Project Title
Improve Stream Gaging and Flow Measurements

Bureau of Reclamation Agreement Number:
[if applicable & known]

Reclamation Agreement Term
[if applicable & known, e.g., Oct. 1, 2018 – Sep. 30, 2023]

Note: Recovery Program FY23 scopes of work are drafted in May 2022. They often are revised before final Program approval and may subsequently be revised again in response to changing Program needs. Program participants also recognize the need and allow for some flexibility in scopes of work to accommodate new information and changing hydrological conditions.

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Category:
_x_ Ongoing project
__ Ongoing-revised project
__ Requested new project
__ Unsolicited proposal

Expected Funding Source:
_x_ Annual funds
_ _ Capital funds
__ Other *[explain]*

Relationship to LRP:
Supports Program goals and management by maintaining accurate readings at the USGS gages that are critical to determining whether the SJRIP's various flow targets are being met.

Study Background/Rationale and Hypotheses:
There are five United States Geological Survey (USGS) streamflow gaging stations on the main stem of the San Juan River that are very important to management of the river and the operation of Navajo dam to implement the San Juan Recovery Implementation Program (SJRIP) flow recommendations. Stream gaging data on the San Juan River are necessary to reliably implement and revise the SJRIP flow recommendations.

Study Goals, Objectives, End Product(s):
The San Juan River is a naturally mobile and sediment laden channel, prone to moss growth and channel encroachment due to a variety of natural and anthropogenic causes. Low flows from the dam, and high flows from storm activity are common, and can alter channel shape. The USGS provides 4-6 week routine measurements at the existing USGS streamflow measurement gages, as per their regular maintenance. However, the monitoring of the SJRIP's target baseflows and downstream flow target can require more gage maintenance than the USGS standard. Therefore, this scope covers the cost of 12 additional measurements made at strategic times of year and based on hydrology at the time to ensure the SJRIP goals are met as accurately as possible.

Study Area:
The study area includes all gages in New Mexico on the San Juan River. The schedule of additional measurements is based on current weather activity and issues at the various gages. Gages to be considered for extra measurements include Archuleta, Bloomfield, Bolack Ranch, Farmington, Fruitland, and Shiprock on the San Juan River. While the 12 measurements have historically been used at Archuleta and Four Corners, there has been a rare occasion to use one of the measurements in the past at one of these other San Juan gages for the purposes of establishing release and flow levels during the spring peak release or baseflow season.

Task Description, Deliverables and Schedule:
Based on a loose annual schedule determined by the type of hydrologic year, and adjusted as needed, Reclamation will request USGS personnel to perform the additional measurements to ensure accuracy at the gages. A technical report will be provided at the end of the year from USGS summarizing the activities completed and the value of obtaining additional readings. Reclamation will track FY2023 expenditures and develop scope for FY2024.

Budget Summary:

FY Year	*Reclamation*	*USGS*
2023	$ 300	$9,300
2024	$ 300	$10,160
2025	$ 300	$10,430
2026	$ 300	$10,710
Total	$1,200	$40,600

Reviewers:

References: