



NEWS

May 2003 / No. 1



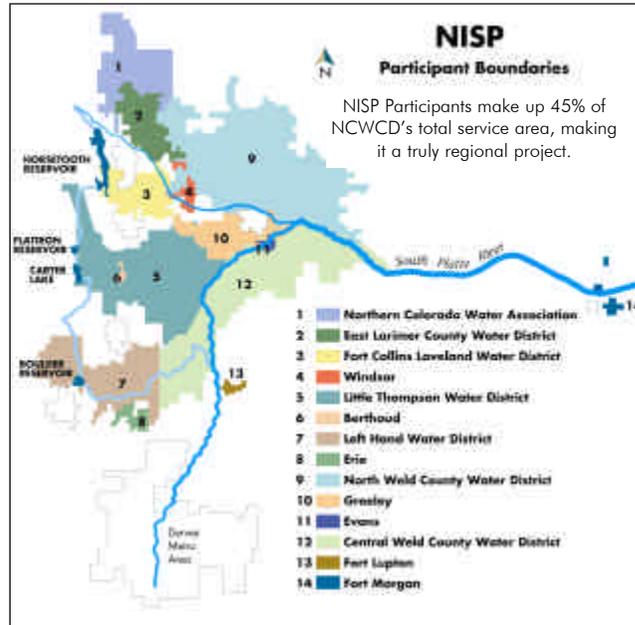
A Publication of the Northern Colorado Water Conservancy District

The Northern Integrated Supply Project: A Regional Water Solution

Northern Front Range water districts and municipalities have noted the need for additional water supply for decades. Water professionals are concerned about meeting future demand on already limited supplies, especially given increased need for new supplies in our region and the constant possibility of drought.

To address this need for additional supplies, the Northern Colorado Water Conservancy District and 14 regional water providers are moving forward with the Northern Integrated Supply Project. The NISP team is a broad coalition of northern Front Range municipalities and water districts who hope to increase the quantity and reliability of their water supplies. NISP's implementation will assure that regional water resources benefit regional communities.

On behalf of the 14 participants, NCWCD is currently examining a wide array of options to meet their water needs. The options include non-structural alternatives such as integrating existing water infrastructure, and structural possibilities like expanding existing reservoirs or creating new ones.



Project Need

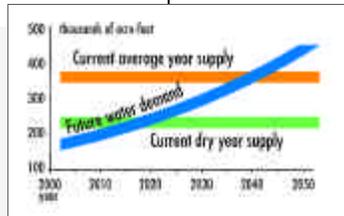
In 2000, NCWCD completed a regional study of future water demand. The study integrated information from city and county planning documents into a Geographic Information System database. The database compared current and planned future land use to create water demand projections. As shown in the graph below, the final study forecasted a 160% increase in water

demand in the next 30 to 60 years. That means the region needs another 300,000 acre feet of water per year, which is the same as a second Poudre River!

To meet this demand, each water provider could pursue its own solution, or the municipalities could work together. NCWCD believes a collaborative approach has the following benefits:

Maintenance of agricultural lands

One option cities use to increase their water supply is to purchase water rights from agriculture. This strategy will result in a loss of productive farmland and the open space and economic diversity it provides. Based on historic trends, most of the transferable Colorado-Big Thompson Project water contracts likely will be owned by the municipal and industrial sectors within the next 15 years, at which point none will be left to transfer out of agriculture. To preserve our farmland and provide a sustainable supply to cities, NISP will not include permanent conversion of agricultural water to urban uses as an alternative.



An integrated project instead of many separate projects

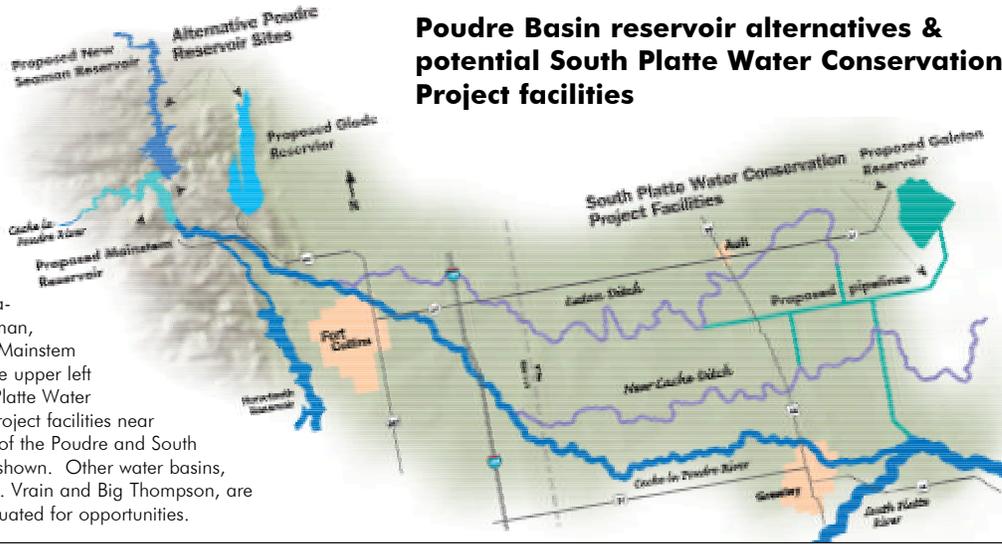
Without a regional solution, cities and towns will find individual solutions. This may prove more costly, more environmentally damaging and less effective than one integrated project.

Regional control of regional natural resources

The city of Thornton already bought northern Colorado farmland and the associated water rights to satisfy its growing demand. Additionally, Thornton owns conditional water rights on the Poudre River which it may develop unless NCWCD exercises its rights on the Poudre River. Plans that promote the interests of the northern Front Range, such as NISP, must be developed if regional control of our natural resources is desired. Without a regional water project, the northern Front Range jeopardizes its ability to control its own destiny.

Poudre Basin reservoir alternatives & potential South Platte Water Conservation Project facilities

Three potential Poudre Basin reservoir alternatives, New Seaman, Glade and the Mainstem are shown in the upper left corner. South Platte Water Conservation Project facilities near the confluence of the Poudre and South Platte are also shown. Other water basins, including the St. Vrain and Big Thompson, are also being evaluated for opportunities.



The Phase II Process

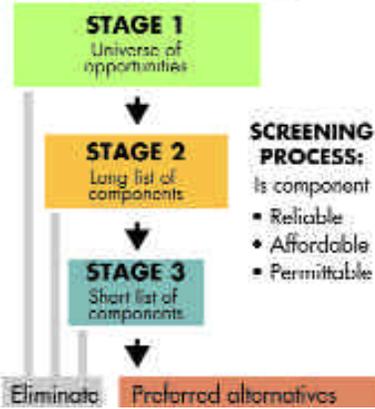
In January 2003, NISP entered Phase II. Its objective is evaluation of the universe of alternatives to find those that address the participants' needs, while also being environmentally and economically feasible. The team will then identify the preferred alternative, prepare a report and present it to the public.

Phase II also will lay the groundwork for the National Environmental Policy Act process, which requires completion of an environmental review to aid in the decision-making process. Substantial public participation is built into NEPA, and the District will publicize comment

opportunities and meetings. For more information on NEPA, visit: <http://ceq.eh.doe.gov/nepa/nepanet.htm>

Currently under study by the NISP team is a long list of potential project elements, including those shown in the list below. They will assess these elements in a three stage process, shown at right. As the screening process progresses, the team will eliminate elements that do not meet the screening criteria. Elements that survive the screening process will be consolidated into several alternatives. The participants and team will choose the preferred alternative by early 2004.

NISP alternative selection process



To find the most viable alternatives, the team uses a three stage screening process. The components must meet criteria based upon reliability, affordability and permissibility at each stage to progress forward. Screening criteria at each stage are more detailed and rigorous.

The list below illustrates some of the components the NISP team is evaluating for inclusion into the preferred alternatives. The complete list contains over 100 components, which will be screened using the three stage process at right.

| Non-Structural Components | | |
|---|---|---|
| New Management Strategies Change existing reservoir operations Phreatophyte (willow, tamarisk, etc.) control Forest management Allow non-federal entities use of C-BT storage Cloud seeding | Water Rights Reuse of return flows Lease of Windy Gap Reservoir water Water bank Temporary dry year ag. to urban transfers | Conservation Agricultural water conservation Municipal water conservation |
| Structural Components | | |
| New Reservoirs Glade New Seaman Halligan Grey Mountain Galeton Cactus Hill | Existing Reservoirs Hardin Rockwell St. Vrain basin sites Off-channel South Platte sites New Big Thompson basin rights Substitute foothills for plains storage | Other Enlarge existing reservoirs Dredge existing reservoirs Groundwater development S. Platte Water Conservation Project Gravel pits |

Community Questions

Each edition of *NISP News* will contain a Community Questions segment. It will provide answers to questions about NISP expressed to NCWCD by the public.

Q Who is paying for NISP?

A The 14 NISP participants are jointly financing the Phase II investigation and report. The participants' costs are proportional to the amount of project storage or water yield they require

from the project. Once Phase II is complete, participants will enter into a new contract to finance the NEPA review.

Q What waters may be diverted or affected by NISP?

A All of the northern Front Range water sources are being evaluated. These include the Cache la Poudre, Big and Little Thompson, St. Vrain, Boulder Creek and South Platte Rivers. Mechanisms to utilize the water range from new river diversions to reuse of return flows. Any new water source must not infringe upon the water rights of downstream users.

NISP may utilize the District's existing, undeveloped water right on the Poudre River. This junior right allows diversion only during high flow periods in wet years. Options for storage of that flow include new reservoirs on or off the Poudre River mainstem and enlargement of existing reservoirs.

