY SURVEY

July 28 – August 1, 2003

SUMMARY

Introduction: As part of the technical and management support, Dolly Sods, WV Maneuver Area and FUDS in WV contract awarded by the U.S. Army Corps of Engineers to S&C Advertising & Public Relations, a regional representative conducted a five-day community survey at the Dolly Sods Area in West Virginia, and nearby towns and tourist areas from July 28 - August 1, 2003.

Demographics: During the visit, 72 local residents and visitors were interviewed face-to-face, and two persons by telephone to evaluate their awareness, knowledge and concerns about the potential of unexploded ordnance at Dolly Sods. All the respondents were pleasant and engaging. Ten participants were under the age of 25; 35 were between the ages of 25 and 55; and 24 were over the age of 55. Of the 72 surveyed, only 69 were accounted for age-wise, information was not available for the remaining 3. The survey did not distinguish between visitors and locals. However, some questions reflected patterns between the two groups.

Eight interviews were held in Elkins (Randolph County); 28 in the Dolly Sods Area (combined Grant, Tucker and Randolph Counties); 19 in the Canaan Valley Area (Tucker); five in Pendleton County; and five others outside those areas. Visitors were represented from Pennsylvania, Ohio, Virginia, West Virginia, Kentucky, and New York.

Primary penetration was throughout the Dolly Sods Area, Canaan Valley Resort and campgrounds, and the Seneca Rock Visitors Center. Other important survey areas included the Elkins/Randolph Visitors Bureau and Chamber of Commerce; and the Tucker County Convention and Visitors Bureau. Other interviews were conducted at local businesses and residences scattered throughout nearby towns.

Obstacles: Getting to interview locations was somewhat hindered by roads that are steep and winding, and more than half are unpaved. Average driving speed on pavement was 45 mph, and on unpaved roads it was 25 mph. On several occasions, traffic was halted and reduced to one-lane through road construction areas. Demographically, there are only ten people for every one hundred miles of terrain, making time and distance a factor in the number of interviews possible. At times the Dolly Sods Area was thick with fog and there were few visitors.

Survey Results:

Question 1: Are you familiar with Dolly Sods? Out of 72 people interviewed, 70 (97%) reported being familiar with the area, two (3%) were not. Most had been to the Wilderness Area at least once.

Question 2: Are you aware that the Dolly Sods Area was once used by the U.S. Department of Defense? Fifty-three people (74%) were aware that the Department of Defense had previously used the area for military purposes.

Question 3: Are you aware that Dolly Sods is now a Formerly Used Defense Site? The majority of people was unfamiliar with the term Formerly Used Defense Site, and found the question confusing. (They thought it repeated the previous question.) But when given an explanation, 37 people (51%) said they understood that Dolly Sods would be in that classification.

Question 4: Did you know the U.S. Army Corps of Engineers conducted an investigation and cleanup of ordnance in the area? Forty-two individuals (58%) surveyed knew of the investigation. It is noted that local residents had greater awareness than visitors. Those hearing Dolly Sods' history for the first time appeared very interested but unconcerned.

Question 5: Have you or your family members seen signs, materials, or any type of information on the potential presence and danger of ordnance in the area? More than half (54%) said they had seen signs at the trail heads, poster stations, or at visitor centers and local stores. One individual mentioned she had read notices on web sites as she planned her trip. Several people mentioned reading newspaper stories awhile back.

Question 6: Suspicious items that may be ordnance should never be touched or disturbed. Do you know what to do and what not to do, if you or a family member discovers a suspicious item? This created an interesting reaction as 45 people (62%) said "yes", but when asked what they would do, answers varied from "I wouldn't touch it," (majority) to, "I'd put something over it" or, "I'd take it home as a souvenir."

When asked who they would call, (Question 6a) 38 people (53%) of those who answered "yes" to the prior question said they would call the police or the forest service, while 47 percent said they would call such places as the Department of Defense, game warden, the armory, fire department, or a number of other local authorities. Three people said they would look for the sign and call the number listed. No one mentioned calling the Potomac Ranger District or the Seneca Rocks Visitor Center by name.

Question 7: Do you feel the Army should take additional protective measures to ensure that the community is aware of the potential presence of ordnance? It is noted that more local residents responded “no” and more visitors responded yes.” Collectively, 41 people (57%) said “yes,” and 31 (43%) said “no.” Those who felt more measures should be taken were asked which forms of communication they felt would be the most beneficial (Question 7a). The majority felt trailheads and poster stations were most effective. Interestingly, no one selected public meetings although it was offered as an option. Overall responses are as follows.

-
- | | |
|------------------------|-------------------------------|
| • Television – 2 | • Trailhead signs - 18 |
| • Radio – 3 | • Internet – 4 |
| • Newspaper – 4 | • Other: |
| • Poster stations – 11 | - Travel guides/brochures – 4 |
| • Public meeting – 0 | - Signs at Ranger House – 2 |
| | - Signs at main entrances – 3 |
-

Question 8: Would you be interested in participating in a future Restoration Advisory Board? Seventeen (17) candidates expressed an interest in serving on a RAB board. They represent local business owners, residents, Canaan Valley Resort staff, the Tucker County Visitors Bureau, and others. (See Addendum A)

Question 9: Would you like to receive information from the U.S. Army Corps of Engineers regarding future interest or activity at Dolly Sods? Forty people asked to receive future information and their names and contact information is provided on Addendum B.

