IN THE MATTER OF TRANS MOUNTAIN PIPELINE ULC TRANS MOUNTAIN EXPANSION PROJECT

DECLARATION OF LORRAINE LOOMIS

LORRAINE LOOMIS makes this declaration on behalf of the Swinomish Indian Tribal Community, an intervenor in the above proceedings, and declares as follows:

Background and Qualifications

1. I am Lorraine Loomis. I am a Native American and a member of the Swinomish Indian Tribal Community (hereafter, "Swinomish"), an Indian tribe recognized under the laws of the United States government. My tribal name is Itakbix. I was born and raised on the Swinomish Reservation, currently reside on the Reservation, and have lived on the Reservation for almost all of my life.

2. The Swinomish Reservation is located on Fidalgo Island in Puget Sound, in Skagit County, Washington. The Reservation is just north of the mouth of the Skagit River, the only river in Washington that still supports runs of all six species of salmon. Swinomish has just over 1,000 tribal members, most of whom live on or near the Reservation. In the past I served as a member of the Swinomish Senate, the governing body of the tribe, for 15 years.

3. I am currently employed by Swinomish as the Fisheries Manager, a position I have held for 40 years, since 1975. In that capacity I am responsible for the overall management and regulation of the Swinomish fisheries, including the off-reservation treaty rights fishery. As Fisheries Manager I oversee a staff of fisheries biologists and technicians, manage all of the tribal fisheries, participate in preseason planning and develop management plans for all fisheries, establish regulations for and open and close fisheries, issue various permits and licenses to tribal fishers, register fishing vessels, and the like.

4. In addition, a large part of my job involves discussions and negotiations with other tribes, the State of Washington, the United States government, and international organizations regarding the regulation and conduct of the various fisheries. My work with four of these organizations is described in the following four paragraphs. A number of others could be listed as well.

5. At the local level is the Skagit River System Cooperative (SRSC), a consortium formed in 1975 by Swinomish and the Sauk-Suiattle Tribe that is dedicated to the health of the salmon fisheries and habitat on the Skagit River, which is crucial to our fishing activities. SRSC

employs about two dozen fisheries scientists and technicians who work on research, habitat restoration, improvement of water quality, and the like. I oversee the work of this staff.

6. At the intertribal level, the Northwest Indian Fisheries Commission (NWIFC) is an entity formed by all twenty of the tribes in the State of Washington that have treaty fishing rights. The primary mission of NWIFC is to assist and support its member tribes in their role as co-managers (with the State of Washington) in managing the fisheries of the State. NWIFC's staff of 65 performs a wide variety of functions in research, modeling, policy formulation, environmental and habitat protection, and just about anything else related to the tribes' treaty fisheries. Each tribe has a representative on the NWIFC Board. I have served on the Board since 1978, was Vice Chair of the Board for 30 years, and since last year have served as its Chair.

7. At the statewide level, the primary salmon process is the "North of Falcon" process, in which the Washington Department of Fish and Wildlife and the tribes come together annually to decide on the harvest quotas and regulations for all of the salmon fisheries within the State of Washington, from the offshore limit of the State's jurisdiction to the terminus of each stream's salmon run. Each of the 20 tribal fisheries and all of the various state sport and commercial fisheries is included. The process results in a large List of Agreed Fisheries (LOAF) that provides for the tribes and the State to each achieve the harvest of its 50% share of the harvestable surplus of each species of salmon. Other co-management processes result in agreed fisheries in the various species of shellfish in the various management regions.

8. The Pacific Salmon Commission is an important international body that affects treaty fishing in the State of Washington. The Fraser River Panel of that Commission oversees the harvest in the U.S. and Canada of Fraser River salmon, which run through U.S. waters on their way back to the Fraser. I have served on the Fraser River panel since 1988, at times in the capacity of chair of the U.S. section of the panel.

9. In my capacity as Fisheries Manager for Swinomish for four decades, and in light of my service with various intergovernmental fisheries management agencies, including the four described in paragraphs 5 through 8, above, I have become familiar with Swinomish fishers, Swinomish fishing practices, Swinomish history regarding the fishery, the role of fishing in the tribal economy, the regulation and management of the Swinomish fishery, the legal and governmental framework in which the fishery operates, and the environmental and habitat threats to the health of the fishery.

Swinomish Treaty Fishing Rights

10. In a series of treaties with the U.S. government in 1854 and 1855, The Indian tribes of Puget Sound and the Washington coast from Gray's Harbor north ceded their aboriginal lands to the U.S. and retained reservations of land along with hunting, fishing and gathering rights. These treaties are commonly referred to as "Stevens treaties" because the U.S. negotiator was Washington Territorial Governor and Indian Agent Isaac Stevens. Each of the treaties reserved to each tribe the right to fish in its "usual and accustomed grounds and stations,"

commonly referred to as "U&As." The term "fish" is broad and includes both finfish and shellfish and other aquatic invertebrates.

11. The treaty fishing rights of the tribes were comprehensively interpreted and decreed in a U.S. federal district court decision in 1974 commonly called the "Boldt decision," named after the judge who rendered it. This case laid down the basic framework for conduct of the treaty fishery that have applied ever since. The court retained continuing jurisdiction which it exercised to this day, and the parties are constantly availing themselves of the court to resolve disputes. It is no small part of a tribal fisheries manager's tasks to appear in court or attend court-supervised mediations on fishing matters.

