FUTURE FISHERIES IMPROVEMENT PROGRAM

REVIEW PANEL MINUTES
WINTER 2022

Date: December 15, 2021

Review Panel Attendees:

In Person: Karin Boyd, David Cope, John Goodwin, Michael Johns, Richard Lane, Bill Mytton, Mike Newton, Clint Peck, Ron Pierce, Rep. Brian Putnam, Bob Schroeder, Bill Semmens, Nancy Winslow

FWP staff:

In Person: Michelle McGree, Trevor Watson, Valisa Milligan

Applicants and others in attendance:

In Person: Ryen Neudecker, Ryan Kreiner, Matt Jaeger

Phone/Zoom: Scott Opitz, Will McDowell, Caleb Uerling, Tess Scanlon, Audra Bell, Amy Sacry, Adam Switalski, Connor Parrish, Morgan Case, Ben LaPorte, Mark Ockey, Paul Parson, Eric Trum

Panel business (before project review):

- Welcome and introductions. David Cope, John Goodwin, Michael Johns, Richard Lane, Mike Newton, & Ron Pierce are new to the Review Panel.
- The agenda was approved.
- Review Future Fisheries balances, staff recommendations.
- Update on Ninemile Creek.
- Instruction and overview of authority funding. Explanation of application review process.
- Explanation of FWP staff recommendations.

Panel business (after project review):

- Project balances were reviewed. Nancy Winslow was chosen as the panel representative for the prioritization. The prioritization committee planned to meet January 2022.
- Discussion on updating applications by requiring grazing plans, fencing plans and location maps (to include project features) be included in application submission to help panelist make a more informed decision.
- The decision was made to keep funding levels as recommended.
- The Fish & Wildlife Commission will meet in February 2022 to finalize funding awards.

- Summer tour options will be emailed after the meeting.
- FFIP summer meeting and field tour is scheduled for the week of June 13, 2022.

Application discussions and funding recommendations:

1) **Shields River Chadbourne Diversion retrofit (010-2022)**

Amount Requested: $11,244

FWP Recommendation: We recommend fully funding this project ($11,244) but ask the applicant to describe the water user participation/investment, given that funding will be used to maintain the integrity of the diversion structure.

Project Representative: Scott Opitz, FWP

Discussion Items:

- Discussion on other sources of funding. Confident will receive federal funding and trying to get away from smaller "bake sale" funding to allow biologists to focus on identifying projects. The water users will pay up to $1,000 for the diversion repair.
- Any concerns about non-target migratory fish? Shouldn't affect Yellowstone Cutthroat, Rainbow or Brown Trout. There are strong populations. Will remove Rainbow Trout in upper basin system (not brown trout).
- Discussion on access to site. Land is not owned by canal company but has easement for the site and there is a restored county road that can be used.
- Original design included a fish ladder and trap to process fish and move them. Genetic analysis isn't fast enough to do this.
- Discussion on status of diversion. There is not a screen and debris the biggest problem. The ditch is shut down in the spring to prevent entrainment. Don't want to use rock for wingwall as it would be washed out.
- Is there a 20-year agreement? Yes.

Motion: Motion made to fund the project at $11,244

Motion Made by: Karin Boyd

Motion Second by: Bob Schroeder

Panel Action: Motion passes (unanimous)

Amount Approved: $11,244

2) **Blackfoot River fish screen (001-2022)**

Amount Requested: $8,900

FWP Recommendation: We recommend fully funding ($8,900) Provide additional detail on the specifications of the fish screen.

Project Representative: Ryen Neudecker, Big Blackfoot Chapter of Trout Unlimited

Discussion Items:

- Discussion on concerns of using a turbine pump. Ranch managers have been complaining about pump for years, although some are proven to work. AquaTech overhauled pump and inspected screen. They have designed turbine pump to provide clean water without fish.
- Placement will be in a back eddy, not in the river. The location should handle flooding. The screen is easy to install without a lot of engineering.
- Entrainment level is hard to estimate but is significant (e.g. fish in nozzle).
- Who will provide maintenance? Landowner has a 20-year agreement. Pump will be taken out by a crane during winter and landowner/ranch manager will maintain screen and crane.
- Discussion on how events such as fires and mudslides have a catastrophic effect on Bull Trout.

