



2011 SPRING HIGHWAY CONDITIONS – FACT SHEET

How have highways been impacted by moisture/flooding this spring?

- Potholes and surface breaks on highways are predicted to be well above average this spring. Roadbeds that were saturated with moisture due to excessive rainfall in 2010 and flooding in 2010 and 2011 have begun to thaw and as the frost comes out of the ground, the result is severe surface breaks, cracks and potholes on highways throughout the province.
- Potholes are formed from the expansion (freezing) and contraction (thawing) of water that has entered into the subsurface of the road. As a result the pavement expands bends or cracks and weakens the road.
- Much of the damage is yet to come – as flood waters recede, the full impact to highway sideslopes, roadbeds and surfaces will be revealed.

Which highways will be most impacted?

- Some paved highways are more vulnerable in the spring than others:
 - Older highways will allow more water into the subgrade
 - Roads with lower grades will stay saturated longer until water has dried up and the road has had a chance to dry.
- Thin Membrane Surface (TMS) roads can be very sensitive to break up in the spring.
 - These highways do not have the same structural strength as paved highways.
 - If large volumes of water take a long time to recede, more surface breaks are expected.
 - If heavy loads travel over TMS roads that have a saturated subgrade, more surface breaks are expected.

What are you doing to fix damaged highways?

- When surface breaks occur in the spring, highway crews flag the hazard and do an assessment of what kind of repair is needed.
- The crew may apply gravel material or blade on asphalt patching material as a temporary repair.
- These are short-term repairs – crews MUST wait until the road dries before attempting long-term repairs or the repairs will not last, and holes and surface breaks will soon re-appear.
- Long-term repairs can include deep patching, seal coating or microsurfacing. This work will be scheduled into spring and summer work plans for crews and contractors.



What work are highway crews doing now?

- The current priority for crews is to clear culverts, maintain drainage runs and direct traffic through or around flood zones.
- Crews are also making temporary repairs to damaged highways.
- As soon as critical flooding and high moisture areas are addressed and roadbeds dry out, permanent repairs on other highways will begin.
- Crews generally prioritize their work by highway classification – repairs on the most heavily-travelled highways will be scheduled first.

How has the Ministry prepared for potential flooding this spring?

- Data is used from the Saskatchewan Watershed Authority and Ministry historical experience to predict highways that will most likely be impacted by spring run off.
- A surveillance program enables crews to quickly provide warning to motorists and provide short-term repairs. This includes using the Highway Hotline as a centralized point of contact for the general public and municipalities to report trouble spots.
- Priority is placed on clearing culverts, bridges and other drainage structures so that they can handle runoff at their design capacity.
- Extra measures this spring to prepare for potential flooding includes:
 - ensuring additional equipment and bridge replacement components have been ordered or are on standby, to ensure quick restoration of highways and bridges;
 - assembling emergency repair trailers throughout the province;
 - re-deploying staff from drier areas of the province if necessary.

For the latest spring road conditions, contact the Highway Hotline:

