Healthy Rivers, Healthy Communities

"Eventually, all things merge into one, and a river runs through it."

– Norman Maclean, *A River Runs Through It*

Courtesy of NEW BELGIUM BREWING.

What you can do:

- Contact your elected representatives and ask them to oppose NISP/Glade and support efforts to protect and restore the Cache la Poudre River: **www.savethepoudre.org/write_your_representatives.html**
- Write a letter or an op-ed/soapbox to the newspapers: **www.savethepoudre.org/voice_your_opinion.html**
- Conserve water at home: www.westernresourceadvocates.org/water/conservetips.php
- Talk to your friends, neighbors, and coworkers about how NISP threatens the Cache la Poudre River. Please let people know about the Save the Poudre website: www.savethepoudre.org
- Please make a contribution to the Save the Poudre Coalition. We are working hard to save this river! **www.savethepoudre.org/donate.html**
- Get out and enjoy the Cache la Poudre River. Walk its banks, kayak its rapids, fish its riffles, swim its pools, and love this great river of ours.

The Save the Poudre Coalition is a group of 15 national, state, and regional environmental organizations whose joint mission is to protect and restore the Cache la Poudre River as it flows from the mouth of Poudre Canyon to its confluence with the South Platte River. Save the Poudre is monitoring and commenting on proposed reservoir projects, including the controversial Northern Integrated Supply Project/Glade Reservoir, which will destroy the flows, water quality, and ecological health of the Poudre River.

National Wildlife Federation
Clean Water Action
Sierra Club, Rocky Mountain Chapter
American Rivers
Friends of the Poudre
Fort Collins Audubon Society
Wolverine Farm Publishing
Citizen Planners
Poudre Paddlers
Defenders of Wildlife
Environment Colorado
Cache la Poudre River Foundation
Colorado Environmental Coalition
Western Resource Advocates
Lighthawk

THE HEALTHY RIVERS ALTERNATIVE

Water Supply Security for Northern Colorado That Protects the Cache la Poudre River

"A frog does not drink up the pond in which he lives." **– Sioux proverb**

Poster design and photo illustration by ONE TRIBE CREATIVE.

Colorado has some of the most beautiful rivers in the world, including Colorado's only National Wild and Scenic River, the Cache la Poudre. While the Poudre has been somewhat protected in its canyon through the mountainous Front Range, the lower Poudre – which runs through the heart of Laporte, Fort Collins, Timnath, Windsor, and Greeley – has been degraded by excessive diversions and channel alterations. The lower Poudre is in grave danger, threatened by a massive dam and reservoir scheme called the Northern Integrated Supply Project (NISP) and its proposed Glade Reservoir.

A large coalition of citizens and nonprofit groups is working diligently to save the Poudre River. As part of that effort, we have created the Healthy Rivers Alternative, a proposal for water supply security that better protects the Poudre River than does NISP/Glade and is also less expensive and better for farms and ranches. This brief report provides an executive summary of how the Healthy Rivers Alternative can serve as the path forward for a sustainable water supply solution for northern Colorado while avoiding the major problems of the NISP/Glade proposal. Find full copies of the Healthy Rivers Alternative at **www.savethepoudre.org** and **www.westernresourceadvocates.org/water/index.php**.

A great river deserves a great effort to preserve it for future generations. The Cache la Poudre River is worth every ounce of our work to fight the NISP/Glade proposal. The river needs protection and restoration, not further degradation. The Healthy Rivers Alternative is a healthier, better path toward meeting our water needs.

The Problem

Photo by ROGER FAABORG.

The Poudre River in Fort Collins has two main problems: sometimes it is drained completely dry; other times, the peak flow is removed. The peak flow is what makes the river healthy and feeds the cottonwoods, wetlands, and natural areas all through Fort Collins.

NISP and its Glade Reservoir is a one-size-fits-all scheme that creates far more problems than it solves.

1. ***NISP would kill the Poudre's last remaining peak flows – its celebrated June rise.*** Sixty percent of the water in the river below the mouth of Poudre Canyon is already diverted away for towns and irrigation. NISP would drain out 40% of what remains, leaving a mere remnant of the Poudre flowing through Fort Collins. The riverbed would fill with silt; suckers and carp would replace trout; and native cottonwoods, willows, box elder, and ash trees dependent on peak flows would die and be replaced by invasive crack willow and Siberian elm. If NISP is built, the river as we know it will be gone.

