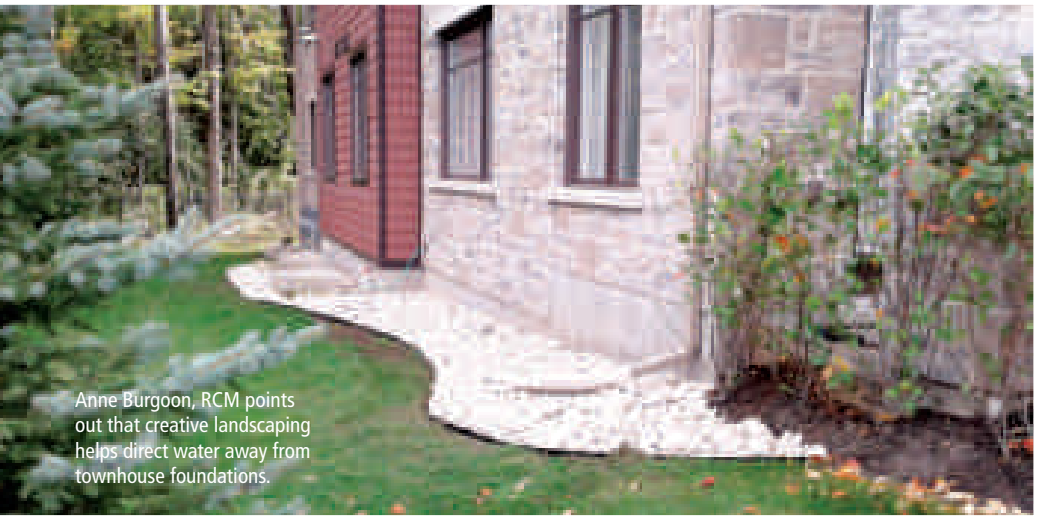
Storm Water Strategies



Anne Burgoon, RCM points out that creative landscaping helps direct water away from townhouse foundations.

Kingston

Meeting Mother Nature's Ongoing Challenges

Water is one of the most destructive forces in nature. For condominium managers, it represents a constant and potential source of damage for a condominium corporation's common elements and private property. Insurance companies have typically identified water as the single most common contributor to property damage.

Faulty water pipes, sprinkler malfunctions, icing conditions, rain water, storm water and snow melt flooding all represent forms of water that can lead to property damage to condominiums.

As condominium managers, we have all experienced these types of water damage events. They often result in countless calls to the corporation's insurer, meetings with owners, reports to boards and contractor follow up. As managers, we need to ensure that we are anticipating these types of occurrences and pursuing preventative maintenance strategies to reduce the likelihood or intensity of these type of events for our clients.

The one source of water that we often overlook as a major contributor to property damage is storm water; however, with our changing weather patterns, the potential for substantial damage to the common elements and private property from storm water events needs to become a greater concern for condominium managers.

Intense rain storms, flash floods or even rapid snow melt conditions that we experience during our ever-changing Canadian winters all carry with them the potential of overwhelming local storm water collection systems. These natural storm water events all carry with them the potential of causing flooding and substantial damage to condominiums.

In our experience, below grade areas such as basements and parking garages have become increasingly susceptible to this type of storm water damage. In many of our townhouse communities with basement living areas, many condominium owners have considered the installation of back flow preventers to reduce the potential for sewer backups during intense storm water events. Owners and managers should check with local building officials prior to approving this type of plumbing device.

For condominium corporations, remedies that could be considered to reduce the potential of storm water flooding would include the installation of rain barrels on sites that can accommodate them into the general landscaping. More expensive remedies can include specially designed areas or gardens where rain can be diverted from rooftops or paved parking areas during storm water events. Other solutions may include updating sump pump equipment, installing water monitoring devices, or even increasing the pumping capacity of pumps and outflow pipes.

Creative design solutions can result in attractive rain gardens that can help to control both pollution from water runoff and the potential for onsite flooding. Today, there are only two types of condominiums, those that have experienced storm water damage and those that eventually will.

Ask any condominium manager and they will tell you that no two properties are alike to manage. Neither are the mechanical, maintenance or people issues that arise. We asked RCMs in different regions across the province to explain their direct experiences with storm water issues, and how the situations were approached and resolved.

Pursuing best management practices and being aware of the potential for storm water damage to your condominium community can assist you in ensuring that your condominium corporation is prepared for the next storm water event.

As managers, we will need to continue to respond to an ever-changing weather environment and the global effects of human activity.

