

***Project Name**

South Platte Basin Geologic Salinity Sources – Geologic Formation Chemical Characterization

***Grant Recipient**

Colorado Geological Survey

***Primary Contact**

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***WSRF Grant Type**

Watershed Health, Environmental, & Recreational
Eligible Water Activities (Check All That Apply)

Nonconsumptive (Environmental)

Other

If other, please explain.

River salinity impacts agriculture, municipal & industrial water suppliers and wastewater treatment providers as well as environmental. Thus, multiple categories could apply.

Total Project Cost

\$ 106,683.00

Are you submitting a proposal to the South Platte Basin RT, the Metro RT, or both?

Both

South Platte Basin RT Grant Amount Request (If applicable)

\$ 40,234.50

Metro RT WSRF Grant Amount Request (If applicable)

\$ 40,234.50

Colorado Water Plan Grant Amount Request (if any)

\$ 0.00

Other Basin Roundtables WSRF Funding Being Requested (if any)

\$ 0.00

If Other Roundtable Requests, which roundtable(s)

(No response)

***Project Description**

This grant proposal seeks to supplement the 2020 CWCB study “Geologic Salinity Sources in the South Platte Basin”, currently nearing completion, and which has Stakeholder group and Technical advising team components. The Technical Team has encouraged collection of chemical composition data from the basin’s geologic formations. These data will support identifying salts that different geologic formations are contributing to the basin’s water. Geologic formations may be contributing different types and quantities of salts than other salinity sources. Further, chemical composition in near-surface weathered and deeper unweathered rock may differ.

***Which basin priorities does the project address? How?**

Environmental Water Needs & Concerns Protection & Enhancement Watershed Health

***Project Timeline and Tasks**

Official timeline would be from grant authorization until the end of June 2024. It is proposed that up to 40 weathered rock samples be analyzed from surface outcrops along the Saint Vrain, Big Thompson, Cache la Poudre, and South Platte River drainages. An attempt would be made to also obtain 8 unweathered rock samples from the USGS Core Library core or alternate sources. These samples will be analyzed for the same analytes as the water samples in the prior study. Also, 10 “split” water samples be collected by the Colorado Department of Agriculture from existing alluvial wells near the sampled outcrops (as feasible) during their planned 2023 S Platte groundwater well sampling program. As this is important to the study, but would likely occur before the September grant authorization timeframe, all associated efforts are included as match.

Attach Budget (not required)

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Attach a map, graphic, etc. (not required)

(No response)

Attach a File (not required)

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