

currents



Building the
Pacific Northwest's
**LARGEST WATER
CONVEYANCE
PROJECT**

PLUS —

Recognizing Sustainable
Infrastructure Through Envision®

Stormwater Funding
Success Stories

A Milestone in Securing LA's
Recycled Water Future

Water ARC®'s
Full-Service Solutions

EDITORIAL

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This quarter, our feature story offers a look into the construction of a pivotal project that will enhance water quality, safety, and reliability in Oregon’s Willamette Valley. We detail how the Willamette Water Supply System, a \$1.6 billion infrastructure investment, will be one of the most seismically resilient water systems in Oregon. We also bring you insights into the Envision® certification system to help you navigate this important sustainability framework, and we highlight proven strategies to qualify for stormwater project grants and loans in an increasingly competitive funding environment.

Our article on the DC Tillman advanced water purification facility showcases how a cutting-edge indirect potable reuse facility is helping to advance Los Angeles’ long-term water recycling goals. And finally, we take a deep dive into Carollo’s Water ARC® and demonstrate how three specialized programs work in tandem to craft innovative water solutions for our clients.

We hope this issue both informs and inspires you. As always, we welcome your questions and comments. Please reach out to me or our authors with your thoughts!

IN THIS ISSUE

- 2 Recognizing Sustainable Infrastructure Through Envision®
- 4 Stormwater Funding Success Stories
- 6 Building the Pacific Northwest’s Largest Water Conveyance Project
- 8 A Milestone in Securing LA’s Recycled Water Future
- 10 Water ARC®’s Full-Service Solutions



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ENVISION IN ACTION

Sarasota County Earns the Gold

Sarasota County, Florida, faced a critical environmental challenge: algal blooms and their potential to impact the region’s economic vitality, environmental health, and public safety. To combat the nutrient discharge causing these blooms, address reclaimed water storage needs during the wet season, and accommodate a growing population, Sarasota County decided to expand the Bee Ridge Water Reclamation Facility from 12 mgd to 18 mgd. The project focused on three key goals: enhanced water quality, a sustainable water supply, and resilience against climate change.

Sarasota County teamed with Carollo to evaluate and design the expanded plant. Converting Bee Ridge to an advanced wastewater treatment facility significantly improved water quality by reducing effluent nitrogen and phosphorus levels.

The project earned an Envision® Gold award based on its excellence in several key areas.

- **Environmental stewardship.** Protecting local water bodies and the ecosystem through the rehabilitation of on-site wetlands and the reduction of nutrient discharges.
- **Climate resilience.** Combatting increased storm intensity and sea-level rise through design features such as setting finished floor elevations for new facilities above the 100-year flood elevation and installing a new electrical distribution system to supply continuous power.
- **Resource efficiency.** Conserving limited resources by implementing robust water reuse systems and beneficial use of construction waste.
- **Community benefits.** Supporting population growth and economic development through continuous community engagement and increased reclaimed water availability.



Sarasota County’s Bee Ridge Water Reclamation Facility received Envision®’s second-highest honor in 2024.

UNDERSTANDING ENVISION®

A Framework for Resilient and Sustainable Infrastructure

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Sustainable planning and design require holistic consideration of economic, environmental, and social factors. While this integrated approach seems straightforward in concept, actually implementing sustainable practices in infrastructure projects can be challenging. Project teams often struggle with quantifying sustainability efforts, determining priorities, and creating consistent evaluation frameworks.

Enter Envision®

Envision® is a sustainability rating system specifically designed for infrastructure projects, developed by the Institute for Sustainable Infrastructure (ISI) in partnership with Harvard University’s Zofnass Program for Sustainable Infrastructure. Envision® provides a structured approach to incorporate sustainability throughout a facility’s lifecycle—from planning and design through construction, operation, and maintenance. Think of it as the infrastructure equivalent of LEED certification for buildings.

How Envision® Works

Projects are evaluated across five key categories:

- **Quality of Life.** Community wellbeing and engagement.
- **Leadership.** Commitment to sustainability principles.
- **Resource Allocation.** Material, energy, and water efficiency.
- **Natural World.** Ecosystem preservation and enhancement.
- **Climate and Resilience.** Emissions reduction and adaptation capabilities.

Understanding the Rating System

The rating system uses a point-based approach where projects earn credits in each category through documented sustainable practices. Each credit has specific achievement levels (Improved, Enhanced, Superior, Conserving, and Restorative) that determine the points awarded.

