

2019 Annual Report



800-369-RAIN



www.northernwater.org



ContactUs@northernwater.org



220 Water Ave., Berthoud, CO

Board of Directors



Mike Applegate
Larimer County



Bill Emslie
Larimer County



Jennifer Gimbel
Larimer County



Sue Ellen Harrison
Boulder County



Todd Williams
Boulder County



Dennis Yanchunas
Boulder County



Dave Nettles
Weld County



Don Magnuson
Weld County



Dale Trowbridge
Weld County



Gene Manuello
Logan County

Manager's Message

On behalf of the Northern Water Board and its staff, I am pleased to provide to you its 2019 Annual Report. Throughout 2019, Northern Water continued its preparation for a future that promises added complexity and responsibility. As we labor over the final details of constructing Chimney Hollow Reservoir and reach the final permitting summit for the Northern Integrated Supply Project, we must not lose sight of our shared responsibility to reinvest in the project that prompted Northern Water's creation – the Colorado-Big Thompson Project. When Northern Water was created in 1937, and as the initial federal appropriations were approved for the construction of the C-BT Project, Northern Water served a population just shy of 150,000. In 2019, Northern Water's constituency exceeded the 1 million mark. All told, nearly one Coloradan in five is a beneficiary of the water supplies provided by this wondrous project!

In further recognizing the need to address the inherent risks and uncertainties in operating, maintaining, protecting, replacing and bettering an aging C-BT Project, the Northern Water Board also adopted a new reserve fund policy in 2019. The policy identifies objective goals to ultimately fund improvements that enhance the project's reliability and resiliency – attributes the region has come to expect. In addition to reinvesting in existing facilities and providing new water storage and delivery infrastructure to Northeastern Colorado, Northern Water is also committed to advancing thoughtful water resource solutions that will help minimize the region's anticipated future gap between water demand and water supply.

I hope you find this report informative. As always, please feel free to contact Northern Water if you have any questions or comments.

Bradley D. Wind
General Manager



Rob McClary
Sedgwick County



John Rusch
Morgan & Washington Counties

Northern Integrated Supply Project Reaches Several Milestones

Water Quality Certification Among Top Priorities

In January 2019, Northern Water took another significant step in the NISP permitting process when it submitted a 401 Water Quality Certification application to the Colorado Water Quality Control Division. This certification, which is a review of NISP water quality impacts, was granted by the state in January 2020, concluding that no significant degradation is expected because of NISP.

Northern Water Purchases First Farms as Part of WaterSecure Effort

Northern Water purchased two Weld County farms in 2019 as part of NISP's ongoing WaterSecure program. Rather than a "buy-and-dry" approach, these WaterSecure purchases represent a novel "buy-and-supply" strategy that will benefit the region by preserving irrigated agriculture. The WaterSecure program will ensure that water supplies remain within local irrigation companies while also perpetuating a guaranteed mechanism to help ensure that Glade Reservoir water expected to be exchanged with water releases from Galeton Reservoir will continue to be delivered to area farms.

Northern Water Initiates Traditional 1041 Permit Process with Larimer County

In November, Northern Water modified its 1041 permitting approach with Larimer County for NISP. The 1041 permit addresses two aspects of NISP – a cooperative approach to recreation uses of Glade Reservoir, and pipeline routes through the County. Since 2016, Northern Water had been seeking a 1041 permit through an intergovernmental agreement process. Northern Water and Larimer County mutually agreed to transition to a traditional process, which is more fully transparent and accessible to public comment. Elements of the public engagement process have included an interactive online platform and forum, NISPtalk.com, as well as open house events.

Nearly 300 people attended Northern Water's 2019 Fall Symposium in November – a record crowd for our fall and spring water users events that have been taking place for decades.

Ribbon-Cutting Ceremony Celebrates Completion of Watson Lake Fish Bypass

Construction of the Watson Lake Fish Bypass on the Poudre River near Bellvue concluded in the spring, with the partners who brought the project to fruition celebrating with a ribbon-cutting several weeks later. The bypass, an element of the NISP Mitigation and Enhancement Plan, reconnects two segments of the Poudre River previously bisected by the Watson Lake diversion dam. The bypass provides for the movement of fish in both directions through that structure, as well as other benefits. Northern Water collaborated with Colorado Parks and Wildlife, Morning Fresh Dairy and noosa yoghurt on the project.



