

AFFIDAVIT OF MICHAEL E. JACOBS

I, Michael E. Jacobs, Fisheries Manager, Haisla Fisheries Commission, presently residing in Kitimat, BC, MAKE OATH AND SAY THAT:

1. I am the Fisheries Manager for the Haisla Fisheries Commission. The Haisla Fisheries Commission implements annual projects under DFO's Aboriginal Fisheries Strategy (AFS). I am not a band-member, but contracted by the Haisla Nation Council to fulfill this role.
2. I have been employed as the Haisla Fisheries Manager for 3 years. Prior to that, I worked in various positions supporting fisheries research and development in British Columbia for 23 years; working with Provincial and Federal agencies, other First Nations, community conservation groups, industry and the general public. I am a graduate of the Sir Sandford Fleming College of Applied Sciences' Fish and Wildlife Program.
3. In my capacity as the Haisla Fisheries Manager, I have worked with members of the Haisla Nation on a variety of issues, including community consultation on marine use planning, industry development, habitat restoration and compensation, commercial and communal fisheries development (including food, social and ceremonial harvesting), catch-monitoring, conservation issues, stock assessment, and fisheries program development and expansion.
4. As a result of my work with Haisla Nation members, I have acquired knowledge and information about the use of fish and other marine resources by Haisla Nation members. My past work, with more than 20 other BC First Nations, and

my relations through marriage (my wife is Gitksan) have provided me with knowledge of First Nations food-harvest techniques, traditions and customs.

5. The Haisla Nation harvesting calendar could be described as starting in March, with the taking of oolichan (also spelled eulachon). These were formerly fished in the Kitimat, Kildala and Kemano Rivers (and occasionally at 5 other Haisla watersheds), but are now imported from the Nass and Skeena Rivers.
6. Once the oolichan have been harvested, they are processed by individual families, communally (as in former camps), or as a community project (most recently), and are eaten fresh, smoked or as a grease (rendered). I am told that in former times of abundance, oolichans were harvested by clans, at traditional camp locations. Teaching, story telling, and seasonal celebrations occurred in association with the return of the oolichan. In recent years, the inability of the community to meet subsistence needs has resulted in a community effort to bring traditional foods back to the community. The Haisla Fisheries Commission assists with this process at both administrative and technical levels.
7. The harvesting and processing of oolichan is an important cultural practice for Haisla Nation members. The re-establishment of the oolichan runs in the Kitimat and other Haisla oolichan streams, together with increasing access to traditional foods, especially fish, was identified by community members as their highest priority in recent community consultations for marine use planning.
8. In April and May, and continuing into the summer, Haisla Nation members typically troll and net Chinook (spring) salmon returning to the Kitimat River and its tributaries. They also crab, catch prawns and shrimp, gather sea-cucumber, gather seaweed on the outer coastlines, collect sea-gull eggs, longline for halibut and groundfish, and take steelhead trout from rivers.
9. Traditionally, April and May were also the months during which the Haisla Nation members gathered abalone from the outer coastlines. This practice has been

discontinued, due to the blanket ban on abalone harvesting under Canada's *Species at Risk Act*.

10. From June to September, members of the Haisla Nation fish for salmon in-river and in approach areas, using nets or by angling. The different salmon species arrive in approximately the following sequence: steelhead, Chinook (spring), sockeye, pink, chum, coho.
11. From June to September, members of the Haisla Nation also continue to long-line for all groundfish species, harvest sea-cucumbers, crab, and catch prawns and shrimp.
12. From October to February, Haisla Nation members engage in bivalve harvesting. This harvest consists primarily of cockles and butter clams taken at low night-time tides. Haisla Nation members also harvest muscles, and continue to crab and catch prawns and shrimp.
13. From October to February, Haisla Nation members also troll for "winter" springs. These are primarily Columbia River and Oregon State (US) Chinook, feeding in Haisla waters at this time of the year.
14. The Columbia River Chinook prey species (typically herring and formerly oolichan) are also harvested at this time. Herring are caught by net, rakes (historically), and herring "spawn" is also collected on seaweed. The Haisla have witnessed a gradual come-back of herring in the Kitimat area in recent years. Returns in 2011 resulted in both Haisla harvest of spawn on kelp and adult herring.
15. Finally, October to February is also a time for hunting moose, deer and goat, as the snow pushes the animals toward the valley bottoms and shorelines. Similarly, it is a time for bird hunting, with seasonal spring/fall migrations.

