

**Final
Wildlife Habitat Restoration Plan for the AT&SF Tie-
Treater Superfund Site, New Mexico**

February 2007

Prepared by:

**U.S. Fish and Wildlife Service
Ecological Services Regional Office
500 Gold Avenue, Room 4012
Albuquerque, New Mexico 87102**

**New Mexico Office of Natural Resources Trustee
610 Gold Avenue, SW, Suite 236
Albuquerque, New Mexico 87102**

Final Wildlife Habitat Restoration Plan for the AT&SF Tie-Treater Superfund Site, New Mexico

Issued: February 20, 2007

Points of Contact for Additional Information:

U.S. Fish and Wildlife Service

Southwest Regional Office
Ecological Services
500 Gold Avenue, Room 4012
Albuquerque, NM 87102
Contact: Laila Lienesch
Telephone: (505) 248-6494
Fax: (505) 248-6788
Email: Laila_lienesch@fws.gov

New Mexico Office of Natural Resources Trustee

610 Gold Avenue, SW, Suite 236
Albuquerque, New Mexico 87102
Contact: Elysia Martinez
Telephone: (505) 243-8087
Fax: (505) 243-6644
Email: nmenv-onrtinfo@state.nm.us

1.0 Introduction and Background

In February 2005, the Department of the Interior and The New Mexico Natural Resources Trustee, acting through the New Mexico Office of Natural Resources Trustee, as natural resource trustees (Trustees), received money for a settlement of a natural resource damage claim with the responsible parties for the AT&SF Albuquerque Tie-Treater Superfund Site (Site). The Trustees sought this settlement because contamination at this site had injured trust resources under our authority. The Trustees are required to use the settlement money to compensate for those losses. The Comprehensive Environmental Compensation and Liability Act (CERCLA, commonly known as the federal "Superfund" law), which designates natural resource trustees, requires that before the settlement monies can be used for restoration activities a Restoration Plan must be developed and adopted, and that in doing so, there must be adequate public notice and consideration of all public comment.

The Trustees prepared a Draft Wildlife Habitat Restoration Plan (Draft RP) to address natural resources injured and ecological services lost, injured, or destroyed as a result of releases of hazardous substances from the Site. A Notice of Availability of the Draft RP was published in the Albuquerque Journal,

and in the Valencia County News. A copy of the Draft RP was also available for review during office hours at the Albuquerque Public Library located at 501 Copper Street, NW, Albuquerque, NM. The public comment period was open from January 3 to February 2, 2007, and no dissenting public comments or alternative restoration possibilities were received on the Draft RP. Therefore, there were no substantive changes made to the Draft RP and the Trustees are issuing this Final Restoration Plan (Final RP).

1.1 Natural Resource Damage Settlement

The New Mexico Natural Resources Trustee, acting through the New Mexico Office of Natural Resources Trustee (ONRT) and the U.S. Department of Interior (DOI), acting through the United States Fish and Wildlife Service (Service) as a Federal Natural Resource Trustee and Lead Administrative Trustee for this settlement, (collectively referred to in this RP as “Trustees”) have worked together, in a cooperative process, to determine what is necessary to address natural resource injuries caused by past releases of hazardous substances at the Site.

The State of New Mexico, ONRT, and the DOI entered into a negotiated settlement with the Burlington Northern and Santa Fe Railway Company (BNSF) and the United States Department of the Treasury (on behalf of the U.S. Railroad Administration), in the amount of \$1,100,000 for natural resource damages to the Site. As mandated by the Consent Decree (Civil Action 04-1101), \$38,807.40 was paid to DOI and the State of New Mexico for costs previously incurred to assess the injuries and loss of natural resources, \$661,192.60 was paid to ONRT to plan and implement projects specific to groundwater damages, and \$400,000 was placed by the U.S. Department of Justice into a court registry trust account and designated for use by the Trustees to jointly plan and implement restoration projects designed to restore, replace and/or acquire the equivalent of habitat resources injured, destroyed or lost as a result of the release of hazardous substances at or from the Site.

