



# Plumbing & Mechanical Infrastructure Solutions

For the Good  
of Your Building



Founded in 1988, SageWater is the only plumbing and mechanical infrastructure solutions expert that serves occupied condominium and apartment communities nationwide.



**Providing Turnkey Solutions**

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**Operating Nationwide**

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**Serving Occupied Apartment and Condominium Communities**

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**Residents Don't Move Out**

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Every project I have worked on with SageWater has been well-executed. They do a fantastic job for us.

**Andy Wolper**

Portfolio Construction Manager  
Aukum Group

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# From Diagnosis to Design to Delivery

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## When Critical Infrastructure Systems are Failing or Out of Date, Call Us.

**Many people call your building their home. When it's healthy and safe, the community thrives. But the flow of life is disrupted when plumbing and mechanical systems are failing or out of date.**

At SageWater, we solve age-related and defective infrastructure problems across all your piping systems. We tailor comprehensive solutions that include forensic and empirical diagnosis, engineering design, and turnkey construction services.

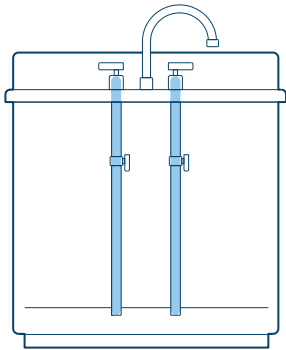
Fixing and installing pipe systems is all we do. We've perfected the art of working efficiently in occupied properties like yours. And we do it with minimal disruption to residents.

You can trust us to preserve the vitality of your building.

**With our solutions, you gain operational efficiency, protect owner investment, and improve your community's quality of life.**



# Piping Systems We Address



## Supply

For hot and cold domestic water piping systems, common problems include low water pressure, discolored or poor-tasting water, and leaks ranging from small pinholes to large catastrophic ruptures.

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SageWater did what they said they were going to do. They were clean, neat, careful. And great communication.

**George Byrd**

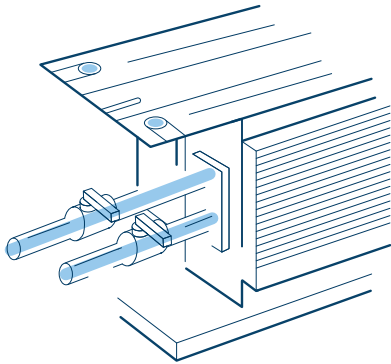
Former Board Member  
The Claridge

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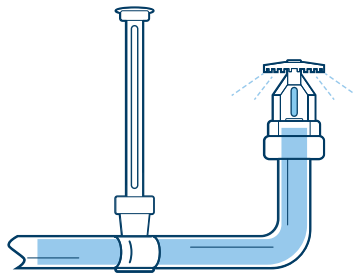
## Drain, Waste, and Vent (DWV)

The original design for many sanitary systems lacked proper cleanouts, making maintenance a challenge. DWV back-ups, slow drains, and cracks can lead to floods, odors, water shut-offs, and community-wide frustration. Leaks can also cause major sanitary concerns.



## Heating, Ventilation, and Air Conditioning (HVAC)

Commonly referred to as your building's mechanical system, these pipes and their system components, such as boilers, chillers, pumps, and air handlers, all take a beating as the seasons change. When they fail, system shutdowns and potentially dangerous temperatures take over your building.



## Fire Sprinkler

A fire sprinkler system is a critical component of your building's life safety infrastructure. You may be required to retrofit an older property that was constructed without fire sprinklers to meet new building codes or legislative changes, or you may want to do it to improve safety in your community.

# Common Pipe Problems



## Cast Iron

Commonly used in drain, waste & vent (DWV) systems, cast iron fails under prolonged exposure to the harsh gases and effluent associated with these systems.



## Copper

Copper pipes are typically degraded due to water quality issues. Corrosion often causes pinhole leaks that lead to mold, mildew, and water damage.



## Galvanized Steel

Galvanized steel is steel coated with zinc to prevent corrosion. Over time, the zinc coating deteriorates leading to pinhole leaks, poor-tasting and rust-colored water, and corrosive build-up that reduces water pressure.



