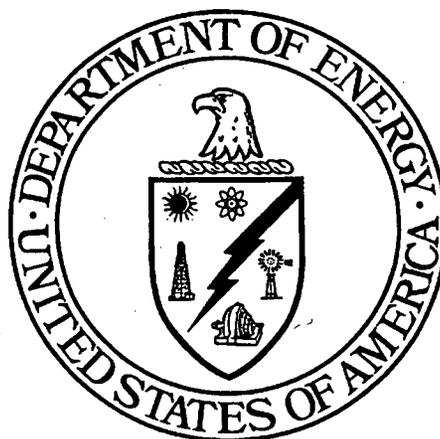


**MASTER PLAN FOR PUBLIC USE  
OF THE FERNALD ENVIRONMENTAL  
MANAGEMENT PROJECT**

**FERNALD ENVIRONMENTAL MANAGEMENT PROJECT  
FERNALD, OHIO**



**FEBRUARY 2002**

**U.S. DEPARTMENT OF ENERGY  
FERNALD AREA OFFICE**

**20900-PL-0002  
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**LIST OF ACRONYMS AND ABBREVIATIONS**

CERCLA	Comprehensive Environmental Response, Compensation and Liability Act, as amended, 42 USC §§6901, et seq.
CFR	Code of Federal Regulations
CRO	Community Reuse Organization
DOE	U.S. Department of Energy
FCAB	Fernald Citizens Advisory Board
FEMP	Fernald Environmental Management Project
FLHP	Fernald Living History Project
FONSI	Finding of No Significant Impact
FRESH	Fernald Residents for Environmental Safety and Health
FRL	final remediation level
NRRP	Natural Resource Restoration Plan
NRTs	Natural Resource Trustees
OHPO	Ohio Historic Preservation Office
OSDF	On-Site Disposal Facility
OU	Operable Unit
PA	Programmatic Agreement
PEIC	Public Environmental Information Center
RCRA	Resource Conservation and Recovery Act, as amended
RI/FS	Remedial Investigation/Feasibility Study
ROD	Record of Decision
SEP	Sitewide Excavation Plan
WAC	waste acceptance criteria

**LIST OF AGENCIES AND PERSONS CONSULTED AND/OR  
PARTICIPATING IN THE FUTURE OF FERNALD PROCESS**

Brookville Middle School  
Butler County Soil and Water Conservation District  
Community Reuse Organization  
Congressional Representative Rob Portman's Office  
Congressional Representative Steve Chabot's Office  
Crosby Township Fire Department  
Crosby Township Historical Society  
Crosby Township Trustees  
Fernald Atomic Trade and Labor Council (FAT&LC)  
Fernald Citizens Advisory Board  
Fernald Living History Project  
Fernald Residents for Environmental Safety and Health  
Hamilton County Parks  
Hamilton County Regional Planning Commission  
Izaak Walton League of America  
Metro Parks of Butler County  
Morgan Township Trustees  
Native American Alliance of Ohio  
Ohio Environmental Protection Agency  
Ohio Horseman's Council of Hamilton County  
Ross Township Trustees  
Southwest Regional Water District  
U.S. Department of Energy  
U.S. Environmental Protection Agency  
University of Cincinnati  
Waste Management Federal Services, Inc.

**1.0 PURPOSE AND NEED**

1  
2  
3 The U.S. Department of Energy at Fernald (DOE) must make a decision regarding the future public use  
4 of the Fernald Environmental Management Project (FEMP, Figure 1), to appropriately plan restoration  
5 projects and long-term stewardship. To date, DOE has received a significant amount of public input  
6 regarding future public use of the FEMP through ongoing discussions with stakeholders. DOE received  
7 valuable input and formal recommendations from the Future of Fernald Process public meetings in 1999  
8 and 2000. The meetings were co-sponsored by the Fernald Citizens Advisory Board (FCAB), Fernald  
9 Residents for Environmental Safety and Health (FRESH), Fernald Living History Project (FLHP), and  
10 the Community Reuse Organization (CRO, FCAB 2000 and 2001). The information and  
11 recommendations received to date have helped DOE identify and develop alternatives and develop the  
12 proposal outlined in Section 3.0 of this Master Plan (Plan). The public review comments received on  
13 this Plan will be utilized by DOE to plan and implement the future public use of the FEMP.

14  
15 Any future public use of the FEMP must be consistent with decisions made to date regarding  
16 remediation, restoration and final land use. The proposal outlined in this Plan is intended to be  
17 consistent with those past decisions. In 1998, DOE held a public meeting in accordance with National  
18 Environmental Policy Act (NEPA) on the final land use and restoration plans for the FEMP. DOE issued  
19 a decision on final land use in the form of a Finding of No Significant Impact (FONSI, DOE 1999a) in  
20 June of 1999. The decision included natural resource restoration on approximately 904 acres of the site  
21 (including the potential for recreational use of the FEMP), excluding the 123-acre On-Site Disposal  
22 Facility (OSDF) and a tract of 23 acres set aside for potential development. DOE is currently in the  
23 process of finalizing restoration plans with the Fernald Natural Resource Trustees (NRTs). Any public  
24 use of the FEMP must not threaten the integrity of past remedial actions, threaten restored areas of the  
25 FEMP or introduce unacceptable land uses.

