Southeast Missouri Lead Mining District Natural Resource Restoration: Proposal for West Fork Black River Bottomland Restoration Project

Missouri Trustee Council

September 2, 2015
I. Introduction

The State of Missouri, the U.S. Department of the Interior, and the U.S. Department of Agriculture, acting on behalf of the public as trustees for natural resources and their associated services, propose to fund several compensatory restoration projects in the Southeast Missouri Lead Mining District. This restoration proposal relates to the natural resource damage assessment and restoration process undertaken by the State of Missouri, the U.S. Department of the Interior, and the U.S. Department of Agriculture (collectively “Trustees”) in the Southeast Missouri Lead Mining District pursuant to the Comprehensive Environmental Response, Compensation and Liability Act (42 U.S.C. §§ 9601-9675) and implementing regulations (43 C.F.R. Part 11). The Trustees recovered monetary damages from the American Smelting and Refining Company1 (ASARCO, LLC), Cyprus Amax Minerals Company, Missouri Lead Smelting Company (for purposes of this proposal, Cyprus Amax and Missouri Lead will collectively be referred to as Freeport McMoRan), Teck American, Inc., and DII Industries, LLC. (for purpose of this proposal, Teck American and DII will collectively be referred to as Magmont Joint Venture) to settle certain legal claims concerning injuries to natural resources and their services. In accordance with the Southeast Missouri Ozarks Regional Restoration Plan (SEMORRP), the Trustees propose to fund bottomland restoration along the West Fork of the Black River.

For purposes of the ASARCO restoration funds, the Missouri Trustee Council is comprised of the State of Missouri, represented by the Missouri Department of Natural Resources and the U.S. Department of the Interior represented by the U.S. Fish and Wildlife Service. For purposes of the Freeport McMoRan and Magmont Joint Venture restoration funds, the Missouri Trustee Council is comprised of the State of Missouri, represented by the Missouri Department of Natural Resources, the U.S. Department of the Interior, represented by the U.S. Fish and Wildlife Service, and the U.S. Department of Agriculture, represented by the U.S. Forest Service. SEMORRP provides a process framework that governs the approach for restoration project identification, evaluation, selection and implementation. This restoration proposal relates the Trustees’ actions to the public in order to solicit their input prior to the selection and implementation of the project.

The proposed restoration projects described in this proposal are compliant with the preferred alternative selected in the SEMORRP. The preferred alternative (SEMORRP, Section 5, Alternative D) is a combination of primary and compensatory restoration. As identified in the SEMORRP, priority is given to primary restoration, whenever feasible.

II. Proposed Restoration Activities

The proposed restoration project is to restore springs, riparian area, and wetlands in the West Fork Black River located on the Mark Twain National Forest (MTNF) as a means to restore and rehabilitate natural resources and their services lost as a result of the releases of hazardous substances from the activities of the above mentioned companies in the Viburnum Trend.

More specifically, the proposed project has two components: (1) work towards the restoration of the hydrology of the West Fork Black River bottomland area through nuanced re-contouring and

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1 The U.S. Department of Agriculture was not a party to the ASARCO claim and settlement.
re-vegetating; and (2) to restore springs within the area to a natural flow and restore wetlands. Restoring the hydrology of this area will help to increase the diversity of plants, insects, birds, and mammals. In the past, springs and wetlands were dammed and ditched to dry out the area to make it suitable for farming. Restoring a more natural flow of these springs will help support bottomland hardwoods, ephemeral wetlands, emergent wetlands, wet-meadows, and forested wetlands. These wetlands would provide habitat for several species of plants and animals including federally endangered Hine’s emerald dragonfly, gray bat, Indiana bat, and threatened northern long-eared bat. This project will improve the aquatic community structure to provide high-quality habitat for aquatic-dependent biota. In addition, restoration of the terrestrial habitat in this project area will support a wide range of natural resources, including migratory birds and other animals.

Table 1. Some of the sensitive species in the vicinity of the project area (Habitat is available or will become available after restoration)

<table>
<thead>
<tr>
<th>Federally Listed Species</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Common name</strong></td>
</tr>
<tr>
<td>Indiana bat</td>
</tr>
<tr>
<td>Gray bat</td>
</tr>
<tr>
<td>Northern long-eared bat</td>
</tr>
<tr>
<td>Hine’s emerald dragonfly</td>
</tr>
</tbody>
</table>

Region 9 – Regional Forester Sensitive Species (RFSS)

