



MEMORANDUM

TO: Members of the Trustee Restoration Council:
Tracy Stone-Manning, Chief of Staff, Governor's Office
Bill Rossbach, Chair, UCFRB Advisory Council
Elizabeth Erickson, BNRC Advisory Council
Tim Fox, Attorney General
John Tubbs, Director, DNRC
Tom Livers, Director, DEQ
Jeff Hagener, Director, FWP

FROM: Doug Martin, NRDP

DATE: May 4, 2015

SUBJECT: Trustee Restoration Council Meeting on May 13, 2015

The Trustee Restoration Council (TRC) will meet on Wednesday, May 13, 2015 from 2:00 to 4:00 p.m. in Room 137 of the Capitol. Attached are the meeting agenda and backup materials. All of these materials are also available on the NRDP website at <http://doj.mt.gov/lands/advisorycouncil.asp#trc>. Following is a description of the agenda items.

Program Updates

The NRDP has filled two vacant Environmental Scientist positions since the last TRC meeting. Jim Ford is working on the Butte Area One restoration plan as well as assisting on implementation of the UCFRB Aquatic and Terrestrial Resources Restoration Plans. Jim was working in the private sector and brings groundwater and construction management expertise to the program. Beau Downing started in March 2015 and is working on implementing projects in the priority watersheds associated with the UCFRB Aquatic and Terrestrial Resources Restoration Plans. Beau had worked with FWP for 4 years and has a geomorphology background.

Proposed Update to UCFRB Aquatic and Terrestrial Resources Restoration Plans – Action Item

The TRC will consider and decide on its recommendation for the Draft 2015 Update to the UCFRB Aquatic and Terrestrial Resources Restoration Plans (Draft 2015 Update) to be subject of a 30-day public comment period. The draft update and revisions to the 2012 UCFRB Aquatic and Terrestrial Resources Restoration Plans were made in part from a public solicitation of conceptual restoration projects and revisions. NRDP staff proposes several revisions to the 2012 UCFRB Aquatic and Terrestrial Resources Restoration Plans that should assist with the implementation of the plans. Four conceptual restoration projects were submitted and six comments were received during the solicitation period. A summary of the Draft 2015 Update

will be provided at the meeting. Copies of the NRDP's draft response to comments document and the Draft 2015 Update are attached.

Butte Area One Restoration Plan Small Projects – Action Item

At your June 26, 2014 meeting you recommended to the Governor, and the Governor approved, an amendment brought forward by the Butte Natural Resource Damage Restoration Council (BNRC) to the December 2012 Final Butte Area One Restoration Plan changing the funding process for small projects of \$100,000 or less. The amendment broadened the type of projects eligible for funding consideration under the small projects process, streamlined the funding consideration process, and offered more details on this process.

The TRC will consider 10 small projects of \$100,000 or less. These projects are summarized in the attached criteria evaluation tables prepared by the NRDP. At the meeting Pat Cunneen, NRDP, will summarize each project and provide the staffs funding recommendation. Elizabeth Erickson will next provide the BNRCs funding recommendation and input. Following the consideration of public comment, the TRC will vote on its funding recommendation to the Governor for each of the 10 projects.

Trustee Restoration Council Meeting
Wednesday, May 13, 2015
2:00 to 4:00 PM
Room 137 of the Capitol

AGENDA

- 2:00 – 2:10 Introductions and Meeting Overview – Tracy Stone-Manning, TRC Chair
- 2:10 – 2:45 2015 Update to the 2012 UCFRB Aquatic and Terrestrial Restoration Plans – Action
- Summary of Draft 2015 Update – Doug Martin, NRDP
 - UCFRB Advisory Council Input – Bill Rossbach, Chair
 - Public Comment
 - TRC Discussion, Input, and Action on Recommendation for Public Comment Period – facilitated by, Tracy Stone-Manning TRC Chair
- 2:45 – 3:50 Butte Area One Restoration Plan, Small Project Proposals – Pat Cunneen, NRDP
- Summary of 10 Small Projects and Funding Recommendations – Pat Cunneen, NRDP
 - Butte Natural Resource Damage Restoration Council (BNRC) input – Elizabeth Erickson, Chair
 - Input from Project Sponsor
 - Public Input
 - TRC Discussion, Input, and Action on Recommendation to Governor – facilitated by Tracy Stone-Manning
- (Note: Separately, each of the 10 projects will be summarized, subject to public input, and have TRC action taken.)
- 3:50 – 4:00 Additional Public Comments/Adjourn

Note: All meeting materials are posted on the NRDP website at: <https://doj.mt.gov/lands/advisory-councils/>

**Draft Response to Project Abstracts
and Public Comments on the 2015
Update to the UCFRB Aquatic and
Terrestrial Resources Restoration
Plans**

**Includes Draft Update to the UCFRB Aquatic and
Terrestrial Resources Restoration Plans, 2012**

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April 13, 2015

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Section I. Introduction

On February 23, 2015, the Natural Resource Damage Program (NRDP) released the 2015 Update, Solicitation of New Restoration Action Concepts and Potential Revisions for the Final Upper Clark Fork River Basin (UCFRB) Aquatic and Terrestrial Resources Restoration Plans (hereafter referred to collectively as Restoration Plans) for public solicitation of additional conceptual restoration proposals specific to aquatic and terrestrial resource priority areas and revisions to the Restoration Plans. The NRDP sent notices of this opportunity to 427 individual/entities on its mailing lists, issued a press release, and placed display ads in four basin-area newspapers. The NRDP also summarized this public solicitation for project abstracts/comment process at the January 21, 2015 meeting of the UCFRB Remediation and Restoration Advisory Council (Advisory Council).

The NRDP received four conceptual restoration proposals and three letters proposing updates to the Restoration Plans during the public solicitation/comment period. See Appendix 1 for a list of conceptual restoration proposals/commenters, identified by a specific number that serves as a reference to the comment throughout this document. Appendix 1 also provides the conceptual restoration proposals/comment letters, which are also available on the NRDP website at: <https://doj.mt.gov/lands/ucfrb-restoration-plans/>.

This document further summarizes the conceptual restoration proposals and comments received and provides the State's responses. The State's responses discuss which conceptual restoration proposals and revisions to the Restoration Plans are incorporated into the draft update and why certain conceptual restoration proposals or suggested changes are not incorporated. Section IV provides the State's recommended update to the Restoration Plans.

The State's draft 2015 Update to the Restoration Plans will be presented at the April 22, 2015 meeting of the Advisory Council and a meeting of the Trustee Restoration Council (May 13, 2015). Both councils will consider the staff's proposed draft 2015 Update to the Restoration Plans and consider the staff's recommendation to request public comment on this draft 2015 Update to the Restoration Plans during a 30-day public comment period. Following consideration of public comment and the recommendations of these two councils, the Governor will make the final decision on the 2015 Update to the Restoration Plans. The State proposes to begin a second Restoration Plan update and revision process two years following the Governor's decision.

Section II. Conceptual Restoration Proposals Submitted:

1) Frost Creek, Philipsburg, Montana: an urban trout habitat and riparian zone enhancement concept.

This project abstract proposes to accomplish the goals of improving the health of Frost Creek, a tributary to Flint Creek, and provide new educational and recreational opportunities for visitors and residents of Granite County. The objectives of the proposed action are to restore the natural hydrologic features by adding meanders, falls, pools, and correcting streambed incision; restore native riparian plants along the course of the creek in the restoration area; install nest boxes for mountain blue birds; construct an interpretive nature walk along the corridor; and enhance the natural corridor that the creek provides by removing obstacles and refuse wherever possible.

Response: The Restoration Plans address Priority 1 and 2 aquatic priority areas. The UCFRB prioritization document, Prioritization of Areas in the Upper Clark Fork River Basin for Fishery Enhancement (Aquatic Prioritization Plan)(December 2011),¹ provided the basis for the determination of Priority 1 and 2 aquatic priority areas for the Restoration Plans. Frost Creek is not listed as a priority stream in the Aquatic Prioritization Plan. This is reflected in Section 3.2.2.7 of the Restoration Plan, Flint Creek Watershed, which identifies Flint Creek and Boulder Creek as the priority tributaries with proposed restoration actions.

