

MEMORANDUM

TO: Members of the Public

FROM: BNRC and NRDP

DATE: Oct. 7, 2020

SUBJECT: Proposed 2020 Butte Area One Restoration Plan Amendment

1. Purpose and Background

By this memorandum, the Butte Natural Resource Damage Restoration Council (BNRC) and the Natural Resource Damage Program (NRDP) submit for public comment an amendment (2020 BAO Amendment) to the 2012 Butte Area One Restoration Plan (BAO Plan), as amended by a July 2014 amendment that involved the small projects category of the BAO Plan, the Butte Area One Restoration Plan Amendment – Parrot Tailings Waste Removal, approved in December 2016 (2016 BAO Parrot Amendment), and the 2019 Butte Area One Restoration Plan Amendment, approved September 20, 2019 (2019 BAO Amendment).

This 2020 BAO Plan Amendment revises the allocation of reimbursed funds to the BAO Fund, allocates unspent Small Projects funds, and makes updates and clerical corrections to the BAO Plan and its amendments. It is proposed in view of the BPSOU Consent Decree Scope of Work (Appendix D to the Consent Decree). The BPSOU Consent Decree was entered by the federal court on September 16, 2020.

As background, the BNRC incorporates by reference the discussion in Section 1 of the July 23, 2019, Proposed Butte Area One Restoration Plan Amendment. Following the receipt of Public Comment on the proposed 2019 BAO Plan Amendments, the Trustee responded to those comments on September 17, 2019, and on September 20, 2019 executed the "Trustee's Modifications to Plan Amendments. Based on Public Comment, and Approval of Plan Amendments as Modified." This final Trustee version concurrently amended the *Upper Clark Fork River Basin Aquatic and Terrestrial Resources Restoration Plans* (UCFRB Plans) and the *UCFRB Restoration Fund/Butte Groundwater Restoration Plan* (BSB Groundwater Plan). Again, much of the pertinent background and substance as to those prior actions were set out in those documents, and thus will not be repeated or characterized here. The reader is directed to those publicly available documents for the history and context of this 2020 BAO Amendment.

The BPSOU Consent Decree did two things specifically relevant to the amendments proposed in this memo. First, it specifies with more clarity the remedial work obligation of the Settling Defendants, specifically British Petroleum - Atlantic Richfield (BP-AR). At the time the 2012 BAO Plan was adopted, the scope and substance of those remedial activities were not known, and the 2012 BAO Plan accordingly allocated restoration funds to various categories based on assumptions of what that future remedial work would be. Now that the remedial work is known, the BNRC believes it is appropriate to revisit and, if appropriate, reallocate BAO Restoration Funds to reflect this new information.

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Second, and in specific reference to the issues addressed in this 2020 BAO Amendment, Paragraph 20 of the BPSOU Consent Decree establishes a "BPSOU Account" into which Settling Defendant BP-AR will deposit \$20.5 million to be used for the purposes and under the limitations set forth in that paragraph and elsewhere in the BPSOU Consent Decree. As provided in Paragraph 21 of the BPSOU Consent Decree, if funds are left over after DEQ completes the Blacktail Creek construction work, such funds can be used for other State restoration actions coordinated with the remedy (i.e., restoration in BPSOU) and as support for the creek channel identified in the SOW [Attachment C, Addendum 1 (Further Remedial Elements Scope of Work – End Land Use Additions)]. At the time of the 2019 BAO Amendment, the existence and anticipated use of the BPSOU Account was generally known to the BNRC, but the exact amount and parameters around its use was not. Accordingly, in the 2019 BAO Amendment, the BNRC and the Trustee explained as follows:

It is anticipated that some of the funds transferred to the NRDP Parrot Tailings Removal Fund from the BAO Restoration Fund under this BAO Amendment could be reimbursed from proceeds of a future settlement between the State of Montana and Atlantic Richfield, if such a settlement is finalized through a BPSOU consent decree, and pursuant to that consent decree, the funds are not required for the Montana Department of Environmental Quality to complete the Blacktail Creek and Confluence portions of the BPSOU remedy. The funds would be reimbursed from such a future settlement in the same proportions as the funds are expended. That is, 26% of any future settlement would reimburse the UCFRB Restoration Fund/Butte Groundwater Restoration; 31% from any future settlement would reimburse the BAO Restoration Fund; and 43% of any future settlement would reimburse the UCFRB Restoration Plan Reserves.