The total points accumulated across all categories determine the final certification level. Based on performance, projects can achieve four certification levels: Verified, Silver, Gold, or Platinum.

Navigating the Process

Envision certification follows a two-step process:

- 1. Initial Assessment.** Project teams evaluate performance across all 64 credits, identifying sustainability opportunities early when they can be most effectively incorporated into design.
- 2. Verification Pursuit.** For projects with promising scores, teams submit documentation to ISI for independent third-party review to confirm achievement levels.

Certified Envision® Sustainability Professionals (ENV SPs) guide the assessment process, helping facilities work toward the highest standards while balancing economic, social, and environmental considerations.

Even without pursuing full verification, the initial assessment alone provides valuable insights that can improve project outcomes and sustainability performance.

To date, 396 Envision® projects with a cumulative value of more than \$283 billion have been registered, are under review, or have been completed. For projects to qualify for an Envision® award, at least one member of the project team must have an ENV SP credential.

FUNDING STRATEGIES for Stormwater Infrastructure

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EMILY PLATT

As stormwater infrastructure ages and replacement costs rise, utility managers face increasing challenges in developing viable replacement and upgrade programs. Federal, state, and local grant and low-interest loan programs offer alternative funding mechanisms for critical infrastructure projects; however, growing needs and limited resources make these programs highly competitive.

THE FIRST STEP IN APPLYING FOR FUNDING: KNOW WHAT TO LOOK FOR

Understanding program requirements is the foundation for developing a competitive application. Some programs target characteristics specific to the community or project, such as socially-vulnerable populations or areas with minimal greenspace. Knowing what to look for when

reviewing a funding application is critical. Success relies on the applicant's ability to discern and clearly address a program's targets and goals.

Key words in the program requirements can dictate the application's structure. Phrases such as *environmental benefits*, *increased resiliency*, or *nonpoint source pollution reduction* provide strong direction for the most vital concerns to address. Utilities can also modify the proposed project itself to increase funding competitiveness. This approach requires carefully reviewing program priorities and adapting designs accordingly. For example, if the funding program mentions nature-based solutions, adding rain gardens can further align a project to the program's goals. When programs prioritize resiliency in socially-vulnerable areas, infrastructure can be upsized to demonstrate added protection where it's needed.

SUCCESS STORIES

The following examples showcase how utilities have secured competitive funding for critical stormwater projects. Each demonstrates different strategies—from project modifications to persistent reapplication—that turned ambitious infrastructure plans into funded projects.

City of Mount Vernon, Ohio

To mitigate severe bank erosion, flooding, and nonpoint source pollution affecting stream habitat, historic buildings, businesses, and roadways along the scenic Kokosing River, the City of Mount Vernon applied for and received grant funding for a critical river restoration project. Funding sources included the Ohio Environmental Protection Agency's 319(h) Nonpoint Source Pollution Program and the local Muskingum Watershed Conservancy District.

The project would not have been feasible without \$500,000 in federal and local grant funding, as Mount Vernon's stormwater utility can only support one major improvement project each year. The city's applications featured nature-based solutions—such as riverbank protection using native plantings—and green and grey infrastructure. These features closely aligned with the funding program's goals.

Completed in 2021, the Kokosing River Restoration Project has significantly reduced nonpoint source pollution, decreased erosion, mitigated flooding impacts, and helped establish a robust habitat for a thriving population of native freshwater mussels.



Mount Vernon's successful river restoration funding strategies included nature-based solutions for erosion control along the banks of the Kokosing River.

**\$500
THOUSAND**
in federal and
local grant
funding

IS YOUR PROJECT GRANT OR LOAN READY?

Carollo's stormwater infrastructure and funding experts can help you determine if your project is eligible for federal or local funding programs. We can also provide guidance on the best ways to structure your application or project to align with program goals and optimize competitiveness.

City of Madison, Wisconsin

Flooding devastated the west side of Madison in August 2018. One area particularly hard hit was the Old Sauk Trails Business Park, which hosts daycare centers, health care clinics, and some residential housing. The city's Watershed Study Program identified a regional flood management project to address the issue. The problem: its implementation cost was more than \$8 million.

With an annual capital improvement budget of \$5 million, the city's stormwater utility lacked the funds to move forward. Madison applied for a FEMA Building Resilience Infrastructure and Communities (BRIC) grant in 2020. Unfortunately, the grant was denied.

The city reapplied in 2021, this time making the application more competitive by detailing nature-based solutions, highlighting additional resilience for the infrastructure serving the clinics and daycares, and renaming the project to reflect its nature-based and resiliency features. The second funding application was a success, providing Madison with \$6 million in FEMA BRIC grant funding.



