

Municipal Climate Change Sustainability: Flooding

Many of the adaptations suggested in this section are ways to manage stormwater runoff by increasing the permeability of the built landscape and preserving lands which are already highly permeable.

Education

- Educate the public on high-risk flooding areas and let them know if they live in these areas
- Educate the public on how they can prevent flooding and protect their homes
- Sump pumps
- Preventative zoning and permitting
- Updating or creating flood hazard maps, taking into consideration future climate predictions
- Emergency measures
- If community were to be isolated, what members of the community would need medical supplies, what members of the community would be most vulnerable

Infrastructure

- Identify areas which drainage problems may occur by keeping track of complaints/areas which need maintenance and keep records where crews are dispatched
- Update culverts and determine if their maximum output may exceed heavy flooding and rainfall
- Annual culvert inspections
- Is the culvert suitable if the water flow were to double? Triple?
- Look into alternate transportation routes into the community if the main route were to be impassable
- Porous/permeable pavement options
- Permeable asphalt:
 - 2-3 times more expensive than regular pavement
 - Save on stormwater installations
 - Must be above the normal water sample
 - May save on de-icing during winter months
 - May be an option for parking lots in low lying areas
- Vegetated Grid system: Grids made from plastic or concrete over soils and drainage material, and low maintenance grass is planted in the voids
 - Great for low traffic parking lots or roadways