## Black Steel

Black steel is most frequently used in hydronic HVAC piping systems. While insulation failures are the most common issue, chemical additives can also cause premature failure of both the pipe and system components such as boilers, chillers, and fan-coil units.



## CPVC

The standard for many years during the 1980s and '90s, CPVC systems are starting to show signs of age. Hot water lines, in particular, deteriorate more quickly. Ballooning and splitting are increasingly common in properties over 30 years old, causing significant leaks.



## Polybutylene

Used in up to 10 million homes from 1978 to 1996, and discontinued after a huge class-action settlement, polybutylene is a gray plastic pipe that degrades in the presence of common water additives such as chlorine.



## Yellow Brass Fittings

Yellow brass is an alloy that contains zinc. Over time, the zinc breaks down, leading to structural stress fractures and disastrous leaks. Yellow brass fittings used in the early 1990s have been the subject of numerous class-action lawsuits.



## Epoxy-Lined Pipes

While promoted extensively as an alternative to pipe replacement, pipe-lining's challenges with installation, quality control, and maintenance along with health, environmental, and safety concerns make it a poor choice for most communities.

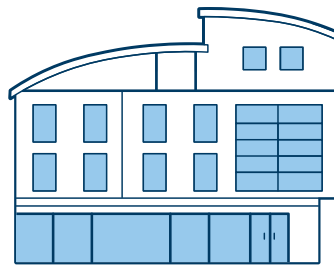
# Who We Serve

## Property Types



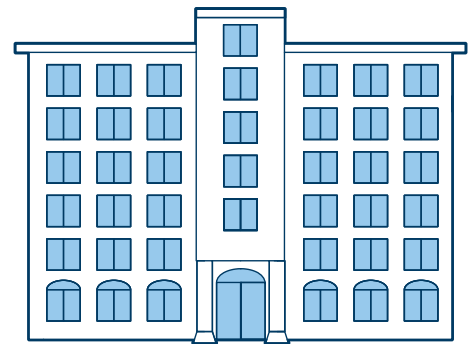
### Apartment Communities

Multifamily investors, owners, REITs, and property managers are often concerned about occupancy rates and resident retention and satisfaction, particularly during large rehabilitation projects. That's why SageWater develops a custom and coordinated communications plan that makes it easy for even the largest apartment community leaders to ensure residents feel heard, included, and respected.



### Condominium Communities

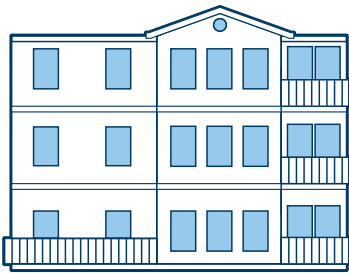
For condo owners, functional piping infrastructure is often taken for granted. You simply expect your plumbing and mechanical systems to work. When they don't, and failures occur frequently across the community, it quickly becomes a major problem. To support your community, SageWater has developed a suite of services to help your Board of Directors and managers navigate the decision-making, funding, and construction process.



### Commercial Properties

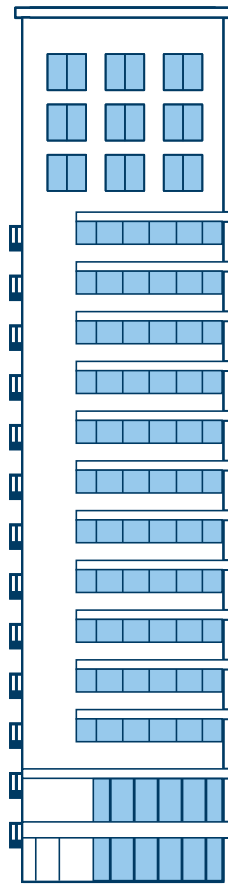
No two office buildings or hotel floor plans are the same. That's where SageWater's expertise comes in—our crews have seen it all, and we know how to adapt our workflows so that businesses stay open during construction. Our teams get their jobs done while allowing you to do the same. Our exacting professional standards keep the project timeline manageable and the project disruption minimal, so you can get back to business.

