

The Coeur d'Alene Tribe

Energy Efficiency and Renewable Energy

May 3, 2019

By Tiffany Allgood, EAP Coordinator

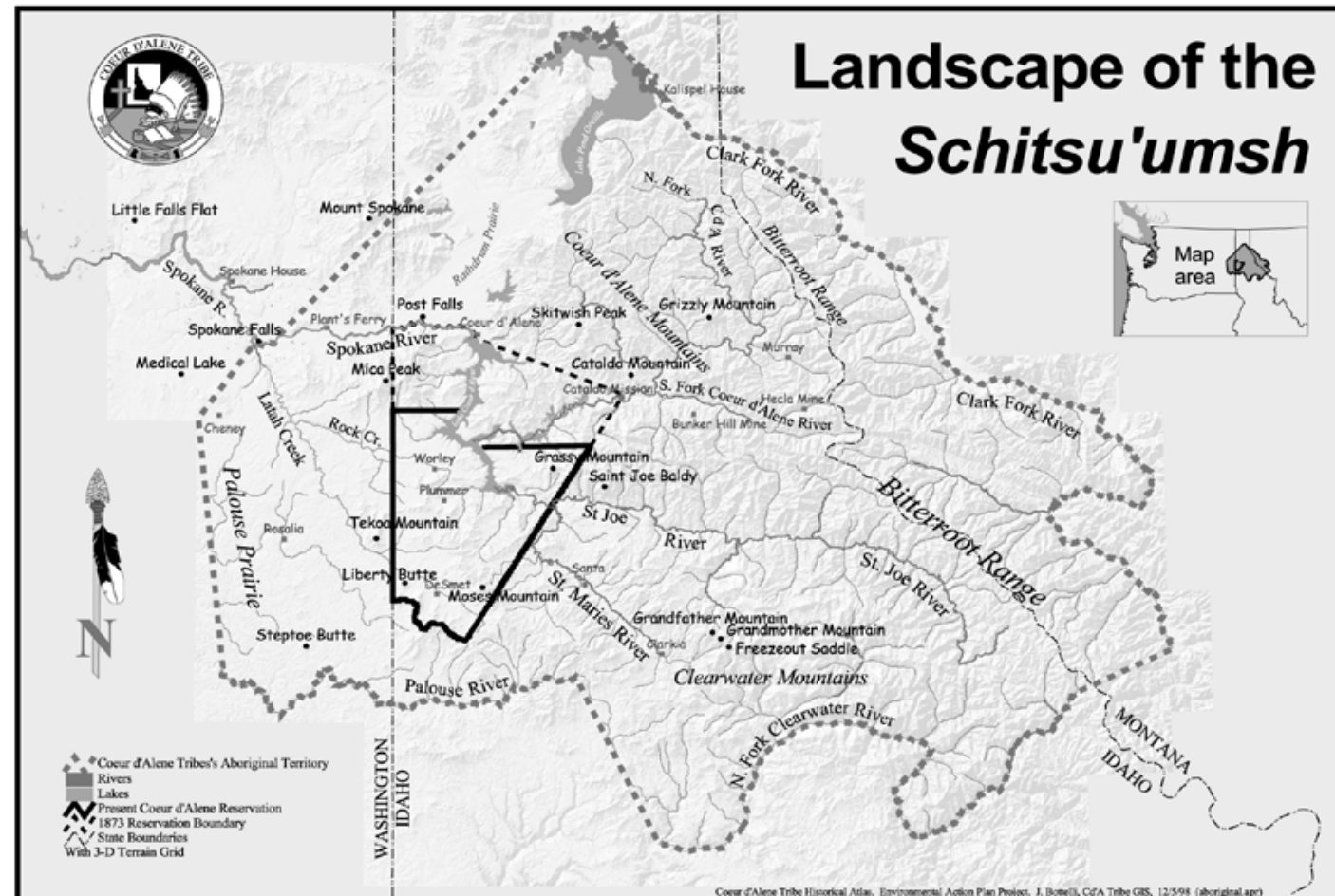
Presentation Summary

- Overview of the Coeur d'Alene Tribe
- Previous and current Tribal energy work (EE and Renewable Energy)
- Next Energy Steps
- Lessons Learned
- Contact Information