The Aquatic Prioritization Plan was subject to substantial public consideration over an 18 month period prior to being finalized in 2011. The Aquatic Prioritization Plan will be periodically revised as new information becomes available, with significant changes being subject to public comment. The State will take into account any changes due to any later updates of the Aquatic Prioritization Plan.

Because Frost Creek is not a prioritized stream, the State has not included this Frost Creek project in the 2015 Update of the Restoration Plans.

2) Zeke's Meadow, Granite County, Montana

This project abstract proposes to conserve approximately 800 acres of habitat in the headwaters of Rock Creek, known as Zeke's Meadow, namely Moose Meadows Creek and intermittent streams contributing to the Ross Fork of Rock Creek. Moose Creek contains a population of westslope cutthroat trout, and Ross Fork of Rock Creek is designated bull trout critical habitat. This proposal would permanently protect and maintain this terrestrial and aquatic habitat by incorporating the lands into the Beaverhead Deer Lodge National Forest. Approximately 640 acres of this project are located within the Phillipsburg West Landscape Area, with 160 acres of riparian habitat located along Ross Fork and Rock Creek, outside of the Phillipsburg West Landscape Area, although more than 25% of the 160 acre parcel is within Priority 1 riparian area.

¹ Available from the NRDP website at: <http://doj.mt.gov/lands/prioritizing-aquatic-and-terrestrial-resources>.

Response: These lands are within or adjacent to the Phillipsburg West Landscape Area, and meets the criteria to be considered for funding from the Restoration Plans, Terrestrial Resources Plan. The project abstract will be identified and included as part of Section 4.2.4.1, Proposed Actions for Phillipsburg West Landscape. The State will work with project partners to fully evaluate this project. See Section IV of document.

3) Deer Lodge Valley Parks/Trail Master Plan

In this project abstract, Powell County proposes to compose a plan to create linkage between existing recreational opportunities in and around the City of Deer Lodge, along the Clark Fork River, and connect to the trail system at the Grant-Kohrs National Park. This is a planning proposal integral to the Deer Lodge Trestle Park project funded in the Restoration Plans.

Response: This project abstract seeks funding for a recreational project. The Restoration Plans allocated \$6.5 million to recreation projects. This \$6.5 million was allocated to six projects within the UCFRB, including the Deer Lodge Trestle Park project for \$1.4 million. Rather than include this project as a separate recreational project, the State will work with Powell County to integrate this project into Powell County's current Trestle Park project, as there are funds available. The project abstract will be identified in Section 5.2.1, Recreational Enhancements in Injured Areas, under the Deer Lodge Trestle Community Park heading.

4) YT Timber, Anaconda, Montana

This project proposes to acquire from YT Timber two parcels of land that are adjacent to the Garrity Mountain Wildlife Management Area and US Forest Service property, totaling 223 acres. The properties are a bighorn sheep migration corridor between the Blue-eyed Nellie WMA and the Garrity Mountain WMA. Warm Springs Creek and Barker Creek, both Priority 1 streams, run through parts of these properties. Public access would be preserved for fishing, hunting, hiking, and wildlife viewing.

Response: These lands are within the Anaconda Landscape Area and meet the criteria to be considered for funding from the Restoration Plans, Terrestrial Resources Plan. The project abstract will be identified and included as part of Section 4.2.4.7, Anaconda Priority Landscape. The State will work with project partners to fully evaluate this project. See Section IV of document.

Section III. Comment Summary and State Response

Comment 1: Consideration of flow restoration without receiving a DNRC change authorization.

Comments: Two comments indicated a desire for more flexibility to accomplish the desired flow restoration goals listed in Section 3.2.1 of the Restoration Plans. The two commenters suggested a variety of tools be considered to meet these goals. These tools include short-term and long-term water right leases, sources switches, diversion reduction or forbearance agreements, irrigation efficiency projects, split-season leases, minimum flow agreements, single season agreements, or other flow management agreements that enhance flow (Comment Letters #1 and 3).

Response: The State addressed a similar comment in the Final Response to Public Comments on the Draft UCFRB Aquatic and Terrestrial Resources Restoration Plans (December 2012) 2012 Response to Comments:² “One comment urges flexibility in providing up-front investment in unique circumstances of some water right purchases/leases (Comment #107d).”

The State’s 2012 Response to Comments states:

Since the comment is urging flexibility in a hypothetical situation, it is difficult to determine what kind of flexibility would be needed for a potential project or the likelihood it would ever occur at some time in the future. As proposed in the Draft Aquatic Plan, after completion of project development efforts, which include a DNRC change process determination, each flow project has to be approved by the Trustee, following consideration of input from the public, Advisory Council, and Trustee Restoration Council. Based on its negative experience with the up-front funding approach to the Racetrack project, and because the unique circumstances might be considered to exist with any one project, the State does not propose to change this requirement. *As the State gains more experience in the next two years with development of flow projects, it can reconsider this issue as part of its review associated with the planned review of the 2012 Final Restoration Plans two years after their approval by the Governor that is provided for in the 2012 Process Plan.* (Emphasis added.)

Over the past two years, the State has seen firsthand the formidable task of advancing instream flow applications through the DNRC process. The State agrees with the commenters that further tools may assist in realizing instream flow benefits. The State therefore proposes to modify the Restoration Plans, Section 3.2.1, to allow for the use of alternative methods as part of the project development costs to achieve the flow goals of the Restoration Plans. This process would allow the State, in appropriate circumstances, and working with its partners, the ability to directly fund up to \$50,000 per project for short-term agreements, not to exceed two years. Funded projects would serve as a supplement to the DNRC process, assisting the State in defining potential benefits of a long-term acquisition, while also establishing a working relationship with landowners. Appropriate agreements would also help landowners understand what could be

²Available from the NRDP website at: <http://doj.mt.gov/lands/prioritizing-aquatic-and-terrestrial-resources>.

expected if entering into a longer term water deal. Price would be based on the data gathered by the State on similar transactions within the State. The State proposes funding of these short-term agreements directly, without going through the normal flow restoration funding process, since the State would consider these types of agreements part of the due diligence of project development activities, and similar to technical services contracting. The State would report the funding of any of these types of projects during its normal reporting requirements.

Proposed new language is included in Section IV.

Comment 2: Comments specific to leveraging outside funding to maximize opportunities.

Comment: One comment expressed an opinion that contributions from outside partners such as Columbia Basin Water Transaction Program (CBWTP) can complement NRDP's funds to share costs necessary to bring instream flow transactions to fruition. The commenter noted that NRDP has developed a good line of communication with CBWTP; the commenter encouraged NRDP to more fully develop that relationship, and to also explore similar opportunities with other entities such as FWP's Future Fisheries Program. Another comment encouraged the State to continue to develop partnerships with multiple state and federal agencies, local governments, and private entities that share an interest in aquatic habitat and fish passage restoration, stating that the collaboration not only strengthens projects, but can bring other funding that will maximize the impact of the State funds (Comment Letter #3).

Response: The Restoration Plans, Section 6.0, Project Development and Design, recognizes the opportunities to work with project partners to obtain additional matching funds to increase project cost-effectiveness. Several projects implemented by the State and its partners have included matching funds. The State will continue to look for opportunities to obtain matching funds whenever possible.

No revision to the Restoration Plans is necessary.

Comment 3: Comment on developing Group 2 and Group 3 flow projects.

Comments: One comment expressed an opinion that the Restoration Plans constrain flow restoration projects through the rigid priority system that precludes consideration of flow projects outside of Group 1 until all Group 1 projects are completed. The commenter requested a change that would allow the funding of Group 2 and Group 3 projects under some circumstances. The commenter suggested that certain projects and opportunities may arise outside of the Restoration Plans priority scheme that could provide significant flow restoration and leverage outside funding, (Comment Letter #3).

Response: The State acknowledges this comment, but references the Restoration Plans, Section 3.2.1, page 3-13: "The State realizes that under the sequenced, prioritization approach, some projects may not be funded due to timeframe or funding issues. But earlier funding of a lower priority project would inappropriately raise the risk of not having adequate funds available to fund the highest priorities."