The Federal Water Pollution Control Act, 33 U.S.C. § 1251, *et seq.* (CWA, commonly known as the Clean Water Act) and CERCLA, 42 U.S.C. § 9601, *et seq.*, authorize States, Indian Tribes, and certain federal agencies that have authority to manage or control natural resources, to act as “trustees” on behalf of the public, to restore, rehabilitate, replace, and/or acquire natural resources equivalent to those injured by hazardous substance releases. The DOI’s Natural Resources Damage Assessment (“NRDA” or “Assessment”) regulations are set forth at 43 Code of Federal Regulations (C.F.R) Part 11. Additionally, CERCLA requires that before the settlement monies can be used for restoration activities, a restoration plan must be developed and adopted, and in doing so, there must be adequate public notice and consideration of all public comments.

2.0 Purpose and Need for Restoration

2.1 The Site – Background

The Site is a former wood treating plant situated at 3300 Second Street SW, Albuquerque, Bernalillo County, New Mexico (see map Appendix A). The Site and the land to the east and north contain light industry. The Rio Grande and the Rio Grande Valley State Park (Park) are located approximately one mile to the west. Land to the west and south of the Site is predominately agricultural.

The Site operated as a wood treating plant that operated from March 1908 to January 1972. Wood products treated included railroad ties, bridge timbers, and fence posts. The facility operations in the early years involved preservation of wood products without the benefits of drying agents. The preservatives at the Site were typically straight creosote, and a creosote and oil mixture. Creosote is a very complex mixture of numerous organic compounds known as polycyclic aromatic hydrocarbons (PAHs). Many of the PAHs are considered carcinogenic substances. From 1914 to 1926, some wood products were treated with zinc chloride. Additionally other compounds were utilized during the plant operations that included drying agents or weed control that contained copper and arsenic respectively. Washdown waters, spills and leakage were disposed of in an unlined impoundment covering approximately 3.4 acres.

In July 1990, approximately 8,250 tons of creosote-contaminated soil and debris were removed. The approximate surface area excavated was 45,000 square feet with the depth of excavation varying from two to five feet. The site was listed on the United States Environmental Protection Agency's (EPA) National Priorities List (NPL) on December 16, 1994. The Site is currently backfilled with clean soil, capped and graded so as to minimize any future infiltration of surface waters. Additional soil and groundwater cleanup actions are being undertaken at the Site as required by the EPA's Record of Decision executed in June 27, 2002.

Injuries to migratory birds attracted to the Site occurred through direct adverse physiological effects of the contaminants, or indirectly via loss of useable habitat and through subsequent remediation.

2.2 Authority and Legal Requirements

This Final RP has been prepared jointly by ONRT and the Service. The ONRT and the Service are designated natural resources trustees 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. The ONRT derives additional authority from the New Mexico Natural Resources Trustee Act, NMSA 1978, §§ 75-7-1 to - 5 (1993). Each Trustee is authorized to act 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 the DOI to conduct a natural resource damage assessment and restoration plan. The AO is the Region 2 Regional Director for the Service, and represents the interests of the DOI, including all affected Bureaus.

The primary goal for the restoration project(s) is to compensate the public for natural resources that were lost. The purpose of the Final RP is to consider alternative projects to restore, replace, and/or acquire the equivalent of habitat-related natural resource injuries and service losses caused by the release of hazardous substances at or from the Site. This document also serves as the Final RP for implementing the selected project(s) as required under NRDA regulations. The project(s) 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.

2.3 Overview of Damage Determination

Damages recovered by the Trustees for natural resource injuries or service losses due to hazardous substances releases must be used to restore, replace or acquire natural resources or services equivalent to those injured or lost. The DOI has adopted regulations under CERCLA and the CWA establishing procedures for assessing natural resource damages. The NRDA regulations are codified at 43 C.F.R. Part 11. These regulations recognize that such “damages” are to be based on the cost to restore injured resources.

