

Welcome

Draft Environmental Assessment Open House

**Water Users' Commitment to Provide
10,825 acre-feet to the 15-Mile Reach
of the Upper Colorado River**



Razorback Sucker



Colorado Pikeminnow



Bonytail Chub



Roundtail Chub

Illustration: CDOW

10825 Project Participating Water Users

- City of Aurora
- Colorado River Water Conservation District
- Denver Water
- Eagle River Water and Sanitation District
- Municipal Subdistrict, Northern Colorado Water Conservancy District
- Northern Colorado Water Conservancy District
- Southeastern Colorado Water Conservancy District
- Upper Eagle Regional Water Authority
- Ute Water Conservancy District



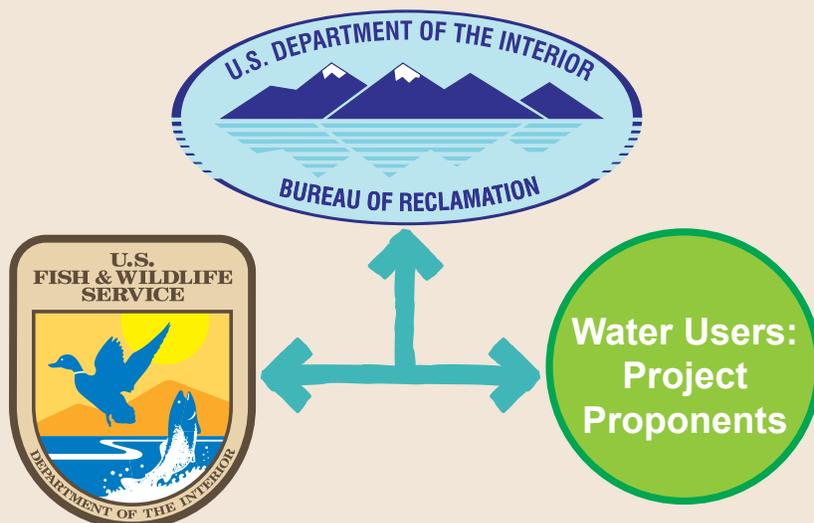
The 15-Mile Reach of the upper Colorado River

Participants

The Bureau of Reclamation (**Reclamation**) is the **lead federal agency**. Reclamation is proposing to complete up to four contracting actions that would allow releases of 10,825 acre-feet per year of water to benefit endangered fish species habitat in the 15-Mile Reach of the Upper Colorado River.

The Fish and Wildlife Service (**Service**) is a **cooperating agency**. Because the Service is responsible for endangered fish recovery, the Service offered special expertise during preparation of the Environmental Assessment.

East and west slope **Water Users** are requesting contracts from Reclamation and are the **project proponents**.



Reclamation's Four Proposed Contracting Actions

- A contract for release of 5,412.5 ac-ft of water from Ruedi Reservoir, a Reclamation facility on the Fryingpan River. The term of this contract would be for up to 40 years.
- An “if and when” contract for storage in, and release from, Green Mountain Reservoir, a Reclamation facility on the Blue River. The term of this contract would be for up to 40 years.
- A contract or similar agreement between Northern Water and an entity in the Grand Valley to release 5,412.5 ac-ft of water from Granby Reservoir, a Reclamation facility on the Colorado River and to protect the water during conveyance to and through the 15-Mile Reach of the upper Colorado River. Reclamation would consent to the contract in writing, but would not be a party to the contract. The term of this contract or agreement would be for up to 40 years.
- Supplement (modify) Contract No. 9-07-70-W0020 with Northern Water, which recognizes the Redtop Valley Ditch water that would accrue to the Colorado-Big Thompson Project would be used outside Northern Water boundaries.

Project Purpose

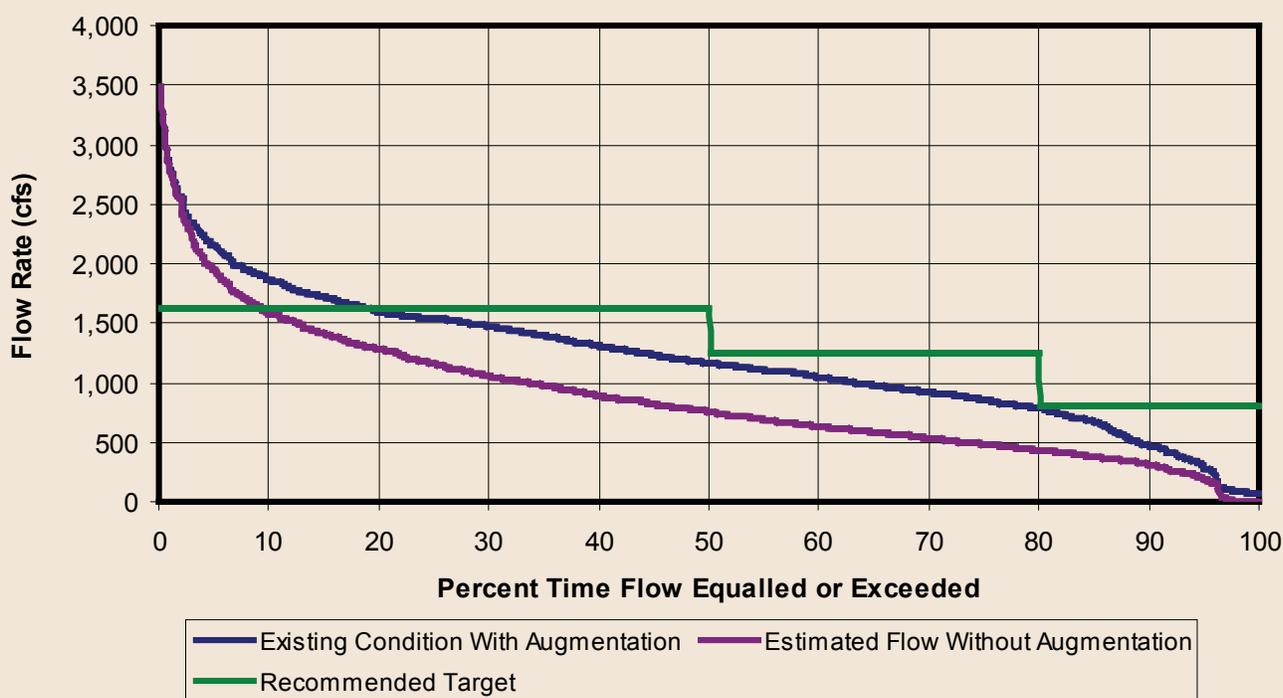
The purpose of the proposed 10825 contracts is to allow water providers who divert from the Colorado River or its tributaries to fulfill a commitment described in the *1999 Final Programmatic Biological Opinion [PBO] for Bureau of Reclamation's Operations and Depletions, Other Depletions, and Funding and Implementation of the Recovery Program Actions in the Upper Colorado River Above the Confluence with the Gunnison River*. Pursuant to the PBO, the water users will permanently deliver 10,825 acre-feet of water ("10825 water") to the 15-Mile Reach of the upper Colorado River to augment baseflows in late-summer and early fall in support of the recovery of endangered fish species (Colorado pikeminnow, razorback sucker, humpback chub, and bonytail chub).

Since 2000, the water users have provided water on an interim basis from Williams Fork and Wolford Mountain Reservoirs while a permanent solution was being developed. The Proposed Action would provide the permanent water to fulfill the 1999 commitment.