26  
27 DOE has received a significant amount of public input regarding the construction of a Multi-Use  
28 Educational Facility (MUEF) on the FEMP property. DOE, in consultation with stakeholders, is  
29 currently evaluating the feasibility of constructing such a facility as a repository for site information, a  
30 facility for educational purposes, etc., on the 23 acres currently set aside for potential economic  
31 development. There are significant issues regarding the construction of the MUEF (e.g., funding,  
32 appropriate management arrangement) that will not be resolved for some time. Therefore, construction

- 1 of the MUEF is not within the scope of this Plan and will not be part of the public use decision made by
- 2 DOE at this time. If DOE determines that the construction of the MUEF is feasible at a later date, a
- 3 separate process will be initiated to obtain public input prior to making a final decision.

## 2.0 BACKGROUND

### 2.1 REMEDIATION

In 1989, production ceased at the Feed Materials Production Center due to a decreased demand for feed materials and an increased focus on environmental remediation efforts. The current sitewide remediation effort is being conducted pursuant to the Comprehensive Environmental Response Compensation and Liability Act (CERCLA). Waste is managed at the site under CERCLA and other authorities. Mixed wastes (radioactive wastes with hazardous waste components) are managed in accordance with the Ohio Hazardous Waste Management Rules on the Resource Conservation and Recovery Act (RCRA), as amended. (For the purposes of this document, references to RCRA shall include the Ohio Hazardous Waste Management Rules).

Remediation also includes the construction of an On-Site Disposal Facility (OSDF). This facility will contain low level radioactive waste that meets the waste acceptance criteria (WAC) established for the OSDF. WAC are defined in the Sitewide Excavation Plan (SEP, DOE 1998).

A Remedial Investigation and Feasibility Study (RI/FS) was conducted for each of five operable units (OUs) established:

- Operable Unit 1 – Waste Pits Area
- Operable Unit 2 – Other Waste Units
- Operable Unit 3 – Production Area
- Operable Unit 4 – Silos 1-4
- Operable Unit 5 – Environmental Media

Based on the results of the RI/FS, Records of Decision (RODs) were issued outlining the selected remedy for each OU.

OU5 includes all environmental media, including soil, surface water, groundwater and vegetation not otherwise addressed by another OU's ROD. Soil and sediment exceeding final remediation levels (FRLs) will be excavated and placed in the OSDF or shipped off-site. FRLs are the cleanup goals for the site. FRLs for soil, sediment and surface water were developed based on risk scenarios for recreational uses of the site consistent with the undeveloped park scenario. For the FEMP, the FRL is the average concentration of a contaminant that can remain in an area under a given exposure scenario and still be

1 protective of human health and the environment. Actual FRLs are defined in the SEP. Soil certification  
2 processes and sampling of sediment and surface water will be performed to ensure that excavation has  
3 removed all impacted material, as outlined in the SEP. Any future public use of the FEMP must be  
4 consistent with the scenarios used to develop cleanup goals for the site.

## 5 6 2.2 RESTORATION

7 Ecological restoration follows remediation and is the final step to completing cleanup of the site. For the  
8 FEMP, ecological restoration is outlined in the draft final Natural Resource Restoration Plan (NRRP,  
9 DOE 2001).

10  
11 The goal for restoration of the FEMP is to enhance, restore, and construct as feasible, given  
12 postexcavation landforms and soils, early stages of vegetative communities containing species that were  
13 present in pre-settlement southwestern Ohio. Figure 2 illustrates the conceptual ecological restoration  
14 plan for the FEMP. Restoration of the FEMP will involve four major components:

- 15  
16 1. Expansion/enhancement of the riparian corridor along Paddys Run
- 17  
18 2. Expansion/enhancement of the wooded areas in the northern portion of the FEMP
- 19  
20 3. Create the early stages of a contiguous prairie in the central and eastern portions of the  
21 FEMP
- 22  
23 4. Creating open water areas and wetlands throughout the site as topography and hydrology  
24 allow.
- 25

26 The majority of remediation and restoration projects are currently scheduled for completion in  
27 December 2006, although efforts to accelerate the completion date are being considered on an ongoing  
28 basis.

## 29 30 2.3 FINAL LAND USE

31 In their 1995 report, the FCAB did not have any specific recommendations for final land use, but did  
32 recommend that final land use decisions should be made with input from local communities  
33 (FCAB 1995). Furthermore, the FCAB recommended federal ownership of the FEMP in perpetuity and  
34 that residential and agricultural uses of the FEMP should not be considered (FCAB 1996) after cleanup is  
35 completed. Finally, the FCAB also suggested that all existing natural resources at the FEMP be

1 protected and enhanced, and that all necessary natural resource restoration activities take place on site  
2 (FCAB 1996).

