

**FINAL NATURAL RESOURCE DAMAGES
RESTORATION PLAN:**

**Keystone Sanitation Landfill Superfund Site
Adams County, PA**

Prepared by

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Final Natural Resource Damages Restoration Plan for the Keystone Sanitation Landfill Superfund Site

1.0 Introduction: Purpose and Need for Restoration

This document includes the final Restoration Plan (RP) on proposed restoration actions associated with the Keystone Sanitation Landfill Superfund Site, located in Adams County, Pennsylvania. This document was prepared by the U. S. Fish and Wildlife Service's (Service) Pennsylvania Field Office. The purpose of this document is to address the restoration of natural resources injured, impaired, or lost by the release of hazardous substances at the Keystone Landfill, and to describe options for restoring the injured resources and the services these resources provided using funds collected as natural resource damages for these injuries, pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, as amended, commonly known as Superfund, (42 U.S.C. 9601 *et seq.*).

CERCLA requires that the environment and the public be made whole for injuries to natural resources and services resulting from the release of hazardous materials into the environment. This goal is accomplished through the Natural Resource Damages Assessment and Restoration (NRDAR) process by: 1) returning injured natural resources and services to their baseline (pre-incident) condition, and 2) compensating for the interim loss of natural resources and services from the time of the injury until recovery is complete.

CERCLA outlines a process for evaluating and selecting appropriate compensatory restoration actions. This final RP identifies and evaluates proposed compensatory restoration options for addressing lost ecological services from the result of the hazardous substance contamination and the associated remedial actions at the Keystone Sanitation Landfill.

1.1 Authorities

The Service, acting as Trustee, prepared this final RP to fulfill requirements under CERCLA. Authority for NRDAR also falls under the Federal Water Pollution Control Act of 1972, as amended, commonly referred to as the Clean Water Act (33 U.S.C. 1251 *et seq.*). In addition, Federal agencies must identify and evaluate environmental impacts that may result from Federal actions (42 U.S.C. 4321 *et seq.*). This document addresses environmental considerations as defined under the National Environmental Policy Act (NEPA) of 1969, as amended (42 U.S.C. 4321 *et seq.*).

Other natural resource and environmental laws and regulations considered during the development of this RP include: the Endangered Species Act of 1973, 16 U.S.C. 1531 *et seq.*; the Migratory Bird Treaty Act, 16 U.S.C. 703 *et seq.*; the National Historic Preservation Act, 16 U.S.C. 470 *et seq.*; the Archaeological Resources Protection Act, 16 U.S.C. 470 *et seq.*; and the Fish and Wildlife Coordination Act of 1934, 16 U.S.C. 661 *et seq.*. Restoration projects described in this document will be conducted in compliance with all applicable State, Federal, and local regulations.

1.2 Trustee Responsibilities under CERCLA

The Service is a designated Federal Trustee for natural resources including migratory birds and their respective habitats (Executive Order 12580 (40 CFR 300.000)). The Service is the natural resource Trustee responsible for restoring natural resources injured from the release of contaminants from the Keystone Sanitation Landfill.

Under CERCLA, Trustees are authorized to conduct natural resource damage assessments and develop a plan for restoration of injured natural resources and services. CERCLA requires that the Trustees must develop a Draft and Final Restoration Plan, with an opportunity for public review and comment on the Draft Plan. The plan must include a reasonable number of restoration options and include selection of the preferred project(s).

1.3 Affected Area

1.3.1 Site Description and Natural Resource Injury

The Keystone Sanitation Landfill is located in Adams County, Pennsylvania. It occupies an area of approximately 40 acres in a gently rolling, predominantly agricultural setting. The landfill was used from 1966 until 1990 for disposal of household and municipal waste and certain types of industrial and construction debris.

The landfill is situated on a ridge, and surface-water runoff flows from the site in all directions. Conewago Creek, a tributary to the Susquehanna River, drains the northern and eastern portions of the site. Piney Creek, a tributary to the Monocacy and Potomac Rivers, drains the southern and western portions of the site.