Overview of the Coeur d'Alene Tribe

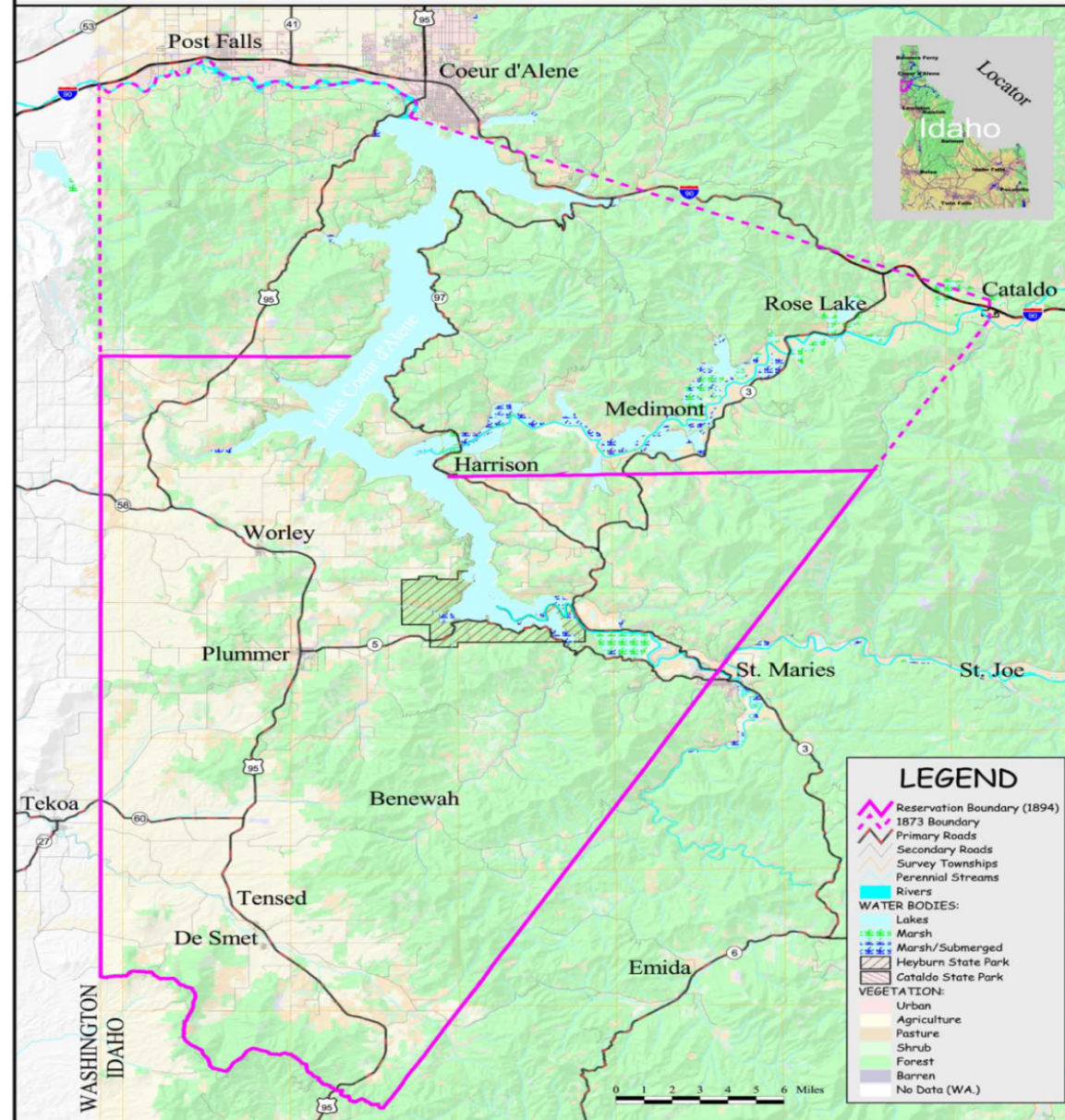
- The Coeur d'Alene Reservation is approximately 334,000 acres, not including Tribal submerged lands.
- Aboriginal territory = more than 5 million acres.
- 6,760 residents according to the 2010 Census.
- Tribal enrollment is 2,501 and growing (December 2018).
- Tribe relies on forestry, agriculture, gaming, etc. in the current economy.
- Tribe continues traditional subsistence activities such as fishing, hunting and gathering foods and medicine.

