

Stream Management Plan Grantee Project Summary

Upper Gunnison Basin Watershed Management Plan

Geographic Description:

Gunnison Basin:
Upper Gunnison and tributaries

Size:

20 miles of mainstem and tributaries

Project Homepage:

<http://bit.ly/UpperGunnisonBasinWMP>

Primary Contact:

Frank Kugel
Upper Gunnison River Conservancy
District
fkugel@ugrwc.org

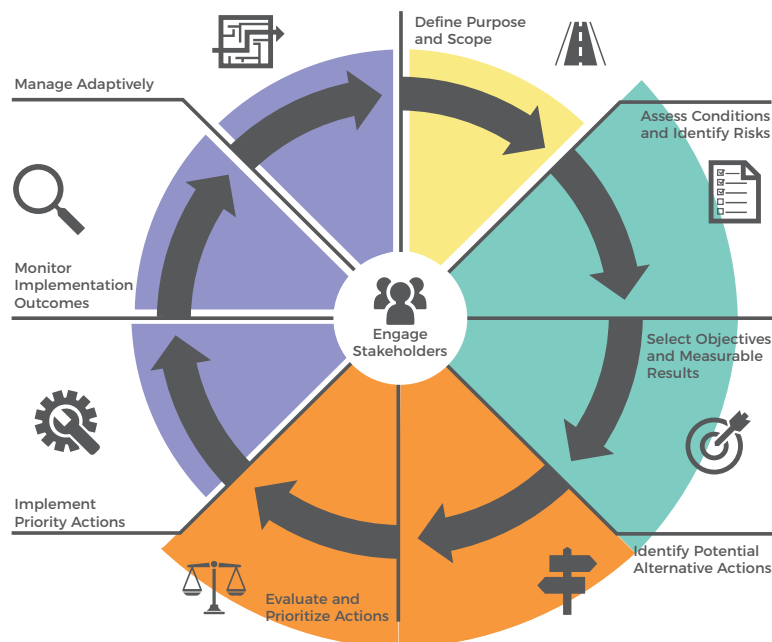
Project Timeline



Stakeholder Groups Involved in Planning Process

●	Agricultural producers
●	Riparian landowners
●	Aquatic and riparian science
●	Environmental advocacy
●	Utilities or other water management
●	Recreation & tourism
●	Local government & land use planners
●	State and federal agencies

Current Planning Phase



*Note: timeline and current phase correspond to planning in the initial three Upper Gunnison sub-basins.

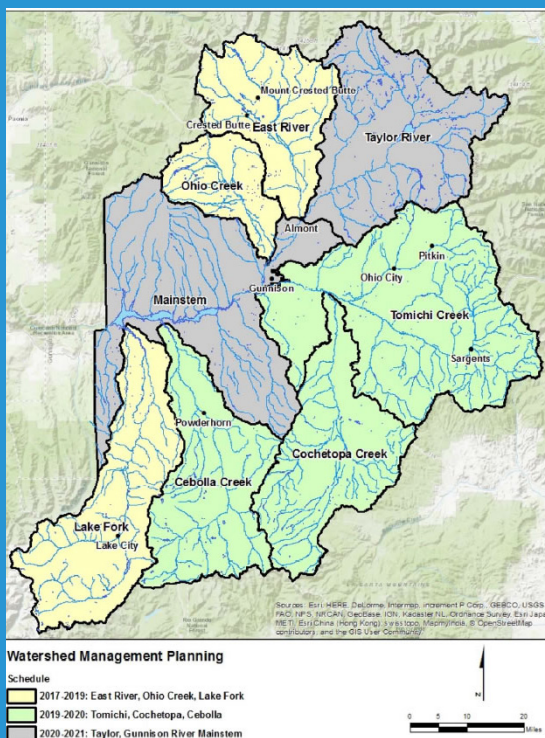
Project Goals

- Understand spatial and temporal water availability gaps both under existing water management conditions and modeling future conditions by sub-basin.
- Increase stakeholder involvement in water resources management.
- Improve storage and percolation and enhance channel stability by implementing riparian habitat improvement projects.
- Improve fisheries to benefit recreation economies on public and private lands.
- Improve watershed health that provides a range of ecosystem services to benefit local communities, such as clean drinking water and fertile soils.

Overview

Geography:

The Upper Gunnison River Basin is an important headwaters area of the Gunnison River, a major tributary of the Colorado River. Most of the Upper Gunnison River Basin is comprised of several sub-basins: East River, Ohio Creek, Taylor River, Tomichi Creek, Cebolla Creek, and the Lake Fork of the Gunnison, along with other smaller tributaries contributing to the Blue Mesa Reservoir. These sub-basins each have unique qualities and uses.



