

## Statement of Significance

### Meziadin River Fish Ladder



#### Description

The Meziadin Fish Ladder complex consists of a concrete passageway which allows spawning salmon to navigate Victoria Falls on the Meziadin River, a technical fish counting and sampling facility which extends over the Meziadin River, and a seasonal camp for fishery technicians. The complex is located approximately 50 kilometres east of Stewart, B.C., in the Regional District of Kitimat-Stikine.

#### Heritage Values

The heritage value of the Meziadin Fish Ladder is found in its early and ongoing contribution to the conservation of the salmon resource, in its cultural values related to First Nations use of the Meziadin River for fishing, and in its current use as a fish ladder and fish counting facility.

The current facility, constructed in 1966 by the Federal Department of Fisheries and Oceans, replaced an earlier fish ladder, built in 1914, at the same location. It is important for its natural and geographical association with the Meziadin River and Meziadin Lake, an important spawning lake within the Nass River system.

Cultural significance is found in the past and current use of this locality on the Meziadin River for salmon fishing by First Nations, and in their traditional knowledge of the river and the fishery which has assisted government conservation efforts since the late 1800s. The historic place is called Lak-an-Zoq by local First Nations as it was the site of their daily fishing activity. Today, this significance is seen in seasonal fishing camps and smokehouses along the north bank of the Meziadin River, the monitoring of the fishery by technicians representing the Nisga'a and the Gitanyow First Nations, and the use of traditional dipnet fishing methods by the Gitanyow.

The Meziadin Fish Ladder is historically significant as an example of early fish enhancement policy and activities undertaken in northern British Columbia and demonstrates the early

understanding of the importance of the Meziadin River in the Nass River salmon fishery. Most early fishways in British Columbia were constructed to mitigate barriers to fish migration caused by the construction of dams for hydro-electric generation or mining purposes. At Meziadin, however, it was the location, length and steepness of the Victoria Falls that prevented the passage of salmon upriver to Meziadin Lake. The value of the Meziadin salmon resource was first documented by provincial fisheries inspector C.P. Hickman in the early 1900s and helped lead to provincial and federal government cooperation in the construction of the original fish ladder which opened in September 1914. Today, 70 to 80 percent of the Nass River sockeye run returns to the Meziadin system, which translates into an average of 200,000 sockeye counted each year at the facility.

The Fish Ladder is valued for its natural history, scientific and conservation importance, emphasized through the natural cycle of the salmon and the seasonal nature of fishing and fish counting at the site. The original unmaintained fish ladder was replaced in 1966 by the current ladder when hydro-electric development was considered on the Nass River and studies found that the 1914 ladder was no longer effective in allowing more fish to reach the spawning grounds.

The 670 foot long Fish Ladder is valued for its engineering, design and physical form. Bridging both the upper and lower Falls, the Fish Ladder has 33 ascending pools providing access to spawning grounds above the falls. A concrete weir at the lower falls directs fish into the fish ladder, while a buttressed design of steel and concrete make the structure impervious to river currents. The vertical slot design allows fish to either freely navigate the ladders or to be manually directed by technicians.

The site is also important for its social, educational and interpretive values. The public can view fish leaping over the weir at the lower end of the Ladder, observe activities of fisheries technicians as they conduct daily counts of returning salmon and biological sampling, and understand the cultural values of the site through interpretive signs.

### **Character Defining Elements**

Key elements that define the heritage character of the Meziadin Fish Ladder include:

- remote location,
- direct connection and relationship to the Meziadin River and Meziadin Falls
- views to the Falls from the steel walkway over the fish ladder
- public viewing area at the foot of the fish ladder, and views of operations at enumeration facility
- the concrete and steel fish ladder structure with its buttressed design
- the fish counting and sampling station,
- site of seasonal camps
- continued use as a First Nations fishing and fish processing area along the river edge, below the falls
- interpretive signs

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Kevin Christie, BSc., Fisheries Technician, Meziadin Fishway