12. From a fisheries manager's perspective, the main rules pertaining to treaty fishing rights that affect the fishery relate to U&As, conservation, allocation, tribal self-regulation, and co-management. These principles will aid in understanding the tribal harvest data that comes later.

a) U&As. Each tribe has a court-defined area of U&As in which it can exercise treaty fishing rights. These areas are different for each tribe and overlap, making regulation a challenge. As many as seven or eight tribes may have U&As in a given area; some tribes are alone with U&As in other areas.

b) Conservation. The treaty tribes are not allowed to take as much as they want. Managers must ensure that the needs of conservation—the propagation of fish for the future—are met, and only the harvestable surplus after conservation needs are met may be harvested.

c) Allocation. The treaty tribes are allowed to take up to 50% of the harvestable surplus, and the rest is available for non-treaty fishers. Basically, state and tribal fishers each get half the harvest in treaty waters.

d) Tribal Self-Regulation. The courts have ruled that if a tribe is capable of regulating its own fishery to protect conservation, it must be allowed to do so. The state can regulate tribal harvest only if the tribe is incapable of regulating its own fishers. For decades now all of the treaty tribes in Washington have been regulating their own fisheries.

e) Co-management. The 50-50 allocation and tribal right to self-regulation led to the evolution of a co-management process under which the tribes and state reach agreement on harvestable surplus and on how each side should regulate the fishery. The North of Falcon process described in paragraph 7 is the co-management process for salmon, and there are other joint management efforts in place for other species as well.

13. Swinomish traces its treaty fishing right to a particular Stevens Treaty, the Treaty of Point Elliott, Jan. 22, 1855, 12 Stat. 927. That treaty also established the Swinomish Reservation, which has been home to the Swinomish ever since. I am a direct descendant of two of the chiefs who signed the treaty for the Swinomish tribes and bands, Kwallattum and Goliah.

The marine fishing U&As established for Swinomish in the Treaty of Point Elliott extend from the Canadian border south to a few miles beyond the southern tip of Whidbey Island. They border the Kinder Morgan shipping route from the U.S./Canada border until ships have passed well to the west of Victoria B.C.

Swinomish Treaty Fishing—Commercial

14. Swinomish has recently gathered information on its treaty fishery based on a questionnaire that was developed for use in a recent report on vessel traffic impacts on Lummi fishing done by Glosten and Associates. The Swinomish response played no part in that study but was prepared and presented to the U.S. Army Corps of Engineers for consideration in connection with the approval process for the Gateway Pacific coal dock at Cherry Point, Washington. I have attached that questionnaire and the Swinomish responses as Exhibit A to my Declaration. The responses were prepared by the fisheries staff at my direction based upon Swinomish fishing data contained in the NWIFC tribal treaty fishing database, TOCAS. Please note the exhibit does not include data for the entire Swinomish treaty fishery in most responses. For most responses, it only includes the areas shown and named on the map on page 1 of Exhibit A. This area includes the northern and western portions of Swinomish U&As that are likely to be directly affected by TransMountain pipeline expansion vessel traffic, including associated anchoring and bunkering. I will refer to this portion of Swinomish U&As, shown on the map attached to Exhibit A, as the "Affected Area" in the remainder of this Declaration. Swinomish has not recently fished in the Strait of Juan de Fuca West area, so that area is not included in the Affected Area. Swinomish treaty fishing in the Skagit River and the more southern and eastern part of its marine U&As are not included. I will compare some features of this Affected Area to the Swinomish treaty fishery as a whole later in this Declaration.

15. Swinomish is today, and always has been, very much a fishing community. Table 7 of Exhibit A shows that a large portion of the tribe engages in some form of commercial fishing. In 2013, 162 members registered for salmon fishing and 200 for Dungeness crab in the Affected Area. That is around 20% of the Swinomish membership, one in five of every Swinomish man, woman and child. Some of the fishers are engaged full time in the various tribal fisheries, while others fish part time during certain seasons to supplement their income. Most hire deckhands, who must be Swinomish members.

16. The Swinomish fishing fleet is locally based; 95% moored their boats on the Reservation (LaConner) and the rest at nearby Anacortes. Exhibit A, #16. The harvest is much more widely marketed, however, with some of it delivered to Vancouver, B.C. Exhibit A, Table 11.

17. Swinomish commercial fishers pursue every available commercial harvest in the Affected Area: sockeye, pink, coho, chum, chinook, steelhead, crab, shrimp, halibut, clams, oysters, sea cucumber, sea urchin, and geoduck. Exhibit A, #1. The species of primary importance in the Affected Area are salmon, followed by crab. Exhibit A, Table 2.

18. Swinomish fishes throughout the Swinomish U&As in the Affected Area for all the species it pursues (except for geoduck, clams and oysters in the Haro Strait-Boundary Pass

area). Exhibit A, Table 1. The fishing is particularly heavy in the areas Strait of Juan de Fuca East and Haro Strait/Boundary Pass, areas directly affected by shipping traffic from Canada traveling to the ocean through the Strait of Juan de Fuca. Exhibit A, Table 4.

19. The Swinomish fishery is dominated by small boats, in the Affected Area and throughout its fishery. In 2013, 87% of the tribally registered vessels in the Swinomish fleet (all tribal fishing vessels must be registered) were under 30 feet in length. Of those, a third were under 20 feet in length. Only three of the 113 boats were 50 feet or longer. Exhibit A, Table 6. This affects the inclusion of our fleet in vessel traffic studies, because most of the vessels are too small to have automatic locator devices. Our fleet is invisible to such systems and thus excluded from some vessel traffic studies that rely on the automated system information.

