



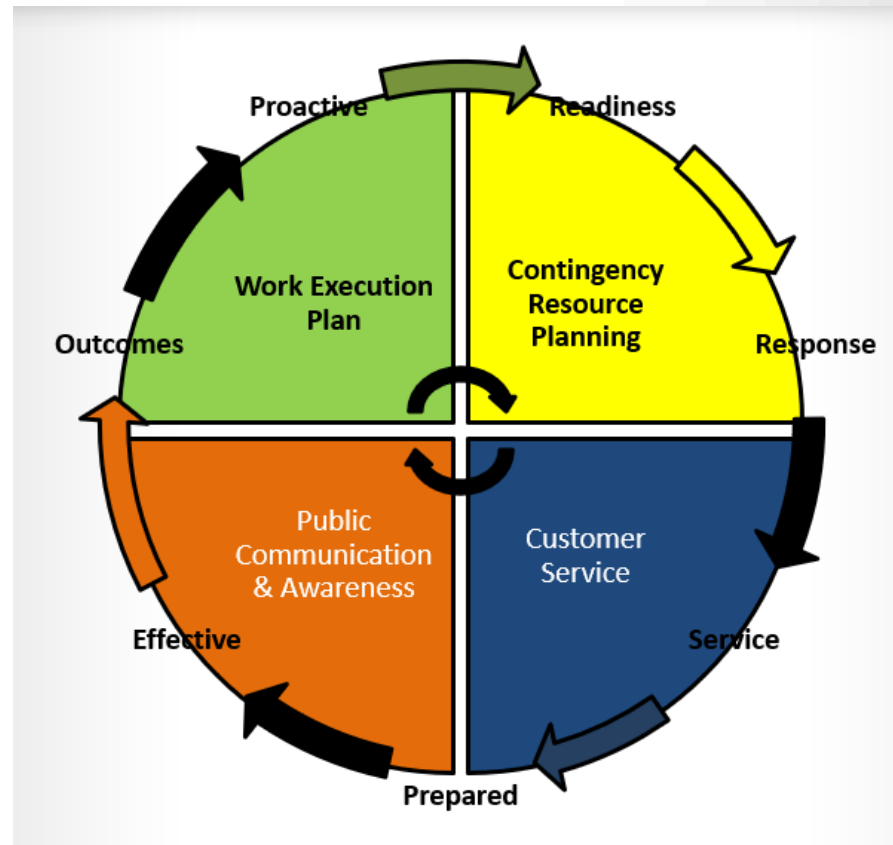
2019 Spring Preparedness

March 12, 2019
Committee of the Whole

The Spring Strategy in Preparedness

**BE More Proactive
(planned)**

**BE More Effective
(reactiveness)**

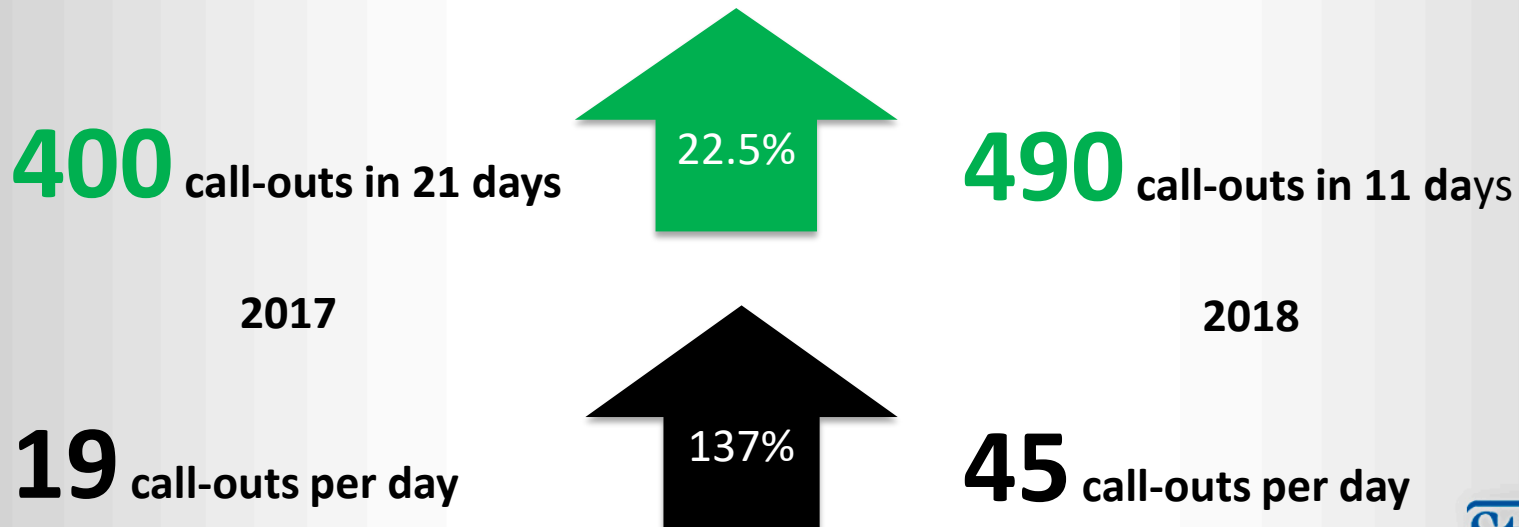


Background

As part of our mandate, Transportation Services institutes measures to mitigate impacts of spring weather and runoff.

IMPACT SEVERITY INFLUENCED BY:

- Aggressive warming trends with above-average snow accumulations which promote higher runoff within compressed timeframes.
- Abundance of freeze-thaw cycles induce weakness and deterioration of road surfaces.