Users:

Primary water uses in the Upper Gunnison Basin include:

- Agricultural uses for crops and pasture (about 95% of the basin's water rights)
- Recreational uses
- Domestic and municipal uses
- Industrial uses, including mining, geothermal and hydropower (including Blue Mesa Dam hydropower rights)

Need for planning:

Water users in the Upper Gunnison Basin face a number of stressors to water supply and demand, including:

- The population in the basin is expected to increase by 50-100% over the next 30 years.
- Water losses due to climate change could decrease water supply by 20% by 2050.
- Future drought periods will provide additional incentive for senior water rights holders to lease or sell water outside of the basin, with the implied threat of a call on junior rights holders if water is not forthcoming.

The Upper Gunnison Watershed Assessment and Stream Management Plan is intended to improve water security for all water uses in the Upper Gunnison Basin in the face of future demand changes and climate uncertainty.

Approach

The Upper Gunnison River Water Conservancy District (UGRWCD) is the fiscal sponsor and project manager for the Upper Gunnison Basin-wide planning effort, providing coordination and oversight for the eight sub-basin efforts and basin-wide representatives from various water user groups. UGRWCD was chosen to lead this effort because of capacity and its mandate to serve as an active leader in water issues affecting the Upper Gunnison Basin.



UGRWCD has opted to take a phased approach, splitting the Basin into eight sub-basins with unique water needs and cultures. UGRWCD is appointing a coordinator to each sub-basin to work with local stakeholders and the technical consultants (in this case, Wilson Water Group and Alpine Environmental Consultants). This individual is familiar with the sub-basin and its inhabitants and will be equipped to interact with the major water users. For the first three (phase 1) sub-basins beginning their planning process (Ohio Creek, East River, and the Lake Fork), coordination will be provided by Trout Unlimited,

High Country Conservation Advocates, and the Lake Fork Valley Conservancy.

UGRWCD has created a phased approach to standardize work between sub-basins. More detail can be found on the project's website:

- Phase 1: Collect and synthesize existing data in order to construct a detailed map of each sub-basin
- Phase 2: Identify and hire a sub-basin coordinator with ties to the sub-basin
- Phase 3: Conduct stakeholder outreach to assess perceived needs under current and future conditions
- Phase 4: Conduct inventories of non-consumptive and consumptive uses to address data gaps and stakeholder needs – including implementing demonstration projects and identifying opportunities for improved water management practices
- Phase 5: Integrate sub-basin inventories into draft watershed management plan for Upper Gunnison Basin

The final product of this effort will be an Upper Gunnison Watershed Management Plan that accelerates basin-wide planning.

Variables and Inventory Assessment Level

Depending on the purpose and scope determined by local stakeholders, assessments employ different methodologies to evaluate a suite of specific parameters related to stream health and ecosystem goods and services. The comprehensiveness of the data is will vary depending on what is needed to answer core questions addressed by the SMP, ranging from less precise (general, often anecdotal or third-party information) to more precise (data-driven, quantitative metrics). The Upper Gunnison Basin Watershed Management Plan is assessing the following variables to evaluate watershed health and delivery of ecosystem services.

	Variable	Assessment Level
Ecological Integrity:		
●	Existing Flow Regime	More Precise
●	Future Flow Regime	More Precise
	Sediment Regime	
●	Water Quality	Moderate
	Network Connectivity	
●	Floodplain Hydrology	Less Precise
●	Riparian Vegetation	Less Precise
●	Stream Corridor Dynamics	Less Precise
●	Structural Complexity	Less Precise
●	Aquatic Biota	Less Precise
Regulating and Maintenance:		
	Flood Regulation	
	Groundwater Recharge	
●	Erosion Control	Less Precise
	Pest Regulation	
	Regulatory Compliance	
Provisioning:		
●	Agricultural Production	More Precise
●	Drinking Water Supply	Moderate
●	Industrial Processing	Less Precise
	Hydropower Production	
Cultural:		
●	Aesthetics and Intrinsic Values	Less Precise
●	Symbolic/Emblematic Species	Less Precise
●	Boating Recreation	Moderate
●	Angling Recreation	Moderate

Budget

Contributing Entity	Amount and Form of Match
CWCB Watershed Restoration Fund	\$175,000 cash
Upper Gunnison River Water Conservancy District	\$300,000 cash
CWCB Water Supply Reserve Fund	\$60,000 cash
High Country Conservation Advocates	\$21,600 in-kind
Trout Unlimited	\$16,200 in-kind
Total	\$572,800

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