As defined in the NRDA regulations, injury is an adverse biological, chemical, or physical effect on natural resources, such as death, decreased population, or lost services (*i.e.*, recreational opportunities, ecosystem functions). Damages are the estimated dollar value of the injured resources. The objective of the NRDA process is to compensate the public through environmental restoration for injuries to natural resources that have been caused by releases of hazardous substances into the environment. Under Section 107(f)(1) of CERCLA, damage settlements can only be used to restore, rehabilitate, replace, or acquire the equivalent of trust resources injured, destroyed, or lost as a result of the release of hazardous substances.

Accordingly, this Final RP has been developed to evaluate and, ultimately, select restoration projects designed to compensate the public for damages that occurred to natural resources at the Site. Implementation of selected restoration projects will occur over a period of time, dependant upon the project type.

The DOI NRDA regulations provide that restoration plans should consider ten factors when evaluating and selecting projects to restore or replace injured natural resources. The factors below are part of the needs that will be used to select and compare projects. (See 43 C.F.R. § 11.82)

1. Technical feasibility
2. The relationship of the expected costs of the project to the expected benefits
3. Cost-effectiveness
4. The results of any 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 per the Consent Decree (Civil Action 04-1101), the selected project must be designed to restore, replace, and/or acquire the equivalent of habitat resources injured, destroyed, or lost as a result of the release of hazardous substances at or from the Site. Based on the recommendations of the Trustees and input from the public, the AO will select one or more of the projects.

3.0 Restoration Alternatives

3.1 Goals of the Restoration Project(s)

The overall objective of the restoration planning process is to identify restoration projects that are appropriate to restore, replace, or acquire natural resources and their services equivalent to natural resources injured or lost as a result of releases of hazardous substances. The restoration actions make the public whole by providing compensation for injuries and losses to natural resources.

The primary goal of the restoration project is to compensate the public for natural injuries that were lost. Since the habitat portion of the settlement addressed in this Final RP resulted from injury to wildlife and their habitat, this restoration plan is focused on wildlife habitat. It is preferred to consider restoration projects in the following priority order:

1. Restoration of in-kind natural resources at the same location, if cleanup or remediation will be sufficient to prevent future contaminant problems for an on-site restoration;
2. Restoration or replacement of in-kind natural resources in the vicinity of the loss;
3. Acquisition and conservation of similar, out-of-kind resources that are otherwise threatened that are in the vicinity of the loss.

Two broad categories of restoration are in-kind and out-of-kind restoration. In-kind means that the work focuses on resources comparable to those that were lost. Out-of-kind means that the work focuses on resources different than those that were lost. Out-of-kind restoration projects are given lower priority than in-kind restoration projects. Out-of-kind projects are usually considered if in-kind projects are not available or feasible. Acquisition entails substituting an injured resource with another resource that provides the same or substantially similar services and is at risk of destruction or development if it is not acquired.

Once a reasonable range of restoration projects is developed, the NRDA regulations require the Trustees to identify a preferred restoration project based on the factors outlined in Section 2.3. In accordance with NRDA regulation, the Trustees developed appropriate restoration alternatives and selected a preferred project(s) to address resource injuries and losses of services. Based on a thorough evaluation of a number of factors, including the criteria listed above, the Trustees are proposing a preferred project(s) for compensatory restoration of injured natural resources and services.

3.2 Specific Projects Considered

The Trustees are obligated to assess a “reasonable number” of possible restoration projects. A project may consist of a single action or a set of actions that may be undertaken. The Trustees evaluated each of the restoration projects based on all relevant considerations including, but not limited to, the factors listed below and in Section 2.3:

- nexus to the injured resource(s);
- regional planning and local needs;
- proximity to the site of injury;
- leveraging of funds and partnerships;
- long-term management/maintenance of restoration site;
- implementation timeframe;
- ecological benefits can be measured for success from the baseline (monitoring);

Approximately \$400,000 has been allocated for habitat-related restoration planning and implementation. Because this sum is not sufficient to cover all the restoration projects that were suggested, the list of projects was narrowed down to those that carry out the intent of the NRDA regulations and are consistent with restoration goals outlined in this plan.