2. ***NISP is very, very expensive.*** The cost of the NISP/Glade proposal is over a billion dollars in capital expenses and interest, which is more than $25,000 per acre foot, making NISP one of the most expensive water projects in Colorado history. NISP places a huge debt burden on the region, and especially on Weld County, which has already suffered greatly in the 2008-2009 recession.

3. ***NISP would put farmers out of business.*** Not one drop of the water from NISP/Glade would go to increase irrigation water supplies. Tens of thousands of acres in the lower South Platte basin are currently irrigated using water that NISP/Glade would drain from the Poudre. NISP is literally designed to unseat the farming and ranching heart of the northern Front Range. The NISP participant towns plan to grow on top of nearly 80,000 acres of farms – drying up, subdividing, and paving over much of the farming heritage of northern Colorado.

4. ***NISP would waste water.*** Contrary to local, regional, and national trends, there is virtually no substantive commitment to conservation and efficient use of water by cities that propose building NISP. New water supply projects must not be built until conservation and efficiency measures are exhausted. It is simply wrong to drain the Poudre, and it is especially wrong to drain it and then waste its precious water.

5. ***The NISP financing scheme will help fuel rapid population growth.*** The financing scheme requires communities to grow rapidly in order to pay off the NISP debt. NISP is not needed to meet current residents' water demands; it is all for future growth. If Northern Colorado's growth stalls like it has in 2008 and 2009, today's residents will end up footing the bill for NISP through higher water rates, or the towns subscribing to NISP/Glade will have to promote rapid growth to pay for the project.

The Solution

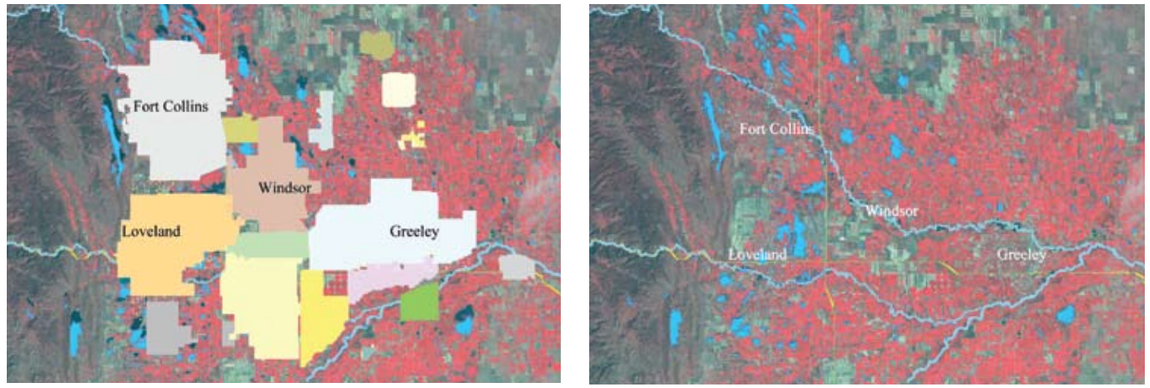
A healthy Poudre River flowing through Fort Collins is an environmental and economic amenity to the City and all of its citizens. The City has spent tens of millions of dollars buying open space and building trails along the river. Draining the river makes no sense.

Photo by JOHN BARTHOLOW.

6. ***NISP endangers public health and safety.*** Below Poudre Canyon, the Cache la Poudre River no longer meets state and federal water quality standards for numerous pollutants and bacteria. The NISP/Glade proposal will take even more water out of the lower river, generating more stress on natural systems and greatly worsening water quality. Ironically, stripping the peak flows from the river would make the region more vulnerable to flooding because silt would fill the riverbed and leave less room for floodwaters in the river channel.

The Save the Poudre coalition is committed to being a part of the water supply solution for the Poudre River and northern Colorado.