20. Swinomish fishing methods vary with the fishing location and species being harvested. Fishers use pots for crab and shrimp, set-lines for halibut, seines for all species of salmon, and drift gillnets for chinook and chum salmon. Exhibit A, #7, 8, Table 5. In addition, fishers dive for geoduck, sea cucumbers, and sea urchins and dig for clams and oysters.

21. Swinomish fishing effort is spread throughout the year. In every year since 1997, Swinomish fishers had at least one landing of catch in each of the months of the year. Exhibit A, Table 9. The largest concentration of fishing is in July through September, but fisheries are also quite active in March through May and in November. *Id.* In 2013, Swinomish fishers made 1,785 harvest landings, most of which were for crab, though the fewer landings for salmon and halibut involve larger catches per landing. Exhibit A, Table 8.

22. Many fishing openers during the year, especially for crab, shrimp, salmon, and halibut, are of short duration—a few days or even hours. These openers are spread throughout the year. Swinomish commercial fishing boats are on the water about half the days of the year, and land a harvest on about 40% of the days of the year (146 days). Exhibit A, Table 10.

23. Swinomish engages in a considerable part of its fishing activity and gains a considerable part of its harvest from the Affected Area. In 2013 Swinomish fishers harvested almost 3 million pounds of fish from the Affected Area. Exhibit A, Table 2. That is 9,000 pounds per fisher or $1\frac{1}{2}$ tons per tribal member. The major portion of the harvest was salmon, which accounted for over half the harvest by weight. Crab accounted for about 15% of the total. Exhibit A, Table 2.

24. Attached as Exhibit B is a table showing 2013 numbers for the revenue generated by the Swinomish fishers from harvest in the Affected Area, along with the total Swinomish harvest and revenue in its entire fishery. This table was generated by my staff under my direction from Swinomish fishing data available on NWIFC's treaty database, TOCAS. The revenue generated from the sale of harvest by Swinomish fishers in the Affected Area was \$3,625,500. This was just about half of the revenue from all Swinomish commercial fisheries (49%). This accords with the share of harvest from the Affected Area, which is just over half on the Swinomish harvest (52%). The harvest numbers and values reveal a difference between the fisheries in the Affected Area produces relatively more of the salmon harvest (57%) and all of the

lucrative halibut harvest by Swinomish. Conversely, the Affected Area produced only 37% of the total crab harvest. The two areas thus complement each other in seasons and fisheries resources available.

25. The Swinomish community also benefits from the tribal commercial fishery in another way. Since 1968 a fish processing plant has been operating on the Swinomish Reservation. The plant began as a tribal operation, but after a few years was leased out to a private operator. In 2009, Swinomish formed the Swinomish Fish Company and took over operation of the plant. The plant has a number of product lines, primarily involving the processing of salmon, and has launched the Native Catch® line of seafood products, mostly salmon. Swinomish Fish Co. is also major producer of salmon roe caviar primarily for export to Europe and Asia. The plant purchases crab and other local harvests as well. It is a major purchaser of tribal member harvest, and its wholesale purchasing activities help to support the price fishers obtain for their fish. The plant also purchases fish from other sources, tribal and non-tribal alike, including fish from British Columbia. Swinomish Fish Company generated several million dollars in sales last year. The plant would likely close if there were no tribal treaty harvest to process.

26. In summary, the Swinomish treaty fishery in the Affected Area is a crucial component of the overall tribal fishery that generates significant income. Since almost every Swinomish household includes a fisher (one of every 5 tribal members), that income is diffused through the whole tribal community. A decline in tribal fishing would seriously affect the tribal economy.

Swinomish Tribal Fishing—Subsistence and Ceremonial

27. The economic impact of tribal treaty commercial fishing is very important to the tribes, including Swinomish, but it is not the only value of the fishery nor, in the end, is it the most important one. The court decisions following the Boldt decision have drawn the contours of the tribal treaty fishing right have identified four basic values associated with the treaty right: 1) conservation value of the resource, 2) ceremonial, religious and spiritual values; 3) subsistence; and 4) commercial value. As a fisheries manager I address the conservation value every day, and the tribes have invested much in the conservation of the resource and the protection of habitat. The previous section dealt with the commercial value of the right. I now want to take up the subsistence and ceremonial aspects of the Swinomish treaty fishery.

28. The tribes have a right to engage in subsistence fishing, meaning fishing for personal or household consumption and not for sale. Commercial fishing has a subsistence component, since all commercial fishers reserve from their catches fish for their families and to distribute to extended family, elders and others in need in the community. Sharing of the bounty of the sea is a deeply engrained cultural tradition of the Coast Salish tribes. It is particularly strong at Swinomish, where the bounty of the Skagit River, the adjacent tidelands, and the strong marine fisheries close to the Swinomish Reservation presented an abundance of fisheries riches. The people thrive as a community around the sharing of fish.

29. Like all of the other treaty tribes, Swinomish has a system of issuing permits for subsistence harvest of fish. These harvests are by nature small and make up a small portion of the tribe's overall fishery, Exhibit A, Table 3. But the subsistence fishery is important to sustaining the circulation of fish throughout the community. Subsistence fisheries may be open when commercial fisheries are not, making fresh seafood products more readily available.

30. Subsistence on fish is much more important to Swinomish and other treaty tribes than it is to the general population. Fish and shellfish are a major part of the Swinomish diet. Swinomish conducted a scientific survey of its fish consumption. The summary of the results of that survey, *Swinomish Seafood Diet Survey 2004–2006*, are attached as Exhibit C. The survey showed that the Swinomish people eat significantly more fish and shellfish—over twice as much than does the general population. In addition, it revealed that tribal members would like to eat even more, but are unable to do so for various reasons, including lack of access, abundance, fear of pollution, and harvest time restraints. That subsistence and dietary relationship between the people and the treaty fishing harvest is a strong strand of the tribal culture. Swinomish would not be Swinomish without this marine diet.

31. The treaty fishing right also includes the right to take fish for ceremonial purposes. This harvest directly addresses the ceremonial, religious and spiritual values of the treaty fishing right. As the Fisheries Manager I manage these fisheries too. They take place under permit and the catch counts toward our allocation share. But it is as a community member and leader that I most appreciate the significance of the ceremonial fishery.

32. Feasting on the bounty of sea and river, and particularly on salmon, is a central feature of almost every Swinomish ceremony or gathering, as is true throughout the whole Coast Salish culture. Some of the ceremonies mark important events for an individual or family— birth, death, naming, marriage, and the like. They also feature prominently as the core of community events, such as the Coast Salish Gatherings, the Canoe Journey, and the First Salmon Ceremony. For example, at the first Salmon Ceremony recently held at Swinomish on May 14, the whole community, staff and invited guests feasted on salmon, clams, mussels, shrimp, crab, and other fruits of the sea. The ceremonies are an integral part of our culture, and the ceremonial food is essential to the ceremonies.

33. The act of fishing, the circulation of harvest within the community, the dietary reliance upon the harvest, and the importance of salmon and other species to the Swinomish culture and spiritual life, give treaty fishing rights a value that far transcends the economic value as a commodity. The treaty fishing right was meant to preserve our culture and way of life revolving around fishing and the fish harvest. As a fisheries manager, I am mindful of the need to preserve the fishery in order to preserve our identity as a tribe.

Impact of Proposed Pipeline Expansion on Swinomish Treaty Rights

34. I am aware that the proposed expansion of the TransMountain pipeline in Canada by building a second pipeline next to the existing one would lead to at least a five-fold increase in the amount of crude oil shipped by tanker along the shipping route in the Salish Sea. These tankers would follow the U.S./Canada border through Boundary Pass and Haro Strait, then west

through the Strait of Juan de Fuca, travelling right along Swinomish U&As and the area where our fleet fishes, until the tankers pass Victoria on their way to sea. I am also aware that it is likely that some, and perhaps many, of these tankers will anchor and bunker in U.S. waters near Vendovi Island, in the Saddlebag, Guemes, and Rosario Strait areas, an important part of our northern fishery. This increase in large vessel shipping will hurt our treaty fishing, further degrade the fishery habitat, and create an undue risk of catastrophic oil spill that could destroy vast areas of the fishery in our U&As for a generation or more.

35. The increase in vessel traffic in the area in which Swinomish fishes will increase the vessel traffic interference with the exercise of treaty fishing rights. Such studies were recently completed or are underway in the U.S., however. The recently released study of vessel traffic interference with the exercise of treaty fishing rights in the Affected Area, by Glosten and Associates, is limited to the Lummi Tribe. This report is attached to the Written Evidence submitted by the four U.S. tribes as Appendix B. Recently Swinomish, along with the Suquamish and Tulalip Tribes, commissioned a study, *Tribal Fishing Navigation Risk Assessment*, by Marico Marine Risk Consultants Ltd., which should be completed this summer. The study will include the Affected Area.

36. Swinomish tribal fishers already suffer from interference with their treaty rights due to shipping. Fishers must generally avoid shipping lanes, and the busier the traffic the more this is so. Ships frequently travel outside the traffic lanes, making matters worse. Vessels at anchor or bunkering create additional interference with areas of productive tribal fisheries. Fuel barges and tug escorts further reduce the space available to tribal fishers. Kinder Morgan's increase in traffic will only make matters worse.

37. Gear loss is of particular concern, because it harms the fisher directly and deprives the fisher of present and future fishing. Gear loss due to vessel traffic occurs throughout the fishery. The worst places, however, include locations near the shipping lanes in Haro Strait and the high traffic vessel anchoring and bunkering areas in the vicinity of Vendovi Island, areas that will be affected by traffic increase due to the pipeline expansion. Exhibit A, #9 a and b.

38. The increase in shipping traffic will also cause environmental damage that will further degrade fisheries habitat in the Salish Sea. The degradation of fisheries habitat was documented in *Treaty Rights at Risk: Ongoing Habitat Loss, the Decline of the Salmon Resource and Recommendations for Change,* July 14, 2011, a report from the treaty tribes of Western Washington. The portion dealing with the statement of the problem is attached to this Declaration as Exhibit D. The study identifies protecting existing salmon habitat as the most important action needed to protect salmon stocks.

