

# Gully Lake and Eigg Mountain-James River Wilderness Areas

## Socioeconomic Analysis Study Summary

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The *Wilderness Areas Protection Act* requires that a socioeconomic analysis of the impact of designating a new wilderness area be completed and made available to the public, prior to designation.

This summary highlights the key findings of a study which was prepared for Nova Scotia Environment and Labour by Jacques Whitford Limited. The study assesses the socioeconomic effects of designating two new wilderness areas within Crown land parcels at Gully Lake and Eigg Mountain-James River. The study considers a range of social and economic benefits and costs of designating each candidate area. It was not intended to be a strictly mathematical exercise, since many costs and benefits are difficult to quantify.

The initial study was prepared as a discussion paper to foster awareness, and support informed discussion and decision-making. Individuals and groups were able to comment on the socioeconomic study as part of the public consultation on these two new candidate wilderness areas. Public comments were reviewed by Jacques Whitford Limited, and considered by the consultant in developing the final socioeconomic analysis report.

The final version of the full socioeconomic analysis study report may be viewed at Environment and Labour offices in Antigonish, Truro, and Halifax, or on-line at [www.gov.ns.ca/enla/pareas](http://www.gov.ns.ca/enla/pareas).

Additional information on the wilderness areas is also available from the above sources, or may be received by mail, by calling (902) 424-2117.

### Effects of Designation

**Forestry:** Designation prohibits forest harvesting. Over an 80 year time-span, lost gross revenue of forest harvesting at Gully Lake is estimated at \$5,939,000, of which \$1,307,000 is potential profit. For Eigg Mountain-James River, lost gross revenue is calculated at \$6,805,000, of which \$1,497,000 is potential profit.

The loss figures for Eigg Mountain-James River may be overstated, as they assume that an area recognized in existing forest management plans for old-forest values (thirty four percent of the wilderness area ) is potentially available for harvest. Also, the forestry loss figures do not account for possible forestry restrictions being considered by the Town of Antigonish for the regulated James River drinking water supply area (thirty-eight percent of the wilderness area is within the drinking water supply area).

**Minerals:** Future exploration and mine development are prohibited by designation, except where pre-existing mineral licenses exist. There are no known economic deposits within the wilderness areas, although there is current exploration interest in the Gully Lake region. The effects of designation on the mineral industry can not be quantified, as they primarily relate to lost opportunities related to the discovery and development of potential deposits, which are currently unknown.

**Tourism:** Designation will secure protected lands suitable for developing and marketing nature tourism opportunities in northern Nova Scotia. The study does not quantify tourism values. As a result of designation, tourism values for both wilderness areas are expected to increase over time.

## Effects of Designation (continued)

**Research and education:** Designation will secure a protected land base ideal for education and research on natural ecosystems. The study does not quantify current research and education values. As a result of designation, research and education values for both wilderness areas are predicted to increase.

**Vehicle use:** Designation will result in restrictions in the use of vehicles in the wilderness areas, including snowmobiles and all-terrain vehicles. The study estimates economic values associated with regional off-highway vehicle use. The reduction of these values is predicted to be small because many of the most heavily-used vehicle routes are outside the wilderness areas. Travel on regionally-significant connector routes which pass through the wilderness areas can be maintained through some combination of: (1) exclusion from designation, (2) authorization through trail management agreements, and (3) development of alternative routes.

**Sport fishing, hunting, and trapping:** The wilderness areas have limited use for sport fishing. The level of hunting and trapping in the areas was not evaluated. Since sport fishing, hunting, and trapping are permitted in wilderness areas, designation will have a limited impact on these activities, although some use may change due to vehicle use restrictions.

**Naturalist and trekking:** Designation will secure opportunities for non-motorized, low-impact outdoor recreation in a wilderness setting. Designation is expected to increase these activities over time. The annual value of existing use is estimated to be \$35,000 at Gully Lake, and \$14,000 at Eigg Mountain-James River.

**Existence values:** Existence values are benefits which are not associated with direct use of an area. Maintaining large natural spaces can strengthen cultural identity and heritage values, and inspire artists and others. They also represent a legacy for future generations. Designation will positively affect existence values.

**Climate change mitigation:** Designation will increase on-site carbon storage because protected forest areas store more carbon than land managed for forest harvesting. The study calculates carbon-storage benefits in two ways. Depending on assumptions used, the value of designation for carbon dioxide-related climate change mitigation is \$1,143,000 or \$37,000,000 for Gully Lake, and \$1,251,000 or \$40,600,000 for Eigg Mountain-James River.

**Water regulation:** Forests regulate water flows, reduce flooding, recharge groundwater and prevent soil erosion, while ensuring good water quality and aquatic habitat. Designation will maintain or enhance these values. Additionally, at Eigg Mountain-James River protection will help ensure drinking water quality and quantity, and reduce risks to supply for the Town of Antigonish.

**Biodiversity maintenance:** Designation will help maintain large patches of roadless older forest, which provide important - and now rare - habitat for species that depend on, or prefer, these large natural areas (e.g. northern goshawk; moose). Protection also supports the development of old-growth hardwood and mixed forests, and protects special and sensitive habitats and typical examples of Nova Scotia's landscape diversity.

**Other values:** Due to project scope and data limitations, the socioeconomic analysis study did not consider all possible values. For example, the study did not evaluate the impacts of designation on human health, adjacent land values, community or regional development, or environmental services such as soil protection, or air quality maintenance.