



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Wheeler National Wildlife Refuge

2700 Refuge Headquarters Road

Decatur, Alabama 35603

June 7, 2001

Mr. Ronald M. Levy
BRAC Environmental Coordinator
Bldg 215, 15th Street
Fort McClellan, Alabama 36205

Dear Mr. Levy:

I have reviewed the Draft Site-Specific Work Plan Charlie Area Engineering Evaluation/Cost Analysis Ordnance and Explosives Response Fort McClellan, Alabama. This area comprises lands that are proposed as a new national wildlife refuge and are of specific concern to the U.S. Fish and Wildlife Service (Service). These lands contain a unique landscape of old growth mountain longleaf pine interspersed with fragile spring seepage areas. Physical damage and alterations to this biological community could alter and degrade the ecological value and importance of this system.

The Service therefore requests to participate in planning and selection of sampling grids and transect lines that could minimize any harm to the natural landscape. General comments and concerns were previously provided on the general work plan in a letter dated May 31, 2000 (Attachment). Service concerns remain the same as previously stated. Longleaf pine areas should be avoided, if possible, particularly old growth stands which comprise about 100 acres of the area. If vegetation removal must take place within longleaf stands, care should be taken to leave standing longleaf pines and as many seedlings and saplings as possible. Wetland seeps should also be avoided if possible. The white-fringeless orchid (*Platanthera integrilabia*) is found in some of these seepage areas. In fact, one of the largest populations known occurs behind Range 21 in a seven-acre seep. This plant has recently been elevated to Candidate status and is expected to be proposed in the near future.

The Service welcomes the opportunity to work with the army in minimizing adverse impacts to these lands and protecting these lands for the benefit of future generations.

Sincerely

Bill Garland
Biologist

Attachment:

Letter to Ron Levy, BRAC Environmental Coordinator dated May 31, 2000

Response to Comments



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Wheeler National Wildlife Refuge
2700 Refuge Headquarters Road
Decatur, Alabama 35603

November 7, 2001

FOSTER WHEELER ENVIRONMENTAL RESPONSE TO COMMENTS

Foster Wheeler Environmental concurs with your request. Your office will be included in the planning process.

June 7, 2001

Mr. Ronald M. Levy
BRAC Environmental Coordinator
Bldg 215, 15th Street
Fort McClellan, Alabama 36205

Dear Mr. Levy:

I have reviewed the Draft Site-Specific Work Plan Charlie Area Engineering Evaluation/Cost Analysis Ordnance and Explosives Response Fort McClellan, Alabama. This area comprises lands that are proposed as a new national wildlife refuge and are of specific concern to the U.S. Fish and Wildlife Service (Service). These lands contain a unique landscape of old growth mountain longleaf pine interspersed with fragile spring seepage areas. Physical damage and alterations to this biological community could alter and degrade the ecological value and importance of this system.

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Bill Garland
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Letter to Ron Levy, BRAC Environmental Coordinator dated May 31, 2000



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Wheeler National Wildlife Refuge
2700 Refuge Headquarters Road
Decatur, Alabama 35603

May 31, 2000

Mr. Ronald M. Levy
BRAC Environmental Coordinator
Bldg 215, 15th Street
Fort McClellan, Alabama 36205

Dear Mr. Levy:

I have reviewed the general site-wide work plan and the M2 parcel work plan in regards to possible adverse or beneficial impacts to the natural environment from the UXO survey process. My concern involves possible alterations or degradation to the natural ecosystem from intrusive survey activities. The U.S. Fish and Wildlife Service (Service) has identified the mountain longleaf pine forest system on these slopes as a rare and unique natural landscape in need of protecting and managing. Current plans involve developing and managing these lands as a new national wildlife refuge with the primary purpose of saving and retaining this rare landscape type. We therefore request that survey efforts take into consideration measures that minimize or avoid adverse alteration to this forest system.

Based on descriptions of vegetation clearing requirements in the general work plan (p 2-15), vegetative cover will be removed from site grids no greater than four inches above the ground and trees less than three inches in diameter will be cut. Our recommendation is to selectively leave longleaf pine in these areas and focus on the removal of hardwoods on pine sites. Actually, disturbances to the soils that allow invasive weed species to develop are a greater concern than the selective removal by cutting of trees and shrubs. We do however support the option presented on p 2-15 of using prescribed fire as an alternative method of vegetative clearing. This method mimics the natural processes that longleaf exists under and would be far preferable to mechanical removal. Brush clearing methods involving heavy equipment and a bush-hog were used on the M2 parcel. We would hope that more sensitive soils and landscapes in the mountains would avoid this approach and employ hand clearance for the selective removal of trees and minimization of soil disturbance.