Careful recrafting of Madison's previously-denied FEMA BRIC grant application resulted in funding for a regional flood management project to help prevent future occurrence of the devastating flood damage experienced in 2018.

**\$6
MILLION**
in FEMA BRIC
grant funding

City of Los Angeles, California

Historically, Los Angeles has imported the majority of its water. Its current infrastructure is unable to fully utilize the city's occasional storm events for beneficial use or for much-needed groundwater replenishment. Recently, LA passed the Green New Deal, which aims to locally source 70 percent of its water supply by 2035.

The infrastructure investment required to meet this goal is immense. As such, Los Angeles Sanitation and Environment (LASAN) is utilizing the LA's Regional Safe Clean Water (SCW) Program's Regional Infrastructure Program, which requires that all proposed efforts describe how they will plan, build, and maintain multi-benefit, watershed-based projects to improve water quality, increase water supply, and enhance impacted communities. One such effort is the MacArthur Lake Stormwater Capture Project, which allows beneficial use. To date, LASAN has secured \$186.9 million for scientific studies, infrastructure projects, and their operation and maintenance from the SCW program.



Key to LASAN's success is their extensive community outreach for these projects. The grant applications highlight the planned activities and incorporate language that supports the grant program's priorities.

**\$186.9
MILLION**
from the
SCW program

BUILDING

Tomorrow's Water Infrastructure

INSIGHTS FROM THE PACIFIC NORTHWEST'S LARGEST WATER CONVEYANCE PROGRAM

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As water utilities across the country grapple with aging infrastructure, population growth, and increasing climate uncertainties, a major infrastructure initiative in the Pacific Northwest demonstrates effective approaches to meet these challenges. The Willamette Water Supply System (WWSS)—spearheaded by the WWSS Commission, a partnership of the Tualatin Valley Water District and the cities of Hillsboro and Beaverton, Oregon—is a \$1.6 billion investment in resilient water infrastructure.

The Willamette Water Supply Program (WWSP) addresses multiple water system challenges through integrated planning and design. The system will deliver water from the Willamette River to the rapidly growing Tualatin Valley through a network of seismically resilient infrastructure. The system's cornerstone is a state-of-the-art, 60-mgd water treatment facility, designed with expansion capabilities to 120 mgd. This scalability enables the facility to meet both current demands and future growth without significant retrofits.

In addition to the water treatment facility, the program encompasses 13 major projects, including:

- More than 30 miles of large-diameter pipelines (66-inch and 48-inch) built to modern seismic standards.
- A modified intake on the Willamette River.
- A 15-million-gallon terminal storage reservoir on Cooper Mountain.
- Ancillary facilities designed to enhance system reliability.

When complete, the WWSS will be one of the most seismically resilient water systems in Oregon, engineered to withstand natural disasters, protect public health, and speed regional economic recovery by restoring critical services following natural disasters faster than ever before.

MANAGING CONSTRUCTION CHALLENGES

The project's scale and complexity required sophisticated construction management approaches. Carollo, in partnership with Stantec, provides both program management and construction management services, having secured the construction management contract in 2017.

The construction management scope includes oversight of the intake, treatment facilities, reservoirs, and large-diameter pipelines through a variety of jurisdictions. Some system components, including the reservoir and major pipeline segments, were constructed and tested up to three years before final system integration. Others, such as segments of pipe built to correspond with planned roadway construction—known as “opportunity projects”—were completed as much as eight years in advance. This phased approach allows for thorough testing and validation of each component while maintaining overall program momentum and limiting public disruption.

Community Buy-In

To mitigate community concerns about construction impacts such as traffic, noise, ground movement, and site access both during and after construction, program partners sponsored a coordinated public outreach program. A significant portion of the pipelines were originally routed through farmlands with no roadway access. By partnering with local government agencies such as Washington County, the Carollo/Stantec team modified the routing of some pipe reaches to parallel planned roadways to new developments. This significantly improved buy-in from local growers by minimizing impacts to their farms, while providing access during pipeline construction and for future maintenance.

A Focus on Local Participation

To boost the local economy, WWSP offered opportunities to as many local businesses as possible. Rather than hire a team of consultants and builders from outside the region, WWSP placed a high priority on giving those who live and work in the community the opportunity to contribute to this seminal project and share in its economic benefit. Efforts have included significant outreach to recruit local trades, contractors, and other businesses.

