

LUMMI NATION AQUACULTURE A COMMUNITY-BASED HISTORY

LESSON PLAN

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LESSON PLAN

Historical Question:

Why did Lummi Nation build an aquaculture facility in the 1970s?

Length/Timeframe:

- One week module
- 5 hours of facetime

Teacher materials

- 5-page background lecture, includes description of visuals
- PowerPoint with images (limited text)

Student materials

- Timeline
- 8 annotated primary sources
- Guided reading and research questions

PART I: Introductory Lecture and Discussion

SLIDE 1: Title Slide

SLIDE 2: Map and photo of Lummi Aquaculture Facility

You are looking at the site of the Lummi aquaculture pond on Lummi Nation waters, located on Lummi Bay in Whatcom County, about 90 miles north of Seattle and 20 miles south of the Canadian border. This 750-acre sea pond was constructed between 1970 and 1971 and is still operational. The pond is made up of a mixture of freshwater from the Nooksack River and saltwater pumped from Lummi Bay. It was believed at the time that this mix of fresh and saline water would create the ideal estuarine environment for raising juvenile salmon, an **anadromous fish** that changes from being freshwater fish into ocean-dwelling (saltwater) fish and back again.

The hatchery building that you are looking at was also constructed in the early Seventies to produce small seed shellfish that when large enough are planted on the Lummi Bay tidelands. A **hatchery** is a place where fish eggs are grown for commercial purposes. Today, the hatchery raises clams and oysters that are harvested by community members. It also raises geoduck seed, which is sold to customers throughout Puget Sound.

A note on the map. The Nooksack River's headwaters, route, and delta have changed over the years due to natural and human-made events. The river's name has changed as well, but was always been important to the Lummi. This map gives an approximation of the Nooksack River today, beginning in the North Cascade Mountains and emptying into Bellingham Bay and Lummi Bay, along the Lummi Reservation.

SLIDE 3: Historical Question

Ask students to define the following:

Aquaculture: The cultivation of fish and shellfish in controlled aquatic environments.

Follow-up questions:

1. Have you ever heard of aquaculture before and if so, what are some examples? Likely, at least a few students will be familiar with salmon and oyster hatcheries. Others may have family or friends that are involved with the industry.
2. Any ideas about where you would receive training for this type of work?

Connect student answers to the founding of the Lummi Indian Aquaculture School (LISA) 1973. Explain that by the time the dike had been constructed, the young people, most of whom had been involved with the construction, had “fallen in love with the project” (Deloria, “The Lummi Indian Community,” 136). The tribe developed an aquaculture class to train students, including elders, about raising fish and oysters. The growth of LISA coincided with the Lummi Nation’s development of several other projects to create jobs, professional training, and housing on the reservation. The Lummi aquaculture project was also an inspiration to other tribes. During the 1980s and 1990s, LISA evolved into what is now Northwest Indian College (NWIC), the only accredited tribal college in the northwest United States.

In this lesson, you will listen to a 20-minute introductory lecture, review a timeline, carefully read eight primary sources, and listen to voices of those who lived through this time. Together these materials will help you to determine why the Lummi chose to develop their aquaculture facility when they did, how they did it, and why this project is historically significant. The assessment for this lesson is an 800-word essay using evidence from a minimum of five sources.

Before we look at the sources, we will look at some images to better understand the context for the Lummi decision to build a 750-acre sea pond in Lummi Bay.

SLIDE 4: Nooksack River

This is the Nooksack River. Take a moment to imagine the Nooksack in the fall with a salmon run so plentiful that it seems almost possible to cross the river by walking on the backs of the fish.

This is how Coast Salish people recalled salmon runs in their rivers for thousands of years. In the late 1960s, Lummi elders carried the living memory of such bountiful runs from the late nineteenth century, before industrial fishing, diking, damming, and pollution devastated the population of their salmon and shellfish relatives.

The history of fishing, colonialism, and environmental destruction is critical for understanding why the Lummi Nation decided to pursue the aquaculture project. The Lummi had experienced scarcity of food and other resources during natural disasters, but colonialism made scarcity everlasting, and introduced poverty, a condition that did not previously exist in Lummi society. The Lummi language has no word for “poverty,” and Lummi culture promoted community wellness.

SLIDE 5: Shell Middens on the Northwest Coast

There’s a traditional saying associated with Coast Salish people, “When the tide is out, the table is set.” The saying speaks to the sumptuous dining of the Coast Salish on a wide

range of shellfish – clams, mussels, crabs, shrimp, and oysters – that are native to this region. In eroded banks along the shoreline and the grounds of ancient villages, evidence of historical shellfish harvest and seafood feasts are visible today in shell middens, protected archaeological sites that remain sacred to the Lummi people and contain an abundance of discarded shells, bones, and tools. These sites speak to the abundant wealth of communities that did not know poverty.

SLIDE 6: Reef Net Fishing

Reef net fishing only exists in this part of the world and the design is what allows for the next generation of salmon to survive. Lummi families with hereditary rights exclusively created and owned reef net gear and fishing sites, and Lummi fishermen shared their harvest with other Salish Sea villagers. Historically, Lummi fishermen attached nets to canoes and big rocks weighing a couple hundred pounds anchored the nets to the seafloor – some of these anchors are still visible today in the Salish Sea. In this type of fishing, you're not following the fish. Fish come to the net. Fishing is also limited to certain tides, and restrictive customs ensure fish for future generations. Traditional drying techniques preserved seafood harvests for the winter months, and for travel, gifts, and trade.

These are methods of fishing and harvesting shellfish that have existed in this area since time immemorial, and as affirmed in the Treaty of Point Elliot (1855), reef net sites throughout the Salish Sea are still reserved for Lummi to fish today. These practices are built on traditional knowledge of place and a deep commitment to communal responsibility for the lands and waters of the Salish Sea.

SLIDE 7: Fish Traps and dam on the Nooksack

In the 1880s and 90s, non-Native industrial fishing companies established massive fish traps throughout the Salish Sea to supply the booming canning industry. In just a couple of decades, fish stocks were devastated because of commercial fishing and settlers' destruction of salmon spawning grounds through logging, draining of marshes for farmland, and diversion and dredging of rivers and streams. Meanwhile new Washington state laws banned traditional Indigenous fishing techniques and white policemen and fishermen forcibly prevented Coast Salish people from fishing in their "usual and accustomed places." Additional factors contributing to salmon loss included industrial wastes, municipal sewage, and hydroelectric dams. By the mid-twentieth century, the salient fact about fishing in the Salish Sea was that there were more fisherman competing for fewer and fewer fish.

With few options, some Coast Salish people chose to participate in the new methods, working alongside white fisherman in commercial fisheries. But for the vast majority of Northwest Native Americans, the arrival of whites had forced them off their fishing grounds

and excluded them from participation in the harvest of what at one time seemed a limitless supply of seafood.

SLIDE 8: Photos from the Final Report to the Economic Development Administration (1975)

For some fishermen, tribal and non-tribal, the response to these declining runs was to figure out a new way of fishing. Some suggested raising fish in pens – farming fish like poultry, so that it becomes the “chicken of the sea.” In other words, construct a pond where shellfish and “pan size” salmon could be reared and sold directly to the public.

Many of you may be thinking, wait a minute, given the effectiveness of their traditional sustainable fishing practices, why would the Lummi embrace this new hatchery science? In this lesson you’ll discover the answer to that question by listening to voices, looking at images, and closely reading original sources from the time. You’ll also discover that while not all the initial goals came to fruition, the decision to go forward with aquaculture put the Lummi in a position to become leaders on preserving salmon runs, a position they maintain to this day.

SLIDE 9: From “Civil Rights” to “Fish-ins”

The Lummi had been defending their fishing and treaty rights since the start of American colonization in the 1850s, including through an 1895 lawsuit against the Alaska Packers Association, which operated illegal fish traps in Lummi waters. Lummi fishermen had frequently faced violence and arrest. But the 1960s opened a new phase of struggle.