We have analyzed the water needs of the NISP participants and prepared the Healthy Rivers Alternative as a viable option to the NISP/Glade proposal. This alternative provides the water supply and storage sought by the NISP/Glade participants while making the long-term protection and partial restoration of the Cache la Poudre River possible.



On the left is the developed footprint of Northern Colorado as projected to look in 2030. On the right is the region as it looked in 2002. The red areas are irrigated farmland. Over 70,000 acres of farms will be put out of business. Source – GREELEY WATER RESOURCES (2007).

The Solution

The Healthy Rivers Alternative (HRA) will:

1. ***Extend a hand to farmers and ranchers by protecting irrigation water quality and supply.*** The HRA will preserve peak flows in the Poudre and South Platte and thus protect farms by reducing water salinity and crop-sensitive pollution. In addition, the HRA will use water-sharing contracts between cities and farms that will protect irrigated farmland and increase farm income. The Healthy Rivers Alternative also stores water more cheaply and efficiently in existing reservoirs, gravel pits, and aquifers rather than huge centrally controlled reservoirs like Glade.

2. ***Maximize conservation and efficiency.*** The HRA promotes simple and inexpensive conservation measures that are crucial to our future and to the survival of our rivers. Per-capita water use in major Front Range cities has declined over the past decade, and most city utilities plan to reduce water use steadily over the next two decades or more. The HRA uses existing water supplies more efficiently and maximizes water conservation.

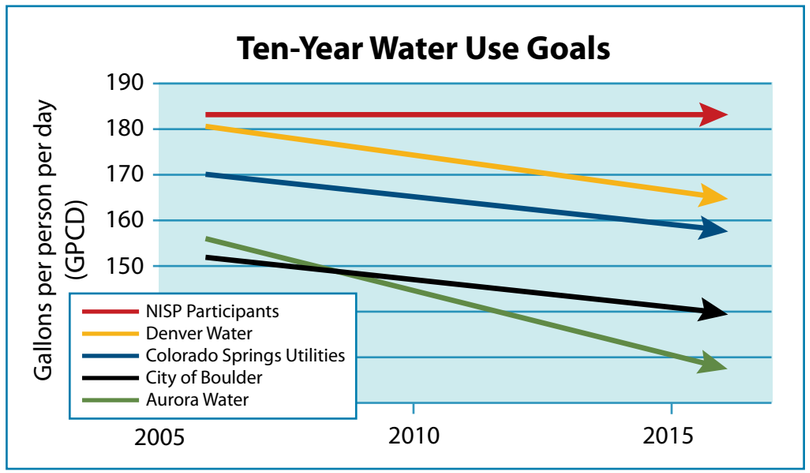
3. ***Make a commitment to financial responsibility.*** Borrowing a billion dollars that must be paid back by rapid population growth is a bad idea. Instead, the Healthy Rivers Alternative focuses on pay-as-you-go financing that incrementally adds water supply and storage, as well as conservation and efficiency measures as needs require. Water conservation and efficiency technology is changing rapidly; thus, incrementally purchasing conservation and efficiency measures while purchasing new water supplies and storage allows water managers to meet demand more cheaply without draining our rivers.

	NISP AS PROPOSED	HEALTHY RIVERS ALTERNATIVE
Capital Cost	At least $828 million	$449 million

The Healthy Rivers Alternative would cost about half what the NISP project would as proposed, without incurring huge public debts and financing costs, and without draining the Cache la Poudre River.

4. ***Maintain a clean, drinkable water supply.*** More than a quarter million people depend on the Cache la Poudre River for clean drinking water. The river irrigates hundreds of thousands of acres of farmland. Maintaining peak flows protects water quality and the ecosystem that naturally cleans the river without human assistance.

5. ***Protect and restore the Cache la Poudre River.*** We have used the Cache la Poudre River to grow crops, water our lawns, flush our toilets and bathe our children. In the process, we have also abused it. In many places the river is dried up completely. The Healthy Rivers Alternative promotes the protection and restoration of the river – not to its natural flow level, but to a healthy flow level – that will enhance both the environment and the economy for citizens in northern Colorado.



