

# Education and Engagement in the Rio Grande

Sustaining Colorado Watersheds Conference 2015



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# Rio Grande Basin Implementation Plan



5 Subcommittees- 1. Public Outreach and Stakeholder Involvement 2. Water Administration  
3. Agriculture 4. Municipal and Industrial 5. Environment and Recreation

# Rio Grande BIP goals



1. Protect, preserve, and/or restore the sustainability of the Rio Grande Basin watersheds by focusing on watershed health and ecosystem function.

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2. Protect and preserve the doctrine of prior appropriation and vested water rights, and fully utilize Colorado's compact entitlements as specified under the Rio Grande and Costilla Creek compacts.

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3. Sustain the confined and unconfined aquifers in accordance with Senate Bill 04-222 and operate within the State Engineer's new Rules and Regulations for the San Luis Valley.

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4. Operate, maintain, rehabilitate, and create necessary infrastructure to meet the Basin's long-term water needs, including storage.

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5. Manage water use to sustain optimal agricultural economy throughout the Basin's communities.

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6. Support the development of projects and methods that have multiple benefits for agricultural, municipal and industrial, and environmental and recreational water needs.

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7. Meet new demands for water, to the extent practicable, without impacting existing water rights and compact obligations.

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8. Establish a long-term education and outreach effort for water use and needs in the San Luis Valley/Rio Grande Basin.

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9. Make progress toward meeting applicable water quality standards throughout the Basin.

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10. Promote water management and administrative practices that are adaptive, flexible, and responsive to optimize multiple benefits.

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11. Protect, preserve, and enhance terrestrial and aquatic wildlife habitats throughout the Basin.

Env&Rec

12. Conserve, restore, and maintain wetlands and riparian areas for the benefit of a healthy watershed.

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13. Work to sustain active river flows throughout the year in cooperation with water users and administrators to restore and sustain ecological function of the rivers and floodplain habitats within the context of existing water rights and compact obligations.

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14. Maintain and enhance water-dependent recreational activities.

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# Rio Grande Reservoir Dam Operations are “Mystifying”



- ✦ **Ag... Teach-** needs and constraints    **Learn-** what screws up fishing
- ✦ **Admin... Teach-** legal operations and priority system    **Learn-** Rec and environmental goals and opportunities to “stack up” benefits
- ✦ **Outfitters... Teach-** flows needed and effects of drastic flow changes  
**Learn-** operational constraints and legal & administrative reality
  
- ✦ How do we coordinate and facilitate and still do our individual jobs? Bring in TU of course!

## Good Morning Rioneers

A cloudy start after two beautiful days in a row. The Rio and tribs are dropping quickly over the last few days, and a couple of float sections will be too low to boat today. Inflows at Rio Grande Reservoir are at approximately 200 cfs and the reservoir is 361 Acre Feet under legal. So, in order to catch up to legal storage, they would have to cut the release by 180cfs for the next 24 hours. That would leave 20 cfs in the river. Thankfully, that will not happen today because stored Rio Grande Compact water will be used to provide the extra water. **The release today will be 200cfs.** Yes, this is a 40% drop in the upper river from yesterday, but remember that it wasn't very long ago that we didn't even have a compact storage option. The DWR is again keeping us and our fish in the game. So, while it is sad to see that upper river drop out of reach, the majority of our 80 miles of floatable water will remain an option. Wagon Wheel is at 700 cfs this morning, so with a 140 cfs cut it will still be 560 cfs or so and floatable as will everything below it all the way to Del Norte. The Marshall park area will likely have enough water too, as it picks up some good tribs like Trout, Fern, Texas, Middle and Clear Creek etc. Only the top 17 miles in the Oxbow reach is out today. Again, it could be a lot worse if not for compact water, so thanks again to DWR for putting the compact water to work on double duty!

Have a great Friday on the Rio Grande and an amazing weekend of fishing!

KT

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# Rio Grande Cooperative Project



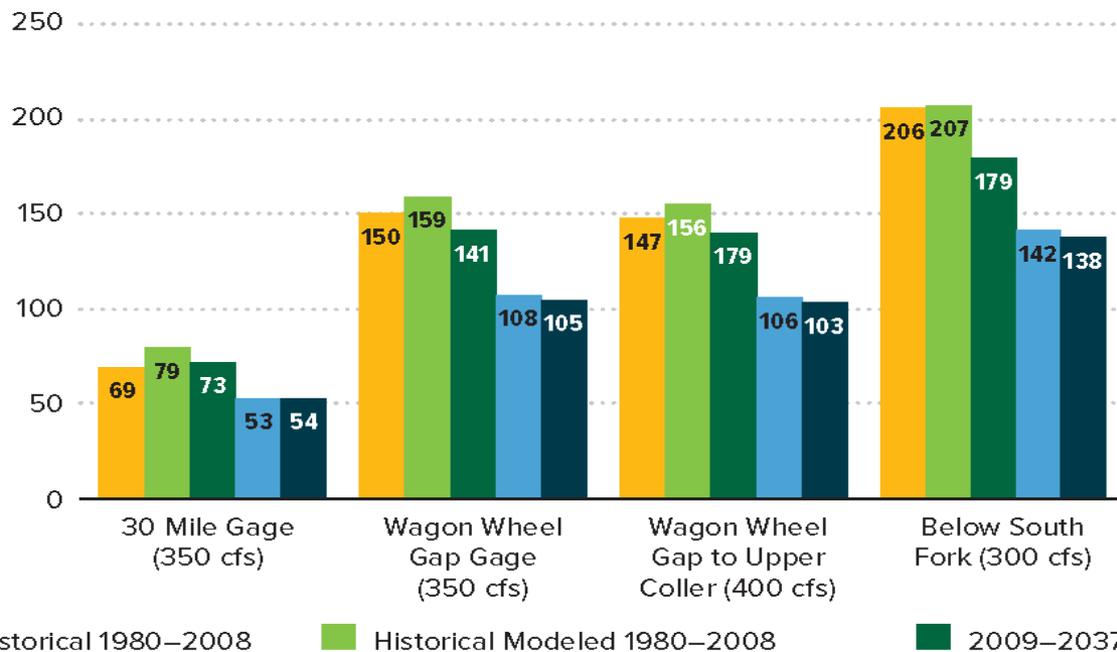
Reservoir Rehabilitation, Riverware software to investigate opportunity to increase benefits through retiming and coordination, Set targets and practice, review and adjust