The historical context for this lesson plan is the social movements of the 1960s. The African American civil rights movement’s use of nonviolent “direct action” tactics to push national leaders to hold state and local officials accountable to federal law in the South inspired Indigenous activists in Washington State, whose treaties signed with the U.S. government in 1854 and 1855 were legally binding under the Constitution as “supreme law of the land.” Native Americans, along with their supporters, “fished in” on Washington rivers where they had been systematically denied access. Sometimes these were on tribal nation lands, but often they were “off reservation” on the banks of rivers that their ancestors had reserved for them in their treaties. Like the Black students who took direct action by “sitting in” at Woolworth counters in the South knowing that these actions might result in arrest and police brutality, Native activists risked frequent arrests, confiscation of fishing gear, and physical assault.

To defend themselves in court, tribal nations chose lawyers who would speak to their **tribal sovereignty**, meaning self-governance. They argued that the very treaties that had dispossessed them of most of their lands had also reserved them the right to continue fishing in their “usual and accustomed” places, regardless of state laws imposed in subsequent years. The climax of this confrontation came in the summer of 1970 when two hundred game wardens

and state policemen, many of them on horseback, used tear gas and clubs to attack Native “fish in” activists on the Puyallup River while television cameras were rolling. A brilliant tactic, using mainstream media to shine a spotlight on the displacement of the Native fishery by white fishermen, this event was a breakthrough for legal recognition of treaty rights, as well as economic and cultural self-determination.

SLIDE 10: Lisa Cook Capstone Presentation – Time Immemorial

Cue film <https://youtu.be/gdN9rqOrmUI>

Cue 11:45-16:45 – 5 minutes total

Before we look at the timeline and sources, we’ll watch a five-minute section from a video created by Lisa Cook (Wilson) for her capstone project at Northwest Indian College. In it, she includes a clip from the Dick Cavett show (a popular late night television talk show in the 1970s). In this clip, you’ll hear the voices of Wallace Heath, the biology professor at Western Washington State College who approached the Lummi with the idea of aquaculture, and Sam Cagey, one of the members of the **Lummi Indian Business Council** (the Lummi Nation tribal government) who pursued this project as part of a larger effort to reassert tribal sovereignty.

You’ll also hear them talk about the opposition, much of which came from white homeowners living on Lummi Nation lands. Portions of the Lummi Reservation had been broken into privately-owned parcels—known as “allotments”—since shortly after the Treaty of Point Elliot in 1855, and the federal government facilitated the sale of allotments into the early twentieth century. By the end of the 1950s, nearly all of Lummi reservation was in private hands, more than forty percent of it owned by non-Indigenous people, though the Lummi Nation maintained control of the tidelands along Lummi Bay and Bellingham Bay. The aquaculture opponents also included a minority group of Lummi tribal members who favored a plan to build a magnesium oxide plant on Lummi Bay.

The last bit of historical context, which is referred to in the video, and we’ll also review on the timeline, is the set of federal programs initiated by President Lyndon B. Johnson known as the Great Society, or the War on Poverty. For the Lummi Nation, the most significant Great Society antipoverty programs were the Economic Development Administration, the Office of Economic Opportunity, and the Community Action Program, which provided most of the funding for the Lummi Aquaculture Project.

PART II: TIMELINE

The Lummi Nation Aquaculture Project

1953

The federal government initiates a policy called termination, aiming to end American Indian tribal governments, treaty rights, and political sovereignty.

1964

March: Robert Satiacum (Puyallup) and actor Marlon Brando arrested during a “fish-in” demonstration on the Nisqually River.

1967

July: The Bureau of Indian Affairs issues legal statement clarifying Washington Indians’ rights to control waters and lands of their reservations as guaranteed in the Treaty of Point Elliot. This decision affirmed a legal basis for Lummi development of their tidelands.

1968

Lummi receive a grant of \$1,000 from Washington State Oceanographic Commission to survey Lummi Bay as potential aquaculture site. Idea comes from Western Washington State College biologist and environmental activist Wallace J. Heath, who proposed the idea as a job creation alternative to a proposed magnesium oxide plant and gained support from Lummi elders.

1969

February: Lummi gain \$143,220 grant from federal Economic Development Administration (EDA) for aquaculture research and training.

June: Office of Economic Opportunity, Indian Division, grant for \$300,000 to build 4.4-acre sea pond for oyster, salmon, and trout cultivation. Members of the Lummi Nation begin to build the sea pond and surrounding dike, which eventually becomes the largest of its kind outside of the Netherlands.

June – February 1970: Lummi Bay Beach Owners Association, comprised of white property owners who had acquired private allotments on the reservation, launch petitions and a campaign of letter-writing to the *Bellingham Herald*, government agencies, and elected officials to oppose the aquaculture project. The petitions include multiple signatures by the same people, some of whom did not live in the area. A small group of Lummis who hoped to benefit

from the proposed magnesium oxide plant joined the campaign to oppose the aquaculture project. Led by Chairman Vernon Lane with the majority support of the Lummi community, the Lummi Indian Business Council defeats both efforts.

1970

July: Impressed by the outpouring of Lummi involvement, the EDA awards a \$1.5 million grant to build a larger, 750-acre pond.

In response to organized pressure from American Indian tribal governments and activists, President Richard M. Nixon announces an end to termination and expresses support for self-determination.

1971

June 4: Lummi community members complete construction of the dike and create the sea pond.

1972

August: Lummi Nation constructs oyster hatchery on Lummi Bay next to the sea pond.

November: The young, militant American Indian Movement (AIM) stages a six-day occupation of the BIA office in Washington DC; Nixon is reelected as U.S. president. During Nixon's second term, the federal government makes deeper cuts to the War on Poverty and reduces grants to Indian tribes.

1973

Lummi Aquaculture School opened on northwest side of Lummi Island.

1974

The Supreme Court decision in *United States v. Washington* (known as the "Boldt decision," after Washington federal justice George H. Boldt) upholds Indians' rights to fish in "usual and accustomed places" as outlined in the Washington treaties of the 1850s.

1983

Lummi Community College chartered (renamed Northwest Indian College in 1989; accredited for associate degree in 1993).

PART III: PRIMARY SOURCES

A NOTE ON THE SOURCES

Each of the following primary sources includes a brief introduction by the editors and a citation.

In most cases, the source is followed by a list of terms and Notes from the Schelangen Division. *Schelangen* is a Lummi language word that refers to the Lummi “way of life,” and the Schelangen Division is another name for the Lummi Nation Cultural Commission. The Notes from the Schelangen Division were created by members of the Lummi Nation Cultural Commission during meetings of the Community-Based Participatory Research Project that created this lesson plan. These Notes provide Lummi perspectives on the primary source documents and their significance.

Each of these sources is also followed by a set of Study Questions to guide reading and analysis.

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Source #1: *Squol Quol*, Volume 1, November-December 1973

Squol Quol – which in the Lummi language means “news” – is the official publication of the Lummi Nation. It is currently published monthly by Lummi Communications. In this first issue of *Squol Quol*, Willie Jones wrote an editorial expressing his concerns about Lummi efforts to adapt to the changing environment and economy. The feature article was about the Lummi Aquaculture Project.

“editorials” by Willie Jones, Editor [excerpted]

An Indian is a human being with basic human needs to survive. In the past before the white man came the Indian had these needs fulfilled. He lived on the land, from the land, and with the land. He lived near the sea, plants, the animals and the elements. He loved the rivers, the streams, the mountains and the sky. There has been a long and painful road traveled on by many generations of Indians since the time of our ancestors. There have been many changes and many hardships that have faced our people but we are still here.

Today I hear the question, “What is an Indian?” An Indian is a descendent from his ancestors with the same basic need to survive that his ancestors had. The difference is the difficulty in fulfilling these basic needs for survival...An Indian is a person standing and saying I’m tired of waiting for these needs to be fulfilled as promised by the many treaties...

Many Indians today are changing. They are learning many trades that few or none of our grandparents knew. The white man says progress is most important. I pray that at least once in a while we will be able to look back on the road that our parents, grandparents and ancestors built, so that when we get on the freeway we will never lose sight of our starting point.

Lummi Aquaculture Project: Development of a Human Resource [excerpted]

In 1969, 15 Lummi Indians gathered on the shore of Lummi Bay to begin a new and exciting venture. They were starting to build a dike on the Lummi tidelands. They worked during the night when the tides were low. They were forced to work during the fall season because of political and non-Indian opposition. It was a race against time and odds.

