



**Forest  
Practices  
Board**

## **Flooding of Ponds on Neskonlith Indian Reserve**

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**FPB/IRC/10  
Complaint 980151**

November 1998

# Table of Contents

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|                               |          |
|-------------------------------|----------|
| <b>The Investigation</b>      | <b>1</b> |
| Scope of the Investigation    | 2        |
| Background                    | 2        |
| <b>Investigation Findings</b> | <b>3</b> |
| Extent of Harvesting          | 3        |
| Harvesting Operations         | 3        |
| <b>Conclusions</b>            | <b>4</b> |

## The Investigation

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This report is the result of an investigation by the Forest Practices Board (the Board). The report examines if the flooding of ponds on the Neskonlith Indian Reserve was caused by forest practices and whether there were any contraventions of the *Forest Practices Code of British Columbia Act* and related regulations (the Code).

Neskonlith Indian Reserve #2 is situated about eight kilometres west of Chase, British Columbia. Three unnamed ponds are located on the reserve. Water levels in the ponds began rising in the spring of 1998 and the three ponds joined to form one lake. The high water levels flooded grassland and killed trees scattered around the perimeters of the ponds.

On May 11, 1998, the Board received a complaint about the flooding. The complainant asserted that the flooding of the ponds may have been due to logging on a nearby woodlot licence. He was concerned that water levels would continue to rise unless the cause of flooding was identified and addressed. The complainant requested that:

1. the cause of the flooding be identified;
2. any improper forestry activities identified be remedied; and,
3. surface runoff be permanently diverted to another lake prior to reaching the ponds.

The Board informed the complainant that the permanent diversion of water is subject to the *Water Act* and is outside of the Board's jurisdiction. The complainant was also informed that the Board may make recommendations, but does not have the authority to require remedies. The complainant requested that the investigation proceed to identify the cause of flooding and develop recommendations to address any contraventions of the Code.

The Board decided that the investigation would initially determine whether flooding may have been caused by forestry practices, such as logging or road construction, for which the Board has jurisdiction to investigate under the Code. If so, the Board would then examine these activities in detail for compliance with the Code. If not, the investigation would be concluded.

The woodlot licensee and the Ministry of Forests, Salmon Arm Forest District (the district) were parties to the complaint. The investigation also involved the Ministry of Environment, Lands and Parks' (MELP) Water Management Branch (Southern Interior

Regional Headquarters), and the Department of Indian and Northern Affairs, as they could be affected by the findings or recommendations of the investigation.

## **Scope of the Investigation**

The investigation examined the sub-basin and relevant documentation to determine if harvesting activities caused the flooding. The investigation considered two questions:

1. Was the extent of harvesting sufficient to have altered the hydrology of the sub-basin?
2. Had harvesting operations altered the normal drainage patterns of the sub-basin?

## **Background**

The ponds receive water from a sub-basin of approximately 750 hectares. Located within the sub-basin are the Reserve, the woodlot licence (which consists of private land and Crown land), and other Crown forest land. The district estimated that one and a half hectares were flooded at the time of the investigation. The flooding did not threaten any buildings or other property.

No obvious stream channels drain into or out from the ponds. However, the ponds were being fed by surface water flowing over grassland during the spring of 1998. The surface water appeared to originate from the general area of the woodlot. The complainant therefore reasoned that logging on the woodlot might be causing the flooding.

The complainant expressed his concerns to the district in April 1998 and requested that the district examine the matter. In response, the district inspected the ponds and surrounding area on April 27, 1998, accompanied by the complainant. However, the woodlot licensee denied the complainant permission to cross through the private land portion of the woodlot. The complainant therefore could not view the portion of the woodlot where harvesting had recently occurred. The district completed the inspection without the complainant, and concluded that forestry practices were not causing the flooding. The complainant was not satisfied with the ministry's assessment and filed the complaint with the Board.

Upon receiving the complaint, the Board encouraged the participants to continue pursuing independent resolution. On June 9, 1998, there was a second inspection of the ponds and surrounding areas, this time including the complainant and representatives from the Ministry of Environment, Lands and Parks (MELP) and the district. However, the complainant was again denied access to the private land.

MELP prepared an assessment of the flooding based on the field review and submitted it to the district on June 15, 1998. The report suggested that recent forestry operations had not affected the hydrology of the watershed, and that the rise in water levels was likely due to higher snowpacks during 1996 and 1997, plus increased rainfall. The assessment pointed out that other nearby lakes were experiencing similar high water levels.

The complainant was not satisfied with MELP's assessment, as it was not prepared by a forest hydrologist. The complainant asked the Board to proceed with the investigation. The Board notified the participants of its decision to investigate on July 11, 1998.

## Investigation Findings

### Extent of Harvesting

Prior to 1992, harvesting in the sub-basin was limited to selective logging where individual trees were removed. Clear-cut harvesting in the sub-basin began in 1992. Since that time, a total of only 28 hectares had been disturbed in the sub-basin. Of these, 15 hectares had been harvested by the woodlot licensee, with the remaining 13 hectares harvested by Ministry of Forest's Small Business Forest Enterprise Program (SBFEP). There was no recent harvesting on the Reserve portion of the sub-basin. This level of forestry-related disturbance, which amounts to less than 4% of the total area of the sub-basin, was unlikely to significantly affect the hydrology of the sub-basin.

#### Finding #1

**The area of forestry-related disturbance in the sub-basin was insufficient to have affected its hydrology to the extent necessary to cause the flooding.**

### Harvesting Operations

The assessment by MELP stated that no evidence of water being diverted by logging or other activities was observed. The assessment noted that one block in the process of being harvested was in a wetter area. The block required a culvert to drain groundwater exposed along the ditch of an access road. The district confirmed that it instructed the licensee to install a culvert, but notes that the culvert would have re-established natural drainage patterns, rather than diverted water flow.

Observations by MELP did not include the cutblock recently harvested by the SBFEP. However, the district inspected the SBFEP operations five times between December 1996 and April 1998 and did not observe any hydrological concerns. The inspections

found that road construction and harvesting adhered to the Code. Normal drainage patterns were maintained.

The Board's examination of the site and review of relevant documentation confirmed the observations of both MELP and the district.

### **Finding #2**

**The Board found no evidence that harvesting or road construction anywhere in the sub-basin diverted water flow or otherwise altered normal drainage patterns to cause the observed flooding.**

## **Conclusions**

The Board found no evidence that timber harvesting or road construction contributed to the flooding of the ponds. No instances of non-compliance with the Code were found.

The report from MELP suggested that natural weather events caused the flooding of the ponds. Although the investigation did not examine weather records, the Board agrees with this conclusion based on general observations in the field.

The Board has advised the complainant to discuss his request for permanent diversion of water away from the ponds with the Water Management Branch of MELP.