Bringing it All Together

Coordinating a major construction program so all components come together smoothly takes planning and skill. Key to success is implementing policies and procedures to streamline the construction process. For the WWSP, the strong emphasis on local business involvement resulted in participation of a larger than usual number of contractors. To keep costs in check, maintain a rigorous schedule, and avoid potential rework, the program employed specific contract language, and a

detailed construction sequencing plan aimed at seamlessly transitioning the work from one contractor to another.

The commissioning process presents unique challenges, including testing a 15-million-gallon reservoir for leaks, connecting and flushing more than 30 miles of large-diameter pipe, and managing the associated water disposal. With construction completion now in sight, a comprehensive plan to address all interrelated program elements is more critical than ever. The commissioning team meets at least monthly to monitor construction and refine the plan to adjust to evolving issues.

“This joint effort between contractors, program staff, and operators from three different owners is all coming together just as planned, with the first water deliveries to customers scheduled for early 2026.”

—Tim Tekippe, Carollo Program Commissioning and Startup Manager

MEASURING SUCCESS

Despite the program's complexity, it has evolved to adapt to shifting technical, regulatory, and economic issues over its 11-year duration, and work remains on track to meet the original 2026 completion date established in 2015. Plus, the overall program change orders for the work currently stand at just one percent. This achievement is a testament to the discipline and technical acumen of the program participants. It reflects the soundness of the program objectives and the leadership of those dedicated to achieving them.

When complete, the system will provide exceptional finished water quality, improved water conservation measures, enhanced system safety, and greater source reliability and redundancy for the region's growing population.



A SUSTAINABLE WATER SUPPLY for LOS ANGELES

The DC Tillman Water Reclamation Plant is Helping Pave the Way for 100 Percent Wastewater Recycling

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When complete, the state-of-the art advanced water purification facility at the DCTWRP will be one of the largest IPR facilities in the nation.

Los Angeles has historically depended on imported water from the State Water Project, Colorado River, and Los Angeles Aqueduct for the majority of its drinking water needs. Prolonged drought conditions affecting these imported water sources, coupled with seismic risks to conveyance infrastructure crossing the San Andreas Fault, have underscored the need for reliable and sustainable local water supplies. In response to these challenges, the city has prioritized water recycling as a key strategy for enhancing water security and resilience.

Working Together to Secure LA's Water Future

In 2019, Los Angeles launched an ambitious initiative targeting 100 percent water recycling at its four water reclamation plants to source up to 70 percent of the city's drinking water locally. This visionary program marks a significant shift in water management, focusing on replenishing groundwater tables, diversifying water supplies, and implementing drought-resistant strategies for Angelenos across the city, with equity in distribution being a core principle.

Through a partnership between Los Angeles Sanitation and Environment (LASAN) and the Los Angeles Department of Water and Power (LADWP), the city is implementing multiple water recycling projects. A key component of this effort is the advanced water purification facility (AWPF) at the Donald C. Tillman Water Reclamation Plant (DCTWRP), which will produce approximately 20 mgd of purified water upon completion.

The existing DCTWRP plant site encompasses approximately 90 acres, with 6.5 acres dedicated to a Japanese garden. The existing DCTWRP, with a current flow of 55 mgd, provides primary treatment, biological nutrient removal, filtration, and disinfection.

Designed by Koichi Kawana, the Japanese Garden at the DCTWRP is open year-round and beautifully demonstrates one of the many positive uses of reclaimed water.



State-of-the-Art Treatment Processes

The new AWPF will apply state-of-the-art treatment processes to supply 21,000 acre-ft/year of purified water to replenish the San Fernando Groundwater Basin. The advanced purification process employs several treatment and disinfection steps before the water can be recharged into the aquifer. These involve clearing multiple treatment barriers and providing regular water quality monitoring to optimize safety and protect public health. The AWPF's processes include microfiltration, reverse osmosis, and ultraviolet advanced oxidation.

The facility's advanced treatment train is designed to process stable tertiary effluent while consistently meeting or exceeding California's stringent water quality standards for groundwater replenishment. Real-time monitoring systems and automated controls facilitate optimal performance across all treatment processes.

Groundwater Replenishment

Following treatment, the purified water will be conveyed to the Hansen Spreading Grounds through an existing pipeline. The Hansen Spreading Grounds' 117 acres of engineered basins are designed to optimize infiltration rates while maintaining stable groundwater levels. Regular hydrogeological monitoring provides effective aquifer management and tracks water movement through the subsurface.