3.3 Evaluation and Comparison of Projects

Restoration of In-Kind Natural Resources at the Same Location:

No projects were identified under this category.

Restoration or Replacement of In-Kind Natural Resources in the Vicinity of the Loss:

3.3.1 Tingley Beach Park Riparian and Wetland Enhancement.

The overriding goal of this project is to preserve, protect and enhance the health of the Rio Grande Bosque through pruning, lopping, clearing, fire prevention and overall general maintenance of the 18-acre area of Tingley Beach Park. Tingley Beach Park is an urban recreational facility of the Albuquerque BioPark near the Rio Grande complete with fishing ponds, café, and gift shop. Constructed wetlands to the west in the cottonwood Bosque are the site for many education programs, including Twilight Bosque Tours in the summer.

The scope of work of the project is pond restoration and improvement of peripheral wetlands for terrestrial and aquatic native and non-native habitat. Further work would include reduction of erosion and sedimentation through bank stabilization efforts and placement of nesting structures for waterfowl.

This project was eliminated from further consideration as it failed one or more of the screening factors established by the Trustees in Sections 2.3 and 3.2. Most notably, the project ranked lower in the net overall ecological benefits gained factor because of its proximity to a large urban population. In addition, this project did not rank near the top of the potential alternatives due to its overall emphasis on public education and recreation, both of which are not consistent with the requirement outlined in the Consent Decree.

3.3.2 Bird and Vegetation Community Relationships in the Middle Rio Grande Bosque.

This proposed project is a monitoring study that will sample avian abundance and species richness relative to vegetation community and structure within the Middle Rio Grande bosque. One of the primary objectives of this project is to collect long-term data comparing current avian abundance and species richness among current vegetation community and structure types. The information is particularly important given the extensive restoration efforts currently underway in the Middle Rio Grande Bosque.

The Trustees acknowledge that this type of information is extremely valuable for monitoring the ecological effects of restoration in the Bosque; however the project was eliminated from further consideration as it specifically is aimed at monitoring rather than habitat improvement or restoration. The project failed to meet the requirement stated in the Consent Decree that projects must restore, replace and/or acquire the equivalent of habitat resources injured, destroyed or lost as a result of the release of hazardous substances at or from the Site and was therefore removed from further consideration.

3.3.3 *City of Albuquerque Open Space Division Bosque Re-vegetation Project.*

This project would enhance habitat in the Rio Grande Valley State Park (Park) by planting native vegetation on approximately 100 acres of the Park in sites that have already undergone non-native plant removal. The Park functions primarily as a wildlife sanctuary and is managed as public open space. The project would establish several types of plant communities in a mosaic or patchwork of habitat. This project would provide food, shelter and nesting opportunities for birds and other wildlife.

The planting plan for this project consists of using lower water use plants that are appropriate for site specific existing conditions. The plan for this project conforms to the *Environmental Enhancement Plan for the Rio Grande Valley State Park* (AOSD, 2005), developed by the City of Albuquerque Open Space Division (AOSD), and is designed to enhance the bird and wildlife habitat as well as provide for a healthy and sustainable Bosque. The actual selection of plants and plant communities to be planted would be determined by site-specific conditions such as existing plant communities and plant densities, soil type, topography, and surface and groundwater hydrology. Of the approximately 100 acres to be re-vegetated, the mosaic of plant community types would include approximately 25 acres of forest, 20 of acres of shrub thicket, 50 acres of open meadow, and 5 acres of moist soil communities.

Project design, implementation, monitoring, and long-term maintenance activities would be implemented by the AOSD. Maintenance would include watering, suppressing non-native growth and unwanted weedy species, and controlling pests. The AOSD is well positioned to help the Trustees achieve their goal of improving habitat because they are the managing agency for the Park and have worked closely with other local, regional, and federal agencies to improve conditions in the Bosque.