Two months later, the Lummi sea pond was completed. The sea pond would grow fish and oysters for the tribe. That was only the beginning; since 1970, the Lummi crew grew in numbers, skill, and determination. Their ability to handle political, legal, and management problems grew. They gained confidence in getting an education. In 1971, a Fish Hatchery was built which now produces 8,000,000 fish a year. The Indian crews completed the dike over 3 miles long to make a 700 acre sea pond. The first **Oyster Hatchery** in the Northwest began producing seed oysters for the sea pond in 1972...they learned very sophisticated scientific techniques and knowledge to enable them to culture oysters, trout, and salmon in great numbers commercially.

Perhaps the most important motivation is that the Lummis are being trained and will be working on the reservation. It also helps to know that new jobs will help make it possible to pay for more homes in the new housing project for the tribe. This economic venture will branch into other ventures as we Lummis restore and gain some of the pride that has been lost...

Much interest is created by the facilities developed by the tribe, but it is important to remember that hatcheries, ponds, and equipment are tools to be used by people. The most significant part of everything that has happened is what people have shown they can do. The age range of the Aquaculture classes was 18 to 63; and many had not finished the 9th grade.

With this in mind, the tribe set up the Lummi Indian School of Aquaculture (LISA) this year. They found that there are between 30 and 40 tribes that have enough water resources to support their reservation. By offering training in water resource development to members of other tribes, there could be a small nucleus of tribal technicians to help begin water resource development. This is now underway and inquirers are welcome to call...the LISA office.

Citation: Lummi. *Squol Quol*, Volume 1, Number 1, November-December 1973. Center for Pacific Northwest Studies, Western Washington University.

Terms

Oyster Hatchery: a facility where oyster eggs are fertilized, and larvae are cultivated by feeding them algae and maintaining proper water temperature for growth.

Notes from the Schelangen Division

Willie Jones's editorial reminds readers that the Lummi must consider the advice of elders and the well-being of future generations when adapting to modern challenges.

The "Lummi Aquaculture Project" article conveys the great feelings of optimism created by this project. Life was hard on the Lummi reservation in the mid-twentieth century. Though some Lummis held university degrees, professional careers, and substantial wealth, poverty was widespread. Many people lacked access to jobs, adequate food, and electricity. Due to pollution and overfishing, fish and shellfish stocks were depleted, and the beaches no longer supported the abundance of sea life the elders remembered. The federal government's Indian policies after World War II were called Termination and Relocation. Yet again, the government sought to break-up reservations, dissolve tribal governments, and force Indians to assimilate to American individualism. Whether due to these policies, or to explore new opportunities in a rapidly changing post-World War II world, many moved away from the reservation.

But Lummi was always home. Our sense of place had been passed down from our grandparents.

The aquaculture project was about hope. The article explains how the aquaculture project brought the community together, created jobs and new sources of seafood for Lummis on the reservation, and led to further projects for community economic development. Aquaculture and related projects also inspired many Lummis who had left the reservation to come home during the 1970s.

Study Questions

1. (Sourcing) Who published this article? Why might this article be helpful to understanding who supported the Lummi Indian School of Aquaculture?
2. (Close Reading) According to this document, what was the most important "motivation" for completing the Lummi Aquaculture project?
3. (Context) According to the Schelangen Division, what is the significance of this document?

Source #2: “Lummi Oysters Spawn” *Northwest Passage* (Sept. 9, 1969)

Northwest Passage was an alternative paper that ran for seventeen years (1969-1986). Published in Bellingham for the first nine years, *Northwest Passage* coincided with the cultural shift that was happening in Bellingham in the 1970s, from a more conservative mill town to one of the epicenters of hippie counterculture. The founders of the paper were involved in the anti-war movement and opposition to the Vietnam War dominated the earliest issues of the paper. There was also from the beginning a strong focus on community interests, like exposing industrial polluters, raising awareness about civil rights issues, and supporting environmental conservation programs.

Lummi Oysters Spawn [Modified]

The newly completed Lummi Indian **Oyster Hatchery** has **spawned** its first set of oysters recently, in a year when all **natural oyster seed setting** has failed. In the first of the controlled **spawning** methods, an estimated 30 million new oysters resulted on the first day. The modern facilities completed by the Lummis will provide oyster seed throughout the year to supply their own oyster **raft culture** industry.

This is the only oyster hatchery in the Pacific Northwest. In addition to spawning Pacific oysters, they will also be spawning and culturing Eastern and European oysters, as well as several other species that will be tried experimentally.

Due to low temperatures in August of this year, no natural set has occurred in the Pacific Northwest, leaving oyster growers without any seed for the coming year. Seed import from Japan in the spring will no doubt come at a much higher price. The price of Japanese seed has been going up and the quality has been going down for several years...

The full development of this oyster hatchery could have a major impact on the oyster industry in Puget Sound by providing ample supplies of seed of several kinds throughout the year, thus freeing the industry of its dependence on the whims of nature and the costly Japanese supply.

Citation: “Lummi Oysters Spawn.” *Northwest Passage*, Volume 1, No. 10, 9 September 1969. Western Libraries Collection.

<https://mabel.wvu.edu/islandora/object/www%3A34999>

Image Citations [see below]: “Lummi Take Another Look: Close beaches & land to non-Indians.” *Northwest Passage*, Volume 2, No. 2, 4 November 1969. Western Libraries Collection. <https://mabel.wvu.edu/islandora/object/wvu%3A41428>

Terms

Spawn: oysters release eggs and sperm into the water for fertilization.

Natural oyster seed setting: Oysters spawning without any human role and clinging to rocks or another substrate in the tide flats.

Raft Culture: wooden poles are laid parallel to each other, and strings of oysters are suspended from the raft.



The Lummi Aquaculture Project: Here, the Lummis spawn oysters for commercial purposes and have plans for developing 700 acres of their tidelands for spawning oysters, steelhead, trout, etc. This is viewed by the Lummi people as a means of establishing "Forever roots" on their own land with an industry which has a minimum of pollution and is in harmony with the environment.



The Lummi Bay Beach Association—non-Indian landowners—banded together to try to prevent construction of the Lummi Aquaculture Project.

LUMMI'S TAKE ANOTHER LOOK

**close beaches &
land to
non-indians**

Catholic missionaries came, built "schools", took the youngest children, demanded English from them, and forbade them their own tongues. The young were supposed to teach the old what heathens they were and bring them the ways of Christianity. Few Lummi people today know anything about their own culture. There are still some Lummi today who bear horsewhip scars on their backs—the penalty if one was caught speaking the Lummi language.

*their wings were nailed
upon the cross
and a fierce consciousness
then was lost .*





Study Questions

1. (Sourcing) Who published this article? When was it published? Why might this article be helpful to understanding who supported Lummi Aquaculture?
2. (Close Reading) According to this document, why would the Lummi oyster hatchery have a “major impact on the oyster industry in Puget Sound”?
3. (Observations) Describe a photograph or a drawing from Northwest Passage. What did this image help you to understand or help you to think about the Lummi decision to close the beaches to non-Indians?

Source #3: “Lummi Hatchery: Eat Oysters and Love Longer” *The Western Front* (Nov. 14, 1972)

The Western Front was the student newspaper for Western Washington State College, which in 1977 changed its name to Western Washington University (WWU). The first edition of *The Western Front* was published in 1967. Earlier versions of the student paper date back to 1899 when WWU was a Northwest Normal School. In 2021, *The Western Front* changed its name to *The Front*.

Lummi hatchery: Eat oysters and love longer [Modified]

“Eat oysters and love longer,” boasted a bumper sticker on a truck parked outside the Lummi Oyster Hatchery.

The Lummi Indian Tribe is going to try to help you do just that, while providing income for the tribe, by harvesting about 100 million oysters next spring.

That will be the first oyster harvest since the Lummi Aquaculture Project began more than three years ago with a pilot hatchery on **Lummi Island**.

Since then a new facility, including a three-mile long breakwater enclosing a 750-acre pond area has been constructed near Gooseberry Point. The facility includes tanks for growing and nourishing oyster larvae and eggs until they are ready to be planted in the outdoor ponds...

After they are set [on shells], it will take about a year and a half before the oysters are ready to harvest...