Motion: Motion made to fund the project at $8,900
Motion Made by: Mike Newton
Motion Second by: Michael Johns
Panel Action: Motion passes (unanimous)
Amount Approved: $8,900

3) Johnson Creek fish screen (006-2022)

Amount Requested: $7,750
FWP Recommendation: We recommend partial funding ($7,750) provide additional information on the fish screen, including examples of installation and success. How is sediment removed? Describe the landowner participation and investment in the project, given that they will be getting a new headgate and will be responsible for maintenance. Were they part of the screen selection and project development?
Project Representative: Ryen Neudecker, Big Blackfoot Chapter of Trout Unlimited
Discussion Items:

- Discussion on entrainment data. There have been 2 years of fish rescues and electrofishing. Ditch was electrofished and 30-40 cutthroat per run were moved back into creek (up to 6" in size; no bull trout).
- How will screen be cleaned? There will be a brush on site. The landowner lives there full time and will maintain it.
- Discussion on ditch. Irrigators created ditch long ago and it became enlarged over time (no control structures).

Motion: Motion made to fund the project at $7,750
Motion Made by: Bob Schroeder
Motion Second by: Michael Johns
Panel Action: Motion passes (unanimous)
Amount Approved: $7,750

4) Nevada Creek restoration project phase 5 (009-2022)

Amount Requested: $35,000
FWP Recommendation: We recommend full funding ($35,000)

Project Representative: Ryen Neudecker, Big Blackfoot Chapter of Trout Unlimited
Discussion Items:

- Discussion on fencing. Fence will be electric single wire and will be wildlife friendly to allow wildlife to move through and ensure that wildlife will not "camp out" in area and eat riparian vegetation. Bottom wire on fence will be 18" specs for grizzly bears to go under according to bear biologists all other wildlife will be able to jump over. Mannix cows are conditioned to stay within electric fence. The local school and volunteers will provide labor.
- Will public fishing be allowed? Landowners are good about access, but site is tough to get to.
- Discussion on 100-year flood event. The same approach was used on all four phases and has seen high flow water years with good success.
- Discussion on Nevada Creek channel movement / bank hardening. Nevada Creek has different side channels and riparian is good for habitat and bank stabilization. Bank erosion is a problem. Will bring back to historical natural state and will protect banks that have a lot of erosion.
- Bank treatment design is for bankflow; applicant could consider variability and going a bit below bankfull. Willows need to be at bankflow to increase survival.
- What is next phase? Have at least 8 miles left, lots of miles are just fine; likely several phases to go. For this phase, landownership used to be Wineglass Ranch.
- Two upstream diversions (owned by DNRC) that BBCTU is working on.

Motion: Motion made to fully fund the project at $35,000
Motion Made by: Bill Mytton
Motion Second by: Nancy Winslow
Panel Action: Motion passes (unanimous)
Amount Approved: $35,000

5) Browns Gulch fish screen (002-2022)

Amount Requested: $31,987
FWP Recommendation: Partial fund (23,000), equal to the match. Mileage costs are not an eligible expense. Would it be possible to consolidate ditches or fish screens in this drainage? Information on the screen (including design), pictures of the site, and a map showing the site plan are necessary to understand the project.
Project Representative: Will McDowell, Clark Fork Coalition
Discussion Items:

- Discussion on measuring device and control of flow. Suspects there is not a measuring device on the ditch. New headgate will control on/off and screen is designed to certain flow. 1.6 cfs is highest water right.
- Entrainment modeling: 10-20% of the flow is entering the ditch so likely entrains 10-20% of fish. The screen selected is a corrugated water screen.
- Is instream flow work happening in Browns Gulch? Not aware of any. Some years the stream runs dry. Dewatered and may be a losing reach.

- Discussion on funding. No matching from landowner, they have provided equipment, labor and materials in the past. Don't ask for funding from landowner because it doesn't benefit them and can be a maintenance issue. Will ask for funding from Forest Service for remaining three diversions and for the difference from what is received from FFIP. Questions about match vs. using in-kind.
- Discussion on maintenance. Fish screen requires more maintenance in spring and fall and is needed every few days to week. Screens now require less maintenance than in the past.
- Fishing is allowed with permission.
- Would like to do project in Fall of 2022.

Motion: Motion made to fund the project at $20,500
Motion Made by: Michael Johns
Motion Second by: Mike Newton
Panel Action: Motion passes (unanimous)
Amount Approved: $20,500

6) Flint Creek riparian restoration phase 2 (004-2022)

Amount Requested: $43,000
FWP Recommendation: We recommend full funding ($43,000) confirm that matching funds are secured.
Project Representative: Tess Scanlon, Trout Unlimited
Discussion Items:

- Discussion on size of logs. Small, medium and large logs are needed, will use the root wods. Toe wood is the biggest. Suggested that Rock Creek Ranch may be a good contact to provide cheaper or donated logs.
- Who pays for fencing? Montana Natural Resources will pay for fencing and landowner will maintain. Would landowner consider electric fence? Yes, can talk to landowner who wants wildlife friendly fencing.
- Discussion about private landowners past practices having caused problems but aren't willing to contribute to fix the problem. Determined we don't know enough, e.g. how long they have owned land or what past practices might be. Consensus is that landowner should contribute.
- Engineering stream banks and relocation is a skilled project and needs to have professionals do the work (vs. the landowners).
- Oversight costs include designs.
- Efficiencies in second phase include specs, particularly regarding materials. Overall phase 1 went well.
- Is mercury a limiting factor? 1 source addressed, and expect low mercury in Flint Creek. Currently working on the other source (Fred Burr).
- Discussion on monitoring. How do we explain the investment? Will provide and collect data.
- Fishing is accessible via a bridge downstream. Permission by request.