3  
4 The final land use decision reached in June of 1999 committed approximately 904 acres of the FEMP to  
5 ecological restoration or greenspace (DOE 1999a and 1999b). The decision also included the potential  
6 for recreational public use of the FEMP. The remaining land on the FEMP would include approximately  
7 123 acres committed to the OSDF and 23 acres set aside for potential, future development. The land use  
8 decision also restated commitments for federal ownership of the FEMP in perpetuity and the prohibition  
9 on agricultural and residential use of the site.

#### 10 11 2.4 NATURAL RESOURCE TRUSTEES NEGOTIATIONS

12 Since 1994, negotiations have been ongoing between the DOE and the other Natural Resource Trustees.  
13 It is anticipated that the proposed settlement of the 1986 natural resource damages claim will include a  
14 monetary payment for groundwater injuries, as well as on-property restoration of the FEMP. The draft  
15 final NRRP outlines the restoration approach for each area of the site (DOE 2001b). Restored habitats  
16 would include upland forest, riparian forest, tallgrass prairie, wetlands and open water. Three restoration  
17 projects have been completed to date. These include the Aesthetic Barrier along Willey Road; the  
18 Wetland Mitigation Project – Phase I; and the Area 8, Phase II Revegetation Project. A public access  
19 ecological restoration park in Area 8, Phase I and several ecological research projects have also been  
20 completed in various locations on the FEMP. The draft final NRRP also includes the proposal for the  
21 construction of trails for access to the restored areas. The draft final NRRP outlines a phased approach  
22 to restoring the balance of the FEMP integrated with the remediation schedule.

#### 23 24 2.5 PUBLIC INVOLVEMENT

25 The public has played a very important role in the remediation process at the FEMP, and stakeholders  
26 remain very involved in the remediation and planning for the future of the FEMP. The public and other  
27 key stakeholders will remain involved with the planning activities and will continue to play a very active  
28 role in helping DOE make critical, post closure planning decisions.

29  
30 There are several groups and organizations that follow and remain involved with the remediation of the  
31 FEMP on a regular basis. To date, three “Future of Fernald” workshops have been conducted/  
32 co-sponsored by the FCAB, FRESH, the CRO, and the FLHP (April 20, 1999, May 29, 2000,

1 September 26, 2000). These workshops were open to the general public and gave them the opportunity  
2 to provide input on the final public use decision. Resulting ideas and contributions from these  
3 workshops range from no public use, to providing a network of trails for hiking, and possibly biking, that  
4 may connect to an on-site MUEF or even the local parks. However, the main focus of the Future of  
5 Fernald process is to make Fernald an educational resource. This Plan incorporates the ideas and  
6 contributions from all of the participants in the workshops into the listed proposed and alternative  
7 actions. A list of the groups and organizations that participated in all three Future of Fernald workshops  
8 is provided in the front of the document. Participation by organizations, groups, and individuals outside  
9 of DOE and Fluor Fernald is encouraged during the public use decision process.

### 3.0 PROPOSED ACTION

#### *Limited public access for educational purposes including walking trails and interpretive information in restored areas.*

The proposed action includes restricting access to the OSDF and opening restored areas of the site to the public during daytime hours. It is envisioned that the site would contain designated access and parking areas, a series of improved and unimproved trails with interpretive signs providing information on site and area history as well as natural and cultural history. It is anticipated that use of the FEMP would be geared towards education, rather than recreation, and education would be a fundamental component of long-term stewardship of the site (Figure 3).

It is suggested that a primary goal of the Proposed Action would be to support education of the public about regional environmental, cultural, historical, and ecological issues. The FEMP is located in an area with a rich cultural history. The site itself was constructed to assist in the Cold War effort. As a result of the activities at the site, there has been environmental damage that is being remediated. Following the environmental remediation, ecological restoration of the site's natural resources will take place.

It is also suggested that a second goal would be to make information available so that the public would be aware of what remains at the site, what is being done to care for and maintain it, and what long-term stewardship responsibilities are being upheld. The OSDF will require ongoing monitoring and maintenance, which will eventually fall under long-term stewardship responsibilities. The public will be kept aware of what is being done to ensure public safety.

#### 3.1 SITE ACCESS

In the event that public access to the FEMP is permitted, there would be public access to parking areas and walking trails at the conclusion of remediation and restoration activities. Site access would be available through the existing South Access Road off Willey Road, the existing North Access Road off State Route 126, the Ecological Restoration Park off Paddys Run Road, and at the northwest corner of the property off Paddys Run Road.

1 From these four designated access points, a series of trails would be constructed through individual  
2 restoration projects. Trails would provide easy access for viewing completed remediation areas,  
3 restoration projects, and cultural resource areas. Along the trails, visitors would be provided with  
4 information on the cultural, industrial and natural history of the site. Hiking trails and boardwalks would  
5 provide access to more remote and physically demanding areas.

6  
7 The only other vehicle access to the site will be a gravel road that will provide access to the OSDF for  
8 inspections and monitoring. This road would be connected to public parking areas in the southern  
9 portion of the site and the northern portion of the site connected to State Route 126. Access to the OSDF  
10 will be controlled at the southern and northern ends by gates that will be locked at all times to prevent  
11 unauthorized access.

12  
13 Perimeter fencing will be maintained around the FEMP so that access to the site occurs only at  
14 designated locations. Signs will also be maintained at access points and on the perimeter fence posting  
15 restrictions for access and use of the FEMP.

### 16 17 3.2 PUBLIC USE AMENITIES

18 It is envisioned that unimproved trails (e.g., mulched) would be available for educational purposes and  
19 would lead to no more than five overlooks for viewing historical, archaeological, and ecological points  
20 of interest at the FEMP. Unimproved trails would not exceed four miles in length. Activities that might  
21 harm or injure natural resources at the FEMP would not be permitted.

22  
23 It is suggested that no more than one mile of boardwalk be installed to provide access to wetland areas.  
24 Trail access into and across Paddys Run Stream would have to be carefully planned to minimize impacts  
25 to the stream.

26  
27 Improved trails would provide handicap access to key features of the restored FEMP. These trails would  
28 not exceed one mile in length and would be installed as determined appropriate by DOE in consultation  
29 with stakeholders and other appropriate agencies.

30  
31 It is anticipated that trails would contain interpretive stations (not to exceed 20 total) providing  
32 information on historical, archaeological and ecological points of interest at the FEMP.

1  
2 Native American reburial could occur in most restored areas, assuming vegetation could be established  
3 on the burial location. Native American Tribes have identified some areas of the western side of the site  
4 as preferable areas for reburial (Figure 3). Reburial would not be permitted in wetlands. Trail access to  
5 or near Native American reburial areas would be determined through consultation with Native American  
6 tribes and groups.

7  
8 3.3 ACCESS RESTRICTIONS TO OSDF AREA

9 There will be no access to the OSDF except for authorized personnel conducting inspections and  
10 monitoring as outlined in the Post-Closure Care and Inspection Plan for the OSDF (DOE 1997a).  
11 Protection of OSDF monitoring wells outside of the OSDF perimeter fence may also be required. Access  
12 gates will be located at the northern and southern ends of the OSDF. A perimeter fence will be  
13 maintained around the OSDF, along with signs that prohibit access and ensure the OSDF is secure.  
14 Further details on access controls, required inspections and monitoring around the OSDF can be found in  
15 the Post-Closure Care and Inspection Plan for the OSDF which is available at the Public Environmental  
16 Information Center (PEIC).

17  
18 3.4 SUGGESTED PROHIBITED ACTIONS

19 The following are suggested prohibited actions on the FEMP for ongoing protection of the site and any  
20 members of the public using the site as developed and intended as a result of the Future of Fernald  
21 process and consultation with the NRTs. Any prohibited actions would be clearly posted on the site and  
22 continued federal ownership and monitoring will help ensure they are followed. The suggested  
23 prohibited actions listed below are not intended to be all-inclusive and may change over time.

- 24
- 25 • No public hunting or trapping of any kind will be permitted on the FEMP property (some  
26 may be permitted for research and/or wildlife management activities)
  - 27
  - 28 • No removal or damage of plants by unauthorized personnel will be permitted
  - 29
  - 30 • No swimming or wading in creeks, ponds or wetlands will be permitted
  - 31
  - 32 • No public hiking other than on designated trails will be permitted
  - 33
  - 34 • No biking on or off trails
  - 35
  - 36 • No soil excavation for any reason by unauthorized personnel

- 1
- 2 • No off-road vehicles will be permitted except on designated roads
- 3
- 4 • No dumping of any kind on the FEMP.
- 5
- 6

### 7 3.5 MAINTENANCE OF SITE

8 Maintenance of the site falls under the responsibilities of long-term stewardship and will be conducted  
9 under the direction of DOE and other site steward(s). In accordance with CERCLA, monitoring and  
10 maintenance of the OSDF will be necessary to ensure the integrity of the OSDF and ensure the protection  
11 of human health and the environment. More specifically, monitoring will be conducted on leak detection  
12 and leachate monitoring systems, the cell cap and cover system, and support systems such as physical  
13 barriers and the surrounding area.

14

15 Monitoring may be necessary for restored areas to ensure the health and vitality of the area (e.g., wetland  
16 hydrology, prairie management, and health of vegetation). Any decisions regarding maintenance of  
17 restored areas will be addressed evaluated during long-term stewardship planning.

18

19 OSDF maintenance is addressed in the Post-Closure Care and Inspection Plan for the OSDF. Decisions  
20 regarding maintenance of the OSDF and restored areas will be addressed during long-term stewardship  
21 planning. The environmental impacts of site maintenance activities associated with the long-term  
22 stewardship may be addressed in a separate NEPA document to be released in conjunction with the public  
23 release of the stewardship plan. Referenced documents will be available at the Public Environmental  
24 Information Center, 10995 Hamilton Cleves Highway (State Route 128), Harrison, Ohio 45030-9728.