Since the pilot hatchery began on Lummi Island and the new facility opened near Gooseberry Point in September, Poole [hatchery manager] said, 50 jobs have been created for the Lummis...they hope to double that figure when the oyster business gets into actual harvesting. Employees of the hatchery have undergone training programs which include such things as basic biology, fish farming and chemistry.

Besides the hatchery employees, the Lummis also have a marketing manager in Seattle, who is responsible for finding customers for the new Lummi Oysters...

Poole, who was formerly a marine biologist for the California Fish and Game Department, said the tribe hopes to cover its operating expenses with income from its spring harvest. He said they hope to start making a profit by the end of 1973.

Citation: Collingwood, Alice. "Lummi hatchery: Eat oysters and love longer." *The Western Front*, Volume 65, Number 13, 14 November 1972.

Terms

Lummi Island: An island accessible by ferry from Gooseberry Point on Lummi Reservation.

Notes from the Schelangen Division

The Northwest Passage and Western Front articles show that there was great enthusiasm and support for the Lummi Aquaculture Project among local non-Natives. This was particularly the case in Bellingham's leftwing political movements and at Western Washington State College. These views reflected a shift in attitudes among the Lummi's neighbors that opened opportunities for collaboration and coalition-building in support of the Lummi Nation's tribal sovereignty, community development, and environmental stewardship.

Study Questions

1. (Sourcing) Who published this article? When was it published? Why might this article be helpful to understanding who supported Lummi Aquaculture?
2. (Close Reading) According to the hatchery manager, how would they "make a profit" by the end of 1973?
3. (Context) According to the Schelangen Division, what is the significance of Sources #2 and #3?

Source #4: Lummi Bay Beach Association letter (1969)

The Lummi Bay Beach Association was a group of white homeowners who came together to oppose aquaculture on Lummi Bay. The group held a series of public meetings and organized a letter-writing campaign, with members writing to the *Bellingham Herald* and other local newspapers and to their Senators, the Army Corps of Engineers, and President Richard Nixon. They also organized a petition opposing the project, though many of the signatures turned out to be fraudulent.

This letter outlines some of the Lummi Bay Beach Association's primary concerns. Its assertions that a majority of the Lummi opposed the aquaculture project and mistrusted Wallace Heath were false. The letter was likely circulated at Lummi Bay Beach Association meetings.

[Excerpted]

The Aquaculture activity recently proposed for Lummi Bay is a matter of increasing concern to property owners in the area...

Although some exploratory work seems to have been started last summer, the first public exposure occurred this spring. The presentation was frightening. It suggested a system of dikes and ponds which would appear to eliminate boating and swimming, infringe greatly upon the view and result in depressed property values...It is our belief that no one would wish to deprive our Indian neighbors of a sound and promising economic activity. The project on question, however, seems imaginative and impractical from many angles. Even if proven economically feasible, the overriding fear is that it would eventually fall into the hands of commercial operators. Although endorsed by the Business Council, we are advised that a majority of voting tribal members oppose it. Indeed, there are those who fear that furtherance of Dr. Heath's professional standing is not the least of his aims.

You see – things are being done; but all this requires time, effort, general support and money. Here is where you come in. (1) If you have not done so, send \$10.00 in the enclose envelope for membership. The Corporation envisions an eventual effort to arrange tideland leases and other beneficial activities including zoning. (2) Write your congressmen, Senators; particularly the Honorable Warren G. Magnuson, and the Honorable Henry W. Jackson, Senate, Washington D.C., expressing your opposition.

This effort is for the preservation and enjoyment and value of your property and must have your support.

Very truly yours,
Trustees
Lummi Bay Beach Association

Citation: Lummi Bay Beach Association Letter, April 1969. Lummi Archives, Folder 28: Petitions, in subfolder “Aquaculture Dike Opposition.”

Notes from the Schelangen Division

Hatred from white people permeated the air in the Lummi Bay Beach Association’s public meetings. Lummis still feel such racism in certain places in Bellingham.

Overall, the Lummi respected Wally Heath, and saw him as sincere.

This letter is part of a long history of white property owners opposing Lummi treaty rights and tribal sovereignty that unfortunately did not end in the 1970s. In 2016, the Lummi Nation and its allies defeated a plan to build a massive coal terminal at Cherry Point that would have been devastating to the Salish Sea. More recently, a handful of non-Indians organized a campaign against the Ferndale School District’s adoption of the Lummi Nation’s 2021 Land Acknowledgement. As in the past, the Lummi Nation continues to assert its sovereignty.

Study Questions

1. (Sourcing) Who wrote this letter? Is it a credible source for understanding why the Lummi supported aquaculture?
2. (Close Reading) According to the Homeowners, what is the “overriding fear” about developing this aquaculture project?
3. (Context) According to the Schelangen Division, what was happening at the time that helps to explain opposition to Lummi aquaculture?

Source #5: Lummi Indian Business Council to Army Corps of Engineers (1969)

The Lummi Indian Business Council (LIBC; the Lummi Nation's governing body) prepared this memorandum as a rebuttal to the many letters of opposition they received in the months leading up to the construction of the aquaculture ponds. The opposition letters were part of an unsuccessful campaign by the Lummi Bay Beach Association to convince the Army Corps of Engineers to deny the LIBC's application for a permit. This excerpt highlights the LIBC rebuttal to three objections in a Lummi Bay Beach Association letter dated April 1969.

The names of Lummi leaders and families who initially opposed the aquaculture project have been redacted to protect their living relatives.

[Excerpted]

To: Army Corps of Engineers, Seattle Office

From: Lummi Indian Business Council

Date: August 15, 1969

Subject: Rebuttal to Letters from Opponents of the Lummi Aquaculture Development Research Ponds in Lummi Bay

A total of 67 letters from individuals were received from the Corps of Engineers by the Lummi Council. They have been read and analyzed by our staff in relation to the application for a permit to build the 4.44-acre research pond system 1000 feet from shore on Lummi Bay. Our rebuttal to those objections is given below according to the topics listed by number...the Lummi Council is well aware that a concerted effort was made using falsified information to create the maximum degree of opposition to our project by real estate personnel and vested interests within the Tribe. The letters reflect the fear inspired by wild stories of dikes going continuously from Sandy Point around Pt. Francis and Portage Bay cutting everyone off from boating, swimming, etc., pollution by fish and oysters, cutting of the wind (!), putting oysters on the beaches to cut the feet of recreationists, hostile Indians roaming the beaches forcing white people out of the water, strong smells created by the fish, removal of all wildlife, and total interruption of the view. These letters reflect the results of this door-to-door campaign, which many residents and witnesses have reported to us in recent weeks.

...

1. Objection: The 2000-acre structure would depress property values; they should be located in Bellingham Bay; Phase I research ponds should be located further north. (48 letters = 72% of total)

Rebuttal: There is no specific evidence in any of the complaints why property values would be lowered...As emphasized elsewhere there will be no pollution, blocking of the view, or interference with present uses of the bay within the one-half by 2-mile area adjacent to the proposed pond system, and hence, no cause for a reduction in real estate values.

The research ponds must be located where proposed for several reasons. This is the ideal depth (5 ft.) at MHHW [Mean Higher High Water]; it is hard, sandy bottom, flat and near the only feasible access to shore. Any distance further north would make them too shallow. Any distance toward shore would result in a muddy surface.

The large dike system is designed to utilize the center of the bay and leave ample area for the present uses. It must be located in Lummi Bay which alone offers adequate water quality, pond slope and drainage, building materials, fresh water control, and adequate area for economic success.

...

6. Objection: This is not really a project to help the Indians, but mainly for white men who have never worked with Indians. Most of the Lummi Indians oppose it. (14 letters = 21%)

Rebuttal: The present council composition was strengthened by popular vote for supporting aquaculture in the annual January tribal election when aquaculture was a main issue. There was, and is, a strong majority behind the Lummi Council on this matter. There are 11 members on the Council and 8 of these strongly support the aquaculture project.

The opposition is led by [REDACTED] [REDACTED] [REDACTED] (totaling about 80 votes). The council has been supported by the issue by both votes and a petition of 146 adult Lummi people three months ago.