Additional comments from participants: (regarding additional measures to take):

- *It depends on if they did their job.*
- *We need to know if something else is coming in.*
- *Not unless some problem emerges.*
- *Make the signs big enough to see.*
- *The community pretty much knows, but can't say for outsiders.*
- *You could, but it wouldn't make much difference.*
- *No one knows anything about the ordnance until they see the sign.*
- *No. It's a waste of the taxpayer's money.*
- *For 90 percent of the people, the signs are enough.*
- *You're beating a dead horse.*
- *Cattle farmers may want information. There are no fences and their cattle stray into the sods.*
- *Keep it natural. The area has special meaning to a lot of people.*
- *The photos in the signs are good.*
- *Won't hurt to keep a continuing presence.*
- *Continual signage is better than short awareness efforts.*

Secondary interviews:

In addition to the 72 people surveyed, a number of local opinion leaders were consulted for their insight on peoples' awareness of unexploded ordnance at Dolly Sods (The contact information is located in Addendum C). They included:

- Mayor Judith Guye of Elkins, WV
- Judith Lazeere, Mayor Elkins' assistant
- William Smith, executive director, Tucker County Convention & Visitors Bureau
- John Northeimer, recreation director, Canaan Valley Resort & Conference Center
- Liena Smith, executive director, Canaan Valley Institute
- Dave Seville, West Virginia Highlands Conservancy
- Kate Goodrich, public affairs and legislative officer for the Forest Service at Seneca Rocks
- Sarah Schell, Potomac Ranger District

Highlights from secondary interviews:

- Continuing awareness efforts are necessary because there are new visitors coming to Dolly Sods all the time.
- Signs should be monitored by someone on a regular basis as they become weathered, may be knocked down by bears, and taken by visitors as souvenirs.
- They should be updated because many people are so used to seeing them they have lost their presence. First time visitors are most likely to read anything posted.
- Many West Virginia governmental departments do not have budgets for printed materials. The Internet should be used more to get messages out.
- The National Forest Service brochures are outdated and scarce. Perhaps the Corps could collaborate together to produce new materials.

Observations:

- Staff from the visitor centers said that people ask about Dolly Sods every day. It is one of the most popular tourist sites. There are many tourist brochures that feature Dolly Sods but few of them mention the ordnance possibility.
- Several survey participants mentioned sending brochures and signs to ranger stations. Yet, these locations are not easily identified by residents or maps.
- Only two people surveyed knew the proper steps to follow if they found ordnance, as outlined in the trailhead signs.
- The Dolly Sods areas are very personal to the local residents and they want it to remain as untouched as possible. They feel the changes over the last few years (such as graveled trails and restricted camping areas) have detracted from its naturalness. The flip side is that they understand that tourists are good for their economy.
- On one occasion, four elderly locals picking Huckleberries were asked if they had ever seen signs about the potential ordnance there. They all said “no”, and when it was pointed out they were standing beside one, they all laughed and said “I’ll be darned.”

Recommendations:

Signage: The survey indicated that trailhead and poster station signs are still the best way to create awareness. Several participants stated that if they were to find a suspicious item they would go back to the sign for instructions. Although the agreement between the Corps and S&C is for 24 new signs, additional ones are recommended as follows:

- Replace black and white existing and missing signs at trailheads and poster stations.
- Place additional signs on new trails that have emerged since the last posting of signs.
- Place road signs on metal posts along the eight-mile stretch that are large enough to read from inside a car while moving.
- Place more colored signs in selected businesses, nature centers, hotels and restaurants, libraries, ranger stations, post offices and other public areas. (Store owners are using 3rd and 4th generation black and white copies.)
- Place notices where main highways and roads leading to Dolly Sods connect.
- Produce map of trails and campsites that have been cleared in the Dolly Sods Area. This would provide visitors with information that they could use to further minimize risk.

It is also recommended that new signs have brighter colors and continue to contain photos. Telephone contacts should be simplified.

Brochures: New informative brochures geared towards adults and another towards children are recommended.

Additional communication:

- Internet Opportunities: There are numerous Internet sites that include Dolly Sods as a tourist attraction. Some list information about potential ordinance but most do not. Some web site ideas include:
 - www.trailpixie.net/dolly.htm (Trail Pixie.Net)
 - www.wilderness.net/hwps.search.ofm (The Wilderness Information Network)
 - www.serc.si.edu/watershed (Smithsonian Institute)
 - www.wvcorridor.com (WV Div. of Highways)
- Print media: A fresh angle to create or recreate awareness through local newspapers might be to announce a five-year anniversary since the last restoration. Take reporters through the history of all the Dolly Sods restorative work since WWII. State how the Corps continues awareness efforts through new signage and other measures, and announce plans for any upcoming activities. S&C has developed a current list of all newspapers near the Dolly Sods areas and can identify appropriate reporters.
- PowerPoint Presentation: One set of presentation should be created for an adult audience and the other for children should be produced. This tool can be effective for multiple forms of media. A well designed presentation with links to other sites can be a powerful medium for the Corps to get messages across. The presentation could be placed on the Corps web site, and again as a collaborative effort with other agencies and organizations touting Dolly Sods. Those who have given their email addresses can access it via a link from their email to a page on the Corps website.

The presentation on a CD could be available in local libraries, hotels, schools, nature centers, the local television station, WV State Police, Seneca Rocks Visitors Center and other information centers.

- Video Production: Consider using copies of the video as described in the Corps Scope of Work agreement as an effective educational tool for libraries, schools, Internet sites, visitor centers, and other places where people go for information about Dolly Sods.
- Newsletters: New messages regarding the Corps future interests and activities planned for Dolly Sods could be incorporated into the Corps existing Dolly Sods newsletter. Distribution can be increased by adding the names of people surveyed who wish to be kept informed. Other distribution suggested includes all the previously mentioned public areas, visitor centers, and local businesses.

Conclusion:

S&C Advertising & Public Relations conducted community surveys in the Dolly Sods Area and surrounding towns on behalf of the U.S. Army Corps of Engineers to evaluate local and visitors' awareness, knowledge, and concerns about the potential of ordnance at Dolly Sods. During the five-day visit, July 28 - August 1, 2003, 70 people were surveyed face-to-face, and two people by phone. Informational meetings and phone conferences with various opinion leaders and related agencies were also obtained to enhance the study.

Nearly all locals are aware of and are comfortable with the military's history and earlier restoration efforts at Dolly Sods. Residents who were not familiar with it were fairly new to the area.