The State addressed a similar comment in the 2012 Response to Public Comments on the Restoration Plans:

With respect to the comments suggesting that flow augmentation is equally important on the tributaries as the Clark Fork River mainstem, it should be understood that restoration of the mainstem Clark Fork River and Silver Bow Creek fisheries is the primary aquatic restoration goal and the goals for tributary restoration are aimed at how best to achieve restoration of mainstem fisheries, as further explained in the aquatic goals section of the Draft Plans (section 3.1.1). The prioritization of the flow projects (e.g., Group 1, 2, 3) (section 3.2.1) was done to focus the initial flow augmentation efforts and funding on the highest priority areas, and is based on this overarching goal for the mainstem trout fishery. Consistent with the identification of flow augmentation on the mainstem as the highest priority in the 2011 Aquatic Prioritization Plan, the Group 1 projects entail those that are located on, or have a high likelihood of providing flow to, the dewatered reach of the Clark Fork River between Galen and Deer Lodge.

The State acknowledges that Group 2 projects have the potential to provide positive benefits to the UCFRB; however, the State maintains that the Group 2 projects are not likely to have as high a cost:benefit ratio for instream flow when compared to Group 1 projects, because Group 1 projects have the greatest potential to supply instream flows to the area of the Clark Fork River between Galen and Deer Lodge, thereby giving Group 1 projects the highest priority in the Restoration Plans. Though most of the Group 1 projects have been initiated and are moving through the Restoration Plans' process to determine their viability and possible implementation, most are a year or more from a funding decision. Though there are projects that have either stalled or are otherwise no longer viable (e.g., Silver Lake Project, Clark Fork Meadows Project, and Racetrack Pipeline Project), additional efforts continue with the ongoing projects as well as those projects under the "Above Deer Lodge Project" listing. The State believes these Group 1 projects need to continue through the process before starting Group 2 projects, as the Group 1 projects continue to have the strongest potential to supply instream flows to the area of the Clark Fork River between Galen and Deer Lodge, in order to best achieve restoration of mainstem fisheries.

The State does not recommend funding Group 2 or Group 3 projects at this time. The State has proposed another update and revision to the Restoration Plan in 2017, at which time this comment can be resubmitted and considered.

No revision to the Restoration Plans is necessary.

Comment 4: Consider Incentives for riparian habitat projects on private lands.

Comment: One comment stated that one of the primary impediments to developing riparian protection and management projects on working private lands is the reluctance of landowners to take valuable bottom land out of production. The commenter believed that the Restoration Plan could address this by compensating landowners who are willing to modify their land use in a way that improves riparian and stream habitats on private lands. The variety of these types of compensations could be included in tributary plans and budgets. In addition, the commenter

believed some consideration should be given to integrating terrestrial project funding for projects that also meet the wildlife objectives of the Terrestrial Plan (Comment Letter #3).

Response: The State acknowledges that almost all the work to be implemented associated with the Restoration Plans is located on private lands and that without landowner cooperation, very few projects would be possible. The State believes that restoration projects do provide compensation to landowners in most cases. For example, new irrigation diversions built to allow fish passage decrease landowner maintenance. Streambank stabilization projects decrease sediment to streams and improve stream habitat as well as decrease erosion into fields and pastures. In some cases, there may not be equal compensation, and the Restoration Plans allow the State to compensate landowners accordingly, for example by providing off stream water, assisting with the purchase of irrigation equipment, or purchase of feed in lieu of producing hay or grazing.

The State also acknowledges that the integration of terrestrial and aquatic restoration has high net benefits to the natural resources, as well as to private property owners. The State and its partners are implementing the terrestrial plan's habitat enhancement actions in the priority landscape areas (Section 4.2.2) with an emphasis on work within watersheds that are both priority aquatic and terrestrial areas. Emphasis is also given to work in priority terrestrial areas adjacent to landscapes where restoration activities are being implemented by others, e.g., East Deer Lodge Valley Landscape Restoration Project, led by the USFS. These types of terrestrial projects, when integrated with aquatic projects, will provide the landowner with additional benefits as well as help enhance the natural resources of the entire watershed or landscape, not just one element of the landscape.

No revision to the Restoration Plans is necessary.

Comment 5: Integrate flow restoration with fish passage and habitat projects where possible.

Comment: One comment encouraged the State to work with its partners to integrate flow restoration and other habitat restoration as much as possible. The commenter stated that in certain cases, it could be more beneficial and efficient for the State to fund lower priority flow restoration while high priority habitat restoration is underway (Comment Letter #3).

Response: The State addressed this comment in the 2012 Response to Public Comments on the Restoration Plans:

With respect to the comments suggesting that flow augmentation is equally important on the tributaries as the Clark Fork River mainstem, it should be understood that restoration of the mainstem Clark Fork River and Silver Bow Creek fisheries is the primary aquatic restoration goal and the goals for tributary restoration are aimed at how best to achieve restoration of mainstem fisheries, as further explained in the aquatic goals section of the Draft Plans (section 3.1.1). The prioritization of the flow projects (e.g., Group 1, 2, 3) (section 3.2.1) was done to focus the initial flow augmentation efforts and funding on the highest priority areas, and is based on this overarching goal for the mainstem trout fishery. Consistent with the identification of flow augmentation on the mainstem as the

highest priority in the 2011 Aquatic Prioritization Plan, the Group 1 projects entail those that are located on, or have a high likelihood of providing flow to, the dewatered reach of the Clark Fork River between Galen and Deer Lodge.

The Draft Aquatic Plan also recognizes that tributary restoration is an important part of restoring the Clark Fork River fishery, and that flow is a key part of several of the tributary projects. As such, it specifies that in some watersheds (Mill Creek, Willow Creek, Dempsey Creek, and Lost Creek) instream flow needs must be met prior to funding/implementation of other non-flow restoration actions. For these areas, flow augmentation is the significant limiting factor to the fishery, and unless flow augmentation is obtained first, funding for the development and implementation of non-flow enhancement or protection actions would not have the desired benefits. For the remaining priority watersheds, the State determined that non-flow projects are worth implementing, even though flow augmentation may be delayed or not possible. In this way, funds will be expended for flow augmentation where flow is needed most and the proposed restoration actions will derive the greatest benefits.

The Restoration Plans allow for implementation of watershed restoration actions which may incidentally result in increased flow. For example, a new diversion structure designed to allow for year-round fish passage may also result in additional flow in the stream. A water right change may or may not be necessary with this type of project but results in water savings left instream. These types of projects will be funded by the specific watershed funds.

No revision to the Restoration Plans is necessary.

Comment 6: Consider terrestrial projects that are outside Priority 1 or 2 areas.

Comment: One comment requests that the State consider terrestrial project proposals that meet the criteria of the narrative format that may fall just outside the Priority area depicted on the associated prioritization maps (Comment Letter #2).

Response: This comment is addressed in Section 4.2.1, Terrestrial Landscape Areas, page 4-10, allowing the consideration of projects adjacent to the priority area boundaries to be considered for action.

Landscape area boundaries are simplified due to the groupings of Priority 1 and Priority 2 areas, and are approximate. As a result, landscape areas may include within their boundaries some housing developments, ranch homesteads, irrigated agriculture, or features not eligible or targeted for terrestrial actions. *In addition, some small areas of Priority 1 or Priority 2 habitats may fall outside the landscape area boundaries (such as small patches or stringers of riparian and wetland habitats), but still eligible for action. As the boundaries are approximate, areas adjacent to boundaries may still be included for action based on cost effectiveness and contribution to restoration goals.* (Emphasis added.)

No revision to the Restoration Plans is necessary.

Section IV. Summary of the Recommended Updates to the Restoration Plans

The State proposes the following update to the Final Upper Clark Fork River Basin Aquatic and Terrestrial Resources Restoration Plans, 2012 (Restoration Plans). These revisions include corrections to the Restoration Plans document, changes that the State believes will improve the implementation of restoration actions, and changes resulting from the solicitation of additional conceptual restoration proposals specific to aquatic and terrestrial resource priority areas and revisions to the Restoration Plans.

Original text from the Restoration Plans is provided along with the redline of revisions that are proposed to illustrate each change. Revisions also include the addition of the three project abstracts, as noted in Section II.