SWSP II Project Complete

Progress continued throughout 2019 on the \$44 million Southern Water Supply Project II, with the final piece of pipe being installed on Jan. 23, 2020 – a milestone event for the approximately 20-mile long pipeline that had been under construction for about 18 months.

“This has been a momentous day,” Northern Water Project Manager Carl Brouwer said in the moments after the last pipe segment was installed just below Carter Lake. “We’re happy to see that this project has come to completion.”

Garney Construction served as the project’s contractor and Ditesco served as the construction manager.



Stretching from Carter Lake to Boulder Reservoir, the pipeline will provide a secure, year-round water supply for each of the four participants which funded the project – the City of Boulder, Town of Berthoud, Left Hand Water District and Longs Peak Water District. Prior to this new pipeline, the participants partly received water deliveries from seasonally operated open canals, which posed challenges to water treatment plant processes.

The estimated population within Northern Water boundaries surpassed **1 million people.**

Chimney Hollow Reservoir Project

Participants in the Chimney Hollow Reservoir Project saw significant progress in 2019, with the highlight being the selection of Barnard Construction Inc. of Bozeman, Mont., as the general contractor to build Chimney Hollow Reservoir in southern Larimer County.

On Dec. 5, 2019, the Municipal Subdistrict Board of Directors authorized a \$485 million contract to build the reservoir, its conveyance pipelines and other improvements at the site. Groundbreaking for the project is anticipated for 2020.

In addition, work progressed on the creation of the Colorado River Connectivity Channel that will skirt around Windy Gap Reservoir in Grand County. That project will be a showcase

for cooperative efforts between the Municipal Subdistrict, Northern Water and stakeholders on the West Slope to improve the riverine environment. While a funding gap for construction of that channel remains, project managers are confident that work will get underway in 2021.

Cooperation among the Municipal Subdistrict and stakeholders throughout the Upper Colorado River Basin continues through the Learning By Doing program, which works to identify solutions to improve the river, its habitat and its water quality. Participation in the program is a critical component of the environmental commitments associated with the Windy Gap Firing Project permits.

2019 Water Year

The 2019 water year began in November 2018 with Colorado-Big Thompson Project reservoirs at 106 percent of average storage levels. Above-average snowpack and spring runoff produced C-BT Project inflows that were 30 percent above average.

At the April Board meeting, Northern Water Directors issued a 70 percent C-BT quota allocation. A 70 percent quota closely mirrors the long-term average C-BT quota declaration of 72 percent. In May, the Board also allocated 12,500 acre-feet from Northern Water's Regional Pool Program. The allocation was made available to water users through a public auction.

A cool May and early June led to lower-than-average early season runoff before flows picked up at the end of June. Some basins did not experience peak flows until the beginning of July, approximately a month later than normal. This resulted in delayed summer demands for C-BT Project water and lower-than-average deliveries. Total C-BT Project deliveries in water year 2019 were approximately 180,000 acre-feet, the lowest since 2014.

The cool spring gave way to hot temperatures later in the summer that persisted through September. On July 20, the all-time highest temperature record for the state was broken with 115 degrees observed at John Martin Reservoir near Las Animas on the Arkansas River. Statewide, September was the hottest month ever. For many stations, the hottest day of the year occurred in September instead of in July or August.



From a record-setting warm September, Colorado transitioned directly into winter-like weather, with October being the fourth coldest on record.

With lower-than-average C-BT Project water demands in water year 2019, C-BT Project reservoir storage levels were well above average at the end of October.



Twelve landscape projects across Boulder, Larimer and Weld counties received funding support through Northern Water's new water efficiency grant program.

Various water quality efforts led to Grand Lake experiencing its **best clarity** results in four years.