Chemical analysis of environmental media on and near the site began in 1974 following installation of monitoring wells around the perimeter of the property. A Remedial Investigation (RI) was conducted by the Environmental Protection Agency (EPA) during 1989 and 1990. Results of well monitoring and the RI work revealed that the groundwater under and near the site, the surface soil on and near the site, and the surface water and sediment in some of the small streams near the site were contaminated with volatile organic compounds, and heavy metals including mercury, zinc, and manganese.

The Department of the Interior prepared a natural resource damage claim for the Site based upon injuries to DOI trust resources, primarily migratory birds. Natural resource injury is a measurable adverse change, either long- or short-term, in the chemical or physical quality or the viability of a natural resource resulting from either direct or indirect exposure to hazardous substances (43 CFR 11.14(v)). Injuries can include effects caused by the exposure and effects caused by Remedial Actions (43 CFR 11.15(a)(1) and 15 CFR 990.51(b)(2)(ii)). It is the Trustee's responsibility to develop a plan to restore injured resources to their pre-incident condition. The primary injury at Keystone was injury to migratory birds via the elimination and/or impairment of 2.6 acres of upland forest, 6 acres of forested wetland, and 17 acres of

emergent wetland habitat.

1.3.2 Natural Resources Compensation

A settlement of \$204,161 was reached with eight original generator parties and many *de micromis* and *de minimus* Responsible Parties. This settlement was negotiated in cooperation with the EPA and filed as several Consent Decrees in U.S. District Court in September 1999. An additional settlement of \$125,000 was reached with the owner/operators in a Consent Decree in U.S. District Court in May 2001. Interest has accrued, and some funds used for restoration planning have debited the account. The current amount available for restoration, including restoration implementation, oversight and monitoring is \$371,083.

1.4 Public Notification and Review

Under CERCLA and NEPA, Trustees must involve the public in the restoration planning process. Accordingly, the Service published a Public Notice of Availability for the Draft RP in *The Gettysburg Times* on May 10, 11, and 12, and in the *Hanover Evening Sun* on May 11, 12, and 13. Copies of the Draft RP were made available for review during office hours at the following locations:

Littlestown Library
46 E. King Street
Littlestown, PA 17340
717-359-0446

Adams County Library
140 Baltimore Street
Gettysburg, PA 17325
717-334-5716

Interested parties could also have obtained an electronic or hard copy of the Draft RP from the Service at the following address:

Pennsylvania Field Office
U.S. Fish and Wildlife Service
315 S. Allen Street, Suite 322
State College, PA 16801
Telephone: (814) 234-4090

1.5 Comments on the Restoration Plan

The Service believes that public comment and input is critical to the success of this RP and considered all comments received from the public. Comments received are addressed in Section 8.0 of this Final Restoration Plan. Comments were accepted from May 10 through June 12, 2007. Comment letters were sent to:

Pennsylvania Field Office
U.S. Fish and Wildlife Service
315 S. Allen Street, Suite 322
State College, PA 16801

2.0 Description of Restoration Options

Under CERCLA, trustees must identify and evaluate a reasonable number of restoration options and select the preferred option, as part of the development of the Draft and Final Restoration Plan. Acceptable restoration actions include any of the actions authorized under CERCLA which include: restoration, rehabilitation, replacement, or acquisition of the equivalent natural resources to those injured, or some combination of those actions. Section 2.1 explains the criteria used to identify restoration options. Sections 2.2 through 2.4.5 describe each option. Section 3.0 explains the criteria for evaluating and selecting the preferred option. And Section 4.0 identifies the preferred restoration options.

2.1 Criteria for Identifying Restoration Options

The primary goal of the Service, acting as Trustee, is to select a restoration option that compensates for injuries to trust resources (migratory birds) that resulted from the release of hazardous substances from the Keystone Landfill. We identified the following as desirable characteristics for potential restoration options: 1) the site is or can be made available for restoration, 2) the site will provide functional benefits to migratory birds, and 3) the site is located within one of the two watersheds that were impacted by the contaminant release.

2.2 Option A: No Action

This option is addressed to fulfill requirements under NEPA, and is consistent with the damage assessment process under the NRDAR regulations. Under the No Action Option, no restoration, rehabilitation, replacement, or acquisition actions would occur to compensate for resources injured.

