The Coeur d'Alene Tribe

COEUR CENTER SOLAR PROJECT

November 14, 2023
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Presentation Summary

- Overview of the Coeur d'Alene Tribe
- Previous Tribal energy work
- Coeur Center Solar Project
- Next Steps
- Lessons Learned

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.
- Grown from 6,760 residents in 2010 to 8,068 residents in 2021.
- Tribal enrollment is 2,599 as of November 2023, just under half live on the Reservation; 865 are below 18 years old, and 1,400 are under 30.
- Major employers: CDA Casino and Resort (850), Marimn Health and Wellness (200), and Tribal Government (~320).
- Tribe continues traditional subsistence activities such as fishing, hunting and gathering foods and medicine, though these practices have been badly impaired by settler encroachment.





The schitsu'umsh People





t'u'lschint (Membership)

Capable, decent, moral, 'a good person', a good citizen in your family, tribal, local and world community. A responsible, accountable and informed citizen in all spheres of relationship.

snmiypnqwiln (Scholarship)

Life-long, holistic learning with ideas rooted in tribal values, self-determination, self-government and sovereignty that produces deep knowledge to understand the world and meaningful application within the community.

'ats' qhnt' wesh (Stewardship)

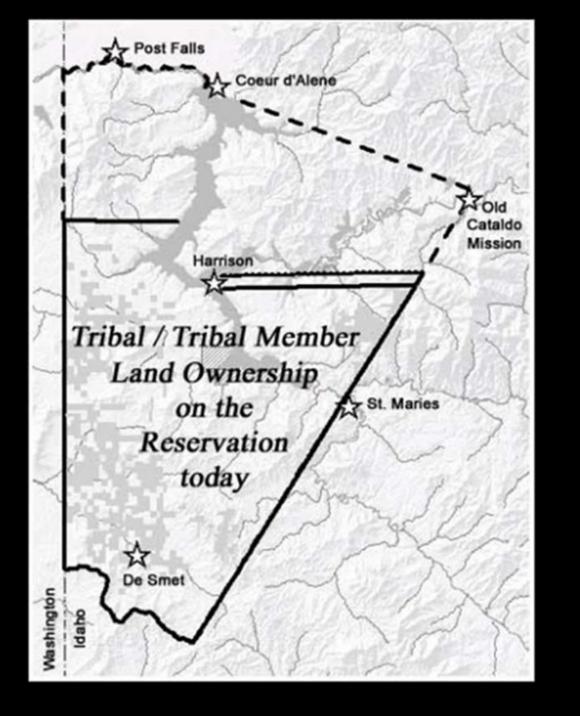
To care for all things with integrity, responsibility, accountability and social awareness in all spheres of life, human, animals, natural resources, and the cosmos, looking at each other from the heart.

hnshat' qn (Guardianship)

To protect our tribal ways of knowing and being through the protection, care and responsibility for our people, natural resources, culture, history, traditions, language and spirituality.

chsnpa'silgwesn (Spirituality)

Faith from which the Creator reveals the connection between all life. It unites the space between the past, present, and future through the peoples, environment, and land; and is rooted within the ceremonies from which the Tribe celebrates those connections.





