

## EXECUTIVE SUMMARY

The Department of Works, Services and Transportation (WST) is proposing to construct a two-lane, all-season gravel surface highway from Cartwright Junction to Happy Valley-Goose Bay. One alternative routing option is one proposed by the Newfoundland and Labrador Outfitters Association for a route to the south of the preferred route. A detailed environmental assessment was conducted in 2002 on the preferred route (JW/IELP 2003). In response to comments received on the environmental impact statement (EIS) and comprehensive study report (CSR), Jacques Whitford (JW) and Minaskuat Limited Partnership were contracted to prepare the following waterfowl study on the A13 section of the alternative route as identified by the Newfoundland and Labrador Outfitters Association. The objective of this study was to conduct original research to describe waterfowl distribution along the A13 section of the outfitter route.

Following the methodology used for surveys along the preferred route (JW and LMSS 2003), five aerial surveys were conducted in 2003: May 9 (early spring staging); May 23 (spring staging); June 9-10 (breeding); July 16-17 (brood/moult); and September 4-5 (fall staging). Using either a Bell 206 L or Aerospatiale "A" Star helicopter, survey speed was approximately 50 km/hr at an altitude not greater than 30 m above ground level. Areas of open water and wetland habitat were identified by the navigator/recorder, who directed the pilot and two other experienced observers over the course of each survey. Communication through an intercom system on the aircraft used a 12-hour clock for orientation, to locate and identify observations according to species and sex. All sightings were plotted directly onto 1:50,000 NTS map sheets (with the proposed route plotted on the maps in advance) and verified using the aircraft's global positioning system (GPS).

During the May 9, 2003 survey, most lakes and wetland areas remained >75 percent ice or snow covered. Since the route crosses no major rivers and is in proximity to relatively few larger waterbodies, areas of open water were limited. Waterfowl observed in Section 1 of the highway route were associated with the Kenamu River, Brennan Lake and another large waterbody, areas common between the preferred and outfitter routes. No waterfowl were observed in Section 2. In Section 3, American black duck and green-winged teal were observed in areas of open water along the western end of the outfitter (A13 section) route. This portion of the A13 section of the outfitter route has the most wetland and standing water.

During the May 23 survey, there were many areas of open water and waterfowl were distributed throughout the survey area, with most observations being in areas on the western and eastern portions of the route. Similar to observations made during some surveys along the preferred route in 2002, ring-necked duck represented the greatest number of individuals observed. Numbers of Canada goose and American black duck were comparatively low. With the exception of ring-necked ducks that were seen in groups of five to seven individuals in some areas, most waterfowl were seen in groups of two or singularly.



During the June 9-10 survey, all rivers and inlet and outlet areas of lakes where ducks tended to congregate were ice-free. A pattern of distribution similar to that of the May 23 survey was observed. Black ducks, generally in pairs, were commonly observed using wetland areas. Canada geese were observed in similar habitat. Thirteen Canada goose nests were also observed, all generally on small islands in string bogs or small waterbodies surrounded by wetland habitat types. Ring-necked duck were also commonly observed during the survey.

During the July 16-17 survey, Canada geese were aggregated in groups ranging from pairs and single birds with broods to groups of four to eight birds. Ring-necked ducks were generally observed in small groups of five or less birds. One grouping of 16 ring-necked ducks was observed on the eastern portion of the highway route. Common goldeneye and mergansers were distributed throughout the survey area, generally singularly. Similarly, scoters were observed singularly or in pairs along the central and eastern sections of the highway route. Several species, including Canada goose, black duck, green-winged teal, common goldeneye, red-breasted merganser, scoters, and ring-necked ducks, were observed with broods. A total of 28 young Canada geese were observed in eight separate groups. Numerous broods of black ducks were observed, totalling 59 young. Several groups of ring-necked ducks were also observed, totalling 35 young. Lesser numbers of young common goldeneye, green-winged teal, red-breasted mergansers and scoters were also observed.

During the September 4-5 survey, congregations of black ducks were observed at various locations along the route (total of 123 individuals), with the largest congregation being 11 birds. Similarly, Canada geese were observed in groups ranging from three to ten individuals, with groupings of two or three birds common (total of 84 individuals). Ring-necked ducks were distributed throughout the survey area (total of 132 individuals), mainly in groups of five or less. Other species observed included mergansers, common goldeneye, northern pintail, green-winged teal, and scoters. For the first time during surveys in support of the Trans Labrador Highway environmental assessment, white-winged scoters were seen at four locations on the eastern and central sections of the outfitter (A13 section) route.

No harlequin ducks were observed during the surveys. While it appears that harlequin ducks do not breed or breed at extremely low densities in the project area, it is known that southern Labrador is a migration route for birds returning from wintering grounds off Newfoundland and further south along the eastern seaboard (Brodeur 1997). Therefore, individuals may use waterbodies in the study area infrequently.

Similar to results observed along the preferred route, waterfowl observations during the series of surveys along the A13 section of the outfitter route indicate species occur at relatively low densities throughout wetland habitat in the study area. However, the large amount of potential habitat that is available results in waterfowl being widely distributed throughout the area. A total of 16 wetlands surveyed in June 2003



exhibited waterfowl densities greater than 0.10 birds/ha. The wetland with the highest density (1.2 birds/ha) is located approximately 160 m from the proposed highway route. Three of the sixteen immediately adjacent to or within the highway right of way.

The western portion of the outfitter (A13 section) route (approximately 30 km) appears to support a larger number of waterfowl than the eastern and central sections due to the volume of wetland and small waterbodies that are present in that area.

