

MMIA RISK MANAGEMENT BULLETIN

The Root of Sewer Line Blockage

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Winter Root Growth

Winter seems like a time of dormancy for trees but in fact, that's not the true picture. As frigid temps encompass most of Montana, winter becomes a big growing season for trees. That growth is focused on the roots, not their branches and leaves. **That can be bad news for sewer lines!** Winter growth plus the general lower-than-normal levels of available water and nutrients can mean that municipal tree roots are attracted to municipal sewer lines. Add in the drought conditions during 2021, and those thirsty trees will be looking for large quantities of beverage and groceries this winter. Trees sense that there are both water and nutrients in those pipes. They will send out long, thin feeder roots to acquire those nutrients. When they find municipal sewer lines, they'll do their best to find a crack or joint they can penetrate. Once they send a feeder root into the sewer line, the nutrients there generate fast growth. Those feeder roots quickly grow into a dense clump that blocks the flow of water and waste. By late winter, feeder roots have had up to 120 days of growth in sewer lines!



Sewer Back-up Claims Cost Everyone

MMIA data indicates:

- Months of March, May, and June have the highest number of sewer back-up claims.
- Increasing daytime temperatures, spring runoff, and frequent periods of rain during these months will increase the volume of flow into the sewer lines.

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- Any root clogged lines will reduce the system's ability to move the fluids, resulting in the dreaded sewer water backing up into residential homes or community businesses.
- MMIA responds to claims from property owners who have experienced damage due to these incidents.
- Sewer related claims have cost \$2.6 million dollars since July 2016. That's a lot of dough for 492 claims!
- Reputational risk is at stake when root maintenance is not completed.

Sewer Backup Prevention

- Develop a plan that encompasses all areas of line servicing, maintenance, and repair. Update the plan as needed.
- Create and maintain records of sewer line servicing, root issues, repairs, call out complaints, routine root scheduled maintenance, and scheduled maintenance. See attached sample Sewer Routine Maintenance document.
- Maintain records of community reported issues. See attached sample Sewer Call Out Work Order
- Follow up with investigations on reported issues. See attached sample Sewer Call Out Work Order
- Create and maintain records of known trouble spots in sewer lines where tree roots are known to be a problem. Remove and treat the root system area regularly.
- Use sewer line cameras to confirm suspicions of root activity inhibiting flows in trouble areas.
- Develop a budgetary plan to upgrade, replace, or acquire proper equipment to maintain sewer lines and provide employee training for safe equipment operation.
- Plan the work and work the plan.

Final Thoughts

- Established case law maintains that a utility owner has a duty to reasonably inspect and maintain the sanitary sewer system to keep the sewer main line in good working order.
- Lack of regular system maintenance, lack of historical records, and related documentation can inhibit MMIA from effectively defending our Member-Owners for claims of property damage due to sewer back-up.
- Known root problem areas without adequate follow-up to resolve the issue has negatively impacted MMIA's ability to defend our Member-Owners.
- Sewer Back-up claims cost everyone in our self-funded pool. Risk management efforts to prevent sewer back-ups is money and time well spent.

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Remember... it's your money!!

**Learn about the MMIA Member-Owners' Self-Funded Pool (your money)
at "[Know where your dough goes.](#)"**