# Building Styles



## Garden Style or Walk-Up

These multi-unit residential buildings can be up to four stories tall, typically lack elevators, and are prevalent in both suburban and rural areas across the country. Many were built during the building boom in the 1980s and 1990s, which means their plumbing and mechanical infrastructures are experiencing age-related issues that SageWater has successfully addressed for multifamily apartment owners, condominium boards, and their managers—all while residents remain in their homes.



## Mid- to High-Rise

Taller buildings present a unique set of logistical challenges for community-wide plumbing and mechanical system renovations. These can include coordinating and delivering projects in properties with varied floorplans, limited elevator access, and pipe running vertically between floors. SageWater expertise in these types of properties is proven. We've successfully delivered projects coast-to-coast with minimal disruption to residents.



“ When SageWater is onsite, I get a break because I know for a fact that everything is going to go exactly how it was planned for the day, for the week, for the month. And if there is a change, I get a phone call [or] a text. And if I get no text, that means everything's great.

**Michele Taan**  
Site Manager  
Ohana 4 Services

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# What We Do

## Turnkey Pipe Replacement

**Our core business is turnkey pipe replacement. It has been the foundation of our company for over 35 years. When we say we provide a turnkey solution, we truly mean it. One contract, one point of accountability, complete satisfaction.**

Unlike service plumbers who rarely have the scale to handle a piping infrastructure renovation in an occupied multifamily property, or general contractors who subcontract out the majority of the work, SageWater self-performs—bringing all the necessary skills to your project under one contract. With a single point of accountability and reduced overhead, we deliver value on every job, every day.

From pre-construction planning to final punch-list walkthroughs, we can handle your entire project from end-to-end. We provide all the required trades (plumbing, drywall, paint, carpentry, tile, and more) so you don't have to worry about typical construction issues like sub-contractor delays or inconsistent quality.

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During these projects, we're going into people's homes. So, one of the biggest concerns for me is the integrity and respect that's required to do that. For example, if something is damaged, how would we rectify the situation and de-escalate in a respectful fashion? There are multiple companies I reached out to in my due diligence who don't offer that. But when I've navigated these projects with SageWater, there's always a game plan for customer service and to resolve potential challenges. That's highly important to me.

**Kimber Barrett**

Community Manager  
Greystar Management

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## A SMARTER WAY TO COMMUNICATE

### Customized Communications Plans for Every Project

From the first town hall meeting to the last drop of paint, SageWater's dedicated onsite project managers work with residents and staff to ensure that expectations are set and met.



### A Dedicated Project Website

For larger projects, we provide a dedicated website to serve as an information hub, giving residents 24/7 access to information about upcoming renovations.



### Unit-Specific Information

Our paper notices and color-coded floorplans let each resident know where we will be working and when we'll be done.

### Direct Access

Throughout the pipe replacement process, residents can communicate directly with SageWater's onsite project management, limiting extra phone calls to your building staff.



# Turnkey Pipe Replacement

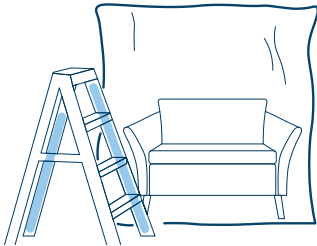
## OUR PROCESS



### 1 Staging Area Established

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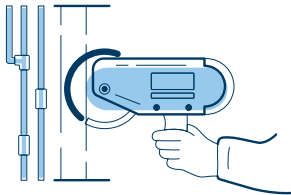
For most garden style projects, our staging area will be in a small shipping container. For high-rise projects, we frequently set up in a parking lot or some other location that works within your space constraints. Materials are stored onsite to ensure our crews are fully supplied to keep pace without losing time waiting for materials.



### 2 Residents' Homes Protected

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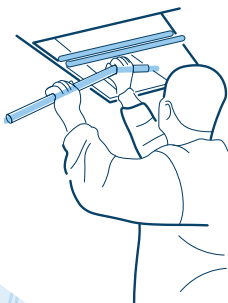
Our dust mitigation system protects any furniture and valuables. We put up and take down plastic sheeting and drop cloths every day so residents can safely and comfortably live at home during the project.