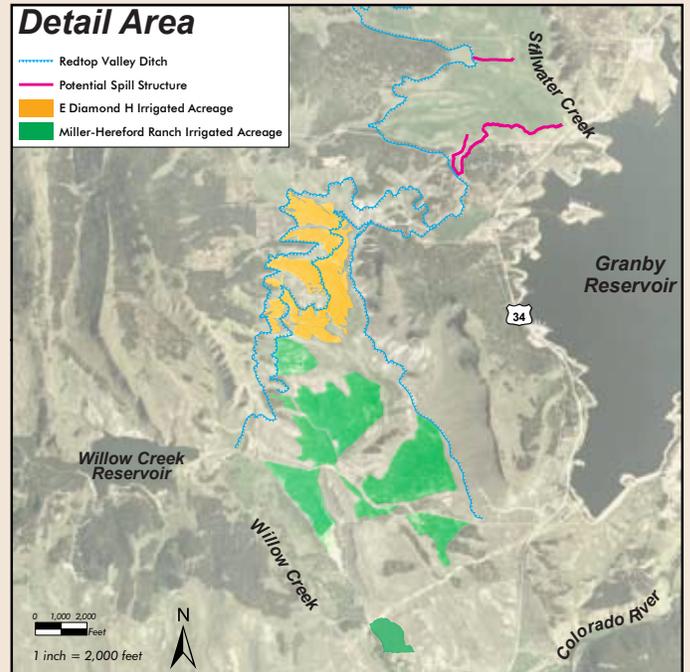
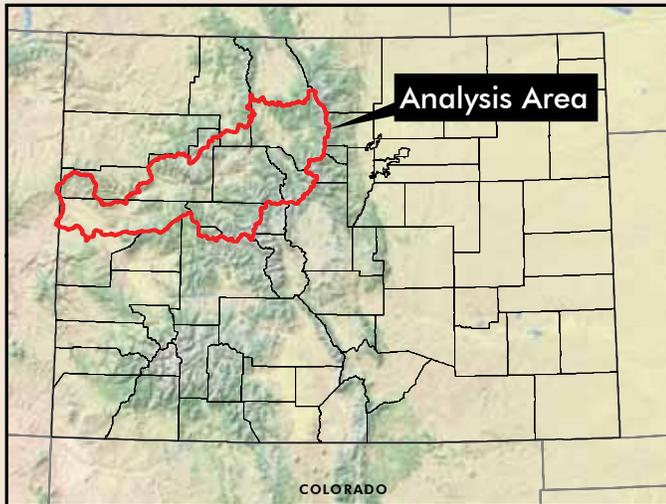
Project Need

- The U.S. Fish and Wildlife Service recommended monthly streamflow targets for the 15-Mile Reach as part of the Recovery Program
- Actual recommended flow targets vary by type of year (i.e., dry, average, and wet)
- Targets are defined for August, September, and October as measured at the Palisade gage
- Recommended flow targets are based on biological and habitat requirements of the listed fish species

15-Mile Reach Historical and Target Flow between August 1 and October 31 (Water Years 1998-2008).