16. All the resources discussed above are harvested at locations that are passed down as traditional knowledge or are communicated in-season. The known and utilized locations vary by species, and I am told historically varied by clan.
17. There are over 70 identified salmon spawning streams identified in DFO's Statistical Area 6 (North), which includes the Kitimat River and its tributaries. Attached hereto as Exhibit "A" are a map of Area 6 North and a list of the salmon spawning streams.
18. In the Kitimat River, the Haisla Nation salmon harvest takes place throughout the drainage to roughly 40 km upstream of the mouth. The upper area, above the Highway 37 bridge, is especially important to Haisla Nation members, as it is restricted to food, social, and ceremonial salmon fishing only (i.e. no sport fishing for salmon is permitted).
19. The Haisla Nation operates a Community Food Fishery, to ensure that traditional foods and resources are distributed to members of the community who can no longer gather these foods and resources themselves. The Haisla Fisheries Commission typically coordinates harvesting and delivery, Haisla Health staff assist with distribution, and the community ("on and off-reserve" in the Kitimat area) receives equal portions, based on availability and harvested amounts.
20. The Haisla Nation Community Food Fishery is administered by both the Haisla Fisheries Commission and the Haisla Health Department, and is seen as integral to the health and well-being of the entire community.
21. The Haisla Community Food Fishery includes fishing for halibut. The Haisla communal license limit for halibut is currently 17,000 pounds, but is in the process of being raised because it hasn't been elevated to keep up with population growth. This year the Haisla food fishing crew brought in 2,500-3,000 pounds of halibut per two-day trip.

22. There are currently more than 20 Haisla commercial fish boats, which are used both for commercial fishing as well as food fishing. There are also new fishermen learning and acquiring boats while elders retire and concentrate on the occasional food fishing trip. While doing focused community food fishing, fishermen are paid for their hours. The food-fish contribution by these experienced commercial fishermen, to the community, is tremendous. Depending on what's running or biting, these trips may stay as close as Kitimat Arm, Kildala, or the lower Gardner Canal; or they may have to go further. This is a livelihood for the fishermen and an important aspect of the continuing Haisla traditional diet. In-river fishing also occurs, once adult salmon return to freshwater.
23. Most Haisla adult men fish at some point during the year. They are not sport fishermen so they fish with a native food fishing credential. They go out when the runs are happening and, consistent with the *nuyem*, bring home fish for elders and neighbours as well as for family members. The majority of them are fishing with small boats, which has an effect on how far they can go. Fishermen with a 15 foot skiff and a 10 horsepower motor, which many Haisla use because of the price of gas these days, will necessarily be heading for grounds and runs close to Kitamaat village. Others may be working out in the territory and, while working, might set a net and put out a crab trap; when work is done for the afternoon, they lift the net and the trap; as well, they may fish for an hour on the way home. They fish because it is the Haisla thing to do and because it isn't uncommon for community members to eat seafood more than once per day.
24. Food fish are vital to the Haisla diet. The value of the food fish contribution by these experienced fishermen, on the well-being and cultural continuity of the Haisla, is far beyond the value of the fish if they were sold.
25. The Haisla Nation coordinated an Escapement Salmon Surplus Requirement (ESSR) fishery in 2011. This fishery involves careful, regular escapement surveys of particular streams or rivers within Haisla traditional territory, calculating the annual escapement of the target species relative to figures

collected for those rivers over the past 30 years. When a surplus is established, based on this monitoring, an in-river fishery is permitted that can be harvested for commercial purposes. This coming year (2012) will be the second year of this program. Surveys are under way by helicopter in the Chist, Upper Kitimat, Dala, Kildala, Brim, Kemano, Kitlope (including sockeye), Wahoo, Bees and Lower Kitimat watersheds. This initiative is a Haisla Nation Fisheries enterprise, conducted as a commercial activity, separate from the Haisla Community Food Fishery.