Coeur d'Alene Reservation





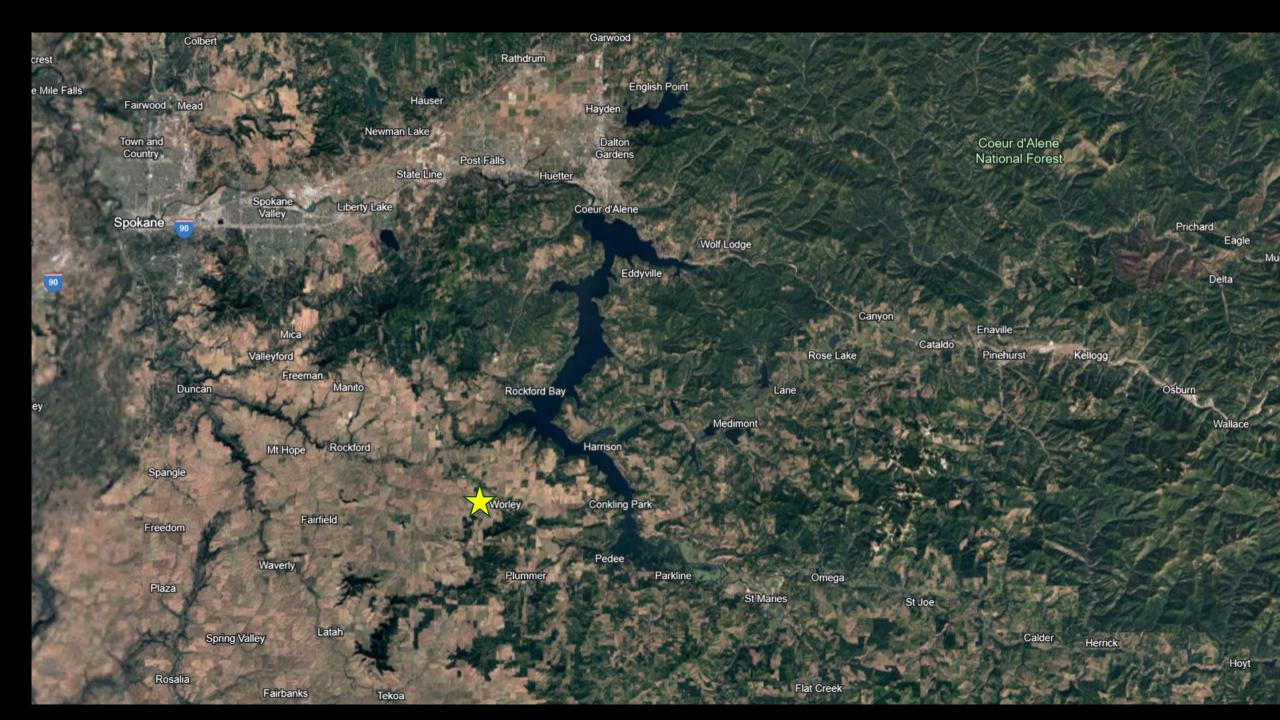
Coeur d'Alene Tribe

Mission Statement

All people on the Coeur d'Alene Indian Reservation shall have a chance to pursue their hopes and dreams as members, guardians, and stewards in a culturally rooted, vibrant, safe, healthy and sustainable community.

Vision Statement

The Coeur d'Alene Tribe shall exercise its inherent sovereignty, responsibility and self-governance practices by means of innovation and economic and environmental leadership, so that the people, lands, and resources across the Reservation and Tribal aboriginal lands shall thrive and prosper.



Tribal Natural Resources Department

- In 1992, the Tribal Natural Resource Department was established as a stand-alone Department.
- Natural Resources: Environmental Programs, Fisheries and Wildlife,
 Forestry and Fire, Land Services, Recreation, and Water Resources
- Environmental Programs:

Air Quality
Pesticide Circuit Rider
Wetlands Restoration
Climate Resilience
Environmental Health
Solid Waste/Recycling

Brownfields
Energy Development
Land Use
Research – Climate-smart economic opportunities, Energy and water resilience

Prior Energy Work

- 2012 Energy efficiency report on 34 Tribal government buildings
- 2014 -Energy efficiency feasibility study
- 2014-2016 Benewah Market Energy Efficiency upgrades
- 2018 -2019 Sennwinchen Senior Housing Complex Commons Area: 52.4 kW solar PV system (ground-mounted)











Senior Apartments



Other Energy Work

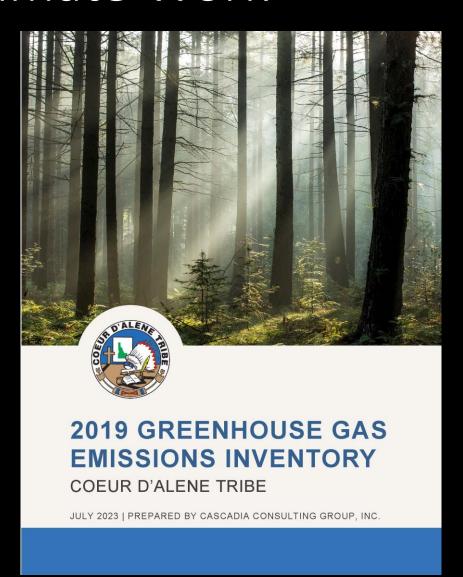
- 2008 Wind and Biomass Energy Feasibility Study with Bureau of Indian Affairs funding (preliminary)
- In 2018, Bonneville Power Administration's Tribal Low-Income Energy Efficiency Program awarded the Tribe funding to replace all refrigerators, washers, and some bathroom fans in Senior Housing Complex apartments
- 2014 Bonneville Environmental Foundation funded, via Solar 4R Schools, 14.25 kW solar photovoltaic system on NR Admin building
- In 2019, Bonneville Power Administration's Tribal Low-Income Energy Efficiency Program baseboard heaters with new ductless heat pumps in 19 of the 20 apartments
- 2020, 2021 BPA funding provided upgrades to two Tribal homes
- 2023 currently working on contract to pilot four highend heat pumps in Tribal rental homes; BPA will monitor performance data for one year.

