

**MISSOURI-MADISON RIVER FUND RECREATION PROJECT
FY2024 GRANT APPLICATION FORM**

Project Name: BLM Lake Sites Water System Replacements

Reservoir or River Segment: Hauser/Holter County(ies) Lewis and Clark

Site Name (or project location): Devil’s Elbow, Clark’s Bay, White Sandy, Holter Lake, and Log Gulch

Applicant Name: Chris McGrath

Position and Agency: BLM-Supervisory Outdoor Recreation Planner

Telephone: 406-438-0837

Email: cmcgrath@blm.gov

Project Sponsor Name: Chris McGrath

Position and Agency: BLM-Supervisory Outdoor Recreation Planner

Telephone: 406-438-0837

Email: cmcgrath@blm.gov

Project Cost Breakdown and Financial Request:

Complete the financial section below by providing total project cost (to the nearest dollar), contributions by applicant and cooperators, request for NorthWestern Energy match of agency funds (see detailed instruction), and River Fund Grant request. Document in-kind contributions by public agencies for determination of NorthWestern Energy match request. A description of funding sources and in-kind contributions should be included in the Project Description.

| | | |
|--|--|-----------------------------------|
| Total project cost: | <u>\$664,443</u> | |
| Applicant Contributions – cash | <u>\$75,000</u> | |
| Applicant Contributions – value of in-kind: | <u>\$19,000</u> | |
| | <u>((\$10K hydrants,\$9K work month)</u> | |
| Other Contributions – Please list by source: | | |
| | <u>\$</u> | Percentage of Total Project Cost: |
| | <u>\$</u> | |
| Total Applicant and Other Contributions: | <u>\$94,000</u> | <u>14%</u> |
| NorthWestern Energy Match Request: | <u>\$94,000</u> | <u>14%</u> |
| River Fund Grant Request: | <u>\$476,443</u> | <u>72%</u> |
| Proposed Project Implementation Period: | <u>Spring into Summer 2024</u> | |

**MISSOURI-MADISON RIVER FUND RECREATION PROJECT
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1. Has this project been previously submitted for funding consideration by the River Fund Board, either as a separate project or part of another project? _____ Yes X No

Not to this project specifically. However, in 2022, the River Fund awarded funds to replace the wells at Devil's Elbow and Clark's Bay recreation areas which is scheduled to occur in the spring of 2024.

2. **Project Description:** Provide a description of the proposed project. Be sure to include specific project elements that are planned, and any associated cost detail.

- ▶ The Bureau of Land Management Butte Field Office has five water systems that are in various levels of disfunction and operational statuses. The BLM BFO is scheduled to receive \$75,000 in safety funds at the National Operations Center for repairs to these systems in FY24. This proposal is to replace the existing drinking water distribution systems. The existing lines will be abandoned and left in place where it is not easy to remove them. Trenches will be dug in almost the identical footprint as the existing systems. Project includes installing new HDPE pipe installation, the appurtenances required (NSF, PVB'S, Air Valves, etc....), irrigation system components, and water filtration. The goal of this project is to replace all BLM administered Hauser and Holter Lake water systems by the end of 2025. A phased approach would prioritize the systems most in need which would be the Hauser Lake sites.

The BFO has applied for Bipartisan Infrastructure Legislation (BIL) funds, Inflation Reduction Act (IRA) funds and the BLMs own deferred maintenance and capital improvement funds for these projects in addition to this request. The BLM BFO has purchased enough hydrants to replace all of these during this project, at just under \$10,000. One work month at \$9,000 has been estimated for in kind contribution although it will take more time to execute the contract(s) we didn't want to overestimate this contribution. The BLM BFO is willing and able to commit additional funds as needed to get these drinking water systems back in working order.