2018 Spring Experience

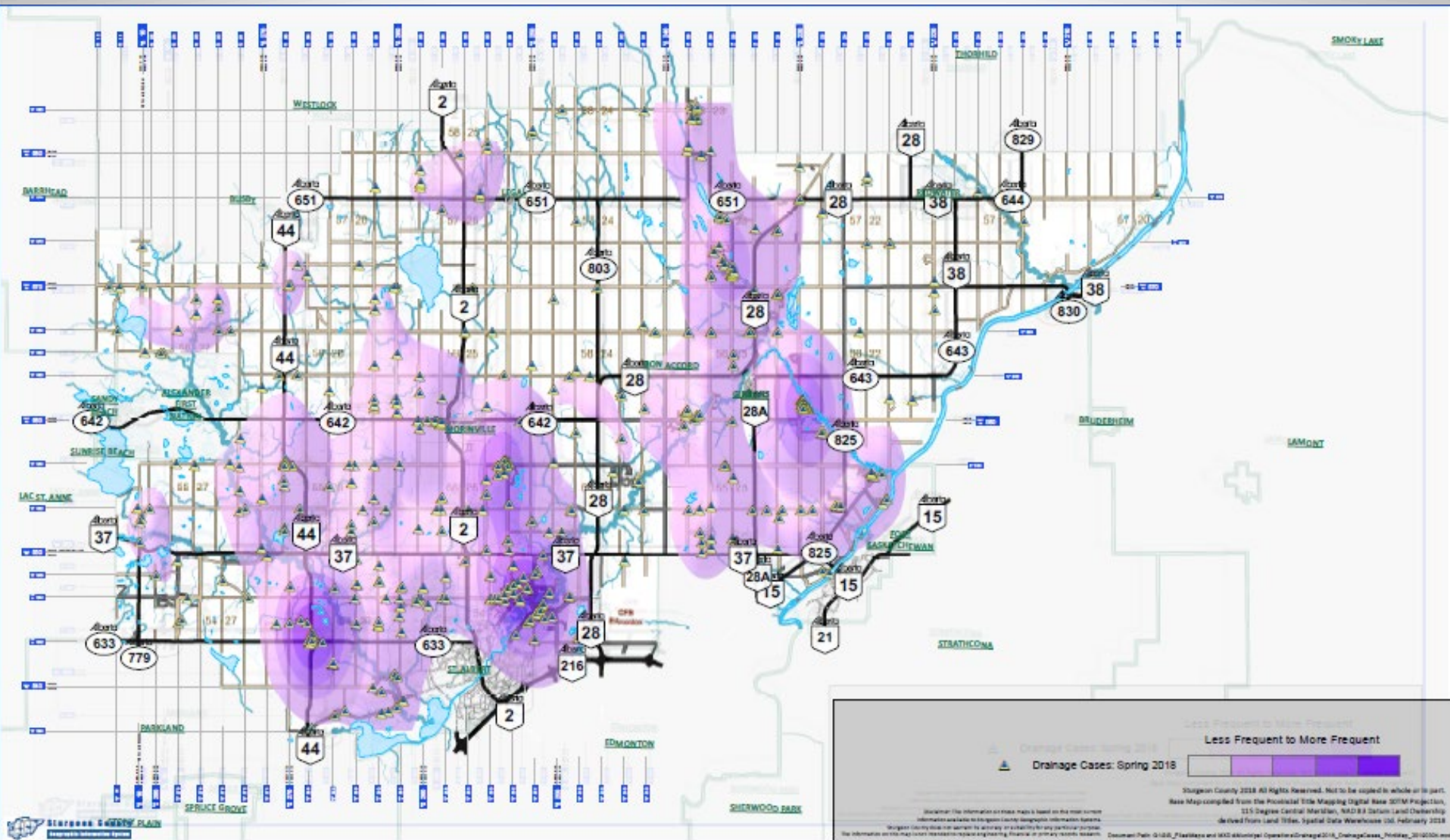


Limited resources and supplies externally available
(Regional Event)

- ❖ Concentration of resources committed to drainage
- ❖ Limitations imposed on road conditioning
- ❖ New baseline established
- ❖ Enhanced Preparedness
- ❖ Leads to more timely service delivery

Spring 2018

Overview of High Frequency areas for Drainage Cases in Spring 2018



Enhanced Capacities – 2019

Snow removal & spot
gravelling



Treating frozen culvert inverts



more timely response and quality of
pavement repair

THEN

2018

2019

NOW

- **Engaging industry** – Actively engaging contracted services and equipment and further incorporated in contingency planning. Three crews, along with beaver control and management dedicated to drainage.
- **Communication and awareness campaign** – Utilizing radio and social media.
- **Extended office hours** – Accommodation of an afternoon/evening shift for administrative staff to enhance customer support during the spring thaw period.
- **Staff deployment** – Earlier onboarding of seasonal staff for full complement of crews and scheduling additional shift to promote enhanced field presence. Three steam crews, one sign crew and pumping crew dedicated to drainage.
- **Enhanced Equipment** – Increased ability for response.
- **Designated Pothole patching crew** – Greater focus, which correlates to more timely and higher quality of pavement repair.