Vincent Bennett, RCM, President, Bendale Property Management Kingston, ON

London

Many years ago, as a result of an overburdened storm sewer system caused by a new development, calls began pouring in from multiple corporations in a defined geographical area. Everyone had a flooded basement and the property roads were flooding as well. Within 24 hours there were upwards of 100 townhouse units with flooded basements. Remediation effort organization commenced. The SUB's at most of the affected corporations were defined as "unfinished". The boards took the following under consideration:

1. Insurance responsibility – corporation vs. owner;
2. Communication frequency and content to manage project;
3. Mitigation options, costs etc.;
4. Information from local city council and technical experts;
5. Funding sources for protective measures; and
6. Budget adjustments for future years under appropriate categories.

The boards opted to use surplus operating funds in conjunction with a small assessment to install backflow preventers in order to prevent further occurrences. In the end, the way the board approached the situation and circumstances led to goodwill among the owners and an increased sense of community – despite the inconvenience of it all.

Jenn Zammit, ACCI, RCM Trademark Ltd. London, ON

Prescott

After a particularly bad rainfall, we received a call about a garden bed being eroded by water and the adjoining terrace of a unit had sunk in. The cause of this was water overflowing in the eavestrough above and dropping into the area next to the garden and terrace rather than being diverted down the spout.

A review of recent maintenance records indicated that the eaves and downspouts had been cleaned a month before. Before any repairs could be completed the cause of this needed to be determined. Another inspection of the trough revealed a dead pigeon in the downspout.

Once the source of the problem was "removed" a landscaping contractor was hired to add top soil to the garden bed and to slope the land away from the building. The terrace stones were removed, soil added and stones re-installed. River rock was then added to the side of the building on the down

slope leading away from the garden bed and terrace. Not only did this help with the drainage of the rainwater but it also looked very nice.

Anne Burgoon, RCM
Vice President, Eastern Ontario
Property Management Group
Prescott, ON

Ottawa

Highrise Buildings and Sump Pit Pumps

Most highrise buildings have sump pits for elevators, sanitary systems and storm water systems. These sump pumps require constant supervision and maintenance.

I have been managing highrises for over 30 years. In the early 1980s, sump pump systems only had one pump, and if you were lucky a warning system that let you know the pump was not working. Usually, by the time you discovered the pump had failed, you already had a flooded mechanical room or lower garage.

In one building we discovered an Artesian spring, or well, with a very large flow of water. We were lucky; when the pump failed the superintendent was in the mechanical room and discovered the flood before it reached the elevator room.

The water was rushing in so fast we had to get a pumping truck in to pump the water out and replace the pump. We discovered the constant flow of water only gave us eight hours time to repair the pump before the mechanical room, along with the Piston elevator mechanical room, would be flooded causing several thousands of dollars damage.

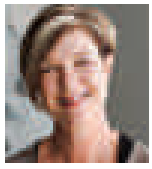
We incorporated a dual pump system along with a very good warning system connected to the supers' apartment. One pump was installed at the bottom of the pit and the second was located three quarters up the pit on a separate electrical circuit. When the first pump fails the second pump kicks in and the warning goes to the super. I have incorporated this system into all of the buildings I have managed since then.

Another overlooked issue with modern highrise buildings is the storm water holding tanks. The buildings that have these systems should also install a back flow preventer valve at the effluent pipe. This will prevent City storm water from flooding your tank and building during a major storm. We had this happen in Westborough in 2016.

James McHugh, RCM
Axia Property Management
Ottawa, ON

Waterloo

I am currently managing primarily commercial office buildings, after 20 years of condominium management. The company I work for is developing a site for residential condominiums and I plan to retire into residential condominium work, so keep my membership and education up to date.



My experience with storm water management is in the commercial field. The buildings I manage are LEED® Gold certified – and I have implemented all that I can to get storm water credits. In this region, you can get a credit on your storm water tax, by educating the people on the site about good storm water practices (no butts or garbage in the lot), power sweeping the lot twice per year, and implementing storm water gardens, bioswales or storm water ponds.

Storm water management is crucial from an environmental perspective, because it keeps salts, oils, and silts out of the regional storm water system, and out of our waterways. Encouraging water to stay on the property in landscaped areas allows the soil to act as a filter for the ground water system, and silts can be swept up and taken to landfill. Laneway curbs prevent storm water from getting to landscaped areas, so easy solutions are to make curb cuts in low lying areas before the storm water flows to catch basins. Alternatively, purposeful planting of storm water gardens in areas to catch runoff is also a way to capture water before it becomes polluted and enters our water system. These efforts not only are a sustainable initiative, but qualify for grants and tax credits for the condominium corporation.

Kathleen Walsh, RCM
Property Manager, The Cora Group,
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