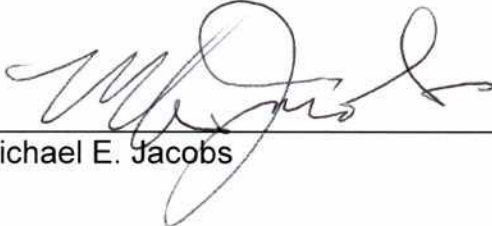
26. The ESSR fishery currently targets pink salmon, as the most viable and sustainable economic ESSR opportunity. Given the two-year life cycle of pink salmon, the ESSR pink fishery is particularly vulnerable to even a small spill in the Kitimat River or Kitimat Arm, which could spread to several of the other watersheds involved.
27. The Haisla Fisheries Program also manages and leases commercial crab, prawn, salmon and halibut licenses (and quota) through its annual AFS agreement, on behalf of the Haisla Nation Council. In 2012, most of these licenses will be fished by Haisla fishermen and primarily within Haisla territorial waters.
28. Contemporary locations for the family food fishing are often close to Kitimaat Village and, thus, also close to the proposed terminal and tanker moorage. Their contribution to the maintenance of Haisla tradition is accepted by all community members to be simply irreplaceable.
29. Haisla food fishermen have been fishing in areas that would be impacted by a spill or possibly by the turbulence of large props and tanker/tender movement in the Campania, Caamano Sound, and Wright Sound entry area.
30. The Haisla Nation is in the process of preparing a Marine Use Plan, to guide future use and protection of marine resources in Haisla Nation territory. This plan, currently in draft format, will help guide the community, government,

industry stakeholders, and the public, in the future (sustainable) use of finite and renewable marine resources within Haisla territory.

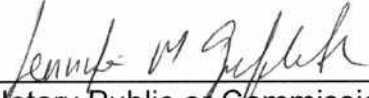
31. The Kitimat River watershed contains many important salmon tributary streams. Pacific salmon and steelhead inhabit the Kitimat River watershed on a year round basis, in various stages of development according to each species' biology. The Kitimat River also supports Dolly Varden (char), cutthroat trout, oolichan, various species of "course" fish, and other important estuarine visitors such as dungeoness crab, halibut, flounder and sole.
32. While adult Pacific salmon typically migrate from May to December, adult steelhead may enter the river at any time during the year. Depending on the species, many juvenile salmonids can be found rearing within the watershed at all times of the year (e.g. steelhead, coho, sockeye and Chinook).
33. Separate "year-classes" (generations) may also be found utilizing the same habitat. Gee-trapping in the lower Kitimat River in October 2011 yielded 1-, 2- and 3-year old coho salmon fry – all using the same pond complex. These juveniles were present within the Kitimat River at the same time as 2011 adults. Three year-old ("jacks") and 4 year-old adults were also present within the returning 2011 run. Thus, up to 5 generations of coho were present at the time of sampling. Some resident species (e.g. Dolly Varden) spend their entire lives within the watershed.
34. The Kitimat River ecosystem has a number of characteristics which suggest it may be particularly vulnerable to an oil spill. The proposed pipeline route through the Kitimat River valley passes through remote and difficult to access areas, which will lead to a delay in the ability to respond and contain a spill.
35. Further, multiple year classes of salmon, steelhead, trout and char and steelhead, as well as recently deposited eggs may be in the river at the same time. Prevailing summer drought conditions can result in most adult salmon spawning in the mainstem or holding at the mouths of their tributaries of origin (as happened in 2010).

36. In addition, extreme high tides could result in dispersal of any spilled hydrocarbons throughout the estuary and intertidal areas, making recovery a challenge.
37. Finally, weather and tide phenomenon that I have observed, such as 30-knot southerly in-flow winds, could hamper or even prevent recovery. A rapid tidal drop, to a low-low tide, would result in transport of spilled hydrocarbons to the outer coast via Douglas and Devastation Channels.
38. The aquatic resources of the Haisla people have experienced environmental pressures from industrial-scale logging, heavy industry, commercial fishing, hatchery introgression, hydro-electric facilities, "ship-source" pollution, habitat loss and poor ocean productivity (possibly associated with global warming). The Haisla Nation is currently engaged in the following activities to assist in ecological recovery: marine use planning, habitat restoration, salmon and oolichan enhancement, public education, environmental monitoring, riparian and marine plant restoration, industrial upgrades, stock assessment, and strategic planning for species at risk, along the Kitimat River and throughout Haisla territory. Healthy fish habitat and healthy fish are paramount to the survival of the culture and the historic way of life for the Haisla.

SWORN [OR AFFIRMED] BEFORE ME
 at Kitimaat Village (City),
 in the Province of British Columbia
 this 14th day of December, 2011.