Section 12 of the general work plan comprises the environmental protection plan. This plan identifies sensitive resources to avoid and provides mitigative techniques to minimize impacts. This section only considers the blue shiner and red-cockaded woodpecker under constraints related to the Endangered Species Act. More detailed consideration should be provided for the white-fringeless orchid. This plant is currently waiting funding to proceed with the listing process. The status report for this orchid identified all spring seeps in the mountain area as potential habitat. Because two populations are already known on the fort, there is a high probability that more exist and the plant should be considered in any activity that potentially could impact wetland areas. Because this orchid may remain dormant in the soil for years, the lack of sightings in a seep or wetland does not necessarily mean it is absent. Section 12.9.2 indicates that wetlands are outside the boundaries of the area. This is incorrect. All streams through the mountains contain numerous seeps along their borders. These small isolated seeps constitute habitat for the orchids. The environmental protection plan also identifies special interest natural areas within the mountain area, but does not provide measures that will be implemented to minimize adverse impacts or degradation. It should be recognized that the first area on the list, Mountain Longleaf Community Complex, comprises the entire mountain area and would include all grid survey locations in the Choccolocco Mountain Area.

Section 2.6 of the general work plan on p 2-17 describes reasonably anticipated future activities as the bases for evaluating risk of UXO on uniform areas. The Service would like to see cleanup of UXO to the fullest extent possible without significantly degrading the environment. Because fire suppression and prescribed burning are primary management goals, the use of heavy equipment on these lands is important. At a minimum, firelanes should be cleared for heavy equipment if unrestricted use of the area is impossible. The Service would also like to see surface use available throughout these lands for both government employees and the public. The Service is currently working with the army on identifying localize intensively developed areas that may require more detailed evaluation in relation to UXO.

Because each area in the mountains involves different constraints and issues, the Service would like to be included in the planning process as each site is identified for survey. We believe that by considering the specific issues at each site, adverse impacts can be minimized or avoided.

Sincerely,

Bill Garland
Biologist

ADEM

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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Mining: 394-4326
Education/Outreach: 394-4383

July 16, 2001

Ronald M. Levy
BRAC Environmental Coordinator
Environmental Office, 291 Jimmy Parks Blvd.
US Army Garrison
Fort McClellan, Alabama 36205

**RE: Review of the Draft Site-Specific Work Plan for the Charlie Area Engineering Evaluation/Cost Analysis, Ordnance and Explosive Response, dated May 29, 2001
Fort McClellan, Alabama**

Dear Mr. Levy:

The Alabama Department of Environmental Management (the Department) has received and reviewed the Draft Site-Specific Work Plan Charlie Area Engineering Evaluation/Cost Analysis Ordnance and Explosive Response, dated May 29, 2001. Enclosed are ADEM's comments for your review and written response. Please submit response comments and a revised work plan to the Department within 30 days from the date receipt of this letter.

For any questions or concerns regarding this matter please contact me at 334-270-5646 or via email at <mailto:pns@adem.state.al.us>.

Sincerely,

A handwritten signature in black ink, appearing to read "Philip N. Stroud".

Philip N. Stroud
Governmental Facilities Section
Hazardous Waste Branch
Land Division

PNS/

cc: Mr. Doyle Britain, EPA Region 4
Mr. Ellis Pope, USA, COE
Mr. Dan Copeland, CEHNC-OE-DC

File: Land Division/Hazardous Waste Branch, Fort McClellan, Correspondence, 2001

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ADEM COMMENTS
DRAFT SITE-SPECIFIC WORK PLAN FOR THE CHARLIE AREA
ENGINEERING EVALUATION/COST ANALYSIS ORDNANCE AND
EXPLOSIVES RESPONSE, FORT McCLELLAN, ALABAMA

General Comments

1. The Draft Charlie Area Site-Specific Work Plan does not explain in detail what percent slopes represent “relatively flat, hilly, and mountainous terrain.” The work plan suggests that work will not be performed in terrain over 40 degrees. Does greater than or equal to 40 degrees suggest mountainous terrain? Please add additional information clarifying slope severity (flat, hilly, and mountainous) and describe the implications it has on clean-up of UXO/OE.
2. It is not clear to the Department how much area in slopes greater than 40 degrees will remain impacted with UXO/OE and/or will not be investigated for the presence of UXO/OE. Several figures (Figures 6-1, 6-2, 6-3, 6-4, 6-6, 6-7, 6-8, and 6-9) in Chapter 6, indicate that the majority of land will not be investigated. Please clarify this issue by submitting revised figures describing Fort McClellan’s plans for these areas.