39. In addition to the sorts of air and water pollution and disturbance of seabed that come with shipping and anchorages of large vessels, the five-fold increase in oil shipments creates an equally large increase in the risk of a catastrophic oil spill. Kinder Morgan's application did not address the effect of a catastrophic event in U.S. waters on tribal fishing protected by U.S. treaties, but it is obvious that a spill does not respect international boundaries and will go where the winds, tides and currents take it. Such an event will very likely affect

treaty fishing; how much will depend on the dispersion of the oil. Kinder Morgan's own dispersion models for a catastrophic spill at Arachne Reef in Volume 8 of its submittal demonstrate adverse impacts on our shellfish gathering and fishing, because they predict dispersion of oil onto beaches and into fishing grounds, within Swinomish U&As and those of other U.S. treaty tribes. The four U.S. Tribes commissioned a review of the Kinder Morgan submission as it relates to U.S. tribal treaty fishing. The review, by Marico Marine Risk Consultants, Ltd., is attached to the fpur U.S. tribes' Written Testimony as Appendix A. It concludes that TransMountain did not adequately address impacts on U.S. tribes' treaty fishing rights, but there is a demonstrable impact that will interfere with the exercise of those rights. App. A, 2.8.

The odds of such a spill arising from an increase in shipping due to Kinder 40. Morgan's pipeline expansion and other causes was recently calculated in a study under a U.S. Environmental Protection Agency grant to Puget Sound Partnership, the Vessel Traffic Risk Assessment 2010 (Mar. 31, 2014) (VTRA), which I am informed is being submitted as part of the written testimony of the Washington Department of Ecology. Swinomish believes that VTRA is a flawed study that understates the risk; Swinomish submitted a peer review of the study to the study authors, that was not incorporated into VTRA's final publication. But even the VTRA's understated original estimate of potential oil spill releases showed a dramatic increase in risk of 375%, compared to the average increase of risk across the whole study area above 2010 baseline levels, due to the increase of 696 Kinder Morgan tanker trips (and 42 bunkering trips in support) annually. VTRA 2010 at 11, 12, 18, 91, Table 11. Earlier, in a presentation by the study-author to a steering committee on February 13, 2014 that Swinomish staff attended, the risk of oil spill at Haro Strait from Kinder Morgan traffic was shown to be increased six times above 2010 levels. In both cases, these substantial increases in oil spill risk were attributed directly to the interactions of Kinder Morgan's increased tanker and barge traffic with other vessels in the already risky areas along the oil tanker route at Boundary Bay, Turn Point, and Haro Pass within the Affected Area.

41. Swinomish commissioned review of the VTRA study which pointed out its flaws. Attached as Exhibit E is the VTRA critique, *Peer Review: Vessel Traffic Risk Assessment 2010*, Marico Marine Risk Consultants, Ltd., Mar. 7, 2014. The Peer Review identifies a number of shortcomings, but an important one I want to emphasize is that VTRA studies only groundings, allisions and collisions, which can result in catastrophic spills but do not account for 70% of spills, which are much more common but not as large. The frequency of these spills in U.S. waters alone indicates that the increase in vessel traffic due to the pipeline expansion will almost certainly increase the number of smaller incidents, particularly because there will be an increase in bunkering and tug activity, both of which are frequent sources of spills. Whether the treaty fishery will be harmed by a catastrophic spill or by as thousand cuts from smaller spills, the treaty fishery is likely to be damaged by spills stemming from the pipeline's increased traffic.

Treaty Fishing Rights on the Brink

42. In my 40 years as the Swinomish Fisheries Manager, I have seen the promise of treaty fishing rights energize the tribal community and bring it new prosperity, only to preside over the gradual practical diminishment of the right as the habitat upon which our primary

species, salmon, depends steadily erode the salmon harvest. In 1975, the year after the Boldt decision, the treaty tribes collectively took just a few percent of the Washington salmon harvest. Now they regularly take their treaty entitlement of 50%—but the amount of salmon harvested is almost the same as it was in 1975! My fellow managers and I have presided over the drastic decline of salmon harvest, and it was not due to harvest itself, which is better managed than it has ever been. Today my salmon management worries as co-chair of North of Falcon center on how to maintain mixed stock harvests when there are stocks of endangered salmon runs in the mix.

43. I'll share just one other observation of the decline from a manager's perspective. As far back as the collective memory serves, and in my early days as a fish manager, it was easy to obtain salmon and other species for ceremonies, and the harvest was done by volunteer fishers who rotated the chore through the community. Today, with all of the harvest restrictions on seasons and the pressures of making a living, this is less true, though we have volunteers when time and season allows. I have taken to freezing the harvest from test fisheries (which cannot be sold) for ceremonial purposes, but sometimes we don't have enough and there isn't a season open or the quota is already harvested. Our culture suffers a little whenever this happens.

44. The decline of fisheries is a problem across almost all of our harvests, and does not just include salmon. But salmon is the bellwether species, and the health of the Swinomish community is linked to the health of the salmon in so many ways. I think we may be reaching a tipping point, and the rush of new projects like the TransMountain pipeline expansion is pushing against our treaty rights, taking away the areas where we fish and killing the fish by destroying the habitat. I fear I will end my lifelong stewardship of the Swinomish fisheries resources by presiding over the dim and fading twilight for our fishing right and our culture.

Signed this 26 day of May, 2015, at LaConner, Washington.

<Original signed by>

Lorraine Loomis

ATTACHMENTS TO DECLARATION OF LORRAINE LOOMIS

(Exhibits A-C)

Cherry Point Cherry Point Hero Strat: Bundary Pass Strat of Juan do Fuca West Strat of Juan do Fuca West Strat of Juan do Fuca West

Questionnaire

Fisheries

1. What fisheries do the Swinomish fishermen participate in? Sockeye, pink, Chinook, Coho, chum, steelhead, crab, shrimp, halibut, clams, oysters, sea cucumber, sea urchin, geoduck.