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## 4.0 ALTERNATIVES CONSIDERED

### 4.1 NO ACTION

#### *No Action*

Under the "No action" alternative, there will be no public access to the FEMP. Perimeter fencing and gates will restrict public access to the site. Authorized personnel will be able to access the site for research, monitoring, maintenance and special activities approved by DOE. All access points will be gated and posted as a restricted area. Decisions regarding monitoring and maintenance of the OSDF and restored areas will be addressed during long-term stewardship planning.

This alternative is not a preferred alternative because the public is in strong support of limited public use of the FEMP. In addition, limited public use is envisioned as a fundamental component of long-term stewardship plans for the site.

### 4.2 LIMITED PUBLIC ACCESS

#### *Limited Public Access for Recreational and Educational Purposes with Hiking and Biking Trails in Restored Areas*

This alternative includes an emphasis on recreational use of the FEMP as well as educational use. For this alternative, the requirements listed in the Proposed Action regarding public use amenities will generally apply, except that the trails through restored areas will be improved (paved). The use of site trails would be expanded to provide opportunities for additional recreational activities such as biking and rollerblading as well as hiking and walking. DOE would consider opportunities to connect site trails with other recreational trails in the area, if determined feasible.

#### 4.2.1 Site Access

Site access for this alternative will be the same as that suggested for the Proposed Action (Section 3.0).

#### 4.2.2 Public Use Amenities

Improved trails will be constructed throughout the site and restored areas. The paved trails will be available for walking or biking and other recreational activities (e.g., rollerblading). Unimproved trails

1 and boardwalks would also be available in areas where it is unfeasible or too difficult to construct a  
2 paved trail.

3 All trails will contain interpretive stations (not to exceed 20 total) providing information on historical,  
4 archaeological and ecological points of interest at the FEMP.

6 No more than one mile of boardwalk will be installed to provide access to wetland areas. Trail access  
7 into and across Paddys Run Stream will have to be carefully planned to minimize impacts to the stream.

9 Native American reburial could occur in most restored areas, assuming vegetation could be established  
10 on the burial location. Native American Tribes have identified some areas of the western side of the site  
11 as preferable areas for reburial. Reburial would not be permitted in wetlands.

13 4.2.3 Access Restrictions to OSDF Area

14 Access restrictions to the OSDF area for this alternative will be the same as that suggested for the  
15 proposed action.

17 There are several arguments for not considering this alternative any further. There will be a higher cost  
18 for the construction and maintenance of improved trails. Paved trails will require more extensive  
19 maintenance to keep them in a safe condition for use. There is a much greater risk of damage to the  
20 restored ecological environments as a result of persons going off of the trails with bicycles. The risk of  
21 mountain bikes leaving the site trails is significant, potentially resulting in adverse impacts to restored  
22 areas.

24 4.2.4 Suggested Prohibited Actions

25 Prohibited actions will be clearly posted on the site and continued federal ownership and monitoring will  
26 help ensure they are followed. The suggested prohibited actions listed below are not intended to be  
27 all-inclusive and may change over time.

- 29 • No public hunting or trapping of any kind will be permitted on the FEMP property (some  
30 may be permitted for research and/or wildlife management purposes)
- 31
- 32 • No removal or damage of plants by unauthorized personnel will be permitted
- 33
- 34 • No swimming or wading in creeks, ponds or wetlands will be permitted

1  
2  
3  
4  
5  
6  
7  
8  
9

- No public hiking/biking off of designated trails will be permitted
- No soil excavation for any reason by unauthorized personnel
- No off-road vehicles will be permitted off designated roads
- No dumping of any kind on the FEMP.

10 4.2.5 Maintenance of Site

11 Maintenance of the site for this alternative will be the same as that suggested for the Proposed Action  
12 (Section 3.0).

5.0 ENVIRONMENTAL IMPACTS

5.1 PROPOSED ACTION

*Limited Public Access for Educational Purposes Including Walking Trails and Interpretive Information in Restored Areas*

Under the Proposed Action, unimproved (mulched) trails will be constructed for walking/hiking through restored, forested areas (e.g., Paddys Run corridor). A mowed pathway will be maintained through some restored areas (e.g., prairies). The construction of these trails will have minimal impacts on ecologically restored areas. The use of heavy equipment will be avoided in the construction of trails and boardwalks. Erosion control measures will also be utilized and any damage to restored areas will be repaired. Boardwalks will be constructed through wetland areas and across streams (Paddys Run) and gullies. Construction of the boardwalks may have minor environmental impacts due to the additional materials and construction activity required. The activities associated with construction of the boardwalks could result in some increased runoff to Paddys Run or other waterways. Silt fences and other controls will be used to minimize runoff from construction areas. Because of the relatively short duration and minimal scope of construction activities, only minimal impact to local waterways is anticipated.

The proposed action would be planned to minimize impacts to wetland or floodplain areas. The requirements of 10 Code of Federal Regulations (CFR) 1022, "Wetland/Floodplain Environmental Review Requirements" and Section 404 of the Clean Water Act will be met for construction in wetland or floodplain areas, including any necessary permitting.

