Northern Water Mission

Provide water resources management, project operations, and conservation services for project beneficiaries.

Our Values and Principles

- Collaborative, proactive and progressive leadership
- Water resources conservation
- Environmental stewardship
- Personal and corporate ethical integrity and professionalism
- Solution oriented service
- Regional cooperation

Our Priorities

- Deliver Water
- Conserve and protect water supplies
- Plan for future water supplies
- Cultivate organizational and operational excellence
- Strengthen and maintain positive relationships
As we prepare our 2015 Annual Report, I find myself reflecting back on the past year and all that has happened, both at Northern Water and the Municipal Subdistrict, as well as statewide.

The 2015 Water Year was truly remarkable, earning its place in the record books. 2015’s “Miracle May” produced copious amounts of timely and very beneficial precipitation. It also shifted our operation and maintenance crews into overdrive, repairing damage caused by localized excessive rains while concurrently performing all their other duties and responsibilities.

The Colorado-Big Thompson Project saw record storage levels January through May. The project’s limited unfilled storage space was unable to accommodate the “Miracle May’s” increase in snowpack, resulting in a Collection System spill of 191,000 acre-feet, the third largest in the history of the project, third only to 2011 and 1984.

Streamflows on the East Slope also benefitted from 2015’s “Miracle May.” In that month alone more than 1 million acre-feet of water flowed into Nebraska in excess of Colorado’s Compact requirements.

History has demonstrated the necessity and practicality of storing water when it is available for later use when water supplies are short. This principle is why 23 different entities are pursuing either or both the Northern Integrated Supply Project and the Windy Gap Firming Project.

In 2015 both projects continued to make progress in their respective decade-and-a-half permitting process. The participants view the 305,000 acre-feet of additional water storage provided by the two projects as absolutely necessary for their future.

In 2015 we moved forward with the Granby Hydroelectric Plant. The plant will be Northern Water’s second renewable energy facility, producing 5 million kilowatt-hours annually and adding to Colorado’s green energy production.

Statewide, 2015 saw the completion of the Colorado Water Plan. The Colorado Water Conservation Board released this monumental planning effort in November 2015. The CWP presents a comprehensive analysis of Colorado’s challenging water future, including the problems we face, as well as potential alternatives, to address Colorado’s growing water needs.

Colorado’s water community has long dealt with the challenges of year-to-year hydrologic variations as we oscillate between years of abundance and years of drought with no single year ever exhibiting what decades of historical data would consider to be average. The CWP shows that meeting the challenges of annual hydrologic variability may be relatively simple when compared to the water supply and water management challenges of the future.

Colorado’s water community is dealing with the incredible challenge of very rapid population growth as evidenced by the recent news that the Fort Collins and Greeley areas are two of the top ten fastest growing areas in the entire United States. Every Colorado citizen has a responsibility to become educated about Colorado’s water resources, learning how each of us can conserve, be wise stewards of the resource, and contribute to practical solutions. The Colorado that our children, grandchildren, and great-grandchildren will experience will be heavily influenced by our decisions concerning the conservation, management, and future stewardship of Colorado’s water resources. Northern Water and the Subdistrict are actively involved in advocating for and demonstrating effective conservation practices, finding better ways to manage available water supplies, and providing for Colorado’s water future.

2015 was truly a remarkable year during which Northern Water employees shone brightly. This annual report focuses on Northern Water employees and their unique responsibilities as they diligently and professionally work to assure Northern Water and the Subdistrict fully meet their obligations and responsibilities. In this report you will meet a representative group of our dedicated employees showcasing the many areas in which we work on a daily basis. The employees of Northern Water are the reason Northern Water and the Subdistrict are able to meet the needs of our water users and constituents.

We hope our annual report is informative and educational. As always, if you have questions please feel free to contact us at 800-369-7246, or visit us at northernwater.org.
BOARD REAPPOINTMENTS

Three directors were appointed to 4-year terms on the Northern Water and Municipal Subdistrict boards in September: Mike Applegate, Larimer County; Rob McClary, Sedgwick County; and Dale Trowbridge, Weld County. Applegate, President of the Northern Water Board, was initially appointed to the boards in 1991. McClary is serving his second term and Trowbridge is serving his first full term. He was appointed in 2014 to complete the term of retiring Director Jerry Winters.