2.3 Option B: Restoration of Natural Resources at the Same Location

EPA is addressing contamination at the Keystone Landfill. The major components of the remedy include construction and operation of a groundwater extraction and treatment system; provision of residential filtration systems; monitoring of groundwater in both monitoring wells and residential supply wells; monitoring of surface water and sediment from nearby tributaries and seeps; construction and operation of an enhanced landfill gas extraction system; upgrades to the landfill soil cover and storm water management controls; and institutional controls to protect the remedy and restrict the future use of the landfill property. All activities, including the operation and maintenance of the various remedy components, are being conducted by the responsible parties under EPA's oversight. Any on-site habitat restoration projects would have to

evaluate the probability of benefiting migratory birds. Also, consideration of the potential residual contamination on-site and the effects of the remedial activities on migratory birds would have to be addressed.

2.4 Option C: Restoration of Natural Resources in the Vicinity of the Loss

We have identified five possible projects near the Keystone site where the settlement funds could be used to create, improve, and preserve migratory bird habitat. Each restoration alternative identified below includes a conservation easement component. The Land Conservancy of Adams County (LCAC) has agreed to hold conservation easements for the selected restoration projects. LCAC is a member-supported nonprofit land trust, comprised almost entirely of volunteers. The mission of LCAC is to permanently preserve the rural lands and character of Adams County, Pennsylvania. Conservation easements would be written by LCAC, in coordination with and approval by the Service, for the selected projects.

2.4.1 Littlestown Fish and Game Wetland Restoration and Conservation Easement

This restoration alternative is located at the Littlestown Fish and Game Club property in Adams County, approximately four miles northwest of the Keystone Landfill. This 66.9-acre property includes old field, forest, and open water habitats. The property drains into an unnamed tributary of Alloway Creek, which is a tributary to the Monocacy River. The project would involve two components: 1) restoration of six acres of wetlands and 2) a permanent conservation easement on the property.

Wetland restoration at Littlestown is proposed at two sites, referred to here as the east and west restoration sites. The east site is approximately 14 acres of former hay and crop field that is currently dominated by goldenrod (*Solidago canadensis*). In addition, red maple (*Acer rubrum*), multiflora rose (*Rosa multiflora*), and blackberry (*Rubus* spp.) seedlings are scattered throughout the site. Somewhat centrally located in the field is a 1.5-acre wetland dominated by soft rush (*Juncus effusus*). The proposed wetland restoration at the east site would require the construction of a 700-foot long embankment with an average height of 2.0 feet and a maximum height of 2.4 feet. The embankment would create a 2.8-acre impoundment with an average depth of 0.9 feet and a maximum depth of 2.3 feet. The project would create 3 acres of emergent wetlands after construction (a net gain of 1.5 acres).

The west site is an approximately 7-acre field currently managed for hay. An excavated drainage ditch bisects the site and is bordered by a row of trees and brush (mostly silver maple (*Acer saccharinum*), multiflora rose, and some pin oak (*Quercus palustris*)). The site is dominated by goldenrod, aster (*Aster pilosus*), Queen Anne's lace (*Daucus carota*), and dogbane (*Apocynum cannabinum*). A 0.25-acre wetland near the west end of the drainage ditch is dominated by reed canarygrass (*Phalaris arundinacea*). The proposed west site project would require constructing an 800-foot long embankment which would have an average height of 2.5 feet and a maximum height of 3.0 feet. This embankment would create an impoundment with an average depth of 1.3 feet and a maximum depth of 2.4 feet. Materials for the embankment would be obtained from

two borrow areas, which would create an additional one acre of wetland. The total wetland area would be 3 acres, with a net gain of 2.75 acres.

Additionally, the restored wetlands and an undetermined amount of the adjacent old field and forest habitats owned by the Littlestown Fish and Game Club would be available for a permanent conservation easement. The Littlestown Fish and Game Club property is located in a rapidly developing portion of Adams County and there is intense housing development pressure in this area. The conservation easement would ensure permanent protection of the restored wetlands and up to 60.9 acres of the adjacent uplands owned by the Club. LCAC would hold the conservation easement. The Club would agree to maintain and manage the restored wetlands and manage the property for fish and wildlife according to their respective conservation easement.

