

Attachment 1: Overview of Roads and Overland Drainage Conditions

Road Conditions

In 2017, Parkland County experienced a greater amount of roads in poor condition. Parkland County roads have not been in this poor condition for several years.

The poor road conditions are due to weather over the past 9 months. Large amounts of rain in fall of 2016, numerous freeze thaw cycles through the winter and spring, and warm, wet snow and rain in spring of 2017 caused very rough gravel roads, excessive wash boarding and rutting, and organic material permeating through the road surface. Poor paved road conditions included rutting, increased number of potholes, and surface cracking.

Attachment 2 is a map of Parkland County road conditions in 2017. Some of the poorest road conditions within Parkland County, include the following:

- The area between Range Road 11 and Range Road 20, and Township Road 627 south to the North Saskatchewan River.
- The area between Range Road 11 and Range Road 20, and Township Road 534 and Highway 628.
- The area between Range Road 23 and Range Road 32, and Township Road 523 and Township Road 532.
- The road along Township Road 522, and Range Road 61 and Range 74.

Parkland County has experienced a 30% increase in number of public concerns related to poor road conditions in 2017.

Parkland County's goal is to return the roads to an acceptable condition within a reasonable period of time. Infrastructure Services is addressing the conditions in a multi-phased approach including maintenance in the short term and repair and construction where longer term solutions are needed.

Road Maintenance crews are fully engaged, working to address the concerns in an effective manner based on road usage, resource availability and logistics where roads are in close proximity to each other. We will be continuing to address the poor road conditions throughout the summer and fall season.

Going into the 2017 winter season, Infrastructure Services plans to return the roads into good condition.

Where roads require more than maintenance to keep at an acceptable road condition, they are identified and included in the Capital Road Plan for repair and construction. These roads are prioritized based on usage, safety, and resource availability.

Overland Drainage Conditions

Similar to the concerns identified with road conditions, weather conditions in late 2016 and early 2017, resulted in significant challenges managing the County's overland drainage system earlier this year. A wet fall with an early freeze cycle meant the soil conditions were saturated and not able to absorb additional moisture as various freeze-thaw cycles continued during the winter months. Warm days above melting conditions with overnight freeze cycles created a significant number of issues with frozen culverts and water ponding in ditches and natural drainage courses. Several areas experienced localized

flooding throughout the County as a result. Lower lying areas and areas within near vicinity to water bodies experienced the greater number of concerns.

Over one particular stretch between 3 and 5 days, there were approximately 300 service requests received. An average number would be between 10 and 15 calls. Areas with the greatest issues were prioritized and systematically addressed. Focus of County staff was directed towards relieving pressure on buildings and infrastructure. Reduced focus was on other areas such as open areas, yards, fields, tree stands, etc.

In an effort to address the number of concerns and volume of work identified, seasonal staff were called back a month earlier than normal and additional contracted crews were brought into service to assist. During the peak period of concerns with local drainage challenges, public works staff were assisting drainage staff in a joint effort to address critical concerns.

Review of past practises, historical volumes of work and discussions with key staff members with many years of service indicate this is highly abnormal conditions. Similar issues have not been experienced within the past 10 years. We anticipate this is not a pattern rather an isolated impact. Administration staff will continue to monitor the effects throughout the summer months and will evaluate options available should we experience this kind of weather behaviour in the near future.

As we move into summer months, the overland drainage channels have subsided and are within control of existing resources. We anticipate there will still be calls to maintain and repair existing culverts and drainage channels however, this should be in the norm of planned activities.