### 3 Walls Opened to Access Pipes

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For drywall, we cut and number each piece so that, where possible, it is returned to where it belongs. For block and concrete walls, we make precision cuts to minimize wall repairs after the pipes are replaced. Where required, kitchen and bathroom cabinetry are temporarily removed and protected. Of course, when required, we engage a specialist to perform asbestos abatement before we begin any of this work.



### 4 Old Pipes Disconnected and New Pipes Installed

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With decades of focusing exclusively on piping system replacements, our crews bring unmatched expertise to every job. For supply and DWV projects, water service is turned back on every night.



## 5 Work Areas Cleaned at The End of Each Day

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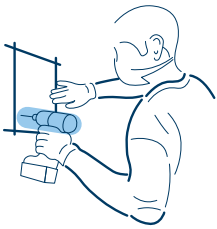
We guarantee that every unit will be cleaned and livable at the end of each day. And because we perform projects in occupied communities, we keep the jobsite clean to minimize the impact to the residents as much as possible.



## 6 City/County Inspections Completed

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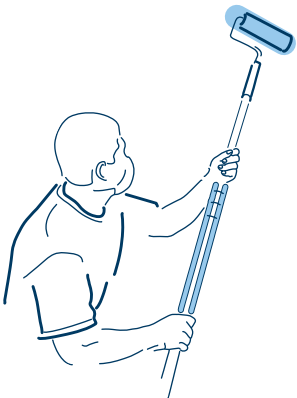
We work with local building inspectors to manage inspection schedules and minimize project delays. We also ensure our work passes all local building codes and inspection requirements. This includes all aspects of the work such as appropriate firestopping, insulation, fire ratings for wall reconstruction, and more.



## 7 Walls Repaired and Finished

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Expert craftsmen repair your walls. Achieving a seamless patch on drywall is our standard. For concrete or block walls, we match textures and finishes for a perfect look. Where required, cabinets, tile, vanities, and counters that were removed to access your pipes are all professionally re-installed.



## 8 Paint and Texture Matched

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We custom color match to ensure each unit looks like we were never there. If texturing is required (Orange Peel, Popcorn, etc.) our craftsmen can match your existing textures to ensure a continuous look.



## 9 Final Walkthroughs Completed

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We take pride in ensuring all punch-list items are completed to your satisfaction. Final walkthroughs with an owner's representative and/or resident ensure everyone is happy with the finished result.

# What We Do

## Pipe TEST™ Forensic Studies & Analyses

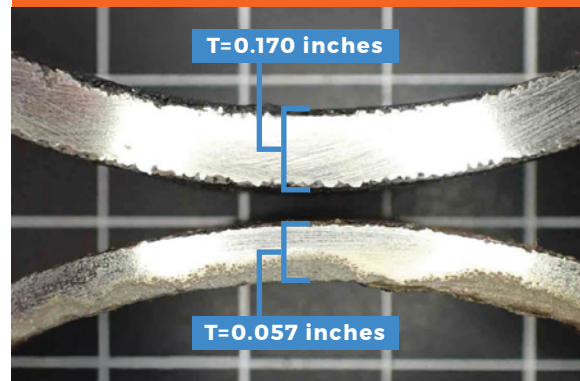
After 35 years of counseling clients on the need for pipe replacement based on the age of their community and leak frequency, we removed the guesswork and developed a more scientific solution.

The SageWater Pipe TEST™ (Technical Evaluation of System Threats) provides factual evidence regarding how your pipes are aging and includes a detailed engineering report of the results. Analyses can include:

-  **Testing your water quality to see if it's causing corrosion**
-  **Engineering analysis of your control systems (e.g., temperature and flow rates) to evaluate if your system is functioning at optimal levels**
-  **Camera and other visual inspections to locate clogs and cracks in your piping system**
-  **Ultrasonic testing to determine pipe wall thickness without turning off the water**
-  **Forensic laboratory analysis, including metallurgical and microscopic observations of pipe samples to determine the cause of failure**

The goal of a Pipe TEST is to help you decide whether you need to repipe now, or if you can hold off a few more years. Third-party, independent, peer-reviewed engineering reports ensure there is no bias in our results, just the facts. If a repipe is indicated, we provide an estimate in the report.