Director Applegate is CEO, president and major shareholder in the Applegate Group, Inc., a consulting engineering firm specializing in water resource services in the Western United States. Director McClary and his family own and operate McClary Farms, Inc. in Sedgwick County in Northeastern Colorado. Director Trowbridge is the general manager of the New Cache La Poudre Irrigating Company and its subsidiaries.
Les Williams
Board Member - Boulder County

Les Williams is the longest tenured Northern Water director currently on the Board. He was appointed in 1989 and has represented Boulder County for 27 years.

Les' service on the Northern Water Board, along with his 23-year tenure as executive director of the St. Vrain and Left Hand Water Conservancy District, has made him a key figure in Northern Colorado's water policy and management decisions for more than three decades.

Les has watched Northern Water evolve since the late 1980s, when he recalled, "The biggest issues confronting us at that time were setting the Colorado-Big Thompson Project quota and maintaining and operating the project."

During Les' tenure Northern Water has grown and accomplished much more than simply setting the annual C-BT quota. In addition to pursuing water storage and infrastructure projects, Northern Water is a leader in water conservation and water quality matters. According to Les, "Water quality is such a huge part of what we do now."

Les served as the president of Northern Water's Municipal Subdistrict from 2000 until 2013. The Subdistrict constructed the Windy Gap Project in the 1980s, and is now pursuing the Windy Gap Firming Project.

When Les was first appointed as a director, Windy Gap had only been operating and delivering water for four years. "The participants have grown into their Windy Gap supplies, and we're continuing with the effort to get them additional storage with the firming project," said Les.

Les was Subdistrict president when the Windy Gap Firming Project was being negotiated. He recalls it as one of the more stressful times. "It seemed like we were meeting constantly with the West Slope to hammer out issues, and the carriage contract with Reclamation wasn't easy either," he said. "It's remarkable that staff and counsel were able to get through it."

The Northern Water Board has also grappled with population growth. In 1989, when Les was appointed, the population within Northern Water's service area was approximately 435,000. Today that number has more than doubled to 895,000 residents.

Les pointed out that, "The Board ultimately had to change with the times and the growth that was happening." "It took a while for this cultural shift that brought about expansion of Northern's boundaries."

The Northern Water Board has also included additional municipalities within its boundaries in 1990, first with Fort Lupton, Hudson and Nunn. Directors voted to include Erie and Broomfield in 1991, with the inclusion of Louisville, Superior and Lafayette over the next dozen years.

"These communities needed reliable water supplies and we were able to help them," recalled Les. "The Southern Water Supply Project was a big step as far as building infrastructure."

Les is proud of the Board's ability to remain focused on its goals over time. "We have maintained a commitment to the C-BT shareholders and the many constituents throughout Northern Colorado." He summarized his feelings toward serving on the Board, "It's been an honor to serve on Northern Water's Board. I've enjoyed it and have served with some great members."

In addition to his service to Northern Water and St. Vrain and Left Hand Water District, Les has also been the president of the District 6 Water Users Association and president of the Plumb and Dailey Ditch Company. He has a Bachelor of Science degree from Colorado State University and a degree in dentistry from Northwestern University. Les enjoys golf, fly-fishing and spending time with his grandsons. He and his wife Martha live in Longmont. They have two children.
Thirty-four years ago Lu Pena joined Northern Water as a fieldman in the operations and maintenance department. Today, Lu serves as a superintendent for the distribution systems department.

Over the last 34 years Northern Water has changed and grown quite a bit. What hasn’t changed is Northern Water’s primary mission to collect Colorado-Big Thompson Project water on the West Slope, divert it through the Adams Tunnel and distribute it to East Slope water users.

Prior to the mid-1980s Northern Water dedicated most of its staff resources to C-BT O&M activities, and the majority of its staff members were employed in the O&M department. In 1987, when Northern Water assumed O&M responsibilities for Horsetooth Reservoir and Carter Lake, Northern Water had 56 full-time employees, half of which were O&M staff.