 Michael E. Jacobs

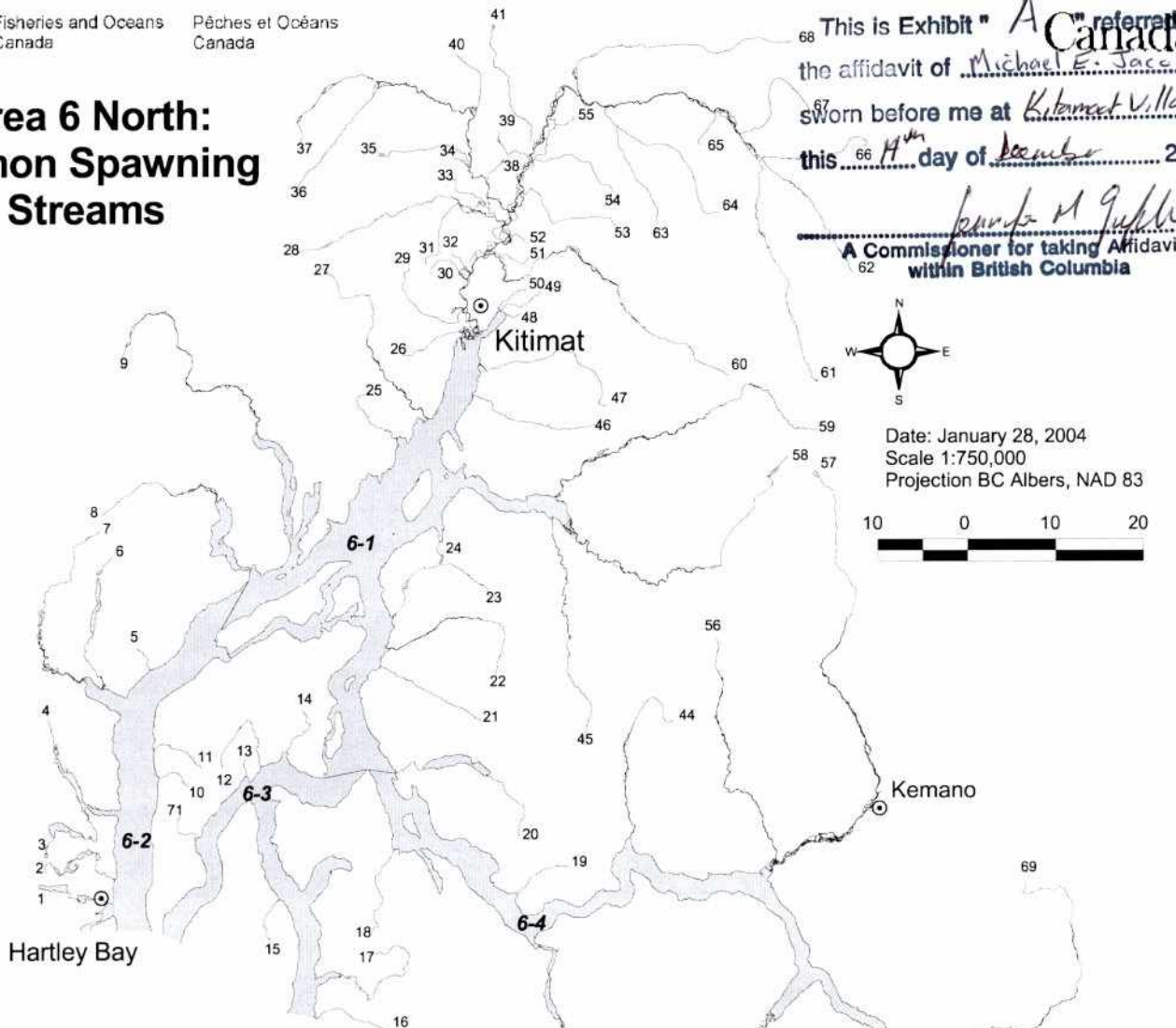


 A Notary Public or Commissioner for
 Oaths in and for the Province of
British Columbia

JENNIFER M. GRIFFITH
 BARRISTER & SOLICITOR
 SUITE 100 - 73 WATER STREET
 VANCOUVER, B.C. V6B 1A1



Area 6 North: Salmon Spawning Streams



This is Exhibit "A" referred to in
the affidavit of Michael E. Jacobs
sworn before me at Kitimat Village BC
this 66th day of December 2011
Kevin M. Jubber
A Commissioner for taking Affidavits
within British Columbia