The estimated total cost of the Littlestown Fish and Game Club project is \$241,000. This includes project planning, oversight, and administration (\$5,000); design, supplies, construction, and monitoring (\$50,000); title search, surveys, and appraisal (\$15,000) purchase of the conservation easement and associated fees (\$161,000); and the easement preparation and holding by the non-profit organization (\$10,000).

2.4.2 Penn Forestry Company, Inc., Conservation Easement

This restoration option would involve a contribution towards a conservation easement for 346.8 acres owned by the Penn Forestry Company, Inc. The site is located in the northwestern corner of Adams County, approximately 20 miles from the Keystone Landfill. The site is the source of two tributaries to Marsh Creek: Mummasburg Run and an unnamed tributary. Marsh Creek drains to the Monocacy River and is a part of the Potomac River watershed. The site is also the source of two unnamed tributaries to the Conewago Creek. This section of the Conewago Creek is classified by the Pennsylvania Department of Environmental Protection as a “high quality cold water fishery.” The Land Conservancy of Adams County (LCAC) received approximately \$214,000 from the Pennsylvania Department of Conservation and Natural Resources (DCNR) for use towards a conservation easement on the 346.8-acre parcel. LCAC is seeking funds to match the DCNR contribution.

Conservation of the Penn Forestry Company’s property is part of a larger mission which is to protect some 2,500 acres of land that is locally known as the Narrows. The Narrows area is one of the largest unprotected woodland areas remaining in Adams County. If protected, it would function as a connective greenway to Michaux State Forest, which lies a few miles to the west. The Narrows has been identified as a preservation priority by several citizen surveys conducted by the Adams County Office of Planning and Development, and is within the South Mountain Area, which has been designated as an important area for conservation by various planning, preservation, and natural resource organizations.

The Penn Forestry site consists primarily of upland forested habitat, with a canopy of mixed hardwood, mature hemlock (*Tsuga canadensis*) and white pine (*Pinus strobus*). This conservation easement would seek to protect large intact areas of fish and wildlife habitat. Fish

and wildlife observed on-site include: bobcat (*Lynx rufus*), black bear (*Ursus americanus*), wild turkey (*Meleagris gallopavo*), white-tailed deer (*Odocoileus virginianus*), bald eagle (*Haliaeetus leucocephalus*), barred owl (*Strix varia*), osprey (*Pandion haliaetus*), brook trout (*Salvelinus fontinalis*), and a variety of amphibians and migratory songbirds (*pers. landowner comm.*). A portion of the conservation area is part of the “Marsh Creek Wetlands,” a site characterized as a mosaic of marsh, shrublands and adjacent woodlands that provides food and cover for a State-listed endangered animal species (The Nature Conservancy 1996 and 2002). Another portion of the site is part of the “Arendtsville Narrows Woods and Seeps,” a locally significant site containing good quality forest and wetland habitat, including older hemlocks and white pine on the higher slopes and mossy, forested seeps along the upper reaches of the Conewago Creek. And lastly, there are two ponds located within the property, a 1-acre cold-water pond and a 0.5-acre warm-water pond. The cold-water pond is fed by several springs, and brook trout, red-spotted newts (*Notophthalmus viridescens*), green frogs (*Rana clamitans*) and bullfrogs (*Rana catesbeiana*) were observed (*pers. observ.*). The warm-water pond is managed for warm-water aquatic species, including largemouth bass (*Micropterus salmoides*). Both ponds provide high-quality emergent wetland habitat along their perimeters.

LCAC would hold the conservation easement. Under the easement, the Penn Forestry Company would agree to promote land uses for biological integrity and ecosystem management. The conservation area has a long history of sustainable forestry consistent with a Forestry Plan updated every ten years. Forestry activities would be regulated under the easement to ensure future availability for sustainable uses, to minimize adverse effects on water resources, and to ensure high biological integrity for migratory bird habitat.

The total cost of the Penn Forestry Project was \$548,424, \$274,000 of which was funded by a Community Conservation Partnerships Program Grant from the DCNR. \$159,424 of the cost was funded through private donations made to LCAC. LCAC completed the purchase of the conservation easement on July 11, 2007. LCAC is in need of \$115,000 to pay off a line of credit obtained for the easement purchase. Additional costs include project planning, oversight, and administration (\$5,000); and the easement preparation and holding by the non-profit organization (\$10,000). The total cost of this restoration option is \$130,000.