The majority of people going to Dolly Sods go for its recreational value. Many locals use the natural resources to supplement their lifestyle (hunting and berry picking). The locals feel a connection with the land, and want to see as little disturbance to it as possible.

Many visitors were also familiar with the history and generally had obtained their information from the Internet. Those who had no prior knowledge were intrigued with the story, but not alarmed. No one seemed reluctant to go there because of the past or future risk of unexploded ordnance.

The majority of people surveyed felt that additional measures to ensure community awareness of unexploded ordnance should be taken (41 replied "yes", 31 replied "no"). Of those who did, most said that trailhead signs and posters were the most effective forms of communication.

Given the scarcity of visitors and residents in the Dolly Sods Area, S&C believes that the 72 interviews conducted, provide a reliable base from which to develop a public involvement program.

Dolly Sods
Community Survey
(July 18 – August 1, 2003)

ADDENDUMS
A-E

Prepared for:
U.S. Army Corps of Engineers
Delivery order DACW69-03-0046
August 15, 2003

Prepared by: S&C Advertising and Public Relations
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ADDENDUM A

U.S. Army Corps of Engineers Dolly Sods Restoration Advisory Board Interest List August 2003

William Smith
Executive Director
Tucker County Convention & Visitors
Bureau
PO Box 565
Davis, WV 26260
Phone: (800) 782-2775
Fax: (304) 259-5315
Email: bill@canaanvalley.org
(Website: www.canaanvalley.org)

John Northeimer
Director of Recreation
Canaan Valley Resort & Conf. Center
HC 70, Box 330
Davis, WV 26260
Phone: (304) 866-4121, Ext. 2677
Fax: (304) 866-2172
Email: north@canaanresort.com

Mike Hajzer
Rooms Division Manager
Canaan Valley Resort & Conf. Center
HC 70, Box 330
Davis, WV 26260
Phone: (304) 866-4121, Ext. 2712

Marilyn Ortt
701 Colgate Drive
Marietta, Ohio 45750
Phone: (740) 373-3372
Email: marilynortt@charter.net

Samantha Bennett
HC 66, Box 15
Dryfork, WV 26263
Phone: (304) 866-4255
Email: moose103@hotmail.com

Virgil Wolford
HC 66, Box 13
Dryfork, WV 26263

Michelle Berg
HC 80, Box 267
Maysville, WV 26833
Phone: (304) 749-8636

Jeff Tansill
1037 W. Main Street
Grafton, WV 26354
Phone: (304) 265-2273
Email: jtansill@aol.com

David Caplinger
HC 68, Box 207
Bowden, WV 262654

Judith Lazeere
HC 68, Box 4
Bemis, WV 26268
Phone: (304) 636-6649

Wayne & Helen Kennedy
Rt. 1, Box 115-3
Elkins, WV 26241
Phone: (304) 636-7474
hkennedy@citynet.net

Thomas Fortuna
c/o West Virginia University
PO Box 6572
Morgantown, WV 26506
Phone: (304) 293-2874
Email: Thomas.Fortuna@mail.wvu.edu

Marilyn Aikman
HC 70, Box 96
Davis, WV 26260
Phone: (304) 866-3883

Wendi Pugh
PO Box 141
Thomas, WV 26292
Phone: (304) 735-6866

RAB Interest List

Page 2

Virginia Phillips
West Virginia Wesleyan College
Campus Box 13
59 College Avenue
Buckhannon, WV 26201
Phone: (304) 473-8444 (Office)
Phone: (304) 473-0682 (Home)
Email: phillips_v@wwc.edu

Mark Burke
Alpine Springs Lodge
HC 73, Box 6
Bowden, WV 26254
Phone: (304) 636-1470

Barbara Reel
HC 72, Box 9
Scherr, WV 26726
Phone: (304) 749-7033

Prepared: Aug. 11, 2003

DOLLY SODS MAILING LIST 2003 (from Community Survey)