Today, Lu helps oversee the distribution systems department. “We have 20 guys in the department now, and the crew and responsibilities have increased in the last 30 years,” Lu said. “We manage the reservoirs [Horsetooth Reservoir, Carter Lake and Boulder Reservoir], a hydropower plant, pump plants, canals and pipelines.”

The East Slope distribution system consists of more than 75 miles of canals and over 100 miles of pipeline. “We cover a lot of ground everyday performing preventative maintenance, making sure everything is operating correctly, and performing construction jobs to ensure the delivery of a reliable water supply.”

With so many responsibilities and a large area to cover, O&M employees are most likely to be found in the field – just where Lu was for his interview. Lu and several O&M fieldmen were conducting an annual inspection of the Carter Lake outlet, which was completed in 2008 to supplement the reservoir’s original outlet.

During the annual inspection O&M crews look for “anything that looks odd,” Lu said. “We are looking for things like erosion, cavitation and general things that could be a maintenance issue.” One of the primary parts of the inspection is to ensure the original outlet’s two guard gates and two operating gates are working properly.

Lu also helps oversee scheduling and construction of jobs the crew performs. “We try to build and make everything in-house,” he said. “We prefabricate culverts, bridges, curbs, cross tubes, concrete buildings and much more.”

The distribution systems department also assists other Northern Water departments, such as facilities and irrigation management. “The guys are very talented and can complete a number of different jobs.” Several O&M fieldmen assisted the facilities department in constructing Northern Water’s new Berthoud headquarters lobby.

With the proposed Windy Gap Firming Project, the Northern Integrated Supply Project and the Southern Water Supply
Project II, the O&M crew’s jobs and responsibilities will continue to grow.

The photo below, circa 1982, depicts Lu’s first year on the job. Lu is in the photo on the bottom right. Directly above him in the tractor cab is Denny Hodgson, who is still with Northern Water as an distribution systems supervisor.

“That was the original O&M crew, which also included the facilities department,” said Lu. “The older guys in the photo were the original crew. I learned a lot from them about the work we do and the C-BT Project.”

Today, Lu is helping teach the new generation of O&M fieldman. “I tell the younger guys, you’re next for the next 30 years!”

The new generation, like Lu and his predecessors, continues to ensure that C-BT Project water is delivered throughout Northern Water’s boundaries.

Outside of work Lu is an avid softball player. He plays on multiple teams, enjoys woodworking and raises a small herd of Beefalo.
In his 31 years at Northern Water, Mike Fiscus’ wide variety of jobs has grown as Northern Water has evolved.

Mike started his career at Northern Water in November 1984 in the operations department. Today he is a construction manager. “In the early years, I did pretty much everything – operated equipment, poured concrete,” Mike said.

After a few years in O&M, Mike moved to the engineering department and took on a number of technical jobs: collecting water flow data on the West Slope; drafting and drawing hydraulic structures; overseeing the construction of pipelines, two power plants and outlet works rehabilitation projects.

In the late 1980s, Mike started collecting water flow data on the Upper Colorado and Fraser rivers and their tributaries. He would go to each gaging station to collect the flow data and send it to Northern Water’s previous headquarters in Loveland.

“We had a big yellow ‘brick’ that recorded the data and sent it via satellite,” Mike said. “There were only certain times of the day you could transmit.” Because Mike was working in the infancy of electronic water data management, there was still a lot of manual data checking and recording.

The data was used to establish flow requirements for the Windy Gap Project (completed in 1985) and operate the Colorado-Big Thompson Project and the Farr Pump Plant on Lake Granby.

Today, the flow data collection process is automated. Data from more than 30 gages on the West and East slopes is sent 24 hours per day to Northern Water’s Berthoud headquarters. This live flow data is also available to the public on Northern Water’s website.

In the early 1990s, Mike learned computer aided design, surveying and drafting. “I drew up hydraulic structures, bridges, modifications to canals – anything we needed,” Mike said.

The construction management phase of Mike’s career began in 1994-95 with modification of the outlet works at Carter Lake and building of the Southern Water Supply Project pipeline, and continues today with construction of hydropower plants at Carter Lake and Lake Granby.