These systems are at Devil's Elbow, Clark's Bay, White Sandy, Holter Lake, and Log Gulch recreation areas. Three of these systems (Devil's Elbow, Clark's Bay, and White Sandy) were not functioning enough to serve drinking water to the public in 2023, Clark's Bay and Devil's Elbow systems weren't opened in 2022. In addition to the temporarily closed systems there are two water systems (Holter Lake and Log Gulch) that have major breaks which has forced BLM to close several portions of these water systems in 2023. Most if not all the hydrants for these systems are leaking and need replacing. One of the main issues is that when these water lines were constructed with PVC pipe instead of HDPE pipe and they have been poorly maintained in the decades since they were constructed. This has led to the waterlines literally breaking apart at the seams, the joints are no longer holding up, so the staff is chasing broken joints around and having leaks spring up behind them once they get one repaired. Devil's Elbow and Clark's Bay and for a brief period White Sandy had chlorination systems added onto the existing water system. The systems were not built to have chlorination and that chlorination has adversely impacted the lifespan of the systems.

The following is a site-specific breakdown of the issues and the needed repairs.

Devil's Elbow and Clark's Bay: Drill new wells for each site, with the 2022 River Fund grant award funds. If we do not get enough flow or don't have adequate water for whatever reason, we would have to install chlorination again. The new wells were funded by the River Fund in 2022, the chlorination systems would come out of BLM funds in the unlikely scenario that we need to go that route. The waterlines throughout the distribution systems at both sites will be replaced, as will the line between the sites. Hydrants will be replaced throughout the system. Pumphouses would get renovations for the new water supply and distribution system, and the plumbing and components in the pumphouses will be replaced. Irrigation systems will be renovated and many of the snub out hose bib fittings will be replaced with automated irrigation zones, some will remain as hose bib

snub outs though.

Estimated costs: \$217,607.50

White Sandy: In 2012 the BLM BFO drilled a new well at White Sandy. The water from that well is around 400 times the recommended limit for iron, which is a taste preference issue not a safety issue. The old well was closed due to its proximity to a septic tank(s). The BLM has asked DEQ if they could remove/abandon the septic tank and have the host's use one of the two tanks that are outside of the required 100' setback of the well. If BLM does not obtain approval for that plan, BLM would need to drill a new well as it is not possible to filter out that high amount of iron. The water has been very hard on the pipes throughout the system and the orange rusty appearance of the water, and the stained infrastructure doesn't instill confidence in the system holding up any longer, nor does it make anyone want to drink it. This proposal would be to replace the existing drinking water distribution system. The pipes would be replaced with HDPE pipes and would be outfitted with new fittings. The BLM has already purchased the hydrants. The pumphouse would be renovated with improved filtration and proper sized pressure tanks and proper smooth nosed tap. Irrigation system would get an update as well. Large parts of the irrigation would be replaced as it is, other portions would be retained, and other areas would be updated to automated irrigation zones.

Estimated costs: \$125,152.50

Holter Lake: Holter Lake Campground water system has a couple of significant breaks in the lines and the entire drinking water distribution system needs to be replaced. The main issue at this site is that the pipes are falling apart as described above, and that aging process was sped up through the former BLM staff removing the blowout hookups that were originally built with as they thought they could gravity drain the systems, despite the BLM BFO owning an air compressor for this specific purpose. The well at this system is still in good shape and provides clean water so it will not need replacing at all. The water line to the pavilion, the tent area and to the volunteer campground hosts/seasonal staffing hookups has a break under an asphalt parking lot and was therefore closed in 2023. Instead of cutting through the asphalt, the plan is to install new pipes around the asphalt to serve the hydrants in the tent area and near the pavilion and to bring a pipe out of the back of house through the crawlspace to service the campground host connections. The lengthy distribution throughout the campground has sprung numerous leaks throughout the 2023 season and every single hydrant needs replacing as they are currently leaking. The water lines would be replaced with HDPE pipes throughout the site and will receive new fittings as well. Hydrants will be replaced and the pumphouse will be updated. The irrigation system will be renovated and large portions of it will be converted to automated irrigation zones and only a handful of the hose bib snub out setups would remain.

