

The background of the slide features a large, faded circular seal. The top half of the seal contains the text "LUMMI NATION" in a grey, sans-serif font. The bottom half contains the text "TREATY OF 1855" in a red, sans-serif font. In the center of the seal is a stylized bald eagle with its wings spread, facing right. The eagle's body is white, and its wings are yellow with red and black patterns. The eagle is perched on a branch.

Energy Sovereignty for Lummi Nation

Stephanie Bostwick

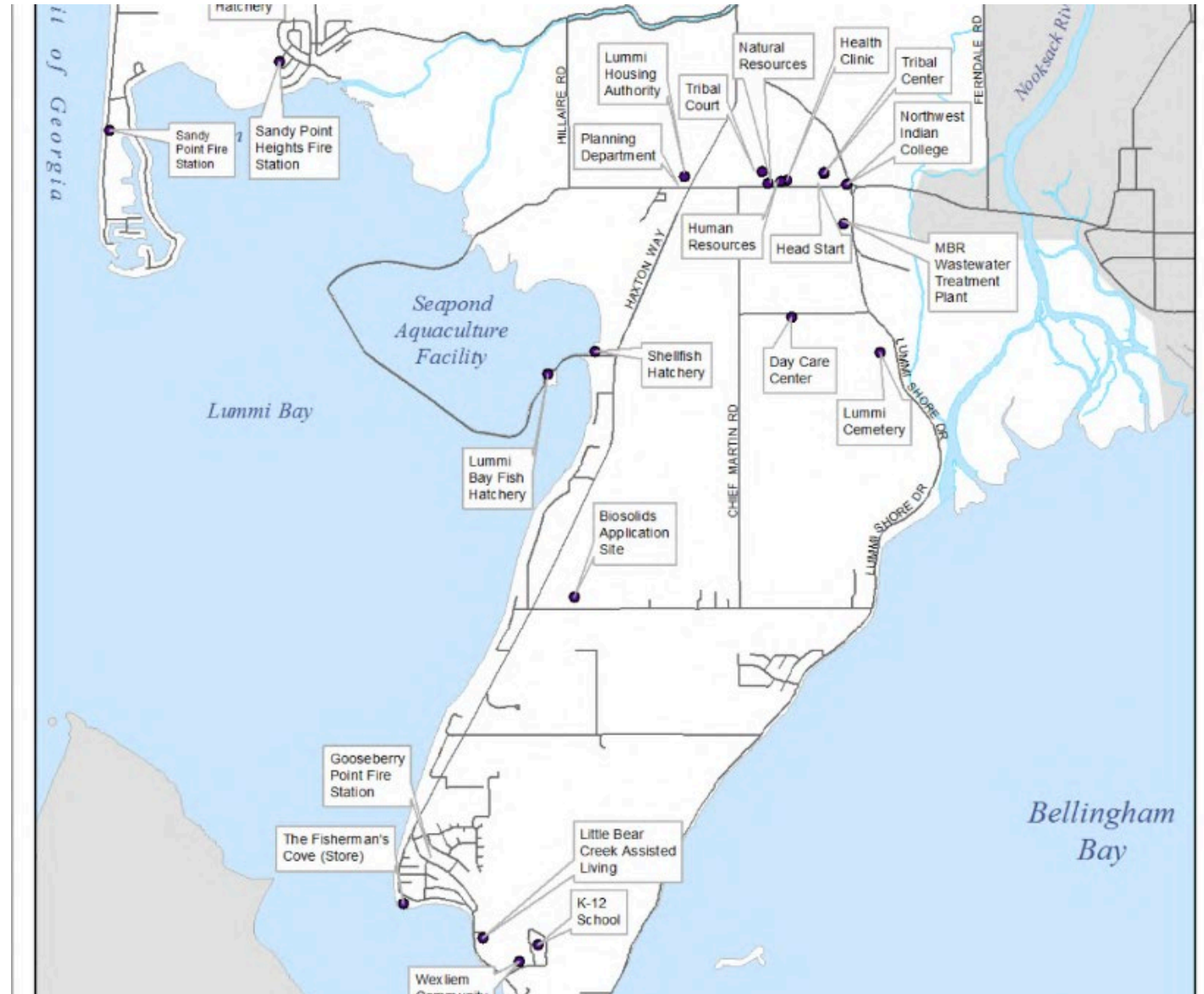
19 October 2022

Overview

- 1) Lummi Nation Background**
- 2) Community Meeting and Vision for Energy Sovereignty**
- 3) Solar Capacity Building and Microgrid Planning through Grants**
 - Lummi Solar Task Force
 - Northwest Indian College (NWIC) and Lummi Nation School (LNS)
- 4) Education**
 - Engineering at NWIC
 - K-12 outreach with LNS
 - Workforce Development
- 5) Plan for the Future**

Lummi Nation Background

- 21,000 acres
- 5000+ community members
- Lhaq'temish – People of the Sea
- Northwest Indian College founded in 1973 as Lummi Indian School of Aquaculture – today serves over 100 Tribes at 7 campus locations



Community Meeting and Vision for Energy Sovereignty

- Meeting took place in September 2019, organized by Spark Northwest
- Several community members without access to Puget Sound Energy (PSE)
- Strong interest in community management of own energy
- Many individuals interested in Renewable Energy – dams may create inexpensive power, but salmon population is depleting
- Resilience during power outages – Reservation is not PSE's top priority for power restoration
- Lummi Indian Business Council (LIBC) subsequently passed Resolution 2020-019 in support of Solar Task Force

Solar Capacity Building and Microgrid Planning through Grants: Lummi Solar Planning Team



Title	Funder
Admin Building and HeadStart Building (384 kW)	WA Department of Commerce Clean Energy Fund (2019)
Green Power Community Support Grant for LNS (50 kW)	Puget Sound Energy (2019)
Lummi Nation Microgrid Feasibility Study	BIA Energy and Mineral Development Program (2021)
Admin Building and Wexliem	WA Housing Finance Commission (2021)
Lummi Tribal Health and Wellness Building (100 kW)	US DOE Deployment of Energy on Indian Land/Edwards Mother Earth Foundation (2021)
Lummi Nation School (72 kW)	WA Department of Commerce: Energy Retrofits for Public Buildings (2022)