2.4.3 Lee Farm Conservation Easement

This restoration alternative is located at the Lee Farm in Adams County, approximately 3.5 miles west of the Keystone Landfill. Consultation with staff from the Natural Resources Conservation Service identified the approximately 52-acre site. Migratory bird habitat present on the property includes: 41 acres of field, 5 acres of forest, 0.5 mile of stream, and 6 acres of floodplain wetland habitat. The property drains into Piney Creek which drains into the Monocacy River.

The project would involve a permanent conservation easement on selected portions of the farm, including approximately 0.5 mile of stream, 6 acres of associated wetland habitats, and up to 46 acres of adjacent upland field and forest habitats. The existing wetlands contain a mixture of dense herbaceous vegetation, including cattails (*Typha* spp.), rushes (*Juncus* spp.), and sedges (*Carex* spp.). The upland areas enrolled under the conservation easement would provide

additional habitat for migratory birds, as well as provide natural buffer areas around the preserved wetlands, thereby enhancing the habitat quality. There is potential for additional migratory bird habitat enhancements including shrub and tree plantings and/or native grass plantings. Along with most areas in southeastern Adams County, this property is located in an area of intense development pressure. The conservation easement would provide permanent protection on the selected areas of the property from development. LCAC would hold the conservation easement.

The estimated total cost of the Lee Farm project is \$134,000. This includes project planning, oversight, and administration (\$5,000); design, implementation, and monitoring (\$15,000); title search, surveys, purchase of the conservation easement and associated fees (\$104,000); and the easement preparation and holding by the non-profit organization (\$10,000).

2.4.4 Brown Farm Conservation Easement

This restoration alternative is located at the Brown Farm in Adams County, approximately 2.0 miles west of the Keystone Landfill. Consultation with staff from the Land Conservancy of Adams County identified the approximately 120-acre site. Migratory bird habitat present on the property includes: 90 acres of field, 22 acres of forest, 0.6 mile of stream, and 8 acres of wetland habitat. The property drains into Piney Creek which drains into the Monocacy River.

The project would involve a permanent conservation easement on major portions of the 120-acre site, including approximately 0.6 mile of stream, 8 acres of associated floodplain wetlands, and up to 112 acres of surrounding field and forest upland habitat. The upland areas enrolled under the conservation easement would provide additional migratory bird habitat as well as provide natural buffer areas around the preserved wetlands, thereby enhancing the habitat quality. Along with most areas in southeastern Adams County, this property is located in an area of intense development pressure. The conservation easement would provide the property with permanent protection from development. LCAC would hold the conservation easement.

In addition, there is excellent potential for migratory bird habitat enhancements on the farm including streamside fencing, tree and shrub plantings, and native grass plantings.

The estimated total cost of the Brown Farm project is \$278,000. This includes project planning, oversight, and administration (\$5,000); design, implementation, and monitoring (\$23,000); title search, surveys, purchase of the conservation easement and associated fees (\$240,000); and the easement holding by the non-profit organization (\$10,000).

2.4.5 Arentz Wetland Conservation Easement

This restoration alternative is located at the Arentz Farm in Adams County, approximately 1.5 miles west of the Keystone Landfill. Consultation with staff from the Natural Resources Conservation Service identified the approximately 9-acre parcel, which primarily consists of floodplain wetland habitat. An unnamed tributary runs through the site and eventually drains into Piney Creek, a tributary to the Monocacy River.

A mixture of wetland vegetation (sedges and rushes) was observed growing on-site, but reed canarygrass appeared to be the dominant cover. Red-winged blackbirds were observed calling and occupying the site (*pers. observ.*). The floodplain wetland is surrounded by agricultural land and small blocks of forest. Most of the agricultural land is in production (hay and crop fields).

The project would involve a conservation easement on the nine acre wetland, protecting it in perpetuity. Furthermore, if this option were selected, we would seek to improve the habitat quality for migratory birds by identifying additional adjacent lands that could be made available for easements, including adjacent uplands and adjoining stream and floodplain habitat. LCAC would hold the conservation easement(s). Migratory bird habitat enhancements would also be considered, and could include native grass, shrub, and tree plantings.