██████████ and his group are attempting to locate a **magnesium oxide** plant on their own land on ██████████ Lummi Bay. Only the ██████████, ██████████, and ██████████ families would benefit from this plant, at the expense of the tribe and residents around the bay. A mountain of **olivine ore** (from Twin Sisters Mountains) would go through the plant and all of the silica **tailings** to be deposited in Lummi Bay. Silica is an uncontrollable pollutant in water and would ruin Lummi Bay for other uses, according to industrial consultants. For further information see Port of Bellingham (Thomas Glenn), Whatcom County Development Council (Joseph Entribin), Whatcom County Commission (Frank Roberts), and Whatcom County Planner (Harry Fulton). They have all rejected this plant and only ██████████ has favored it as a personal project.

This project is completely under the control of the Lummi Indian Business Council. It is administered by the Lummi Tribal Enterprise under the Council's direction and of Lummi membership. Only two non-Indian consultants are employed full-time by the Lummi Tribe, Dr. Heath and Mr. Poole. Dr. Heath served on the National Indian Service Committee in Phoenix, Arizona from 1953 to 1957, helped organize the American Indian Club at the University of Arizona, and worked with members of the Papago Indian Tribe from 1953 to 1959, learning some of that language. Mr. Poole spent his first 20 years on the Navajo Reservation where his parents were Indian teachers for the tribe.

...

13. Objection: The Indians are already employed off the reservation and are doing well. They are employed by the Indian Service, too. There must be a cheaper way to employ them. There aren't that many (600) Lummis needing jobs. (5 letters = 7%)

Rebuttal: The present unemployment figures for the reservation (State Employment Security Office, Bellingham) are 153 men and 187 women. In addition, many more are underemployed or in very unpleasant jobs which they would quit for good jobs on the reservation. As stated above (Rebuttal No. 7) 600 new jobs are needed to take care of the growing population of the next 20 years. There is no way of employing any more people on the reservation at present.

The Indian Service (BIA) employs only one Lummi at present on the reservation (Health Officer).

If \$600,000 is invested in creating a \$400,000/year industry for about 600 people, this is a cheap way to create jobs. Taxes alone would pay back the investment in one year.

Citation: Lummi Indian Business Council. Memorandum No. 3, "Rebuttal to Letters from Opponents of the Lummi Aquaculture Development Research Ponds in Lummi Bay," August 15, 1969. Lummi Indian Business Council Archives, Folder 21: Memorandums.

Terms

Magnesium oxide: a chemical compound used in heating elements, and as a fireproofing material; it's also a component used in cement processing, groundwater remediation, and as an antacid for heartburn relief.

Olivine ore: one of the more common minerals in the earth's surface; magnesium is the dominant element.

Tailings: the residue left behind when extracting, reducing or processing ores.

Notes from the Schelangen Division

This memorandum demonstrates the Lummi Indian Business Council's power in standing up to opponents of the aquaculture project. It also shows a good sense of humor.

Disputes over aquaculture within the Lummi community were bitter. However, all leaders of the community eventually came together to support the project because it was successful in uplifting the community. Members of the Lummi Nation continue to respect all their leaders.

Study Questions

1. (Sourcing) Who wrote this memorandum? Is it a credible source for understanding why the Lummi supported aquaculture?

2. (Close Reading) According to the Lummi Indian Business Council, why did the Lummi locate the ponds “where proposed” and what was the rationale for the “large dike system”? Why didn’t they consider the magnesium oxide plant a viable alternative?
3. (Context) According to the Schelangen Division, what was happening at the time that helps to explain opposition to Lummi aquaculture?

Source #6: “The Lummi Indian Community: The Fisherman of the Pacific Northwest,” by Vine Deloria, Jr. (1978)

Vine Deloria, Jr. (Standing Rock Sioux; 1933-2005) is widely regarded as the most influential Native American intellectual of the twentieth century. A legal scholar, theologian, and activist, Deloria served three terms as director of the National Congress of American Indians in the 1960s and went on to publish more than twenty books on American Indian politics, law, religion, and history. Deloria spent most of his academic career at University of Arizona and University of Colorado Boulder, but his first academic position was in Ethnic Studies at Western Washington State College in Bellingham from 1970 to 1972, during the crucial period of the Lummi Aquaculture Project’s founding. During his time in Bellingham, Deloria advocated for Indian fishing rights and worked on tribal lawsuits that culminated in the 1974 Supreme Court ruling in *United States v. State of Washington* (the “Boldt Decision”), which protected Native fishing rights to 50% of the catch in Washington State.

This source is an excerpt from an essay Deloria wrote for an anthology of case studies on American Indian economic development projects. Such projects gained prominence in the 1970s as tribes reestablished treaty rights as the basis for Indian nations’ relationships with the federal government.

**The Lummi Indian Community: The Fisherman of the Pacific Northwest
[Excerpted]**

In late 1967, the Lummis were approached by a corporation that wanted to build a magnesium oxide reduction plant at Lummi Bay...The company’s plan was to ship ore from the Twin Sisters Mountains and process it in Lummi Bay, on land that certain families owned. A mountain of green olivine ore would be processed at the plant, leaving tailings of silica deposited in Lummi Bay. Economic development would include a dredged seaport facility, large sea traffic (complete with oil spills), and other pollution that would have made the destruction of the bay irreversible.

The Lummis were greatly concerned at the thought of the final destruction of their tidal lands. For more than a century they had preserved the area for tribal use. They dug for oysters and clams in the tidelands. It supported the migratory birds that traveled from Canada to the south and back again each year. The traditional fishing grounds in Hale Passage and western Bellingham Bay, which they had fought so hard to protect, would be ruined by the presence of an industry with such extensive polluting potential.

Some of the Lummi people began to search for another means of using the bay, hoping they could find an alternative to the magnesium oxide reduction

plant... At that point, fate appeared to intervene in the affairs of men. On the faculty of Western Washington State College at that time was Dr. Wallace Heath, who had studied desert ecology... and was well versed in natural life systems. He was also a consultant to the Oceanic Foundation of California, which at the time was studying the mariculture of ancient Hawaiians... Heath paid a visit to the Lummi reservation to determine the status of the magnesium oxide plant and found that the Lummis were just as anxious as he was that alternative use be found for the bay.

As part of his inspection of the Lummi reservation, Heath visited the tidelands. He asked the older Lummis how the tribe had traditionally used the tidelands and discovered that the people had always considered the bay as the most important part of their land, because of its ability to support a great variety of sea life. As he walked the sandy beaches, Heath began to visualize the creation of an aquaculture, comparable to those he had studied in Hawaii. Finally, he asked the Lummis if they had ever considered using the bay for the commercial production of seafood. They had not considered such a use, but, after hearing Heath's description of Hawaiian aquacultures, they decided they wanted to try the idea...

...Of the projects developed in Indian country during the whole decade of the frantic 1960s, the most outstanding and promising to date—and certainly the most innovative—has been Lummi aquaculture...

...Perhaps the most significant lesson that can be learned from the developments of the Lummi community is that economic development should not be conceived as economic development, but as community development. The orientation of the Lummi people has been to accomplish something on a community basis, because the community has been looking for a means of asserting itself. Lummi community life has traditionally revolved around the ecological values of the immediate area. From precontact times until the present, the Lummi people have been a community in the process of discovering itself...

Citation: Deloria, Vine, Jr. "The Lummi Indian Community: The Fishermen of the Pacific Northwest," in *American Indian Economic Development*, edited by Sam Stanley. Mouton Publishers, 1978: 87 – 158.

Notes from the Schelangen Division

This excerpt is powerful because Vine Deloria Jr. understood that the Lummi work collectively—as a community—and that Lummi elders were trying to defend our tidelands. The aquaculture project was deeply influential. Many Lummis are well versed in marine biology and science today but do not realize this is because of the effectiveness of the aquaculture project in uplifting the tribe.

The Lummi continue to experience generational trauma from federal boarding schools, which separated Indian children from their families. The U.S. government’s goal was to “Kill the Indian, save the man,” and it is hard for Indians to face the reality that assimilation efforts nearly succeeded. Since the 1960s, the Lummi have engaged in many initiatives to empower tribal sovereignty, economic self-determination, and culture. Of these, aquaculture has had the greatest influence.

