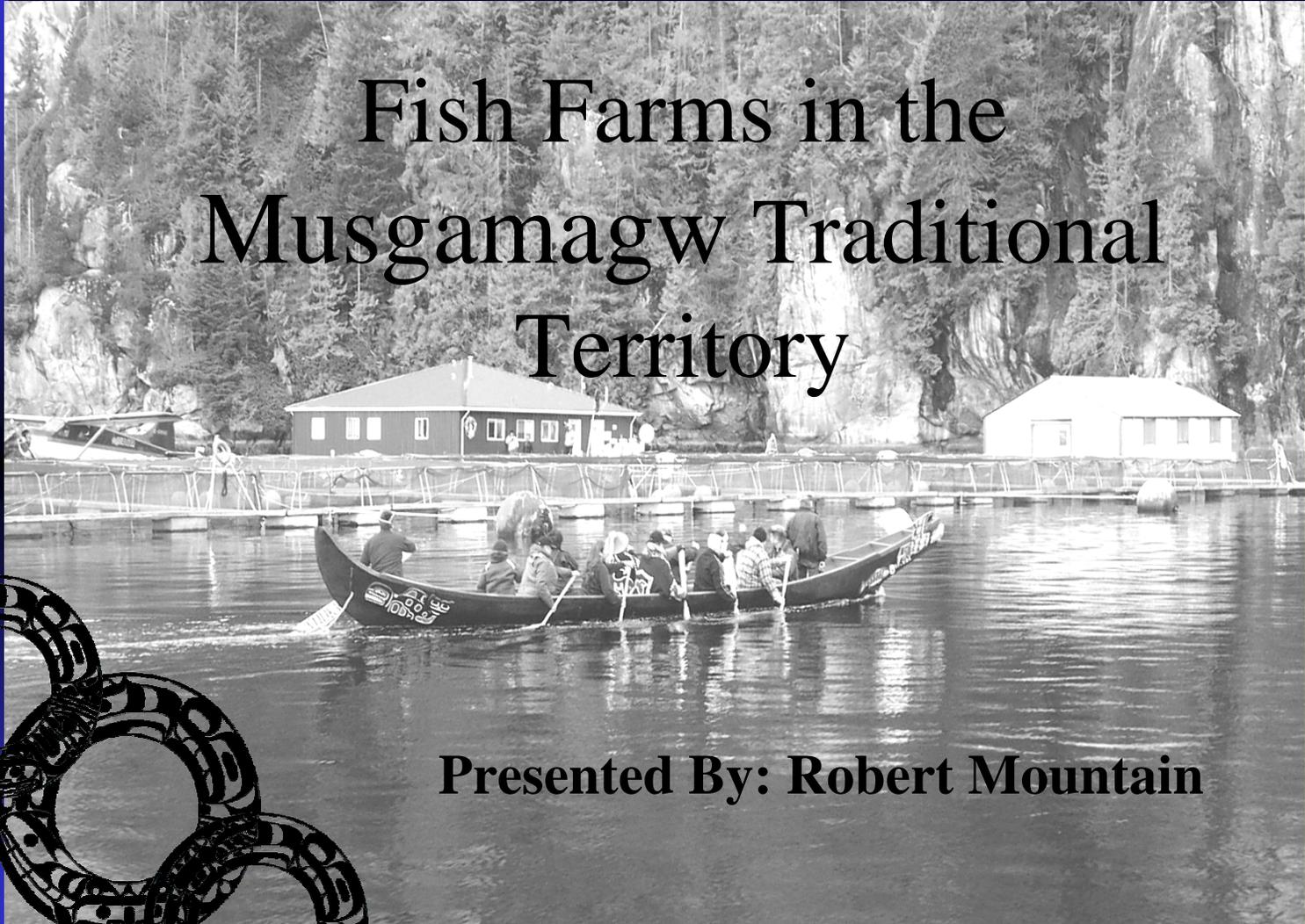
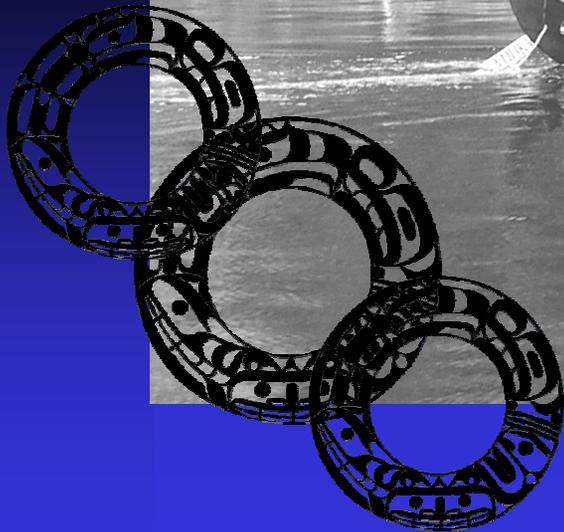


Fish Farms in the Musgamagw Traditional Territory

Presented By: Robert Mountain



Local Steward Coordinator: Robert Mountain

The MTTC has 5 members nations

Kwicksutaineuk/Ah-kwaw-ah-mish-Gilford Island

Tsawataineuk- Kingcome Inlet

Gwawaneuk- Hopetown

Namgis- Alert Bay(Nimpkish River),

All working toward the removal and/or transition to
closed containment of all fish farms in the Musgamagw
Tsawataineuk Territory

MTTC is part of the CAAR group:

Musgamagw Tsawataineuk Tribal Council (MTTC),
David Suzuki Foundation (DSF),

Friends of Clayoquot Sound (FOCS),

Georgia Strait Alliance (GSA),

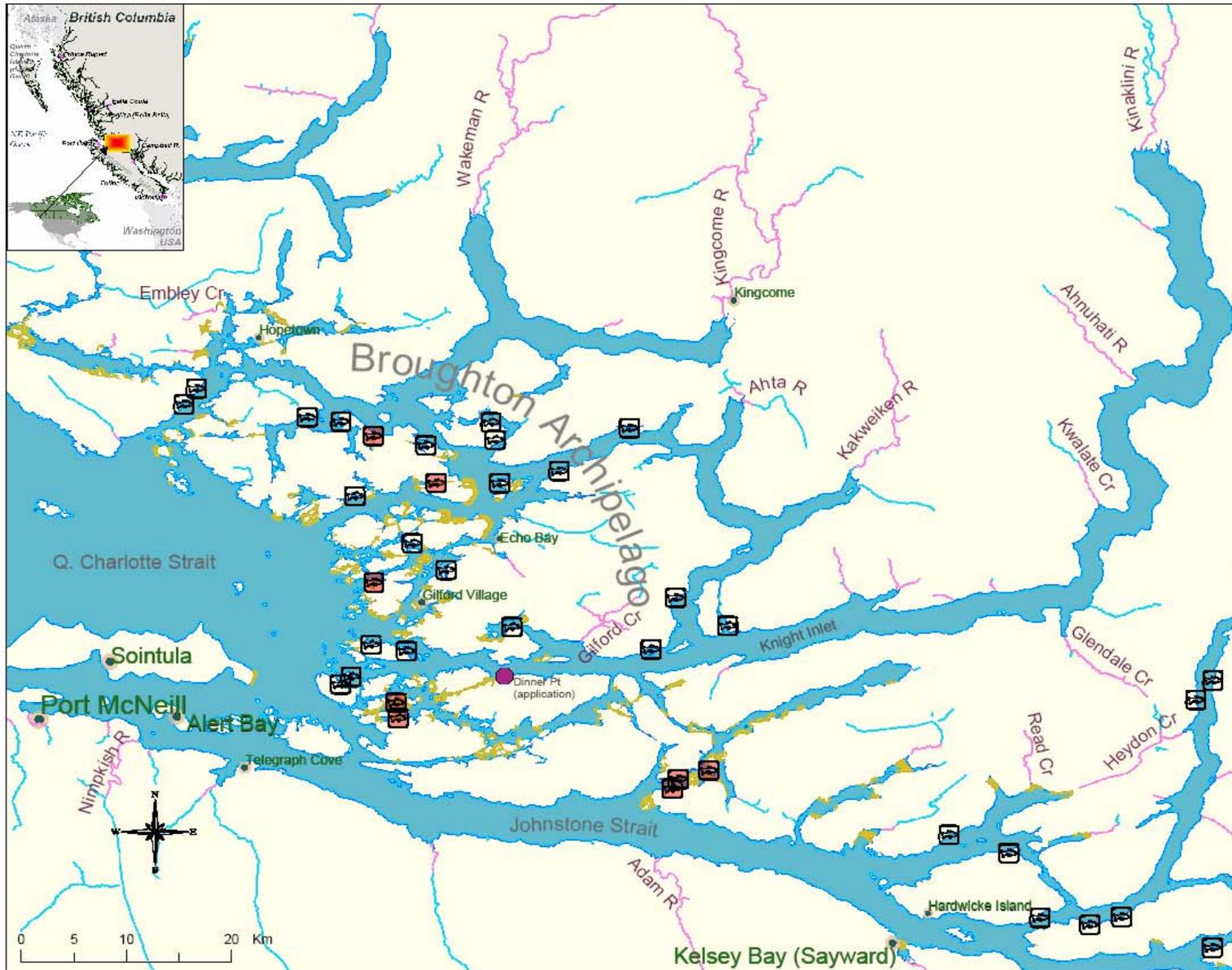
Living Oceans Society (LOS),

Raincoast Conservation Society (RCS),

Raincoast Research (RR),

T Buck Suzuki Environmental Foundation (TBSEF),
Watershed Watch Salmon Society (WWSS)

There are now 28 fish farms in the Musgamagw Traditional Territories



Salmon Farms Clam Beds (buffered) and Pink Salmon Rivers in the greater Broughton Archipelago

Fish Farm Tenures
(Some active, others "fallow")

-  Farm not near known clam beds
-  Farm likely in violation of clam siting criteria

 Pink Salmon Reach

 Salmon Bearing Stream Reach

 Clam Beds
(Buffered according to criteria below)

The BC Ministry of Sustainable Resource Management states that salmon farms should be:

"At least 300 m from inter-tidal shellfish beds that are exposed to water flow from a salmon farm and have regular or traditional use from First Nations, recreation, or commercial fisheries."

"At least 125 m from all other wild shellfish beds and commercial shellfish growing operations."

([http://www.agf.gov.bc.ca/fisheries/pdf/Provincial%20siting%20criteria%20\(March%20%202000\).pdf](http://www.agf.gov.bc.ca/fisheries/pdf/Provincial%20siting%20criteria%20(March%20%202000).pdf))

Farm Locations: Land & Water BC
Clam Data: DFO & MSRM
Salmon Streams: FISS

April 16
2004



Problems that we had right from the start:

- ❖ These farms are here illegally,
 - ❖ there was never any consultation with any First Nations in our territory to put these farms there, so there is no accommodation either.
- ❖ There was never any CEAA baseline information done for any of the existing sites, except for 2 that are re-locations.

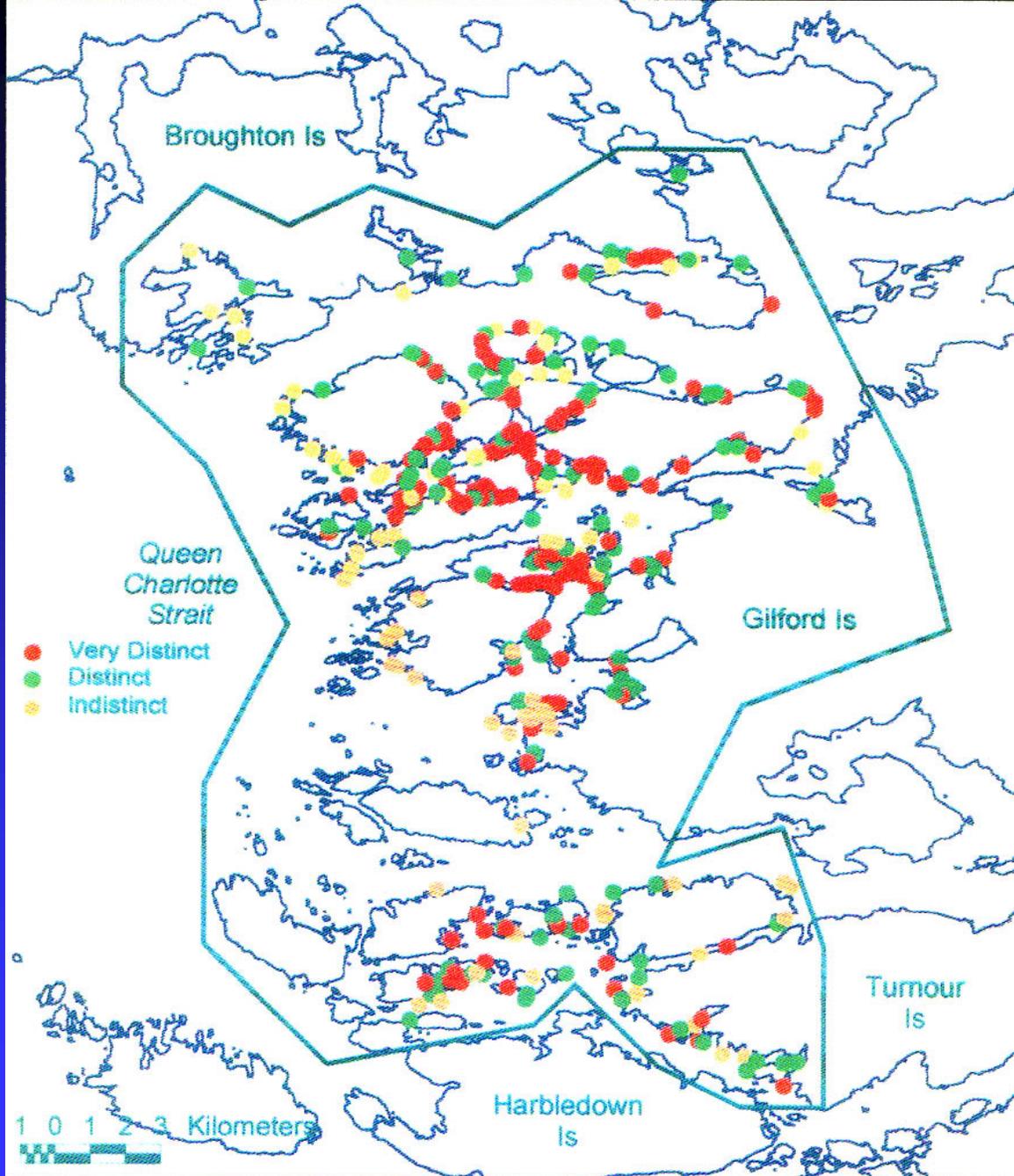


Figure 8

Boundary of AVI survey area and *clam terrace* locations.

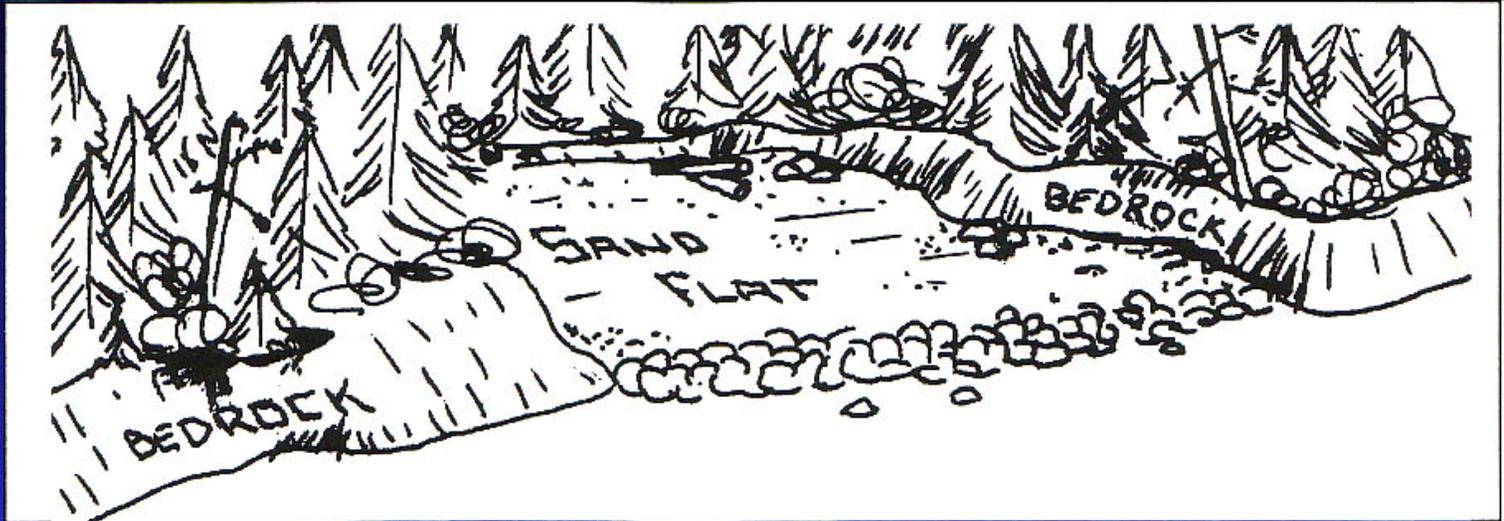


Figure 1 Sketch of typical *clam terrace*.

a **boulder ridge** in the lower intertidal zone, apparently comprised of uniformly-sorted cobble/boulder-sized sediment,

a **tidal flat** in the mid-intertidal zone that consists almost entirely of sand-sized shell fragments, and

either **bedrock cliffs** or **large boulder rubble** over bedrock in the upper intertidal zone.



