Draft Natural Resource Restoration Plan
&
Environmental Assessment
for Leading Creek Stream System

June 2006

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SECTION 1

Introduction and Summary

This Restoration Plan and Environmental Assessment (RP/EA) has been prepared by the U.S. Fish and Wildlife Service (USFWS), as the Responsible Agency as designated in the Consent Decree and Settlement Agreement, dated March 22, 1996, in U.S. vs. Southern Ohio Coal Company, and as trustee for natural resources, acting on behalf of the U.S. Department of the Interior ("DOI") to address natural resources injured and ecological services lost due to the releases of hazardous substances from the Meigs Mine No. 31 into Raccoon Creek, Leading Creek, and the tributaries thereto (the 'affected streams'), all waters of the United States located within the Leading Creek Watershed (the "Site") (see Figure 1).

The original Consent Decree, dated March 22, 1996, resolved claims asserted by the United States against the owner and operator of the Meigs Mine No. 31, the Southern Ohio Coal Company (SOCCO). The Consent Decree required SOCCO to pursue restoration (recovery) of the "affected streams" in accordance with a SOCCO/Ohio Environmental Protection Agency (Ohio EPA) prepared Restoration Plan and Ecological Endpoints Document. Additionally, the Consent Decree ordered that SOCCO commence an ecological assessment of conditions in the entire Leading Creek Watershed and develop recommendations for enhancing the aquatic life uses of the entire Leading Creek Improvement Stream System. These recommendations were to be finalized in the Leading Creek Improvement Plan, a plan that would describe actions that could be taken in the Leading Creek Watershed to enhance the physical, chemical, and biological characteristics throughout the Leading Creek Stream System. The Consent Decree also ordered SOCCO to pay the United States $1,900,000 as compensation for natural resource injuries and stipulated that the funds must be used to implement or support the implementation of enhancement projects identified in the approved Leading Creek Improvement Plan (LCIP).

An Amended Consent Decree, dated November 21, 2003 also specified that all funds in the Leading Creek Improvement Account were to be used to implement and monitor projects intended to improve the aquatic life uses of the Leading Creek Stream System and/or to acquire resources equivalent to those affected by the 1993 dewatering of the Meigs Mine No. 31. The Amended Decree ordered SOCCO to pay to the United States an additional $1,400,000 as further compensation for affected natural resources.

Although the State of Ohio is not a co-trustee, as envisioned by the two Consent Decrees, the USFWS has determined that implementation of any enhancement projects for the Leading Creek Stream System would best be accomplished through a continued state/federal cooperative effort. Furthermore, pursuant to the 1996 Consent Decree, the USFWS developed a working relationship with several federal and state agencies for the purpose of selecting and/or implementing enhancement projects for the Leading Creek Watershed, including the Meigs County Soil and Water Conservation District, the Ohio

Department of Natural Resources, and the Ohio Environmental Protection Agency. These cooperative relationships are expected to continue.

The purpose of this RP/EA is to describe the types of projects, and the process for choosing them, which will be implemented using funds from the Leading Creek Improvement Account to improve the aquatic life uses of the Leading Creek Stream System and/or acquire resources equivalent to those affected by the 1993 dewatering of Meigs Mine No. 31, as required by the two Consent Decrees. The Restoration Plan evaluates three alternatives for accomplishing this. The projects included in the Preferred Alternative would be consistent with the intent of the two Consent Decrees and with the original Leading Creek Improvement Plan. This Restoration Plan also serves as an update to previous plans and utilizes current data on the status of the Leading Creek Stream System. Public comment on this RP/EA will be accepted for a period of 30 days, as defined in Section 7 of this document. The USFWS will consider the restoration project proposals suggested by the public. A Final RP/EA to be issued by the USFWS will consider comments received during the public comment period on the RP/EA.

While some of the restoration activities to be identified in the Final RP/EA may occur outside the boundaries of the Site, the restoration activities selected in accordance with this RP/EA are intended to provide compensation for natural resources affected by the dewatering of the Meigs Mine No. 31.

SECTION 2

Purpose and Need for Restoration

2.1 The Parker Run Leading Creek Watershed Site – Summary of Release History

The Site is located largely in Meigs County, Ohio. The Leading Creek Watershed is approximately 150 square miles in total, with Parker Run approximately 7.5 square miles. The three major tributary streams associated with the watershed are Little Leading, Thomas Fork, and Mud Fork. The watershed originates in the southern portion of Athens County, and flows into the Ohio River near Middleport, in the western half Meigs County (see Figure 1).

Around 1989, a bulkhead was installed in the SOCCO Meigs Mine #31 between an old inactive portion of the mine and the active portion of the mine. Acid mine drainage (AMD) was stored behind the bulkhead in the old mine area, providing proper ventilation in the active mine area. The AMD was to be eventually treated and discharged. In July 1993, the bulkhead broke, and the mine flooding event due to flash flooding of the active mine from the adjacent abandoned mine at the SOCCO Meigs Mine 31 resulted in the emergency release of a substantial amount of untreated and partially treated mine water into Parker Run and Leading Creek. During mine dewatering operations, approximately 132,650 liters per minute of acid mine water was released into the Parker Run tributary draining into Leading Creek. The 24.2-km section of Leading Creek was heavily impacted eradicating most aquatic organisms. An acutely toxic impact resulted from the

discharge of high conductivity (~6000µmhos), low pH (2.5-3.1 pH units), high metal concentrations (iron and iron floc, manganese, copper, nickel, zinc and aluminum, mg/L) and high total suspended solids (TSS) (Currie 1999).

Figure 1: Location of Leading Creek Watershed and Parker Run

2.2 Natural Resource Injuries

In addition to human health risks associated with the hazardous substance release discussed herein, injuries to surface water resources, fishery resources, and avian resources also occurred.

The production of AMD consists of several reactions beginning with the exposure of pyrite (FeS_2) to water and oxygen. Pyrite is typically found within the coal seams or surrounding shale and sandstone. The oxidation of pyritic minerals results in the production of sulfuric acid, which lowers the pH. As this highly acidic, sulfate-rich drainage passes over the surrounding rock strata, coal overburden, or the streambed, heavy metals such as iron, manganese and aluminum are mobilized. AMD has one or more of the following characteristics: high acidity (low pH), high metal concentrations, elevated sulfate levels, and excessive suspended solids and/or siltation. Untreated mine water can have wide ranging effects on aquatic and terrestrial life. AMD is a complex environmental stressor that impacts aquatic ecosystems with high levels of acidity, elevated concentrations of dissolved metals and/or the deposition of metal precipitants. AMD often reduces biological diversity, eliminates sensitive aquatic life, and lowers ecosystem productivity (Bauers 2005).

Additional information on the impacts of AMD can be found in the Leading Creek Watershed Management Plan.

2.3 Authority and Legal Requirements

This RP/EA has been prepared by USFWS. In addition to being the Responsible Agency under the Consent Decrees, the USFWS is also acting for DOI as the designated natural resources trustee under Section 107(f) of CERCLA, 42 U.S.C. § 9607(f), Section 311 of the CWA, 33 U.S.C. § 1321, and other applicable law, including Subpart G of the National Contingency Plan (NCP), 40 C.F.R. §§ 300.600-300.615. As a trustee, the USFWS acts on behalf of the public to assess natural resource injuries and recover damages to natural resources and losses of natural resource services attributed to releases of hazardous substances. The federal Authorized Official ("AO") is the DOI official delegated the authority to act on behalf of the Secretary of DOI to conduct a natural resource damage assessment and restoration plan. The AO is the Region 3 Regional Director for the USFWS, and represents the interests of the DOI, including all affected Bureaus**.**

The purpose of the EA is to consider alternative actions to improve aquatic life uses of the Leading Creek Stream System and/or acquire resources equivalent of any natural resource injuries and service losses caused by the release of treated and untreated mine water into the Leading Creek Site, pursuant to applicable State and Federal laws and regulations. This document also serves as the RP for implementing the selected Alternative.

The Alternative selected in the RP must be consistent with statutory mandates and regulatory procedures that specify that recovered damages are used to undertake feasible, safe, and cost-effective projects that address injured natural resources, consider actual and anticipated conditions, have a reasonable likelihood of success, and are consistent with applicable laws and policies.

Therefore, proposed projects will be evaluated using the following criteria:

1. Technical feasibility
2. The relationship of the expected costs of the alternative to the expected benefits
3. Cost-effectiveness
4. The results of actual or planned response actions
5. The potential for additional injury resulting from the proposed actions
6. The natural recovery period
7. Ability of the resources to recover with or without alternative actions
8. Potential effects of the action on human health and safety
9. Consistency with relevant federal, state, and tribal policies
10. Compliance with applicable federal, state, and tribal laws

As discussed, the selected Alternative must improve aquatic life uses of the Leading Creek Stream System and/or restore, rehabilitate, replace and/or acquire the equivalent of those natural resources injured by the discharge or release of hazardous substances at the Site. Because the Site is a complex community of invertebrates, fish, wildlife, plants and humans, the USFWS intends to consider as much of the watershed as possible and address areas of potential improvement for the ecosystem as a whole**.**

Based on input from the public, the Authorized Official will select one of the alternatives and will determine, based on the facts and recommendations contained herein, and public comment, whether this EA is adequate to support a Finding of No Significant Impact (FONSI), or whether an Environmental Impact Statement (EIS) will need to be prepared.

SECTION 3

Restoration Alternatives

3.1 Alternative A: No Action

The No Action Alternative, required by the National Environmental Policy Act (NEPA), consists of expected conditions under current programs pursued outside the NRDA process. It is the baseline against which other actions can be compared. If this alternative were implemented, the USFWS would not initiate specific actions to restore injured natural resources or compensate the public for ongoing natural resource injuries caused by the release of hazardous substances into the environment. Existing environmental degradation not directly related to hazardous substance releases would continue to occur (sedimentation, poor land management, land development, failing septic systems, etc.), and perhaps worsen

under Alternative A. The state and federal agencies would continue to manage, conserve and protect Leading Creek as outlined in current programs and regulations and within current budget constraints. The public would not be compensated for injuries to natural resources. In addition, the terms of the two Consent Decrees would be violated since the settlement funds would not be expended on enhancement projects.

3.2 Alternative B: Natural Resource-Based Restoration Within the Assessment Area (Preferred Alternative)

Alternative B involves projects that would directly restore injured natural resources and also would provide enhanced ecosystem services as compensation for natural resource injuries caused by hazardous substances. CERCLA authorizes trustees to replace or acquire natural resources equivalent to those injured by hazardous substance releases, in lieu of or in addition to, direct restoration of the injured resources themselves. Natural resources may also be rehabilitated with actions that increase the ecological integrity or viability of resources.

Projects within this alternative would be implemented in the EA area that includes: (see Figure 2)

1) Leading Creek adjacent flood plain and ecologically associated uplands;
2) Sub-watersheds and tributaries to Leading Creek, including adjacent flood plains and ecologically associated uplands;
3) Supporting ecosystems in the Leading Creek Watershed.

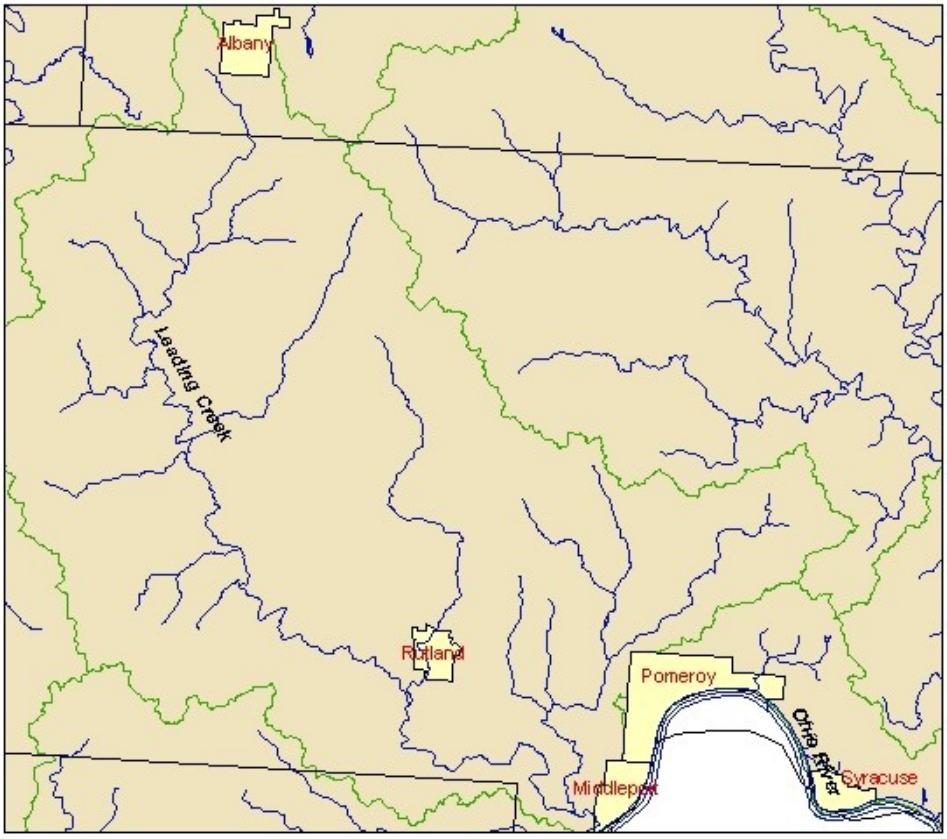

Figure 2: General Restoration Area Alternative B – Preferred Action

Natural resource-based restoration projects include activities or categories such as riparian habitat reestablishment or preservation, which would provide habitat for fish and wildlife species; aquatic habitat quality improvement projects that would restore and enhance aquatic habitat and public recreational services; and direct resource restoration projects, such as projects designed to improve fish reproduction and recruitment.