A note on Vine Deloria Jr.: Among scholars of Native American Studies, Deloria’s contribution to Native American history, politics, and intellectual life are undisputed. Also, many Coast Salish people appreciate his support for their efforts to secure reserved fishing rights in the 1960s and 70s. Deloria was a strong advocate for Native American sovereignty. Readers should note, however, that while reviewing the full version of this source, members of the Lummi Nation Schelangen Division noticed factual inaccuracies, including incorrect dates (the excerpted section does not include inaccuracies). As with all sources, Deloria’s writings on Lummi history should be examined with a critical eye.

Study Questions

1. (Sourcing) Who was Vine Deloria, Jr.? Is this article a credible source for understanding why the Lummi supported aquaculture?
2. (Close Reading) According to the Vine Deloria, Jr., what is the most “significant lesson” of the Lummi aquaculture project?
3. (Context) According to the Schelangen Division, why is Vine Deloria, Jr.’s writing still “powerful” today?

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Source #7: Lummi Aquaculture Final Report to the Economic Development Administration (1975)

The Lummi Aquaculture Final Report was prepared by the project directors and submitted by the Lummi Indian Business Council to the Economic Development Administration. This 244-page report detailed the results of a five-year grant that funded the construction of the Lummi aquaculture facility. The excerpt below was taken from the executive summary.

A Summary of Results from the Lummi Aquaculture Project [Excerpted]

The primary objective of the Lummi Aquaculture Project was to assist the tribe to establish an economic base, improve its business organization, and support its various community needs. Associated with this was the development of an **aquaculture** technology to help provide its necessary income...

Utilization of tribal tidelands by the aquaculture project has resulted in the skyrocketing of the tideland real estate value...The 5,000 acres of Lummi tidelands have risen in value from \$100 per acre in 1968 to a present day estimated value of \$2,400 per acre for a grand total of \$12 million in seven years...These tidelands are owned in common by the tribe and are **held in trust** by the federal government...

The various water-quality studies that have been conducted in conjunction with the aquaculture project by federal and tribal agencies have greatly improved the status of the tribe in relation to its **water rights** in the Nooksack River and surrounding marine waters. The tribe has scientifically established the prevailing threats to the quality and quantity of the river water, and it is in the position to react legally, if necessary, to restore the river's proper conditions to meet the standards set by the federal and state governments...

The Lummi Aquaculture Project has become a major force for exerting pressure on state and federal agencies to maintain and improve the quality of the surrounding Puget Sound waters. These are among the most productive **estuaries** in the nation. The tribe has pointed the way toward food production as one of the most important potentials for economic development in the region...

Many aspects of the project are **prototypes** for what can be done in numerous Indian and other communities adjoining the nation's abundant waters. It has

shown a new dimension of economic profit to be gained from a nation of clean waters, and has added a new financial incentive to improve our aquatic environments.

Citation: Dr. Heath, Wallace, Maxwell King, and Dr. Robert T. Patton. "Lummi Aquaculture Final Report to the Economic Development Administration, U.S. Department of Commerce, Technical Assistance Grant No. 07-6-09226-2." *Submitted by Lummi Indian Business Council*. September 1975. [Note: the images below also come from this source]

Terms

held in trust: Between the Treaty of Point Elliot (1855) and 1934, the federal government, Washington Territory, and Washington State took two-thirds of Lummi reservation lands without compensation. The trust process was subsequently created as a tool to help tribes regain stolen lands. Trust lands are governed by the tribes, and subject to certain federal restrictions.

water rights: Access to water has been an issue on the Nooksack River for over 100 years. Legal claims to water allocation have been contested by the Lummi Nation, the Nooksack Indian Tribe, farmers, landowners, and fishermen.

estuary: A partially enclosed water body where freshwater from rivers and streams mixes with salt water from the ocean.

prototypes: An original model on which something is patterned.

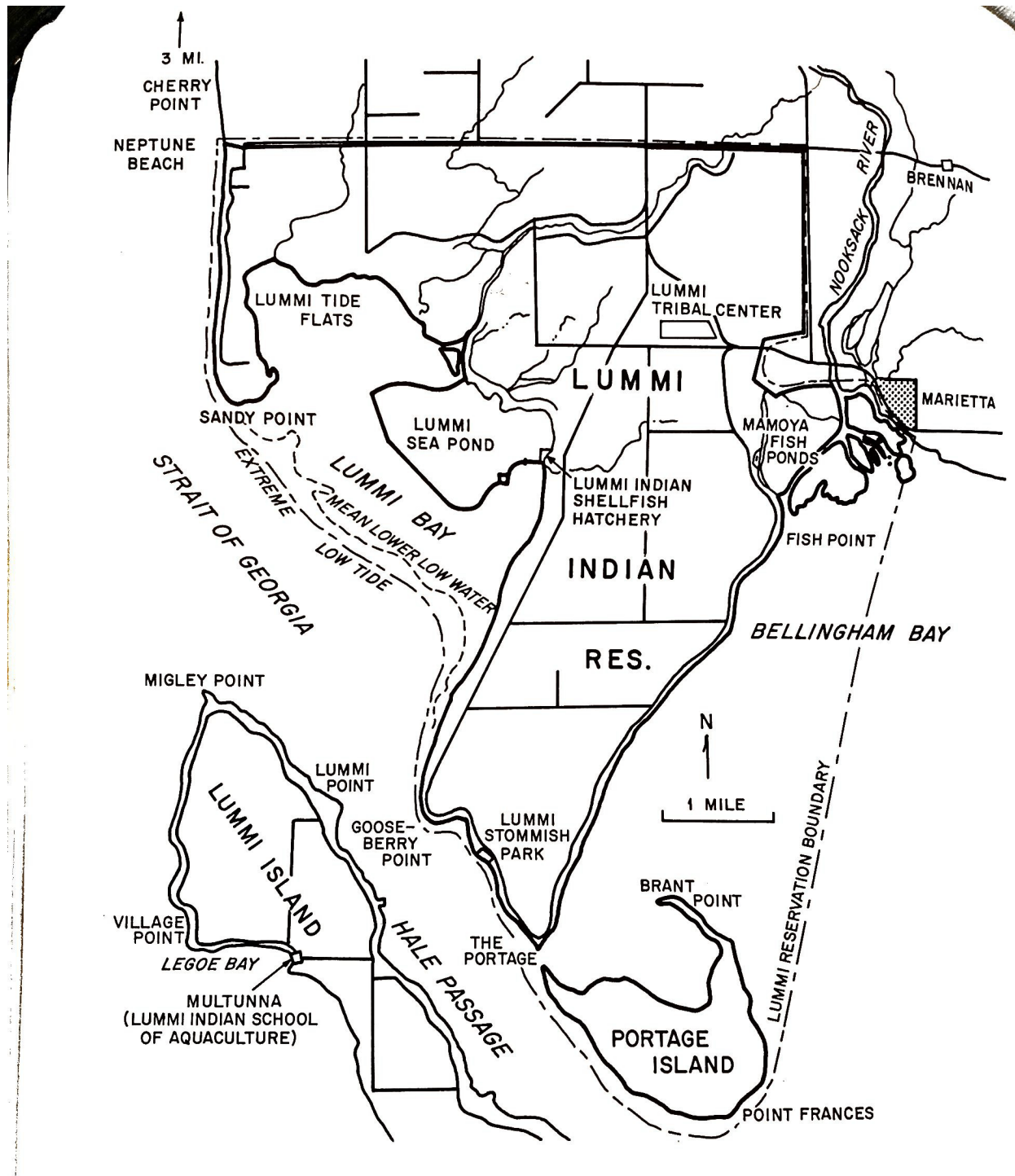


Fig. 1.1 [edited from original]: Map of Lummi Indian Reservation showing boundaries imposed by President Ulysses S. Grant in 1873 and surrounding lands and waters. Aquaculture facilities are denoted in their locations. Grant's 1873 reservation boundaries remain contested by the Lummi Nation.



Figure 2.1 Lummi dike construction team building about 120 ft. per day between tides. Incoming tide near the end of an all-night shift. Sam Cagey directing construction traffic and spotting loads.



Figure 2.2 Research Ponds nearing completion. Tide fills long dirt pond at one end and standpipe regulates outflow at the other end giving 20+% exchange per day. Square tidal reservoir supplies pumphouse with sea water for six concrete ponds (see text.)