1st Motion: Motion made to fully fund the project at $43,000

Motion Made by: Ron Pierce
Motion Second by: Bob Schroeder
Panel Action: Motion fails (2 Yes 10 No)
2nd Motion: Motion made to fund the project at $37,500
Motion Made by: Karin Boyd
Motion Second by: Rep. Brian Putnam
Panel Action: Motion passes (10 Yes 2 No)
Amount Approved: $37,500

7) Glen Lake Outlet stream restoration and fish barrier (005-2022)

Amount Requested: $23,500
FWP Recommendation: Do not fund ($0) and suggest the applicants apply to the Community Pond Program. Because 2,000 Rainbow Trout are stocked in the lake annually, wild fish benefits are uncertain (a requirement of the Program). More information on the expected instream flow from the lake through the constructed channel, as well as discussion regarding construction design would be necessary to determine if spawning habitat is possible. Regardless, the highest value of this project is to expand angler opportunity, which is a goal of the Community Pond Program. We support the project and encourage the applicants to work with FWP to further develop this project to create the best fish habitat possible and provide opportunities to anglers.
Project Representative: None
Discussion Items: Michelle described the program eligibility as it relates to this project.
Motion: Motion made to deny funding ($0)
Motion Made by: Rep. Brian Putnam
Motion Second by: Bob Schroeder
Panel Action: Motion passes (unanimous)
Amount Approved: $0

8) Upper Red Rock Lake overwinter habitat (012-2022)

Amount Requested: $100,000
FWP Recommendation: We recommend full funding ($100,000)
Project Representative: Ryan Kreiner, FWP and Matt Jaeger, FWP
Discussion Items:

- Discussion on lack of oxygenated water. Eliminated the possibility of organics vs. decomposition in oxygen reduction.
- Why didn't Grayling go away before this? Shallower lake and climate change. Used to have deeper spots, more water coming into the lake. Fish get trapped in deeper areas and oxygen from tributaries cannot reach them.
- Discussion on windmill aerators, there are many examples where this doesn't work for this type of project due to wind problems.

- Discussion on low water; Red Rock Creek ran out of water this year, probably the first time.
- Discussion on other funding. Need this funding for leverage to receive matching federal funds. NFWF funds are secured. Estimated 2022 construction.
- What are impacts on nearby pond? Water will be diverted, and the pond is artificial and fishless. Managed for waterfowl.
- Discussion on lifespan and maintenance of pipeline. Biologists in Utah have had them in use since the mid-90's with little to no maintenance (estimated 50 years). Shambow pond is a warm spring, insulated underground so pipeline is unlikely to freeze. The price of the pipe will be determined with a final cost estimate.
- The Utah lake is similar in elevation, shallow, and has similar tributary specs.
- Other fish species include burbot, whitefish, suckers, introduced Yellowstone cutthroat trout. Anglers can fish the tributaries, including Red Rock Creek.
- Discussion on the possibility of using as a brood pond? Other populations are not around. Axolotyl is a Big Hole brood, not self-sustaining.

Motion: Motion made to fully fund project at $100,000
Motion Made by: David Cope
Motion Second by: Michael Johns
Panel Action: Motion passes (unanimous)
Amount Approved: $100,000

9) Upper Ruby River restoration project phase 2 (013-2022)

Amount Requested: $50,000
FWP Recommendation: We recommend partial funding ($46,309), as mileage and per diem are not eligible expenses for grant funding. The spreadsheet budget request/match discrepancies so the narrative and matching contribution tables were used.
Project Representative: Audra Bell (Ruby Valley Conservation District) and Amy Sacry (Geum)
Discussion Items:

- Discussion on fencing and grazing plan. Grazing will be allowed three weeks in spring and three weeks in October, working on getting a number of cows (dormant season grazing). Landowner will install a temporary fence, paid with other sources. The specific grazing and fencing plan is still in the works. The Panel recommended having the grazing plan upfront.
- Q: How many cattle will be in the riparian area for 6 weeks? Density could lead to very different results. Still working on numbers. However, permitting will require a certain maximum. Offsite water is available.
- Discussion on fish and temperature monitoring. Encouraged to get data at top and bottom and maybe center of project, but not part of the plan right now.
- Discussion on access on site and in the Ruby. Site is open to the public with landowner approval. More public access in the upper Ruby.
- Discussion on floodplain. Floodplain is wide and is expected to double in size.