The USFWS prefers a mix of natural resource restoration projects to provide a broad array of natural resource services throughout the Leading Creek EA area while at the same time enhancing a select group of outdoor recreational activities, for example fishing, that have natural resource benefits to local communities. Thus, a variety of goals are supported. Selecting a mix of restoration projects from the defined categories allows for the recovery of a wider range of injured resources as well as more flexibility for cost-effectiveness and feasibility due to different constraints related to the ecology of the area or ability to find willing participants. Potential benefits of this holistic approach to restoration include creating tracts of continuous valuable habitat or connecting existing habitats. This approach keeps the important linkages between physical, chemical and biological properties of the overall ecosystem.

The USFWS anticipates that ecological priorities for all restoration project categories under Alternative B will be influenced primarily by the following key factors:

1) Relationship to injuries (restoration opportunities that address services and values similar to those lost due to the release of hazardous substances are preferred);
2) Quality of restoration opportunities (projects with substantial ecological opportunities are preferred);
3) Ecological function/hydraulic connectivity (areas in proximity to Leading Creek are preferred);
4) Cost and cost-effectiveness (projects with lower cost per restored or replaced services or values are preferred).

Based on information from the Leading Creek Improvement Plan, the Comprehensive Watershed Management Plan for the Leading Creek Watershed, and the Leading Creek Acid Mine Drainage and Abatement and Treatment Plan (AMDAT), specific sub-watersheds are mentioned within each project type description below. Order does not imply priority, and does not exclude additional areas within the boundaries of the Alternative. Prior to the selection and implementation of any site-specific actions, the USFWS will review the specific project proposals to determine if they comply with all applicable requirements: NEPA, Historic Preservation Act, Endangered Species Act, Americans With Disabilities Act, etc.

3.2.1 Aquatic Habitat Quality Improvement Projects

Hazardous substances from untreated mine water impaired the water quality and aquatic habitat in the Leading Creek Watershed. These same resources have been further damaged by un-reclaimed and abandoned surface and underground mine lands, sedimentation, and certain agricultural or other land use practices. Aquatic habitat quality improvement projects would include many of the types of project categories listed below. Specifically, these types of projects would include implementation of best management practices on agricultural land, establishment or protection of existing stream bank riparian corridors with native plant species, stabilizing stream banks for water quality improvement, natural stream channel design/restoration of channelized streams, remediation of acid mine drainage seeps or mine waste adjacent to waterways, wetland and upland preservation, and protecting, reestablishing or enhancing vital native fish species spawning and nursery habitat. Such restoration would provide ecological functions similar to, but not necessarily the same as those injured by hazardous substances.

3.2.2 Sedimentation Reduction Projects

One of the main sources of impairment within the Leading Creek Watershed is siltation from historical surface mine land, and upland erosion from agricultural practices involving livestock and pastureland. Specific sedimentation reduction projects could include fencing cattle out of streams, abandoned mine land reclamation, stream bank stabilization

(bioengineering, gabion baskets), stream channel restoration, protection and enhancement of valley wetlands, installation of floodplain sediment collection devices, and riparian corridor establishment, enhancement, and/or preservation. The USFWS intend to utilize information/data from studies, for example the on-going sedimentation study in Little Leading Creek. According to the Leading Creek Management and AMDAT Plans, priority areas include but are not limited to Little Leading Creek, Sisson Run, Thomas Fork, Lasher Run, and Mud Fork. The mainstem of Leading Creek is also impacted below the confluence of the priority subwatersheds. Projects will focus on areas that do not qualify under current NRCS Conservation Reserve Programs (CRP), Environmental Quality Incentive (EQIP) or other similar programs, or on areas in which natural resources could be enhanced once CRP or other programs have been initiated with a landowner. Preservation of riparian buffers would be obtained through fee title purchase or environmental covenants.

3.2.3 Acid Mine Drainage Abatement and Treatment Projects

Historic surface and subsurface mining occurred in the lower 1/3 of the Leading Creek Watershed. Past mining practices resulted in multiple acres of abandoned mine lands producing acidic heavy metal laden water and highly erodible spoil and coal refuse (gob) piles. Impacts from abandoned mine land was identified in the 1999 Leading Creek Improvement Plan as the main risk to aquatic ecology in the watershed. AMD in Leading Creek Watershed is primarily produced by deep mine sources, diffuse seepage from strip mine pits and auger mine pits and/or subsurface drains that were installed by Mineral Resources Management during reclamation.

Projects which are not covered by current U.S. Office of Surface Mining Abandoned Mine Land (AML) funds could potentially be addressed. The USFWS would also consider AML funded projects in which additional restoration/enhancement of natural resources could be accomplished once the human health and safety aspects of the project have been addressed. AMD impacted streams are not only degrading the water quality in the immediate stream, but prevent fish migration to and from less impacted areas of the watershed. These projects could include reclaiming and capping gob and spoil refuse piles, filling of subsidence holes, establishing, monitoring and maintenance of treatment systems including settling ponds and dosers. The AMDAT Plan has determined that the following sub-watersheds and associated tributaries are priority areas: Thomas Fork, Bailey Run, Hysell Run, Titus Run, Little Leading Creek, and Paulins Run. Other areas with minor impact may be addressed in conjunction with sedimentation reduction or fishery resource enhancement projects.

3.2.4 Wetland and Associated Upland Habitat Preservation, Reestablishment or Enhancement Projects

Restoration of wetlands and ecologically associated uplands would provide increased spawning and nursery habitats, nesting and increased food for a wide variety of fish, birds and other wildlife, and increase sediment storage capacity within the watershed. Certain

types of wetland creation can also be used as a part of AMD remediation and treatment.

Wetland and ecologically associated upland reestablishment and enhancement would help replace habitats that have been impaired or destroyed in the Leading Creek EA area. As stated in the Leading Creek Management Plan, there are few naturally occurring wetlands remaining in the watershed. The USFWS will focus its efforts on areas where hydraulic alterations or other modifications have destroyed or impaired former wetlands and/or ecologically associated upland habitats. The USFWS's wetland and upland habitat reestablishment and enhancement strategy would include active restoration projects such as establishing interconnections between surface water and wetlands**,** removal of invasive plant species (purple loosestrife, kudzu, reed canary grass), and shielding aquatic communities from anthropogenic effects. Low impact techniques such as closing off drainage ditches, disrupting (or not repairing) drain tile systems, and reestablishing wetland plants and other native vegetation in order to reestablish natural characteristics that have been eliminated would also be utilized, as appropriate. Wetland and ecologically associated upland reestablishment and enhancement projects that will improve water quality and provide habitat for biological resources are preferred.

