

# Lummi Indian Business Council Lummi Health and Dental Facility

---

PRESENTED BY:

SEAN LAWRENCE, DIRECTOR, OFFICE OF ECONOMIC POLICY

# Agenda

---

Introduction

Background

Overview of Past Efforts

Overview of Current Efforts

Overview of Lummi Health and Dental Facility Project

Next Steps

Q & A

# Introduction

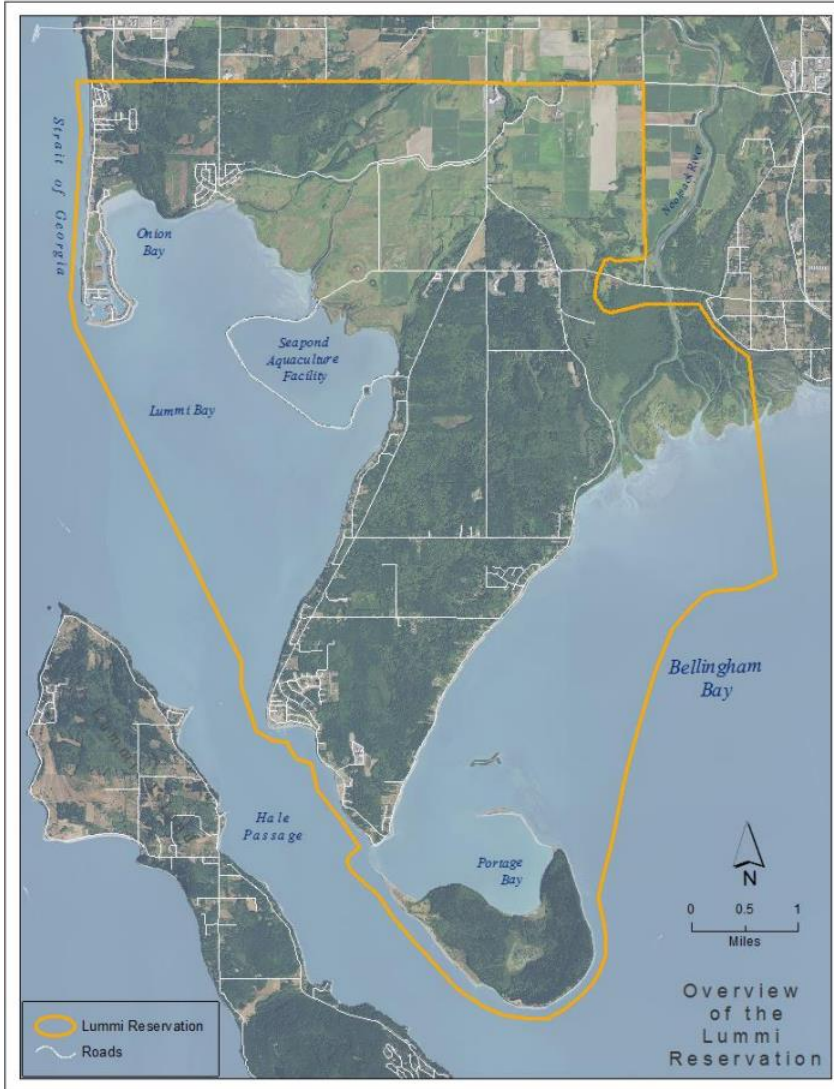
---



## Sean Lawrence

- Director, Office of Economic Policy (2+ years)
- Provide leadership and technical assistance to Nation-owned and member-owned enterprises in support of raising the standard of living for Lummi Tribal Members
- Serves as a member of the (internal) Energy Task Force, now Energy Task Force
- Business Analyst, 4+ years
- Masters of Business Administration – Arizona State University ('18)
- Bachelors of Art – Tribal Governance and Business Management – Northwest Indian College ('15)

# Background



We are the Lhaq'temish, the Lummi People. We are the original inhabitants of Washington's northern most coast and southern British Columbia. For thousands of years, we worked, struggled, and celebrated life on the shores and waters of the Puget Sound.