The construction of a new outlet at Carter Lake and the 110-mile Southern Water Supply Project pipeline has enabled Northern Water to supply water year-round to northeastern Colorado communities.

In all of these projects, Mike is the liaison between the contractor and Northern Water. “When they’re building something, I make sure the project is done per plan and specifications,” Mike said. Although a third-party contractor usually builds the project, “We thought it was valuable to have Northern Water employees on the project so we can really get to know it.”

This usually involves being on the construction site for weeks or months at a time. At his current project, the Granby Hydropower Plant, Mike travels to the West Slope and stays there at least a few days every week.

This is Northern Water’s second hydropower project. The first was the Robert V. Trout Hydropower Plant at Carter Lake, which was completed in May 2012.

The Granby Hydropower Plant will turn the steady flow of water from under Granby Dam into 5 million kilowatt-hours per year of clean electricity. It will start generating electricity for Mountain Parks Electric, Inc. in the summer of 2016.

“We have a year-round flow [at Granby] that never changes – we should utilize that. These REAs (rural electric associations) are looking for green credits. This fits the bill,” Mike said.

Mike has worked on other interesting projects over the years. One of them was the “precipitation enhancement program” in the early 1990s. The cloud-seeding project was intended to increase the precipitation – mainly snowfall – over the Willow Creek drainage on the West Slope. Mike set up generators on 15 ranches in the area to seed the clouds. “In the first year of the program, I think there was more snow, but we couldn’t determine if the cloud-seeding had an effect,” Mike said.

For the future, Mike sees Northern Water continuing to grow and meet the needs of constituents with projects like the Regional Pool Program, the Annual Carryover Program, the Northern Integrated Supply Project and the Windy Gap Firming Project.
Jen Stephenson
WATER QUALITY SPECIALIST

Jen Stephenson is an environmental specialist in the Northern Colorado Water Conservancy District’s water quality department. She began work at Northern Water in October 2008 as the water quality department’s second employee.

In 2007 Northern Water assumed a portion of the water quality sampling responsibilities related to Colorado-Big Thompson Project supplies. Jen was hired to assist with these responsibilities.

Currently Northern Water’s field services department collects C-BT Project and Windy Gap Project water quality samples year-round on both the East Slope and the West Slope. Jen works closely with field services employees to manage all of Northern Water’s water quality data.

She explained that, “While the actual water quality lab analysis work is outsourced, the field services department has a state-of-the-art, in-house laboratory used to decontaminate sampling equipment and calibrate the instruments used to collect water quality samples.”

Jen’s responsibilities include: ensuring the water quality monitoring is going smoothly; preparing Northern Water’s annual QA/QC report; overseeing Northern Water’s monitoring programs; and managing a large and ever-growing volume of water quality data. Jen literally is the “keeper of the data.”

In addition to C-BT Project water supplies, Northern Water’s water quality monitoring supports ongoing efforts to permit and construct two proposed projects – the Northern Water Municipal Subdistrict’s Windy Gap Firming Project, as well as the Northern Integrated Supply Project.

The Colorado Water Quality Control Division recently issued a water quality 401 Certification for the WGFP under Section 401 of the federal Clean Water Act and provisions of the Colorado 401 Certification Regulation. This is a major milestone for the Subdistrict and the WGFP, and should pave the way for the U.S. Army Corps of Engineers to issue a closely-related 404 Permit required under Section 404 of the Clean Water Act.

“We’ve been monitoring for WGFP water quality mitigation efforts since 2011,” said Jen. “Northern Water has ramped up monitoring since then to study nitrogen and nutrient-loading into the Three Lakes system (Grand Lake, Shadow Mountain Reservoir and Lake Granby).” Jen noted that the monitoring should help identify nutrient sources, such as hayfield fertilizers, so they can be mitigated.

NISP-related water quality monitoring on the Poudre River, which began in 2015, extends from the river’s North Fork to its confluence with the South Platte. Monitoring is crucial for creating a solid foundation of the watershed’s water quality issues, developing a pre and post-NISP baseline, and assessing the effectiveness of future mitigation.

“Our water quality monitoring work is extensive on the Poudre,” Jen explained. “We’re working closely with Greeley, Fort Collins, and several other entities – all of which collect water quality data on the Poudre – on a comprehensive water quality data base for the Poudre River.” The data base will be very useful as Northern Water permits and eventually constructs NISP, but it will also help Greeley and Fort Collins with their planned water projects in the Poudre basin.

Besides supporting efforts to permit and eventually construct NISP and WGFP, Jen and the Grand County Water Information Network have cooperatively managed clarity data for Grand Lake and Shadow Mountain Reservoir to find water clarity solutions for Grand Lake. Jen elaborated, “The data that has been collected through our water quality monitoring efforts should help validate the Three Lakes Water Quality Model, and help determine the effectiveness of operational changes to improve water clarity.”

Jen is a Colorado native. She graduated from North Park High School with a class of 16 before attending Colorado State University. At CSU Jen obtained a Bachelor of Science degree in watershed science. Prior to her employment with Northern Water, Jen worked for the City of Greeley. She lives in Loveland and enjoys spending time with her husband and 4 year-old daughter.
Karen Rademacher manages the Northern Colorado Water Conservancy District’s newest department – water records and accounting – which is responsible for all of the organization’s water data records.

Karen joined Northern Water in 2007 as a water resources engineer. Her initial responsibilities included snowpack monitoring and streamflow and runoff forecasting. At that time Karen also helped revamp the Board of Directors’ monthly snowpack and streamflow reports.

In her new position Karen is overseeing the implementation of Northern Water’s third generation water accounting system, or Gen3.

According to Karen, “My previous work in snowpack and streamflow forecasting and calculating Colorado-Big Thompson Project reserves piqued my interest in water accounting.”

While Northern Water and the U.S. Bureau of Reclamation jointly operate and maintain the C-BT Project, Northern Water is solely responsible for administering and delivering water to C-BT Project allottees and water users.

Launched in November 2015, Gen3 replaced the previous Gen II water accounting and software system, which had operated since 2001.

Due to the complexity of Northern Water’s policies and procedures, as well as the complicated nature of C-BT allotment contract ownership, an off-the-shelf water accounting and software system was not an option. As a result, Northern Water software and programming specialists developed Gen3 entirely “in-house.”

Regarding the move from Gen II to Gen3, Karen said, “There were no philosophical changes for C-BT. All of the same rules for moving, transferring and renting water still apply.”

However, other changes did occur with the move to Gen3. One of the most significant was the implementation of daily water accounting.

Previously Northern Water’s metered water accounts were balanced “after the fact” at the end of each month. Gen3’s initiation of daily accounting means allottees and water users now make water delivery and account decisions on a daily basis.

This change didn’t occur lightly or without challenges. To help smooth the transition, Karen and other Northern Water staff met individually with metered account holders, particularly Windy Gap Project participants.

The results were positive. Karen and her team found solutions to meet the daily water accounting needs of each water user. Simultaneously, water users agreed to share with Northern Water valuable, remote and “real time” access to their own water data – truly a mutually beneficial arrangement.

Karen summed up Northern Water’s move to Gen3 as follows: “Higher sophistication, better service to allottees and water users, and greater mutual cooperation with Windy Gap Project participants.”

Karen also noted that Gen3 developers took into account pending construction of the Windy Gap Firming Project’s Chimney Hollow Reservoir, as well as the Northern Integrated Supply Project’s Glade and Galeton reservoirs. As a result, Gen3 should have little trouble accommodating the additional water accounting for the WGFP and the NISP once each project becomes operational.

Karen was born on the Naval Air Station at Pensacola, Florida, but grew up in Arvada. She has a keen interest in genealogy, particularly regarding her Swedish heritage. Karen and her husband Dale have four children and live in rural Weld County near Mead.
Roger Burns has witnessed a lot of change during his 26 years with the Northern Colorado Water Conservancy District. He was hired in July 1989 as an operations and maintenance fieldman in the East Slope’s distribution systems department.

In addition to his work as an O&M fieldman, Roger stated, “I spent 12 years as the assistant operations coordinator to Dennis Miller.” Dennis served as Northern Water’s operations coordinator for many years before Roger replaced him when Dennis retired in November 2013.