Section 3.0 Aquatic Resources Restoration Plan - Revisions:

Consistent with the State's response to Comment 1, Section 3.2.1, under the heading Instream Flow Project Implementation Process on page 3-12, first four paragraphs, would be revised as follows:

Section 3.2.1 Instream Flow Project Implementation Process

Obtaining water for protectable instream flow is technically and legally challenging, and efforts usually take several years to accomplish. In some cases, the full amount of water anticipated for instream flow is not available for purchase or lease, and/or cannot be protected as far downstream as originally anticipated. Valuation of water for instream flow varies greatly based on the ability of water to be delivered where and when needed. Therefore, the following process will be followed for all instream flow projects:

Projects that may supply instream flows to the area of the Clark Fork River between Galen and Deer Lodge receive the highest priority, as they have the highest likelihood of providing water to the most dewatered reach of the river and, thus, supply the best overall benefits to the restoration of the UCFRB. Second in priority are those projects that do not meet the Group 1 criterion but are in either Priority 1 areas or in Priority 2 areas that are also injured areas. Third in priority are flow projects in Priority 2 areas that are outside injured areas.

Only Group 1 projects' development costs will be funded at this time. Development costs include those necessary to sufficiently develop the projects in order to adequately document, through the development steps set forth below: 1) the instream flow amount; 2) the protectable reach of the water body; and 3) that the funding amount sought is less than or equal to the fair market value for instream flow use. This information will be used in seeking a final funding decision by the Governor. No other funding for Group 1 projects will occur in advance of the Governor's project funding decision. In special situations, a project's development costs may include up to an additional \$50,000 in costs for a short-term agreement with a landowner(s), to help inform DNRC's Change of Use Process. A short-term agreement with landowners could be a water right lease, diversion

reduction or forbearance agreement, split-season lease, minimum flow agreement, single season agreement or other flow management agreement. Short-term agreements are limited to funding of up to \$50,000 per project, and may not exceed two years. The cost for any such agreement will be based on the data gathered by the State for similar transactions within the State, must be at or below the fair market value for use as instream flow, and would be applied toward any later transaction. The State will report on project development costs as part of its normal reporting requirements as provided in Section 6.0.

The project development phase will require due diligence, and require that each project successfully go through the DNRC's Change of Use Process for conversion to instream flow, as set forth below...

Section 3.2.2 Aquatic Priority Area Specific Plans - Revisions

Section 3.2.2.2 Summary of Proposed Actions and Funding in Priority Tributary Areas

The sum total of all Aquatic Priority Specific Plans, including contingency, has not changed. However, the Table 6-1 total was not accurately reflected in the text. To correct this error, as well as to accurately reflect the changes to Table 6-1 described below in the Section 6.0 revisions, Section 3.2.2.2 on page 3-22, last paragraph, 2nd sentence would be revised as follows:

The State is allocating 50% of the Aquatic Priority Fund, or approximately \$20.4 million to the development and implementation of restoration actions on the Clark Fork River and Silver Bow Creek mainstems and the twelve watersheds that include the Priority 1 and 2 streams (listed above). The cost to plan and implement the Aquatic Priority Specific Plans ~~mainstem and watershed~~ actions is approximately \$13.1million. The State is allocating ~~20% (or \$2.62.8 million) of the \$20.4 million~~ for contingency for the Aquatic Priority Specific Plans ~~mainstem and watershed~~ actions because of the conceptual nature of these actions as well as the uncertainties associated with these types of actions. This budget also includes \$1.5 million for monitoring and maintenance of these actions, as further explained in Section 3.2.3 on aquatic resource monitoring.

As outlined in Section 6.0 revisions below, "Project Management" is being changed to "Project Administration" to provide the project partners the necessary funds to develop and manage projects. This clarification would also be reflected in Section 3.2.2.2, Summary of Proposed Actions and Funding in Priority Tributary Watersheds, page 3-24, as follows:

Project ~~Management~~ Administration Costs: A 5% project ~~management~~ administrative budget was assigned to eleven of the twelve watersheds, except Lost Creek.

In addition, all the Watershed Tables: pages 3-52, 3-61, 3-68, 3-76, 3-81 would change from "Project Management" to "Project Administration" to address the 5%/\$25,000 limit on project administration costs.

Section 4.0 UCFRB Terrestrial Resources Restoration Plan Revisions:

Ability to Purchase Conservation Easements or Acquire Fee Title:

Section 4.2.2, Terrestrial Actions, page 4-14, makes clear the importance of conservation easements and acquisitions in meeting restoration goals: “The protection of high priority lands through perpetual conservation easements or public acquisitions is the clear dominant component of the terrestrial restoration alternative, with an estimated 75% of all terrestrial restoration funding.” However, some of the Priority Landscape Area Plans limit consideration to projects listed in abstracts or GAP projects, while other Priority Landscape Area Plans allow for broader consideration. This inconsistency was unintentional. The State proposes to revise Section 4.2.2, item 1, page, 4-14, as follows:

1. Protection of high priority lands through perpetual conservation easements or public acquisitions. In portions of the UCFRB, wildlife habitat is threatened by development, primarily residential subdivision, and the conversion of native grasslands to crop production. Perpetual conservation measures can conserve large blocks of high priority habitats and maintain landscape connectivity, provide replacement of resources by offsetting future losses from development. Gaining access for wildlife-related recreational use is also important.

The State may perform project development efforts for Priority Landscape Area Plans projects that the State believes may meet the established criteria. For most proposed easement or acquisition efforts included in this plan, significant project development efforts are still needed in order to accomplish such projects. This includes completion of natural resource inventories, other necessary due diligence, title work, and State appraisals for all potential easement/acquisition parcels. Unless otherwise indicated in this Plan, project development efforts for the proposed easement and acquisition efforts would be funded. However, a subsequent funding decision on project implementation would be subject of public comment, consideration by the Advisory Council and Trustee Restoration Council, and final approval by the Governor, as indicated in Section 6 on Restoration Plan Implementation. The majority of terrestrial actions will fall under this category.

This clarification would also be reflected in the following Priority Landscape Area Plans: Philipsburg West (page 4-20), Lower Flint Creek (page 4-22), Garnet (page 4-24), Avon North (page 4-27), Deer Lodge South (page 4-31), and East Flint (page 4-36).

2015 Conceptual Restoration Projects

Section 4.2.4.2 Philipsburg West Priority Landscape Area

The concept proposals submitted by the public for this area included riparian habitat protection and enhancement along Flint Creek (abstract #8); the development and implementation of conservation easements, or acquisitions, in the John Long Mountains (abstract #49); and the improvement of wildlife winter range through removal of conifers and weed control (abstract

#74), and Zeke's Meadow acquisition proposed by the Rocky Mountain Elk Foundation (2015 abstract). The State's proposed actions cover the concepts suggested in two of these abstracts (abstracts #8 and 49), but with lower costs and allocation of effort than proposed. These concepts fit well with the State's priorities and guidance.

Section 4.2.4.7 Anaconda Priority Landscape Area

Anaconda-Deer Lodge County estimated that \$6.7 million for re-vegetation of smelter impacted lands is needed here (abstract #69). Restoration needs in the area are expected to be covered by 2008 settlement funding for the Smelter Hill Area Uplands injured area, as discussed above. A State identified gap in restoration planning is purchase of 88 acres of private land adjoining the Blue-eyed Nellie WMA (abstract #G12). Acquisition of this parcel, would protect NRDP's investment in the Blue-eyed Nellie WMA by avoiding development of bighorn sheep winter range adjoining an existing WMA, and maintain connectivity through this area in the face of increasing housing development. **The Montana Wild Sheep Foundation propose to acquire 224 acres from YT Timber adjacent to the Garrity Mountain WMA (2015 abstract).**

Section 6.0 Restoration Plan Implementation, Revisions:

Section 6, Table 6-1, Cost Summary of Proposed Actions would be revised as follows:

- "Other Aquatic Projects" changed to "Aquatic Priority Specific Plans" in order to be consistent with Section 3.2.2;
- Aquatic Priority Specific Plans section revised to correct the Lost Creek cost. The only restoration action proposed for Lost Creek is for flow, and \$770,854 was erroneously allocated to Lost Creek in the Watershed section. Instead, Lost Creek should have \$0.00 non-flow funds allocated. The State proposes to move the \$770,854 Lost Creek allocation to the Aquatic Priority Specific Plans contingency. The Aquatic Priority Specific Plans contingency will therefore increase to \$2,816,614;
- "15% Contingency" changed to "Contingency;"
- Aquatic Priority Specific Plans section revised to correct the Racetrack Creek cost. The Racetrack Creek cost of \$770,860 is changed to \$734,960 to be consistent with Table 3-10, page 3-80, for Racetrack Creek. This change is also made to Section 3.2.2.13 text.