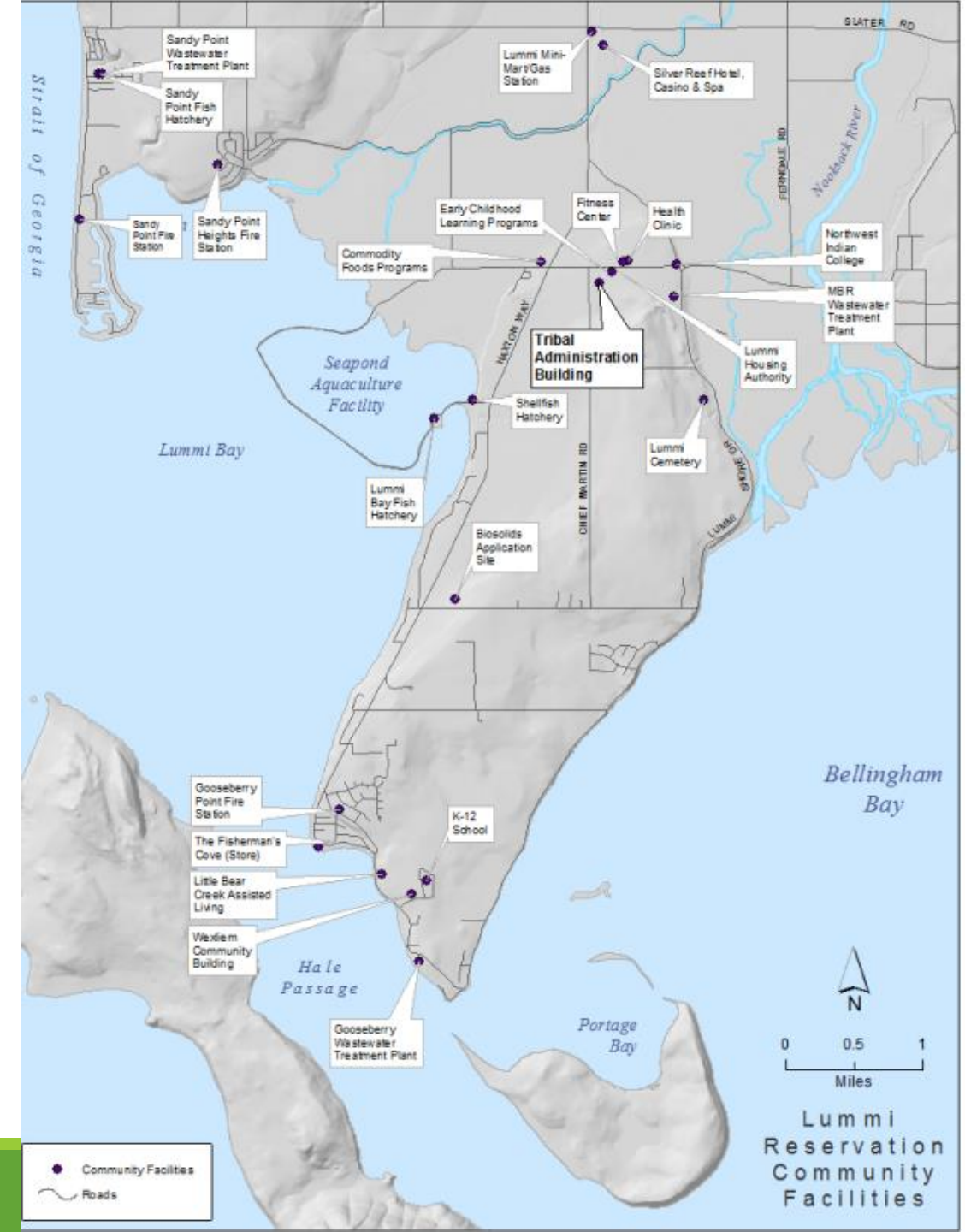
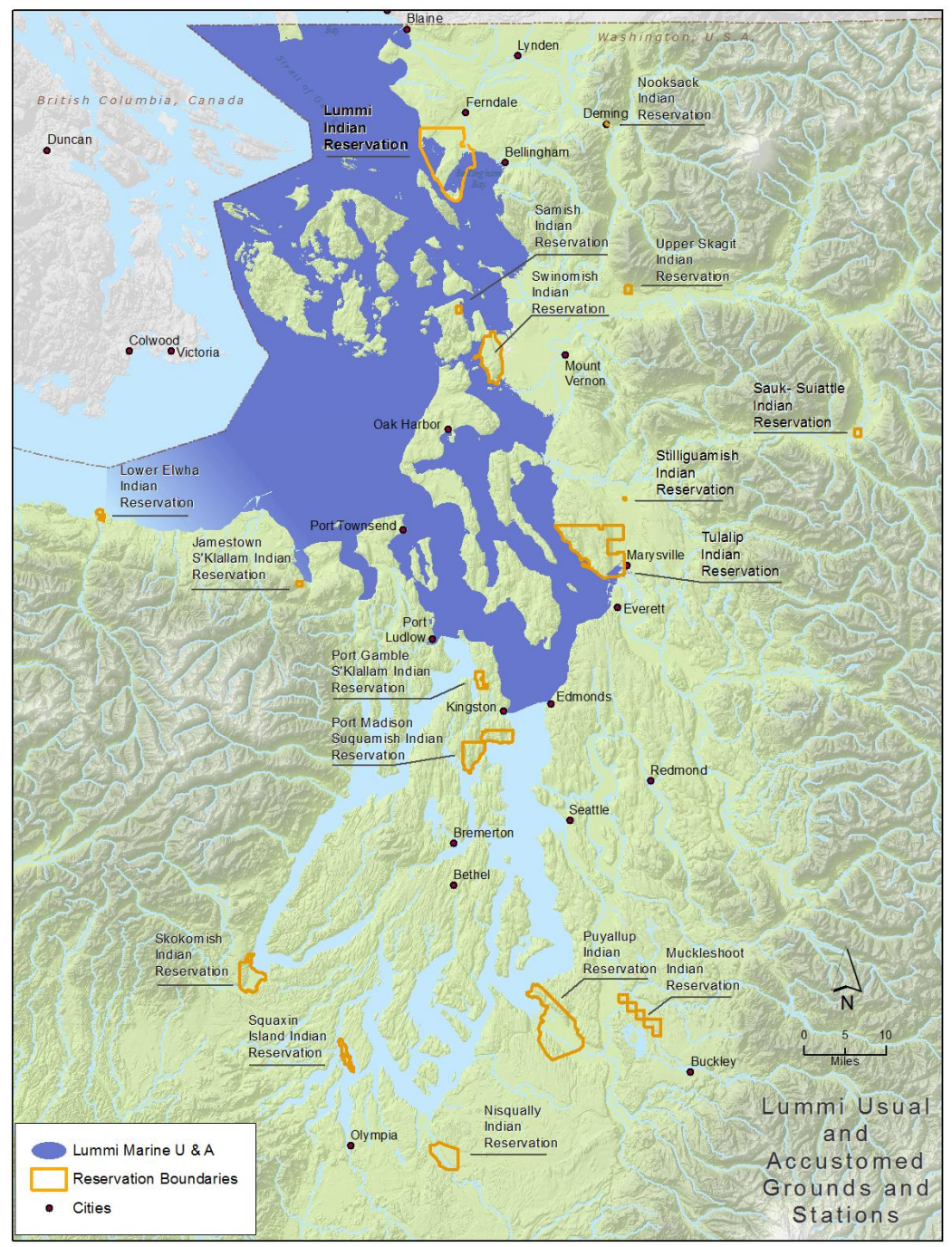
Signatories of the Point Elliott Treaty of 1855

