

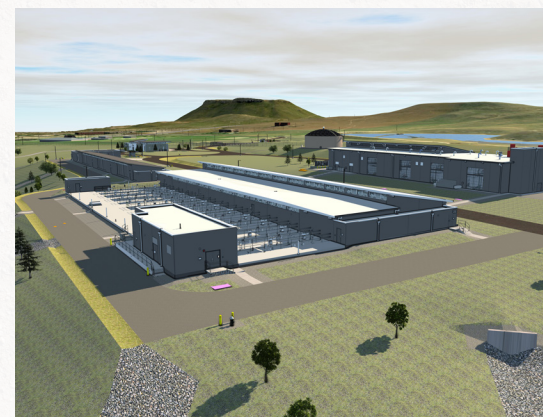
# BOOSTING PRODUCTIVITY THROUGH ONE COLLABORATIVE SOLUTION

 DENVER WATER

**T**hey say that sometimes you don't know what you're missing until you find it. Once you find it, you're left wondering how you ever did without it. The Northwater Treatment Plant team experienced this first-hand.

Turning mountain snowmelt into clean drinking water for 1.4 million customers, the Northwater project is owned by Colorado's oldest and largest water utility, Denver Water, and is part of its \$1.3 billion commitment to infrastructure resiliency and flexibility. Capable of treating up to 75 million gallons a day and expandable to 150 million, the project plan includes operations, electrical and treatment buildings, water storage and security, as well as the building of a new pipeline to its Moffat facility. Each plan brings with it a whole set of unique voices: designers, engineers, contractors, the owner and its representatives.

With so many teams working across so many disciplines, Denver Water knew it would be managing not just thousands of documents and tasks, but the research and coordination needs of hundreds of people. It initially planned to use the same project management methods that had served the utility well over the years. But could there be a better way?





Because of its willingness to reimagine traditional document management processes, this public agency, with the help of InEight® Document, is now bringing teams and talents together via one collaborative system, raising the bar on productivity, accountability, accuracy and quality for stakeholders across the board.

## MULTIPLE VOICES DEMAND A **COMPREHENSIVE SOLUTION**

After engaging roughly 50 firms in design and pre-construction, the Northwater team — project owner, Denver Water; owner’s representative, Jacobs Engineering Group; and one of North America’s largest construction and engineering firms, Kiewit Corporation — realized very early on that enacting strong document control would be essential to avoiding project chaos. They had originally selected Bentley ProjectWise® for design review, Microsoft SharePoint® for document control, Microsoft Outlook® for correspondence and Bluebeam® for document review. This multi-point solution, however, was not perfect.

For Jill Crockett, project manager for Jacobs Engineering Group, a world leader in civil engineering, a big part of any improvements had to involve an easier platform and fewer logins. “For us as the owner’s rep, and with a team of several hundred users on the project with varying levels of control, getting everything into a single platform is hugely beneficial,” she says.

Colin Bunker, the assistant project manager on Northwater for Kiewit, agrees. With a strong belief that good document control is all about having visibility into a record of who did what and when, he could also see that for a project as complex as Northwater, transparency is essential.

Northwater Treatment Plant  
in Denver, Colorado



But with Denver Water trying to manage most of its design through the combination of SharePoint and ProjectWise, that crucial transparency was missing. “We knew we’d be riding a roller coaster of design iterations and pricing fluctuations, plus we’ve been bidding some things out over the last few years, and it’s really important with all of our sub-contractors to know exactly who saw what, and at what time,” Colin says. “So, if we could have full transparency, we knew it would be a great tool for accessing project history to address minor disputes, for example, and finding out exactly what happened.”

Denver Water’s project manager, Pete McCormick, has a slightly different point of view. “From the owner’s perspective, there are dozens of types of software we can choose, so it’s not just about what the software can do now or how amazing it will be in the future; it’s about getting a firm grasp upfront of its true fit and functionality for our specific business processes.”

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So, for Pete, any new document management software being considered would need to include a high level of support from the software provider and a willingness to customize the solution as needed to suit specific business needs. “Really, it all comes down to their responsiveness in being able to address things with us when we need it,” he adds.

## TRUSTING THE TEAM AND CHOOSING INEIGHT

The Northwater team feels that InEight Document is a strong overall solution since the sheer number of companies composing the project team makes clear collaboration and communication a number one priority. Keeping this in mind, Colin is particularly impressed with how Document’s notification feature adds clarity to their complex contract style. “When you add Document’s comments to let people know how important an update is, or whether something materially changed or not, you’ve got a supremely powerful tool,” he explains. “A tool like that keeps everybody 100% informed on what’s new and latest and greatest, and also focuses them more on what they need to pay attention to right away.”

The team is also a heavy user of transmittals for distributing documents, so they are making good use of the mail, transmittals and packages modules for seamlessly distributing project documents to the right people at the right time. Additionally, being able to use the program’s built-in workflows forms, and then being able to “custom bake” their own forms within the system’s forms module, helps ensure that they successfully capture and track their critical business processes.

The document history capabilities are a deciding factor as well. “Our client, Denver Water, is rightly passionate about having every comment and action ever made recorded to have

a true, traceable history of resolutions,” Colin explains. “With Document, everyone has access to a complete audit log of who did what and when they did it.”