Addendum B

Name	Title	Business	Address 1	City	State	Zip	Phone	Email
John Northeimer	Recreation Director	Canaan Valley Resort & Conference Center	HC 70 - Box 330	Davis	WV	26260	(304) 866-2172	jnorth@canaanresort.com
Mike Hajzer	Rooms Division Manager	Canaan Valley Resort & Conference Center	HC 70 - Box 330	Davis	WV	26260	(304) 866-2172	hajzerm@guestservices.com
Marilyn Aikman		Canaan Valley Nature Center	HC 70 - Box 96	Davis	WV	26260		
William Smith	Executive Director	Tucker County Convention & Visitors Bureau	PO Box 565	Davis	WV	26260	(800) 782-2775	bill@canaanvalley.org
Judith Guye	Mayor	Elkins, WV	401 Davis Ave.	Elkins	WV	26241	(304) 636-1414	
Carol Whetsell	Recreation Director	Potomac Ranger District - Mon. Nat'l. Forest	HC 59 - Box 240	Petersburg	WV	26848	(304) 478-3251	
Jeff Hannis	District Manager	Potomac Ranger District - Mon. Nat'l. Forest	HC 59 - Box 240	Petersburg	WV	26847	(304) 478-3251	
Sarah Shell		Potomac Ranger District - Mon. Nat'l. Forest	HC 59 - Box 240	Petersburg	WV	26847	(304) 478-3251	
Liz Garland	Issues Coordinator	West Virginia Rivers Coalition	801 N. Randolph Ave.	Elkins	WV	26241	(304) 637-7201	
Jeremy Muller	Director	West Virginia Rivers Coalition	801 N. Randolph Ave.	Elkins	WV	26241	(304) 637-7201	
Brenda Pritt	Executive Director	Randolph Cty. Convention & Visitors Bureau	315 Railroad Ave.	Elkins	WV	26241	(800) 422-3304	
Bryan Moore	Chairman, BOD	Trout Unlimited					(304) 842-2779	bkmore811@aol.com
Dave Seville		WV Highlands Conservancy	PO Box 131	Haven Bridge	WV	26711	(304) 284-9548	
Kate Goodrich	PA & Leg. Officer	Monongahela National Forest	200 Sycamore Street	Elkins	WV	26241	(304) 636-1875	kgoodrich@fs.fed.us
Kiena Smith	Executive Director	Canaan Valley Institute	PO Box 673	Davis	WV	26260	(304) 463-4739	
Victoria Phillips	Assnt. Prof. of Religion	West Virginia Wesleyan College	Campus Box 13, 59 College Ave.	Buckhannon	WV	26201	(304) 473-8444	phillips_v@wwvc.edu
Mark Burke	Owner	Alpine Lodge	HC 73, Box 6	Bowden	WV	26254	(304) 636-1470	
Thomas Fortuna	Data Network Specialist	West Virginia University	PO Box 6572	Morgantown	WV	26506	(304) 293-2874	Thomas.Fortuna@mail.wvu.edu
Steve Wise			PO Box 233	Slanesville	WV	25444		swise@yahoo.com
Roger Watson			PO Box 22	Manington	WV	26582		grwatson@thrashereng.com
Louis Whitecotton			RD 3 - Box 124-C	Wheeling	WV	26003		
Keith Tomlinson			2762 Wakefield St.	Arlington	VA	22207		meadowlark@starpower.net
Wendi Pugh			PO Box 141	Thomas	WV	26292		
Amanda Price			General Delivery	Whitmer	WV	26296		
Robert Huffman, Jr.			HC 66 - Box 18	Dryfork	WV	26263	(304) 866-4264	
Robert Huffman, Sr.			HC 66 - Box 20	Dryfork	WV	26263	(304) 866-4264	
Howard Cork			PO Box 302	Pine Grove	WV	26419	(304) 889-3555	preacherhc@hotmail.com
Jeff Tansill			1037 W. Main Street	Grafton	WV	26354	(304) 265-2273	jtansill@aol.com
George McCoy			PO Box 316	Weston	WV	26452		dottied@citynet.net
Marilyn Ranhorn			400 Warren Crescent	Norfolk	VA	23507		
David & Gina Zehrung			633 Williamson Rd.	Greencastle	PA	17225	(717) 597-3823	dzehr@pa.net
Ray Long			153 Collins Dr.	Martinsburg	WV	25401		
Floyd Channell			5 Taylor Lane	Beverly	WV	26253		fchannel@mear.net
Marilyn Ort			701 Colgate Drive	Marietta	OH	45750	(740) 373-3372	marilynortt@charter.net
Ronald Grove			170 Furrow Field Court	Winchester	VA	22602	(540) 662-8237	
Samantha Bennett			HC 66 - Box 15	Dryfork	WV	26263	(304) 866-4255	moose103@hotmail.com
Virgie Wolford			HC 66 - Box 13	Dryfork	WV	26263		
Michelle Berg			HC 80 - Box 267	Maysville	WV	26833	(304) 749-8636	
Barbara Reel			HC 72 - Box 9	Scherr	WV	26726	(304) 749-7033	
Rhonda Michalski			PO Box 85	Bowden	WV	26254		
Helen Davis			PO Box 46	Harman	WV	26270	(304) 227-4462	
David Caplinger			HC 68 - Box 207	Bowden	WV	26254		
Judith Lazier			HC 68 - Box 4	Bemis	WV	26268	(304) 636-6649	
Christi Flynn			409 Central Ave.	Parsons	WV	26287		
Liza & Chas. Peters			3312 Pickwick Dr. S.	Jacksonville	FL	32257		seaotter62@aol.com
Wayne & Helen Kennedy			Rt. 1 - Box 115-3	Elkins	WV	26241		hkennedy@citynet.net
Nancy Webley			Rt. 1 - Box 92	Elkins	WV	26241	(304) 636-5690	
Carl Yokum			HC 59 - Box 3	Seneca Rocks	WV	26884	(304) 567-2928	
Michael & Chris Smith			HC 64 - Box 189	Hillsboro	WV	24946	(304) 653-4254	one4cranberry@hotmail.com
Jerry Catlett	EMAIL ADDRESS ONLY							tmechanic@hotmail.com

Addendum C

Secondary Interviews:

In addition to the 72 people surveyed, a number of local opinion leaders were consulted for their insight on peoples' awareness of unexploded ordnance at Dolly Sods. They included:

Judith Guye
Mayor, City of Elkins
401 Davis Avenue
Elkins, WV 26241
Phone: (304) 636-1414

Brenda Pritt
Executive Director
Randolph County Chamber of Commerce
315 Railroad Avenue
Elkins, WV 26241
Phone: (800) 422-3304
bpritt@randolphcountywv.com

Judith Lazeere
Assistant to the Mayor's Office
401 Davis Avenue
Elkins, WV 26241
Phone: (304) 636-1414

Kate Goodrich
Public Affairs and Legislative Officer
USDA Forest Service
200 Sycamore St.
Elkins, WV 26241
kgoodrich@fs.fed.us
(304) 636-1800, Ext. 220

William Smith
Executive Director
Tucker County - Convention & Visitors Bureau
P.O. Box 565
Davis, WV 26250
Phone: (800) 782-2775
bill@canaanvalley.org

Sarah Schell
Special Use Manager
Potomac Ranger District
USDA Forest Service
HC 59 - Box 240
Petersburg, WV 26847
Phone: (304) 257-4488 Ext. 16

John Northeimer
Recreation Director
Canaan Valley Resort & Conference Ctr.
HC 70 Box 330
Davis, WV 26260
Phone: (304) 866-4121
jnortheimer@canaanresort.com

Lisa Garland
Issues Coordinator
West Virginia River Coalition
801 N. Randolph Ave.
Elkins, WV 26241
Phone: (304) 637-7201
wvrc@wvivers.org

USACE Dolly Sods Area Community Survey

Interview Date: _____

Type of survey: 1. ___ Face to Face 2. ___ Tel # _____ Name & address if available: _____
E-mail address: _____ ZIP: _____