The Lummi Indian Business Council is the Governing Body of the Lummi Reservation

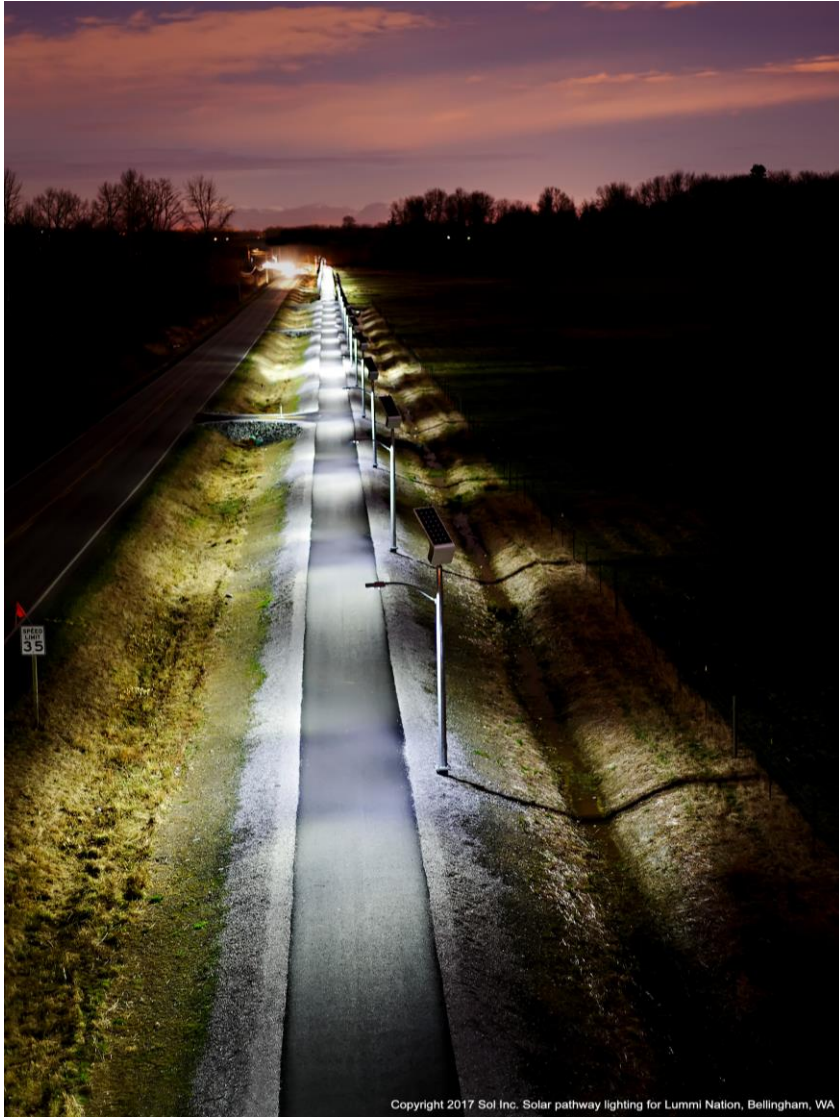
The Lummi Nation continues to govern its own affairs. Investing in the education and training of our people, developing our economy, and holding true to our values.

Our mission is to protect, preserve, and promote our "*Schelangen - Way of Life*".