<table>
<thead>
<tr>
<th><strong>Species</strong></th>
<th><strong>Common name</strong></th>
<th><strong>Scientific name</strong></th>
<th><strong>Status</strong></th>
<th><strong>Habitat</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cerulean warbler</td>
<td>Setophaga cerulea</td>
<td>RFSS</td>
<td>Riparian areas</td>
<td></td>
</tr>
<tr>
<td>Butternut</td>
<td><em>Juglans cinerea</em></td>
<td>RFSS</td>
<td>Riparian</td>
<td></td>
</tr>
<tr>
<td>A heptogeniid mayfly</td>
<td><em>Stenonema bednariki</em></td>
<td>RFSS</td>
<td>Creeks and rivers</td>
<td></td>
</tr>
</tbody>
</table>

Missouri Species of Conservation Concern

<table>
<thead>
<tr>
<th><strong>Species</strong></th>
<th><strong>Common name</strong></th>
<th><strong>Common name</strong></th>
<th><strong>Status</strong></th>
<th><strong>Habitat</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Four-toed salamander</td>
<td><em>Hemidactylum scutatum</em></td>
<td>Over</td>
<td>S-4 uncommon but not rare</td>
<td>Ponds, creeks</td>
</tr>
<tr>
<td>Wood frog</td>
<td><em>Lithobates sylvaticus</em></td>
<td>S-3 vulnerable</td>
<td>Ponds, creeks</td>
<td></td>
</tr>
<tr>
<td>Ozark emerald dragonfly</td>
<td><em>Somatochlora ozarkensis</em></td>
<td>SU status undetermined</td>
<td>Creeks</td>
<td></td>
</tr>
</tbody>
</table>

A. Project Area
The project area is located in Reynolds County (Location T32NR2W, Section 2) and encompasses approximately 30 acres of habitat. (See maps) The Project Area is adjoined by Forest Service managed lands on three sides, is located in the Current River Hills ecoregion, and falls within a National Audubon Society Important Bird Area (IBA) and the Current River Hills Conservation Opportunity Area. The Project Area is within the Viburnum Trend; it is less than one mile from the West Fork Mine and is upstream of gravel mining and the stream channel by-pass at West Fork Mine. It is also downstream of the Brushy Creek Mine tailing pond.
Downstream there is gravel mining in the river adjacent to the property and the West Fork Mine. Upstream, Bill’s Creek enters the river.

B. Maintenance Requirements and Project Timeline

The restoration of springs and wetlands is anticipated to be completed in one year. Planting of bottomland hardwoods would occur after the ground disturbing work of re-contouring is done. Non-native invasive species treatments would be performed once per year for five years. Monitoring would determine needs for maintenance on vernal pools and restored springs. Planted trees would be monitored for survival and any need for re-planting. If restoration goals are not being achieved, such as drainage patterns not behaving as expected, the Forest Service may return to the project site to remedy the issue.

C. Project Management

The U.S. Forest Service Mark Twain National Forest will implement this project. The Forest Service has completed National Environmental Policy Act (NEPA) analysis, Endangered Species Act Section 7 consultation, and Historic Preservation Act compliance and will seek a storm water permit from the State of Missouri. The NEPA document can be found at http://www.fs.usda.gov/project/?project=30149

D. Proposed Budget

Proposed budget for this project is $59,100.

U.S. Forest Service has and will provide matching funding for this project in the form of employee salaries for surveys, implementation, contract administration, and project oversight. This is consistent with the SEMORRP criteria of leveraging restoration funds with other funding or projects to provide additional benefit to the environment.

E. Project Partners

The Forest’s shared Watershed Restoration Specialist position with The Nature Conservancy (soon to be hired) will provide technical assistance with the project implementation and monitoring.
III. Public Participation

A. Public Review and Comment Period

The public is invited to review and comment on the proposed projects until October 5, 2015. A public meeting will be held to describe the proposed restoration project as described below.

Comments can be submitted electronically (preferred) to:

Ms. Becky Bryan
Remediation Coordinator
Mark Twain National Forest
401 Fairgrounds Road
Rolla, MO 65401
573-341-7436
Email: blbryan@fs.fed.us

B. Public Meeting, Presentation

A public meeting to solicit comments and answer questions about this restoration proposal will be held on September 2, 2015 at the Visitor Center in Johnson’s Shut-Ins State Park at 6 pm.
W. Fork Bottomland Restoration Project
Salem RD, MTNF
T32NR2W Section 2
Bunker, Greeley, Corridon Quads
Reynolds County- 30 acres

Legend
- wfork_project_area
- ALP BasicOwnership
- NON FS
- OWNERCLASSIFICATION
- USDA FOREST SERVICE

The USDA Forest Service makes no warranty, expressed or implied regarding the data displayed on this map, and reserves the right to correct update, modify or replace this information without notification.

sbradley, 4/21/2015