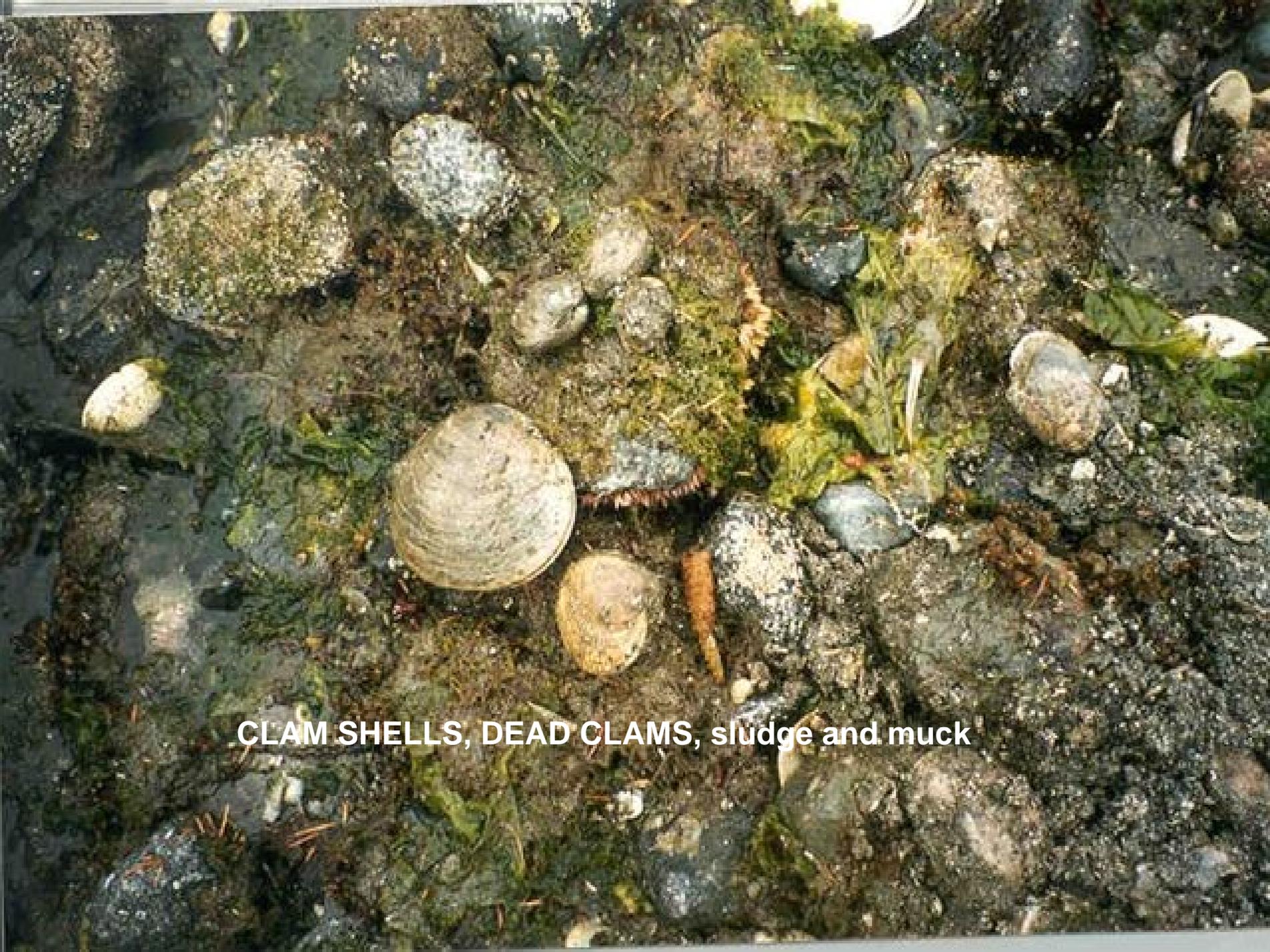
Figure 10. Aerial photo of Location H showing the typical morphology of a *clam terrace*. Note the apron of biogenic sand/mud in the subtidal,



Figure 11 Ground photograph looking across the boulder/cobble ridge of Location H.



SITING CRITERIA NOT SUFFICIENT, Less than 300m away and all the sewage flows onto the beaches, not enough tidal flow to disperse or dissipate.



CLAM SHELLS, DEAD CLAMS, sludge and muck

Another problem, green algae growing all over the clam beds



14 5 2006



More dead clams, muck and sludge



14 5 2006

DISCOLOURED CLAM. MEAT IS
USUALLY CREAMY WHITE OR LIGHT
GREY IN COLOR





MORE DISCOLOURED MEAT OF CLAMS

HEALTHY CLAMS, approximately 20kms from any fish farm site.