The groundwater replenishment process allows the water to naturally filter through soil and percolate into the aquifer, where it will remain for several years before extraction via existing groundwater wells. The water will undergo further processing at a drinking water treatment facility before becoming part of LA's drinking water supply.

LA's Water Recycling Vision

The AWPF project is an essential component of the Los Angeles Groundwater Replenishment Project, a large program that aligns with LA's water management strategy, and accounts for approximately 15 percent of the Pure Water Los Angeles program at buildout. LASAN and LADWP spent several years researching advanced treatment options and working with stakeholders before finalizing the facility's design. The project team, including Carollo as owner's advisor, has completed the AWPF design, and construction began in December 2024. The facility is expected to be operational in 2027.



LASAN and LADWP experts speak about the future of wastewater recycling in LA.

This initiative complements LA's broader water recycling portfolio, which includes three additional facilities.

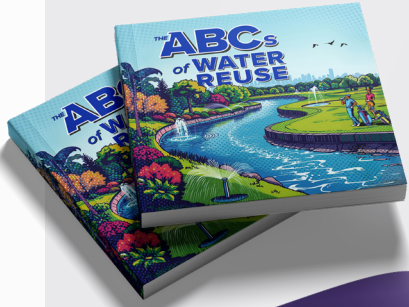
- **The AWPF at Hyperion Water Reclamation Plant** is proof of concept for full transformation to 100 percent recycling.
- **The Los Angeles-Glendale Water Reclamation Plant** processes and conserves more than one billion gallons of potable water annually.
- **The Terminal Island Water Reclamation Plant** can produce up to 12 mgd of purified water for seawater intrusion prevention, saving millions of gallons of potable water each day.



This project brings together the community with a passionate team of dedicated professionals, including two of LA's leading utilities.

Making Water Reuse Easy to Understand

To enhance public understanding and acceptance of water recycling, Carollo developed a fun and informative educational resource: The ABCs of Water Reuse. This colorful resource uses the alphabet to explain key concepts, benefits, and the science behind water reuse in simple terms. It's suitable for readers of all ages and is an essential tool for all those wanting to learn more about recycled water!



Scan to download The ABCs of Water Reuse.



Building Public Trust

Successful water recycling programs require careful planning, stakeholder engagement, and community outreach and education. Despite the proven benefits of sustainable water management, utilities often face public misperceptions about recycled water.

The LASAN, LADWP, and Carollo team has developed stakeholder engagement and community education initiatives focused on communicating the benefits of wastewater reuse—including enhanced water security, environmental protection, and consistent water quality. Through transparent information sharing and community outreach, the team is addressing public concerns while maintaining confidence in water safety.

This project represents a significant advancement in sustainable water management for urban areas. Its success could serve as a model for other cities facing similar water security challenges, demonstrating how innovative treatment technologies and thoughtful implementation can transform reclaimed water into a valuable resource.

DIVING DEEP

Inside Carollo's Water Applied Research Center

JESS BROWN, PhD, PE (jbrown@carollo.com)

Water challenges across communities are driving the need for forward-thinking solutions. Behind many of the innovative approaches addressing today's water issues stands Carollo's Water Applied Research Center (Water ARC®)—a comprehensive research hub where theory meets application, and the future of water solutions takes shape.



Watch the Water ARC® video to learn more.

The Evolution of Water ARC®

The Carollo Research Group's Water ARC® has grown from a specialized laboratory to a full-service partner for Carollo's projects, capable of adapting to specific demands and providing reliable expertise to handle a wide array of water challenges. To date, Carollo's Water ARC® staff have contributed to more than 400 applied research projects impacting more than 5 billion gallons per day of water from water and wastewater facilities.

But what truly sets our Boise-based facility apart isn't just its impressive statistics—it's the integrated approach that brings together three specialized programs to address the specific needs of our municipal and private sector clients.

Three Pillars of Innovation

Laboratory Testing Services: Where Precision Meets Possibility

Under the direction of Katie Davis, our state-of-the-art laboratory serves as the analytical backbone of Water ARC®. Here, water samples undergo rigorous examination—from emergency and rapid-response diagnostics and short-term testing to extended studies, complex investigations, and custom or condition-specific studies.

The lab's capabilities extend to specialized areas, including suspended ion exchange (SIX®), ion exchange-based advanced treatment (XBAT), ozone and UV disinfection, wastewater inhibition, per- and polyfluoroalkyl substance (PFAS) treatment, rapid small-scale column tests (RSSCTs), and much more. If you have unique testing requirements, we will work with you to develop creative solutions to deliver the data you need for your project.