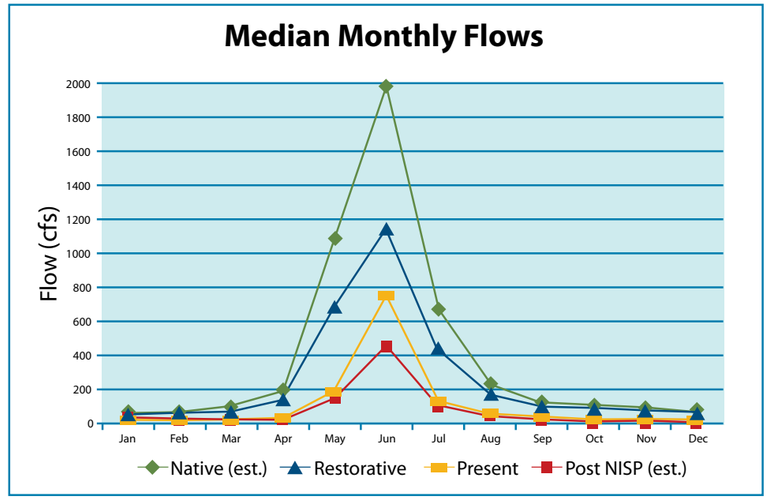
Left; System-wide water use goals by various Front Range water providers.

Healthy rivers are fun for the family, good for the soul. Photo by J. BARTHOLOW.

The Poudre River needs to be protected and partially restored.

1. Peak Flows must be protected and augmented. In the diagram to the right, we present a proposal for the minimum flows necessary to protect water quality, provide wildlife habitat, and meet public safety needs for the river. Existing peak flows have already been cut in half. Losing peak flows degrades the river, leading to higher water temperatures, algae infestations, loss of biodiversity, and ecosystem shifts that benefit exotic species over native species. Rather than stripping the river of the remainder of its peak flows, as the NISP/Glade proposal will do, we must augment them where possible. Peak flows are fundamental to the health and viability of the ecosystem. They clear silt and algae from the riverbed, create seedbeds for riparian vegetation, build and maintain habitat for fish, recharge riparian-associated wetlands, and greatly improve water quality.

2. The Cache la Poudre River needs critical baseline winter flows. Winter flows currently average less than 5% of the historic average of 50-70 cubic feet per second (cfs). For many months of the winter, long sections of the river are completely dry. This



The Solution

creates major problems for water utility managers, isolates fish and wildlife, and severely degrades habitat. In the photo to the right, the natural winter flows would normally rise to an adult person's knees. Today, water rarely flows during the winter at more than a trickle.

Winter flows improve water quality, provide aquatic habitat for fish and insects, and provide riparian habitat for mammals, birds, and reptiles, as well as recreational resources for people. Since 2000, the Poudre River has routinely run dry or nearly dry in the stretch from the Poudre Canyon mouth to Windsor from late October through mid April. These winter dry-ups must be eliminated if we are to enjoy the benefits of a healthy river.

3. River flows must be better managed for ecological health. While there are wet and dry years, changes in the river's natural flow occur gradually. Aquatic and other river-dependent life has adapted to these patterns. However, over the course of the last century, flows have risen and fallen at extreme rates from day-to-day and even hour-to-hour as water diverters trade water up and down the river system. Such extreme hour-to-hour variation is extremely damaging to stream banks and vegetation. Flow changes of over 1000 cfs in a single day are common, leading to bank slumping, erosion, dismal water quality, and damaged habitat.

At least a dozen stretches of the river below the canyon mouth have been dry or nearly dry for several weeks to months out of the year. In the photo to the right, the river was drained completely dry in June – normally the time of peak flow – in downtown Fort Collins. Small pools of water provide the only aquatic habitat in these stretches, severing critical habitat linkages between upstream and downstream stretches and greatly degrading water quality.

The Cache la Poudre River in Winter. Flows are often completely drained away from November through February. PHOTO BY J. BARTHOLOW.