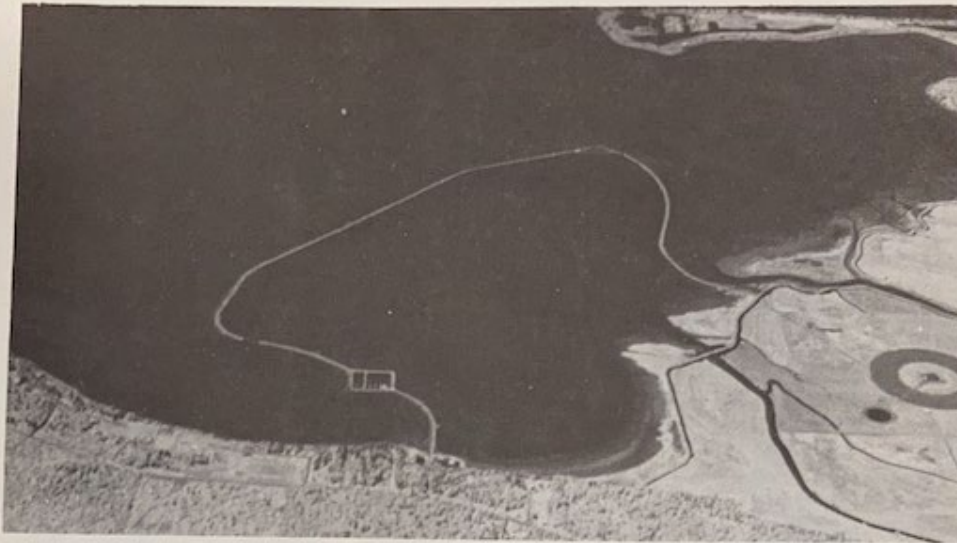


Figure 3.6 Three-mile dike and 700-acre sea pond from the air, Sandy Point in the background at high tide,



Figure 3.7 Dike closure celebrated by project supporters, including (L to R) David Jenkins (EDA Washington, D.C.) Dr. James E. Wilson (Director, OEO Indian Division), Vernon Lane (Lummi Chairman), Kenneth Latcholia (EDA, Region X), Wallace G. Heath (Lummi Aquaculture Project Director), Sameul M. Cagey (Lummi Vice-Chairman), James N. Ellis (Lummi Fisheries Director), Richard Poole (Lummi Shellfisheries Director).



Figure 1.4 Lummi Aquaculture Training Program had 18 trainees in 1969, 64 in 1970, and 40 (advanced) in 1971. Over 90% of original trainees completed training; project now employs 140. Training program resulted in Lummi Indian School of Aquaculture (LISA), with 80 students from 18 tribes (who will return to assist in water resources development on their reservations). Trainees shown carrying out nutrition and disease control projects for fish and oysters.

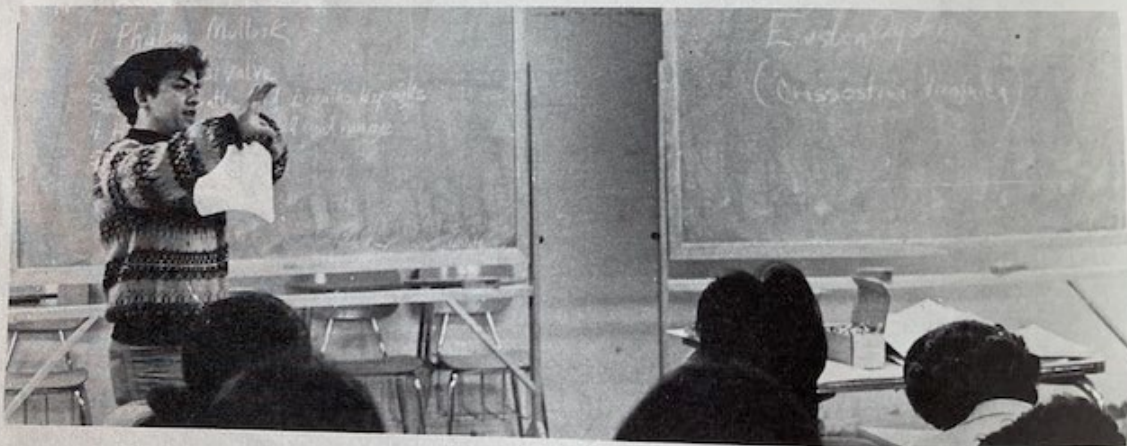


Figure 1.5 Lummi Instructor (Merle Jefferson) graduated from first program and taught in second, third, and LISA (along with 10 other Lummis). Elder women excelled in microbiology, nutrition, and general laboratory technique. Several trainees went on to college and university work to take over future technical management of project.

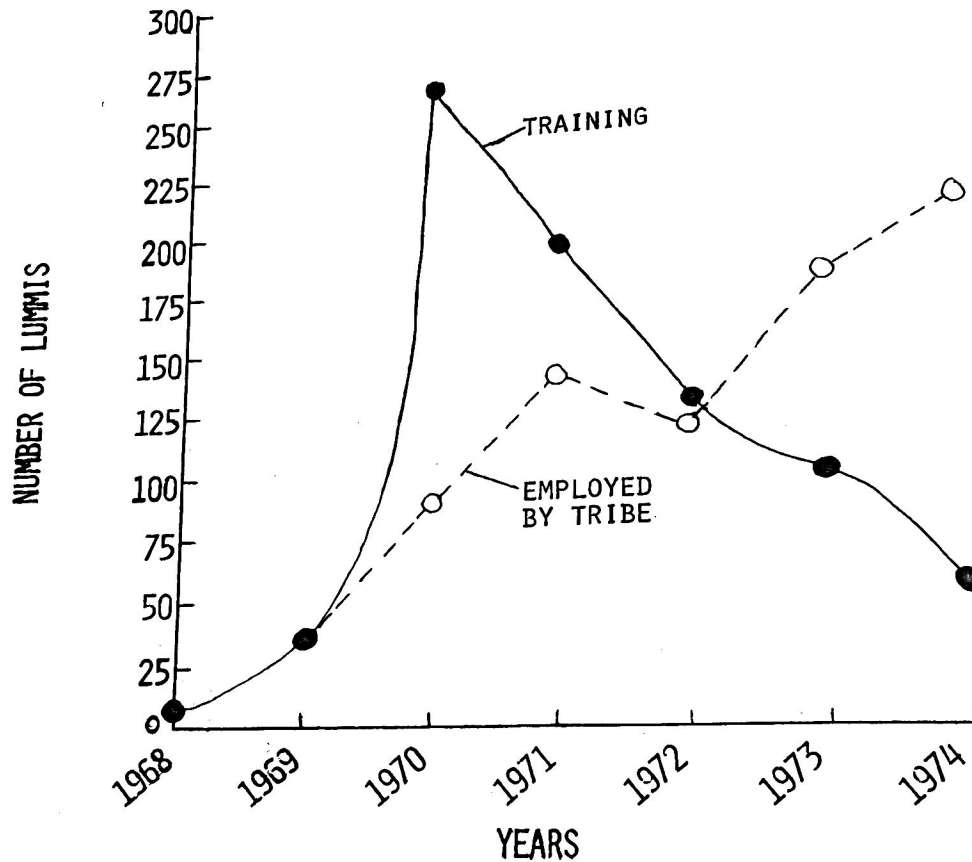


Figure 1.2 The relations between the total number of Lummis in reservation training programs and the number employed by the tribe during a five year period. Training programs included Operation Mainstream, National Youth Corps, Multioccupational Training (carpentry, mechanics, nursing, clerical, and maintenance), Aquaculture Training Program, Lummi Management Training Program, New Careers Health Aid Training, Public Assistance Administration Unit, and Teacher's Aid Program. Employment included all of tribal programs (see Appendix A) and Aquaculture.