There are several plants and animals that are listed as either threatened or endangered by the State of Ohio and/or the U.S. Department of Interior and that are present or have the potential to be present at the FEMP. The Indiana Bat is a Federally Endangered Species and the northern portion of the Paddys Run corridor has been identified as an excellent habitat for it. In August 1999, one Indiana Bat was captured and released in that area. The Sloan's Crayfish is listed as threatened in the State of Ohio and is thriving in the northern portions of Paddys Run. The spring coral root is also listed as endangered by the state of Ohio and has the potential to exist on the FEMP. The proposed action would be implemented in a manner that would not impact any threatened or endangered species or their habitat.

1 Because all remediation areas of the FEMP have been previously surveyed for cultural resources, the  
 2 proposed action would not result in any adverse impact on archaeological or other historic resources.  
 3 Boardwalks and pathways will be constructed a respectable distance from cultural resources, as  
 4 determined appropriate by DOE in consultation with Native American tribes/groups. In 1995, the Ohio  
 5 Historic Preservation Office (OHPO) declared the FEMP eligible for the National Register of Historic  
 6 Places. As a result, DOE entered into a Programmatic Agreement (PA) with the Advisory Council on  
 7 Historic Preservation and the OHPO to document past operations at the FEMP to help preserve the  
 8 history of what has occurred at the site (DOE 1996). A second PA was entered into among DOE, the  
 9 OHPO and the Advisory Council on Historic Preservation regarding future archaeological investigations  
 10 at the FEMP (DOE 1997b). This PA provides a streamlined mechanism for conducting and reporting the  
 11 results of archaeological investigations. Pursuant to the archaeological PA, restoration activities in areas  
 12 of the FEMP that have not been remediated will be surveyed for the presence of archaeological resources  
 13 prior to any ground disturbing activities pursuant to the Archaeological PA.

14  
 15 Visitors will be instructed and encouraged to remain on all pathways to prevent damage to restored  
 16 ecological areas. Exceptions may be made for research or education purposes under the direction of the  
 17 site steward. No socioeconomic concerns with the construction of the trails suggested under the  
 18 Proposed Action are anticipated.

19  
 20 5.2 NO ACTION ALTERNATIVE

21 *No Action*

22  
 23 Under the No Action Alternative, public access will not be permitted at the site. There will be no  
 24 negative impacts to air quality, water quality, groundwater, floodplains, wetlands, endangered species or  
 25 cultural resources as there will be no construction or public use to threaten any of these sensitive  
 26 resources.

27

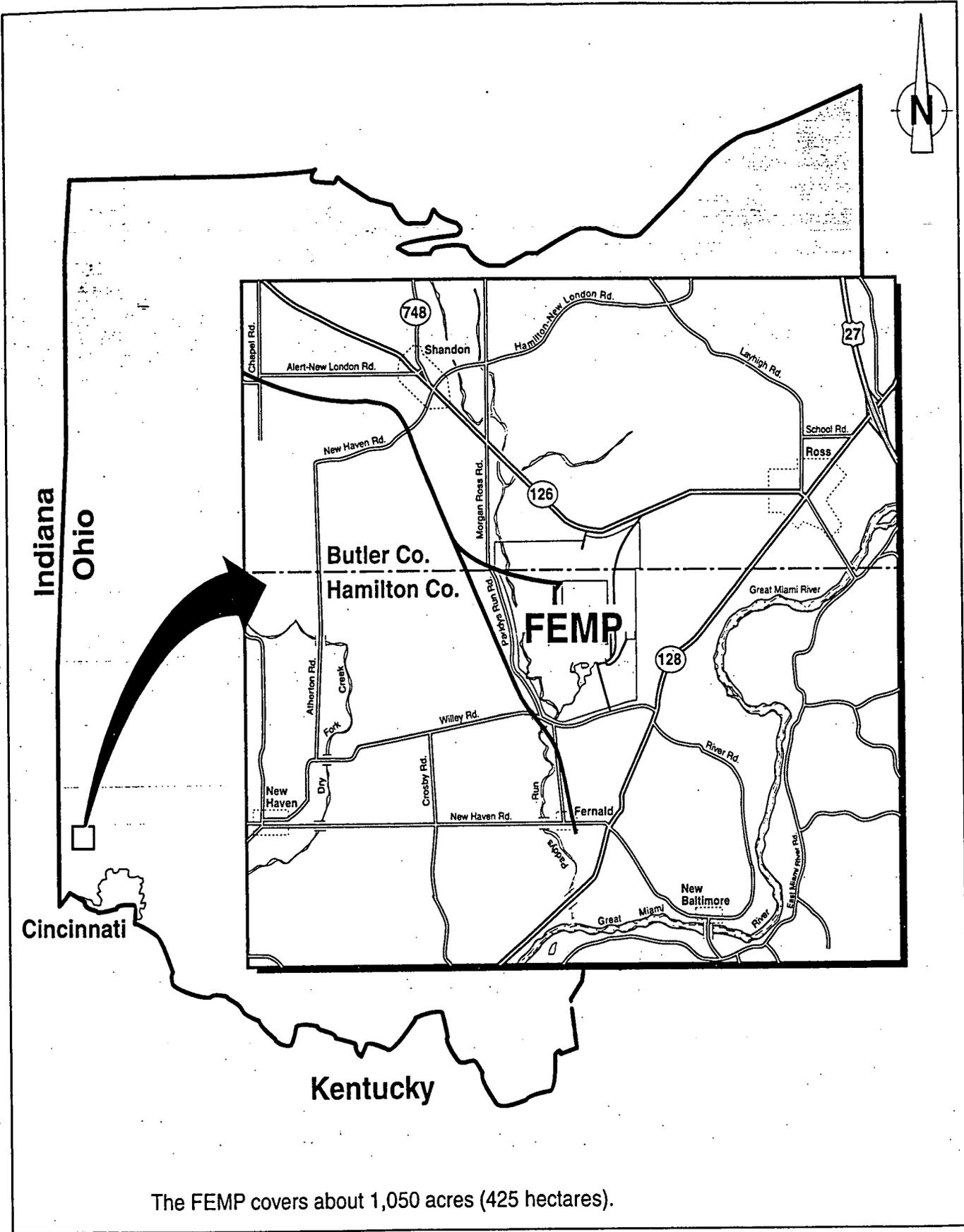
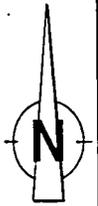
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1 5.3 LIMITED PUBLIC ACCESS ALTERNATIVE

