Attachment A - Scope of Work Missoula, City of Rattlesnake Creek Wilderness Dams Project

Background:

Rattlesnake Creek is a tributary to the Clark Fork River in Missoula with an 82 square mile drainage that originates in the Rattlesnake Wilderness and is a tributary to the Clark Fork River. The City of Missoula acquired ten dams in the Rattlesnake Wilderness area that were built in the 1920s as part of the Rattlesnake Creek Water Supply. The dams have not been used for water delivery in more than 30 years and are largely inoperative. A Feasibility Study in 2018 recommended multiple dams in the Rattlesnake Wilderness area be evaluated for decommissioning. Among those, McKinley Lake Dam was the primary candidate for immediate decommissioning and is a severe hazard. McKinley Lake is a glacial cirque lake at an elevation of 6,609 feet. It was an earthen embankment originally built at the outlet in 1923, which now has a 16-acre footprint and an estimated lake volume of 211 acre-feet at full pool. The McKinley Lake Dam has a headcut in the emergency spillway that potentially threatens the dam's stability, seepage at the toe of the dam in multiple locations and would require extensive modifications or a rebuild to meet U.S. Forest Service (USFS) standards. The lake supports a wild rainbow trout fishery and primitive campsites on the dam crest. This project is a pilot for a larger dam decommission project in the Rattlesnake wilderness area.

Scope of Work:

The following scope of work will help address the deficiencies noted above. This scope of work is the object of this grant and consists of project startup, design, construction, and close-out. Activities include:

Specific tasks include:

- Breech a portion of the McKinley Lake Dam;
 - Construct a new steam channel to convey a 100-year or larger flood event;
- Reclaim head cut in spillway;
- Install control sill to reduce sediment releases;
- Remove existing outlet gates and gate tower; and
- Backfill and seed the disturbed areas.

Schedule:

The project will finalize design the fourth quarter of 2022. Bidding and contracting will occur in the second quarter of 2023. Construction will begin the third quarter of 2023 and be completed the fourth quarter of 2024. The contract will be closed by the fourth quarter of 2024 to allow for construction related delays to the schedule (if needed).