Estimated costs: \$93,582.50

Log Gulch: This water system has several broken pipes within the campground and near the day use parking lot and have rendered about 2/3 of this system as closed to prevent bacteria and other contaminants from entering the system. The main issue at this site is that the pipes are falling apart, and that aging process was sped up through the BLM staff removing the blowout hookups the systems were built with as they thought they could gravity drain the systems, despite the BLM BFO owning an air compressor for this purpose. Some of these broken pipes have unfortunately existed at this site for over a decade (waterline to Little Log). The well at this system is still in good shape and provides clean water so it will not need replacing at all. The distribution system would get the lines replaced and updated with new fittings. The hydrants will be replaced but the BLM has purchased those already. Ideally when the line between the pumphouse and the administrative facility gets replaced it can be moved from a 2' bury to at least a 4' bury so the water line to the house doesn't freeze in the off season which would allow the admin facility to be used longer in the year. The irrigation system would be replaced, primarily with automated irrigation zones but some hose bib snub outs will remain.

Estimated costs: \$209,100.00

Total project estimated cost excluding in kind contributions: \$645,442.50.

The BLM received quotes from several local contractors for the required work to help determine the cost estimates. Installing new HDPE pipe, appurtenances and irrigation components at each of the Chain of Lakes recreation sites. The unit price includes dirt work required to complete the project, HDPE pipe installation, appurtenances required (NSF), irrigation system components, water filtration, and mobilization costs.

For additional information on the site-specific cost estimates please see spreadsheet on page 8.

To see site-specific engineering design drawings please see attachments on pages 9-12.

3. **Project Phasing:** Briefly discuss whether the project could be phased over more than one year or construction season.
 - ▶ We understand that the price tag of this project is larger than most project proposals. This proposal could easily be phased in over several years. BLM could complete anywhere from one to all the water system replacements per year over the next several years. Priority would be in this order; Devil's Elbow/Clark's Bay, White Sandy, Holter Lake and Log Gulch. Preferable phasing would be two stages, first phase would be to implement the Hauser Lake site replacements and phase two would be the Holter Lake sites replacements.
4. **Cultural Resource Management:** Cultural Resource Management (CRM) requirements for any activity related to this Project must be completed and documented to NorthWestern Energy as a condition of awarded River Fund grant funds or NorthWestern Energy matching funds. Grant and matching funds may not be used for any land-disturbing activity, or the modification, renovation, or removal of any buildings or structures until the CRM consultation process has been completed. Agency applicants must submit a copy of the proposed project to a designated Cultural Resource Specialist for their agency. Private parties or non-governmental organizations are encouraged to submit a copy of their proposed project to a CRM consultant they may have employed. Private parties and non-governmental organizations may also contact the NorthWestern Energy representative for further information or assistance. Applications submitted without this section completed will be held without any action until the information has been submitted.

Summarize how you will complete requirements for Cultural Resource Management.

- ▶ BLM Butte Field Office Archeologist will work with Montana SHPO to get concurrences that these proposed projects would not impact any cultural resources. It is not anticipated that we would have any difficulty getting this as the impacts would be in previously disturbed areas, for example most of the systems would be placed in the same trench that the distribution systems are currently in.
5. **Scoring Criteria.** Respond to the following Scoring Criteria. Put answers in the cell after ▶.

5.1 Does the project occur at a 2188 license site?

- ▶ Yes, they all are. Clark's Bay, Devil's Elbow, White Sandy, Holter Lake, and Log Gulch.

5.2 Project is for operation and maintenance of an existing recreation site. Describe if the project will meet operation and maintenance needs. Higher points awarded to projects that are higher priority and are not a recurring expense. Lower points awarded to projects that are low priority and/or have been previously funded. It is unlikely that the timeframe of River Fund would address emergency operation and maintenance needs but could support non-emergency operation and maintenance needs.

- ▶ Yes, this proposed project is to replace existing water systems within existing recreation sites. This will make the systems operational and will reduce the current maintenance nightmare with the decrepit water systems currently in place at these sites.

5.3 Project involves collaboration with other agencies or organizations. Identify project partners other than NorthWestern Energy or River Fund, if any, and describe their participation. Document all funding sources and all in-kind support and services to a project, because all are sources of partnerships and in-kind contributions from public agencies qualify for calculation of NorthWestern Energy matching funds. If there are no project partners, explain why.