Location: 1. ___ Elkins, WV (Randolph County) 2. ___ Dolly Sods Wilderness Area 3. ___ Seneca Rocks Visitor Center (Pendleton County)
4) ___ Canaan Valley Resort Area (Tucker) Other: _____ Zip code: _____

- 1. Are you familiar with the Dolly Sods Area? YES NO
2. Are you aware that the Dolly Sods Area was once used by the U.S. Department of Defense? YES NO
3. Are you aware that Dolly Sods is now a Formerly Used Defense Site? Explain only if respondent answered no. YES NO
4. Did you know the U.S. Army Corps of Engineers conducted an investigation and cleanup of ordnance in the area? YES NO
5. Have you or your family members seen signs, materials, or any type of information on the potential presence and danger of ordnance in the area? YES NO
6. Suspicious items that may be ordnance should never be touched or disturbed. Do you know what to do and what not to do, if you or a family member discovers a suspicious item? YES NO
6a. Do you know who to call if you find a suspicious item and think it could possibly be a bomb? YES NO
7. Do you feel the Army should take additional protective measures to ensure the community is aware of the potential presence of ordnance? YES NO
7a. If yes, what measures do you think would be beneficial?
1. ___ TV 2. ___ Radio 3. ___ Newspaper 4. ___ Poster Station
5. ___ Public Meeting 6. ___ Trail Head Signs @ Park 7. ___ Internet 8. ___ Other
8. Would you be interested in participating in a future Restoration Advisory Board? Explain what a RAB is and that meeting frequency could range from monthly to quarterly or other. YES NO
9. Would you like to receive information from the U.S. Army Corps of Engineers regarding future interest or activity at Dolly Sods? YES NO

Additional Comments:

Optional: What is your interest in Dolly Sods? 1. ___ Recreational 2. ___ Educational 3. ___ Live or Work in area 4. ___ Environmental
(Select all that apply)

What is your age range? (volunteer question) 1. ___ < 25 2. ___ 25-55 3. ___ > 55 Thank you for your time and participation.

Interviewed by: Diana White, Regional Account Executive, S&C Advertising & Public Relations

ADDENDUM E

DOLLY SODS COMMUNITY SURVEY OUTCOMES

SURVEY DEMOGRAPHICS															
INTERVIEW TYPE		LOCATION						AGE GROUP			INTEREST IN DOLLY SODS				
		Elkins (Randolph)	Dolly Sods	Canaan Valley (Tucker)	Seneca Rocks (Pendleton)	Other	Total Interviews	< 25	25-55	> 55	*	R	Ed	L/W	Env
70	2	8	28	19	5	5	72	10	38	24	People	54	16	20	11

SURVEY QUESTIONS

	YES		NO	
	TOTAL	%	TOTAL	%
1. Are you familiar with the Dolly Sods Area?	70	97%	2	3%
2. Are you aware that the Dolly Sods Area was once used by the U.S. Department of Defense?	53	74%	19	26%
3. Are you aware that Dolly Sods is now a Formerly Used Defense Site?	37	51%	35	49%
4. Did you know the U.S. Army Corps of Engineers conducted an investigation and cleanup of ordnance in the area?	42	58%	30	42%
5. Have you or your family members seen signs, materials, or any type of information on the potential presence and danger of ordnance in the area?	39	54%	33	46%
6. Suspicious items that may be ordnance should never be touched or disturbed. Do you know what to do and what not to do, if you or a family member discovers a suspicious item?	45	62%	27	38%
6a. Do you know who to call if you find a suspicious item and think it could possibly be a piece of ordnance?	38	53%	34	47%
7. Do you feel the Army should take additional protective measures to ensure that the community is aware of the potential presence of ordnance?	41	57%	31	43%
8. Would you be interested in participating in a future Restoration Advisory Board? (See Addendum A)	17	24%		
9. Would you like to receive information from the U.S. Army Corps of Engineers regarding future interest or activity at Dolly Sods? (See Addendum B)	40	56%		

* R-Recreational Ed-Educational L/W-Live/Work in Area Env-Environmental

Appendix F: RESPONSES TO REVIEWER COMMENTS

Quality Control Review Certification

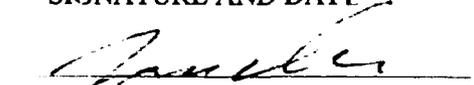
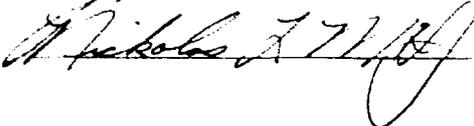
**Ordnance and Explosives Recurring Review
Dolly Sods Project, Former West Virginia Maneuver Area,
Monongahela National Forest, West Virginia,
Draft Report – April 2004**

Project Title: Dolly Sods Project, Former West Virginia Maneuver Area

Product: Draft Ordnance and Explosives Recurring Review Report

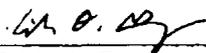
Lead Environmental Professional: Erich D. Guy

In accordance with the Huntington District ISO Procedure 3.36, independent review for the identified product has been completed and all comments are resolved. The following ITRT members certify completion of the review and resolution of comments:

NAME	OFFICE	DISCIPLINE	SIGNATURE AND DATE
<u>Frank R. Albert, Jr.</u>	<u>CELRH-EC-CE</u>	<u>Env. Engineer</u>	
<u>Nickolas L. McHenry</u>	<u>CELRH-EC-CE</u>	<u>Env. Engineer</u>	

Summary of issues resolved by the Chief of the Environmental and Remediation Section or responsible individual:

Lead Environmental Professional:



Erich D. Guy

4/7/04

USACE CELRH-EC-CE Reviewer Comments and Responses to Comments: Ordnance and Explosives Recurring Review, Dolly Sods Project, Former West Virginia Maneuver Area, Monongahela National Forest, WV, Draft Report – April 2004

1. Section 3.1, Page 3, 1st Paragraph, 5th Sentence. Consider rearranging the sentence to read: “However, ordnance-related risk is illustrated by a sporadic but continuous discovery of UXO by recreational visitors, following the USDoA clearance in 1997-98.” (Comment by NM)

Response: Concur. The sentence was revised and is now worded: “However, ordnance-related risk is illustrated by a sporadic but continuous discovery of UXO, between the initial USDoA clearance and the year 2003, by recreational visitors.”