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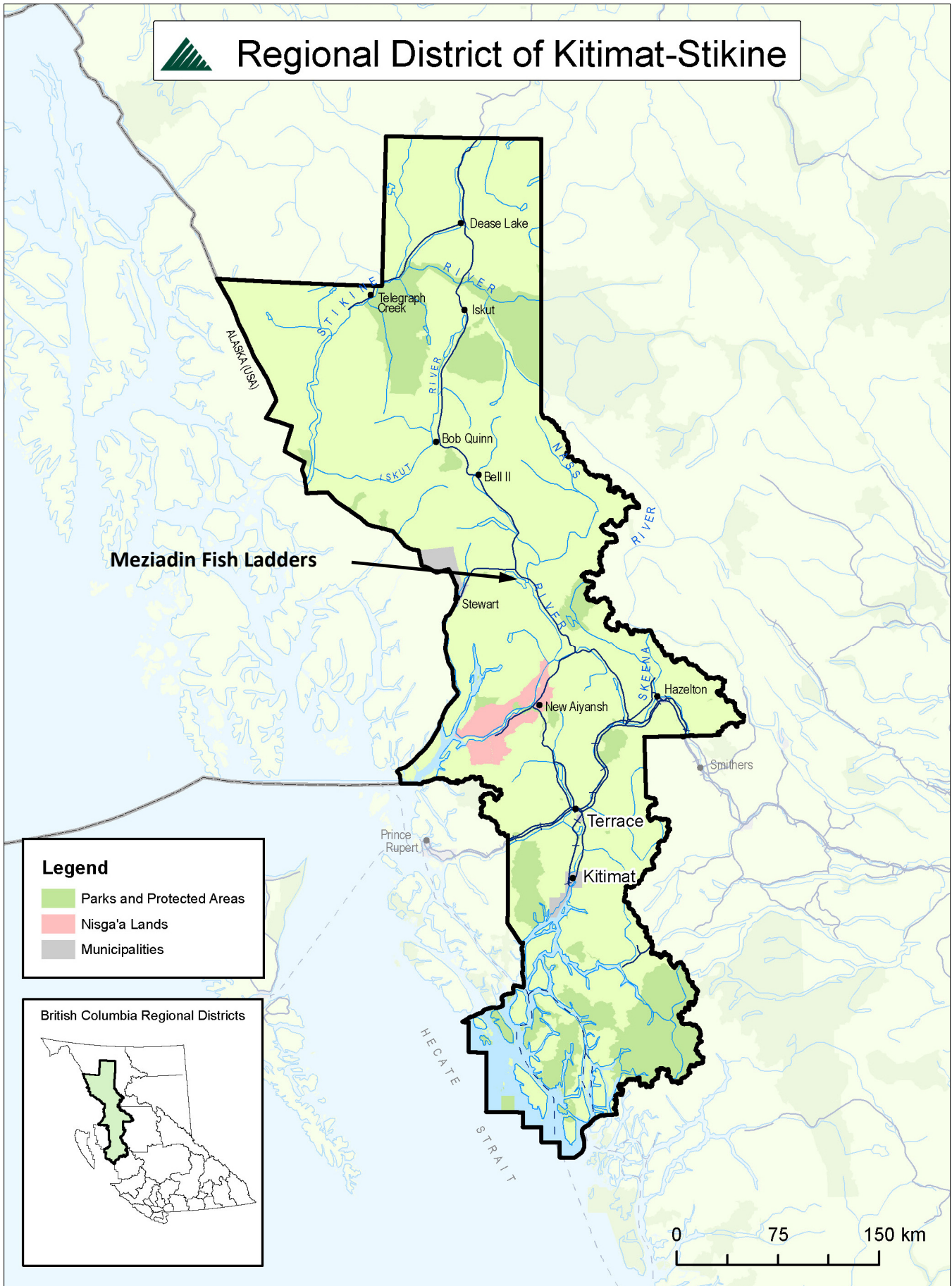
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