Unhealthy clam



Healthy clam



Strange things on our beaches, unknown, never seen before



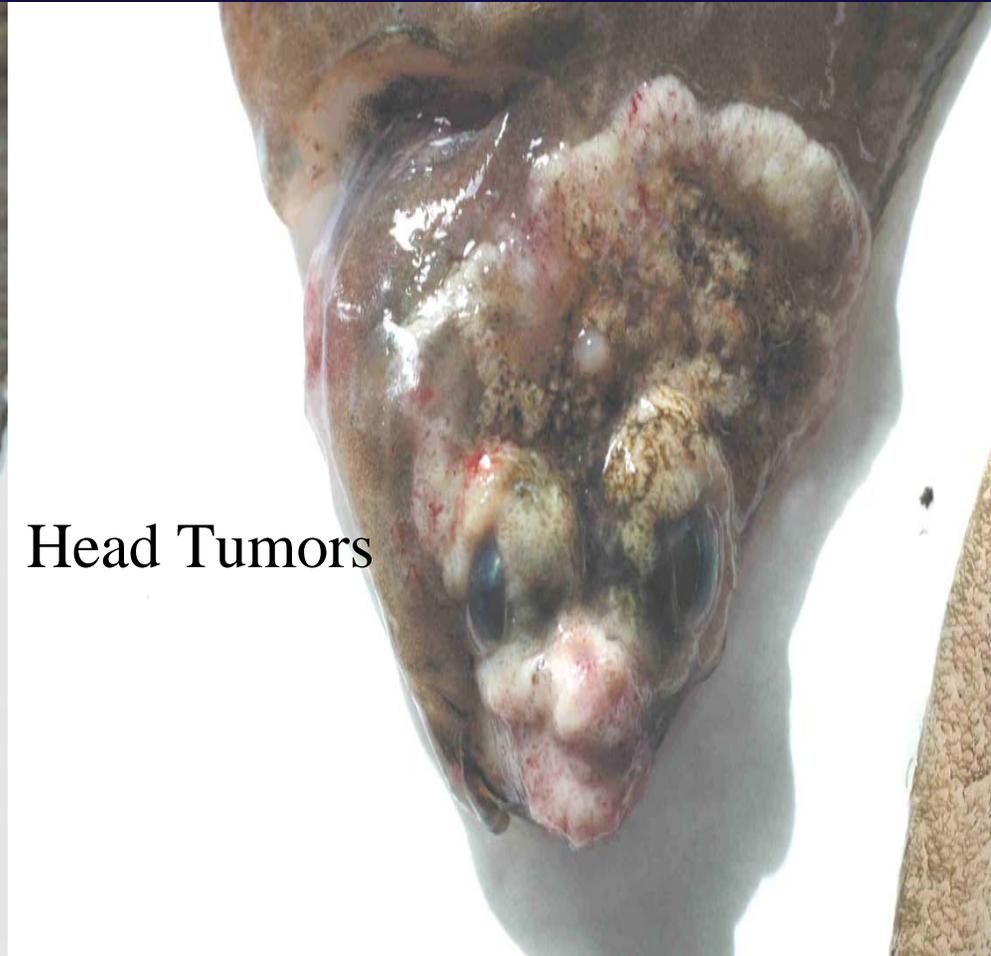
Shrimp with ulcer and/or lesions



❖ When you fish for ground fish anywhere near a fish farm, they come up full of sea lice and also have ulcers and lesions all over them.