Copyright 2017 Sol Inc. Solar pathway lighting for Lummi Nation, Bellingham, WA

# Overview of Past Efforts

---

## 1980s-2010s

- Tribe is interested in exploring energy projects
  - Cogeneration facility
  - Wind Energy Assessment
  - Haxton Way Pedestrian Path – Solar Powered
  - Lummi Tribal Administration Building – Geothermal Heat Pumps

## 2014

- Guiding Principles of Climate Change
- Energy Efficiency Pilot Program

## 2016

- [Climate Change Mitigation and Adaption Strategy](#)
- [Strategic Energy Plan](#)

## 2020

- Implementation of a Solar Energy Task Force



# Current Efforts

---

Renaming of Solar Energy Task Force to Energy Task Force

## Installation Projects

- Lummi Tribal Administration Building\* -Solar
- Lummi Early Learning Program\* - Solar
- Lummi CAREs Building\*- Solar
- Lummi Nation K-12 School - Solar
- Northwest Indian College – Solar
- Lummi Health and Dental Facility – Geothermal Heat Pumps

Each project includes workforce development

Lummi Microgrid Feasibility Study and construction

Federal, State, and Local partners support these efforts

\* Projects that distribute energy savings to the community

# Lummi Indian Business Council Lummi Nation Health and Dental Facility

Control Number: #2317-1523

Topic Area 1a: Energy Generating System(s)

## Project Summary

The Lummi Nation will install a 99.8 kW photovoltaic (solar electric) system at the Lummi Nation Health and Dental Facility, a new 50,000 square foot facility to be located at 2616 Kwina Rd, Bellingham, WA in an effort to 1) improve economic and energy self-sufficiency and 2) reduce emissions from energy production and use that contribute to global climate change, air quality degradation, and other adverse environmental and human health impacts. The new clinic will be located in a high visibility area, which hosts a cluster of community resources. Additionally, tribal members will receive training in solar system operations and maintenance to mitigate long term costs and improve workforce opportunities.



The Lummi Nation Health and Dental Facility will embody an integrated care approach with features that maximize economic, ecological and social benefits, and support goals toward energy sovereignty.

## Key Personnel/Organizations

Sean Lawrence, LIBC Office of Economic Policy  
Dale Andert, LIBC Public Works  
Tim Ellis, LIBC Public Works  
Cornerstone General Contractor  
Rhima Electric

## Budget

**Federal funds requested: \$146,123**  
**Cost-share proposed: \$146,123**  
**Total Project Costs: \$292,246**

## Project Outcomes

- 99.8 kW Solar PV Array providing 114,600 kWh/year estimated production, 14% offset from a baseline, an estimated \$324,984 of energy savings over 25 years
- Solar technology training for 7 Lummi tribal members
- Per year, the solar PV system will eliminate an estimated 77,784 pounds CO<sub>2</sub>, 48 pounds SO<sub>2</sub>, and 72 pounds NO<sub>x</sub>