- ▶ BLM has worked extensively with Montana DEQ on repairing and ultimately replacing these decaying water systems. BLM has worked with several contractors while determining how to repair and replace these water systems. We started working with both DEQ and the contractors when we were understanding that the systems would be repairable. BLM will continue to work with them moving forward on replacing these systems. While it is not another agency or organization, BLM has also worked with the BLM Montana State Office and the National Operations Center and has requested funds through numerous BLM avenues as possible such as Bipartisan Infrastructure Legislation (BIL), Inflation Reduction Act (IRA), and deferred maintenance as well as capital improvement to help us obtain the funds required to take on this type of project. BLM will apply for all internal funding sources possible, while this is the BLM first attempt at outside funding other sources will be pursued if this is not successful.

5.4 Project provides a benefit to public recreation in the Project Area and addresses specific issues and goals of the Missouri-Madison Comprehensive Recreation Plan (CRP). Identify how the project provides a benefit to public recreation and describe how the project specifically addresses issues and goals in Chapter 2-1 of the CRP.

- ▶ ***Goal: To provide safe and well-managed recreation sites and dispersed use areas that provide enjoyable user experiences across a spectrum of opportunities and seasons.***
The BLMs proposal to replace the dysfunctional water systems would improve visitors' experiences at the developed recreation sites. Most of the camping public rely on drinking water being available on site at campgrounds. Day use visitors are less impacted, but they would also benefit from having a source of safe, clean drinking water available at these sites. The closest available location to fill tanks near Lakeside MT is adjacent/attached to the dump station at the Lakeside Market. It doesn't feel right telling the public that we do not have water available and that they need to go to Lakeside Market and use the hose attached to the dump station to fill their tanks, but that is where we are.

Goal: To maintain or proactively increase public safety for recreationists in the Project Area.
Replacing the dysfunctional drinking water systems would improve public health and safety and reduce the risk of the BLM providing drinking water that makes someone sick and it would allow the BLM to meet drinking water standards as described in the Clean Water Act as well as meeting requirements for MT DEQ to serve drinking water and for OSHA requirement of providing potable water at all locations where people are living or working.

5.5 Project responds to a clearly identified need. Describe and document the need for this project and how the project would address that need. Cite specific sources, as possible, to establish need and support the project. Discuss consequences if the funding request is unsuccessful. For a new construction or acquisition project, identify how post-project, long-term costs (such as site maintenance and management) will be provided.

- ▶ The failing drinking water systems has been the top complaint by a mile at Devil's Elbow, Clark's Bay and White Sandy recreation areas for the past few years. Most of the visitors expect drinking water to be available at these sites. If the BLM is not able to secure funds through this process the BLM will continue to work to procure the proper funding levels to renovate and replace these drinking water systems. BLM would eventually get the funds to complete the project, but it would take multiple more years to get those funds. The BLM is willing and able to chip in additional cash over the next several years to make sure we can get these systems redone and back online for the recreating public to enjoy. The BLM would be willing to spend the required funds each of the next several years to fill the gap and get these systems completed. The BLM Chain of Lakes recreation

program has recently been approved to significantly increase the size of our staff. The increase in staffing will allow the BLM to properly maintain these water systems so that they do not just fall into disrepair in a decade again.

5.6 Project design options have been considered, estimated, and a preferred design selected. Well-designed projects reduce occurrences of budgetary overages, design changes, and additional complications. Discuss the current design phase for this project, demonstrate that the project has been well vetted, and include cost estimates.

- ▶ The BLM Butte Field Office and Western Montana District Engineering staff has spent a significant amount of time and effort discussing, reviewing, planning and considering alternatives and designs to improve the success and decrease the costs for this project. The planning and design work for this has been ongoing for at least the past 18 months.

5.7 Project supports or protects other resources and is consistent with or supports resource plans in the Project Area. Describe how this project will protect resource values (such as public access, water quality, fisheries, wildlife, habitats, and cultural resources) and support other resource and agency plans, including Project 2188 License plans and land use and land management plans in place in the Corridor. Management plans should provide justification for the project.