Sole Tumor



Head Tumors

These parasites are always around any type of sewage



Arrow tooth with parasites



Rex copepods
with parasites



Area 12: Salmon Spawning Streams



Date: January 28, 2004

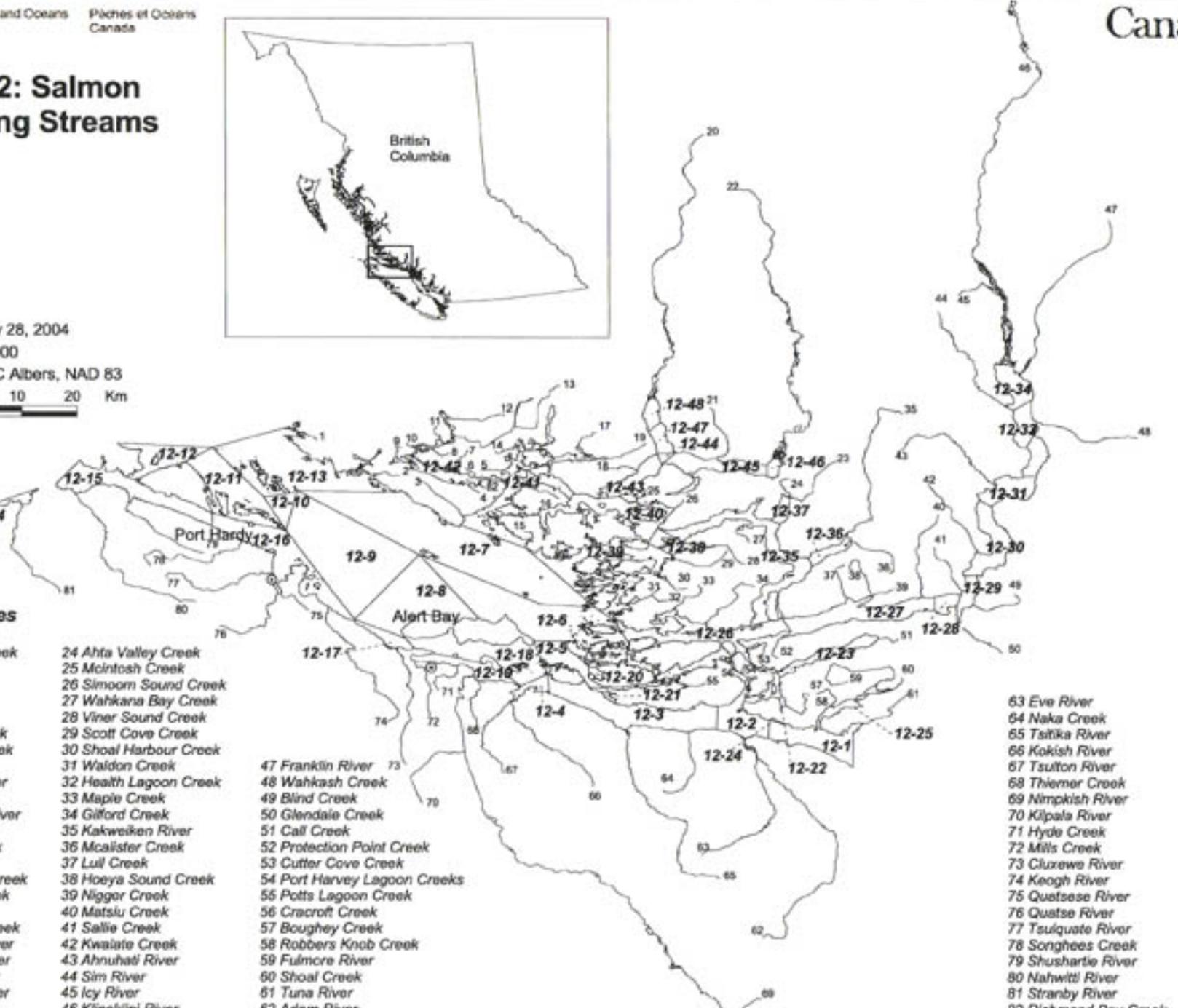
Scale 1:950,000

Projection: BC Albers, NAD 83



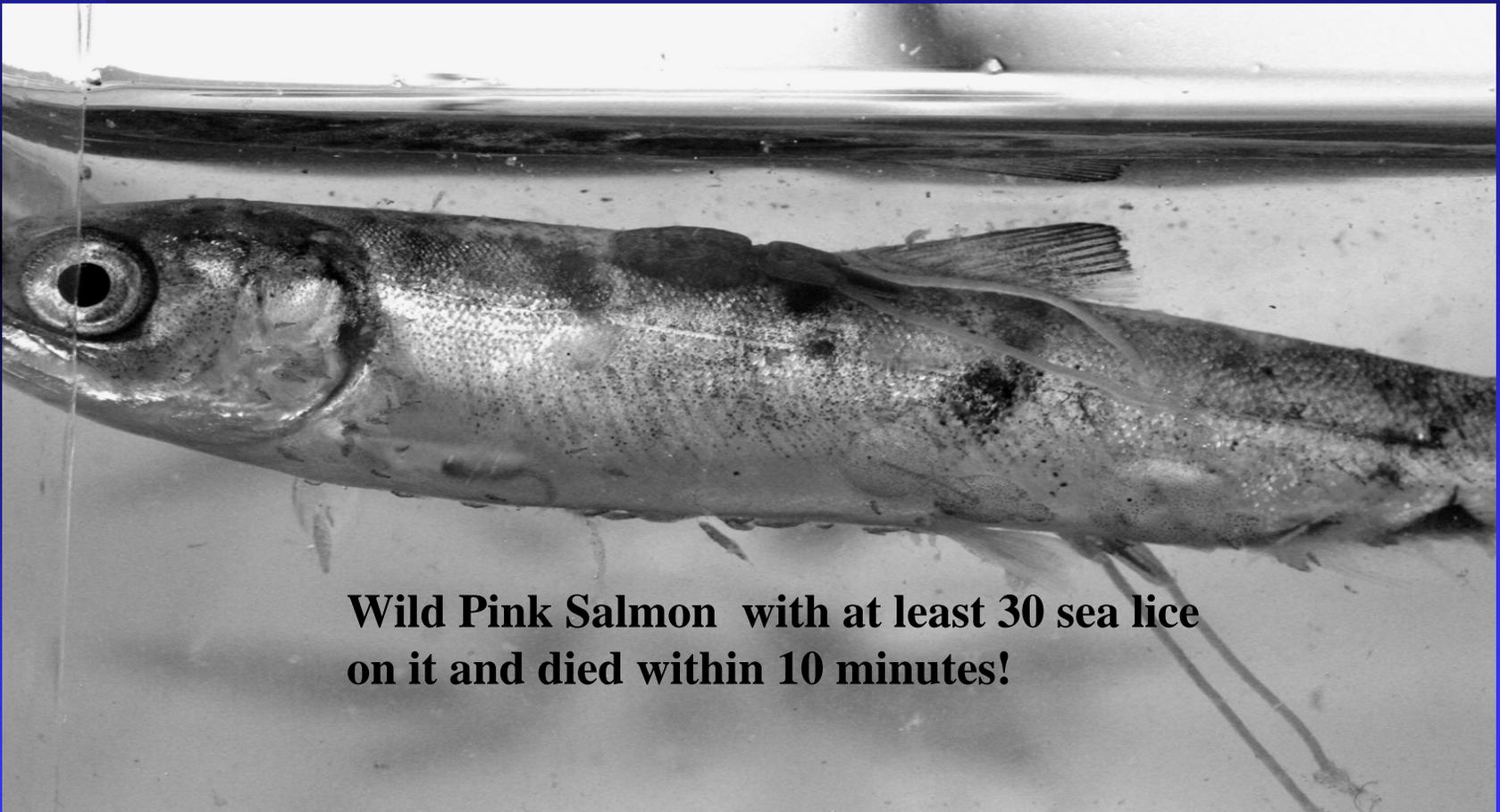
Stream Names

- | | | | |
|-----------------------|------------------------|------------------------------|-----------------------|
| 1 Shelter Bay Creek | 24 Ahta Valley Creek | 47 Franklin River | 63 Eve River |
| 2 Coho Creek | 25 McIntosh Creek | 48 Wakkash Creek | 64 Naka Creek |
| 3 Kenneth River | 26 Simoom Sound Creek | 49 Blind Creek | 65 Tsitika River |
| 4 Tancred Creek | 27 Wakkana Bay Creek | 50 Glendale Creek | 66 Kokish River |
| 5 Carriden Creek | 28 Viner Sound Creek | 51 Call Creek | 67 Tsulton River |
| 6 Bughouse Creek | 29 Scott Cove Creek | 52 Protection Point Creek | 68 Thiemer Creek |
| 7 Jennis Bay Creek | 30 Shoal Harbour Creek | 53 Cutter Cove Creek | 69 Nimpkish River |
| 8 Hand Creek | 31 Waldon Creek | 54 Port Harvey Lagoon Creeks | 70 Kilpala River |
| 9 Sutherland River | 32 Health Lagoon Creek | 55 Potts Lagoon Creek | 71 Hyde Creek |
| 10 Skeene River | 33 Maple Creek | 56 Crocroft Creek | 72 Mills Creek |
| 11 Creasy Bay River | 34 Gifford Creek | 57 Boughey Creek | 73 Cluzawa River |
| 12 Marion Creek | 35 Kakweiken River | 58 Robbers Knob Creek | 74 Keogh River |
| 13 Hauskin Creek | 36 Mcalister Creek | 59 Fulmore River | 75 Quatsese River |
| 14 Embley Creek | 37 Lull Creek | 60 Shoal Creek | 76 Quatse River |
| 15 Phyllis Lake Creek | 38 Hoeya Sound Creek | 61 Tuna River | 77 Tsuigate River |
| 16 Allardyce Creek | 39 Nigger Creek | 62 Adam River | 78 Songhees Creek |
| 17 Nimmo Creek | 40 Matslu Creek | | 79 Shushartie River |
| 18 Ellen Cove Creek | 41 Sallie Creek | | 80 Nahwitl River |
| 19 Mackenzie River | 42 Kwalate Creek | | 81 Stranby River |
| 20 Wakeman River | 43 Ahnuhal River | | 82 Richmond Bay Creek |
| 21 Charles Creek | 44 Sim River | | |
| 22 Kingcome River | 45 Icy River | | |
| 23 Ahta River | 46 Klinaklini River | | |



Open net cage fish farms are harming and infecting our Traditional Foods and the environment.

❖ Fish farms are floating “hotels” for sea lice and diseases. Sea lice is another big issue as they are killing our wild salmon, this is another huge issue that needs to be studied.



Wild Pink Salmon with at least 30 sea lice on it and died within 10 minutes!

