**WYOMING WATER DEVELOPMENT OFFICE**

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July 7, 2023

Wayne Pullan, Regional Director
Bureau of Reclamation
125 South State Street, Room 8100
Salt Lake City, Utah 84138

VIA ELECTRONIC MAIL

*UCBEfficiency@usbr.gov*

Re: Request for Input for the Upper Colorado River Basin System Conservation and Efficiency Program

Dear Director Pullan:

On behalf of the Wyoming Water Development Office (WWDO), I write in response to your June 22, 2023, letter requesting input on the Phase 2 implementation of Inflation Reduction Act funding which will focus on long-term, durable projects in the Upper Colorado River Basin. Your letter requests input on the types and nature of projects, project selection criteria, and program administration considerations.

The WWDO administers Wyoming's Water Development Program (Program) which was established in 1975. The Program provides for the planning, selection, financing, construction, acquisition, and operation of water development projects throughout Wyoming. These can include projects for the conservation, storage, transmission, supply and use of water, necessary in the public interest to develop and preserve Wyoming's water and related land resources.

It is my understanding that the Upper Division States of Wyoming, Colorado, New Mexico, and Utah, through the Upper Colorado River Commission (UCRC), will be providing input on Phase 2 implementation which focuses primarily on project selection criteria and program administration. The WWDO, which has worked closely with Wyoming's UCRC Commissioner, Brandon Gebhart, joins and supports that input. Because the UCRC intends to address project selection criteria and program administration, this letter will focus on the types of projects that should be considered eligible for funding provided they satisfy the evaluation criteria to be developed by Reclamation and the Upper Division States.

Attached to this letter is a list of potential project types that should be considered for Phase 2 funding should they satisfy program criteria. They include agricultural, municipal, and industrial projects. When applicable, we have included a corresponding Natural Resource Conservation Service (NRCS) Conservation Practice Standard code for reference and information only. We do

not intend to incorporate NRCS project rules, restrictions, or conditions by referencing those codes. The WWDO developed the list of potential projects working with the Wyoming State Engineer's Office, Wyoming's Colorado River Working Group, and water users and stakeholders within Wyoming's portion of the Upper Colorado River Basin. As the project list was developed we noted that some of the NRCS practices are commonly associated with one another. An example would be Streambank Protection being associated with a Dam Diversion. We included these commonly associated practices, even though they may not be directly conserving water, because they are part of a complete project package.

Thank you for the opportunity to provide input. The WWDO looks forward to having an active role implementing Phase 2 within Wyoming.

Sincerely,

Jason Mead

Jason Mead, P.E.
Director
Wyoming Water Development Office

Enc.

Electronic CC:
Brandon Gebhart, P.E., - Wyoming State Engineer and Wyoming UCRC Commissioner

**Potential Agricultural Projects**

| PRACTICE | DEFINITION | NRCS CODE |
|---|---|---|
| Telemetry / SCADA | Not an NRCS Conservation Standard Practice; however, this was presented as a possible practice to conserve water. | - |
| Irrigation Ditch Lining | An irrigation ditch, canal, or lateral, lined with an impervious material or a chemical treatment. | 428 |
| Irrigation Pipeline | A pipeline and appurtenances installed to convey water for storage or application as part of an irrigation water system. | 430 |
| Livestock Pipeline | A livestock pipeline is a pipeline installed to convey water for livestock or wildlife. | 516 |
| Structure for Surface Water Control | A structure in a water management system that conveys water, controls the direction or rate of flow, maintains a desired water surface elevation, or measures water | 587 |
| Drainage Water Management | The process of managing the drainage volume and water table elevation by regulating the flow from a surface or subsurface agricultural drainage system. | 554 |
| Irrigation and Drainage Tailwater Recovery | A system designed to collect, store, and convey irrigation tailwater, rainfall runoff, field drain water, or combination thereof for reuse in water distribution to the crop. | 447 |
| Subsurface Drain | A conduit, or system of conduits, installed beneath the ground surface to manage soil water conditions. | 606 |
| Surface Drain, Field Ditch | A graded channel on the field surface for collecting and conveying excess water. | 607 |
| Surface Drain, Main or Lateral | An open drainage ditch for moving the excess water collected by a field ditch or subsurface drain to a safe outlet. | 608 |
| Irrigation Land Leveling | Irrigation land leveling is reshaping the surface of the irrigated land to the planned lines and grades. Land leveling also improves water use efficiency. | 464 |
| Irrigation System, Surface and Subsurface | A system that delivers irrigation water by surface means, such as furrows, borders, and contour levees, or by subsurface means through water table control. | 443 |
| Sprinkler System | A distribution system that applies water by means of nozzles operated under pressure. | 442 |
| Watering Facility | A watering facility stores or provides drinking water to livestock or wildlife. | 614 |
| Water Harvesting Catchment | A facility for collecting and storing water from an area that has been treated to increase precipitation runoff to provide water for livestock, fish & wildlife, or other conservation purposes where additional water is needed. | 636 |
| Water Well | A hole drilled, dug, driven, bored, jetted, or otherwise constructed into an aquifer for agricultural water supply. | 642 |