A redlined and clean version of Table 6-1 is attached as Appendix 2.

Section 6.0, page 6-1, indicates that "Project Management will be capped at \$25,000 or 5% of the total estimated project development and design costs, whichever is less." The State proposes to change "Project Management" to "Project Administration" to provide the project partners the necessary funds to develop and manage projects, limited to \$25,000 or 5%, whichever is less. Section 6, under the Project Development and Design heading, second bullet, would be revised as follows:

Consistent with past guidance approved by the Trustee Restoration Council, the project ~~management~~ administration activities will be capped at \$25,000 or 5% of the total estimated project development and design costs, whichever is less.

Section 6.0 text under the Restoration Plan Revisions and Updates heading would be revised as follows:

The Aquatic and Terrestrial Restoration Plans will be reviewed and revised two years after the Governor's approval, and two years after approval of the 2015 Update. The frequency of later reviews/revisions ~~after this initial two year review~~ can be addressed in subsequent plans. The revisions to the restoration plans will include a public solicitation of conceptual restoration proposals.

Summary of BAO Criteria Evaluation for 2014 Small Project: Conservatory Consolidated Proposal	
Proposal Summary	Community Preservation Design (project sponsor) proposes to demonstrate how clean storm water can be captured and used to augment the irrigation of an enhanced planting of new trees/shrubs on a reclaimed mine site. Total request of BAO restoration funds amounts to \$80,435.80 with a match of irrigation water and consulting fees adding up \$7,151.80.
Evaluation Summary/Funding Recommendation	Project appears to be feasible and would likely prove successful; however, costs outweigh the benefits. If the project sponsor could present an alternative that would maintain the same benefits, but could reduce cost by about half of the current proposed total, then the benefits would be more commensurate with the costs. NRDP does not recommend funding the project as proposed because of high net costs.
Criteria Evaluation	
1. Technical Feasibility	Uncertain Feasible: It is uncertain whether the technologies proposed to be utilized in the project (whether well-known and accepted or experimental or innovative) can be applied to the project site to achieve their stated objectives. The proposal looks to take advantage of runoff from nearby structures to enhance irrigation of the proposed planting of trees and shrubs. Runoff capture area appears to be smaller than the proposed planting area, so project would seem to, at best, provide approximately double the natural precipitation to the planting area—which on a steep south facing slope might not be enough to sustain the proposed woody species through a period of extended drought.
2. Costs:Benefits	High Net Costs: The project costs significantly exceed the benefits to be gained from the project. Total estimated project cost = \$87,587.60 and the project area is less than ½ acre, so cost per acre is roughly \$175K/acre. Similar tree planting project in the basin have typically cost \$20K to \$40K/acre.
3. Cost-Effectiveness	Not likely cost effective: A suitable alternative exists that will produce similar benefits at significantly lower costs. Establishing switch backs with lumber and installation of soil retention material such as riprap or bentonite liner seems labor intensive.
4. Results of Response Actions	Positive Coordination: Project is a BRES site. Sponsor proposes to coordinate their efforts with EPA/State/BSB. It would augment remedial action.
5. Adverse Environmental Impacts	No Significant Adverse Impacts: This project does not appear to present any significant adverse impacts to the environment. It should be expected that some short term impacts to the work area will occur during the construction phase of the project which would need to be mitigated by the project sponsor.
6. Recovery Period and Potential for Natural Recovery	Reduces the Recovery Period: Proposal potentially could accelerate the recovery period for the project area and add more species diversity to the reclaimed site, however; the effects of the amount of water captured and used to irrigate the planting plot is uncertain. Sponsor references a similar reclaimed site less than one mile to the west where trees have volunteered and would emulate similar conditions at the proposed project location.
7. Human Health and Safety	No Significant Adverse Impacts: The project presents no potential significant adverse impact to human health and safety.
8. Federal, State, and Tribal Policies, Rules, and Laws	Project sponsor would need to coordinate with EPA/DEQ/BSB.
9. Resources of Special Interest	Project should have no adverse impacts. If funded NRDP will consult with the Tribes and DOI concerning the potential to impact natural resources of special interest. If necessary, the grant agreement would require proper consultation with the Tribes and/or DOI in such situations should undiscovered/undocumented resources of special interest be encountered during project construction activities.

Summary of BAO Criteria Evaluation for 2014 Small Project: Restoring Tree Growth	
Proposal Summary	Montana Tech Mining Engineering Department (project sponsor) proposes to construct a greenhouse in the Underground Mine Education Center on the Montana Tech campus and grow 4,000 seedling trees per year for three years, with the intention of having them planted in the Butte Priority Soils Operable Unit to help restore native vegetation and improve the water quality of Silver Bow Creek. Total BAO funds requested are \$99,860 with a match of \$50,125 in salaries/benefits proposed.
Evaluation Summary/Funding Recommendation	This project is a research and revegetation project. If evaluated as a “revegetation project” supplying 12,000 seedling trees at a cost of nearly \$100,000 the project would be considered “not cost-effective” as the same number of trees could be purchased at 1/5 the cost from the Department of Natural Resources and Conservation (DNRC) nursery. If evaluated as a research project, coordinated with the Montana Tech Native Plant Program the cost benefit increases although the cost-effectiveness is uncertain. Montana Tech proposes to conduct research to prove/disprove the theory that local plant seed and stock will produce greater survival/better growth than nursery stock. <u>Recommendation:</u> NRDP staff recommends funding the local/nursery research aspect of this project for approximately \$80,000 with term ending June 2021 and for the project to be coordinated with the Montana Tech Native Nursery program with hypotheses quantified in a research paper presented to the BNRC/NRDP.
Criteria Evaluation	
1. Technical Feasibility	<u>Uncertain Feasibility:</u> It is uncertain whether the experimental technologies proposed are likely to achieve their stated objective. Project sponsors propose to replicate a successful endeavor undertaken by the Anaconda Company 40 years ago: an underground greenhouse. The sponsors propose collecting seed from local stock that is likely more tolerant to the local climate/environmental conditions, then raising the seed in mine wastes from local sites in the underground nursery and then transplanting the seedlings into mine wastes. The aspect of the proposal to plant seedlings directly into mine wastes is likely to produce poor results (likely high mortality for trees planted directly in mine waste). NRDP does not propose the mine waste aspects for funding.
2. Costs:Benefits	<u>High Net Costs:</u> Project costs significantly outweigh benefits to be gained. Total estimated project costs are \$149,985 producing an estimated 4,000 seedling trees per year for three years. The same number of seedling trees from the DNRC nursery in Missoula would cost (from DNRC website: \$0.94 to \$1.55 each) for less than \$20,000.
3. Cost-Effectiveness	<u>Not Likely Cost-Effective:</u> A substitute alternative exists that will produce similar benefits at significantly lower costs. This project offers no integration with the existing Montana Tech Native Plant Diversity program, which has already been funded with BAO restoration monies, yet it would likely achieve very similar goals.
4. Results of Response Actions	<u>Inconsistent but Potentially Beneficial:</u> The project will not interfere or duplicate the results of any Superfund response actions. The project could augment response action if results are positive. This project would overlap with the BSB Bow Tree Planting project and the Montana Tech Native Plant project, but it would likely augment those actions. The project sponsor would need to coordinate with EPA/DEQ/BSB.

Summary of BAO Criteria Evaluation for 2014 Small Project: Restoring Tree Growth	
5. Adverse Environmental Impacts	<u>No Significant Adverse Impacts</u> : This project appears to present no significant adverse impacts to the environment.
6. Recovery Period and Potential for Natural Recovery	<u>May Reduce the Recovery Period</u> : If successful, the proposal could accelerate the recovery period and add a more species diversity to the Butte Hill.
7. Human Health and Safety	<u>No Significant Adverse Impacts</u> : the project presents no significant adverse impact to human health and safety.
8. Federal, State, and Tribal Policies, Rules, and Laws	Project location is a BRES site: project sponsor would have to communicate and coordinate with EPA/DEQ/BSB.
9. Resources of Special Interest	Project should have no adverse impacts. If funded NRDP will consult with the Tribes and DOI concerning the potential to impact natural resources of special interest. If necessary, the grant agreement would require proper consultation with the Tribes and/or DOI in such situations should undiscovered/undocumented resources of special interest be encountered during project construction activities.