Motion: Motion made to fund the project at $46,309

Motion Made by: Ron Pierce
Motion Second by: Nancy Winslow
Panel Action: Motion passes (7 yes, 2 no)
Amount Approved: $46,309

10) East Fork Lolo and Lost Park Creeks instream habitat enhancement (003-2022)

Amount Requested: $33,000
FWP Recommendation: We recommend full funding ($33,000)
Project Representative: Adam Switalski, Clark Fork Coalition
Discussion Items:

- No grazing plan and no plans to allow grazing.
- Plan is to match reference conditions.
- Total project cost used 'other contributions' in calculation.

Motion: Motion made to fund the project at $33,000
Motion Made by: Mike Johns
Motion Second by: Bob Schroeder
Panel Action: Motion passes (unanimous)
Amount Approved: $33,000

11) Mill Creek 5 Bar 6 restoration project (007-2022)

Amount Requested: $25,002.44
FWP Recommendation: We recommend full funding ($25,002.44) Describe 1) What the untreated fence posts will be used for? 2) What the "40-Heavy Equipment for $350 each" refers to? 3) What is the grazing management plan? 4) What is the size of the riparian buffer throughout the project, especially in the Instream Habitat Enhancement Zone? 5) The status of the current and potential future threats from Rainbow Trout.
Project Representative: Connor Parrish, Trout Unlimited
Discussion Items:

- What the untreated fence posts will be used for? Posts will used as anchors to jam logs into place.
- What the "40-Heavy Equipment for $350 each" refers to? Refers to 40 hours of equipment use and time.
- What is the grazing management plan? Grazing is allowed, but only for a handful of cows and horses and in a fenced in area in the winter (short, seasonal).
- What is the size of the riparian buffer throughout the project, especially in the Instream Habitat Enhancement Zone? 10 to 70 feet wide. Skinny in places, will expand.
- The status of the current and potential future threats from Rainbow Trout. The biggest threat is hybridization and there is a barrier in development upstream. This project focuses on fish moving downstream of the barrier and migratory fish from the Yellowstone.

- Discussion on longevity of log jams, how much wood and if submerged. Engineers are still working on design, but submerged wood lasts longer. Will be stable, try for most submerged.
- Discussion on flow of Mill Creek. Flow is ok in fall for spawning (Rainbow and Cutthroat are spring spawners).
- Discussion on logs. Cost seems expensive, $500 is on the high side. Wanting Fir due to a longer life and hoping to source locally.
- Discussion on possibility of using boulders instead of posts. Don't want to use boulders as they aren't found in the area and wood can accumulate more wood, but boulders would be an option if needed.

1st Motion: Motion made to fund project at $25,002.44
Motion Made by: Brian Putnam
Motion Second by: Bob Schroeder
Panel Action: Motion passes (unanimously)
Amount Approved: $25,002.44

12) Murphy Spring Creek instream flow restoration renewal (008-2022)

Amount Requested: $15,000
FWP Recommendation: We recommend full funding ($15,000) Describe the level of water user support for the project.
Project Representative: Morgan Case, Trout Unlimited
Discussion Items:

- Water users want to be good stewards of the land, but it not economical and this project will help with that.
- Project will increase public fishing offsite. The stream is very small and doesn't have much pressure.
- Project will increase recruitment of fish and supports Bull Trout. This is an important part of Bull Trout restoration due to recruitment and thermal refugia. It supports a critical population of fluvial Bull Trout.

Motion: Motion made to fund the project at $15,000
Motion Made by: Mike Newton
Motion Second by: Bob Schroeder
Panel Action: Motion passes (unanimous)
Amount Approved: $15,000

13) Upper French Gulch fish passage and restoration (011-2022)

Amount Requested: $20,000
FWP Recommendation: We recommend full funding ($20,000). *Note that government salaries cannot be used as in-kind match.
Project Representative: Ben LaPorte, Big Hole Watershed Committee
Discussion Items:

- Presenter had received new specs from engineer on the day of the presentation. The new design will eliminate tight meanders and use step pools that are more natural.
- Does the new design affect cost? Lidar data helped. The same amount of earthwork is used so construction costs are the same.
- Question about $20/yard cost, as it could be double what it should be.
- Flow data were not collected for the peak flow in 2021, will try again in 2022. Have historical data and extrapolating flows based on partial flow data.
- Discussion on tabling project so presenter can get accurate numbers and specs and resubmit at a later date.

Motion: Motion made to table the project
Motion Made by: Bob Schroeder
Motion Second by: Richard Lane
Panel Action: Motion passes (unanimous)
Amount Approved: $0