

Gardom Lake Fisheries Management

- 1. BC Fisheries Management – Program Plan and Stocking Policies**
- 2. Fishery Classification and Management**
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Provincial Fisheries Program Plan

Goals:

1. Establish governance approaches that are strategic, effective, and efficient.
2. Conserve wild fish and their habitats.
3. Optimize recreational opportunities based on the fishery resource.

Optimizing Recreational Opportunities:

Meeting our goals:

1. Sustainable Opportunities:

Maintain and develop diverse and sustainable opportunities for fishery resource users.

2. Stakeholder Values:

Integrate stakeholder values into freshwater fisheries management decision making.

Provincial Stocking Policy

Policy Statement

To give priority to the conservation of wild indigenous species and to support the stocking or transplant of eggs or fish into lakes or rivers where:

- a) the stocking is part of an approved management, research or recovery plan; or
- b) there is an **identified demand for additional recreational** opportunity for the public or opportunity to reduce angling pressure on wild stocks; and an evaluation has been completed that **assesses the risks** to native species that are dependent on the freshwater environment, and that these **risks are considered to be acceptable**.
- c) appropriate consultation has been completed to assess issues relevant to First Nations where agreements aren't already in place.

Lake Management Classifications

1. Wilderness
2. Wild-Stock
3. Trophy
4. Quality
5. Family
6. Regional
7. Kids
8. Biodiversity

Each of these classifications is subject to a targeted:

- Management Objective
- Regulation Suite
- Stocking Prescription
- Performance Criteria

Gardom - Historical Fishery

Connectivity suggests that the lake may have contained native trout species at some point in time.

Earliest fish records indicate the release of rainbow trout fry in 1908, lake trout releases in 1909, and cut-throat trout releases in 1911.

Stocking History

1945 - 1995

Wide variety of species, strains, and stocking densities of diploid fish.

1995 – 2004 (Spiny Ray Introductions)

Increased research into hatchery products and a more focused approach to fish stocking. Rainbow/Brook Trout prescriptions. Introduction of Fraser Valley Catchables

2005 – 2009 (Invasives Present)

Triploid and all female stocks are readily available. Heavy stocking of FV CA likely kept the fishery quality from declining further than it did due to invasive fish effects.

2010 – Present (Post Treatment)

Combined stocking of FV CA and new Pennask All Female Triploids to re-establish the fishery. 2014 transition to only Pennask.

Management Strategies

Prior to Closure Managed as a Regional Fishery:

Objective — Provide harvest opportunity and encourage broad scale participation.


Regulations — 5 fish quota, no gear restrictions, no bait bans, open year round.


Stocking Densities — Relatively high, >150/ha

Performance Criteria — 20 to 30 cm fish, Moderate to High Catch Rates.

Stocking Densities

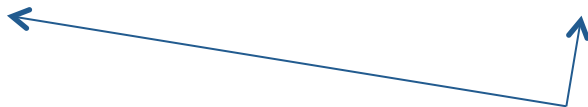
It is common for rainbow trout fisheries to have a strong Density---Size relationship in the stock.

Population
Density 

Individual
Fish 

Stocking Density Selection (for stocking Yearling Rbt) :

$$\text{TDS}^* + 100^* (24.7^* \text{Shoal Area} + 2.47^* \text{Surface area})^* (0.1)$$



Productivity Indicators

Stocking History

Re-Establishment Strategy:

Release	Species	Strain	Life Stage	Number	Genotype
15-Apr-14	Rainbow Trout	PENNASK	Yearling	8000	All Female Triploid
24-Jun-13	Rainbow Trout	PENNASK	Yearling	2000	All Female Triploid
24-Jun-13	Rainbow Trout	PENNASK	Yearling	3000	All Female
9-Apr-13	Rainbow Trout	PENNASK	Yearling	5000	All Female Triploid
9-Apr-13	Rainbow Trout	FRASER VALLEY	Spring Catchable	3000	Triploid
9-Jul-12	Rainbow Trout	PENNASK	Yearling	3000	All Female Triploid
17-Apr-12	Rainbow Trout	FRASER VALLEY	Spring Catchable	5000	Triploid
16-Apr-12	Rainbow Trout	PENNASK	Yearling	2000	All Female Triploid
11-Apr-11	Rainbow Trout	FRASER VALLEY	Spring Catchable	5000	Triploid
11-Apr-11	Rainbow Trout	PENNASK	Yearling	3000	All Female Triploid
10-Jun-10	Rainbow Trout	FRASER VALLEY	Spring Catchable	700	Triploid
21-May-10	Rainbow Trout	FRASER VALLEY	Spring Catchable	1575	Triploid
8-Apr-10	Rainbow Trout	FRASER VALLEY	Spring Catchable	3425	Triploid

Management Strategies

Post Re-establishment: Managed as a Quality Fishery:

Objective — Still provide some harvest opportunity, with the opportunity to catch larger fish.

Regulations — 2 fish quota, no gear restrictions, no bait bans, open year round.

Stocking Densities — Relatively high, 80-100 fish/ha

Performance Criteria — 30+ cm fish, Moderate to High Catch Rates.

Future Considerations

Regulations and stocking prescriptions appear to be appropriate for the fishery.

Increases in angler effort, as a response to the quality of the fishery, have caused concerns.

Current lake access and parking are inadequate for the level of angling pressure.