Date: January 28, 2004
Scale 1:750,000
Projection BC Albers, NAD 83

10 0 10 20 Km



Stream Names

- 1 Gabion River
- 2 Keesil Creek
- 3 Missed Creek
- 4 Kiskosh Creek
- 5 Kihess Creek
- 6 Kitkiata Creek
- 7 Quaal River
- 8 Foch River
- 9 Gilttoyes Creek
- 10 Little Tillhorn Creek
- 11 Big Tillhorn Creek
- 12 Verney Passage Creek

- 13 Fishtrap Bay Creek
- 14 Evelyn Creek
- 15 Riordan Creek
- 16 Angler Cove Creek
- 17 Goat River
- 18 Paril River
- 19 Hotspring Creek
- 20 Crab River
- 21 Pike Creek
- 22 Weewanie Creek
- 23 Hugh Creek
- 24 Eagle Bay Creek
- 25 Emsley Creek
- 26 Moore Creek

- 27 Bish Creek
- 28 Little Wedeene River
- 29 Anderson Creek
- 30 Duck Creek
- 31 Bowbyes Creek
- 32 Goose Creek
- 33 Trout Creek
- 34 Eleven Mile Creek
- 35 Raley Creek
- 36 Aveling Creek
- 37 Wedeene River
- 38 Iron Mine Creek
- 39 Deception Creek
- 40 Lone Wolf Creek
- 41 Cecil Creek
- 42 Kowesas River
- 43 Kiltuish River
- 44 Brim River
- 45 Falls River
- 46 Wathlsto Creek
- 47 Wathl Creek
- 48 M.E.S.S. Creek
- 49 Minette Creek
- 50 Pine Creek

- 51 Cablecar Creek
- 52 Powerlines Creek
- 53 Nalbeelah Creek
- 54 Humphrys Creek
- 55 Mcneill Creek
- 56 Wahoo River
- 57 Kemano River
- 58 Kildala River
- 59 Dala River
- 60 Hirsch Creek
- 61 Kitimat River
- 62 Davies Creek
- 63 Bolton Creek
- 64 McKay Creek
- 65 Tellock Creek
- 66 Hoult Creek
- 67 Hunter Creek
- 68 Chist Creek
- 69 Tsaytis River
- 70 Kitlope River
- 71 Hawksbury Island Creek

MAPSHEET: AREA 06N

7	QUAAL RIVER	QUAAL RIVER		910-713900-00000-00000-0000-000-000-000-000-000-000	00000KUMR	91-9400-000-000-000-000-000	1086
35	RALEY CREEK	RALEY CREEK		910-673500-19300-21600-0000-0000-000-000-000-000-000-000	00000KITR	91-9000-100-100-000-000-000	1063
15		RIORDAN CREEK	RIORDAN RIVER	915-566500-58300-00000-0000-0000-000-000-000-000-000-000	00000KHTZ	97-6950-180-000-000-000-000	1905
65	TETLOCK CREEK	TETLOCK CREEK		910-673500-60100-00000-0000-0000-000-000-000-000-000-000	00000KITR	91-9000-500-000-000-000-000	1075
33		TROUT CREEK		910-673500-17000-14500-0000-0000-000-000-000-000-000-000	00000KITR	91-9000-080-020-000-000-000	1058
69	TSAYTIS RIVER	TSAYTIS RIVER		910-618500-00000-00000-0000-0000-000-000-000-000-000-000	00000TSAY	91-8310-000-000-000-000-000	1033
12		VERNEY PASSAGE CREEK		915-567300-75400-00000-0000-0000-000-000-000-000-000-000	00000KHTZ	97-7200-258-000-000-000-000	1907
56		WAHOO RIVER	WAHOO CREEK	910-627400-01800-00000-0000-0000-000-000-000-000-000-000	00000TSAY	91-8510-000-000-000-000-000	1035
47	WATHL CREEK	WAUGH CREEK		910-670400-00000-00000-0000-0000-000-000-000-000-000-000	00000KITR	91-8980-000-000-000-000-000	1046
46	WATHLSTO CREEK			910-669300-00000-00000-0000-0000-000-000-000-000-000-000	00000KITR		2655
37	WEDEENE RIVER	BIG WEDEENE RIVER		910-673500-19300-00000-0000-0000-000-000-000-000-000-000	00000KITR	91-9000-100-000-000-000-000	1060
22	WEEWANIE CREEK	WEWAMIE CREEK		910-649000-00000-00000-0000-0000-000-000-000-000-000-000	00000TSAY	91-8780-000-000-000-000-000	1040
71		HAWKSBURY ISLAND CREEK		915-567300-86300-00000-0000-0000-000-000-000-000-000-000	00000KHTZ		3553