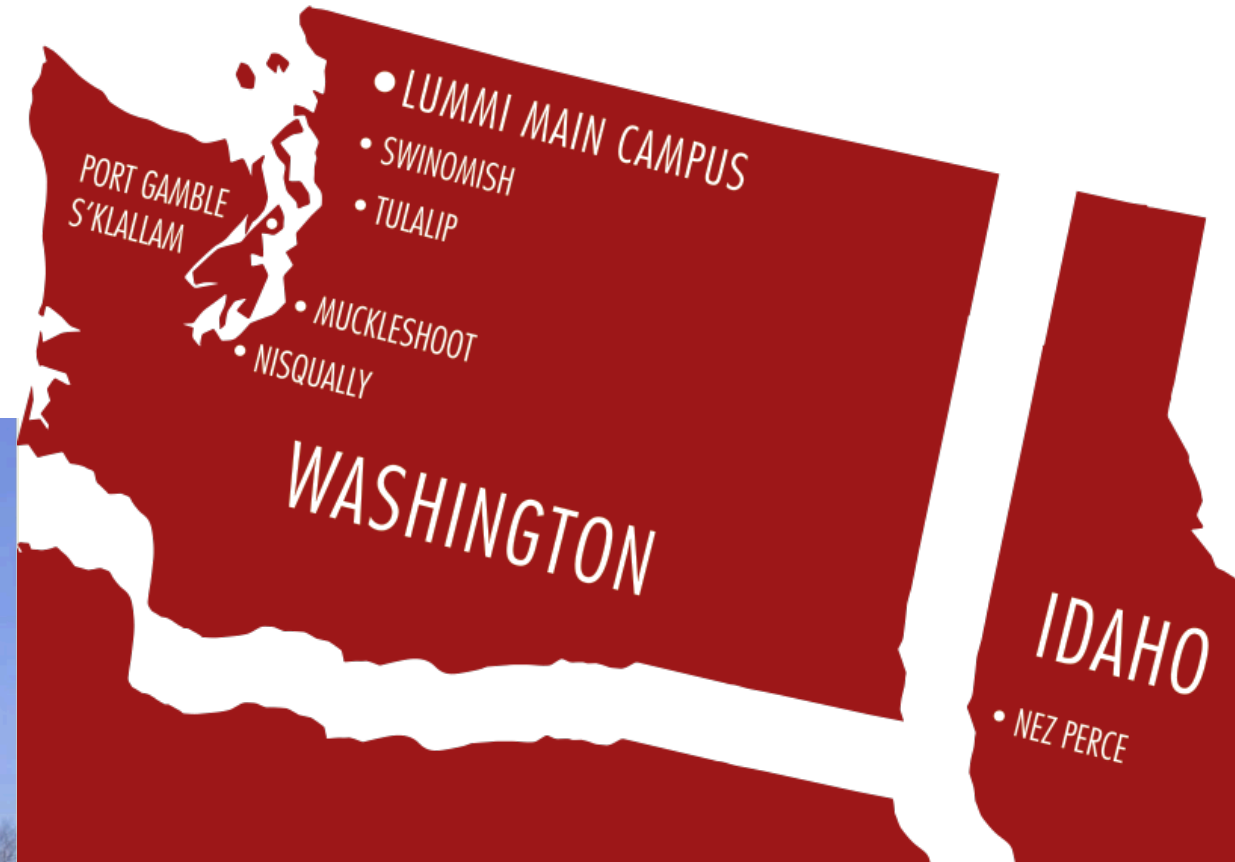
Solar Capacity Building and Microgrid Planning through Grants: NWIC and LNS



Title	Funder
Solar installation on NWIC Cooperative Extension Building (16 kW)	Na'ah Illaheed Fund (2021-22)
Mock Roof and Train the Trainer	All Points North Foundation (2021-22)
Lummi Nation Microgrid Feasibility Study	BIA Energy and Mineral Development Program (2021-22)
NWIC Microgrid Feasibility Study	BIA Tribal Climate Resilience (2021-23)
Youth Engagement	BIA Tribal Climate Resilience (2021-23)
Travel to NWIC sites for solar installation training	BIA Tribal Climate Resilience (2021-23)
Solar installation on NWIC Library (70 kW)	Grid Alternatives Tribal Solar Accelerator Fund (2022-23)

Education: Engineering at NWIC

- Program focuses on real world, hands-on learning opportunities for students
- Students exposed to Renewable Energy and Microgrid technologies
- KCTS-9 documentary featured Engineering Program



Education: K-12 Outreach with LNS

- STEM summer camps with solar kits and kites
- Teacher training for We Share Solar briefcase kits
 - Partnership with Remote Energy
 - Students donate completed kits to elders



Education: Workforce Development

- Partnered with Remote Energy to develop multiple hybrid courses for solar technicians including installation, maintenance and troubleshooting
- In process of starting mock roof design and build for Lummi Main campus
- Working with Remote Energy to retrofit donated trailer for mobile training at NWIC sites



Credit: redcloudrenewable.org

Plan for the Future

- **Use output of Microgrid Feasibility Studies to apply for infrastructure funding**
- **Use Biosolids Site for additional solar and wind generation**
- **Continue growing Engineering and Workforce Development to ensure next generation has stake in their future**
 - **Second documentary in-progress with Plumb Productions**

Questions?