Preservation would be obtained through fee title purchase or environmental covenants. Land acquired is usually conveyed to individual state, tribal, federal, or local government agencies, land trusts, or non-governmental conservation organizations following specific procedures and standards for each governmental entity. While the primary purpose of the preservation of land is to protect fish and wildlife habitats, portions of the acquired properties may be available to the public for natural resource based recreational activities such as wildlife viewing, hiking, fishing or hunting.

3.2.5 Fishery Resource Enhancement Projects

The abundance and diversity of fish species that once inhabited the Leading Creek EA area is different from the fishery currently observed in portions of the watershed due to anthropogenic impacts including effects of pollutants. The AMDAT Plan notes that Ohio EPA studies have shown that streams impacted by AMD, for example Thomas Fork, have had limited fish species for decades. These areas will likely need additional habitat enhancement once the AMD or reclamation of abandoned mine land has been addressed. The USFWS's goals include the support of self-sustaining native fish populations and a healthy fish community in the Leading Creek EA area. The USFWS will focus on projects such as: projects that restore or enhance the diversity and abundance of native predators within the EA area; projects that enhance the abundance and diversity of native prey fish species; and projects that can effectively control the abundance and distribution of aquatic nuisance species. The Leading Creek Management Plan lists Eurasian milfoil and curly pondweed as potential aquatic non-native species.

3.2.6 Natural Resource-Based Public Awareness Projects

This category of projects is intended to promote the improvement in the quality of life for surrounding communities expected to result from the restoration process. Although there are no state or federal parks or forests in the watershed, public awareness projects could take place at the 174 acre site acquired by the Meigs SWCD. Projects could include educational programs that promote fishing and bird watching opportunities, trash clean ups (stream sweeps) and education about the importance of water quality to life in the Leading Creek EA area. These projects would facilitate public access to, and thus appreciation of, natural resources.

Rather than supporting public use enhancement projects that do not have ecological benefits, the USFWS will support natural resource-based public use enhancement projects that direct high intensity public use activities away from ecologically sensitive areas, thus protecting or preserving the ecological integrity of such areas. While the USFWS supports public use enhancement projects, their primary focus is the restoration of natural resources.

3.3 Alternative C: Natural Resource-Based Restoration Within and Beyond the Assessment Area

This alternative includes all the categories of projects outlined in Alternative B, but would restore, rehabilitate, replace, and/or acquire equivalent resources outside as well as within the Leading Creek EA area. The Alternative C area includes the Leading Creek EA area as well as adjacent watersheds that support the ecological balance of aquatic and terrestrial species injured in the Parker Run and the Leading Creek area: (see Figure 3)

1) Leading Creek Watershed, its subwatersheds and tributaries, adjacent flood plain and ecologically associated uplands;
2) Tributaries to the Ohio River, including adjacent flood plains and ecologically associated uplands;
3) Supporting ecosystems within the Ohio River Watershed and the State of Ohio.

Figure 3: General Restoration Area Alternative C

The USFWS recognizes that basic ecological principles must be adhered to so as to achieve maximum benefit from restoration projects. However, projects that serve to restore ecological function to the Leading Creek EA area or those which are hydraulically connected to the Leading Creek EA area are preferred to projects located in upstream or adjacent watersheds. The USFWS expects ecological priorities for all restoration project categories under Alternative C will be influenced primarily by the following key factors:

1) Relationship to injuries (restoration opportunities that address services and values similar to those lost due to the release of hazardous substances are preferred);

2) Quality of restoration opportunities (projects with substantial ecological opportunities are preferred);
3) Ecological function/hydraulic connectivity (areas in proximity to the Leading Creek EA area and the restoration area are preferred);
4) Cost and cost-effectiveness (projects with lower cost per restored or replaced services or values are preferred).

Under this Alternative, prior to the selection and implementation of any site specific actions, the USFWS will review the specific proposals to determine if they comply with all applicable requirements: NEPA, Historic Preservation Act, Endangered Species Act, Americans With Disabilities Act, etc.

3.3.1 Aquatic Habitat Quality Improvement Projects

The only difference between Alternative B and this category of projects is the geographical extension of the restoration area for aquatic habitat quality improvement projects.

3.3.2 Sedimentation Reduction Projects

The only difference between Alternative B and this category of projects is the geographical extension of the restoration area for sedimentation reduction projects.

3.3.3 Acid Mine Drainage Abatement and Treatment Projects

The only difference between Alternative B and this category of projects is the geographical extension of the restoration area for AMD and treatment projects.

3.3.4 Wetland and Associated Upland Habitat Preservation, Reestablishment or Enhancement Projects

The only difference between Alternative B and this category of projects is the geographical extension of the restoration area for wetland and associated upland habitat preservation, reestablishment or enhancement**.**

3.3.5 Fishery Resource Enhancement Projects

The only difference between Alternative B and this category of projects is the geographical extension of the restoration area for fishery resource enhancement projects.

3.3.6 Natural Resource-Based Public Awareness Enhancement Projects

There is no difference between Alternative B and this category of projects. The USFWS does not foresee a need to extend the implementation area beyond the Leading Creek EA area.

3.4 Alternatives B and C: Criteria and Priorities for Restoration Project Categories

3.4.1 Technical Feasibility: Projects that use reliable, proven methods are preferred to those that rely on experimental, untested methods. Other factors that can affect project success, such as validity of assumptions inherent to the project approach, will also be considered by the USFWS.

3.4.2 Benefit Scope: Restoration projects that provide a broad scope of measurable benefits to a wide area or population are favored over those that are focused on a limited set of benefits to a limited area or population. Natural resource-based restoration projects with a high ratio of expected benefits to expected cost are preferred. This aspect may be assessed relative to other proposed projects that benefit the same resource. Natural resource-based restoration projects should not have disproportionately high costs or low benefits to a localized population. Projects that benefit more than one injured natural resource are expected to be given priority. Wherever possible, natural habitat functions which are self-sustaining and essential to maintain the habitat will be restored, enhanced and/or protected. Projects that provide long-term benefits to the habitat, and which would be established soon after project implementation, will be preferred. If projects provide equal benefits, those with minimal operation and maintenance activities will be preferred.