Key- COORDINATION

# Estimated Impacts on Boatable Days



AVERAGE ANNUAL BOATABLE DAYS



**FIGURE 25.**

Number of average annual boatable days at different locations of the Rio Grande headwaters.

Analysis based on historical gage data from 1980–2008, modeled gage data from 1980–2008, and modeled gage data during three future periods under climate change.

# Conejos Winter Flow Program



Old Fight New Solutions, Restart a conversation and get every side of the story, Opt in-Opt out flexibility, Incentivize participation and reduce workload to participate, Result- **3cfs addition to 7 cfs minimum for all 5 months during storage season in 2015-16!!!!!!!**

# Conejos Cooperative Project



Brand New Discussion.... Colorado Parks and Wildlife, Conejos Water Conservancy District, Division of Water Resources, United States Forest Service, Colorado Water Conservation Board, TU and that's just to start.... Feasibility phase as ATM study to seek opportunity and maximize benefits

# Educate → Engage → Implement → BIP Projects and Methods



- ✦ Rio Grande Cooperative Project
- ✦ Boatable Days Analysis
- ✦ Conejos Winter Flow Program Stream Management Plan
- ✦ Upper Rio Grande Watershed Assessment
- ✦ Trujillo Meadows ATM aka “Conejos Cooperative Project”
- ✦ The list goes on!!!!

## PROJECT FACT SHEET



### LOCATION

La Jara Creek, Conejos County

### SPONSORS

Conejos County, Trout Unlimited, State Land Board, Colorado Mountain Club, volunteers for Outdoor Colorado

### ESTIMATED PROJECT COSTS (2014 Dollars)

\$30,000

### POTENTIAL FUNDING COLLABORATIONS / SOURCES

GOCO, Rio Grande Basin Roundtable

### PROJECT TIMELINE

2–3 years

### PROJECT START DATE

2014

### WSRA FUNDING OPTION

– Statewide ✓ Basin

### PROJECT BENEFICIARIES (Direct and Indirect)

Conejos County, Colorado Parks and Wildlife, State Land Board, Trout Unlimited

PROJECT SCHEDULE	YEARS	PROPOSED BUDGET
Preliminary Design Analysis	2014	In-Kind
Permitting	N/A	
Land Acquisition	N/A	
Final Design	2014	<\$1,000
Construction	2014–2016	\$29,000
Surveying, Inspection, Legal, and Administration	2015	In-Kind
Contingency	2014–2016	Carryover
<b>Total</b>		<b>\$30,000</b>

## Jim Creek Riparian Protection and Restoration Project

Approximately 5 miles of fencing will protect 2.5 miles of Jim Creek from continued erosion and habitat loss caused by cattle grazing activities, and the fence will create a riparian buffer area of at least 30 acres. By eliminating cattle grazing in the riparian buffer area and the damage caused by trampling in the stream channel and along its banks, the stream and its riparian area will begin a natural recovery. The fence will be designed with input from grazing lessees to ensure that their operations are not adversely affected, allowing for appropriately spaced access to the stream for watering and crossing of livestock. The Rio Grande cutthroat is a candidate for ESA listing, and this partnership with ranchers will protect the stream while allowing ranching operations to continue, therefore providing both a higher level of security for the future of their operations and the conservation population of native trout that resides in Jim Creek.



### BASIN PLAN GOALS / NEEDS MET

1. Protect, preserve, and/or restore the sustainability of the Rio Grande Basin watersheds by focusing on the watershed health and ecosystem function.
6. Support the development of projects and methods that have multiple benefits for agricultural, municipal and industrial, and environmental and recreational water needs.
11. Protect, preserve, and enhance terrestrial and aquatic wildlife habitats throughout the Basin.
12. Conserve, restore, and maintain wetlands and riparian areas for the benefit of a healthy watershed.

### USES / NEEDS MET

- ✓ Agricultural
- Municipal & Industrial
- ✓ Environmental & Recreational
- Water Administration
- ✓ Other



# Questions?

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