2 *Limited Public Access for Recreational and Educational Purposes with Hiking and Biking Trails in*  
3 *Restored Areas*

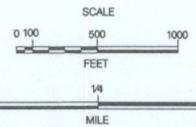
4  
5 The improved trails would be constructed in a manner that would minimally impact restored areas.  
6 Potential impacts would be similar to those described for the Proposed Action. However, there is a  
7 greater risk to the environment as a result of the additional equipment, materials and activity required to  
8 construct the paved pathways. Care and consideration for runoff to waterways, the wetland/floodplain  
9 areas, endangered/threatened species, and cultural resources would be practiced in the same manner  
10 described under the Proposed Alternative.

11  
12 An even greater risk to the ecologically restored areas comes from allowing bicycles and other forms of  
13 recreation other than hiking on the FEMP property. Visitors will be instructed and encouraged to remain  
14 on all marked pathways to prevent damage to restored ecological or sensitive natural or cultural resource  
15 areas. If visitors do not adhere to these instructions, serious damage to the restored areas could result.  
16 However, other than sign postings, there will be little means of controlling these activities.



The FEMP covers about 1,050 acres (425 hectares).

Figure 1 FEMP and Vicinity



PUBLIC ACCESS

PADDY'S RUN RD.

MAINT. ACCESS

PUBLIC ACCESS

NATIVE AMERICAN CURATION SITE

ST. RT. 126

PARKING LOT

OSDF

MAINTENANCE ACCESS TO OSDF

PUBLIC ACCESS ECOLOGICAL PARK

PADDY'S RUN

STORM SEWER OUTFEAL DITCH

23 ACRE ECONOMIC DEVELOPMENT AREA

WILLEY ROAD

PUBLIC ACCESS

RT. 128 HAMILTON CLENS RD.