"Our laboratory isn't just about running standard tests. We specialize in creating testing protocols for emerging challenges that don't yet have established methods."

— Katie Davis
Water ARC® Laboratory Manager



Equipment Construction Services: Building Tomorrow's Solutions Today

When off-the-shelf equipment can't address unique challenges, Water ARC®'s equipment construction services team steps in. Led by Greg Stanczak, this team designs and fabricates custom equipment tailored to specific project requirements.

Recent innovations include custom bioreactors for specialized treatment processes, Carollo's inflatable fast and lightweight off-gas analysis technology (I-FLOAT) for wastewater off-gas testing, and a bicarbonator skid for sodium bicarbonate SIX® regeneration.



"Every water challenge has its own fingerprint. Our ability to create purpose-built equipment means we can tackle problems that standard tools simply weren't designed to solve."

— Greg Stanczak
Water ARC® Equipment Construction Services Manager

Pilot and Field-Testing Services: Proving Concepts in Real Conditions

The journey from laboratory to full implementation requires rigorous field validation. With a fleet of over 20 pilot skids and a wide array of field equipment, Carollo's pilot- and field-testing services team, led by Luke Snell, helps clients explore viable solutions, confirm efficacy, and make informed decisions to deliver successful projects.

Our services span the entire pilot testing lifecycle—from initial facility design through construction, commissioning, operation, troubleshooting, and modification. The team regularly provides pilot support for testing microfiltration/ultrafiltration membranes, reverse osmosis processes, ozone treatment, flocculation/sedimentation configurations, filtration technologies, pipe loop skids, and more. In addition, handheld meters, probes, and other field equipment aid in data collection and analysis.



"Pilot and field testing eliminates surprises and provides the confidence our clients need before committing to full-scale implementation."

— Luke Snell
Water ARC® Pilot and Field-Testing Services Manager

Water ARC® Testing Saves Millions for New Smyrna Beach Utilities

Carollo is participating in a pellet softening project for Florida's New Smyrna Beach Utilities (NSBU) that includes total trihalomethane (TTHM) mitigation. NSBU's water treatment plant had never exceeded TTHM or haloacetic acid (HAA5) maximum contaminant levels, but levels were high enough that the utility wanted to examine them. In response to organics levels, warm water temperatures, and the short free chlorine contact time (CT)—enough to get 4-log virus inactivation—many Florida utilities have turned to air stripping technologies. But this approach only focuses on removal of chloroform.

Carollo proposed to do limited testing to quantify air stripping's effectiveness at NSBU by answering the following questions:

- How quickly do TTHMs and HAA5 form?
- What percentage of TTHMs is chloroform?

Carollo's Water ARC® tested plant samples to measure disinfection byproduct (DBP) formation over time and the results were surprising.

- DBP formation was not as fast as anticipated. TTHM formation was 23 µg/L with 7 minutes of CT, and 45 µg/L with 28 minutes of CT. Theoretically, the CT needed for 4-log reduction with typical settled water quality is 3 to 4 minutes.
- Chloroform formation was initially 83 percent of the TTHM but dropped to 67 percent at 28 minutes of CT.

During testing, Carollo also reviewed the existing plant configuration and found the following:

- The chlorine contact basin was poorly baffled (later revealed to have a t_{10}/T of 0.38).
- Volatilization of chloroform would be more expensive due to multiple distribution system storage tanks. A revised approach to pull water from the clearwell beneath the filters and process it through a packed tower had an anticipated cost of \$1 to \$2 million.

Water ARC®'s data revealed a better solution: Improve the baffling factor and reduce CT with free chlorine—all while continuing to maintain 4-log virus inactivation with a conservative safety factor.

The selected alternative was to upsize the piping from the pellet softening process and allow all the CT in the pipeline, which is a perfect contactor (t_{10}/T of 1.0). This option can save millions, is simple to operate, and can reduce the TTHM by 50 percent and the HAA5 by 33 percent.

A person with a backpack stands on rocks by a stream in a forest. A blue arc graphic is overlaid on the image.

Where do you find Carollo **Innovation?**

In our culture
In our solutions
In our communities

Like water itself, innovation flows through every challenge and shapes new possibilities. For over 90 years, Carollo has pioneered breakthroughs in water technology—from resilient infrastructure protecting growing communities to groundbreaking solutions safeguarding public health and ecosystems. At Carollo, innovation isn't just about what's new—it's about what's necessary. Every advancement, every improvement, and every solution flows from a single purpose: shaping a future where water enriches every community it touches.