- **Proactive flooding mitigation** – Advance inspections, steaming and snow removal from identified trouble spots to minimize adverse impacts of the spring thaw, enhanced coordination on beaver control and dam removal.

Spring Response Strategy

Traffic Safety

- When a road or bridge washout occurs or is expected to occur and is deemed non-preventable, the road or bridge will be closed.

On Call Service

- Staff and equipment will be available 24 hours/day, 7 days/week throughout the spring runoff season.

Operations

- Snow Clearing (Preventative Measure) – Removal of accumulated snow from known trouble spots.
- Culvert Steaming (Reactive Measure) – To facilitate flow and eliminate flooding and/or erosion.
- Pumping (Reactive Measure)

Spring Response Strategy Con't

Resident Communications

- Customer response team will triage issues based on priority
- Residents will be given an estimated resolution time



Aftermath/Repair

- Roads – where washouts occur roads will be repaired and reopened as soon as safe to do so
- Culverts – information gathered during runoff will be utilized in proactive preventative maintenance

Priority Areas (1)

- Cardiff Pittsburgh/Echoes
- Pro North Industrial Park
- Villeneuve
- Riviere Qui Barre
- Sturgeon Industrial Park
- Braun Village
- Skyglen Subdivision
- Heritage Industrial Park
- Alcomdale
- Select Township and Range Roads - TWP RDs 543,544,564, RR's 271,270,265,264

Prioritization (Triage) Guidelines:

1A: Immediate damage occurring to public infrastructure

1B: Immediate damage occurring to private infrastructure

2A: High risk of damage occurring to public infrastructure

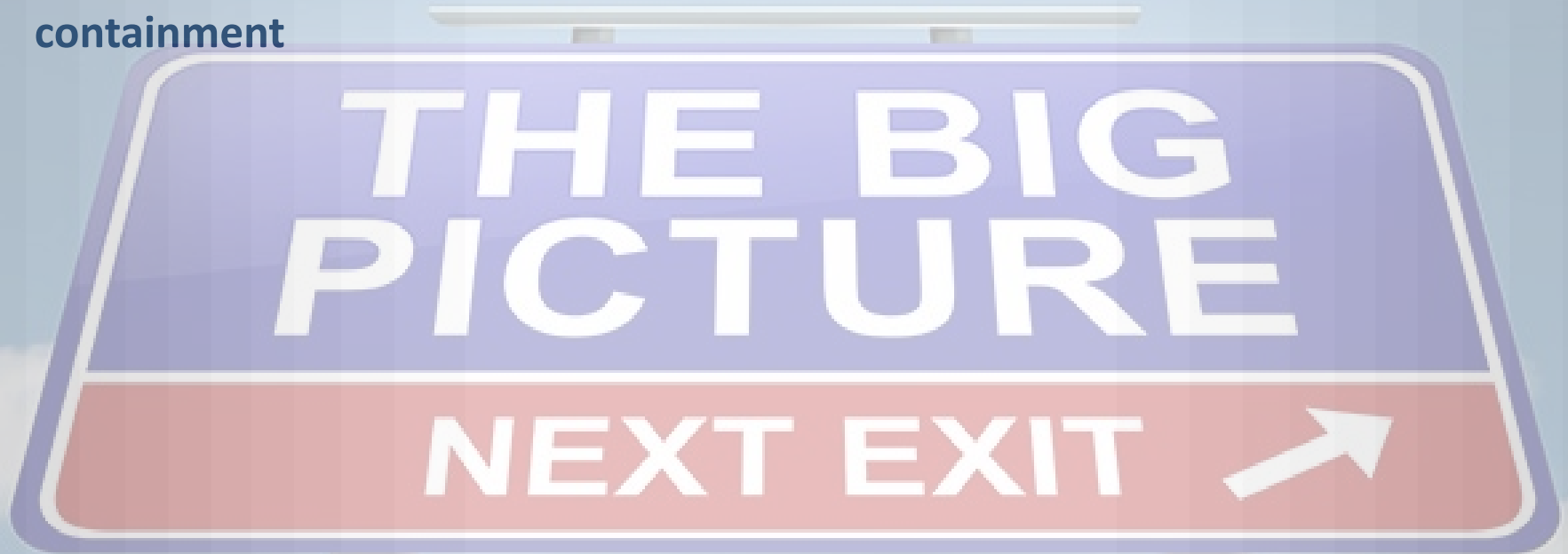
2B: High risk of damage occurring to private infrastructure

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

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

Service Enhancement -Drainage Plan

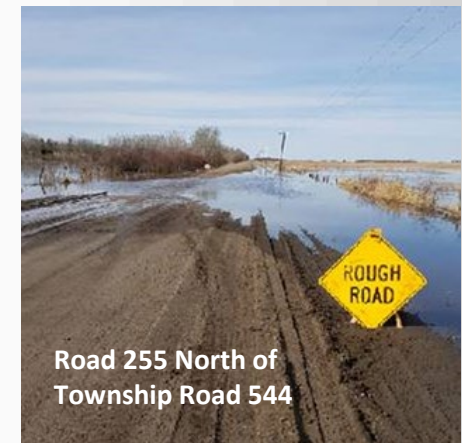
- Overall drainage patterns and constraints in water management
- Areas of focus to alleviate\lessen impacts through staged release and containment



- Ties in development and previous studies that may have site specific for development but ultimately contribute to impacts
- Utilize engineering services to provide support on this initiative

LOCALIZED PERSPECTIVE/IMPACTS

- Localized drainage issues, small scale in respect to the County's landmass 2,300 square kilometres.
- Identify legacy issues within our spring preparedness plan and other longstanding, recurring problems, subdivision backlot drainage, staged approach.
- Under bridge site surveys and recommendations.
- Site specific drainage capacity and release, upstream resolution and downstream impacts.



Thank You