2. Referring to the map above, please identify what types of fish that Swinomish generally fish for in each area and check the corresponding boxes in Table 1, below. Also, please use a star to indicate the area where the most fishing takes place within each fishery.

Fishery	Strait of Juan de Fuca	Strait of Juan de Fuca	Haro Strait- Boundary	Rosario Strait	Saddlebag	Guemes Channel	Cherry Point	San Juan Islands
	West	East	Pass					
Salmon		Х	Х	Х	X	Х	Х	Х
Halibut		Х	Х	Х	X	Х	Х	X
Dungeness		Х	Х	Х	Х	Х	Х	Х
Crab								
Geoduck,		Х		Х	Х	Х	Х	Х
Clams, and								
Oysters								
Sea		Х	Х	Х	X	Х	X	Х
Urchins								
and Sea								
Cucumbers								
Shrimp		Х	Х	Х	Х	Х	Х	Х
Other								
Total		X	X	X	X	X	X	X

Table 1. Swinomish fishing locations.

Note: If the "Other" row is filled out, please include the list of species that would apply to this group.

3. Please complete Table 2 with the volume in pounds of the annual Swinomish fishery harvest for *each* fishery in each of the last three years (2011, 2012, 2013).

Fishery	2011	2012	2013
Salmon	1,959,948	204,816	2,417,076
Halibut	23,662	17,781	34,441
Dungeness Crab	454,096	384,457	428,590
Geoduck, Clams, and			
Oysters	36,079	29,510	10,221
Sea Urchins and Sea			
Cucumbers	19,427	46,997	52,814
Shrimp	24,909	30,385	51,049
Other			
Total	2,518,121	713,945	2,994,192

 Table 2. Swinomish harvest volumes in the questionnaire catch areas.

The catch numbers in this table and associated values in all following tables are only for the catch areas in the questionnaire map above. They do not include Skagit Bay/River, for example.

4. Please fill out the cells in Table 3 to indicate what portion (percent of total pounds) of each fishery is commercial versus subsistence or ceremonial.

Commercial	Subsistence/Ceremonial	Total Harvest
98.2%	1.8%	100%
95.8%	4.2%	100%
99.9%	0.1%	100%
100.0%	0.0%	100%
100.0%	0.0%	100%
99.8%	0.2%	100%
		100%
	98.2% 95.8% 99.9% 100.0% 100.0%	98.2% 1.8% 95.8% 4.2% 99.9% 0.1% 100.0% 0.0%

Table 3. Swinomish Commercial, Subsistence, and Ceremonial Volumes, 2013

Note: The sum of the two center columns should total 100 percent

5. Using the map on page 2, please estimate the percentage of time spent in each area during these fishing trips in the following table.

Fishery	Strait of Juan de Fuca West	Strait of Juan de Fuca East	Haro Strait- Boundary Pass	Rosario Strait	Saddlebag	Guemes Channel	Cherry Point	San Juan Islands
Salmon		10	20	15	20	5	5	25
Halibut		60	20	3		2	5	10
Dungeness Crab		10	5	5	40	5	15	20
Geoduck, Clams, and		50	5	5	5	5	5	25

 Table 4. Swinomish Fishing Time Estimates.

Oysters							
Sea	30	5	5	5	5	5	45
Sea Urchins							
and Sea							
Cucumbers							
Shrimp	45	15	5	5	5	5	20
Other							

Note: If the "Other" row is filled out, please include the list of species that would apply to this group.

Gear

6. We would like to learn more about reef net fisheries. Generally speaking, in which areas (as identified by the map on page 2) are the Swinomish reef net sites that are used today?

Swinomish does not fish any reef nets.

a. How many vessels are typically at a reef net site? N/A

b. What is the level of activity at these sites, as measured in days per year? N/A

7. What is the primary gear used by tribal fishermen for halibut fishing? *Set-lines*.

8. What portion of the total annual Swinomish salmon harvests are caught using each gear type? Please fill out the shaded areas of Table 5 (the total column should equal 100 percent).

Fishery		Percent of Total Harvest										
	Drift Gillnet	Set Gillnet	Seine	Reef Net	Other	Total						
Chinook	11.5	0	88.5	0	0	100						
Chum	1.4	0	98.6	0	0	100						
Coho	0	0	100	0	0	100						
Pink	0	0	100	0	0	100						
Sockeye	0	0	100	0	0	100						

Table 5. Swinomish Harvest Data by Gear Type in the Questionnaire Catch Areas, 2013.

9. Please provide any data that the tribe has on volume of gear lost by type, location, and year.

The Swinomish Tribe does not have long-term data on gear loss. However, gear is susceptible to loss from damage to buoys or nets by recreational, commercial, ferry, shipping, and other vessel traffic, as well as theft.

a. Is gear loss due to vessel traffic more common in some areas over others? Please explain in detail.

Crab pots commonly placed near Lopez Island are particularly vulnerable to vessel traffic, as they are in or near shipping lanes and ferry routes. Other locations near shipping lanes in Haro Strait and Rosario Strait are also particularly susceptible to gear loss, as are locations near the high traffic vessel/barge anchoring and bunkering areas in the vicinity of Vendovi Island, and near the Anacortes and Cherry Point refineries and their associated oil tanker traffic.

b. Are certain types of gear more likely to be interfered with by vessel traffic than others? Please explain in detail.

