



Nanaimo
Land Based
Model Aquafarm



LITTLE
CEDAR FALLS

First let's look at freshwater aquaculture in BC

- Total Trout Production in BC <1000 MT
 - 37 Hatchery licences 71 finfish growout (some also hatchery)
 - 2010 Three companies contributed 96% and five companies generated the remaining 4% of the food market sales
 - 8 farms report **any** food market sales- 12 U catch farms
 - One company is the major producer with most of the production – less than 100mt total of all other producers
 - Other freshwater producers
 - 1 tilapia farm 100mt
 - Salmon hatcheries for majors
 - Shellfish hatcheries
 - Sablefish hatchery
 - Sturgeon farm

Our Partners



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A LABOUR OF LOVE

Little Cedar Falls grows healthy, sustainable, land-raised salmon



JANET ATKINSON

STEVE ATKINSON

Our Funding Partners



***NRC Industrial Research
Assistance Program***



**Investment
Agriculture
Foundation**
of British Columbia

LITTLE
CEDAR FALLS



LITTLE CEDAR FALLS

GROWN ON LAND, RAISED WITH LOVE.

“Our family invested in making this farm come to life. It’s a choice we made because we believe in good business.”

– STEVE ATKINSON

ABOUT US

Our land is family land. We care deeply about it. Our farm has been in our family for decades. We want to keep it that way for our children's children.

Fish deserve respect and we give it to them. We will harvest 2 MT of Steelhead Salmon weekly in our 99.6% Recirculating Aquaculture System. Circular FRP tanks.

Our knowledge gained is knowledge shared. This is a Canadian Model Aquafarm Initiative of IPSFAD, a Training facility for Vancouver Island University, a Research and Development centre for PR Aqua and a Business Venture for Taste of BC.



WE MAKE A HOME FOR OUR FISH

Production will reach 100 MT of Steelhead annually.

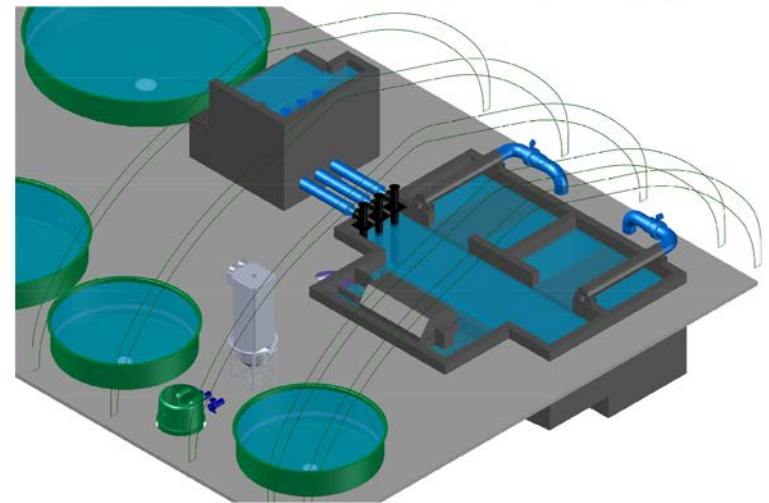
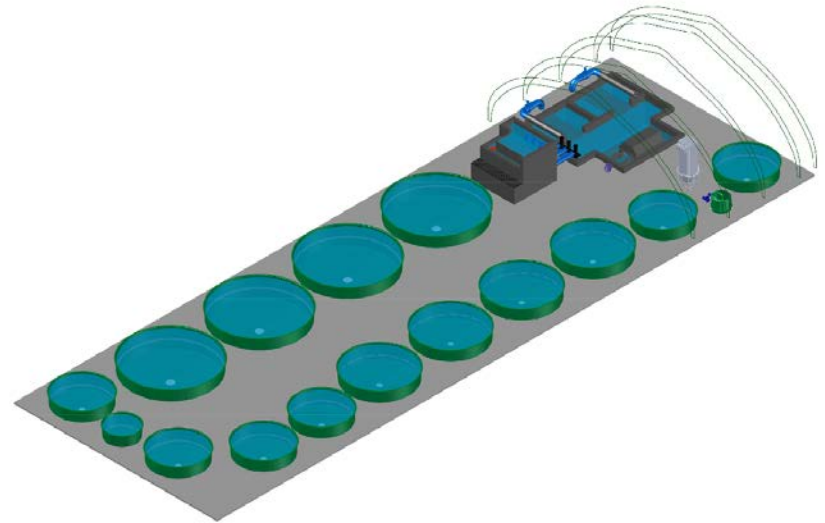
100% hormone and antibiotic free.