2. Section 3.1, Page 3, 1st Paragraph, Last Sentence. Would it be possible to indicate how the reader could access the “Information concerning the amount and types of OE-related scrap and UXO” database? (Comment by NM)

Response: Concur. The sentence was revised is now worded: “Information concerning the amount and types of OE-related scrap and UXO that have been found and removed/disposed of since 1983 is well documented (USACE, 2004a) and maintained by the USACE Huntington District.”

3. Section 3.2, Page 4, 2nd Paragraph, 3rd Sentence. Add a comma between the words “was not” and “expected”. (Comment by NM)

Response: Partially concur. A comma was added to the sentence as suggested but in a different location. The sentence was revised and is now worded: “Due to the following conditions and facts, the action could not, and was not expected to, negate ordnance-related risk entirely:...”

4. Section 6.1, Page 11, Last Sentence. Possibly include the benefits of a Restoration Advisory Board being established. (Comment by NM)

Response: Partially concur. The sentence was revised and is now worded: “USACE should further evaluate local interest and the potential net benefits of establishing a project RAB.” The potential net benefits, if sufficient community interest exists, are numerous but are dependent upon many variables. The intent of the discussion is to concisely recommend that a RAB be considered. Proper description of the RAB and potential benefits would require adding another paragraph, and is beyond the intent.

5. Section 6.3, Page 11, 2nd Sentence. Insert Monongahela in front of “National Forest” so as to not confuse the reader. (Comment by NM)

Response: Concur. The change was made as suggested.

6. Section 6.7, Page 12. Possibly add a statement concerning adding a map of cleared trails to the Official U.S. Forest Service website for Dolly Sods located on the web at www.fs.fed.us/r9/mnf/sp/dolly-sods-wilderness.htm. This would allow more access for the public to the cleared trails map. You may also want to include this website in the report as an asset to use. (Comment by NM)

Response: Concur. The following statement is contained in section 6.7: “Distribution could be accomplished by placing hard copies of the map at the most highly visited trailheads and at other local visitor centers and offices, and by placing a digital copy on the USACE Huntington District website

and the USFS website for download.” The specific address recommended was not listed because the USFS could place the map wherever they feel it would be most effective.

7. Appendix C. The Safety Briefing Sheet for either field reconnaissance visit (August & November 2003) were not completed. (Comment by NM)

Response: Non-Concur. Site safety and health plans were completed for both the August and November 2003 field work sessions and are included in Appendix C. The “safety briefing checklist” items were not physically checked off using a pen, but each item was thoroughly addressed and covered at each of the on-site safety briefings which were led by the OE Safety Specialist; the safety briefings will be more clearly mentioned in the report text. On the page following the “safety briefing checklist” in Appendix C for each date, are the signatures of the field team members; each member read the safety and health plans and attended the safety briefing.

8. Appendix E. The blank page following the Dolly Sods Community Survey Title Page can be removed. (Comment by NM)

Response: Concur. Inclusion of the blank page wasn’t intentional; it likely resulted during printing.

9. Table of Contents. A section should be reserved for a Responsiveness Summary, which would note the questions that the public offered to the recurring review following the 30-day review and comment period. This would entail adding a short section at this time, noting that a public meeting will be scheduled, at which time a 30-day review and comment period will commence, and that the Responsiveness Summary shall be revised to include all comments that had been received, with response from USACE provided. (Comment by FA)

Response: Concur. Appendix G was added and will contain the Responsiveness Summary. The following statement was added to Section 4.2, which already contains information regarding public meeting scheduling and the 30-day review and comment period: “Subsequent to the 30-day public review and comment period, a Responsiveness Summary (Appendix G) will be prepared to discuss any significant public comments received on the report and the actions taken to address any such comments.”

10. Executive Summary, 3rd paragraph, 3rd and 4th sentences. I believe that you mentioned elsewhere in the report, but you could also note here, that a complete sweep and removal of the area could not be accomplished due to the extremely high estimated cost, the extensive environmental damage that would occur, and the fact that a complete sweep of the area would not provide 100% confidence that all UXO had been found. (Comment by FA)

Response: Concur. The text has been revised and is now worded: “Recent incidents have occurred because visitors have wandered away from cleared trails, and because a complete detection and removal of ordnance in the region could not be accomplished due to the environmental damage that would occur, the extremely high estimated cost, and technology limitations. The 1997 to 1998 removal action was not expected to negate ordnance-related risk entirely, therefore, continued periodic reviews of the site and the education of individuals who use the region, are necessary.”

11. Section 5.0, 2nd paragraph. Can you compare the rate of UXO findings prior to the 1997-98 removal actions, and the findings since 1998, to make a statement that the removal action appears to have been successful due to a reduction in the number of reported UXO since 1998? You may also be able to show that prior UXO reports (prior to 1997-98) showed findings along trails and at campsites, and since 1998, most, if not all, findings have been in

areas outside the areas that were searched and cleared during the 997-98 UXO RA. (There have *only* been six OE reports since the 1997-98 removal action, so the RA appears to have been effective). (Comment by FA)

Response: Concur. Without providing too many specific details for safety- and security-related reasons, text has been revised as follows to address this comment: “Prior to the 1997 to 1998 removal action there were many instances (e.g. an average of ten per year during one ten year period) in which UXO was encountered along designated trails and at inventoried campsites (USACE, 2004a). Since 1998, there have been six cases of encountered UXO by recreational visitors. In each case, UXO was found in an area that receives little visitor traffic, nobody was injured, and the U.S. Army Explosive Ordnance Disposal (EOD) conducted disposal after being contacted through established notification and reporting processes. No UXO has been found since 1998 in the highly used areas of Dolly Sods (i.e. along the trails or at the campsites that were cleared for ordnance), and this indicates that the removal action is functioning as intended. Recent incidents have occurred because visitors have wandered away from cleared trails, and because a complete detection and removal of ordnance in the region could not be accomplished due to the environmental damage that would occur, the extremely high estimated cost, and technology limitations. The 1997 to 1998 removal action was not expected to negate ordnance-related risk entirely, therefore, continued periodic reviews of the site and the education of individuals who use the region, are necessary.”

