

years of operation that it is not expected to substantially reduce any of the linear feature density values. Over time, there would be some native habitat recovery in portions of existing and Project-related linear features (see Section 6.5.3.1), which could further reduce total linear feature density for the entire Regional Study Area into the small magnitude range (linear feature density in the portion of the Regional Study Area outside of the Thompson area remains well within the small magnitude range).

Although Project operation during the first 30 years is not expected to remove any of the individual 200 ha or 1,000 ha core areas, reservoir expansion (Section 6.3.7) is predicted to decrease total core area by approximately 180 ha. Habitat recovery in the temporarily cleared and rehabilitated areas would slightly increase core area, somewhat offsetting Project related habitat loss. Natural regeneration on portions of existing cutlines would further increase core area. In summary, the Regional Study Area core area percentage is expected to remain higher than 80%, which is well within the small magnitude range (*i.e.*, well above 65%).

Mitigation during operation, in addition to that already incorporated into the Project design, will include the following:

- The rehabilitation plan developed and initiated during construction will extend into the operation phase, and continue until all necessary rehabilitation is completed; and
- Except for existing resource-use trails (see Construction Access Management Plan), Project-related cutlines and trails will be blocked where they intersect the Project Footprint, and the portions of these features within 100 m of the Project Footprint will be revegetated to minimize the risk of habitat disturbance, invasive plant spreading, accidental fires and access-related effects.

The potential effects of improved public access on intactness will be somewhat offset if and when Manitoba Infrastructure and Transportation closes PR 280 between the junctions of the north access road and PR 290.

6.5.3.3.4 RESIDUAL EFFECTS OF OPERATION

After considering mitigation and the effects of other past and existing human features, residual Project effects on regional intactness during operation are expected to include positive changes to linear feature density and small adverse changes to core area percentage.

Using the criteria established to determine the significance of Project effects for regulatory purposes, the likely residual effects of Project operation on intactness are expected to be adverse, medium in geographic extent, long-term in duration and small in magnitude. Step 2 analysis is screened out based on Step 1 analysis.

6.5.3.3.5 CONCLUSION ABOUT RESIDUAL EFFECTS ON INTACTNESS

Overall, the likely residual Project effects on regional intactness are expected to be adverse but regionally acceptable because no very large core areas are lost and core area percentage is

expected to remain over 80%, which is well within the small magnitude range. This occurs because the Project is located in a portion of the Regional Study Area where intactness is already low due to past and current human development.

The small, adverse residual effects of the Project on intactness will overlap spatially and temporally with effects from the following future Projects: the Keeyask Transmission Project, Bipole III Transmission Project and Gillam Redevelopment. These cumulative effects are discussed in Chapter 7.

Intactness monitoring will include documenting actual Project effects on intactness and confirming the effectiveness of mitigation measures used to minimize access from the Project Footprint to existing linear features that were previously difficult to access. Chapter 8 provides an overview of intactness monitoring.

6.5.3.4 WETLAND FUNCTION

Potential Project effects on wetlands include wetland loss and alteration in the Project Footprint and surrounding areas primarily through pathways such as physical disturbance, edge effects, altered depth to groundwater, altered groundwater flows and/or changes to the nutrient status of surface and groundwater. Project-related wetland loss and alteration could affect wetland function, with the degree of these effects depending on wetland type and local conditions. The Project could also potentially affect the globally, nationally and/or provincially significant wetlands identified by Ramsar, the North American Waterfowl Management Plan, Ducks Unlimited and/or the Manitoba Heritage Marsh Program. The TE SV Section 2.8.4 provides a detailed evaluation of how the Project is predicted to affect wetland function.

As described in Section 6.2.3.4.2, particularly important wetlands were the focus of the assessment and mitigation because wetlands cover most of the Regional Study Area and most of these wetlands are relatively pristine. Particularly important wetlands were the off-system marsh types and the globally, nationally and/or provincially significant wetlands.

Since wetlands are a type of terrestrial habitat, the habitat effects predictions (Section 6.5.3.1) were the basis for predicting potential Project effects on wetland function.

The acceptability of residual Project effects on wetland function was evaluated based on how the particularly important wetlands would be affected and the cumulative historical area losses for each of the remaining native wetland types. Substantial effects on any existing globally, nationally and/or provincially significant wetland would be an unacceptable effect. For the other particularly important wetland types, a net area loss would be an unacceptable effect. For the remaining native wetland types, effects that are small to moderate in magnitude would generally be acceptable regardless of their duration or geographic extent because this degree of change is expected to fall within the range of natural variability. Exceptions to this generalization could occur for a moderate magnitude residual effect if