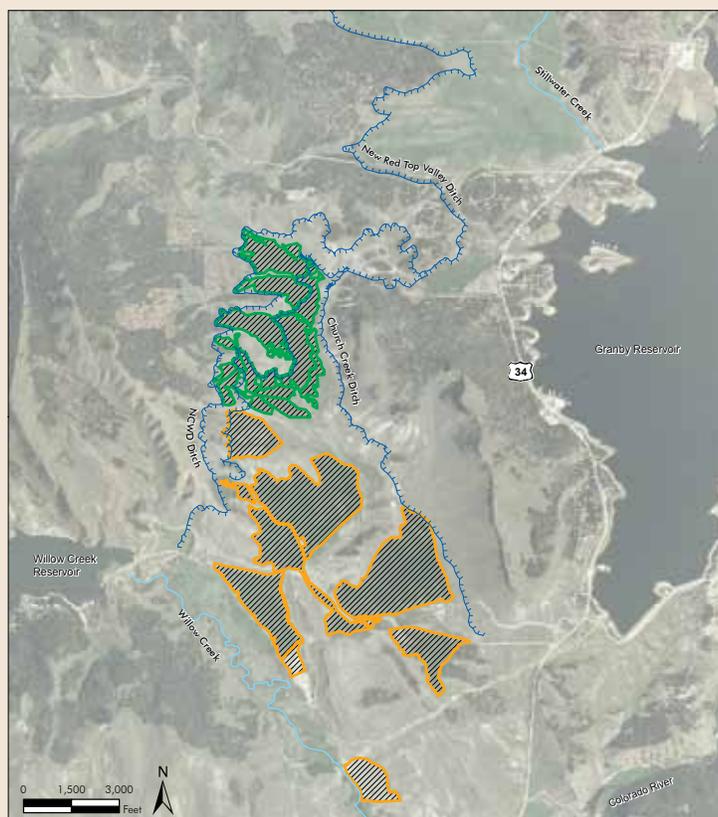


General Study Area



Five Elements of Proposed Action

- Permanent dry-up of a portion of the land irrigated by the Redtop Valley Ditch near Granby Reservoir through shares in the ditch that Northern Water owns or would acquire
- Annual release of 5,412.5 AF of water from Granby Reservoir
- Annual release of 5,412.5 AF of water from Ruedi Reservoir
- Periodic exchange of the water released from Granby Reservoir into Green Mountain Reservoir and the subsequent release of this water from Green Mountain Reservoir
- Contracting actions between Reclamation and the appropriate parties to implement the above actions



Lands Proposed for Agricultural Dry-Up

- Ditch
- Agricultural Dry-Up Study Area
- E Diamond H Ranch Irrigated Acreage
- Miller Hereford Ranch Irrigated Acreage

Water not used for irrigation as a result of the dry-up would accrue to the C-BT Project consistent with the Colorado water rights system and be released from Granby Reservoir in accordance with the supplement to Northern Water's existing contract, which would allow Northern Water to contract with a Grand Valley entity with Reclamation concurrence.

Effects of Proposed Contracts on Colorado River

- Increased flow in North Fork Colorado River below Redtop Valley Ditch diversion in June and July
- Increased flow in Stillwater Creek below Redtop Valley Ditch diversion in May, June and July
- Decreased flow in Willow Creek below Redtop Valley Ditch year-round
- Increased flow in Colorado River below Granby Reservoir in July, August, and September
- Increased flow in Colorado River below Windy Gap in August, and September and decreased flow in other months
- No effect on Shadow Mountain Reservoir and Grand Lake storage levels and increased Granby Reservoir storage levels
- Infrequent increase in Green Mountain Reservoir storage levels if an exchange of water was made from Granby Reservoir to Green Mountain Reservoir. Decreased summer reservoir levels in Green Mountain Reservoir in dry years only.



Willow Creek

Effects of Proposed Contracts on Fryingpan River

Releases to Fryingpan River from Ruedi Reservoir

- 5,412.5 acre-foot decrease in annual releases for Recovery Program
- Up to an estimated 14 fewer days when streamflow in the Fryingpan River exceeds 250 cubic feet per second as a result of releases for Recovery Program

Ruedi Reservoir

- On average, reservoir content at end of summer 5,412.5 acre-feet greater
- On average, reservoir elevation at end of summer 6.5 feet higher



Ruedi Reservoir

Effects on Green Mountain Reservoir Allocations

Potential Effect

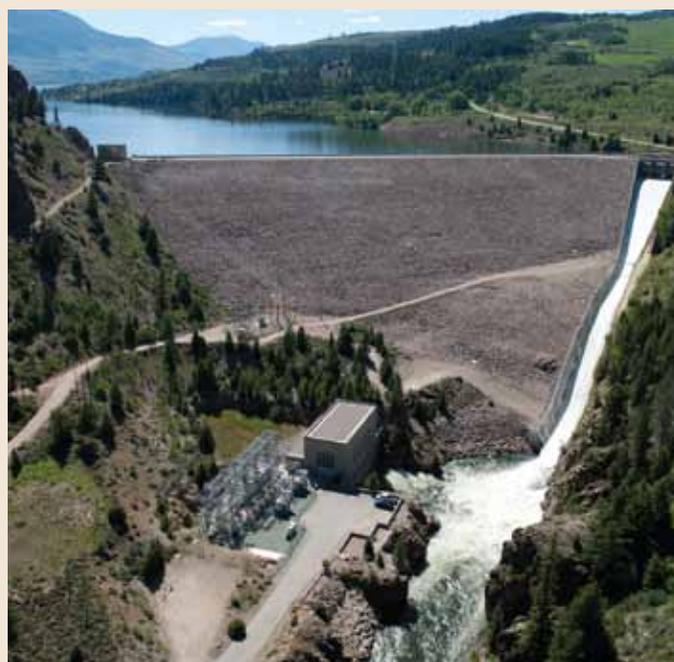
- Additional releases from Green Mountain Reservoir when Redtop Valley Ditch water is stored in Granby Reservoir and Colorado-Big Thompson Project is out of priority
- Shortages to Historic Users Pool and contract deliveries in subsequent years if Green Mountain Reservoir does not fill
- Shortages caused by the additional C-BT replacement release could be up to an estimated 1,786 AF in a worst-case scenario (once in 54 years)