3.4.3 Quantifiable benefits: Projects expected to provide quantifiable benefits and likely to achieve success will have a higher priority than projects that do not. Restoration projects should include an evaluation of success and a monitoring component to determine the effectiveness of restoration actions in providing the public with similar services and values to those lost because of the release of hazardous substances into the environment. A timeline outlining the implementation and progression of the restoration project will be used by the USFWS to determine completion and success of the project. Overall success of the RP will depend upon success of each restoration project.

3.4.4 Potential Impact: Preference will be given to projects that avoid or minimize additional natural resource injury or environmental degradation. The USFWS will require that requisite permits are obtained and applicable regulations are complied with. All projects selected for implementation will be expected to comply with applicable and relevant laws, policies and regulations. To assure that Federally-listed threatened or endangered species will not be adversely affected, or proposed species are not jeopardized, the USFWS will require that the guidelines outlined in Appendix A are followed during

implementation of NRDA restoration activities.

3.4.5 Other project support: Preference is expected to be given to projects or aspects of USFWS projects that are not already being implemented or have insufficient funding under other programs. Although the USFWS may use restoration planning efforts completed by other programs, preference is given to projects that would not otherwise be implemented without NRDA restoration funds. Preference will be given to projects that have a high degree of local support, especially if there are partial supplemental sources of funding or in-kind services available.

3.4.6 Voluntary land acquisition/easements: Preservation of habitats through acquisition of land or covenants will only be from willing sellers or participants. Landowners are under no obligation to sell land to the government agencies associated with the USFWS. Neighbors adjacent to land purchased for preservation under this RP will retain all of their current rights to their land. The government agencies are required to pay fair market value for land purchased. Fair market value would be determined through established appraisal procedures.

3.4.7 Tribal Cultural Resources: The preservation or restoration of specific areas or resources that have appreciable cultural value to Indian tribes are important to the USFWS. A search of the Native American Consultant Database maintained by the National Park Service identified no Indian tribes with relevant interest in Meigs County.

3.5 Preferred Alternative

The USFWS has recommended Alternative B as the Preferred Alternative. The larger geographic area associated with Alternative C does not match the funds that are currently available for the restoration of the Leading Creek EA area. In order to concentrate funds on restoring resources that were impacted by the release of untreated mine water at the Leading Creek Site, Alternative B has been selected as the Preferred Alternative for this Draft RP/EA. The final decision on the selected alternative will be made by the federal authorized official based on input from the public.

3.6 Summary of Alternative Actions

Table 1: Comparison of Alternatives A, B & C

Actions	**Alternative A** (No Action)	**Alternative B** (Natural Resource-Based Restoration Within the Assessment Area (Preferred Action))	**Alternative C** (Natural Resource-Based Restoration Within and Beyond the Assessment Area)
Improve aquatic life uses of the Leading Creek Stream System and/or restore, rehabilitate, replace and/or acquire the equivalent of natural resources injured from the release of hazardous substances into the environment and services those resources provide	No	Yes	Yes, same as Alternative B but over a larger geographic area
Improve aquatic habitat	No	Yes	Yes, same as Alternative B but over a larger geographic area
Reduction in sedimentation in subwatersheds	No	Yes	Yes, same as Alternative B but over a larger geographic area
Preservation/restoration of riparian buffers	No	Yes	Yes, same as Alternative B but over a larger geographic area
Restore wetlands and associated upland habitat	No	Yes	Yes, same as Alternative B but over a larger geographic area
Preservation of wetlands and associated upland habitat	No	Yes	Yes, same as Alternative B but over a larger geographic area
Remediation of AMD in areas not covered by AML Funds	No	Yes	Yes
Provide for enhancement of abundance and diversity of self-sustaining fish populations	No	Yes	Yes, same as Alternative B but over a larger geographic area
Improve outdoor recreational opportunities/enhance public awareness	No	Yes	Yes, same as Alternative B

SECTION 4

Affected Environment

As part of the larger Ohio River eco-region, the Leading Creek EA area forms a unique and important ecosystem. The terrestrial, wetland, and aquatic habitats of the Leading Creek EA area support a wide diversity of birds, fish, and mammals, including rare, threatened, and endangered species. The health of the ecosystem and the quality of its habitats are vital to the invertebrates, plants, fish, and wildlife of the area. Public uses and enjoyment of these resources also depend on the health and quality of the Leading Creek EA area.

4.1 Physical Characteristics

The restoration area is located in southeastern Ohio in Meigs County with upper reaches in Athens County and the southern most portion within Gallia County. The watershed is north of Pomeroy and south of Athens. The climate of the restoration area is seasonal and temperate, with an average summer air temperature of 71 degrees Fahrenheit, and an average winter low air temperature of 32 degrees Fahrenheit. Annual precipitation is approximately 40.7 inches.

4.2 Biological Environment

4.2.1 Habitat/Vegetation

According to the Comprehensive Management Plan for Leading Creek, a majority of the watershed is forested, consisting of second, third, or fourth generation growth stands. Mixed mesophytic forests in this region of Ohio are noted for floristic richness due to microclimates, land surfaces, and soils. This forests consist of a diverse composition of tree species such as red and white oak *(Quercus spp.)*, hickory *(Carya spp.)*, red and sugar maple *(Acer spp.)*, tulip popular *(Liriodendron tulipifera)*, and American beech *(Fagus grandifolia)*. Agriculture makes up about 30 percent of the Leading Creek Watershed, and occurs within the upper three sub-watersheds. Pastureland is the main agricultural practice, followed by row crops.

4.2.2 Listed, Proposed, and Candidate Species

The Leading Creek Watershed falls within range of the Indiana bat, the pink mucket pearlymussel, and the fanshell mussel, all Federally-listed endangered species. An endangered species is any species that is in danger of extinction throughout all or a significant portion of its range. The site is also within range of the sheepnose mussel, a candidate for Federal listing. A candidate species is a species for which the U.S Fish and Wildlife Service has sufficient information on their biological status and threats to

propose listing them as endangered or threatened under the Endangered Species Act, but for which development of a proposed listing regulation is precluded by other higher priority listing activities.

The Federally-listed species discussed above are potentially present in the restoration area boundaries for both Alternative B & C. However, Alternative C includes additional watersheds more likely to contain suitable habitat for mussel species. The following sections provide additional information on Federally-listed species from the U.S Fish and Wildlife Service Endangered Species and NatureServe website.

4.2.2.1 Mammals

The Indiana bat *(Myotis sodalis)* was designated as endangered throughout its range in March of 1967. Limestone caves are used for winter hibernation. The decline of this species has been attributed mainly to human disruption and commercialization of roosting caves. During the summer months, the bats roost in trees which have exfoliating bark, and dead or live trees with split tree trunks and/or branches, and cavities (that may be used as maternity or male roost areas). Stream corridors, riparian areas, and upland woodlots provide forage sites. There are known records for this species in Athens County and is potentially present throughout the Leading Creek Watershed.

