

- **What happens when a water main breaks?**

When a main break occurs, Mt. Washington Water's top priority is to stop water loss and return service to the affected customers as quickly as possible. Once a possible water main break is reported, a crew is immediately dispatched to the site to determine if it is a main break and to set up safety equipment. If there is a main break, the crew immediately locates and closes nearby valves to isolate the broken main from the water system, closing the valves closest to the break to minimize service disruptions to customers. Once the valves are shut off, Mt. Washington Water notifies BUD (Before you dig) of the impending excavation so the water main and other utilities near the water main break can be identified. Repair work cannot begin until all other utilities in the area are identified so the crew does not damage them.

After the utility lines are marked, excavation can begin. Construction equipment helps to remove most of the ground above the pipe and a pump helps to remove water from the excavated trench. Most Mt. Washington Water pipes are buried from three to 10 feet below ground, so depending on the depth, additional measures may need to be taken to ensure the safety of the workers, which can extend the time it takes to repair a break.

Once the pipe is exposed, crews can begin to repair or replace the broken main. When the repair is complete, crews open up a nearby hydrant to flush air and debris from the pipe before reconnecting it to the system. It can take a while for large mains to refill and restore system pressures. Next, the repair crew backfills the trench with gravel and prepares the road for patching. Workers use cold mix asphalt as a temporary patch until Mt. Washington Water's appointed contractor can permanently repave the road.

#### **What causes water main breaks?**

Water main breaks are caused by a variety of factors, including freezing or severe weather, pipe corrosion, soil conditions, age, ground movement, or being struck by heavy equipment. Mt. Washington Water's distribution system is upgraded periodically according to budget and still have a lot of updates needed, which maximizes main breaks caused by age. Although the Mt. Washington Water system varies in area of age, the City Council dedicates funding on an annual basis to ensure that the system can be upgraded and replace as needed without placing a financial or service burden on our customers.

We understand the inconvenience a water main break has on customers without water or low water pressure, but we want you as a customer to know it has an impact on Public Works Department employees as well, who at times are working under extreme weather conditions (i.e.: freezing temperatures, thunderstorms with torrential rain and extreme heat) all the while working diligently to restore the water services as quickly and safely as possible, and receiving hundreds of customer complaints. So as you can see, repair times can be affected by many factors and it is vital that our crews take the time to execute each step properly to avoid further damage and to ensure the safety of the community and the workers.