

To: All HQ Directors: Operations, Planning and Major Projects
All Regional Directors
All Regional Managers of Engineering
All Regional Managers of Project Delivery
All Regional Geotechnical Managers
All District Managers Transportation

SUBJECT: WILDLIFE REFLECTORS

PURPOSE:

The Ministry has received, and continues to receive, requests to install wildlife reflectors along provincial highways. In the past, the Ministry has installed, or agreed to install, wildlife reflectors in an effort to determine their effectiveness to reduce the incidence of wildlife-related collisions.

After over 30 years of use by transportation agencies in Canada and the US, there are no scientifically-sound, long-term, operational evaluations of wildlife reflectors that support claims wildlife reflectors reduce wildlife-related collisions, involving deer or any other species of ungulates.

This Technical Circular clarifies the Ministry's position with respect to wildlife reflectors.

BACKGROUND:

In the early 1980's, the Ministry began investigating wildlife reflectors as part of its ongoing efforts to reduce wildlife-related collisions on provincial highways. Wildlife reflectors were originally developed in Europe as a means to deter animals from crossing highways when vehicles are present at night.

Wildlife reflectors consist of coloured reflective prisms set in heavy plastic frames. They are mounted on posts installed in highway rights-of-way. At night, when the headlights of vehicles strike the reflectors, beams of light reflect off the reflectors across the highway. The concept behind wildlife reflectors is that the reflected light catches the attention of animals and delays animal movements onto the highway until the vehicles have passed.

Existing Ministry Installations

From 1983 to 2004, the Ministry installed wildlife reflectors on either one side or both sides of approximately 160 kilometres of highways. Most of the wildlife reflectors have been installed along highways prone to high numbers of deer-related collisions.

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Cost of Installations

Wildlife reflector installations cost approximately \$5,000 to \$10,000 per kilometre.

Effectiveness of Wildlife Reflectors

The effectiveness of wildlife reflectors for reducing wildlife-related collisions has been the subject of concern by the Ministry, and other transportation agencies in Canada and the US. Research in the US has shown deer behavior is not modified by wildlife reflectors. After over 30 years of use by transportation agencies in Canada and the US, there are no scientifically-sound, long-term, operational evaluations of wildlife reflectors that support claims wildlife reflectors reduce wildlife-related collisions, involving deer or any other species of wildlife.

BCMoT USE OF WILDLIFE REFLECTORS:

No new installations of wildlife reflectors will be undertaken by the Ministry until the devices can be scientifically proven to be effective, in an operational environment, to the satisfaction of the Ministry's traffic engineering and environmental staff.

Existing wildlife reflector installations will be phased out. In locations where wildlife reflectors were installed in combination with MoT wildlife warning signs, the wildlife warning signs will remain in place.

In locations where wildlife reflectors are not installed in combination with wildlife warning signs, standard MoT wildlife warning signs will be considered as replacement mitigation.

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Wildlife Reflectors Circular – Questions and Answers

- 1) Why did the Ministry install wildlife reflectors?

About 30 years ago, when the Ministry began installing wildlife reflectors, it was commonly believed by many transportation agencies, in North America and Europe, these devices could be used to reduce the potential for deer-vehicle collisions.

- 2) How many wildlife reflectors did the Ministry install?

The Ministry installed about 5000 wildlife reflectors on approximately 160 kilometres of provincial highways.

- 3) What will the Ministry do when the wildlife reflectors are removed?

In locations where wildlife reflectors are not installed in combination with wildlife warning signs, standard MoT wildlife warning signs will be considered as replacement mitigation.

- 4) How much will it cost to remove the wildlife reflectors?

Wildlife reflectors will be removed as sections of highway are upgraded as part of large projects. The removal of wildlife reflectors will be a part of the regular work along the highway rights-of-way that normally occurs during a highway upgrade, so no additional costs will be incurred.

- 5) Will the Ministry save money removing the wildlife reflectors?

Yes. Once the wildlife reflectors are removed, the Ministry's maintenance contractors will no longer be required to maintain the wildlife reflectors or replace broken or damaged wildlife reflectors.

- 6) Were the wildlife reflectors expensive to maintain?

Yes. The Ministry estimates wildlife reflectors cost approximately \$500 per kilometre to maintain. This included brushing and mowing costs for wildlife reflector functionality, seasonal adjustment and cleaning of the wildlife reflectors, and the repair or replacement of broken, damaged or deteriorated wildlife reflectors.

- 7) Why is the Ministry removing the wildlife reflectors?

After over 30 years of use by transportation agencies in Canada and the US, there are no scientifically-sound, long-term, operational evaluations of wildlife reflectors that support claims wildlife reflectors reduce wildlife-related collisions, involving deer or any other species of ungulates.