Northern Water continued the fiber-cable expansion across its East and West Slope facilities, as part of an ongoing transition to a **faster and more secure communications network.**



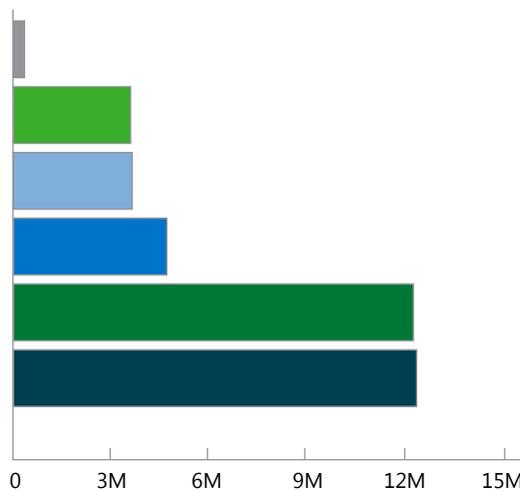
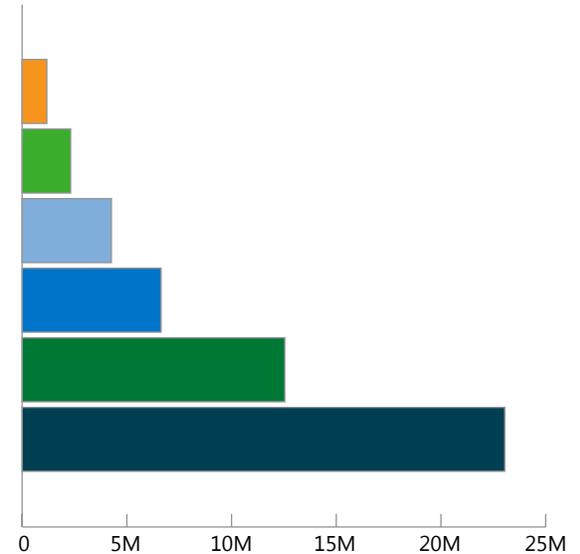
Total C-BT Project storage levels hit a **record high in July.**

Fiscal Year 2019: By the Numbers

Revenues

Northern Water receives revenue from a variety of sources. The largest component is a 1-mill ad valorem tax levied on property within Northern Water's boundaries. Each year, allottees of the Colorado-Big Thompson Project pay assessments for the management and delivery of water, and these charges comprise more than one-fourth of Northern Water's revenue. Revenues in excess of expenses assist Northern Water in building additional reserves for future operating and capital requirements.

2019 Revenues	
● Property and Specific Ownership	\$23.04 million
● Assessments	\$12.51 million
● Charges for Services	\$6.59 million
● Energy Sales from Hydropower	\$1.12 million
● Earnings on Investments	\$2.26 million
● Other Revenue Sources	\$4.21 million
Total Revenues	\$49.73 million



Expenses

Northern Water spends money each year across various categories.

2019 Expenses	
● Operations	\$12.32 million
● Engineering	\$3.71 million
● Environmental	\$3.66 million
● Administration	\$12.42 million
● Depreciation	\$4.77 million
● Nonoperating Expenses	\$0.41 million
Total Expenses	\$37.29 million

Northern Water created **three new departments** - Water Scheduling, Water Rights, and Cybersecurity and Governance - to further streamline work efficiencies. In addition, continued growth has resulted in master planning efforts to begin in 2020 for Northern Water's campus expansions.

In February, Northern Water completed work on a new flume along the Boulder Feeder Canal near Lyons, in a collaborative effort with the neighboring Cemex concrete plant to **improve delivery efficiency and water quality.**

Work began in the fall on a **\$1.9 million project** that will replace the Poudre River Drop Structure, located at the north end of the Hansen Supply Canal.

In May, Northern Water, the U.S. Bureau of Reclamation and the U.S. Geological Survey performed weir calibration work at the gauging station on the Colorado River below Lake Granby, marking the final step in a project that replaced a flume capable of only measuring up to 250 cubic feet per second with one capable of measuring flows up to 3,000 cfs.