

## 1. Objective:

To reduce the impact of snow melt runoff on public and private infrastructure in Sturgeon County.

## 2. Background:

Outside of rivers and large bodies of water, local municipal governments are responsible for the management of storm water flow within Municipal Boundaries. Rural infrastructure is susceptible to overload during the spring runoff period. Contributing factors to overload are snowfall “melt” volumes, melting velocities, frozen culverts and damaged or poorly functioning infrastructure.

Warm melting temperatures early in the year followed by extreme cold temperatures have resulted in ice blocked culverts throughout the County. In addition, large snowfall accumulations have created a significant volume of potential runoff storm water. As a result of these conditions, Transportation Services is expecting a severe spring runoff, therefore a preventative maintenance strategy must be implemented.

## 3. Strategy:

### 3.1 Traffic Safety

“Road Closed” and “Bridge Closed Barricades” will be stocked and available for use as required. These will be used when a road or bridge washout has occurred or is expected to occur and is deemed non-preventable.

### 3.2 24 Hour/Day-7 Day/Week on Call Service

Supervisors, staff and equipment will be available throughout the entire spring runoff period for urgent response. Residents must call 780 939-4321 for service.

### 3.3 Operations (Services)

Snow Clearing (Preventative Measure) - Transportation will deploy a backhoe to multiple known trouble sites to remove snow that is currently blocking culvert ends. This is a preventative maintenance measure. This measure can be taken by the general public using hand tools in order to facilitate natural drainage in their respective areas.

Culvert Steaming (Reactive Measure) - Transportation deploys two (2) in-house steamer units and one (1) or two (2) contract steamer units as necessary. The goal is to facilitate the flow of water through centerline and approach culverts in order to eliminate flooding and/or erosion.

Pumping (Reactive Measure) - Transportation will deploy various sizes of pumps for increasing the flow of water where required. This measure is taken when there is an immediate threat of damage to public or private infrastructure.

### 3.4 Resident Communication

Transportation Services front line staff will be available during business hours to receive requests for information or services as listed above. Customer Service staff will triage the issues and provide information on the priority system to the residents.

Residents will also be given an estimated time of resolution should their issue fall within the scope of work for Transportation.

### 3.5 Aftermath/Repair and Maintenance

Roads - If any washouts do occur, Transportation Services will allocate resources to repair and reopen all roads as soon as possible as long as it is safe to do so.

Culverts/Ditches - Transportation Services will use the information gathered during the spring runoff period to plan necessary maintenance work in order to prevent reoccurrence. This includes ditch cleaning, culvert replacements, culvert flushing and culvert end repairs.

## 4. Priority Areas (Map Attached)

Transportation Services will place dedicated resources within high impact areas such as known troublesome multi lot subdivision areas and industrial parks.

- Cardiff Pittsburgh, ProNorth Industrial Park, Villeneuve, Riviere Qui Barre, Sturgeon Industrial Park,

Dedicated resources will also be placed in targeted areas in order to increase efficiency and response times.

## 5. Prioritization (Triage) Guidelines:

Transportation Services will dispatch resources with the intention of preventing or resolving damage in accordance with the following priority sequence:

**1A:** Immediate damage occurring to public infrastructure

**1B:** Immediate damage occurring to private infrastructure

**2A:** High risk of damage occurring to public infrastructure

**2B:** High risk of damage occurring to private infrastructure

**3A:** Med to low risk of damage occurring to public infrastructure

**3B:** Med to low of damage occurring to private infrastructure