4.2.2.2 Aquatic organisms

The pink mucket pearlymussel *(Lampsilis abrupta)* was designated as endangered throughout its entire range on June 14, 1976. The pink mucket typically inhabits medium to large rivers with strong currents; however, it has also been able to survive and reproduce in areas of impounded reaches with river/lake conditions without standing water. Substrate preferences include sand, gravel, and pockets between rocky ledges in high velocity areas and mud and sand in slower moving waters. Past threats to the species include habitat modification through impoundments, channelization, and dredging operations as well as water quality degradation and commercial over harvestation. This species is found in the Ohio River Watershed within Meigs and Gallia County.

The fanshell mussel *(Cyprogenia stegaria)* was designated as endangered throughout its entire range in June 21, 1990. The fanshell inhabits medium to large rivers. It has been reported primarily from relatively deep water in gravelly substrate with moderate current. The loss of many historic populations was likely due to the impacts of impoundments, navigation projects, water quality degradation, and other forms of habitat alteration, including gravel and sand dredging that directly affected the species and reduced or eliminated its fish host. Most fanshell populations are small and are geographically isolated from one another. This species is found in the Ohio River Watershed within Meigs County.

The sheepnose mussel *(Plethobasus cyphyus)* was designated a Candidate species May 4, 2004. Although it does inhabit medium-sized rivers, this mussel generally has been considered a large-river species. It may be associated with riffles and gravel/cobble substrates but usually has been reported from deep water (>2 m) with slight to swift currents and mud, sand, or gravel bottoms. It also appears capable of surviving in reservoirs. Specimens in larger rivers may occur in deep runs. This species is found in the Ohio River Watershed within Athens, Gallia, and Meigs County.

4.2.2.3 State Listed Species

In addition to Federally-listed endangered and threatened species, the state of Ohio Department of Natural Resources Division of Natural Areas and Preserves maintains a database of rare plants and animals. The following general listing categories are used: (1) endangered, a native species or subspecies threatened with extirpation from the state. This danger may result from one or more causes, such as habitat loss, pollution, predation, interspecific competition or disease; (2) threatened, a species or subspecies whose survival in Ohio is not in immediate jeopardy, but to which a threat exists. Continued or increased stress will result in its becoming endangered; and (3) species of concern, a species or subspecies which might become threatened in Ohio under continued or increased stress, or a species or subspecies for which there is some concern but for which information is insufficient to permit an adequate status evaluation. In Meigs County, there are nine state endangered, nine state threatened, thirteen potentially threatened, and one species of special concern. The Ohio Natural Heritage Database provides the following list of state endangered, threatened and potentially threatened plants that could be found in the Leading Creek Watershed: angle-pod *(Matelea obliqua)*, green milkweed *(Asclepias viridiflora)*, lance leaved-violet *(Viola lanceolata)*, netted chain fern *(Woodwardia areolata)*, Tennessee bladder fern *(Cystopteris tennesseensis)*, slender blazing-star *(Liatris cylindracea)*, and Virginia-mallow *(Sida hermaphrodita)*. Two state and Federally-endangered mussels have been found in the Ohio River, below the mouth of Leading Creek: fanshell *(Cyprogenia stegaria)* and pink mucket *(Lampsilis orbiculata)*. The river redhorse is found in the mainstem of Leading Creek and is an aquatic species of special concern.

Several state endangered terrestrial species may occur within the watershed. The area is considered home range for bobcats *(Felis rufus)*, the black bear *(Ursus americanus)*, and the eastern spade foot toad *(Scaphiopus holbrooki)*. The timber rattlesnake *(Crotalus horridus horridus)*, an Ohio endangered species and a species with a Pre-listing Conservation Plan, is a known inhabitant of Athens County and neighboring Vinton County. Suitable habitat, including dry, wooded hill country, may occur within the watershed.

4.2.3 Other Fish and Wildlife Species

The following section provides a general list of fish and wildlife found in the Leading Creek EA area. Additional species may be found, especially within the boundaries of Alternative C.

Smaller mammals likely to use the Leading Creek EA area include opossum *(Didelphis virginiana)*, eastern cottontail rabbit *(Sylvilvagus floridanus)*, eastern chipmunk *(Tamias striatus)*, woodchuck *(Marmota monax)*, eastern gray squirrel *(Sciurus gireus)*, red fox *(Vulpes fulva)*, striped skunk *(Mephitis mephitis)*, and raccoon *(Procyon lotor)*. Common game animals such as white tail deer *(Odocoileus virginianus)*, eastern wild turkey *(Meleagris gallopavo silvestris)*, and bobwhite quail *(Colinus virginianus)* can also be found within the watershed.

The Leading Creek Watershed provides habitat for several neotropical and waterfowl migratory bird species as well as resident species. These include, but are not limited to the wood duck *(Aix sponsa)*, great blue heron *(Ardea herodias)*, belted kingfisher *(Ceryle alcyon)*, common yellowthoat (*Geothlypis trichas)*, Carolina wren *(Thryothorus ludovicianus)*, and Louisiana waterthrush *(Seiurus motacilla)*.

Fish species in the Leading Creek Watershed include, but are not limited to bluegill *(Lepomis macrochirus)*, common carp (*Cyprinus carpio*), gizzard shad (*Dorosoma cepedianum*), greenside darter *(Etheostoma blennioides)*, Johnny darter (*Etheostoma nigrum*), longear sunfish *(Lepomis megalotis)*, spotted bass *(Micropterus punctulatus)*, pumpkinseed sunfish (*Lepomis gibbosus*), walleye *(Stizostedion vitreum)*, white crappie (*Pomoxis annularis*), yellow bullhead *(Ameiurus natalis)*, and yellow perch *(Perca flavescens)*. A study conducted in 2000 found 36 species of fish in the mainstem of Leading Creek.

4.3 Land Use

The Leading Creek area is comprised of a mix of residential, agricultural, and undeveloped land. Prevalent land uses are forestland (68%), pasture/hay fields (26%), and row crops (5%).

4.4 Cultural Resources

As of June 2005, the county of Meigs contains 10 properties listed on the National Register of Historic Places, of which seven are located within the watershed: three are within the village of Pomeroy, three within Middleport, and one in Rock Springs.

4.5 Local Socioeconomic Conditions

According to the U.S. Census Bureau, Meigs County had 23,072 people in 2000. Rutland is the largest community with 400 residents and is the only incorporated village located entirely within the Leading Creek Watershed. Agriculture and rural areas can be found throughout the remainder of the drainage basin. Using information from the 2000 Census, there are approximately 7,000 to 7,500 people living within the watershed. Meigs County has one of the highest unemployment rates in Ohio, with August 2004 statistics stating a 15.9% unemployment rate.