This project is technically feasible. Implementation of the project will not result in any additional injuries to fish and wildlife resources, and it will compensate for injuries at the Site. This project will not adversely affect endangered species or sensitive areas. The proposed project will have negligible impact on the human environment as no land use change will occur, and is consistent with relevant federal and state laws and policies. The scope of this project is consistent with the Trustees directive to restore, replace and/or acquire the equivalent of habitat resources injured, destroyed or lost at the Site. The project will result in overall improvements to habitat quality, wildlife values, and long-term health and sustainability of the Rio Grande Bosque.

3.3.4 *Whitfield Wildlife Area Riparian Zone Project.*

This project would provide for riparian restoration for the Whitfield Wildlife Conservation Area (WWCA), Belen, Valencia County, New Mexico. The WWCA is adjacent to and contiguous with the Bosque and Rio Grande and has been put into a permanent conservation easement with the United States Department of Agriculture (USDA) Natural Resources Conservation Services Wetlands Reserve Program for restoration of the area. As part of the floodplain of the Rio Grande, the WWCA offers an opportunity to restore the backwater wetlands of the Rio Grande including permanent palustrine wetlands, seasonal wetlands and associated riparian areas. The area provides a valuable link along the Middle Rio Grande migratory corridor for migratory birds such as the Southwestern Willow Flycatcher, Sandhill Cranes and waterfowl.

The project entails restoring 27 of the 94 acres of the WWCA to riparian habitat. Restoration will include planting local genetic stock of native species of trees and shrubs, invasive species control and replanting as needed for establishment of the riparian area. Plant species have been selected for wildlife habitat and forage. Uplands restoration along with riparian plantings will mitigate any invasive plant encroachment into the riparian areas. The upland areas within the WWCA will be restored with upland shrubs, grasses, and forbes.

The scope of this project is consistent with the Trustees directive to restore, replace and/or acquire the equivalent of habitat resources injured, destroyed or lost at the Site. Restoration activities are not expected to create any potential for causing additional injury to natural resources and will compensate for injuries at the Site. The project is technically feasible. The partnerships involved in the project, including a grant from the New Mexico Soil and Water Conservation Commissioners make this project very cost-effective. The project will not adversely affect endangered species or sensitive areas. In addition, restoration is not expected to have any adverse impact on human health and safety and it is consistent with relevant federal and state laws and policies.

3.3.5 *Santo Domingo Tribe Re-vegetation*

This project proposed to enhance wildlife habitat within the Rio Grande Bosque on Santo Domingo Tribal lands. The project would entail planting native trees and shrubs in approximately 130 acres of the Rio Grande Bosque and creating two wetlands on Santo Domingo Tribal lands.

This project ranked well and the Trustees had considered it a potential project; however, the Tribe withdrew the project from consideration.

Acquisition and conservation of similar, out-of-kind resources that are otherwise threatened that are in the vicinity:

No projects were identified under this category.

4.0 Preferred Project(s)

Based on the evaluation and comparison of projects, the Trustees have proposed to select two of the restoration projects as the preferred projects. The projects selected are 3.3.3 (City of Albuquerque Open Space Division Bosque Re-vegetation Project) and 3.3.4 (Whitfield Wildlife Area Riparian Zone Project). Appendix B shows the locations of these projects. Implementation of the preferred projects will compensate the public for the injuries sustained at the Site. This represents the Trustees current proposal for action to make the environment and public “whole” from the loss of natural resources and services due to the release of hazardous substances at the Site.