This image from a digital microscope shows one of many pin-holes in a copper piping system. The interior corrosion has propagated to the exterior, producing leaks.



This forensic analysis compares the pipe wall thickness of a healthy DWV drainpipe on top with one that is thinning and needs to be replaced on the bottom.

# HVAC System Conversions and Upgrades

**Two season or two pipe HVAC systems were popular from the late 1950s to the early 1990s. In addition to issues with aging, residents get frustrated because the whole building is heated or cooled, leaving them no control over their climate.**

These two season systems have a centralized mechanical plant with a boiler whose water heats units in the winter, and a chiller to cool water for air conditioning in the summer. Fortunately, there are many options for upgrading and de-centralizing these mechanical systems to be more energy efficient, while also providing four season conditioning. This enables residents to decide if they want heating or cooling at any given time in their units.

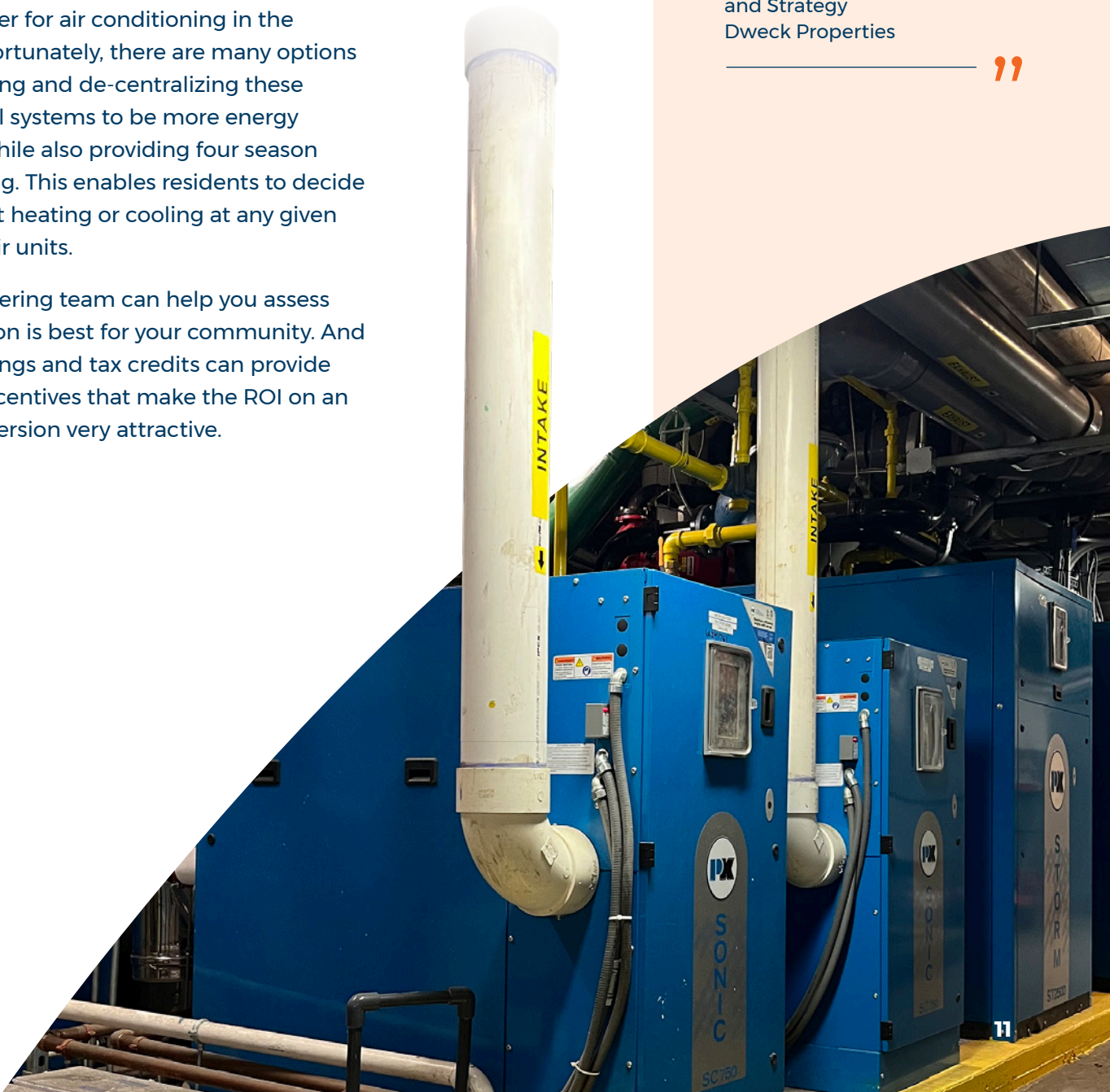
Our engineering team can help you assess which option is best for your community. And energy savings and tax credits can provide valuable incentives that make the ROI on an HVAC conversion very attractive.