Sea Lice 2002



June 15, 2006
Tribune channel



Sea Lice 2004



Sea Lice 2003

WUBC
May 31, 03

THIS IS THE IMPACT OF OPEN NET PEN FISH FARMS ON OUR RESOURCES



Sea Lice
Pink Salmon Fry



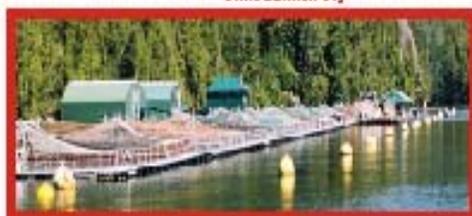
Sea Lice
Pink Salmon Fry



Sea Lice
Pink Salmon Fry



Ulcer / Tumor
Shrimp



Fish Farms



**Degraded Health
of Shellfish Population**



Parasites
Sole



Tumor
Sole



Tumor
Sole



Parasites
Sole Copepod



MTTC partnered on a clam study in 2004/05. We took samples of clams, the sediment and also of rockfish from near the farms.

As a result of the rockfish samples there was a mercury contaminant paper peer reviewed. As this was a Health Canada funded study we were limited in what we could look for in contaminants.

Tested in the samples taken were:

Metals: mercury, arsenic,

PCB's, and

Pesticides: DDT, HCH, Heptachlor EPOXIDE

RESULTS WERE: There were contaminants found in most samples but there are not high enough levels and are below CFIA levels.

And it was stated that there was no causal link to the fish farms because we were unable to get any feed, bottom samples and fish samples from the industry people as they would not provide them to us.

What do we do now?

As stated earlier, MTTC was mandated by the members and bands for the removal of all open net cage fish farms from our territories. In the interim MTTC would engage in negotiations with industry for the transition of new technology, preferably closed containment systems. As these systems will eliminate the transmission of disease, parasites, and waste into the environment and protect our resources in our territories.

We need to work with the BC government and the salmon farm industry and come to some kind of compromise and work towards this end goal.

To end all this I'd like to say that the contamination from these farms will affect us all in the long run. We all know about all the salmon gone missing, and our clams and clam beds turning into dead zones. This is why. It is having a great affect on all the resources as you've seen in this presentation.

As First Nations, and the non-native community of this country we all need to stand together and get the government to live up to their responsibility to protect our resources and the environment in our territories. So speak up and email, write, fax your concerns to both the province and the federal governments.

GILAKASLA(Thank you), Robert Mountain