- ▶ This project would improve public health and safety and would improve water quality related to the drinking water systems but otherwise would not have any impacts on other resources in the areas. This project is consistent with the other resources and the BLM Resource Management Plan.

6. Insert map(s) showing the location of the proposed project, drawings and design work related to the project, and a reasonable number of photos (as available) here.

Cost Estimate Breakdown:

| UNITED STATES DEPARTMENT OF THE INTERIOR | | | | | | |
|---|-------------------------------------|---|-------------|-----------------|-------------------|----------------------|
| BUREAU OF LAND MANAGEMENT | | | | | | |
| CONTRACT ESTIMATE SUMMARY | | | | | | |
| | | | | | | |
| | Contract/Project Name | | | | Estimator | Date |
| | Lake Site Water System Replacements | | | | Sean Clancy | 9/8/2023 |
| | Project Location | | | | Contract Number | |
| | Butte Field Office | | | | | |
| Project Description | | | | | | |
| Installing new HDPE pipe, appurtenances and irrigation components at each of the Chain of Lakes Campgrounds listed below. The unit price includes pipe installation, appurtenances required (NSF), irrigation system components, water filtration, and mobilization costs. Cost estimates include dirt work to replace the pipes. | | | | | | |
| <u>Item</u> | <u>Pay Item</u> | <u>Description</u> | <u>Unit</u> | <u>Quantity</u> | <u>Unit Price</u> | <u>Cost Amount</u> |
| <u>1</u> | <i>1</i> | White Sandy Water System | Linear Ft. | 6105 | \$20.50 | \$ 125,152.50 |
| <u>2</u> | <i>2</i> | Devil's Elbow-Clark's Bay Water Systems | Linear Ft. | 10615 | \$20.50 | \$ 217,607.50 |
| <u>3</u> | <i>3</i> | Holter Lake Water System | Linear Ft. | 4565 | \$20.50 | \$ 93,582.50 |
| <u>4</u> | <i>4</i> | Log Gulch Water System | Linear Ft. | 10200 | \$20.50 | \$ 209,100.00 |
| Total Estimated Cost = | | | | | | \$ 645,442.50 |



WHITE SANDY WATER SYSTEM - PROPOSED LAYOUT
SCALE 1" = 100'

FULL SCALE (22" X 34") 1 IN. = 100 FT.
HALF SCALE (11" X 17") 1 IN. = 200 FT.

NOTES:

UPGRADE WHITE SANDY WATER SYSTEM FROM AGING PVC PIPE TO INDUSTRY STANDARD HDPE PIPE, REPLACE EXISTING PIPELINE APPURTENANCES (PVB'S, AIR VALVES, ETC) AND REPLACE EXISTING IRRIGATION INFRASTRUCTURE.

THE PROJECT IS INTENDED TO ADDRESS THE FOLLOWING:

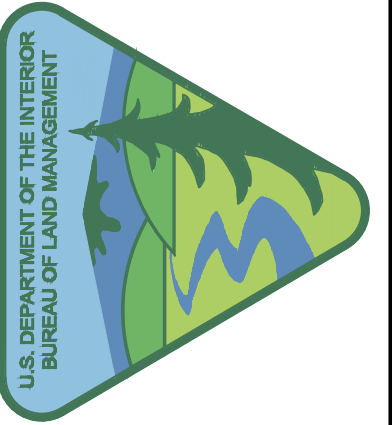
- Eliminate recent water system compliance issues with MT DEQ.
- Recurring maintenance issues that continue to cause closure of the systems and take staff time away from other projects.
- Reduce staff time for site irrigation.

THE PROJECT WILL FOLLOW THE MOST RECENT DEQ DOCUMENT (DEQ CIRCULAR 3, STANDARDS FOR NON-COMMUNITY PUBLIC WATER SYSTEMS, APRIL 2023) IN ITS DESIGN AND IMPLEMENTATION.

