

## Williams Lake Trout Stocking

Records show that the first recorded stocking of trout (rainbow) took place in 1901, by the Mic Mac Fishing Club of Halifax. Nothing else is mentioned until the mid 1950' when the Dept. of Lands and Forest began a program of re-stocking but the numbers and dates were kept by the individual hatcheries involved, most of which are now defunct. The Dept. of Fisheries began centralized data keeping in 1976 which show that Williams Lake was stocked for ten of the years between 76-88 with 74,405 speckled trout.

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### Williams Lake Trout Stocking

Hard and Accurate information on trout stocking of Williams Lake for the most part is lost in time, but what information is available shows that Williams Lake has had periodic help for over 80 years.

On April 4<sup>th</sup>, 1899, 25,000 Californian rainbow trout eggs purchased by the Federal Government of Canada and received by Alferd Ogden, superintendent of the Bedford Salmon Hatchery, were shipped from Caledonia, New York State. These and an additional 25,000 eggs received, resulted in 46,000 fry and most of these were planted in the lakes of Halifax County.

The hatchery stocked certain lakes and made allotments to local fishing clubs, two being Halifax and Mic Mac Fishing Club, both of Halifax. In 1901, the Mic Mac Club reported losing over 40,000 rainbow trout when Chocolate Lake was drained to build a dam. In 1902 they spread their allotment around several lakes, within close proximity of what is now the city, Williams Lake being one, although no numbers were recorded.

No further mention is made of Williams Lake until the mid 1950's when the Department of Lands and Forest (now

Fisheries) began a periodic stocking of the lake. Information on these stockings were kept by the individual hatchery involved, most of which are now defunct. In 1976 Lands and Forest began keeping data in Digby. The records show that Williams Lake was stocked for ten years, between the period of 1976-88, with a total of 74,405 speckled trout, averaging 7" in length. Considering the survival rate of 3%, approximately 2,000 introduced trout are now resident in the lake.

There were a number of 14"-16" trout taken during the spring of 88, with the odd trout in the 18"-20" range. On June 6<sup>th</sup>, 1989 a school of newly stocked trout about 6" long were observed being fed upon by several resident trout in the 2-31b. range on the south eastern side of the lake. Large trout can be observed feeding on the surface over the several deep holes in the lake during the evening. As the trout prefer the cooler water in the holes during the warm weather, there is a problem with the lack of adequate current to create movement, resulting in a rapid depletion of oxygen in the water. During the evenings of very hot days, trout can be heard sucking air on the surface of the water.

As 99% of the lake bottom is unsuitable and with no adequate streams for spawning, Williams Lake needs the 3% or better survival rate of stocked trout in order to maintain a sports fishery.

# WATER QUALITY MONITORING

## PARAMETERS:

### 1. CHEMICAL:

#### a. BIOLOGICAL:

- a) D<sub>5</sub> SAT / CONTENT
- b) COLIFORM COUNT

#### 3. PHYSICAL:

- a) TURBIDITY
- b) SECCHI DISK.

## VARIABLES:

- 1. WATER LEVEL
- 2. FREQUENCY
- 3. WEATHER
- 4. TEMPERATURE
- 5. LOCATION

# WATER QUALITY MONITORING

## PARAMETERS:

1. CHEMICAL:

2. BIOLOGICAL:

- a) O<sub>2</sub> SAT / CONTENT
- b) COLIFORM COUNT

3. PHYSICAL:

- a) TURBIDITY
- b) SECCHI DISK

## VARIABLES:

- 1. WATER LEVEL
- 2. FREQUENCY
- 3. WEATHER
- 4. TEMPERATURE
- 5. LOCATION

VICTORIA GENERAL HOSPITAL

DISCHARGE REPORT

Admission Date \_\_\_\_\_ Discharge Date \_\_\_\_\_ Return Date \_\_\_\_\_

Reports to be sent to Dr. \_\_\_\_\_ Address \_\_\_\_\_

Dr. \_\_\_\_\_ Address \_\_\_\_\_

Transferred to \_\_\_\_\_ Date \_\_\_\_\_

Consultants \_\_\_\_\_

Diagnosis \_\_\_\_\_

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Complications \_\_\_\_\_ Date \_\_\_\_\_

Operations \_\_\_\_\_ Date \_\_\_\_\_

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SIGNED \_\_\_\_\_ M. D.