## INTUITIVE FEATURES SPEED PROJECT SUCCESS

Once the Northwater team got their arms fully wrapped around the right structure for their unique needs within InEight Document, they quickly came to rely upon it as their single source of project truth. The dynamic foldering feature within the document register is an easy favorite now, as it allows everybody on the team to build folder structures to optimize the organization of project documents. A nice side benefit? “The foldering gently trains people into keeping everything in a single document register,” says Colin. “That makes us all more efficient, which is absolutely fantastic.”

The team also enjoys the personalization aspect of Document because it allows their people to configure their own document folder trees down to a very minute level, while still keeping the project documents under control. “The traceability that we have now for design versioning, for instance, was not really even in existence before we shifted into the InEight Document-controlled environment,” Colin says.

Benson Robbins, project engineer at Kiewit, and the team member most directly involved with managing Document for Northwater, reports that the dashboards have proven extremely popular as well. In fact, many folks, he explains, are actually bypassing their Outlook email altogether. They are choosing instead to navigate outstanding actions directly through their dashboards. And what about when people are having a side conversation via email that starts to get borderline contractual? “We ask them to ‘cc’ our Northwater email address which automatically files the email to our project email

archive,” he says. “This is really useful for users who are new to the system because we can just backdoor the whole thing, and they’re not even aware that it’s getting logged for them. It’s pretty amazing.”

“My dashboard is incredibly useful for me. As the owner’s rep, just to be able to see what I’m behind on and what I need to jump on, it’s really helped me prioritize things and be more productive.”

- Jill Crockett, Project Manager, Jacobs Engineering Group

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Another one of Jill’s favorite features is the ability to insert individual comments in the document review process. “I can respond to the ones with the comments, close out some



Northwater Treatment Plant in Denver, Colorado

but not all of them, and then track the ones I want along with subsequent document reviews,” she says. “That alone has been very helpful, because we’ve not been able to do that in, say, Microsoft Excel®. So, having that record go along with each document has given us a lot more flexibility.”

The bottom line on the team’s use of Document? “It’s pretty simple,” Colin says. “Everybody trusts it, and everybody understands how it works. Their different entities are able to access it without headaches. It’s really been a thorough and robust system that we’ve all got confidence in now.”

### **A WORKABLE LEARNING CURVE YIELDS RAPID ADOPTION**

Partnering with InEight’s support teams has helped speed up the Northwater team’s adoption rate. “Just to have the open door that InEight provides to us, to listen to everything that’s been needed — that’s the key to keeping things moving in a positive direction,” Benson says.” Colin agrees, adding, “I also think the collaboration among our teams is fantastic. Actual end users are involved in not just the ideas, but the testing and making sure things are functioning properly.”

As with any new system, there is bound to be a learning curve, but the Northwater team has found the Document curve to be a gentle and generally short one. According to Benson, they currently have roughly 80% of their target user groups on board and active. From the Kiewit side, there are about 760 users and 11,000 documents at last check. Colin has uploaded about 10,000 docs in the document register alone. “I’ve probably got in the thousands of transmittals in my transmittal history at this point, too,” he says.

Saving time is another benefit the team has experienced, especially where Document’s integration capabilities are concerned. “Previously, we would get hand-written markups of plans, specs and different documents that our document controls people had to transcribe into actual commentary,” Jill says. “With Document’s seamless Bluebeam integration, we can skip all of that and be right in the documents we need faster all in one place, all on one platform.”

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- Colin Bunker, Assistant Project Manager, Kiewit Corporation

With most of their users up to speed now, they can look back and see that the learning curve really depends on what a user needs to do. “A lot of our basic engineers, for instance, get in and they just go directly to find documents, and they find them with almost no training,” explains Benson. “For the most part, all of our primary sub-contractors need to do business in the software, so they’ve pretty much all just come on board and adopted it straightaway. It works as advertised.”

## PROJECT CERTAINTY ENSURES A BRIGHTER FUTURE

Denver Water's initial drive to better manage cross-disciplinary teams by adopting InEight Document has paid off in many ways, yet Jill admits that in the beginning, she wasn't absolutely convinced the team even needed the program. "When we first started out, we were just going to use Document for a very specific purpose, really limited to document storage and some document reviews and RSI workflows, but it's become so much more than that," she says. "Now we look at meeting minutes not in siloes, but across disciplines, and we can see certain ones are doing better than others, and we can see that very fast. Because of that ability, you start challenging all your teams, from design and engineering to craft and field execution, to perform at a higher level just by that ease of comparison. I have no doubt now that we made the right decision."

Pete sees the future of Northwater as decidedly bright as well, and one based on continuing the positive partnership the team has enjoyed with InEight and with Document. "As the end owner, the expectation now is that we will continue to see an improved performance in terms of being able to respond to the team's requests so that the story doesn't change over the course of the project," he says. Considering the dedication of his team and the trust they all have in each other, their companies and their decisions, Pete's words will undoubtedly prove prophetic of the project certainty and success to come.

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- Benson Robbins, Project Engineer, Kiewit Corporation

Are you ready for a more efficient approach to document management?

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## ABOUT INEIGHT

InEight delivers proven project certainty through advanced technology by helping owners, contractors and engineers visualize, estimate, control, connect and manage all aspects of their capital projects. Developed by construction professionals for construction professionals, InEight solutions deliver project confidence at every phase of the life cycle, helping minimize risk, control costs, increase efficiency and provide greater visibility for superior project outcomes. A subsidiary of Kiewit, InEight is based in Scottsdale, Arizona, U.S., and is ISO 27001-certified. For more information, visit [InEight.com](https://www.ineight.com).