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It's a really great feeling having a partner like SageWater. They're going to do the work as if they own the building and offer guidance that the owner wants and needs.

**Josh Conroy**  
VP Portfolio Operations  
and Strategy  
Dweck Properties

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# What We Do

## In-Unit Laundry Conversions

These days, communal laundry rooms have fallen out of favor in exchange for in-unit laundry machines. Most newer communities are built this way. To remain competitive, older communities are adding clothes washers and dryers in each unit.

These upgrades can yield a significant return on investment (ROI), but careful analysis is required due to certain considerations that can significantly affect the price and possibility. For example:

**Does your community have the electrical capacity to support the new equipment?**

**Do you need to upsize your drainpipes or add suds relief to meet current building codes?**

**Do you have the physical space in each unit to house a washer and dryer?**

**How will you vent the dryer, or do you need to consider ventless solutions?**

SageWater excels at providing both the engineering/cost analysis and construction renovation solutions to support your community through an in-unit laundry retrofit. We can even help decommission the old communal laundry room if you want to re-purpose the space into something else.



# Fire Sprinkler Retrofits

**Properties built before modern building codes often find they are lacking critical safety infrastructure like fire sprinklers. Across the country, increases in insurance costs and new legislation designed to make communities safer are forcing these older buildings to retrofit a fire sprinkler system.**

Ensuring your community has the appropriate water pressure, pumps, storage, distribution piping, and alarms for a new sprinkler system requires considerable design and engineering work to make sure it is both functional and compliant with all current laws.

In addition to system retrofits, an increasing number of newer buildings need their sprinkler infrastructure rehabilitated due to incompatible materials used during construction. As a result, owners are dealing with premature leaks and related damages.

SageWater can help retrofit and repair your sprinkler piping infrastructure to provide your residents with the safety and peace of mind they have come to expect in today's competitive real estate market.



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SageWater replaced our dry standpipe, and we were very pleased with their work. The crew was efficient, maintained consistent communication throughout the project, and demonstrated excellent customer service. They took great care to protect our common areas, which we truly appreciated. Mahalo, SageWater!

**Tyra Wallrabenstein, ARM**  
General Manager  
Ala Wai Plaza Skyrise

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# How We Work

## Flexible Contracting Options

We like to install and fix piping infrastructures, but how we do it is up to you. We can support your rehabilitation process with whatever contracting model you prefer, and—thanks to our expertise—we’ve achieved an outstanding record of delivering hundreds of projects on-time and on budget.

### Third-Party Facilitated Projects

If you prefer to hire a third-party construction manager, engineer, or architect to design and oversee your project, we’ll be your consultative builder. We routinely contract under this model, providing a competitive and accurate bid in response to your Request for Proposal (RFP).

### Design-Build Projects

Looking to sole-source your project? We can help with that too. Our in-house teams of licensed engineers, project managers, and tradespeople successfully deliver your project with a turnkey solution, from start to finish. Our consultative approach ensures we develop and deliver the optimal solution to your community’s needs.

### Projects Delivered All at Once or Phased Over Time

Efficiencies and cost savings exist when completing a pipe infrastructure project all at once—something we call a single mobilization. But sometimes budget limitations or seasonal requirements mandate phasing your project and spreading out costs over several years. For example, clients in resort towns do this to avoid construction during occupancy spikes, such as ski or beach season. We are flexible and can meet your specific needs.



# Case Study

## The Horizons | VA

### HVAC Conversion, High-Rise Apartment Community

Scan to watch a video online.