It appears there are transect areas noted in green on the above figures that can be investigated. However, some of these green areas appear isolated, suggesting that there are slopes greater than 40 degrees separating them. Explain in detail what measures Fort McClellan will take to complete transects in isolated areas [and if this will be sufficient to statistically prove that ordnance density meets the criteria for high, medium, or low].

3. What are Fort McClellan’s intentions to estimate density UXO/OE in the higher slopes (> 40°)? Apparently, the U.S. Fish and Wildlife will be acquiring significant acreage with slopes greater than 40 degrees and it appears Fort McClellan has no plans to investigate these areas for UXO/OE. Please revise the work plan to explain the exact reasons investigations can not be performed on slopes greater than 40 degrees. Who made the decision to not perform investigations at slopes greater than 40 degrees? Are there physical and technical limitations that prevent or hamper activity at 40-degree slopes? Does the accuracy of the instrument decrease with the increase in slope? Will there be different instruments used at higher slopes and will using different instruments at higher slopes change the accuracy and precision? What other equipment and protocols may be used in higher slopes (> 40°) to at least achieve an understanding that UXO/OE are present or absent and/or to at least estimate an ordnance density?
4. In slopes greater than 40 degrees, the U.S. Fish and Wildlife will have no statistical information available (see page 6-3, Section 6.3.7, Line 18) to know if they are receiving property that has less than 1.0 OE item per acre or greater than 5.0 OE per acre (see page A-15). Has Fort McClellan notified U.S. Fish and Wildlife of this issue? Some effort should be taken to calculate the number of OE per acre where slopes are greater than 40 degrees. Please explain possible methods to evaluate the density of OE where slopes are greater than 40 degrees.
5. The work plan should include a figure showing slope severity over the entire Charlie Area. A slope severity figure would help the reader understand how much of the property is in areas greater than 40

degrees. The figure also would allow the reader to visualize ranges of slopes (i.e., 10-20°, 20-30°, etc.).

6. If UXO/OE are left in slopes greater than 40 degrees, will UXO/OE be considered solid waste and hazardous? Please clarify Fort McClellan's understanding of solid waste rules and regulations that may be applicable to the UXO/OE that it will leave in the Charlie Area. The revised work plan should also address what percentage of the Charlie Area will not be investigated, the assumed density of UXO/OE, and why there will be no attempt to estimate what UXO/OE remain in slopes greater than 40 degrees.

Specific Comments

| | <u>Page/Section</u> | <u>Comment</u> |
|-----|---------------------|---|
| 1. | 4-5/4.3 | Line 40: Change "an" to "a." |
| 2. | 5-4/5.4.5 | Line 6: Delete the word "been." |
| 3. | 6-2/6.3.2 | Line 9: This sentence states that some areas are "too steep." Please explain the percent slopes that represent "too steep." Please check the entire work plan when referencing to slopes (flat, hilly, and mountainous). Please clarify and quantify the slopes Fort McClellan is referring to in all such statements (i.e., 10-20°, 20-30°, etc.). |
| 4. | 6-3/6.3.7 | Line 18: The sentence states: "Slopes greater than 40 degrees are excluded from data collection areas." Please describe why data will not be collected in slopes greater than 40 degrees (technical, physical, terrain, etc.?). |
| 5. | 6-8/6.6.2.3.1 | Line 8: This sentence states: "This range appeared on the 1946 reservation map and included a safety fan." Please explain what range is being investigated. |
| 6. | 6-9/6.6.2.3.1 | Line 11: Delete "was" in the sentence "...range and was...." |
| 7. | 6-12/6.6.2.6.1 | Line 11: Change "h" to "H" in "hill." |
| 8. | 6-24/6.7.1.2 | Line 3: Change "(Current and/or Future and use)" to "(Current and/or Future Land use)." |
| 9. | 6-25/6.7.3.1 | Line 34: Change "Range 24a" to "Range 24A." |
| 10. | 6-27/6.7.3.1 | Line 8: There is no Figure 6-15 at the end of Chapter 6. Please add Figure 6-15. |
| 11. | 6-27/6.7.3.1 | Line 40: There is no Figure 6-16 at the end of Chapter 6. Please add Figure 6-16. |