5.0 Compliance with the National Environmental Policy Act (NEPA)

Actions undertaken by a federal Trustee to restore natural resources or services under CERCLA and other federal laws are subject to the NEPA, 42 U.S.C. 4321 *et seq.*, and the regulations guiding its implementation at 40 C.F.R. Parts 1500 through 1517. The NEPA and its implementing regulations outline the responsibilities of federal agencies under NEPA, including preparing environmental documentation. In general, federal agencies contemplating implementation of a major federal action must produce an environmental impact statement (EIS) if the action is expected to have significant impacts on the quality of the human environment. When it is uncertain whether a contemplated action is likely to have significant impacts, federal agencies prepare an Environmental Assessment (EA) to evaluate the need for an EIS. If the EA demonstrates that the proposed action will not significantly impact the quality of the human environment, the agency issues a Finding of No Significant Impact (FONSI), which satisfies the requirements of NEPA, and no EIS is required. For a proposed restoration plan, if a FONSI determination is made, a Trustee may then issue a final restoration plan describing the selected restoration action(s).

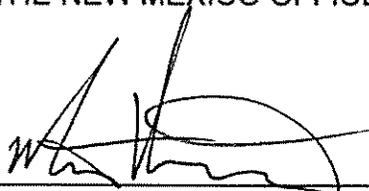
In addition, the *Final Revised Procedures* for the Service for implementing the NEPA, published in the *Federal Register* on January 16, 1997, provide a categorical exclusion for natural resource damage assessment restoration plans prepared when only minor or negligible change in the use of the affected area(s) (the area(s) undergoing restoration) is planned. Categorical exclusions are classes of actions that do not individually or cumulatively have a significant impact on the human environment.

The projects proposed 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, the selected preferred projects are set forth above as a categorical exclusion under NEPA 516 DM 6.5 Section 8.5 B (11) which states “natural resource damage assessment restoration plans, prepared under sections 107,

111, and 122(j) of the Comprehensive Environmental Response Compensation and Liability Act (CERCLA); section 311(f)(4) of the Clean Water Act; and the Oil Pollution Act; when only minor or negligible change in the use of the affected areas is planned" are designated categorical exclusions. The Trustees have prepared an Environmental Action Statement documenting this determination.

6.0 Signatory

FOR THE NEW MEXICO OFFICE OF NATURAL RESOURCES TRUSTEE:

A handwritten signature in black ink, appearing to read 'Martin Heinrich', written over a horizontal line.

MARTIN HEINRICH, State Trustee
New Mexico Office of Natural Resources Trustee
610 Gold Avenue, SW, Suite 236
Albuquerque, New Mexico 87102
(505) 243-8087

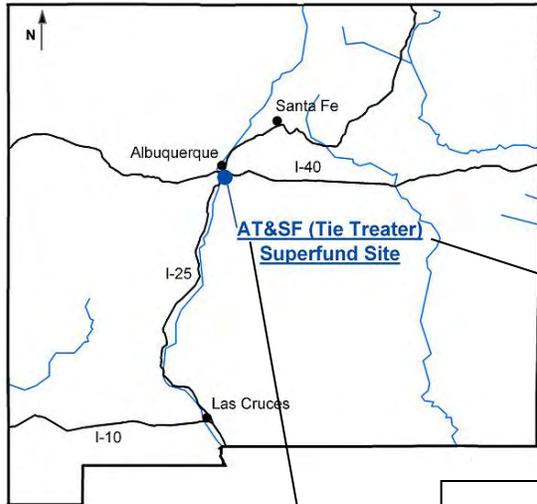
FOR THE U.S. DEPARTMENT OF THE INTERIOR:

A handwritten signature in black ink, appearing to read 'Benjamin Tuggle', written over a horizontal line.

BENJAMIN TUGGLE, Authorized Official
U.S. Department of the Interior
500 Gold Avenue, SW, Room 8100
Albuquerque, New Mexico 87102
(505) 248-6282

Appendix A

Location of AT&SF (Tie Treater) Superfund Site



State Map



Detailed Map

Appendix B

Topographic Map of the Middle Rio Grande

- Location of preferred restoration projects:
 - AOSD Bosque Re-vegetation Project
 - Whitfield Wildlife Area Riparian Zone Project