12. Section 6.6 (Comments by FA)

- a. 6th sentence. There appears to be something missing between the words *of* and *marking*, where it is stated “*Any regional trail...should not have any type of marking its trailhead...*” Possibly you intended to add *UXO warning sign*.
- b. 7th sentence. Recommend adding *wilderness* before *protocol*.

Response: Concur. The text was revised and is now worded as: “Any regional trail that was not cleared for ordnance should not have any type of marking (e.g. a sign, or a pile of stones) at its trailhead; such markings that currently exist should be removed to discourage visitor use. Regardless of any wilderness protocol aspects.....”

13. Section 6.7, 2nd sentence. Recommend adding the words *and campsites*, after “*To facilitate usage of cleared trails and campsites, and assist...*”(Comment by FA)

Response: Concur. The sentence has been reworded as: “To facilitate usage of cleared trails and campsites, and assist hikers in maintaining their course on the cleared trails, such a map should be generated and distributed to the public by USACE.”

14. Appendices. Recommend adding tabbed sheets to easily find the appendices. (Comment by FA)

Response: Concur. This will be done.

15. Appendix D Site Assessment Photographs. (Comments by FA)

- a. Map D1. Recommend adding to the note that the trails that are depicted were established trails that were searched and cleared during the 1997-98 UXO RA.

Response: Concur. The caption of Map D1 has been revised and now reads: “Locations of photographs taken during the 2003 site assessment. The number next to each location corresponds to the photograph number in this appendix. The trails shown on this map are designated and maintained trails that were cleared for ordnance during the 1997 to 1998 removal action.”

- b. General. Recommend adding at the bottom of each photo sheet the following:
 - i. N/A – add that N/A denotes that a UXO marker is not required in this location or that N/A denotes the trail was not cleared of UXO during the 1997-98 UXO Removal Action. (Such trails would have been trails that had not been established by the US Forest Service).
 - ii. Add that the elevations are in reference to Mean Sea Level, MSL.

Response: Concur. The following footer was added to the bottom of each page in Appendix D containing photographs:

Notes: 1. Elevations are in reference to global mean sea level (MSL).
2. “N/A (not applicable) denotes that the location is not the head of a trail that was cleared of ordnance during the 1997 to 1998 removal action (i.e. it is not a designated and maintained trail location), or that a UXO warning sign is not recommended to be placed and maintained at this location.”

- c. Since the time we made the site visits for the Recurring Review, the USFS has provided the proper names for trails in the North area. Therefore, the following corrections could be made for trails that are not named in the photographs. Also, these North area trails were cleared of UXO during the 1997-98 UXO RA.
 - i. Photo 5. It is noted that this trail was not cleared of ordnance since it was assumed to be outside of the firing area. You may consider revising the note regarding *UXO Warning Sign Status*, since a sign should be *N/A*.
 - ii. Photo 7. This trail was not an *established* trail that was searched for UXO during the 1997-98 RA; however, it is a trail now that goes into the OE firing area. The notation that *No sign present*, may be misleading; we should note somewhere/somehow that there are trails that are currently being used, but that they were not searched/cleared of UXO in 1997-98.
 - iii. Photo 8. This area is *assumed* to be outside the UXO firing area; therefore, *UXO Warning Sign Status* should likely be *N/A*.
 - iv. Photo 10. The trail can now be named *Beaver Dam* with the information that has been furnished by USFS.
 - v. Photo 12. I cannot tell by the placement of the photo identifier number if this is the head of the *Bear Rocks Trail* or not. Please revise the trailhead name if this photo is of the Bear Rocks Trail.
 - vi. Photo 25. The trail can now be named *Beaver Dam*.
 - vii. Photo 26. The trail can now be named *Dobbin Grade*.
 - viii. Photo 27. The trail can now be named *Dobbin Grade*.
 - ix. Photo 28. The trail can now be named *Intersection of Dobbin Grade and Upper Red Creek* with the information that has been furnished by USFS.
 - x. Photo 29. The trail can now be named *Dobbin Grade*.
 - xi. Photo 30. The trail can now be named *Raven Ridge*.
 - xii. Photos 31 – 35. The trail can now be named *Bear Rocks* with the information that has been furnished by USFS. Note, if Photograph no. 35 is of the trailhead, then it is not appropriately designated (revise from *N/A* to *N*) and the warning sign status should be *N*.
 - xiii. Photo 38. This photo appears to be of the trailhead; therefore, the head of the trail is not appropriately designated (should be *N* vs. *N/A*) and warning sign status should also be *N*.

- xiv. Photo 40. It should be noted that this campsite was not one of the established campsites that were cleared during the 1997-98 UXO RA.
- xv. Photo 49. You may want to note that this campsite WAS one of the established campsites that were cleared during the 1997-98 UXO RA.
- xvi. Photo 54. Since this was a cleared trail, and the photo depicts the trailhead, the *UXO Warning Sign status* should be revised to *N*.
- xvii. Photo 55. The trail can now be named *Intersection of Harmon and Rocky Ridge Trails* with the information that has been furnished by USFS.
- xviii. Photos 56 – 58. The trail can now be named *Rocky Ridge*.
- xix. Photo 59. The trail can now be named *Intersection of Rocky Ridge and Dobbins Grade Trails* with the information furnished by the USFS.
- xx. Photo 60. The trail can now be named *Rocky Ridge*.
- xxi. Photo 61. This trail appears to be either Rocky Ridge or Raven Ridge, but I cannot tell by Map D1. In either case, since these trails were cleared during the 1997-98 RA, the trailhead should be marked and UXO warning signs should be present.
- xxii. Photo 62. The trail can now be named *Rocky Ridge* (or it may be Raven Ridge, cannot tell by Map D1) with the information furnished by USFS.

