

~ Student lessons for the classroom ~ Kiksht ~ Wasq'u

UNIT:	PRAYER UNIT	BY:	Gladys Thompson, Madeline McInturff, Rudy Clements, Valerie Aguilar, Alice Harman
LEVEL:	Beginning	FOR:	Community Classes
LESSON:	Serenity Prayer	TIME:	15 minutes at a time

GOAL:

For the students to enjoy beginning and ending their classes with a Wasco prayer. To hear and feel the sounds and rhythms of Wasco. To memorize the prayer and be able to say it.

OBJECTIVES:

- The student will be able to:
1. Hear and recognize the Wasco Serenity Prayer, for full control.
 2. Repeat words and phrases of the Serenity Prayer, for partial control.
 3. Read and sound out the words and phrases of the Serenity Prayer, for partial control.
 4. Memorize and say the Serenity Prayer, for partial control.
 5. Know the meanings of four words in the Serenity Prayer, for partial control.

PROCEDURES:

1. Introduction:

Tell the students we will begin the class with the Serenity Prayer in Wasco.

2. Implementation:

First Time

Say the Serenity Prayer, have an elder say it, or show a video of an elder saying the prayer. Have the class listen.

Discuss the meaning of the Serenity Prayer. Use the English version. Refer to the prayer's use in recovery from alcoholism and substance abuse.

Later Classes

Say the prayer. Then choose one or two phrases to focus on. Have the class repeat the phrases. Work on reading and sounding out the phrases from the Serenity Prayer handout.

Last Classes

Have the students say the prayer along with the teacher. Ask the students for a volunteer to begin or lead the prayer.

RESOURCES:

- Serenity Prayer Handout

EVALUATION:

None

Wasco Chieftainship meeting at Agency

A meeting last week, called by Agency District representatives of the Tribal Council, drew around 75 people to discuss the Wasco Chieftainship.

Statements and comments from Council mem-

bers and around 20 tribal members spanned nearly four hours.

The three Agency District representatives agreed that a vote on the Wasco Chief position is the consensus, and they believe the next Wasco

chief will be chosen through an election.

Further discussions and meetings could determine eligible candidates and voters.

You can read additional information and hear audio about the process at kwso.org

Around Indian Country

Pacific Coast Indigenous nations see a glimmer of hope for the future of salmon

Brook Thompson grew up along the shores of the Klamath River in Northern California, where her family would spend their summers camping and catching salmon. "It's where I got a lot of connection about my culture and my family history," Thompson said.

Ms. Thompson, 27, is a member of the Yurok and Karuk tribes. The Klamath River, which flows from Oregon through Northern California and is part of the Yurok and Karuk traditional territory, once provided a bountiful supply of salmon in its cool, clear waters.

However, since 1918 salmon populations along the river have been declining and habitats have disappeared as six hydroelectric dams were built.

In 2002, when Thompson was seven, she witnessed the most devastating fish kill in the history of her people. According to a report from the U.S. Fish and Wildlife Service, 34,000 salmon died.

The cause of death was a parasite able to spread through the warm, stagnant water, due in large part to the low flow from a nearby dam.

When the salmon disappear

"I remember specifically holding my mom's hand and walking along the rocky shore of the Klamath River by the mouth, and just seeing piles and piles of dead salmon lining the shore," Thompson said. "I didn't understand why all these beings had to die and how they could be alive the day before and dead the next morning."

Along the Pacific Coast, many Indigenous nations carry a deep spiritual connection with salmon they share territory with. Many call themselves the salmon people. But threats like habi-

tat loss, climate change and human development from hydroelectric dams and fish farms have meant salmon are disappearing from the waters.

Indigenous nations say the loss of salmon has led to the loss of spirit, culture and overall health of their people. But as salmon continue to shimmer through the routes their ancestors once swam, the Pacific salmon people have a glimmer of hope.

That's because efforts are underway from parts of British Columbia down to Northern California, where Indigenous people are working to rebuild habitats and remove human development so the salmon might be saved for future generations of people and fish alike.

"It's not only about having the salmon, it's about teaching the Indigenous values and what it means to be a tribal member," Thompson said.

Hard-fought victories

There are five species of Pacific salmon—Chinook, Chum, Coho, Pink and Sockeye—and it's estimated that Salmon stocks in almost all areas are at historic lows. In B.C., former fisheries minister Bernadette Jordan said last year that some stocks are seeing up to 90 per cent declines.

But the shishálh First Nation along the Sunshine Coast in B.C. is celebrating a recent victory for their people and the salmon.

In November, fish farm giant Grieg Seafood announced its two remaining salmon farms in the shishálh territory would be decommissioned this winter.

The announcement came after the First Nation, with provincial assistance, decided not to renew their op-

erating license.

In 2019, B.C. became the first province to implement the United Nations Declaration of the Rights of Indigenous Peoples, which requires governments to obtain free, prior and informed consent before taking actions that affect Indigenous Peoples and their lands.

"It is actually quite remarkable for us because we've been saying it all the way along that we weren't consulted," said hiwus (Chief) Warren Paull of shishálh First Nation.

Fish farms in B.C. waters have long been linked to the spread of pathogens among wild fish, including salmon. Studies in 2011 and 2017 also found young sockeye salmon from B.C.'s Fraser watershed are infected with higher levels of lice after swimming past sea farms. Young salmon infected with parasitic lice grow more slowly, which makes them more vulnerable.