The estimated total cost of the Arentz Farm project is \$48,300. This includes project planning, oversight, and administration (\$5,000); design, implementation, and monitoring (\$15,300); title search, surveys, purchase of the conservation easement and associated fees (\$18,000); and the easement holding by the non-profit organization (\$10,000).

3.0 Criteria for Evaluating and Selecting the Preferred Project(s)

The natural resource Trustee is required to evaluate each of the possible restoration projects based on all relevant considerations. In selecting the preferred restoration projects, we evaluated each option based upon the potential benefits to migratory birds and the following factors: project location; technical feasibility; the cost to carry out the alternative; the extent to which each alternative is expected to meet the Trustees' goals and objectives in returning the injured natural resources and services to baseline and/or compensating for interim losses; the likelihood of success of each alternative; the potential for additional injury resulting from the proposed actions, including long-term and indirect impacts; the ability of the resources to recover with or without alternative actions; the potential effects of the action on human health and safety; and compliance with applicable Federal, State, and tribal laws. The following is our evaluation of the specific projects described above:

3.1 Effects of Option A: No Action

Under the no action option, injuries to migratory birds would not be compensated. Furthermore, no environmental benefits would be reached from the settlement with Keystone, and we would not fulfill our obligations as a natural resource Trustee under CERCLA. For these reasons, this option was not considered further.

3.2 Effects of Option B: Restoration of Natural Resources at the Same Location

Although remedial activities at the Landfill are effectively reducing and removing contamination from entering the groundwater (see: <http://www.epa.gov/reg3hwmd/npl/PAD054142781.htm> for more information), the potential for ecological risk to wildlife from residual contamination may still exist. Also, it is uncertain when clean-up actions will be complete and it is in our best

interest to move forward with restoration. On-site restoration using native warm-season grass plantings was considered early in the project's history; however, there was local opposition due to concerns about erosion control and grass roots penetrating the landfill's cap. For these reasons, this option was not selected as our preferred project.

3.4 Effects of Option C: Restoration of Natural Resources in the Vicinity of the Loss

3.4.1 Littlestown Fish and Game Wetland Restoration and Conservation Easement

This option would entail the restoration of 6 acres of emergent wetlands on the Littlestown Fish and Game Club property, along with the permanent protection of these restored lands and up to 60.9 acres of adjacent upland field and forest habitats. The project would be feasible, practical, cost-effective, and would meet the goals of the Service in restoring natural resources injured at the Keystone Landfill.

The selection of the Littlestown project would compensate for injuries to trust resources by restoring habitat for migratory birds injured by the release of contaminants from the Keystone Landfill. The newly restored wetlands at this site would provide feeding, nesting, and brood rearing habitats for waterfowl and other migratory birds. In addition, conservation of the adjacent upland field and forested habitats on the Littlestown property would protect additional migratory bird habitat, as well as enhance the habitat quality of the restored wetlands.

3.4.2 Penn Forestry Company, Inc., Conservation Easement

This restoration option would involve a contribution toward the conservation easement for the Penn Forestry Company, Inc. lands, thereby protecting one of the largest remaining high-quality forested habitats in Adams County. The 346.884-acre parcel, containing high-quality forest and wetland habitat, would provide feeding, nesting, and brood rearing habitats for migratory birds. The combination of forest and associated forested wetlands protected under this easement would meet the goals of the Service in restoring natural resources injured at the Keystone Landfill. The project would be feasible, practical, and cost-effective.

3.4.3 Lee Farm Conservation Easement

This restoration option would involve the permanent protection of 6 acres of floodplain wetlands, 0.5 mile of stream, and up to 46 acres of additional adjacent upland field and forest habitat. The project would be feasible, practical, cost-effective, and would meet the goals of the Service in restoring natural resources injured at the Keystone Landfill.

The existing wetlands are currently providing good migratory bird habitat. The dense herbaceous vegetation currently growing in the wetland areas is providing nesting and foraging areas for migratory birds. Most of the adjacent fields are in active hay and crop production. Opportunities to enhance the migratory bird habitat in and around the existing wetlands could include plantings of native grasses, shrubs, and trees.