In the future, the remaining funds from the BPSOU Account will be allocated to each of the BAO, UCFRB Restoration Fund, and UCFRB – Butte Groundwater funds in accordance with how much each fund loaned money to pay for the Parrot Tailings Waste Removal Project ("Parrot Project"). (The Parrot Project had to borrow money from the BAO Fund and UCFRB Restoration Fund in the 2019 BAO Amendments in order to have cash in hand to conduct the BSB Shops and Phase II waste removal and evapotranspiration cover system construction portions of the Parrot Project.) Repaying the funds used to pay for the Parrot Project meets the requirements of Paragraph 21 that the remaining funds be spent on restoration coordinated with the BPSOU remedy. In his September 20, 2019, decision approving the 2019 BAO Amendment, the Trustee increased the percentage of a potential reimbursement to the BAO Restoration Fund to 35%. That reimbursement percentage, and the amounts to be reimbursed to the UCFRB Restoration Fund and the UCFRB – Butte Groundwater Plan from the BPSOU Account, are not part of this proposed amendment. This amendment specifically proposes how these reimbursed funds would be allocated to the restoration categories within the BAO Plan.

Now that the scope and substance of BP-AR's remediation work is better defined, the BNRC can better assess the areas where restoration work will most effectively integrate with remedy work,

¹ The State retains and reserves all rights and authorities, consistent with state and federal law and all final consent decrees.

or where restoration funds may be needed to accomplish work that remedy will not do. The BNRC wishes to build upon this refined information to assure that the limited amount of natural resource damage dollars available are put to the highest priority uses in Butte Area One.

As specified in greater detail in Section 3 of this Memorandum, the main areas where the BNRC would like to propose changes to the BAO Plan fall into the following categories:

- A. Technical and administrative updates/revisions.
- B. Revisions to the allocation of future Streamside Tailings Operable Unit (SSTOU) Remediation Excess Funds to BAO Restoration Plan categories.
- C. Revision of the allocation of any reimbursements received by the BAO Fund in the future to specific BAO Plan categories, including revisions and clarification of the treatment of any funds already transferred to the NRDP Parrot Fund that are not needed for the Parrot Project.
- D. Elimination of the Small Projects category and allocation of remaining funds to specific projects.

Under the federal Superfund law, natural resource damage (NRD) settlement funds can only be spent to restore, replace, or acquire the equivalent of injured natural resources, and natural resource trustees must complete a restoration plan and consider public input before NRD settlement funds can be spent.² The restoration plan must specify how funds will be spent and include an evaluation of various restoration alternatives according to criteria specified in federal NRD regulations.³ The 2012 Butte Area One Restoration Plan and the 2016 BAO Parrot Amendment meet the above requirements.

2. Review and Approval Processes, and Public Participation

This draft 2020 BAO Amendment was presented by NRDP to the BNRC at a meeting via Teams conference platform on October 1, 2020. The BNRC recommended these amendments be made available for public consideration for a 30-day public comment period. The amendments are available on the NRDP website, https://dojmt.gov/lands/notices-of-public-comment/ and will be sent to NRDP's mailing lists for the BAO Plan. Considering of public input, the BNRC and Trustee Restoration Council will make a recommendation at meetings to be scheduled in mid-November and early December 2020. The Trustee will make the final decision on this 2020 BAO Amendment prior to December 31, 2020.

Public comment on this 2020 BAO Amendment can be submitted in writing during a public comment period scheduled for October 7, 2020 through November 5, 2020. Written comments may be submitted to NRDP at nrdp@mt.gov, or by mail (postmarked on or before November 5,

² 42 U.S.C. §9607 and §9611

³ 43 CFR §11.82

2020) to: NRDP, 1720 9th Avenue, Helena, MT 59620-1425. The subject line must read "Public Comment: BAO Restoration Plan 2020 Amendment".

3. Amendments to the BAO Restoration Plan

A. Technical and Administrative Revisions

NRDP proposes various administrative updates to the 2012 Restoration Plan as shown in Attachment A.

B. Revisions to the Allocation of Future SSTOU Remediation Excess

This proposed revision changes the allocation of any future SSTOU Remediation Excess received.