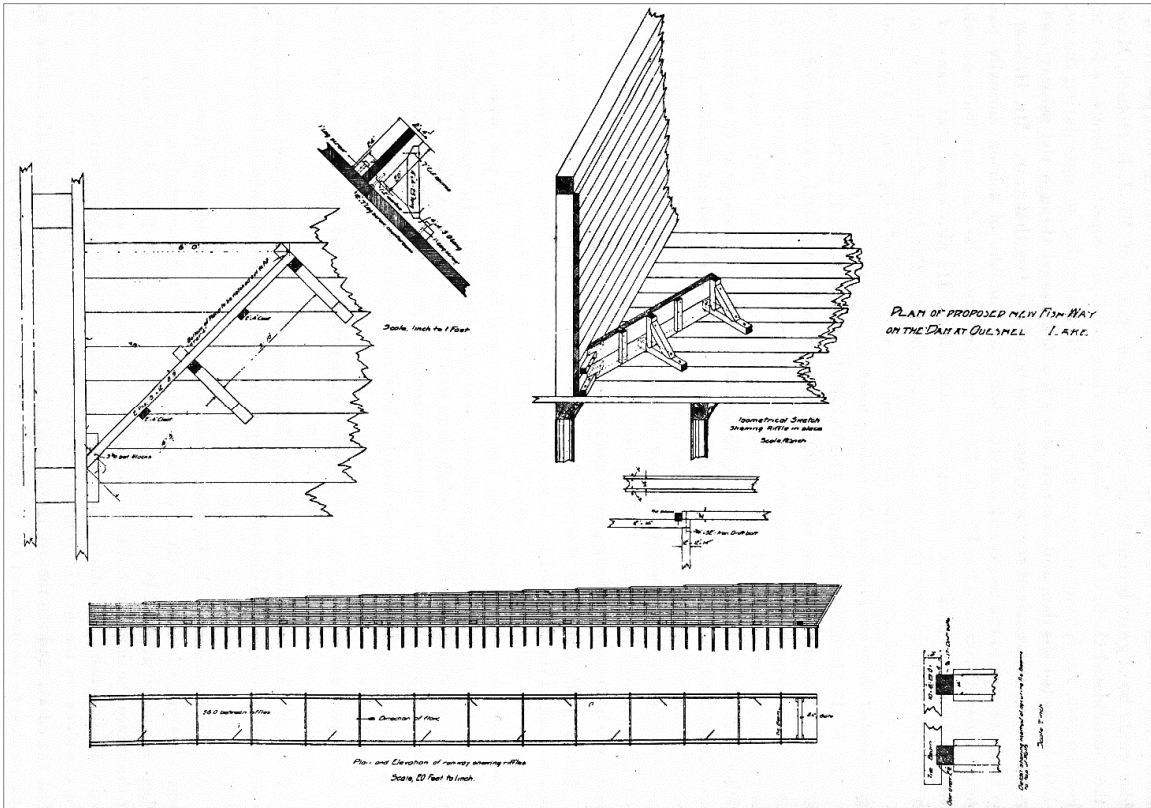
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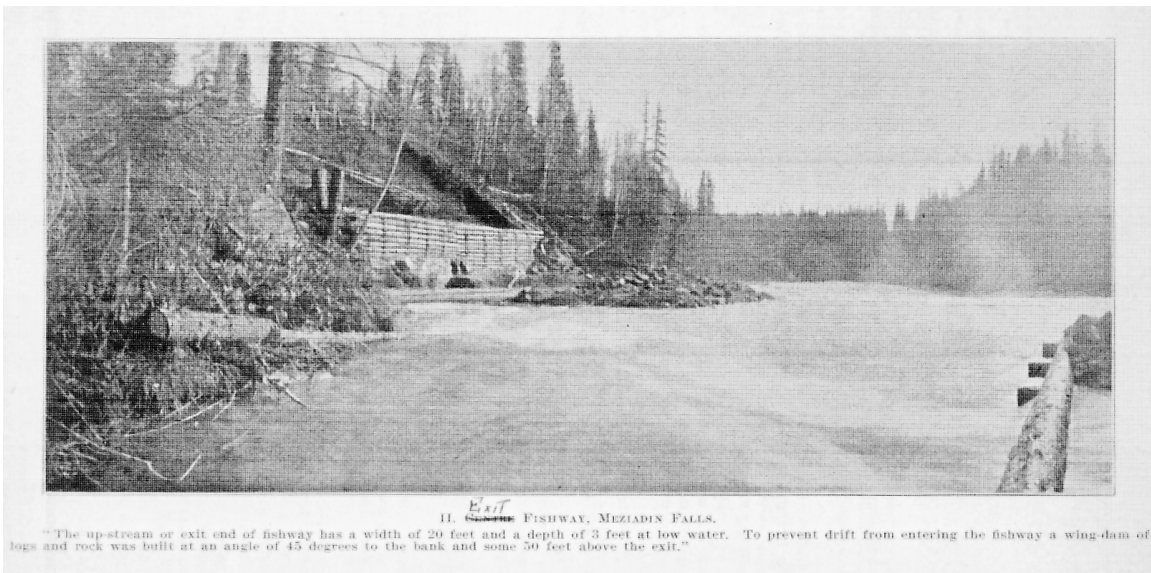