Possible Mitigation

- Develop an “insurance pool” to mitigate effects on Green Mountain Reservoir
- Other water that could be delivered in lieu of Historic Users Pool or contract water from Green Mountain Reservoir
- Complete any necessary and appropriate NEPA documentation

Three Mitigation Options

1. An “if and when” pool in Wolford Mountain Reservoir filled by exchange from Grand County environmental water supplies if those supplies are not needed below the confluence of the Blue and Colorado Rivers as determined by Grand County
2. Grand County environmental water exchanged to Green Mountain Reservoir and used to offset effects caused by storing Red Top Valley Ditch water out of priority
3. The River District obtains 2,000 AF water contract for Ruedi Reservoir water to back-up the Wolford Mountain Reservoir and Green Mountain Reservoir pools in years when they are not available or sufficient



Green Mountain Reservoir

Effects on Other Resources

Affected Resource	Direct and Indirect Effects from the Proposed Action
Groundwater Hydrology	Minor to negligible long-term reduction in groundwater levels near the Redtop Valley Ditch and agricultural dry-up area due to flow reductions in the Redtop Valley Ditch.
Water Quality	<p>Minor long-term reduction in temperatures in Colorado River below Windy Gap when reservoir releases were made.</p> <p>Negligible effect on stream water quality.</p> <p>No effect on reservoir water quality.</p>
Reservoir Operations and Hydroelectric Generation	<p>No effect on Shadow Mountain Reservoir and Grand Lake storage levels and minor effect on Granby Reservoir storage levels.</p> <p>Minor, long-term infrequent increase in Green Mountain Reservoir storage levels if an exchange of water was made from Granby Reservoir to Green Mountain Reservoir. Minor decreased summer reservoir levels in Green Mountain Reservoir in dry years only.</p> <p>No effect on hydroelectric generation.</p>
Aquatic Resources	<p>Minor to negligible long-term beneficial effect in North Fork Colorado River and Stillwater Creek.</p> <p>Minor to moderate long-term adverse effect in Willow Creek.</p> <p>Minor long-term reduction in August and September stream temperatures and improvement in fish habitat in Colorado River below Windy Gap.</p> <p>Negligible effect on other rivers, streams, and reservoirs.</p>
Wetland and Riparian Resources	<p>Increased riparian and wetland vegetation along Stillwater Creek long-term. Negligible effect on wetlands along Willow Creek, Colorado River, and Blue River.</p> <p>62 acres of wetlands in the agricultural dry-up area would permanently lose hydrologic support, and species composition may change.</p> <p>No effect on wetlands associated with Granby and Green Mountain reservoirs.</p>
Vegetation and Wildlife Resources	<p>No effect on federally threatened and endangered wildlife or plant species or Colorado plant species of concern.</p> <p>Minor long-term habitat reduction for sandhill crane, greater sage grouse, boreal toad, and wood frog.</p> <p>Negligible effect on raptor foraging habitat and no effect on known raptor nests or on large game.</p> <p>Minor change in species composition in agricultural dry-up area.</p>
Soils and Farmland	Permanent loss of 479 acres of farmland of statewide importance in agricultural dry-up area.
Recreation	<p>Negligible to minor long-term effects on reservoir recreation in Granby and Green Mountain.</p> <p>Negligible effects to boating and fishing in the Blue River and Colorado River.</p>
Socioeconomics and Land Use	<p>Negligible to minor long-term effects on water-based recreation economies.</p> <p>Negligible adverse effect on the agricultural portion of the Grand County economy.</p> <p>No disproportionately high and adverse human health or environmental effects on minority and low-income populations.</p>

Thank You for Your Participation

Comments Accepted

**Comment Cards and Contact
Information Available Here**

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