At The Horizons apartments, the hydronic HVAC infrastructure was failing. The owner decided to convert to a more energy-efficient system that would also provide residents with year-round or “four season” control of their heating and cooling. But every contractor’s bid for their planned upgrade exceeded the budget.

That’s when SageWater put its design-build capabilities to work. Among the options we engineered, the owner chose a highly efficient Water Source Heat Pump (WSHP) system. To

deliver it, we upgraded the property’s utility plant—decommissioning the chiller and installing new pumps, boilers, and heat exchangers. We also replaced the system piping and swapped fan coil units with WSHPs, all while residents remained in their homes.

The owner selected SageWater because no other contractor provided an innovative, turnkey solution that met their goals and budget. We exceeded their expectations, working successfully in their occupied buildings.

<b>Problem:</b>	Failing HVAC infrastructure including chillers, piping and fan coil units (FCUs)
<b>Year Built:</b>	1966
<b>Units:</b>	229 across two buildings
<b>Duration:</b>	11 months cumulatively
<b>Solution:</b>	Design-Build Hydronic HVAC system conversion



### Other Recent Projects

Scan to see the cases online.



#### ISLAND COLONY | HI

High-Rise DWV & Domestic Repipe,  
Mixed-Use Condo Community

#### REVEAL | AZ

Garden Style In-Unit Laundry Retrofit  
Apartment Community

#### PALACE LOFTS | CO

High-Rise DWV Pipe TEST  
Condo Community

#### NU’UANU PLACE | HI

Walk-Up Design-Build DWV Repipe  
Condo Community

#### CLARIDGE | FL

High-Rise DWV Repipe  
Condo Community

#### GLEN PARK AT WEST CAMPUS AND PAVILION | WA

Garden Style Domestic Repipe  
Apartment Community



# The SageWater Difference

Any plumber can plumb. Any painter can paint. And while we've spent decades honing our skills, perfecting our processes, and innovating our services, what truly differentiates SageWater are the core values that inspire us every day. Those values are:

**M**OTIVATION

**E**MPATHY

**R**ESULTS

**I**NTEGRITY

**T**HOUGHTFULNESS

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MERIT is what sets us apart in a sea of construction services providers. Ask any of our clients about their experience with SageWater, and they are sure to mention at least one of these traits.

Our values are the expectations we set for each other, and the measure by which we hold ourselves accountable. They define how we do our work, how we treat each other, and how we treat you and the residents in your community.

They translate into how we propose and negotiate contracts to deliver on your goals and how we collaborate with your management teams. It's especially evident in how our dedicated, onsite crew members conduct themselves.

We believe that culture and values distinguish an organization above all else, and our customers' feedback speaks to the importance of these values in every project we complete.

# Client Feedback



ROCKVILLE, MD

The way SageWater was able to coordinate the project and message it internally to the residents took a lot of pressure off my teams, instead of me having to hire additional folks to handle the coordination and questions.”

**Eric Posner**  
Chief Operating Officer | Tower Companies



ARVADA, CO

The dedicated onsite project manager is obviously as much tenant relations as anything else, and he really did outstanding. He was attentive and responsive, and I had total faith that whatever he said he would do, he’d do it quickly and thoroughly.”

**Justin Sims**  
Principal | Helios Properties



DALLAS, TX

SageWater did a fantastic job working with the condominium management staff to review, analyze, and test our various plumbing components. The information they provided was invaluable.”

**Sherry Schmoekel, PCAM**  
General Manager | Worth Ross Management Co.



TAMPA, FL

The project was predicted to last months longer than it did. [SageWater] implemented a schedule that got each home done faster, which made our residents very happy.”

**Brandon Moten**  
Resident Services Manager | UDR



HONOLULU, HI

To me the biggest [success factor] was owner satisfaction. From a building standpoint, SageWater’s workmanship was second to none. They always went above and beyond to make sure things were done beyond our expectations.”

**Robert Anderson**  
Former Board Treasurer | Fairway Villa





Contact us for a free consultation.

888-584-9990  
sagewater.com  
info@sagewater.com

SageWater is a proud member of   and other industry organizations

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