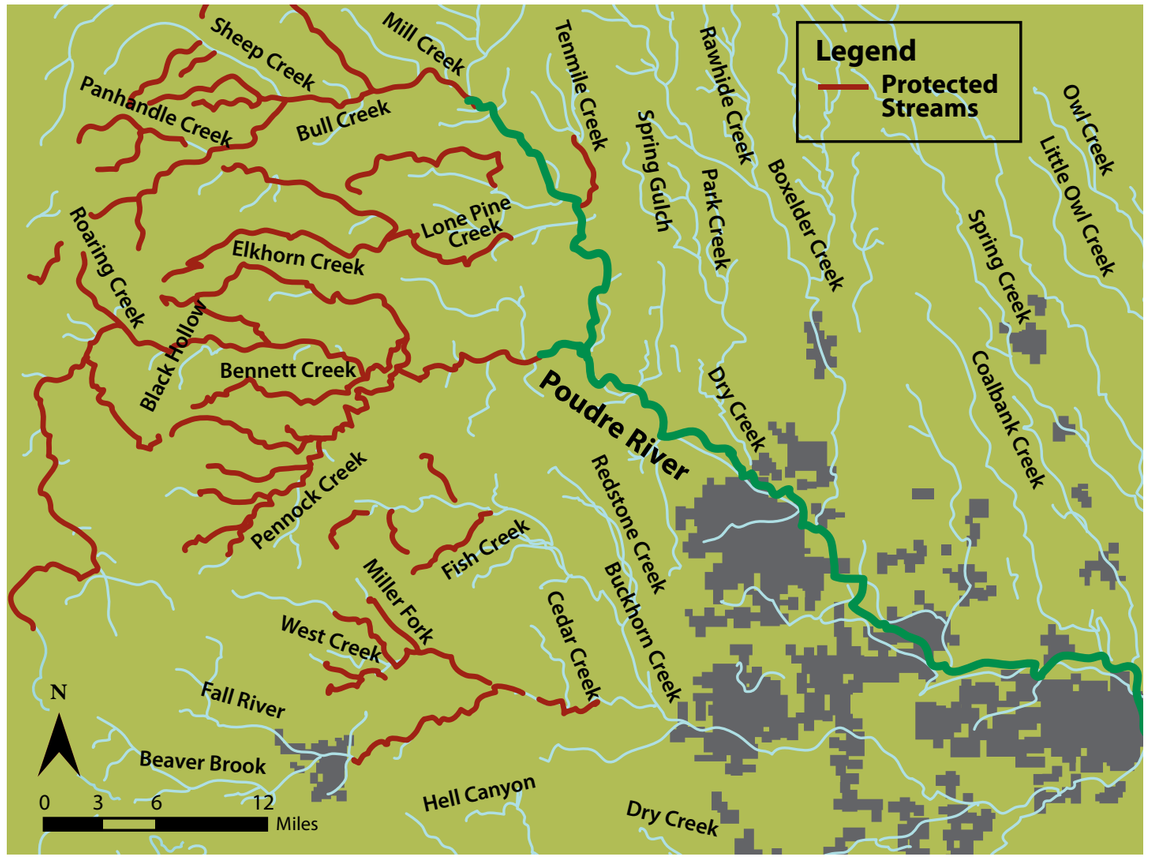
The Cache la Poudre River in late June, 2008. Flows during the peak flow season (the June Rise) are sometimes completely taken from the river. Photo by GARY WOCKNER.

The Time for Change Is Now!

Help us create an instream flow program for the lower Poudre River.

Although some of the Poudre's mountain headwaters are protected, the entire lower stretch of the river has almost no protection and is sometimes completely drained dry by cities and agricultural users. In the map of the Poudre basin below, red lines are minimally protected headwaters and the green line is where the Save the Poudre Coalition proposes a legal instream flow. An instream flow would protect the river – dry-ups would no longer occur, and peak flows could be protected to help keep the river healthy and clean.

Several cities in Colorado have created instream flow programs to protect streams, including Golden, Steamboat Springs, Pueblo, and Durango. Fort Collins, Greeley, Windsor, Timnath, and Laporte should be next. Protecting the Cache la Poudre River will provide environmental and economic benefits in perpetuity, and help keep the ecosystem surrounding the river vibrant and healthy. Creating an instream flow program for the lower Poudre River will be a lot of work and will take creative cooperation and collaboration between a variety of government entities and citizen groups. ***The time to start this important work is now!***



Source: COLORADO WATER CONSERVATION BOARD.