Original Reimbursement:

The 2019 BAO Amendment specified:

\$2.5 million of [the SSTOU Remediation Excess] transferred funds would be allocated to the BAO Restoration Plan for priority stream restoration and riparian habitat restoration in Upper Silver Bow Creek, Blacktail Creek, Basin Creek, and tributaries. These funds would be used for projects that contribute to the water quality and quantity in Silver Bow Creek and improve trout populations in the reach of Silver Bow Creek within BAO and its tributaries. Actions that would be prioritized would include: improving fish passage, decreasing fish entrainment, improving water quantity, and improving woody vegetation where insufficient riparian habitat currently exists. These restoration actions would be coordinated with waste removal and other restoration activities in the Silver Bow Creek corridor and would be implemented consistent with the BAO Restoration Plan.

Proposed Revised Allocation:

The BNRC and NRDP propose \$500,000 of the \$2.5 million SSTOU Remediation Excess to be transferred to the BAO Stream Restoration Category be allocated to the Upper Silver Bow Creek Corridor Category (Table 1). These funds would be spent per Section 6.0 of the BAO Plan to investigate opportunities to integrate restoration funding with remedial actions implemented by others. In accordance with Section 6.0 of the BAO Plan, the BNRC requests NRDP provide prior consultation with the BNRC for any expenditure from that fund beyond \$50,000. The \$2.0 million remaining within the Stream Restoration Category would be spent per the 2019 BAO Amendment.

C. Revision to the Allocation of Any Future Reimbursements to the BAO Fund

This proposed revision would clarify the reimbursement percentages to specific BAO Plan categories and includes funds transferred to the NRDP Parrot Fund that are not needed for the Parrot Project and future BPSOU Account Consent Decree remainder funds.

Original Reimbursement Allocation:

The 2019 BAO Amendment specified that the \$5.3 million which came from the BAO Fund was "comprised of \$3.0 million from the Stream Restoration category [57%], and \$2.3 million [43%] from the Mine Waste Area Restoration/Revegetation category." Any money repaid to the BAO Fund would "reimburse the Stream Restoration and Mine Cap Improvements/Revegetation categories."

Proposed Revised Allocation:

The BNRC and NRDP propose all reimbursements to the BAO Fund be allocated by the following percentages to these BAO Restoration Plan categories (Table 1):

- ➤ 35% to Upper Silver Bow Creek Corridor to be spent per Section 3.2.1 of the BAO Restoration Plan. Specifically, these funds would be spent on integrated waste removal at Diggings East, North Side Tailings, and Butte Reduction Works to protect Silver Bow Creek.
- > 5% to Waste Area Improvements/Revegetation to be spent per Section 3.2.2 of the BAO Restoration Plan on projects to be determined later. (See Table 2 for existing and proposed allocations.)
- ➤ 40% to Stream Restoration to be spent per the 2019 BAO Amendment discussion of the SSTOU Remediation Excess.
- ➤ 20% to Recreation to be spent per Section 3.2.6 of the BAO Restoration Plan.

Table 1. Reimbursements by Category and Year—2019 and Proposed 2020

	2019 Amendment		Proposed 2020 Amendment	
		SSTOU		SSTOU
		Remediation		Remediation
	Reimbursement	Excess (\$2.5	Allocation	Excess (\$2.5
BAO Categories	(%)	million)	(%)	million)
Upper SBC	0%		35%	\$0.5M
Corridor	070		3370	\$0.5141
Waste Area				
Improvements /	43%		5%	
Revegetation				
Stream	57%	\$2.5M	40%	\$2.0M
Restoration	3/70			
Recreation	0%		20%	
Small Projects	0%		0%	

Table 2. Waste Area Improvement/Revegetation Funding Summary

Ideas	Original Allocation	2019 Amendment	2020 Amendment
Butte Area One DCRP:	\$2,714,000	\$914,000 (1.8M to PP)	\$914,000
soil amendment,			
placement, and seeding			
(100 acres)			
Butte-Silver Bow soil	\$2,080,000	\$1,024,559 (500K to	\$1,024,559
testing and placement,		Parrot Project)	
tree and shrub planting			
Public idea #50,	\$206,000	\$206,000	\$206,000
revegetate Parrot Mine			
area			
Public idea #56,	\$1,000,000	\$1,000,000	\$1,000,000
Montana Tech forb and			
shrub project			
Total	\$6,000,000	\$3,144,559	\$3,144,559 (plus 5%)

D. Small Projects Category Allocation of Remaining Funds

The BNRC and NRDP propose to complete the existing Small Projects currently contracted with NRDP and preserve approved funding, \$100,000 each, for the Moulton Reservoir Recreation Development and Bonanza Dump BMX Bike Park projects. Annual updates to the BNRC on the status of these projects is required. BNRC may propose a recommendation to allocate these funds to another restoration category if funds are not contracted by 2023.

