

## **Project Completion Abstract Machmell River Intake**

### **Objectives**

The objective of this project was to re-establish flow along the right bank of the Machmell River to the Xausmdas channel by way of an intake. This channel had become isolated from the river as a result of logs and sediment being deposited in close proximity to the intake due to a previous storm event.

### **FIA investment Schedule Number**

COTSA196211

### **FIA Project Number**

6211003

### **Recipient Name and Division**

Western Forest Products Limited  
Mainland / Islands Region

### **MoF District**

North Island Central Coast District

### **MoF Region**

Vancouver Island Region

### **Author(s) of the Project completion Abstract**

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### **Watershed / stream**

Machmell River

### **UTM (NAD 83) coordinates**

Easting-659836  
Northing-572593

### **Location**

The Machmell River is located 80 km south of Bella Coola and 40 Km east of the village of Rivers Inlet. The Machmell River drains into the eastern end of Owikeno Lake just west of the first narrows.

### **Introduction**

A recent storm event triggered extensive floodplain erosion along a stretch of the Machmell River upstream of the intake for the Xausmdas Channel. Damage to the floodplain resulted in large quantities of wood and sediment being introduced into the river causing a reduction in flow along the right bank. The impact to the Xausmdas channel was the isolation of the intake from the main channel with ground water supplying only 45L/s of flow at the intake. It is anticipated that this flow will decrease as the main channel recedes in coming winter months. Sockeye salmon were observed in the isolated ponds along the right bank where spawning had recently occurred. The drying up of the wetted areas along the right bank could affect the survival of salmon eggs in the main stem and Xausmdas Channel

On November 20, 2003 a site inspection was attended by Bruce Walsh (NHC), Brad Koroluk (DFO- Bella Coola), Sandie Mclaurin (DFO - Bella Coola), Wayne Peterson (DFO - Regional HQ) and Alma Van't Schip (ARM). A plan was developed to address the situation.

### **Environmental Maintenance Project plan**

On November 22, 2003 under the supervision of Alma Van't Schip, an EX300 excavator, proceeded to execute the prescription developed by Bruce Walsh. The excavator entered the Machmell River gravel bar from the Machmell Mainline using a log to minimize impact to the river bed. A short connection channel was excavated 3 m wide for a distance of 40 m. The depth of the channel is 1 m at the down stream end to 0.5 m at the upstream end. The excavated material was spread thinly over the left gravel bar. The completed works will augment ground water flows at the intake and increase salmon egg survival along the right bank and in the Xausdas Channel.



Photo 4  
Downstream view of completed channel

**Cost Summary**

Contracted Materials/labour	\$5005
Equipment	\$3365
Supervision	\$ 930
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Total	\$9300

**For further information Contact:**

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**Description of completed Work**



**Photo 1**  
Down stream view of debris and sediment that has temporarily reduced flows along the right bank.



**Photo 2**  
Construction of connection channel



**Photo 3**  
Upstream view of completed channel