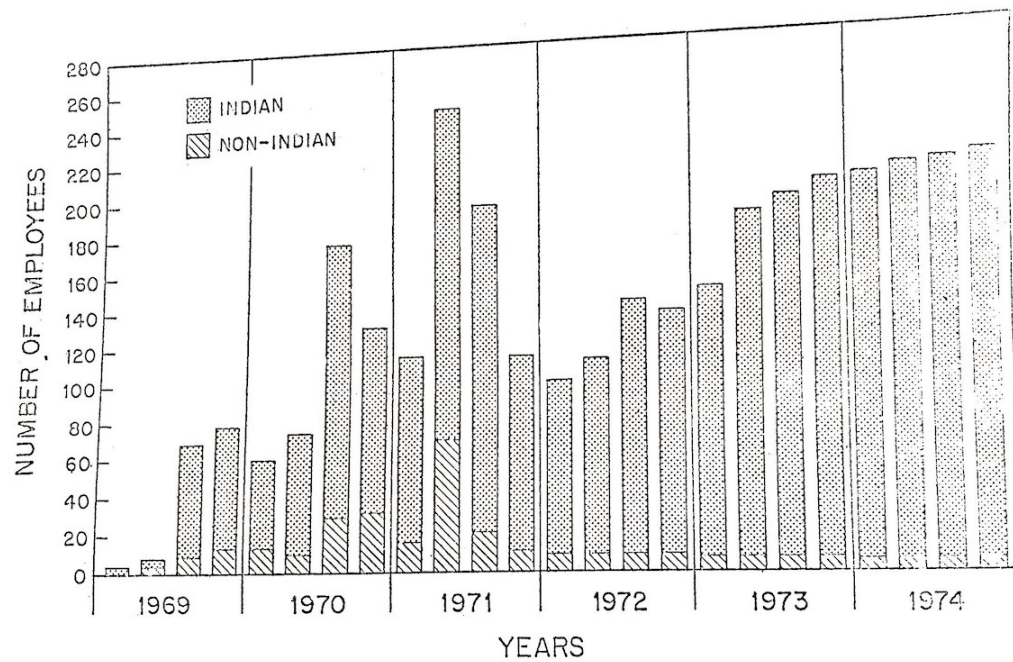


Figure 1.3 Quarterly account of reservation employment progression for five years, showing the increasing ratio of Indian to non-Indian employment. The large component of non-Indians in 1971 was due to subcontracts for tide gate and other specialized construction. Most jobs in 1969 through 1971 were in construction; most of those in 1972 to present are in production and management. Employment will increase considerably again in 1976 when full production in aquaculture is realized.



Figure 3.12 Aerial view of Lummi Fish Hatchery during late construction, Road and S.F. of Nooksack River on right.



Figure 3.13 Lummi crew picking eggs "By the Million". Plastic oyster trays used during the "rush" season,

Notes from the Schelangen Division

In the 1960s and 70s, the Lummi took inspiration from the African American civil rights movement, the Puyallup and Nisqually “fish-ins” in lower Puget Sound, and “Red Power” actions like the 1969 occupation of Alcatraz Island and the American Indian Movement’s occupation of Wounded Knee in 1973. These movements gave an impetus for the Lummi to say to the federal government, “this is what we’ve been trying to tell you about racism and treaty rights.”

Yet the Lummi government chose not to pursue a strategy based on direct action or militancy. The Lummi had an advantage in maintaining their culture because of their relative isolation from centers of U.S. colonization to the south (in the Seattle area) and British colonization to the north (in the Vancouver area). As a result, they were in a strong position to assert their treaty rights and self-determination through conventional legal channels and to take advantage of grants from President Lyndon B. Johnson’s War on Poverty, which made funds for economic development and job creation available for the first time. The Lummi Nation also played a leading role in the Intertribal Council of Western Washington Indians, which successfully fought to end federal termination policies and protect fishing rights reserved in Washington Indian treaties.

The Lummi Indian Business Council’s Final Report to the Economic Development Administration highlights the success of Lummi aquaculture in creating jobs and training programs on the reservation. It must also be noted that representatives from more than sixty tribes from across the United States came to Lummi to participate in aquaculture training programs. Washington political leaders like Senator Henry M. Jackson visited the aquaculture project and so did celebrities like Marlon Brando and Shirley Temple Black. The aquaculture project even became a popular destination for busloads of East Asian tourists. Lummis also traveled to other reservations to share prototypes and expertise. The aquaculture project was not only a success for the Lummi, but a model of community development throughout Indian Country, North America, and the world.

Study Questions

1. (Sourcing) What is the Final Economic Development Report? Who wrote it and why was it written?
2. (Close Reading) According to the Report, why was this project a “prototype” for other tribal nations?
3. Select a photograph from the Report. Describe it. What did it help you to understand or figure out about the Lummi Aquaculture project?

4. (Data analysis) What year between 1968 and 1974 had the highest number of Lummis employed by the tribe?
5. (Context) According to the Schelangen Division, what was happening nationally that helps explain the success of this project in the 1970s?

Source #8: “A Scaled Down Dream” *Klipsun* (January 1982)

Founded in 1920, *Klipsun Magazine* publishes long form journalism articles written by students at Western Washington University. Each edition includes feature stories of interest to people living in the Pacific Northwest. This article, written in 1982, offered a ten-year reflection on the initial goals of Lummi Aquaculture.

A Scaled Down Dream [Modified]

Lummi Indian leaders saw the development of the aquaculture program in 1968 as a way to improve the tribe’s standard of living and provide from 200 to 600 jobs.

But while the fishery has improved the Nooksack River salmon runs for all fishermen, it has failed to provide the hoped-for jobs.

“We were a bunch of dreamers at the time,” recalled local long-time tribal council member Sam Cagey...

In 1975, at the height of the hatchery program, 200 persons were employed. Today that number is down to 12 in the salmon fisheries and five or six in the oyster program...

Because the Lummi supported salmon runs bolster the fishing economy for all fisherman, Cagey said, taxpayers have no right to complain about supporting the Lummi fishery.

Besides, he asked, where do Lummis go to spend their money? “We don’t have supermarkets, beauty salons. They get their tax money right back,” he said.

Cagey said he would prefer to break loose from the stranglehold of federal monies altogether by pooling resources of the tribes across the continent in a giant Indian cooperative.

The Lummi College of Fisheries still trains people for fisheries work, and the program attracts students from Canada, Mexico and across the United States.

Citation: Kirkpatrick, Don. "A Scaled Down Dream," *Klipsun Magazine*, Volume 12, Issue 02 - January, 1982. https://cedar.wvu.edu/klipsun_magazine/62

Notes from the Schelangen Division

Measuring failure and success is a matter of perspective. The Lummi built the aquaculture project not just for jobs—which was an important focus—but to replenish depleted resources.

As the article mentions, our project helped improve regional salmon runs. The Skookum hatchery on the Nooksack River initially was built to develop a new breed of fish, but this did not work. However, the Lummi and supporters realized the hatchery could be used to replenish traditional salmon runs. Raising hatchery salmon was controversial among Northwest Indian tribes because these fish are not as strong as wild salmon, but until the river and wild salmon return, the hatchery plays a critical role in the regional ecosystem. Fish from our hatchery swim throughout the Salish Sea and into the Pacific and are frequently caught in Canada.

The educational impact of the aquaculture project is immeasurable. The Lummi Indian School of Aquaculture later became Northwest Indian College. The Lummi Nation Natural Resource Department is also an outgrowth of the aquaculture project. The Lummi refined ecologically sustainable fishing technology and marine food cultivation techniques since time immemorial, and as a result of the aquaculture project, our expertise on aquaculture and marine science continues to be influential throughout the region and the world.

As previously mentioned, the aquaculture project brought the Lummi community together. It was connected to a series of other initiatives, including new housing developments, that uplifted the community and advanced the Lummi Nation's economic and political self-determination.

Sam Cagey's quotes about non-Indian taxpayers may also require explanation. Cagey was rebutting the common misconception that Indians have some sort of undeserved "special rights." We have political sovereignty and treaty rights affirmed in the Treaty of Point Elliot, a nation-to-nation agreement recognized in the U.S. Constitution as "law of the land." The Lummi Nation has also been the beneficiary of federal and state grants openly available to other municipalities and organizations. Cagey was pointing out that the Lummi Nation's economic activities benefit not only the Lummi, but all the region's people.

Study Questions

1. (Sourcing) Who wrote this article? When was it written?
2. (Close Reading) According to the Klipsun article, how had the goals and motives of the Lummi Aquaculture project changed between 1968 and 1982?
3. (Context) According to the Schelangen Division, what were the long-term consequences of the Lummi embarking on this project?

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