Crab and shrimp pots are likely to be interfered with by vessel traffic because of the proximity of fishing locations to shipping lanes, and because the gear is unattended for periods of time. Some halibut fishing grounds (such as Smith Island) are in or near shipping lanes, making halibut gear vulnerable in these locations. Salmon gear placed in locations with heavy vessel traffic or near shipping lanes, such as Haro Strait, Rosario Strait, and Boundary Pass, are also vulnerable.

Vessel Activity

10. What is the breakdown of Swinomish fishing vessels (seiners, gill netters, skiffs) by vessel type and size (length overall)? Please fill out the shaded areas of Table 6.

Vessel Type	5-20 ft	20-30 ft	30-40 ft	40-50 ft	50-60 ft	60+ ft	Total
Seiners							
Gillnetters							
Skiffs							
Total	34	64	12		1	2	113

Table 6. Swinomish Fishing Vessels by Size, 2013.

Swinomish doesn't register boats by vessel type, so only the total number of boats in each size class are reported here. The 3 boats 50+ feet in length are all purse seiners.

11. What is the total number of Swinomish tribal vessels in each fishery, and how many actually participated in each fishery in 2013? Please fill out the shaded areas of Table 7.

 Table 7. Number of Swinomish fishers and boats by species, 2013.

Fishery	Registered	Active Boats
	Fishers	
Salmon	162	15
Halibut	77	29
Dungeness	200	89
Crab		
Geoduck,	17	8
Clams, and	(+70 diggers)	(+10 clams)
Oysters		
Sea Urchins	17	8
and Sea		
Cucumbers		
Shrimp	52	26
Other	0	0
Total	525	177

Swinomish does not keep track of vessel type and participation in most fisheries. Instead, I've listed the number of individual fishers that sold catch in each of the fisheries during 2013, as a rough estimate of the number of active boats. However, in some cases multiple fishers on a single boat may report their catch separately. Individual fishers/boats may participate in more than one fishery type.

12. Is the number of participants in 2014 expected to be higher or lower than in 2013? *The number of participants varies year to year depending on the harvestable number of fish available and the number of days a fishery is open. Because 2014 is expected to have a very strong Fraser sockeye return, the number of participants in the salmon fishery may be greater than that in 2013.*

13. What is the estimated number of vessel traffic days that Swinomish vessels are fishing in Puget Sound waters? Please estimate the average numbers of trips that Swinomish vessels made by type and fishery in 2013, as well as the typical duration of each trip (one trip equals two transits). This estimate may be expressed in a range; for example, 20-25 trips, 8-12 hours each.

Fishery	Total La	andings	Gilln	etters	Ski	ffs
	Annual Trips	Length of Trips	Annual Trips	Length of Trips	Annual Trips	Length of Trips
Salmon	284					
Halibut	141					
Dungeness Crab	1,121					
Geoduck, Clams, and Oysters	41					
Sea Urchins and Sea Cucumbers	83					
Shrimp	115					
Other	0					
Total	1,785					

Table 8. Swinomish Vessel Trips, 2013.

Swinomish does not track the participation of vessels in individual fisheries or trip lengths. Instead, I have reported the number of landings, by species, for 2013. The number of landings can reasonably be considered a proxy for the number of vessel trips. The length of trips is highly variable depending on the location fished, launch point, delivery point, and duration of the fishery.

14. Please estimate the average annual (by month), number of Swinomish fishing vessel trips (one trip equals two transits) for 1997 through 2013.

Table 9. Number of landings by year and month, 1997-2013.

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Jan	15	14	5	19	18	20	78	22	13	15	16	7	129	68	44	41	73
Feb	8	5	21	20	69	24	46	41	31	6	43	22	107	94	61	41	70
Mar	2	31	38	28	78	24	30	48	33	26	51	112	90	127	83	107	105
Apr	18	58	14	32	10	7	11	42	30	51	88	92	122	51	63	73	58
May	13	167	12	8	8	15	3	5	17	18	31	29	23	27	37	56	230
Jun	2	9	36	126	84	16	60	47	86	96	33	4	2	147	1	33	31
Jul	47	218	209	406	350	413	339	215	499	352	385	288	448	256	304	372	381
Aug	579	340	200	291	405	196	318	235	197	306	362	332	108	325	419	250	277
Sep	379	192	70	107	78	146	228	323	225	285	171	156	206	269	120	169	275
Oct	109	109	210	21	140	111	56	214	235	227	263	200	298	188	160	168	84
Nov	48	32	74	11	75	74	25	55	16	23	32	32	116	189	198	81	120
Dec	25	14	30	14	13	144	22	34	11	13	21	32	72	85	97	75	81

As in # 13 above, the number of landings roughly equals the number of vessel trips, so are used as a proxy.

Table 10. Number of days that a landing occurred by year and month 1997-2013.