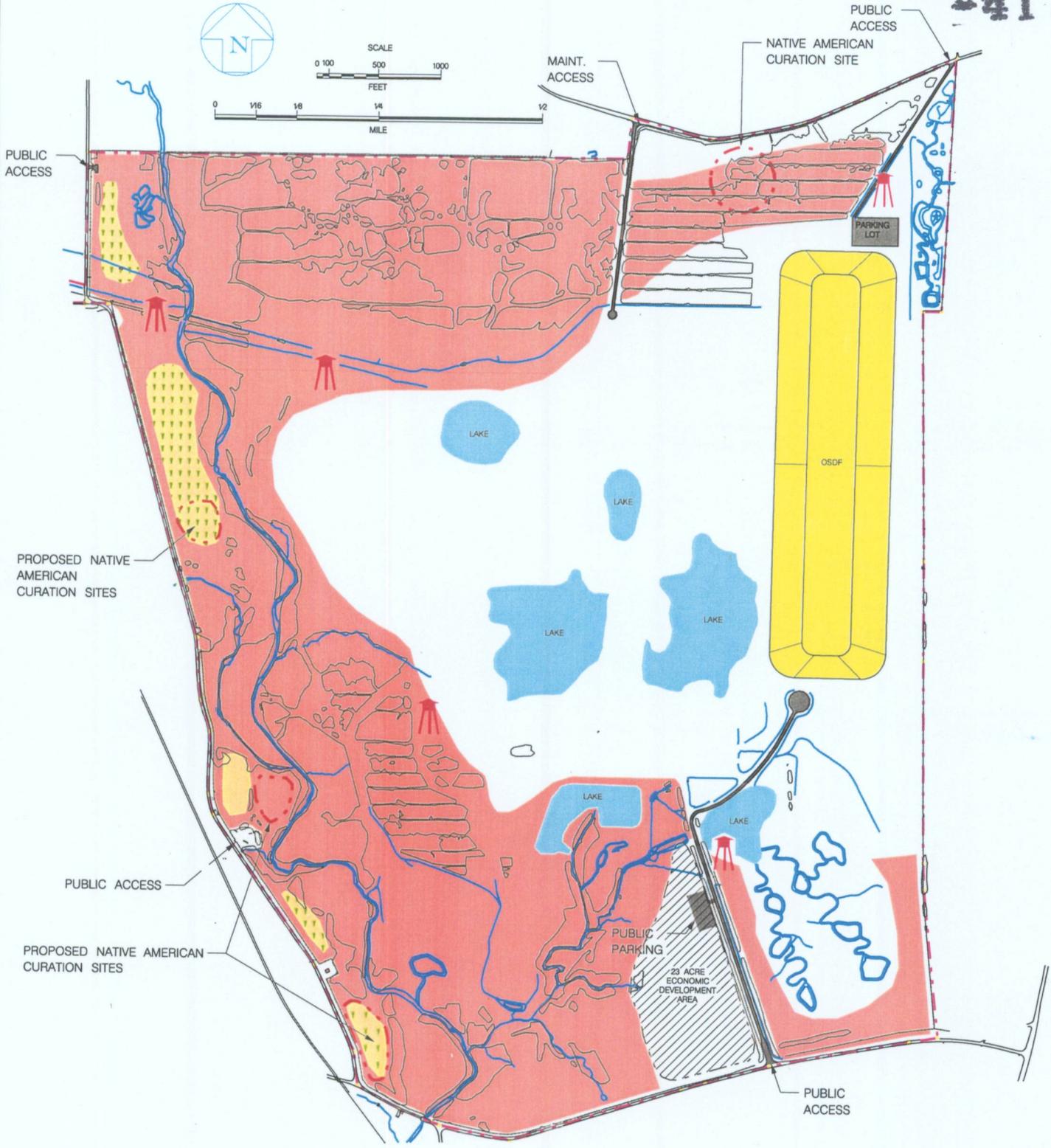
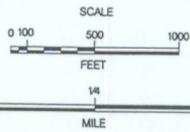
LEGEND:

-  CURRENT TREE LINE
-  WATER
-  PROPERTY LINE
-  FENCE LINE
-  FOREST
-  PRAIRIE
-  SAVANNA
-  WETLANDS
-  LAKE
-  PUBLIC ACCESS ROAD
-  EXPANDED FLOODPLAIN

FERNALD FUTURE LAND USE

FIGURE 2 REV. #2

000022



LEGEND:

-  CURRENT TREE LINE
-  WATER
-  PROPERTY LINE
-  FENCE LINE
-  PRAIRIE
-  SAVANNA
-  AREA TO CONTAIN PROPOSED TRAILS
-  LAKE
-  PUBLIC ACCESS ROAD OR PARKING LOT
-  PROPOSED OVERLOOK LOCATION

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PROPOSED ALTERNATIVE FOR PUBLIC USE  
FIGURE - 3

6.0 REFERENCES

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Fernald Citizens Advisory Board, 1995, Letter, to Jack Craig from John Applegate, "Recommendations on Final Land Use of the Fernald Site", July 1995.

Fernald Citizens Advisory Board, 1996, Letter, to Thomas Grumbly from John Applegate, "Natural Resource Priorities", March 14, 1996.

Fernald Citizens Advisory Board, 2000, Letter, to Steve McCracken from James C. Bierer, "Recommendation #00-4", October 2000.

Fernald Citizens Advisory Board, 2001, Letter, to Steve McCracken from James C. Bierer, "Recommendations #2001-02 and #2001-03", May 2001.

U.S. Department of Energy, 1996, "Programmatic Agreement for Disposition of Facilities Under the Operable Unit Three Record of Decision for Interim Remedial Actions at the Fernald Environmental Management Project", January 16, 1996.

U.S. Department of Energy, 1997a, "Post-Closure Care and Inspection Plan On-Site Disposal Facility", Revision 1, Fernald Environmental Management Project, DOE, Fernald Area Office, Cincinnati, Ohio.

U.S. Department of Energy, 1997b, "Programmatic Agreement for Archaeological Investigations, Department of Energy, Fernald Environmental Management Project" March 6, 1997.

U.S. Department of Energy, 1998, "Sitewide Excavation Plan," Final, Fernald Environmental Management Project, DOE, Fernald Area Office, Cincinnati, Ohio.

U.S. Department of Energy, 1999a, "Finding of No Significant Impact for the Fernald Environmental Management Project Proposed Final Land Use Environmental Assessment", DOE, Ohio Field Office, Miamisburg, Ohio.

U.S. Department of Energy, 1999b, "Environmental Assessment for Proposed Final Land Use at the Fernald Environmental Management Project", Revision 1, Fernald Environmental Management Project, DOE, Fernald Area Office, Cincinnati, Ohio.

U.S. Department of Energy, 2001, "Natural Resource Restoration Plan", Draft Final, Fernald Environmental Management Project, DOE, Fernald Area Office, Cincinnati, OH.