We feed our fish what they were meant to eat.

Raised on land within closed containment means no integration with the marine environments.

The farm construction began in June 2012 with completion in June 2013.

Construction Budget – 1.4 million - \$14kg produced – additional \$6 kg 1st year operations.



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WE MAKE A HOME FOR OUR FISH

- 204' x 70' foot fabric building
- 15 tanks
 - 1 10' Tank
 - 4 each -16' , 20' , 26' Tanks
 - 2 additional 16' tanks for purge cell
- Treatment Cell – below grade
 - Approx 30' x 30' x 10'
 - 2 chamber fsb biofilter,
 - drum filter,
 - co2 stripper/pump sump
- LHO/ Header Tank
 - Approx 10'x10'x10'
- Purge Cells independent of main system
 - Allows for sterilization between harvests



SOME METRICS

Construction Budget – 1.4 million - \$14/kg produced – additional \$6/kg 1st year operations.

Projected electrical cost – 2.62 kw per kg produced – our cost .082 kwh = \$.214 per kg

Building 14,280 f² .14 f² per kg produced

OSI Oxygen generator – 300 lpm

Monitored and alarmed but not automated

FCR anticipated 1.2

Survival anticipated 90% +

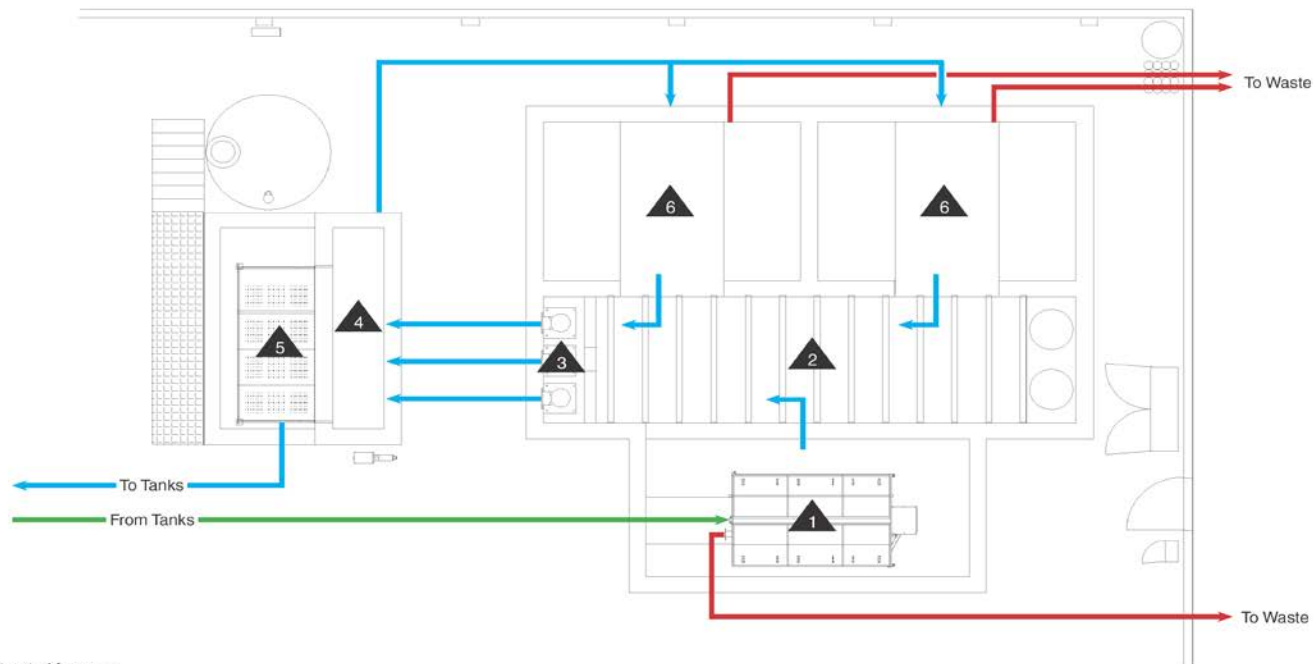
Fish Handling – by hand

Harvest – Stun and Bleed





Taste of BC Aquafarms Land-Based Model Farm Recirculating Aquaculture System



Key

- Used water
- Water being treated for reuse
- Wastewater

- 1 – Rotofilter™ Drum Filter removes solid particles.
- 2 – Carbon Dioxide Stripper removes carbon dioxide and adds oxygen through aeration.
- 3 – Recirculation Pumps lift the water to the header tank.
- 4 – Header Tank maintains gravity flow of water to the biofilters and to the culture tanks.
- 5 – Low Head Oxygenator supersaturates water with oxygen.
- 6 – Fluidized Sand Bed Biofilters prevent the accumulation of ammonia nitrogen, a toxic waste product.

www.praqua.com