Roger’s operations coordinator duties include tracking and accounting for all Northern Water and Municipal Subdistrict water transactions; generating reports and water operator sheets; and sharing Colorado-Big Thompson, Windy Gap and other water information with various water commissioners, the U.S. Bureau of Reclamation and Northern Water’s account entities.

Coordinating with Reclamation, Northern Water’s partner on the C-BT Project, is critical since the project was built to both deliver water and generate hydropower. Northern Water is solely responsible for administering and delivering water to C-BT allottees and water users. Reclamation oversees all of the project’s hydropower-related activities.

Northern Water’s dispatch office also communicates regularly with West Slope operators in the Farr Pump Plant’s control room on Lake Granby. Most of this coordination involves daily releases out of Carter Lake, the Southern Water Supply Project and deliveries made by West Slope operators.

From the perspective of the dispatch office, there are three main pieces to the C-BT Project’s delivery system – the north end (Horsetooth Reservoir), the south end (Carter Lake) and the Hansen Feeder Canal. The dispatch office schedules and makes water deliveries largely based on this ‘big picture’ format.

Not surprisingly, Roger’s position as operations coordinator has been significantly impacted by the November 2015 launch of Northern Water’s third generation water accounting system, or Gen3.

According to Roger, “Daily accounting under Gen3 is a major change for Northern Water’s metered accounts.” Previously, metered accounts were balanced at the end of each month.

While Gen3 has been in operation since late last year, Roger, the dispatch office and other Gen3 team members are still in the process of building new reports in the new Gen3 system.

Like Water Records and Accounting Department Manager Karen Rademacher, Roger sees many benefits in moving to Gen3 and daily water accounting. “Gen3 will be an important part of our efforts to track and account for C-BT return flows.” This will be a critical component of Northern Water’s task to protect C-BT return flows for use within Northern Water boundaries.

In addition to Gen3, Roger noted several other significant Northern Water programs, policies and changes that have impacted the dispatch office and water deliveries over the years, including: the Annual Carryover Program; the Carryover Capacity Transferability Program; the Regional Pool Program, and others. Roger summed up his comments this way, “There are a lot more policies and procedures [affecting the dispatch office and water deliveries] now than in the past.”

Roger was born in Denver and is a third generation Coloradoan. He grew up in Windsor and graduated from Windsor High School. Roger attended Aims Community College and graduated with a degree in building construction. He lives in the Waverly area northwest of Wellington with his wife Therese. They have two daughters, Sadie and Stevi.
Meet Veronica Gomez, Northern Water’s events planning coordinator. Some readers may already know Veronica by attending a Northern Water meeting, taking a summer bus tour, volunteering at a children’s water festival or participating in a regional meeting like the South Platte Forum or Four States Irrigation Council.

Veronica began working at Northern Water in 2004 in the administrative services department. Previously Veronica was an operations coordinator for the City of Loveland’s planning, engineering, building, streets and solid waste department.

“Veronica is always very organized, technically inclined, communicates well, both in writing and speaking and always has a smile on her face as she greets visitors for events. She never gets frustrated, or if she does, it doesn’t show,” said Minerva Lee, administrative services department manager.

Veronica does some of her most exemplary work behind the scenes. She has helped Northern Water create and host successful meetings and tours for more than a decade. As an events planning coordinator, Veronica works closely with Northern Water staff, event location personnel and caterers.

Her eye for detail and organizational skills helps tremendously when managing everything from registration procedures, databases, technical and logistical facility issues and catering. Equally important, Veronica is the first person attendees encounter at most Northern Water events. She greets everyone with a smile, and is always willing to assist and help others.

Veronica’s position involves more than planning events. She supports other employees in a variety of roles. “Veronica’s co-workers find her friendly, courteous, and always available to assist them in their jobs and duties in an efficient and professional manner, by offering quick turnaround on their projects no matter how big or small,” Minerva added.