12. 6-28/6.7.3.3 Line 26: There is no Figure 6-17 at the end of Chapter 6. Please add Figure 6-17.
13. 6-29/6.7.3.4 Line 11: There is no Figure 6-18 at the end of Chapter 6. Please add Figure 6-18.
14. 6-29/6.7.3.5 Line 37: There is no Figure 6-19 at the end of Chapter 6. Please add Figure 6-19.
15. 6-30/6.7.3.6 Line 21: There is no Figure 6-20 at the end of Chapter 6. Please add Figure 6-20.
16. 6-31/6.7.3.7 Line 2: There is no Figure 6-21 at the end of Chapter 6. Please add Figure 6-21.
17. 6-31/6.7.3.8 Line 26: There is no Figure 6-22 at the end of Chapter 6. Please add Figure 6-22.
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19. 6-32/6.7.3.10 Line 36: There is no Figure 6-24 at the end of Chapter 6. Please add Figure 6-24.
20. 6-33/6.7.3.11 Line 17: There is no Figure 6-25 at the end of Chapter 6. Please add Figure 6-25.
21. 6-34/6.7.3.12 Line 2: There is no Figure 6-26 at the end of Chapter 6. Please add Figure 6-26.
22. 6-34/6.7.3.13 Line 26: There is no Figure 6-27 at the end of Chapter 6. Please add Figure 6-27.
23. A-33/Task 2 Fourth Paragraph, Lines 1 and 2: This sentence suggests that 4 percent of the terrain is flat, 10 percent is hilly, and 86 percent is mountainous. What slopes (i.e., 10-20°, 20-30°, etc.) are relevant to the 4, 10, and 86 percent terrain?
24. A-34/Task 2 Second Paragraph: This paragraph suggests that much of the terrain in Charlie Area is very steep and not suitable for data collection using grids. It also suggests that for very steep areas data will be collected using a hand-held metal detector or magnetometer moved along a series of approximately 3-foot swaths over steep or difficult terrain until the necessary sampling acreage is achieved. Please quantify the terms "steep" (i.e., 10-20°, 20-30°, etc.?), and "very steep" (>40°? or <40°?).

25.

C-4/Task 2

First Paragraph, Second Line: This sentence suggests that areas in "very steep" terrain and will be geophysically surveyed and sampled using transects. Please again clarify the term "very steep" (refer to Specific Comment No. 24 above).

End of Comments

July 16, 2001

Ronald M. Levy
BRAC Environmental Coordinator
Environmental Office, 291 Jimmy Parks Blvd.
US Army Garrison
Fort McClellan, Alabama 36205

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Sincerely,

Philip N. Stroud
Governmental Facilities Section
Hazardous Waste Branch
Land Division

PNS/

cc: Mr. Doyle Britain, EPA Region 4
Mr. Ellis Pope, USA, COE
Mr. Dan Copeland, CEHNC-OE-DC

File: Land Division/Hazardous Waste Branch, Fort McClellan, Correspondence, 2001

ADEM COMMENTS
DRAFT SITE-SPECIFIC WORK PLAN FOR THE CHARLIE AREA
ENGINEERING EVALUATION/COST ANALYSIS ORDNANCE AND
EXPLOSIVES RESPONSE, FORT McCLELLAN, ALABAMA

FOSTER WHEELER ENVIRONMENTAL
RESPONSE TO GENERAL COMMENTS 1-6

Chapter 6 of the DO7 (Charlie EE/CA) Work Plan has been rewritten to address the new changes in scope, specifically mountain transects. This new methodology will allow for UXO investigations on slopes greater than the previous limitation of 40 degrees.

General Comments

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Specific Comments

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Addressed.
24. A-34/Task 2 Second Paragraph: This paragraph suggests that much of the terrain in Charlie Area is very steep and not suitable for data collection using grids. It also suggests that for very steep areas data will be collected using a hand-held metal detector or magnetometer moved along a series of approximately 3-foot swaths over steep or difficult terrain until the necessary sampling acreage is achieved. Please quantify the terms “steep” (i.e., 10-20°, 20-30°, etc.?), and “very steep” (>40°? or <40°?).
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25. C-4/Task 2 First Paragraph, Second Line: This sentence suggests that areas in “very steep” terrain and will be geophysically surveyed and sampled using transects. Please again clarify the term “very steep” (refer to Specific Comment No. 24 above).
Addressed.

End of Comments



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

October 15, 2001

EMAIL & US MAIL

4WD-FFB

Mr. Ron Levy
BRAC Environmental Coordinator
U.S. Army Garrison
Environmental Office
Building 215, 15th Street
Fort McClellan, AL 36205-5000

SUBJ: Draft Site Specific Work Plan for the Charlie Area Engineering / Cost Analysis Ordnance and Explosives Response; Fort McClellan

Dear Mr. Levy:

The Environmental Protection Agency (EPA) has reviewed the subject document. Comments are enclosed. Thank you for your cooperation. If you have any questions, please call me at (404) 562-8549.