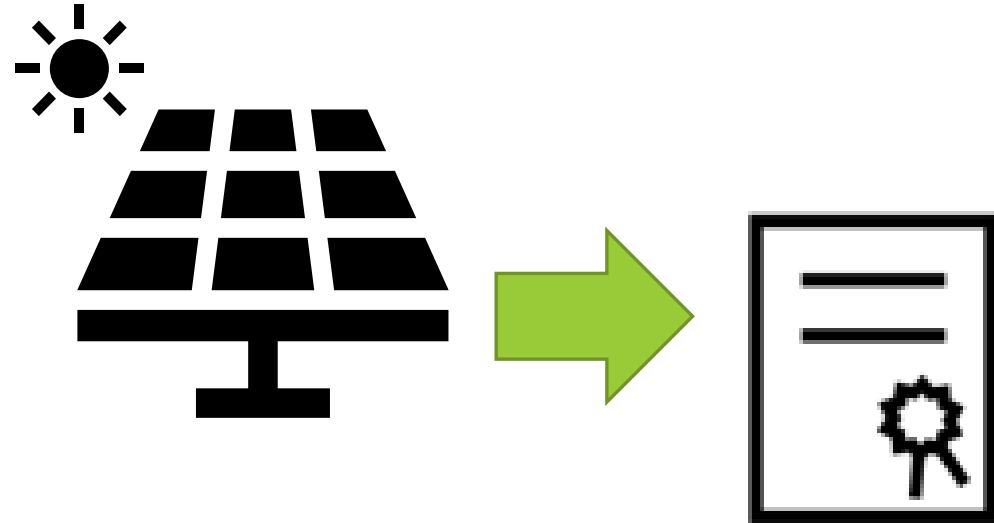




# Lummi Nation Health and Dental Facility Project Objectives

---

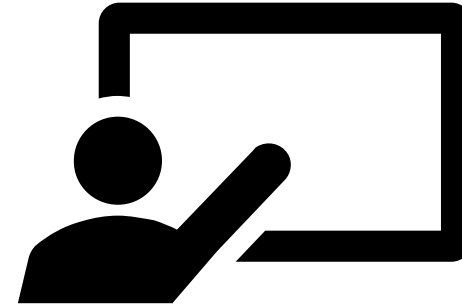
1. Contracts and Design
  1. Vendor and LIBC Work with utility on interconnection requirements and scope of work
  2. NEPA Approval
2. Equipment Procured and Shipped
  1. Vendor issues contract for PV equipment
  2. Vendor coordinates with Construction Team regarding staging area and timing
  3. PV Equipment delivered and staged
3. Project Installation
  1. PV System installed
4. QA/QC, Commissioning, and Interconnection
  1. PV Systems Interconnected and activated



# Lummi Nation Health and Dental Facility Project Objectives

---

5. O & M Training
  1. LIBC Staff Trained in PV O & M
  2. LIBC Staff circulate contact info of internal staff delegated with monitoring, O & M, and external resources for troubleshooting
6. Systems Performance Monitoring
  1. PV System performance monitored for solar production as anticipated
  2. Staff resolve any unexpected variance in solar production
7. Verification of Energy Savings
  1. LIBC collects utility bills and prepare report
  2. Reporting as described within E. Reporting





# Lummi Nation Health and Dental Facility

## Progress Made

---

- Confirm with roof design engineer solar panel racking system and weight of system conforms to standards
- Confirm structural and electrical design
- Procure materials
- Completed installation by June 30, 2023

## Next Steps

---

- Utility to install Net Metering Meter
- Connect system to grid
- QA/QC Commissioning
- O & M Training for LIBC staff
- 12 Month Energy Savings Verification Report

# Lessons Learned

---

## Project timing (start early)

- Solar Panels – supply chain issues
- Installation and Commissioning delayed
- Delay in energy measurement period

# Q & A?

---

For more information contact:

Sean Lawrence

Email: [SeanL@lummi-nsn.gov](mailto:SeanL@lummi-nsn.gov)

Office: (360) 312-2158

Cell: (360) 306-7262

LinkedIn: [Sean Lawrence, MBA | LinkedIn](#)



# Disclaimers

---

## WASHINGTON STATE CLEAN ENERGY FUND 3

The Projects identified in this presentation (Lummi Tribal Administration Building, Early Learning Program, and CARE building), are funded in part by the Washington State Department of Commerce, Clean Energy Fund 3 (CEF3), Low-Income Community Solar Deployment (LICSD) Grant Program.

## WASHINGTON STATE HOUSING FINANCE COMMISSION

The Projects identified in this presentation (Lummi Tribal Administration Building, Early Learning Program, and CARE building), are funded in part by the Washington State Housing Finance Commission, Sustainable Energy Trust (SET) Program

# Disclaimers (Continued)

---

## UNITED STATES BUREAU OF INDIAN AFFAIRS

The views and conclusions contained in this document are those of the authors and should not be interpreted as representing the opinions or policies of the U.S. Government

## PUGET SOUND ENERGY

Puget Sound Energy Retains the exclusive right to claim credit for the Environmental Attributes associated with the Renewable Energy Credits under a Purchase and Sales Agreement.