Veronica’s personality lends itself to being great at her job. Her ability to work well with others is a true asset for someone who plans and helps host events for hundreds of people. “It is appealing to me to work for and with people of differing personalities and interests. I am a big fan of diversity. I love the variety of responsibilities and the sense of accomplishment while overseeing an event from concept start to productive finish,” Veronica said.

Veronica continued, “There are always challenges to event planning.” There are a lot of variables that make the job at times difficult and stressful. “A person can expect last-minute changes, additional tasks and a race to meet deadlines. It is important to be adaptable and even-tempered – a good sense of humor helps!”

In 2015, Veronica received the Four States Irrigation Council’s coveted Ditchrider Award for her efforts assisting the organization. The award highlighted her exceptional work helping plan and organize the Four States Irrigation Council annual meeting. The Ditchrider Award is given to someone who has gone above and beyond in their contributions to the council.

Veronica is a native of Wyoming and attended Casper College with an emphasis in career office studies. Outside of work Veronica enjoys traveling and spending time with her family. Veronica is the proud mother of five children, eight grandchildren, four step grandchildren a son-in-law and daughter-in-law.
Bill Shearer has been a Northern Water Conservancy District employee for the past 25 years. He was hired in August 1990 as an operations and maintenance fieldman in the West Slope’s collection systems department.

Bill stated, “Before getting a job with Northern Water I worked for several contractors around the state. They were good jobs, but I got tired of all the travel, and I wanted a long-term position closer to home.”

After a few years as an O&M fieldman, Bill was promoted to working foreman in 1993. He has spent his entire career at Northern Water on the West Slope.

Some of Bill’s job responsibilities include: helping supervise department planning and scheduling; directing operation and maintenance activities and personnel; ensuring safety regulations are properly applied; and helping train employees in job methods and procedures.

With many of the Colorado-Big Thompson Project’s facilities now 60-75 years old, maintenance and care of the infrastructure is more important than ever. The past year included some major projects and accomplishments in the collection systems department:

- Lake Granby Dam radial gates: Between December 2014 and March 2015, collection systems department staff used an air compressor and pre-built forms to keep the radial gates free of ice. This effort was necessary due to the higher than normal water level in Lake Granby at that time of year.
- Lake Granby Dam and spillway scaling: Northern Water hired, supervised and assisted Yenter Companies to scale rock above Granby Dam and spillway. This work was done prior to repairing the Lake Granby spillway.
- Lake Granby spillway repairs: Yenter Companies removed damaged spillway material, prepared concrete voids and then repaired and filled voids in the concrete spillway.
- Willow Creek Pump Plant switchyard grounding mat: Northern Water, the U.S. Bureau of Reclamation and the Western Area Power Administration upgraded the Willow Creek switchyard approximately six years ago. However the grounding mat was not upgraded until 2015, when crews excavated and removed the grounding mat, rehabilitated it, then reburied it and reestablished all of the grounds.
- Willow Creek Pump Canal panel replacement: During the summer of 2015 Northern Water’s collection systems and distribution systems departments worked jointly to replace 27 concrete panels on the Willow Creek Pump Canal, between the Willow Creek Pump Plant and the Willow-Windy chute into Lake Granby.
- Granby Hydropower Project: Collection systems department staff provided support to Aslan Construction on the new Granby Hydro Plant located below Granby Dam on the Colorado River.

All of these projects and accomplishments demonstrate the skill level and dedication that the collection systems department staff put into their work.

“The O&M crews take a lot of pride in their work and upkeep of the C-BT Project,” said Bill, “from maintaining the pump plants and related infrastructure, to the canals and reservoirs.”

It is clearly evident that Bill takes a great deal of pride in his job at Northern Water, and in his efforts to help preserve the C-BT Project for future generations. It is this type of commitment demonstrated by Bill and the rest of the collection systems department staff that bodes well for the future of the C-BT Project.

Bill is a native of Kremmling and a lifelong resident of Grand County. In his spare time he enjoys photographing the area’s abundant wildlife. Some of his other hobbies include hunting and fishing. Bill and his wife Malba have three children and six grandchildren.
Money management

As this 2015 Annual Report clearly demonstrates, Northern Water is involved in a variety of projects and activities. To manage finances accordingly, Northern Water relies heavily on the framework of business enterprises; each enterprise is usually focused on a single activity.