Summary of BAO Criteria Evaluation for 2014 Small Project: Lexington Ave. Wetland Project Development	
Proposal Summary	Rural Community Solutions (project sponsor) proposes a planning proposal to assess the potential for turning the Lexington Avenue wetland into a bird sanctuary/viewing area, and develop a conceptual plan for a 2015 small project request. Total BAO funds requested are \$9,100 with an undetermined match of pro bono services.
Evaluation Summary/Funding Recommendation	<u>Recommendation</u> : Feasible plan to measure the value of developing this conceptual project into a project that can be implemented in the field. Staff recommends funding for \$9,100.
Criteria Evaluation	
1. Technical Feasibility	<u>Reasonably Feasible</u> : The project employs well-known and accepted methods. Sponsor's approach to sequentially address the issues in a two phased evaluation process to determine if the potential for turning this neglected site into a valued recreational area appears reasonable. The personnel proposed to work on the project are experienced in planning, organizing, and raising funds for these types of projects.
2. Costs:Benefits	<u>Net Benefits</u> : Project benefits outweigh costs associated with the project, especially when other matching funds for the potential restoration project are identified during this project development phase.
3. Cost-Effectiveness	<u>Cost-Effective</u> : The phased approach to the proposal would end project development work if any issues are encountered during the development process. The first phase will identify property owners and assess their willingness to participate, determine any existing environmental issues, and identify any long term O & M issues. The second phase will develop a working group and funding proposals if issues in the first phase issues can be adequately addressed.
4. Results of Response Actions	<u>Positive Coordination</u> : Project sponsors have recognized the potential for environmental issues at the site and will attempt to identify all the issues during this planning phase, and coordinate with EPA/DEQ/BSB.
5. Adverse Environmental Impacts	<u>No Significant Adverse Impacts</u> : This project appears to be primarily an administrative exercise, with no actual field work planned, so no actual environmental impacts should be realized.
6. Recovery Period and Potential for Natural Recovery	<u>No Effect on the Recovery Period</u> : No actual field work is planned under this proposal; rather it is just an assessment of the potential for the site to become the target of a restoration action.
7. Human Health and Safety	<u>No Adverse Impacts</u> : This administrative exercise should pose little/no potential significant adverse impact to human health and safety.
8. Federal, State, and Tribal Policies, Rules, and Laws	Project will consider/identify the potential rules/laws/policies that would be involved if an actual restoration action were to be implemented at the proposed site.
9. Resources of Special Interest	Project should have no adverse impacts. If funded NRDP will consult with the Tribes and DOI concerning the potential to impact natural resources of special interest. If necessary, the grant agreement would require proper consultation with the Tribes and/or DOI in such situations should undiscovered/undocumented resources of special interest be encountered during project construction activities.

Summary of BAO Criteria Evaluation for 2014 Small Project: Vegetative Restoration at Mandan Park	
Proposal Summary	Landscapes of Montana (project sponsor) propose a vegetation enhancement project located at Mandan Park, BRES Site #84 on North Wyoming Street. Project sponsor proposes to plant aspen and native flowering plants to further improve erosion control at the site. Total BAO funds requested are \$4,420 with an unverified match of topsoil/water valued at \$2,144 proposed, for a total project cost of \$6,564.
Evaluation Summary/Funding Recommendation	<u>Recommendation</u> : This is a feasible, cost-effective project with net benefits. NRDP recommends funding for \$4,420, if project sponsor receives the match of topsoil/water (\$2,144).
Criteria Evaluation	
1. Technical Feasibility	<u>Reasonably Feasible</u> : Project sponsor has undertaken a similar project in a nearby BRES site (the Cellar Dirt Dump Restoration Project), and it appears to be a successful vegetation enhancement project thus far.
2. Costs:Benefits	<u>Net Costs/Net Benefits</u> : Based on similar projects completed by sponsor the project benefits outweigh/exceed costs associated with the project, especially if other matching funds of soil and irrigation water are realized.
3. Cost-Effectiveness	<u>Cost-Effective</u> : Sponsor's request is for a small amount of restoration funds. Sponsor has a proven track record of appropriate application of BAO restoration funds.
4. Results of Response Actions	<u>Positive Coordination</u> : Project is anticipated to augment the Superfund action.
5. Adverse Environmental Impacts	<u>Short Term Adverse Impacts with Mitigation</u> : During the implementation of this project, it is anticipated that some disturbance to the area will occur, but it is outweighed by the anticipated final result which should improve the erosion resistance of the waste cover.
6. Recovery Period and Potential for Natural Recovery	<u>Reduces the Recovery Period</u> : Project sponsor proposes to plant aspens at the site, which is currently void of woody plants. End product could more closely resemble the pre-injured conditions at the site; however, an undisturbed condition is not well documented to NRDP's knowledge.
7. Human Health and Safety	<u>No Significant Adverse Impacts</u> : During the construction phase of the project, sponsor's workforce will have to observe safe work practices. Upon completion of the project, no further impacts to human health/safety should be expected.
8. Federal, State, and Tribal Policies, Rules, and Laws	Project sponsor will have to obtain private landowners' permission to conduct the work, and all work will have to be coordinated with the landowner/EPA/DEQ/BSB.
9. Resources of Special Interest	Project should have no adverse impacts. If funded NRDP will consult with the Tribes and DOI concerning the potential to impact natural resources of special interest. If necessary, the grant agreement would require proper consultation with the Tribes and/or DOI in such situations should undiscovered/undocumented resources of special interest be encountered during project construction activities.

Summary of BAO Criteria Evaluation for 2014 Small Project: Vegetative Restoration at Clear Grit Dump or Mountain Con-3 Site	
Proposal Summary	Landscapes of Montana (project sponsor) proposes a vegetation enhancement project located at the 2-1/4 acre Clear Grit Dump, BRES Site #81 on North Wyoming Street, or an alternative 2-1/2 acre site at the Mountain Con-3 BRES Site #181. Project sponsor proposes to plant 2,000 aspen and native bushes and flowering plants to further improve erosion control and species diversity at the site. Total BAO funds requested are \$100,000 with no match proposed.
Evaluation Summary/Funding Recommendation	<u>Recommendation</u> : NRDP recommends funding for \$66,500 if project sponsor receives Butte-Silver Bow match of eight seasons of irrigation water (estimated value of \$33,500). NRDP requires a zoning change prior to Clear Grit Dump funding.
Criteria Evaluation	
1. Technical Feasibility	<u>Reasonably Feasible</u> : Project sponsor has undertaken a similar project in a nearby BRES site (the Cellar Dirt Dump Restoration Project), and it appears to be a successful vegetation enhancement project.
2. Costs:Benefits	<u>Net Costs/Net Benefits if Match</u> : Project costs outweigh the benefits to be gained from the projects only if BSB provides irrigation water, project benefits outweigh/exceed costs associated with the project.
3. Cost-Effectiveness	<u>Cost-Effective</u> : Sponsor's request is similar to the Cellar Dirt Dump Restoration Project currently being implemented by the sponsor, who has a record of appropriate application of BAO restoration funds.
4. Results of Response Actions	<u>Positive Coordination</u> : Project is anticipated to augment the Superfund action.
5. Adverse Environmental Impacts	<u>Short Term Adverse Impacts with Mitigation</u> : During the implementation of this project, it is anticipated that some disturbance to the area will occur, but it is outweighed by the anticipated final result which should improve the erosion resistance of the mine waste cover. Trees planted at the Clear Grit Dump could eventually grow tall enough to potentially block the view shed of the Highland Mountains for those residences situated lower on the Cork Town hillside. Trees planted at the alternative site would be much less likely to block the view shed.
6. Recovery Period and Potential for Natural Recovery	<u>Reduces the Recovery Period</u> : Project sponsor proposes to plant aspens at the site, which is currently void of woody plants. End product could more closely resemble the pre-injured conditions at the site; however, an undisturbed condition is not well documented to NRDP's knowledge.
7. Human Health and Safety	<u>No Significant Adverse Impacts</u> : During the construction phase of the project, sponsor's workforce will have to observe safe work practices. Upon completion of the project, no further impacts to human health/safety should be expected.
8. Federal, State, and Tribal Policies, Rules, and Laws	Project sponsor will have to work with BSB Zoning Board to rezone the Clear Grit Dump Site from R-2 to Open Space, or secure some type of protective covenant to protect the investment of public restoration funds. Sponsor will need to coordinate with the EPA/DEQ/BSB.
9. Resources of Special Interest	Project should have no adverse impacts. If funded NRDP will consult with the Tribes and DOI concerning the potential to impact natural resources of special interest. If necessary, the grant agreement would require proper consultation with the Tribes and/or DOI in such situations should undiscovered/undocumented resources of special interest be encountered during project construction activities.