SECTION 5

Environmental Consequences

5.1 Alternative A: No Action

5.1.1 Habitat Impacts

Under this alternative, no habitat would be restored, enhanced, or preserved beyond what the Fish and Wildlife Service are currently doing within mandates, policies and restricted budgets. Loss of habitat due to poor land management, development, and other sources of environmental degradation not related to hazardous substance releases is expected to continue to occur. The public would not be compensated for injuries to natural resources from the release of hazardous substances into the environment.

5.1.2 Biological Impacts

Fish and wildlife harmed by the release of hazardous substances into the environment would not be restored, rehabilitated, replaced or the equivalent acquired. Populations of fish and wildlife species throughout the Leading Creek Watershed that rely on streams and associated wetland, riparian, and upland habitat would not increase sufficiently to compensate for past losses.

5.1.3 Listed, Proposed, and Candidate Species

Negative impacts to listed species would not be reduced under this alternative.

5.1.4 Cultural Resources

No cultural resources have been identified.

5.1.5 Environmental Justice

Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* (59 Federal Register 7629 (1994)), directs federal agencies to incorporate environmental justice in their decision making process. Federal agencies are directed to identify and address as appropriate, any disproportionately high and adverse environmental effects of their programs, policies and activities on minority or low-income populations.

Under the No Action alternative, wildlife viewing and environmental education opportunities would not improve through enhancement projects. While affluent individuals can afford travel and pay for alternatives, low-income individuals are less capable of doing so.

5.1.6 Socioeconomic Impacts

This alternative would not result in any positive indirect impacts on the local economy. This alternative would not result in additional lands that could provide increased recreational opportunities and related economic development in the area.

5.1.7 Cumulative Impacts

If this alternative were implemented, the cumulative impacts would be adverse to the environment. The exclusive reliance on regulations and policies do not necessarily provide for long-term preservation of valuable aquatic, wetland, and riparian habitats. The Leading Creek Watershed includes many different habitats, such as floodplain forests, dry upland forests, and riparian marshes. Impacts to these and other resources within the Leading Creek EA area continue due to historical and on-going land use practices. For example, previous mining practices combined with agricultural impacts have severely limited aquatic life within major tributaries in Leading Creek. These types of impacts are foreseeable in the future with current available AML and NRCS funds and on-going farming and livestock grazing practices. The loss and degradation of riparian, floodplain, and marsh wetlands would contribute to the continued instability of the aquatic community in the Leading Creek Watershed and the Ohio River. The continued loss of habitat could also adversely affect migratory birds that use the area for resting grounds, and nesting area for those species that remain for the nesting season.

5.2 Elements Common to Alternatives B and C

5.2.1 Habitat Impacts

Preserving, restoring or enhancing aquatic, wetland, and riparian habitats impacted by

hazardous substances improves the ecological functions of the Leading Creek EA area that are essential for many fish and wildlife species. In addition, stream and associated habitat restoration and preservation also improve public use and enjoyment of these resources. Benefits of aquatic, wetland, and riparian habitat improvements or enhancement would include improved water quality, restored habitat for fish and wildlife species, and increased ecological productivity. Improving the quality of aquatic vegetation and habitat for fish and birds would provide similar, though not the same ecological functions as those injured by hazardous substances. These and other long-term benefits outweigh any adverse impacts associated with specific habitat restoration or enhancement methods.

Under Alternatives B and C, there would be minimal short-term impacts to habitat due to the needed manipulation of soil to complete aquatic and wetland habitat restoration or enhancement projects. Some permanent impacts could occur in the event of modification and loss of habitat for trails or other public use facilities. However, these same projects would also direct and control human impacts on those resources.

5.2.2 Biological Impacts

The restoration alternatives would benefit many different species of fish and wildlife found in the Leading Creek EA area. Preservation, reestablishment and enhancement of aquatic and associated wetland and riparian habitats would benefit such species as waterfowl, songbirds, osprey, mink, and beaver. Fishery resource enhancement projects would directly benefit species such as the bluegill, spotted bass, and yellow bullhead leading to the development of a balanced, healthy fish community. Through the aquatic habitat quality improvement projects there would be an increase in shallow waters and beds of submergent and emergent vegetation providing habitat for migrating waterfowl, waterbirds and many species of fish found in the Leading Creek EA area. There would be minimal negative impacts to biological resources from human disturbance in relation to use of preserved areas and natural resource-based public use projects. The public use projects would also protect and potentially minimize human disturbance to fish and wildlife by controlling human impacts on those resources.

5.2.3 Listed, Proposed, and Candidate Species

Federal and State listed or endangered species would receive further protection and aid in the recovery of the species if either of these alternatives were implemented. Aquatic, wetland, and riparian habitat enhancement and preservation would most likely benefit Indiana bat. Federally-listed listed or Candidate mussel species located downstream in the Ohio River would also benefit (increase in fish host species, improve water quality). Protective measures (Appendix A) would be taken during implementation of any projects. Adherence to the restrictions should provide for no adverse effects on the listed species.

5.2.3.1 Mammals

The Indiana bat may use stream corridors or uplands restored or acquired under Alternative B or C. State listed species such as the black bear or the bobcat may use lands restored or acquired under Alternatives B or C.

5.2.3.2 Aquatic organisms

Federally-listed mussel species and other mussel species require clean waterways and fish host species for glochidia. Mussel populations may return or increase in surrounding waterways (Ohio River) once aquatic stream habitat restoration projects address sedimentation issues and improve overall water quality and fish populations in the Leading Creek EA area.

5.2.3.3 Plants

Although there are no known Federally-listed plant species, there are many state listed plant species within Leading Creek Watershed that may benefit from enhancement projects within upland and riparian areas (See section 4.2.2.3).

5.2.4 Cultural Resources

Projects covered under this EA such as planting riparian buffers, plugging drainage ditches, breaking tile systems, stabilizing stream banks, installing sediment traps, treating sources of AMD, acquiring wetlands, and development for public uses or other eventual development on acquired lands have the potential to affect properties meeting the criteria for the Natural Register of Historic Places and other cultural resources. Specific areas for wetland restorations, sedimentation reduction, and land acquisition have not been determined. When these project areas have been determined, and prior to making final decisions about these projects, the Field Supervisor, Reynoldsburg Ecological Field Office, will initiate consultation with the Ohio State Historic Preservation Officer and, with the assistance of the FWS Regional Historic Preservation Officer, will complete the Section 106 process as described in 36 Code of Federal Regulations Part 800.

5.2.5 Environmental Justice

Wetland, riparian, and upland preservation would involve transactions with willing landowners. No minority or low-income populations would be displaced or negatively affected in any way. While the primary purpose of the restoration of this land is for fish and wildlife, portions of the acquired properties may be used by the public for natural resource based recreational/educational activities such as wildlife viewing. Aquatic habitat improvement would also enhance recreational opportunities in and around Leading Creek.