The BNRC and NRDP propose to allocate \$50,000 of unallocated Small Project funds to the Recreation Category to assist with trail planning in and around the BAO area. The Butte Silver Bow Parks and Recreation Department will implement this planning process upon BNRC and NRDP approval of the scope of work and schedule. This funding is to be spent by December 31, 2021, including a presentation of the final planning report findings to the BNRC.

The BNRC and NRDP propose to allocate \$193,305 of unallocated Small Project funds to the Stream Restoration Category to be spent per the 2019 BAO Amendment. (Table 3)

Table 3. Stream Restoration Project Funding Summary

Proposed Funding Component	2019 Amendment	Proposed 2020 Amendment
Upper Silver Bow Creek and tributaries restoration and Riparian habitat improvements	\$3,500,000	\$3,000,000 (plus 40%)
Small Project Allocation		\$193,305
Total	\$3,500,000	\$3,193,305

Table 4 shows the original allocation of BAO restoration funds compared to the results of the 2019 BAO Amendment and the proposed 2020 amendment.

Table 4. Funding Allocation Summary 2012 - 2020

BAO Plan Categories	Original Allocation	2019 Amendment	Proposed 2020 Amendment
Restoration of the Upper	\$10,000,000	\$0	\$500,000 (plus 35%)
Silver Bow Creek			
Corridor			
Mine Waste Area	\$6,000,000	\$3,144,559	\$3,144,559 (plus 5%)
Restoration/Revegetation			
Stream Restoration	\$4,000,000	\$3,500,000	\$3,193,305 (plus 40%)
Municipal Water System	\$10,000,000	\$0	\$0
Improvements			
Storm Water	\$0	\$0	\$0
Recreation	\$1,000,000	\$1,000,000	\$1,050,000 (plus 20%)
Small/Miscellaneous	\$1,000,000	\$443,305	\$200,000
Projects			
Total	\$32,000,000	\$8,087,864	\$8,087,864

2020 BAO Restoration Plan Amendment - Attachment A: Administrative Updates to 2012 Butte Area One Restoration Plan

NRDP proposes the following administrative updates/revisions to the 2012 BAO Restoration Plan which are necessary to make it consistent with its amendments (2016, 2019 and 2020).

Executive Summary (pp. 2, add paragraph at end of section). A summary of the 2016, 2019 and 2020 amendments is necessary. NRDP proposes to insert the following paragraph:

Amendments to this 2012 BAO Plan were recommended by the BNRC and approved by the Governor in 2014, 2016, 2019, and 2020. The 2016 amendment provided for the Parrot Tailings Waste removal (Butte Area One—Restoration Plan Amendment. Parrot Tailings Waste Removal. 2016). Additional funds to pay for the removal of these tailings were allocated in 2019 (Parrot Amendment 2019). A 2020 Amendment to the Butte Area One Restoration Plan is designed to re-allocate remaining funds in restoration categories, direct a \$2.5 million remainder from the SSTOU, and direct the expenditure of potential remainders from the Parrot Project and BPSOU Consent Decree.

Section 1.2.1: Butte Area One Site Background and Injury Overview (pp. 4)

Since the original BAO Restoration Plan was approved in 2012, NRDP has completed additional investigation of the Parrot Tailings and committed restoration funds to remove the tailings.

NRDP proposes to add the following information which details the findings of this additional investigation and how the Parrot Tailings contribute to the injury of Butte's groundwater.

Parrot Tailings Waste Removal Project

In 2015, the Governor, as trustee, determined it was appropriate to implement the Parrot Tailings Waste Removal Project ('Parrot Tailings Project'), which includes substantial mine waste removal and mine waste capping where appropriate. To support the development of the project, NRDP completed a data gap investigation and detailed design for the project. The data gap investigation was completed in 2015, and removal design activities were completed from 2016-2018. The first phase of waste removal was finished in December 2018. The second phase of waste removal and the construction of an evapotranspiration cover system is scheduled for completion in 2022-2023.

A Parrot Tailings Performance Monitoring Program (PMP) was developed and implemented by NRDP in 2017 to establish baseline groundwater conditions adjacent to and downgradient of the Parrot Tailings Project and monitor post-project groundwater conditions over time. The PMP monitoring network consists of 25 new monitoring wells and 52 existing wells that are part of the BPSOU and/or BMFOU groundwater monitoring programs. New wells were located and designed to fill long-existing data gaps and provide additional critical insight into the hydraulic flow system and lithology of the alluvial aquifer—directly adjacent to the existing Subdrain—at the bedrock interface, and at groundwater discharge areas near the confluence of Blacktail and Silver Bow Creeks.