Summary of BAO Criteria Evaluation for 2014 Small Project: Vegetative Restoration North of Berkeley Pit Viewing Stand	
Proposal Summary	Landscapes of Montana (project sponsor) propose a vegetation enhancement project located at the 2-1/2 acre site north of the Berkeley Pit Viewing Stand. The project is proposed on property that is outside the BPSOU boundary and it is not an official BRES site. This property is owned by Montana Resources (MR). Project proposes planting 2,000 aspen and native bushes and flowering plants to further improve erosion control and species diversity at the site. Total BAO funds requested are \$100,000 with a proposed match of 1,457 cubic yards of topsoil (valued at \$23,312) donated by MR.
Evaluation Summary/Funding Recommendation	<u>Recommendation</u> : Project would provide little benefit to the alluvial groundwater in Butte Area One or the surface waters of Silver Bow or Blacktail Creek within BAO. In addition, commitments for addressing revegetation of this area are set forth in a 2004 Greenbelt Memorandum of Agreement between MR and BSB. Butte Area One restoration funds should not be used to correct a portion of the Greenbelt Project that was not sustained by the parties responsible for maintaining the Greenbelt Project. It is the opinion of NRDP that an aspen grove at this location would not likely become self-sustaining, but rather would require perpetual irrigation in order assure tree survival. This proposal appears to be a beautification project that will require perpetual maintenance, and less of a self-sustaining restoration project. Staff does not recommend project for funding.
Criteria Evaluation	
1. Technical Feasibility	<u>Uncertain Feasibility</u> : It is uncertain whether the techniques can be applied to the project site to achieve the stated objectives. Although project sponsor has undertaken a similar project in a nearby BRES site, which appears to be successful thus far, the proposed site was reclaimed by MR as a part of the November 2003 MR Greenbelt MOU between MR and BSB. That agreement called for “small native shrubs/woody species to be planted at a frequency of one plant per 100 square feet” and “supplemental watering for a two-year period.” It appears that only one tree of substantial size has survived. A new planting effort would likely suffer a similar fate as the short southwest-facing slope is not likely to collect/supply adequate precipitation to ensure the long term viability of the trees.
2. Costs:Benefits	<u>Net Costs</u> : Project costs outweigh/exceed benefits associated with the project. Storm water from this site does not report to Silver Bow Creek, but rather runoff from this hillside is routed to MR’s emergency pond.
3. Cost-Effectiveness	<u>Uncertain</u> : There are some unknowns regarding the project; the need for perpetual irrigation likely required assuring long-term success. These costs are not quantified. Insufficient information is available to conclude whether the project is cost-effective.
4. Results of Response Actions	<u>Consistent</u> : The Superfund boundaries are unclear in the area of this project. The project sponsor would need to coordinate with EPA/BSB.
5. Adverse Environmental Impacts	<u>Short Term Adverse Impacts with Mitigation</u> : During the implementation of this project, it is anticipated that some disturbance to the reclaimed area would occur.
6. Recovery Period and	<u>No Effect on Recovery Period</u> : The site has already been reclaimed with an effective grass cover, and it seems

Summary of BAO Criteria Evaluation for 2014 Small Project: Vegetative Restoration North of Berkeley Pit Viewing Stand

Potential for Natural Recovery	unlikely that it would naturally become prime habitat for woody species.
7. Human Health and Safety	<u>No Significant Adverse Impacts</u> : During the construction phase of the project, sponsor's workforce will have to observe safe work practices. AND <u>Potential Long Term Adverse Impacts</u> : Upon completion of the project, this area will likely become deer habitat adjacent to a well-traveled urban thoroughfare—which could result in increased encounters between deer and automobiles.
8. Federal, State, and Tribal Policies, Rules, and Laws	Project sponsor would have to work with MR to assure that the conditions of the mine's operating permit were not compromised. Sponsor would also need to coordinate with the EPA/DEQ/BSB.
9. Resources of Special Interest	Project should have no adverse impacts. If funded NRDP will consult with the Tribes and DOI concerning the potential to impact natural resources of special interest. If necessary, the grant agreement would require proper consultation with the Tribes and/or DOI in such situations should undiscovered/undocumented resources of special interest be encountered during project construction activities.

Summary of BAO Criteria Evaluation for 2014 Small Project: Vegetative Restoration East of Berkeley Pit Viewing Stand	
Proposal Summary	Landscapes of Montana (project sponsor) proposes a vegetation enhancement project located at a half-acre site east of the Berkeley Pit Viewing Stand. The project is proposed on property that is outside the BPSOU boundary and not an official BRES site. The property is owned by the Chamber of Commerce. Project sponsor proposes to plant 800 aspen and native bushes and flowering plants to further improve erosion control and species diversity at the site. Total project cost are estimated at \$42,684 with a request for \$20,720 in BAO small project funds and a match of \$21,928 proposed in short-term irrigation water (\$19,256) and topsoil (\$2,672).
Evaluation Summary/Funding Recommendation	<u>Recommendation</u> : Project would provide little benefit to the alluvial groundwater in Butte Area One or the surface waters of Silver Bow or Blacktail Creek within BAO. In addition, commitments for addressing revegetation of this area are set forth in a 2004 Greenbelt Memorandum of Agreement between MR and BSB. It is the opinion of the NRDP that an aspen grove at this location would not likely become self-sustaining, but rather would require perpetual irrigation in order assure tree survival. This proposal appears to be a beautification project that will require perpetual maintenance, and less of a self-sustaining restoration project. NRDP does not recommend project for funding.
Criteria Evaluation	
1. Technical Feasibility	<u>Uncertain Feasibility</u> : It is uncertain whether the techniques can be applied to the project site to achieve the stated objectives. Although project sponsor has undertaken a similar project in a nearby BRES site, which appears to be successful thus far, the area targeted for this proposal was supposed to be reclaimed, and long-term maintenance was to be provided by the Chamber of Commerce as called for in the November 2003 MR Greenbelt Agreement. It appears that the initial project was either not executed or not maintained. A new planting effort would likely suffer a similar fate as the short southwest-facing slope is not likely to collect/supply adequate precipitation to ensure the long term viability of the trees.
2. Costs:Benefits	<u>Net Costs</u> : Project costs outweigh/exceed benefits associated with the project. Storm water from this site does not report to Silver Bow Creek, but rather runoff from this hillside is routed to Montana Resource's emergency pond.
3. Cost-Effectiveness	<u>Uncertain</u> : There are some unknowns regarding the project; the need for perpetual irrigation likely required to assure long-term success. These costs are not quantified. Insufficient information is available to conclude whether the project is cost-effective.
4. Results of Response Actions	<u>Consistent</u> : The Superfund boundaries are unclear in the area of this project. The project sponsor would need to coordinate with EPA/BSB.
5. Adverse Environmental Impacts	<u>Short Term Adverse Impacts with Mitigation</u> : During the implementation of this project, it is anticipated that some disturbance to the reclaimed area would occur.
6. Recovery Period and Potential for Natural	<u>Reduces the Recovery Period</u> : If left in its current state, this site will likely continue to be habitat for weedy species with slim possibility for natural recovery.