250-714-0141
info@praqua.com



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THE BEGINNING

June 2012



A LOT OF SITE PREP... HUNDREDS OF LOADS OF MATERIAL MOVED



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TREATMENT CELL



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BIG PIPES!



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TANKS UNDER CONSTRUCTION



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TAKING SHAPE



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BIG PUMPS LITTLE PUMP



RECIRC PUMPS - 2250 GPM X 3
INFLUENT PUMP – 45 GPM

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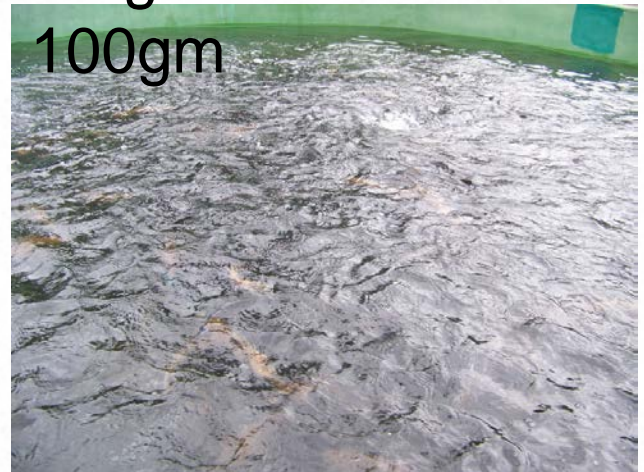
FIRST FISH moved into system in March



We anticipate growth from 20gm to 2kg in 45 weeks @ 15C
We will stock 10,000 fish every eight weeks

We currently have 3 cohorts of fish stocked in the system..

Stocked in at 20 gm.
Largest ones now 100gm



Today.. Construction
essentially complete



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SUSTAINABILITY

Sustainability for our family is an efficient system that does not create more harm to our environment.

As a family farm, we care about the quality of our food. We feed our family and yours the best.

Waste from our fish is feed for our garden. What goes around, comes around. The exploration of other revenue streams are in the early stages.

Growing fish on land conserves our wild stocks.

The bottom line is that we are running a good business. One that brings in profit, treats the environment with respect and produces high quality seafood for all to enjoy.



CONTACT US

We'd love to talk to you.

Steve & Janet Atkinson
2930 Jameson Road
Nanaimo BC, V9R 6W8

Littlecedarfalls.com

Email steve@freshbcsalmon.com

Call 1.250.755.4077



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