Based on an evaluation of data collected as part of the Parrot PMP, the following conclusions can be drawn:

- The Parrot Tailings are the most significant source of contamination in BAO alluvial groundwater.
- Groundwater contamination plumes emanating from the Parrot Tailings Project Site have migrated downgradient and intersect with and discharge to Blacktail and Silver Bow Creeks.
- The majority (72-76%) of contaminated groundwater leaving the Parrot Tailings Project Site is not being captured by the Subdrain; as a result, contaminated groundwater is partitioning to the aquifer matrix and/or discharging to Blacktail Creek and the Blacktail/Silver Bow Creek confluence area which is the only other discharge point for groundwater. (British Petroleum Atlantic Richfield (BP-AR) reported capture of 94-97% of all contaminated groundwater in the alluvial aquifer with the Subdrain.)
- Lithologic, hydraulic, and geochemical data indicates a groundwater flow path from the Parrot Tailings Project area towards Blacktail Creek, bypassing the Subdrain.

Section 3.2.2: Waste Area Improvements/Revegetation (pp 30, paragraph 2)

NRDP proposes to add the following information directing readers to appropriate amendments.

In the 2019 and 2020 Amendments to the BAO Plan, changes were made to funding for waste area improvements and revegetation. See Section 3 – Amendments to the BAO Restoration Plan in the 2020 BAO Amendments for detail.

Section 3.2.2: Waste Area improvements/Revegetation. (pp 30, Table 1)

NRDP proposes to add the following information directing readers to appropriate amendments.

The 2020 BAO Amendment updates funding recommendations for the Waste Area Improvement and Revegetation category. See Table 1 – Reimbursements by Category and Year, and Table 2 – Waste Area Improvement/Revegetation Funding Summary in the 2020 BAO Amendment for proposed funding allocations.

Section 3.2.3: Stream Restoration. (pp 31, Table 2)

NRDP proposes to add the following information directing readers to appropriate amendments.

The 2020 BAO Amendment updates funding recommendations for Stream Restoration category. See Table 1—Reimbursements by Category and Year, and Table 3 – Stream Restoration Project Funding Summary in the 2020 BAO Amendment.

Section 3.2.4: Municipal Water System Improvements. (pp. 31, paragraph 5)

Replace with the following paragraph to reflect the Basin Creek Water Treatment Plant completion in 2016:

The BNRC recommendation allocated \$10 million to Butte-Silver Bow for the construction of a new Basin Creek Reservoir water treatment plant as proposed by the Butte-Silver Bow Chief Executive. Using these funds as well as approximately \$20 million from the UCFRB Restoration Fund, the plant was successfully constructed and operable in 2016. Water from this new facility at the Basin Creek Reservoir is now the predominant water source for the municipality.

Section 3.2.6: Recreation (pp. 32, paragraph 3)

Delete last sentence, "The funds dedicated to this category should be spent or allocated to specific recreational projects no later than the end of 2016." As of 2020, there are funds remaining and left to be allocated.

Section 3.2.7: Small/Miscellaneous Projects (pp. 32, paragraph 4)

Replace with the following paragraph which indicates 2020 BAO Plan direction:

The BNRC Restoration Recommendation allocated \$1 million to implement future small/miscellaneous projects. The maximum amount of funding for any small project was \$100,000. Beginning Spring 2013, the BNRC requested project ideas from the public which were evaluated by the BNRC and NRDP staff. Consistent with guidance in this 2020 Amendment, \$100,000 of small project funds dedicated to the Moulton Reservoir and \$100,000 dedicated to the BMX Park will remain committed to those projects. Trail system planning in Butte would be allocated \$50,000 to the Recreation category and the remaining approximately \$193,000 would be directed to stream restoration.

Section 3.2.8: BNRC Restoration Recommendation Cost Summary (pp. 33, paragraph 2)

Reference to Table 4 is incorrect. Table 3 should have been referenced instead.

Replace with the following paragraph:

As of December 31, 2011, the approximate balance of the Butte Area One Restoration Fund was \$32,050,000. Table 3 provides a summary of how the available funding should be allocated to projects proposed under the BNRC Restoration Recommendation.