Summary of BAO Criteria Evaluation for 2014 Small Project: Vegetative Restoration East of Berkeley Pit Viewing Stand

Recovery	
7. Human Health and Safety	<u>No Significant Adverse Impacts:</u> During the construction phase of the project, sponsor's workforce will have to observe safe work practices.
8. Federal, State, and Tribal Policies, Rules, and Laws	Project sponsor would have to work with Montana Resources to assure that the conditions of the mine's operating permit were not compromised. Sponsor would also need to coordinate with the EPA/DEQ/BSB.
9. Resources of Special Interest	Project should have no adverse impacts. If funded NRDP will consult with the Tribes and DOI concerning the potential to impact natural resources of special interest. If necessary, the grant agreement would require proper consultation with the Tribes and/or DOI in such situations should undiscovered/undocumented resources of special interest be encountered during project construction activities.

Summary of BAO Criteria Evaluation for 2014 Small Project: Mineralogy/Geochemistry of Slag

Proposal Summary	A research proposal by Montana Tech Department of Geological Engineering to characterize the mineralogy and environmental geochemistry of the Butte Reduction Works slag walls to help determine if the slag walls themselves are a source of contamination to Silver Bow Creek. Total project costs are estimated at \$16,906 with a request for \$13,000 in BAO small project funds and an in-kind salary/benefits match of \$3,906.
Evaluation Summary/Funding Recommendation	<u>Recommendation</u> : Project could provide valuable information concerning the potential for the slag walls to be a potential source of contamination to Silver Bow Creek, and could help agencies make better informed decisions about the long term fate of the slag walls. Staff recommends funding for \$13,000 with an in-kind match of \$3,906. NRDP requires the project sponsor to compile any previously collected information/data, as part of the research project.
Criteria Evaluation	
1. Technical Feasibility	<u>Reasonably Feasible</u> : Project sponsor has experience investigating similar environmental issues and proposes to apply known scientific methods to characterize the mineralogy, chemical composition, and environmental geochemistry of the slag that should provide a high likelihood for success.
2. Costs:Benefits	<u>Commensurate Benefits and Costs</u> : The information to be gained seems equivalent to the proposed costs.
3. Cost-Effectiveness	<u>Cost-Effective</u> : The proposed methods appear to be an economically sound approach. Project sponsor proposes in-kind service, use of Montana Tech graduate student and the Montana Tech laboratory for chemical analyses versus sending the material to an outside laboratory which would likely cost significantly more.
4. Results of Response Actions	<u>Consistent</u> : This proposal would augment any information collected during the investigation of the BPSOU. This new information would be made readily available to all interested parties.
5. Adverse Environmental Impacts	<u>No Adverse Impacts</u> : Implementation of this project presents no known adverse impacts to the environment.
6. Recovery Period and Potential for Natural Recovery	<u>No Effect on Recovery Period</u> : This research project will not change the timeframe for recovery. If the slag walls are found to be contributing to contamination of Silver Bow Creek, recovery time could be reduced through removal or other action.
7. Human Health and Safety	<u>No Adverse Impacts</u> : This project should not have any adverse impacts to human health and safety.
8. Federal, State, and Tribal Policies, Rules, and Laws	Project sponsor would need to coordinate with landowners and historical agencies in order to obtain slag samples. If the slag walls are found to be contributing to contamination to Silver Bow Creek, the historical status of the walls may need to be considered prior to any further actions.
9. Resources of Special Interest	Project should have no adverse impacts. If funded NRDP will consult with the Tribes and DOI concerning the potential to impact natural resources of special interest. If necessary, the grant agreement would require proper consultation with the Tribes and/or DOI in such situations should undiscovered/undocumented resources of special interest be encountered during project construction activities.

Summary of BAO Criteria Evaluation for 2014 Small Project: Moulton Reservoir Restoration/Recreation

Proposal Summary	Butte Silver Bow (BSB) proposes to develop a public fishery and improve public recreational opportunities/amenities at the Moulton Reservoir, the headwaters of the Silver Bow Creek drainage, to replace lost recreational opportunities. BSB proposes to use the BAO small project proposal as one piece of a larger project that will implement maintenance on the dam and reservoir infrastructure. Total project costs are estimated at \$469,231 with a request for \$100,000 in BAO small project funds to cover trail improvements/bridges/picnic tables. BSB proposes a match of \$244,487 and along with a DNRC grant for \$124,744.
Evaluation Summary/Funding Recommendation	<u>Recommendation:</u> This is a feasible and cost-effective project with net benefits due to the location and coordination with the larger project. NRDP recommends funding for \$100,000.
Criteria Evaluation	
1. Technical Feasibility	<u>Reasonably Feasible:</u> Project sponsor proposes using well-known building/construction methods to conduct the work, so it is reasonable to expect that the objectives will be reached. Project sponsor, BSB, has the experience to complete the tasks proposed. Fish, Wildlife and Parks has indicated a willingness to stock Moulton Reservoir with west slope cutthroat trout.
2. Costs:Benefits	<u>Net Benefits:</u> The potential replacement of lost recreational opportunities exceeds the project costs.
3. Cost-Effectiveness	<u>Cost-Effective:</u> The multiple facets of this project, when executed in a collaborative effort, should make for a cost effective project.
4. Results of Response Actions	<u>Consistent:</u> The project will not augment, interfere or duplicate the results of any Superfund response actions.
5. Adverse Environmental Impacts	<u>Short-Term Adverse Impacts with Mitigation:</u> This project presents no known long-term adverse environmental impacts, but proper construction techniques will need to be employed with working in the floodplain in order to mitigate short term impacts.
6. Recovery Period and Potential for Natural Recovery	<u>No Effect on Recovery Period:</u> This recreation-based replacement project should not change the timeframe for recovery of the water resources in Butte Area One.
7. Human Health and Safety	<u>No Adverse Impacts:</u> During the construction phase of the project, sponsor's workforce will have to observe safe work practices. Upon completion of the project, no further impacts to human health/safety should be expected.
8. Federal, State, and Tribal Policies, Rules, and Laws	Project sponsor will be required to obtain any/all permits required to conduct this work.
9. Resources of Special Interest	Project should have no adverse impacts. If funded NRDP will consult with the Tribes and DOI concerning the potential to impact natural resources of special interest. If necessary, the grant agreement would require proper consultation with the Tribes and/or DOI in such situations should undiscovered/undocumented resources of special interest be encountered during project construction activities.

Summary of BAO Criteria Evaluation for 2014 Small Project: Hands on Science Exhibits	
Proposal Summary	A public outreach proposal by the non-profit Science Mine to build six locally designed/constructed interactive science exhibits to promote a better understanding of Butte's water resources related to Butte Area One. Total project costs are estimated at \$83,000 with a request for \$49,000 in BAO small project funds and an in-kind labor match of \$34,000.
Evaluation Summary/Funding Recommendation	<u>Recommendation</u> : As presented by the sponsor, this project should "promote stewardship of Butte's water resources through public hands on science exhibits." NRDP recommends funding for \$49,000.
Criteria Evaluation	
1. Technical Feasibility	<u>Reasonably Feasible</u> : Project sponsor proposes building six custom exhibits that are similar to ones commercially available, and sponsor proposes a plan to refine the exhibits and maximize their effectiveness.
2. Costs:Benefits	<u>Net Benefits</u> : The potential benefits of increased stewardship of the resources outweigh the project costs.
3. Cost-Effectiveness	<u>Cost-Effective</u> : Professionals from CFWEP, Montana Tech, and the Montana Bureau of Mines and Geology will volunteer to design and construct these exhibits, thus making this a very cost effective project.
4. Results of Response Actions	<u>Positive Coordination</u> : This proposal would complement public outreach efforts.
5. Adverse Environmental Impacts	<u>No Adverse Impacts</u> : This project presents no known adverse impacts to the environment.
6. Recovery Period and Potential for Natural Recovery	<u>No Effect on Recovery Period</u> : This project will not change the timeframe for recovery.
7. Human Health and Safety	<u>No Adverse Impacts</u> : This project should not have any adverse impacts to human health and safety.
8. Federal, State, and Tribal Policies, Rules, and Laws	Project focuses on public education and does not appear to be subject to Superfund laws/policies.
9. Resources of Special Interest	No Impact: The project is not likely to adversely impact natural resources of special interest to these entities. If funded NRDP will consult with the Tribes and DOI concerning the potential to impact natural resources of special interest.