Response: Each of the above suggested changes under section c. were made as recommended with the following clarifications/exceptions/deviations: Photograph 12 is in fact a photograph of the Bear Rocks trailhead and is therefore now noted as such in the caption. Photograph 35 is not of a trailhead, but of a Bear Rocks trail section, so the warning sign status remains as N/A in the caption. Photograph 38 is the junction between Blackbird Knob and Rocky Ridge trails, so its warning sign status remained N/A in the caption. Photograph 40 shows one of the campsites cleared for ordnance during 1998 (refer to the final removal report), and it is now indicated as such in the caption. Photograph 54 does show the trailhead of Little Stonecoal, however, its warning sign status remains as N/A in the caption, because this is not an entry point into DSW; one would have to pass by the warning sign at Red Creek trailhead to get to this location, so placing a warning sign at the head of Little Stonecoal is not necessary/one of the highest priority locations. Photograph 61 shows a section of trail that is outside of DSN; it is not part of a maintained trail, so its warning sign status remains N/A in the caption. Photograph 62 shows the Rocky Ridge trailhead, and its warning sign status is N as a result since a sign wasn't present.

USACE CEHNC-OE-CX (William Veith), CELRH-PM-PD-R (Wallace Dean) and CELRH-OC (Terry Clarke) Reviewer Comments and Responses to Comments: Ordnance and Explosives Recurring Review, Dolly Sods Project, Former West Virginia Maneuver Area, Monongahela National Forest, WV, Draft Report – April 2004

1. General comment: I looked at the portions that I was involved in and have no comments (Comment by WV, CEHNC-OE-CX).

Response: Concur. Involvement in the study and review of the document is appreciated.

2. General comment: Recommend adding a statement that informs the reader of the only previous ordnance-related incident and injury in the Dolly Sods region (Comment by WD, CELRH-PM-PD-R).

Response: Concur. A statement which mentions the only ordnance-related incident and injury in the region has been added to the report section 3.1.

3. Review completed with no comments (TC, CELRH-OC).

Appendix G: RESPONSIVENESS SUMMARY

USDA-USFS (Carol Whetsell) Reviewer Comments and Responses to Comments: Ordnance and Explosives Recurring Review, Dolly Sods Project, Former West Virginia Maneuver Area, Monongahela National Forest, WV, Draft Final Report – May 2004

1. P. 9 4.4.2 Trailhead and Trail marking inspection. 2nd paragraph about midway. I don't necessarily agree that the lack of markings along certain trail sections has contributed to some of the recent ordnance-related incidents in DSN. I believe there is a traditional use especially by hunters and berry pickers of areas that are not designated trail. People have hunted and picked berries off of designated trails for years and it may take more education to get them to use the designated trails instead of going cross country. Also even though people may camp on cleared sites, that does not mean that they remain on cleared sites during their entire stay. Venturing out to use the restroom or brush their teeth could lead them off of a cleared site and into areas where there are ordnance.

Response: Concur. Section 4.4.2 was revised to state that it is “possible”, rather than “likely”, that the lack of markings along certain trail sections has contributed to some of the recent ordnance-related incidents in the DSN. Since USACE personnel had a difficult time maintaining course along certain trail sections due to lack of markings during the field assessment, and since USACE wishes to have visitors maintain course on the actual trails which were cleared for ordnance, the recommendation to have trail sections “well marked” remains in the report. Additional possible reasons for the recent ordnance finds by visitors, as suggested in the comment above, were also added to section 4.4.2. It is suggested in this section, and in the recommendations and conclusions section of this report, that educational tools which stress the importance of staying on cleared trails and at established campsites be developed and employed to ensure the use of cleared areas by visitors.

2. P. 12 6.4 Notification and reporting process maintenance. I will work with our dispatcher to ensure that persons operating the 24-hour reporting hotline are aware of the ordnance related incident reporting procedures.

Response: Concur; such efforts are in agreement with recommendations made in this report.

3. P. 13 6.5 Warning sign placement and monitoring. The Welcome sign at Bear Rocks Reserve is not a FS sign. That sign actually belongs to the Nature Conservancy so any changes to that sign would need to be worked out through them. The Northland loop Trail is a one-way interpretative trail. A bomb sign should be placed at the southern end of the trail, but I do not believe that a sign should be placed at the end of the trail (north end) as we don't want to encourage people to walk the trail backwards because of the interpretative messages.

Response: Concur. Section 6.5 was revised to state that “It is recommended that the USFS and USACE suggest to Nature Conservancy that the ordnance reporting phone number be added to the welcome sign”. Regarding the Northland Loop trail, the recommendation to add a warning sign to the northern end of the trail was removed from this report in response to the comment received. The recommendation to have a warning sign to the southern end of the Northland Loop trail remains in the report.

4. P. 13 6.6 Trailheads and Trail markings. Jim has 18 signs that need to be placed in the field in the Dolly Sods North area for trailheads and intersections of trails. That should help a lot with officially marking the trailheads and intersections. They should be placed this summer.

Response: Concur; such efforts are in agreement with recommendations made in this report. In Section 6.6, subsequent to the recommendation: "USFS should mark the heads of all trails that have been cleared for ordnance with signs containing the appropriate trail name", the following statement was added: "Note that a comment received from the USFS (Appendix G) indicates that steps towards meeting this recommendation should be accomplished during summer 2004."

5. I saw recommendations to enhance our wording on others signs and in brochures. I will work with my coworkers to ensure that in the future we try to include more of the bomb awareness messages.

Response: Concur; such efforts are in agreement with recommendations made in this report.