THE GOAL OF THE PROJECT IS TO FOLLOW A PHASED APPROACH TO REPLACE ALL HOLTER AND HAUSER LAKE WATER SYSTEMS BY END OF YEAR 2025. THE PHASED APPROACH PRIORITIZES THOSE SYSTEMS IN MOST NEED AS FOLLOWS:

PHASE 1_2024 IMPLEMENTATION: WHITE SANDY & DEVILS ELBOW-CLARKS BAY

PHASE 2_2025 IMPLEMENTATION: HOLTER LAKE & LOG GULCH WATER SYSTEMS



PHASE 1: WHITE SANDY

CONCEPTUAL PLAN
SITE PLAN

| MARK | REVISION | DATE | APPROVED |
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DEVILS ELBOW-CLARKS BAY WATER SYSTEM
 - PROPOSED LAYOUT
 SCALE 1/16" = 1'

NOTES:

UPGRADE DEVIL'S ELBOW-CLARK'S BAY WATER SYSTEM FROM AGING PVC PIPE TO INDUSTRY STANDARD HDPE PIPE, REPLACE EXISTING PIPELINE APPURTENANCES (PVB'S, AIR VALVES, ETC) AND REPLACE EXISTING IRRIGATION INFRASTRUCTURE.

THE PROJECT IS INTENDED TO ADDRESS THE FOLLOWING:

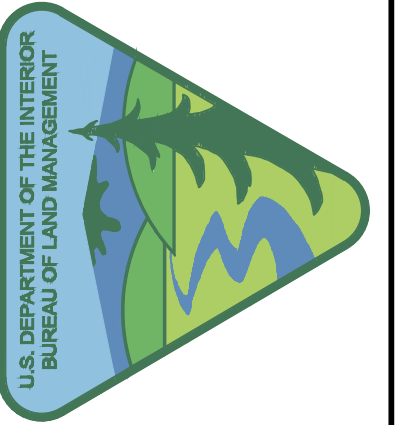
- Eliminate recent water system compliance issues with MT DEQ.
- Recurring maintenance issues that continue to cause closure of the systems and take staff time away from other projects.
- Reduce staff time for site irrigation.

THE PROJECT WILL FOLLOW THE MOST RECENT DEQ DOCUMENT (DEQ CIRCULAR 3, STANDARDS FOR NON-COMMUNITY PUBLIC WATER SYSTEMS, APRIL 2023) IN ITS DESIGN AND IMPLEMENTATION.

THE GOAL OF THE PROJECT IS TO FOLLOW A PHASED APPROACH TO REPLACE ALL HOLTER AND HAUSER LAKE WATER SYSTEMS BY END OF YEAR 2025. THE PHASED APPROACH PRIORITIZES THOSE SYSTEMS IN MOST NEED AS FOLLOWS:

PHASE 1_2024 IMPLEMENTATION: WHITE SANDY & DEVILS ELBOW-CLARKS BAY

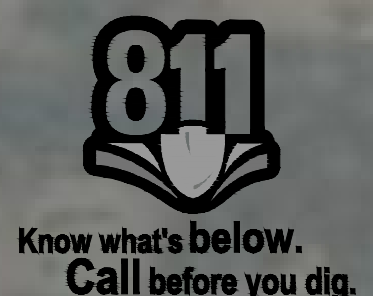
PHASE 2_2025 IMPLEMENTATION: HOLTER LAKE & LOG GULCH WATER SYSTEMS



PHASE 1: DEVILS ELBOW/CLARKS BAY

CONCEPTUAL PLAN
 SITE PLAN

| MARK | REVISION | DATE | APPROVED |
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HOLTER LAKE WATER SYSTEM
 - PROPOSED LAYOUT
 SCALE 1" = 50'

FULL SCALE (22" X 34") 1 IN. = 50 FT.
 HALF SCALE (11" X 17") 1 IN. = 100 FT.

NOTES:

UPGRADE HOLTER LAKE WATER SYSTEM FROM AGING PVC PIPE TO INDUSTRY STANDARD HDPE PIPE, REPLACE EXISTING PIPELINE APPURTENANCES (PVB'S, AIR VALVES, ETC) AND REPLACE EXISTING IRRIGATION INFRASTRUCTURE.