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	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Jan	5	11	1	13	7	12	17	16	3	8	8	4	5	13	13	12	22
Feb		2	6	13	9	5	16	3	1	4	14	10	19	12	14	9	13
Mar	1	12	9	14	13	3	8	11	4	16	13	9	25	7	2	16	14
Apr	3	21	2	16	2	2	1	16	2	20	6	12	20	5	9	14	7
May	4	22	6	6	1	2	1	2	1	8	3	12	5	2	7	7	10
Jun	1	5	6	8	3	2	2	2	1	7	2	4	1	1	1	2	1
Jul	3	20	8	19	2	5	7	11	12	21	12	14	12	6	12	9	9
Aug	14	25	20	20	13	12	7	23	15	14	13	14	9	8	11	10	16
Sep	12	14	21	12	13	13	8	14	23	18	8	5	15	7	7	5	4
Oct	12	23	19	7	22	12	8	16	17	16	13	6	9	13	22	20	5
Nov	19	7	25	2	24	13	9	3	3	6	14	2	26	20	22	12	20
Dec	12	3	15	6	5	24	9	5		6	10	2	16	22	15	27	25

15. Do shellfish harvesters typically travel to and from their harvesting areas using vessels? If so, please describe.

Vessel trips are required for crab, shrimp, and geoduck fisheries, but not as frequently for clam fisheries.

16. Where are most Swinomish fishing vessels moored? 95% in La Conner, 5% Anacortes

17. Where are Swinomish fish delivered? Please fill out the shaded areas of Table 11. If more than one location applies, specify the percentages delivered to each.

Fishery	Delivery Location
Salmon	La Conner (89%), Bellingham (8%), San Juans (2%),
	Blaine (1%)
Halibut	La Conner (84%), Bellingham (6%), San Juans (7%),
	Anacortes (4%)
Dungeness Crab	La Conner (80%), Mt. Vernon (7%), Bellingham (6%),
	Blaine (2%), Ferndale (2%), Anacortes (1%), San Juans
	(1%), Other (<1%)
Geoduck, Clams, and Oysters	La Conner (81%), Kent (9%), Bellingham (5%), Seattle
	(2%), Anacortes (1%), Vancouver B.C (1%), Other
	(<1%)
Sea Urchins and Sea Cucumbers	Marysville (59%), La Conner (23%), Bellingham (14%),
	Port Townsend (2%), San Juans (1%)
Shrimp	La Conner (49%), Anacortes (27%), Vancouver B.C.
	(12%), San Juans (4%), Mt. Vernon (5%), Bellingham
	(3%)
Other	

 Table 11. Swinomish Delivery Locations, 2013

Percentages are based on the total number of landings for each fishery and may not add up exactly to 100% because of rounding.

Fishery Management

18. Are tribal fisheries managed in terms of access days and times? If so, how? *Yes. Fisheries are opened during specific days, times and areas. The fishing schedules for some fisheries are set preseason, while other fisheries are planned only days ahead of time via conference call with other tribal and co-managers.*

19. Are the tribe's scheduled opening and closure days the same as those for non-tribal fishermen?

Not typically.

20. How are Swinomish (and other Indian) fishing vessels identified so that they can be distinguished from non-Indian fishing vessels?

Swinomish vessels are identified with their ID number WN - _ _ - SWN. The three spaces between the WN and the SWN are filled by numbers.

Swinomish 2013 Harvest

Fishery	Harvest Volumes in ALL	Total Value in ALL	Total Value in Affected	
	Swinomish Catch Areas	Swinomish Catch Areas	Swinomish Catch Areas	
Salmon	4,233,109	\$1,985,115	\$1,047,423	
Halibut	34,441	\$186,987	\$186,987	
Dungeness Crab	1,265,154	\$4,271,054	\$1,782,207	
Geoduck, Clams, and				
Oysters	90,308	\$249, 093	\$62 <i>,</i> 845	
Sea Urchins and Sea				
Cucumbers	54,617	\$116, 942	\$114,272	
Shrimp	69,652	\$550,263	\$431,765	
Other	0	\$0	\$0	
Total	5,747,282	\$7,359,452	\$3,625,500	

Results for the Swinomish Seafood Diet Survey

Summary:

The results are based on interviews with 72 adult Swinomish tribal members in 2004-2006. The data show that the Swinomish people eat significantly more finfish and shellfish than the general population, recreational fishers and even some other area Tribes.

These rates are *suppressed*, meaning that Swinomish people, in general, would like to eat more seafood than they do, but cannot for a variety of reasons (lack of access, abundance, fear of pollution, harvest time constraints). Using suppressed rates with out a disclaimer in environmental standards and regulations could lock the Tribe into creating a false baseline of fish consumption, and thus environmental health, by saying that the waters do not need to be cleaned up more than can support the current fish consumption rates (if the Tribe seeks to increase fish consumption in the future, it may not be "safe" to do so due to contamination).

Table 3. Summary of consumption rates for the consumers of the 72 adult respondents.

Consumption	Number of			25%		75%	80%	85%	90%	95%	
Variable	Consumers	Mean ± SD	Min	Quantile	Median	Quantile	Quantile	Quantile	Quantile	Quantile	Max
Total Seafood, g/day	72	118 ± 136	8	40	80	133	152	186	259	384	674
Fin Fish, g/day	71	49 ± 63	2	15	26	51	62	89	113	156	388
Shellfish, g/day	71	72 ± 113	1	15	34	75	80	100	144	272	587

Table 4. Other WA area Fish Consumption Rate Survey Results (in grams per day, g/day)

Population	Number of	Mean	50 th percentile	90 th percentile	95 th percentile
	Adult Surveys				
General Population (consumers	2,853	56	38	128	168
only)					
CRITFC Tribes	464	63	41	130	194
Tulalip Tribes	73	82	45	193	268
Squaxin Island Tribe	117	84	45	206	280
Suquamish Tribe	92	214	132	489	797
Recreational Fishers –marine	NA	11-	1.0-21	13-	246
waters (multiple studies)		53			