TABLE 2  
**WITTHROD LAKE**  
**WATER QUALITY DATA**  
**IN LAKE STATION - 0 DEPTH**

<u>QUALITY PARAMETER</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>Average</u>
Temperature ( C)	21.7	21.2	22.0	21.2	19.4	22.4	22.2	21.4
Dissolved Oxygen (mg/l)	8.5	9.3	8.4	9.7	9.2	8.0	9.2	8.9
Oxygen Saturation (%)	99	107	98	112	103	94	108	103
pH	6.7	7.2	6.8	6.7	6.8	7.0	6.9	6.9
Acidity (mg/l)	1.4	0.9	1.2	1.1	1.8	1.5	2.6	1.5
Alkalinity (mg/l as CaCO <sub>3</sub> )	4.5	2.8	2.1	1.9	2.8	3.5	3.3	3.0
Turbidity (NTU)	0.7	0.5	0.4	2.0*	0.4	0.3	0.4	0.4
Color (Hazen Units)	8	7	7	20*	5	0	5	5
Nitrate + Nitrite (mg/l)	L.05	L.05	L.05	L.05	L.05	L.01	L.01	-
Ammonia (mg/l)	L.5	L.5	L.5	L.5	L.5	0.1	L.1	-
Phosphate (ug/l)	71	58	49	89	59	196*	53	53
Sodium (mg/l)	30	39	40	56	63	76	71	53
Magnesium (mg/l)	1.5	1.4	1.7	2.6	2.5	2.2	0.2	1.7
Sulphate (mg/l)	N.A.	15.4	15.2	21.5	22.5	14.5	28.0	19.0
Chloride (mg/l)	162	60	74	97	106	126	125	107

\* Not included in calculation of average.

TABLE 5  
WATER QUALITY DATA  
WITHROD LAKE  
IN LAKE STATION - 0 DEPTH

PARAMETER	1985	1983	1984	1985	1986	1987	1988	Average
Chloride (mg/l)	165	60	74	97	106	156	152	107
Sulfate (mg/l)	N.A.	12.4	12.5	21.2	55.2	14.2	58.0	19.0
Magnesium (mg/l)	1.2	1.4	1.7	5.6	5.2	5.5	0.5	1.7
Sodium (mg/l)	30	39	40	26	63	76	71	23
Phosphate (mg/l)	71	28	49	89	29	196*	23	23
Ammonia (mg/l)	1.2	1.2	1.2	1.2	1.2	0.1	1.1	-
Nitrate + Nitrite (mg/l)	1.02	1.02	1.02	1.02	1.02	1.01	1.01	-
Color (Hazen Units)	8	7	7	50*	2	0	2	2
Turbidity (NTU)	0.7	0.2	0.4	5.0*	0.4	0.3	0.4	0.4
Calcium (mg/l)	4.2	5.8	5.1	1.9	5.8	3.2	3.3	3.0
Acidity (mg/l)	1.4	0.9	1.5	1.1	1.8	1.2	5.6	1.2
pH	6.7	7.5	6.8	6.7	6.8	7.0	6.9	6.9
Dissolved Oxygen (mg/l)	8.2	9.3	8.4	9.7	9.5	8.0	9.5	8.9
Temperature (C)	21.7	21.5	25.0	21.5	19.4	25.4	25.5	21.4
Saturation (%)	99	107	98	115	103	94	108	103

\* Not included in calculation of average.



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