THE PROJECT IS INTENDED TO ADDRESS THE FOLLOWING:

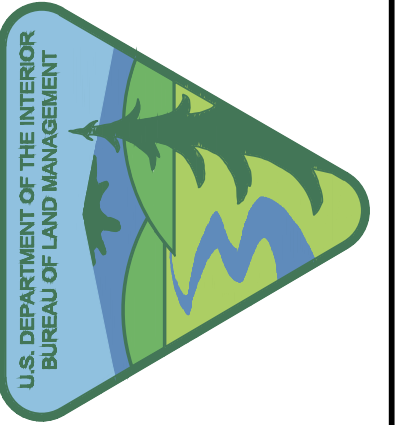
- Eliminate recent water system compliance issues with MT DEQ.
- Recurring maintenance issues that continue to cause closure of the systems and take staff time away from other projects.
- Reduce staff time for site irrigation.

THE PROJECT WILL FOLLOW THE MOST RECENT DEQ DOCUMENT (DEQ CIRCULAR 3, STANDARDS FOR NON-COMMUNITY PUBLIC WATER SYSTEMS, APRIL 2023) IN ITS DESIGN AND IMPLEMENTATION.

THE GOAL OF THE PROJECT IS TO FOLLOW A PHASED APPROACH TO REPLACE ALL HOLTER AND HAUSER LAKE WATER SYSTEMS BY END OF YEAR 2025. THE PHASED APPROACH PRIORITIZES THOSE SYSTEMS IN MOST NEED AS FOLLOWS:

PHASE 1_2024 IMPLEMENTATION: WHITE SANDY & DEVILS ELBOW-CLARKS BAY

PHASE 2_2025 IMPLEMENTATION: HOLTER LAKE & LOG GULCH WATER SYSTEMS



PHASE 2: HOLTER LAKE CAMPGROUND

CONCEPTUAL PLAN
 SITE PLAN

| MARK | REVISION | DATE | APPROVED |
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NOTES:

UPGRADE HOLTER LAKE WATER SYSTEM FROM AGING PVC PIPE TO INDUSTRY STANDARD HDPE PIPE, REPLACE EXISTING PIPELINE APPURTENANCES (PVB'S, AIR VALVES, ETC) AND REPLACE EXISTING IRRIGATION INFRASTRUCTURE.

THE PROJECT IS INTENDED TO ADDRESS THE FOLLOWING:

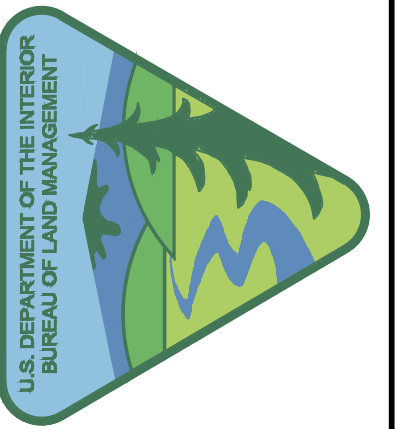
- Eliminate recent water system compliance issues with MT DEQ.
- Recurring maintenance issues that continue to cause closure of the systems and take staff time away from other projects.
- Reduce staff time for site irrigation.

THE PROJECT WILL FOLLOW THE MOST RECENT DEQ DOCUMENT (DEQ CIRCULAR 3, STANDARDS FOR NON-COMMUNITY PUBLIC WATER SYSTEMS, APRIL 2023) IN ITS DESIGN AND IMPLEMENTATION.

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PHASE 1_2024 IMPLEMENTATION: WHITE SANDY & DEVILS ELBOW-CLARKS BAY

PHASE 2_2025 IMPLEMENTATION: HOLTER LAKE & LOG GULCH WATER SYSTEMS



PHASE 2: LOG GULCH CAMPGROUND

CONCEPTUAL PLAN
SITE PLAN

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FULL SCALE (22" X 34") 1 IN. = 50 FT.
HALF SCALE (11" X 17") 1 IN. = 100 FT.

LOG GULCH WATER SYSTEM
- PROPOSED LAYOUT
SCALE 1" = 100'