5.2.6 Socioeconomic Impacts

The overall quality of life for the surrounding communities would improve with the restoration of the Leading Creek EA area. Protection of wetlands, riparian buffers, and uplands would provide wildlife viewing, fishing and hunting, and help create positive economic impacts on the local economy. Aquatic habitat improvements or enhancements would provide for more opportunities for public enjoyment of natural resources.

Acquisition procedures of land would involve transactions with willing sellers who would be paid fair market value. There would be little or no impact on the market price or on landowners in the area who choose not to sell. There would be minimum effects on the local economy and tax base because the areas targeted for preservation are currently undeveloped.

5.3 Alternative B: Natural Resource-Based Restoration Within the Assessment Area (Preferred Action)

5.3.1 Elements Common to All Impacts

Other impairments to the ecosystem such as pollution associated with development would continue to affect the assessment area where restoration projects would be implemented. These additional sources of impact may also inhibit the ability of the natural resources to fully recover or may negatively impact other restoration projects undertaken by the USFWS.

5.3.2 Cumulative Impacts

To begin restoring the overall ecology of the Leading Creek EA area and achieve maximum benefit from those restoration projects implemented, the complete watershed, including headwaters and subbasins, needs to be addressed. Alternative B implements restoration projects within the entire affected watershed.

Cumulative impacts from habitat restoration or enhancement implemented under Alternative B would positively affect the region as a whole. Despite the existence of laws and regulations designed to minimize wetland and aquatic habitat losses and impacts, threats to wetlands and aquatic habitat from indirect impacts, cumulative small scale impacts, or surrounding land use changes still exist. Partnering with various state and federal programs (EPA's Section 319 Clean Water Act State Grants, Partners for Fish and Wildlife, etc) that already contribute to improving the health of the ecosystems and watersheds will aid in restoring more habitats and increasing fish and wildlife populations.

Migratory birds would benefit from this Alternative because there would be more undisturbed areas for spring and fall migration resting and feeding stopovers as well as nesting habitat for other bird species. This Alternative would contribute to the stabilization of fish communities by implementing appropriate fishery resource projects such as restoring fish spawning and nursery habitats.

5.4 Alternative C: Natural Resource-Based Restoration Within and Beyond the Assessment Area

5.4.1 Elements Common to All Impacts

Alternative C includes the extension of the project area of implementation to watersheds adjacent to Leading Creek and Ohio River systems and their tributaries. Land acquired in the restoration area would include properties that currently deliver (or can deliver through restoration or enhancement) ecological services that may never be replaced or would take a long time to recover. Restoration or enhancement projects in the restoration area would enhance recovery time and reduce the compensable damages to the public. Under this alternative the ecosystem can be looked at as a whole regarding restoration.

5.4.2 Cumulative Impacts

Alternative C would contribute to the effort of the region from various partnership groups and local planning groups. Restoration, enhancement, habitat acquisition, and fishery resource enhancement projects would positively affect the region as a whole in conjunction with other programs. Alternative C would provide for opportunities to add to and connect the currently protected habitats over a larger geographic area. Alternative C would also establish larger tracts of continuous valuable habitat that would benefit fish and wildlife species in the area.

5.5 Summary of Environmental Consequences for each Alternative

Table 2: Comparison of Alternative A, B & C Environmental Consequences

Attributes	Alternative A (No Action)	Alternative B (Restoration Within the Assessment Area (Preferred Action))	Alternative C (Restoration Within and Beyond Assessment Area)
Wetlands	Expected continued net loss of habitat	Increase of wetland habitat	Provide additional wetland habitat due to extended restoration area (additional protection from development)

Uplands associated with wetlands	Continued net loss of habitat	Increase of upland and riparian habitat associated with wetlands	Provide additional upland and riparian habitat due to extended restoration area (additional protection from development)
Aquatic habitat	Continued degradation and loss of habitat	Increase of aquatic habitat	Provide additional aquatic habitat due to extended restoration area (additional protection from development)
Fish resources	Populations would remain unbalanced for a greater length of time	Increase diversity of fish community and populations	Provide additional protection
Wildlife resources	Continued harm and decrease of numbers	Increase in populations	Provide additional protection
Listed threatened or endangered species	Negative impacts would continue	Provide further recovery of species in the area	Potential protection of additional species
Cultural resources	N/A	Adverse impacts are possible	Adverse impacts are possible
Surface water	Remain degraded due to sediment and nutrient loading and historic pollution in sediment	Increase in surface water quality	Surface water quality would be improved beyond Alternative B and greatly improved beyond Alternative A
Environmental justice issues	No opportunities for increased quality of life	Increased quality of life in Meigs County	Provide increase in quality of life for additional communities
Socioeconomic issues	Local economy would remain the same or decrease due to continued injury without restoration	Local economy could potentially increase due to restoration	Increase likelihood of restoration benefiting local economy due to greater geographic region
Recreational use Environmental education and resource enjoyment	No enhancement or increase of low impact recreational opportunities or environmental education	Increase opportunities for wildlife/bird viewing, fishing as well as enhancement of understanding of the ecosystem	Further enhancement of wildlife/bird viewing and fishing opportunities as well as enhancement of understanding of the ecosystem
Cumulative impacts	Potential decrease in populations of migratory birds, continued degraded fishery and continued loss of wetland and associated upland habitat in the Leading Creek EA area	Increase populations of migratory birds and greater diversity in the fish community; some ecosystem functions are to be restored or compensated	Increase populations of migratory birds and greater diversity of fish community; ecosystem functions are able to be restored

SECTION 6

Consultation and Coordination with the Public and Others

6.1 National Historic Preservation Act Compliance

The U.S. Fish and Wildlife Service's Project Leader for Reynoldsburg Ecological Services will provide the State Historic Preservation Officers with this Restoration Plan and Environmental Assessment as part of the public review and comment process.

6.2 Endangered Species Act Compliance

This Restoration Plan and Environmental Assessment complies with Section 7 of the Endangered Species Act (ESA) of 1973 as amended, 16 U.S.C. § 1531, *et seq.*, and its implementing regulation (50 C.F.R. 402) (Appendix A).

6.3 Public Participation

Public review of the Draft RP/EA is an integral component of the assessment and restoration planning process. Through the public review process, the USFWS are seeking public comment on the actions proposed to restore injured natural resources or replace lost resource services.

6.4 Restoration Project Proposal Process

The USFWS will solicit restoration project ideas from the public.

SECTION 7

Public Comment on Draft Restoration Plan & Environmental Assessment

Throughout the public comment period, the USFWS will accept public comments on this Draft RP & EA. The USFWS plan to address questions and comments received during the public comment period.

SECTION 8

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SECTION 9

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