3.4.4 Brown Farm Conservation Easement

This restoration option would involve a conservation easement on 0.6 mile of stream, approximately 8 acres of floodplain wetland, and up to 112 acres of upland field and forest habitat. Most of the upland areas are currently in productive agriculture (hay and crop), so there are many opportunities to enhance the habitats for migratory birds, including planting native grasses, shrubs, and trees. The project would be feasible, practical, cost-effective, and would meet the goals of the Service in restoring natural resources injured at the Keystone Landfill.

3.4.5 Arentz Wetland Conservation Easement

This restoration option would involve the permanent protection of approximately 9 acres of floodplain wetlands, which would provide a permanent vegetated buffer for the unnamed tributary that flows through the site and drains into Piney Creek. The existing wetland is currently providing habitat for migratory birds, although native tree and shrub plantings would enhance the wetland quality. In addition, if this option were chosen as our preferred project, we would investigate additional opportunities to expand the conservation area to include adjacent uplands and adjoining floodplain wetlands, however, no additional projects have been identified at this time. The project would be feasible, practical, and cost-effective, and would support the goals of the Service in restoring natural resources injured at the Keystone Landfill.

4.0 Preferred Option

Based on an evaluation of the criteria for evaluating and selecting the preferred project(s) presented in section 3.0, we have selected two projects for restoration: the Littlestown Fish and Game Club wetland restoration and conservation easement, and the Penn Forestry Company, Inc. conservation easement. Trust resources (migratory birds and migratory bird habitat) were injured by the release of hazardous materials at the Keystone Landfill Superfund Site. The two projects selected will effectively address the injuries to trust resources and thereby provide compensation to migratory birds and migratory bird habitat. The Littlestown project was chosen because it is the only project identified that will restore wetlands, thereby increasing migratory bird habitat. The Littlestown project will restore and permanently protect 6 acres of wetland and up to 60.9 acres of adjoining upland field and forest habitats. The total upland acres to be included in the conservation easement for the Littlestown project will be contingent on a conservation easement appraisal and available funds. In addition to the Littlestown project, the Penn Forestry project was chosen because we are able to contribute to the protection of 346.8 acres of high-quality forest and forested wetlands, which will provide high-quality habitat for migratory birds. The total amount available for restoration, including restoration implementation, oversight and monitoring is \$371,083. The approximate cost of the Littlestown Fish and Game project is \$241,000. The cost of the Penn Forestry Company, Inc. project is \$130,000.

5.0 Performance Criteria

The LCAC would hold both conservation easements for the Littlestown Fish and Game Club and the Penn Forestry Company, Inc. properties. In coordination with the Service, LCAC staff would oversee that both property owners comply with the stated objectives and management guidelines outlined in their respective conservation easements.

6.0 Compliance with the National Environmental Policy Act (NEPA)

The U.S. Fish and Wildlife Service under the direction from the *Federal Register* notice dated January 16, 1997 (Volume 62, Number 11) announced the Final Revised Procedures for providing categorical exclusions under NEPA. Categorical exclusions are classes of actions which do not individually or cumulatively have a significant effect on the human environment. For natural resource damage assessment restoration plans prepared under CERCLA, categorical exclusions may be used when only minor or negligible changes in the use of the affected area is planned.

The proposed projects listed above will result in negligible change in the use of the project area and will not have a significant effect on the human environment. Accordingly, this Restoration Plan qualifies for a categorical exclusion under NEPA. An Environmental Action Statement documenting this determination has been prepared as part of the Final Natural Resource Restoration Plan.

7.0 List of Preparers

This Final RP was prepared by the USFWS Pennsylvania Field Office. Review of this document during its preparation was provided by the respective staffs of the Pennsylvania Field Office, the USFWS Northeast Region 5 Regional Office, and the DOI Northeast Regional Solicitors Office.

8.0 Response to Comments

The Service received 24 written comment letters during the public review period. All letters included favorable comments for our selected restoration projects identified in Section 4.0 Preferred Option, particularly our support for the Penn Forestry Company, Inc. conservation easement, which is a priority conservation area for many citizens and conservation groups of Adams County. The Service appreciates all comments received.

9.0 References

The Nature Conservancy. 1996. A Natural Areas Inventory of Adams County, Pennsylvania. Middletown, PA.

The Nature Conservancy. 2002. A Natural Areas Inventory of Adams County, Pennsylvania. Middletown, PA.