Coeur d'Alene Tribal Map of Aboriginal Territory and Present Reservation Boundary





Coeur d'Alene Reservation



Coeur d'Alene Reservation



Coeur d'Alene Reservation



Coeur d'Alene Tribe

Mission Statement

We shall preserve and maintain at all costs our inalienable right to exist as a sovereign nation of people, speak our language, practice our traditions and culture, serve as protectors and stewards of our Mother Earth, respect our elders in everything we do, endeavor to build a future for our children and coming generations that is improved and better than what we ourselves inherited, and promote proud, healthy and vibrant communities and families.

Vision Statement

The Schi'tsu'umsh, Coeur d'Alene Tribal Nation, forever guided by the traditional values of our great leaders of generations past, shall be the "model government" of the world, united as one under the K'olunsuten, with love for our tribe, harmonious with our natural world and the Mother Earth, proud in the strength of our community development, but remaining who we are, who we were meant to be and who we always shall be: Schi'tsu'umsh, Coeur d'Alene Indians!

Prior Energy Work

- Early energy efforts began in our Planning/Public Works Department
 - In 2008, the Tribe's Public Works Department completed a Wind and Biomass Energy Feasibility Study with Bureau of Indian Affairs funding (very preliminary)

Prior Energy Work

- In 2009, Bonneville Power Administration funded Energy Smart of Portland, Oregon to conduct energy audits of the Benewah Market and Benewah Auto on behalf of the Tribe's Development Corporation (reports were completed)

Prior Energy Work

- The Tribe's Environmental Programs Office began energy work with the U.S. Department of Energy, Energy Efficiency & Conservation Block Grant (American Recovery and Reinvestment Act of 2009)
- Bonneville Power Administration contributed funding to this effort in addition to the U.S. Department of Energy

Prior Work

June 2012 – The Tribe completed its initial energy efficiency report on 34 Tribal government buildings



Coeur d'Alene Tribe Energy Efficiency Assessment Report

PLUMMER, ID
JUNE 2012



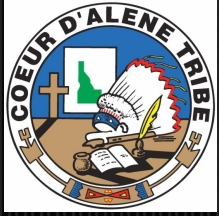
Prior Energy Work

- Developed Tribal Energy Goals
 - Energy Efficiency & Conservation Strategy (2012)
 - Integrated Resource Management Plan (2012)

Prior Work:

Energy Efficiency Feasibility Study (EEFS)

- In 2011, the Tribe was awarded a U.S. Department of Energy, Energy Efficiency and Deployment in Indian Country grant in to conduct an EE Feasibility Study on all Tribal buildings
- This study went in more depth and had more detailed information than the first energy efficiency assessment report



Coeur d'Alene Tribe, Plummer, ID

Bonneville Power Administration (BPA), Spokane, WA



City of Plummer, ID

Partnerships

Clearwater Power, Plummer, ID



Ourevolution Energy & Engineering, Arcata, CA

Kootenai Electric Cooperative, Hayden, ID



Prior Work

- The Tribe completed its Energy Efficiency Feasibility Study on 36 Tribal buildings in 2014



Coeur d'Alene Tribe Energy Efficiency Feasibility Study



Coeur d'Alene Tribal Benewah Medical Center Front Entrance

Prepared for the Coeur d'Alene Tribe
Environmental Programs Office in the Natural Resource Department
by:



September 2014
Technical Report for the U.S. Department of Energy
Assistance Agreement Award #DE-EE0005170

Prior Energy Work:

Benewah Market Energy Efficiency Project

- In 2013, the Tribe was awarded a U.S. Department of Energy, Tribal Renewable Energy and Energy Efficiency Deployment Assistance grant
- The project was a partnership between the Tribe's Development Corporation and the Tribe's Environmental Programs Office in the Natural Resources Department

Prior Energy Work:

Benewah Market Energy Efficiency Project

- Owned by the Tribe
- Located in Plummer, ID
- Approximately 16,000 square feet
- Only full service grocery store in a 35-mile radius



Prior Energy Work:

Benewah Market Energy Efficiency Project

- The Benewah Market EE Project Replaced:
 - 14 aging floor cases with high efficiency cases with doors (where applicable) and integrated controls
 - 16 individual compressors for the refrigeration cases and walk-ins
 - Roof top condensers
 - 15 evaporators in the walk-in coolers and freezers with high efficiency units equipped with electronically commutated motors and integrated control features
 - Refrigerant lines