Another possible component of NISP is the South Platte Water Conservation Project. NCWCD obtained the rights in the early 1990s to unappropriated water near the confluence of the Poudre and South Platte rivers. The diverted water consists primarily of winter month return flows, and would be collected in the proposed Galetton Reservoir. Agricultural ditch companies would receive South Platte water in lieu of the upstream Poudre River water they currently divert. This re-positioning of water would allow Front Range municipalities greater access to high-quality Poudre River water without increasing their diversions on the Poudre's upstream portion.

Q Will NISP affect flows in the Poudre and South Platte Rivers?

A Whether, and how, NISP affects the Poudre and South Platte Rivers depends on the alternative selected. Once alternatives are created, the NISP team will perform detailed analysis on each alternative's impact to river flows. NCWCD will share the analysis with the public. Both the needs of downstream users and water rights holders will regulate the timing and amount of water diverted for NISP.

Threatened and endangered species issues on the Platte River

in Nebraska also may affect Poudre and South Platte river diversions. A 1997 cooperative agreement requires Colorado, Wyoming and Nebraska to protect and enhance habitat for four species. The three states are currently negotiating a basin-wide program. The effects of new upstream water projects, such as NISP, on habitat for those species is uncertain. The U.S. Fish and Wildlife Service report on this issue is due in early summer 2003.

Q Will NISP incorporate water conservation & other non-structural measures?

A Water conservation can be approached in two ways: supply-side and demand-side management. Several supply-side management techniques, such as the re-operation of existing reservoirs to allow for greater storage, are under consideration for inclusion in the final preferred NISP alternative.

The individual NISP participants built demand-management into their systems. A majority of the providers have tiered water rate structures and all have water metering programs. Participants also employ many other water conservation strategies, which NCWCD is currently compiling. A more in-

depth look at conservation measures will be included in a future *NISP News*.

Both supply-side and demand-side management ensure available water is used efficiently. In a semi-arid environment both approaches are important. Even so, managing existing resources does not negate the need for new water supplies. All NISP participants document a need for new supplies; NISP will help them meet those needs in the most cost-effective and environmentally sound way practicable.

A NISP Timeline

Since the early 1900s, several organizations studied water storage and hydroelectric facilities on the main channel, North and South Forks of the Poudre River. More recently, the Colorado Water Conservation Board, Colorado Water Resources and Power Development Authority and the NCWCD conducted separate investigations into the feasibility of projects in the Poudre basin.

As potential projects moved forward, it was clear that environmental interests opposed a mainstem Poudre River project. In 1986 an historic compromise was reached between water managers and environmentalists, and 75 miles of the Poudre River was designated as a National Wild and Scenic River. This was the first such designation in the State of Colorado. This agreement protects over 90% of the river above the canyon mouth, while allowing future water projects on the lower 8 miles above the mouth.

In the late 1990s, two reports spurred NCWCD to increase work on water supply initiatives. A Colorado Water Conservation Board report illustrated to water users that the Denver metro area might look to northern Front Range resources for new water. Secondly, the NCWCD Regional Water Demand Study demonstrated that the Poudre supplies potentially considered by the Denver metro area are needed by the northern Front Range.

NCWCD then facilitated a dialogue with northern Front Range water users about ways to meet their future demand and maintain control of regional water resources. From those discussions, 14 water providers committed to further study of the options available to them. Thus, a regional project to utilize water that often leaves the basin unused, was born.

| | | | | | | | | |
|--|---|--|---|---|--|---|---|--|
| 1981-83 Colorado Water Conservation Board conducts Cache La Poudre Project Study | 1986 Poudre Wild & Scenic Designation | 1986 Colorado Water Resources and Power Development Authority completes St. Vrain Reconnaissance Study | 1985-90 Colorado Water Resources and Power Development Authority evaluates Poudre Project | 1998-99 NCWCD completes Feasibility Study of New Seaman Reservoir | 2000 NCWCD releases draft of Regional Demand Study | 2000 Area water providers meet regarding the new Northern Integrated Supply Project | 2001 NCWCD completes Feasibility Study of Glade Reservoir | 2003 Fourteen NISP participants formally agree to move forward with Phase II study |
|--|---|--|---|---|--|---|---|--|

Questions? Here are four ways to get information



Call

Contact the following NCWCD staff with your questions:

Carl Brouwer
NISP Project Manager
(970) 622-2298

Nicole Seltzer
NISP Public Liaison
(970) 622-2277

Media inquiries, contact
Brian Werner
NCWCD Public Information Officer
(970) 622-2229



Read

Key reports are available for review in the Reference Section of the City of Fort Collins Library.

Visit the NISP web site for available titles and their call numbers.



Surf

The NISP web site at:

<http://www.ncwcd.org>, click on the NISP button,

includes more information.

Soon, you will also be able to add your name to the mailing list and submit comments to NCWCD.



Come to a meeting

NCWCD and the NISP participants will hold informational meetings throughout the summer.

Look for information on the NISP website. Meetings will also be advertised in local newspapers.