| PRACTICE | DEFINITION | NRCS CODE |
|---|---|---|
| Spring Development | The collection and use of water from seeps or springs. | 574 |
| Irrigation Reservoir | An irrigation reservoir is a constructed dam, pit, or tank used to store water for irrigation. | 436 |
| Dam | An artificial barrier that can impound water for one or more beneficial purposes. | 402 |
| Dam, Diversion | A structure built to divert all or part of the water from a waterway or a stream. | 348 |
| Irrigation Canal or Lateral | A permanent channel constructed to convey irrigation water from the source of supply to one or more irrigated areas. | 320 |
| Irrigation Field Ditch | A permanent irrigation ditch, constructed in or with earth materials, to convey water from the source of supply to a field or fields in an irrigation system. | 388 |
| Open Channel | An open channel is a natural or artificial channel in which water flows with a free surface. | 582 |
| Anionic Polyacrylamide (PAM) Application | The application of anionic polyacrylamide helps to reduce irrigation-associated erosion and may be used in areas where disturbance activities prevent establishment or maintenance of a cover crop. | 450 |
| Pumping Plant | A facility that delivers water or wastewater at a designed pressure and flow rate. | 533 |
| Pond | A pond is a water impoundment made by constructing an embankment, by excavating a dugout, or by a combination of both. | 378 |
| Pond Sealing or Lining – Geomembrane or Geosynthetic Clay Liner | A liner for an impoundment constructed using a geomembrane or a geosynthetic clay material. | 521 |
| Pond Sealing or Lining, Compacted Soil Treatment | A liner for an impoundment constructed using compacted soil with or without soil amendments. | 520 |
| Pond Sealing or Lining, Concrete | A liner for an impoundment constructed using reinforced or nonreinforced concrete. | 522 |
| Dike or Levee | A barrier used to retain water on the landscape using a wetland dike; or, a barrier used to exclude water from the landscape and protect property and infrastructure from flooding using a flood control levee. | 356 |
| Diversion | A channel usually constructed across the slope with a supporting ridge on the lower side. | 362 |
| Grassed Waterway | A shaped or graded channel that is established with suitable vegetation to convey surface water at a nonerosive velocity using a broad and shallow cross section to a stable outlet. | 412 |
| Irrigation Water Management | The process of determining and controlling the volume, frequency, and application rate of irrigation water. | 449 |

| PRACTICE | DEFINITION | NRCS CODE |
|---|---|---|
| Pasture and Hay Planting | Establishing adapted and/or compatible species, varieties, or cultivars of herbaceous species suitable for pasture, hay, or biomass production. | 512 |
| Cover Crop | Grasses, legumes, and forbs planted for seasonal vegetative cover | 340 |
| Critical Area Planting | Establishing permanent vegetation on sites that have, or are expected to have, high erosion rates, and on sites that have physical, chemical, or biological conditions that prevent the establishment of vegetation with normal seeding/planting methods. | 342 |
| Salinity and Sodic Soil Management | Management of land, water, and plants to reduce the accumulation impacts of salts, sodium, or combination of salts and sodium on the soil surface and in the rooting zone. | 610 |
| Stream Habitat Improvement and Management | Improve, restore, or maintain the ecological functions of a stream and its adjacent floodplain and riparian area. | 395 |
| Streambank and Shoreline Protection | Treatment(s) used to stabilize and protect banks of streams or constructed channels and shorelines of lakes, reservoirs, or estuaries. | 580 |
| Aquatic Organism Passage | Modification or removal of barriers that restrict or impede movement of aquatic organisms. | 396 |
| Channel Bed Stabilization | Measure(s) used to stabilize the bed or bottom of a channel. | 584 |

**Potential Industrial Projects**

| DEFINITION |
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| Operating/process changes to reduce water consumption and/or evaporation |
| Use/reuse of high TDS water (produced water, high salinity process waters) |
| Capture and re-use of run-off in zero discharge facilities to reduce evaporation losses |

**Potential Municipal Projects**

| PRACTICE | DEFINITION |
|---|---|
| Landscape Conversion | Convert high-water use landscapes (e.g., Kentucky blue grass) to low-water landscapes (e.g., native grasses, trees, shrubs) |
| Water Reuse/Recycling | Convert existing and/or future customers from potable to non-potable sources (e.g., wastewater effluent) for non-potable use (e.g., cooling). Install infrastructure to allow conversion. |
| Customer Metering | Install meters to allow volume-based rates. Install smart meters to more quickly identify leaks. |
| Smart Irrigation Controllers | Web-based controllers automatically adjust watering schedules to align with local weather conditions. |
| Pipeline Rehabilitation | Replace deteriorating pipelines with break history or potential for future breaks. |
| Aquifer Storage and Recovery | Develop underground water storage to capture wet year runoff for use during low water years. |
| Treatment Upgrades | Treatment facility equipment or process upgrades that result in reduction of water waste. |
| Policies and Procedures | Consultants to modify city/town policies, procedures, or codes to promote water conservation practices. |