Sincerely,

A handwritten signature in black ink that reads "Doyle T. Brittain". The signature is fluid and cursive.

Doyle T. Brittain
Senior Remedial Project Manager

Enc.

cc: Lisa Kingsbury, Ft. McClellan
Ellis Pope, USA/COE
Phil Stroud, ADEM
Jeanne Yacoub, IT
Daniel Copeland, CEHNC-OE-DC
Maj. Wayne Sartwell, ALANG
Maj. Bernie Case, ALANG

**ENVIRONMENTAL PROTECTION AGENCY COMMENTS ON THE
DRAFT SITE SPECIFIC WORK PLAN FOR THE
CHARLIE AREA ENGINEERING EVALUATION / COST ANALYSIS (EE/CA)
ORDNANCE AND EXPLOSIVES RESPONSE**

GENERAL COMMENTS

1. The EE/CA Work Plan mentions in several locations that geophysical surveys will not be conducted in areas with slopes equal to or greater than 40 %. All of these areas where it is proposed that geophysical surveys will not be conducted should be clearly delineated on the figures. In addition, the percentage of the acreage which fits in this category should be calculated and listed for each study area. It is not acceptable that these areas not be surveyed for OE/UXO. Even if it involves the development of some innovative survey techniques, these areas must be surveyed and cleared of OE/UXO materials.
2. The EE/CA Work Plan uses several different descriptors to describe the terrain of the study area. Some of these descriptors are "flat, hilly and mountainous", "% slope", and "very steep areas". To avoid confusion, all of these descriptors should be standardized and merged into one common set of descriptors.
3. The concept of using the ribbon walk technique is mentioned numerous times in the EE/CA Work Plan. This technique should be described briefly along with an explanation of why it is used.

SPECIFIC COMMENTS

1. **Page 5-3.** In these analogies, it is hard to understand how the concept of data validation by the collection and analysis of QC samples . . . "other QC samples (i.e., matrix spike, matrix spike duplicate, rinse blanks). . ." [lines 20 and 21] and the collection of laboratory samples for laboratory analysis for confirmation of field screening analyses [lines 29 and 30] will be applied to the evaluation of geophysical anomalies. All of this should be clarified for ease of understanding.
2. **Page 6-2, Table at top of page.** The heading of the second column should be changed from "Sampling Areas" to "Sampling Acres".
3. **Page 6-3, Lines 10, 11, and 12.** These lines state ". . . but grid boundaries will be adjusted slightly to encompass the areas of least vegetative cover in order to minimize the brush cutting required prior to data collection in a given grid." In the report for these activities, both the original grid locations and the adjusted grid locations should be shown on the figures.
4. **Page 6-4, Line 17.** This line mentions the 1 in 600 rule. If this rule is described earlier in the EE/CA, it should be referenced here. If it has not already been described earlier, a description should be provided here.

5. **Page 6-5, Lines 20 and 21.** An explanation should be provided as to why “Intrusive data validation” will be associated with the grids and data collection transects but not the delineation transects.
6. **Pages 6-6 and 6-11.** An explanation should be provided as to why some of the ranges, such as the 81 mm mortar range, are listed in both the FWS sectors and the CC sectors.
7. **Page 6-12, Lines 2 and 4.** “East” in line 2 should be changed to “west” and “west” in line 4 should be changed to “east”.
8. **Page 6-52.** Figures 6-16 through 6-26, which should start on this page, have been omitted. These figures should be added.
9. **Page 9-1, Lines 4 and 5.** “Will describe” in line 4 should be changed to “describes” and “will set forth” should be changed to “sets forth”.
10. **Appendix A, Next to Last Paragraph.** The first sentence of this paragraph provides the percentages of the study area which are flat, hilly and mountainous. Since % slope is used at other locations in the work plan, the % slope range for these three categories should be provided.
11. **Appendix A, First Complete Paragraph.** The second sentence in this paragraph refers to very steep areas. These areas should be tied to the categories listed in Comment 10 above.

In addition, this paragraph states that data in “very steep” areas will be collected with a metal detector carried along a series of transects in the “very steep” areas. However, the body of the work plan does not mention this technique. This inconsistency should be clarified, especially if the use of this technique will satisfy the concerns raised in General Comment 1 concerning the failure to propose geophysical studies in the “steep” areas.