Prior Energy Work: Benewah Market Energy Efficiency Project



Prior Energy Work: Benewah Market Energy Efficiency Project

New Compressors



Prior Energy Work: Benewah Market Energy Efficiency Project



Before

Produce Department Remodel



Prior Energy Work: Benewah Market Energy Efficiency

- Lowered operating costs
- Lowered maintenance costs
- Improved perception of overall store
- Improved food quality
- Increased Tribal pride in store
- Received community support & appreciation
- Increased store sales



Prior Energy Work:

Benewah Market Energy Efficiency Project

- The Benewah Market EE Project was projected to:
 - Save at least 30.8% of the total energy used at the Market
- The Benewah Market EE Project Actually Saved:
 - 22.9% of energy use compared to pre-project energy use
(There was an over-estimation of the older equipment's inefficiency, and the Tribe did not install a heat recapture system to replace the one that was installed on the old equipment)

Energy Work with BEF

- In 2014, Bonneville Environmental Foundation awarded the Coeur d'Alene Tribe a Solar 4R Schools Program grant to place a 14.25 kW solar photovoltaic system on the Tribe's Natural Resources Department building



<https://cebrightfutures.org/kiosk-coeur-d-alene-tribe-natural-resources>

Energy Work with BPA

- In 2018, Bonneville Power Administration's Tribal Low-Income Energy Efficiency Program awarded the Tribe funding to replace all of the refrigerators and clothes washing machines, and some of the bathroom fans in the Tribe's Senior Housing Complex apartments



New Energy Work – Senior Housing Complex Energy Efficiency and Solar Energy Project

- The Tribe was awarded a new U.S. Department of Energy, Energy Infrastructure Deployment on Indian Lands grant in 2018 for the Tribe's Senwichen Senior Housing Complex commons area
- Bonneville Environmental Foundation is providing most of the cost share for the project and is also providing the Tribe technical assistance during the project

SENIOR HOUSING ENERGY EFFICIENCY AND SOLAR PROJECT

TOPIC AREA 1.C

Project Summary

The proposed project will integrate a 52kW solar PV system to the Senior Housing Complex in Plummer, ID. The project will also upgrade lighting, a water heater, and additional efficiency measures. The Tribe's long term energy goals include "improving the quality of life and providing social and economic benefits across the Reservation." These proposed measures move the Tribe toward a more sustainable energy system while providing benefits to its tribal senior residents.



The combined solar and energy efficiency measures will help reduce the total cost of housing for Tribal Seniors.

Key Personnel/Organizations

Tiffany Allgood – Project Manager – Tribal Natural Resources

Caj Matheson – Tribal Natural Resources Director

Evan Ramsey – Consultant – Bonneville Environmental Foundation

Adam Hoefert – Contractor – Next Gen Electric LLC

Budget

Federal funds requested: \$92,500

Cost-share proposed: \$92,500

Total Project Costs: \$185,000

Project Outcomes

The proposed solar and efficiency project will save nearly 100,000 kWhs/year of energy which will reduce the Senior Housing Complex common area's electricity cost by 87% with a decrease of \$7,600 per year. This effort will help deepen the Tribe's solar and efficiency impact with an associated reduction in carbon emissions of nearly 3 million pounds. This next step in the Coeur d'Alene Tribe's sustainable energy journey will demonstrate the value of solar and efficiency to the community and help spur additional solar development.

What's Next ?

- New funding just received from Bonneville Power Administration to complete energy efficiency work at the Tribe's Senior Apartments (and hopefully will continue in future years)
- Look for more ways to involve the Tribal community and provide training opportunities for energy efficiency and renewable energy work

What's Next?

Pursue
training
opportunities
during
projects such
as solar
installation



What's Next ?

- Recently applied for funding from the U.S. Bureau of Indian Affairs for Energy and Minerals Development Program funding to conduct a Solar Feasibility Study on the Coeur d'Alene Reservation – waiting to hear about the funding decisions
- Continue to build on successes and look for new opportunities to increase energy efficiency and renewable energy

Lessons Learned

- Support from Tribal leadership and management is essential
- Each step of the Tribe's energy work has been built on previous Tribal energy work (and it takes time)
- Partnerships that have been built over time have been critical to the Tribe's energy progress

Lessons Learned

- Having an energy champion in the Tribe helps start and maintain momentum
- Staff continuity is good for maintaining institutional memory for energy work
- Submitting grant reports on time and establishing a good track record with funders is important

Contact Information

- If you would like more information, please contact:
- Tiffany Allgood, Environmental Action Plan Coordinator, at (208) 686-8802, tallgood@cdatribe-nsn.gov

Thank you for your time today