Each business activity enterprise comprises its own unique fund to account for revenues, expenses and other financial transactions. In addition, each enterprise fund is managed to ensure that the long-term revenues associated with a specific enterprise sustain that enterprise’s long-term activities.

In 2015 Northern Water maintained five enterprise-related funds: Northern Water District, Southern Water Supply Project, Pleasant Valley Pipeline, Northern Integrated Supply Project and Northern Water Hydropower.

Northern Water’s Municipal Subdistrict has two enterprises and associated funds for the Windy Gap Project and the Windy Gap Firming Project. The Municipal Subdistrict, which was formed in 1970, is a separate, independent water conservancy district with powers similar to its parent district.

These two pages answer the most common questions about our finances: Where does the money come from? Where does it go?

Visit northernwater.org/FinancialReports to view our 2015 Comprehensive Annual Financial Reports, which have detailed information about each enterprise and its respective financial position. Members of our financial services staff are also available to answer your questions.

Revenues

Northern Water receives about 50 percent of its revenues from property tax collections. These monies, along with annual allotment contract assessments and revenues from service charges, are used to operate and maintain Colorado-Big Thompson Project facilities, and for other activities that conserve and protect Northeastern Colorado’s water supplies.

For other operating funds the primary sources of revenue are assessments or power revenue, which go toward related operation and maintenance costs.

Projects in the development stage, which include the proposed Northern Integrated Supply Project and Windy Gap Firming Project, are fully funded by each project’s participants.

Expenses

Expenses primarily include costs associated with project operations, maintenance, engineering and overhead.

The Northern Water District fund’s largest expense is labor. Maintaining the C-BT Project and other projects requires a great deal of employee time, including operating, maintaining and improving the collection and distribution facilities. The other enterprise funds reimburse the Northern Water District fund for all costs incurred on their behalf.

In addition, Northern Water frequently hires outside firms to conduct engineering and other studies, especially when specific expertise is necessary.

Northern Water shares some C-BT Project operation and maintenance costs with the U.S. Bureau of Reclamation.
# Northern Water enterprises

**District**
Supports the operation and maintenance of the C-BT Project, weather data monitoring, water quality studies, snowpack and streamflow forecasting, water conservation and other activities.

**Southern Water Supply Project**
Supports a 110-mile pipeline and other facilities starting at Carter Lake that serve 12 water providers in the southern and eastern portions of Northern Water’s service area.

**Pleasant Valley Pipeline**
Supports a 9-mile pipeline between the Poudre River and Horsetooth Reservoir that serves five water providers in the northern portion of Northern Water’s service area.

**Northern Integrated Supply Project**
Supports efforts to permit, design, construct and operate the proposed Glade Reservoir and related facilities to serve 15 participants in Northern Colorado.

**Northern Water Hydropower**
Supports the operation and maintenance of the Robert V. Trout Hydropower Plant at Carter Lake.

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**Revenues/Capital Contributions**
- District $32,378,768
- Northern Integrated Supply Project $2,600,000
- Southern Water Supply Project $1,826,700
- Pleasant Valley Pipeline $712,208

**Expenses/Capital Expenditures**
- District $26,103,969
- Northern Integrated Supply Project $2,246,910
- Southern Water Supply Project $1,481,202
- Pleasant Valley Pipeline $38,335
- Northern Water Hydropower $356,381

*Fiscal year ended September 30, 2015 – unaudited

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# Municipal Subdistrict enterprises

**Windy Gap**
Supports the operation and maintenance of the Windy Gap Project, which includes a diversion structure on the Colorado River, a pump plant and a 6-mile pipeline to Lake Granby.

**Windy Gap Firming Project**
Supports efforts to permit, design, construct and operate the proposed Chimney Hollow Reservoir and related facilities to serve 13 participants in Northern Colorado.

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**Revenues/Capital Contributions**
- Windy Gap $14,531,489
- Windy Gap Firming $1,133,333

**Expenses/Capital Expenditures**
- Windy Gap $4,861,033
- Windy Gap Firming $533,618

*Fiscal year ended September 30, 2015 – unaudited