# Regional District of Kitimat-Stikine





Sketch plan of the fishway located at the west end of Quesnel Lake, used as a model for the first Meziadin River fish ladder opened in 1914. *Report of the Commissioner of Fisheries, 1903.*



Original Meziadin Fishway in 1914. *Report of the Commissioner of Fisheries, 1914.*

Caption reads: "Fishway, Meziadin Falls"

"The upstream or exit end of the fishway has a width of 20 feet and a depth of 3 feet at low water. To prevent drift from entering the fishway a wing-dam of logs and rocks was built at an angle of 45 degrees to the bank and some 50 feet above the exit."



Victoria Falls on the Meziadin River, 1913. *British Columbia Archives na-04038*



View upstream at Victoria Falls on the Meziadin River, 1913. *British Columbia Archives na-03744*



Salmon attempting to leap over the weir near the entrance to the Meziadin Fish Ladder.  
*August 2006: Photo courtesy Ron Kullman*



Aerial view of Meziadin River and lower section of the fish ladder and weir.  
*July 1995: Photo courtesy of Ken Newman*



View of the weir and start of the fish ladder on the Meziadin River  
*July 2007: Photo courtesy of Ken Newman*



Walkway over top of the fish ladders looking upriver towards the fish counting facility.  
*August 2010*

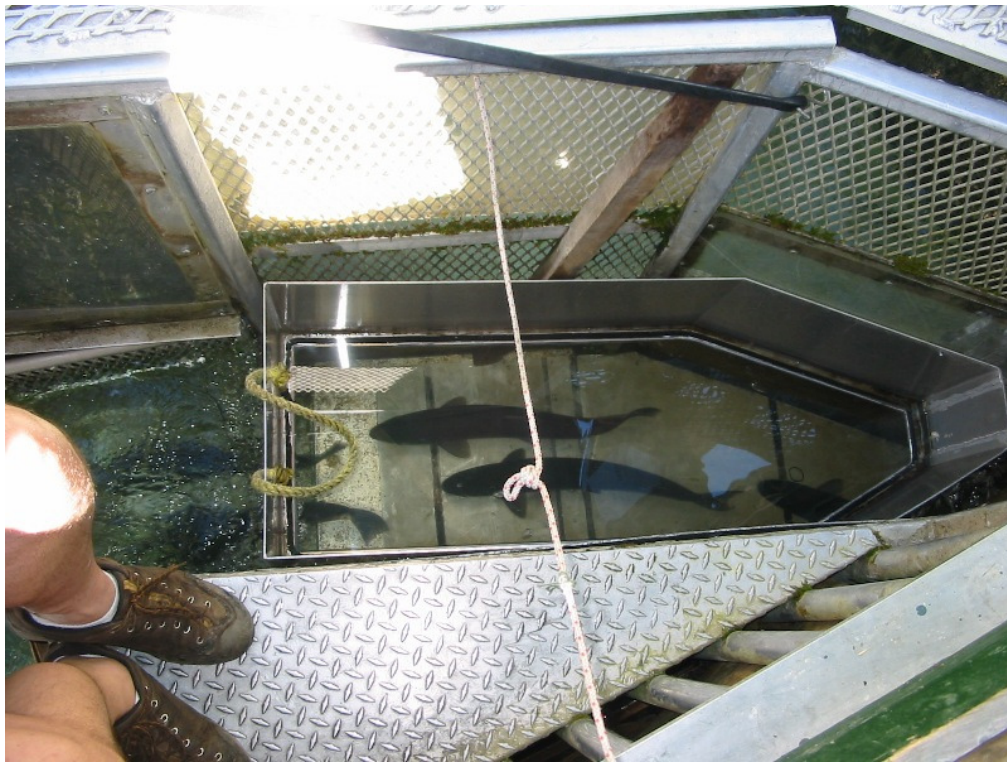




Buttressed concrete side wall of the fish ladder  
*August 2010*



View of the enumeration facility at the top of the fish ladder, Meziadin River in background.  
*August 2010*



Counting and measuring fish at the enumeration facility before they are release above the Falls.  
*August 2010*



View of walkway, buttressed concrete wall and upper Meziadin Falls looking downriver.  
*August 2010*



Public viewing area and First Nations use area just below the falls.  
*August 2010*



Gitanyow First Nations member dip net fishing at Meziadin River below the weir.  
*August 2009: Photo courtesy of Gitanyow Fisheries Authority*