Paull said fish farms aren't all to blame, but the farms add to the cumulative effects salmon are facing from climate change and oxygen depletion in the ocean. And he worries about the orca, eagles, bears, coyotes and wolves who also rely on the salmon to live.

Juvenile wild salmon sampled this spring by the Cedar Coast Field Station on Vargas Island, B.C., have had sea lice infestations.

The net detrimental effect is pretty devastating and affects the whole cycle of life.

Moving forward with the removal of the commercial fish farms from their territory is one less obstacle for the salmon, but Paull says more work will need to be done to bring back the population.

New generation of hydroelectric dams let the fish swim straight through

The American eel is a slippery, mysterious fish. Eels live out most of their lives in the freshwater rivers and estuaries of the United States, from New Mexico to South Dakota to Florida to Maine.

The journey between the States and the Sargasso Sea to spawn is complicated not only by the trawling nets of fisherman, but the steep concrete walls and sharp steel turbines of hydroelectric power plants, over 900 of which are located within the native range of the American eel.

Such dams provide huge amounts of emissions-free energy to the U.S., making them an essential tool in fighting climate change. Balancing this benefit with the needs of the eels—and many other aquatic species—is pro-

pellling a movement to align the dual goals of producing abundant clean energy while protecting biodiversity: turbine by turbine, eel by eel.

In a hydroelectric power plant, water is channeled through turbines to spin the blades that power generators. The sharper these blades are, the more efficiently they can cut through the current to generate power.

"The typical way to design turbine blades is to have a leading edge that is as sharp as possible, which is intuitively not going to be very kind to fish," says Abe Schneider, chief technical officer and co-founder of hydropower developer Natel alongside his sister, Gia Schneider, Natel's chief executive officer. On average, hydropower turbines kill 22 percent of the fish that pass

through them. With their elongated bodies, eels are especially vulnerable. Survival rates for eels passing through traditional turbines can be as low as 40 percent.

Natel's mission is to outfit dams with blades that give fish a fighting chance. The company's Restoration Hydro Turbine system is designed to allow fish safe passage through the turbine itself. It does so through blades with leading edges meticulously blunted, curved, and slanted to minimize danger with negligible change in efficiency.

Moreover, the turbines minimize the gaps between the blades and the turbine walls, vastly reducing the chance that a fish gets trapped between moving and stationary parts.

Around Indian Country

Columbia River Treaty renewal won't just go with the flow: Salmon, environment, First Nation interests on the table

Beginning in earnest in 2018, Canada started work to hammer out a new treaty with the U.S. that would go beyond flood management and hydro-power sharing covered by the existing deal to include the environment, First Nations interests and salmon.

The U.S. has new demands, including potentially more water releases to protect the environment and a reduction in hydro-power payments, \$140 million a year on average in the past decade, that flows to British Columbia.

The payments come from a share of additional power generated in the U.S., most of which B.C. sells back to the U.S.

Add in climate change and the two sides are addressing much more complex issues than in the first agreement created nearly six decades ago that covers a drainage area the size of France.

When the treaty was completed in 1964, its main aim was simply to provide flood control and power, with three new dams in British Columbia providing huge water storage capacity.

The B.C. government announced this week a 15th round of talks had been completed but revealed little of substance.

While Canadian negotiators say there is no official deadline to reach a new agreement, measures in the existing treaty for flood storage in B.C. expire in September of 2024. When they expire, the U.S. would have to request water storage for flood control on an ad hoc basis.

"I think it's common knowledge that some kind of agreement will be reached in 2023," said Jon O'Riordon, an associate fellow at the University of Victoria's Centre for Global Studies and a former assistant deputy minister in the B.C. government.

O'Riordon, who has decades of experience in water policy, said the push to have an agreement reached in 2023 is because of the September 2024 expiration of the flood storage measures.

He noted time is of the essence as any agreement also needs public review and ratification by governments on both sides of the border that could, for example, be affected by the U.S. federal election in November of 2024.

Barbara Cosens, a professor emerita at the College of Law at the University of Idaho, said if the two countries don't reach an agreement by September 2024, it's possible that the existing flood control measures in Canada and the payments could be extended while negotiations continue.

Cosens said there is need for a more complex agreement, but it is a recognition of environmental and other issues ignored 60 years ago.

And she noted that areas of mutual interest around the environment and salmon should help facilitate an agreement and broker trade-offs over water flows and power payments.

The Keenleyside Dam on the Columbia River, near Castlegar, in 1989, about 25 years into its life as a crucial component of the Columbia River Treaty.

"These things are not impossible to work out," said Cosens, a long-time observer of the treaty and Columbia River basin interests. "I think you have real opportunities for a modernized treaty that accounts for the complexity going forward."

Richard Paisley, director of the global transboundary international waters governance research initiative at the University of B.C., said it still not clear to him that a new treaty can be reached.

He said if an agreement is not reached before the flood control measures in the treaty expire, there will be much less impetus to do so.

He noted that including environmental and ecological issues in the treaty add a significant level of complexity, as defining those issues will be different to the many parties affected, including First Nations on both sides of the border.

"There is as many visions of what ecosystem management is as there are people who have those visions," observed Paisley, who has helped to negotiate international water agreements around the world.

Following the latest round of negotiations, the B.C. government cited some confidence on reaching an agreement.

Said Katrine Conroy, the B.C. minister responsible for the treaty: "Although there are still outstanding issues to be resolved, there is cause for optimism as the negotiating teams move closer to a consensus on some of the main issues."