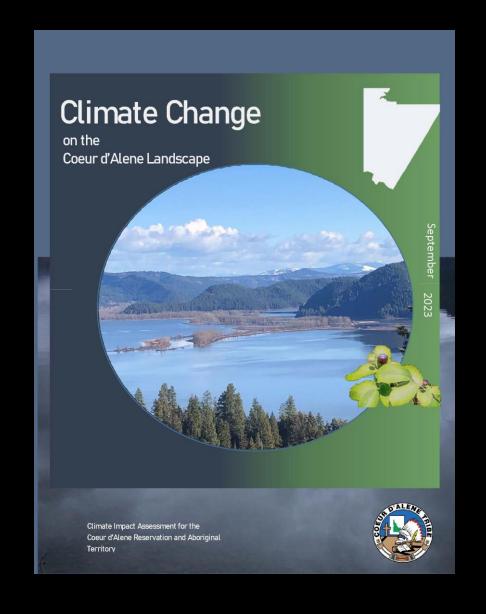


Climate Priorities



Climate Work





New DOE Energy Work

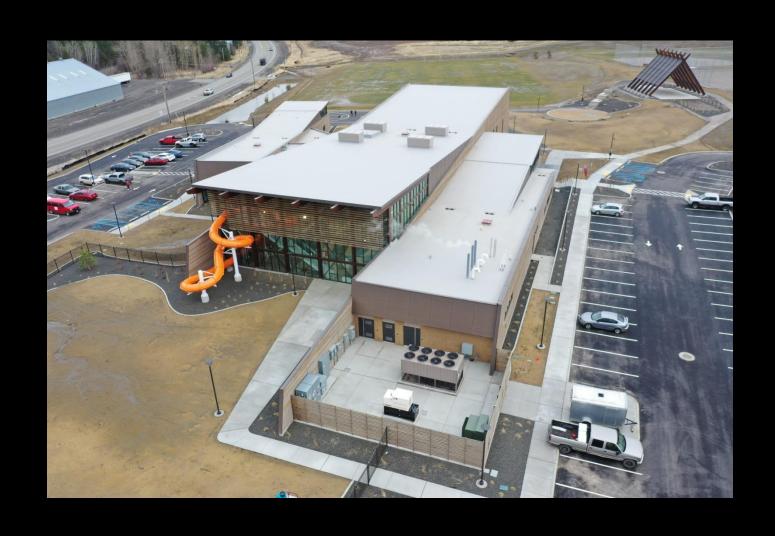
Coeur Center Solar Project

- Coeur Center is 32,000 ft² family and youth center opened in January 2021, and includes indoor pool, gym, football field, workout facilities, and Boys and Girls Club facility.
- In September 2022, the Tribe was awarded a U.S. Department of Energy grant for the Tribe's Coeur Center Solar Project





Coeur Center



2317-1602

Coeur d'Alene Tribe COEUR CENTER SOLAR PROJECT

TOPIC AREA 1.A.

Project Summary

The proposed project will integrate a 35.2 kW solar photovoltaic (PV) system to the Marimn Health Coeur Center in Worley, ID. The Tribe's long term energy goals include "improving the quality of life and providing social and economic benefits across the Reservation." The proposed solar energy project moves the Tribe toward a more sustainable energy system while providing benefits to Tribal and Reservation youth at their new recreation center.

Key Personnel/Organizations

Laura Laumatia – Project Manager – Environmental Programs Manager

Caj Matheson - Tribal Natural Resources Director

Evan Ramsey – Consultant – Bonneville Environmental Foundation

Budget

Federal funds requested: \$68,129.50 Cost-share proposed: \$68,129.50 Total Project Costs: \$136,259



The proposed solar project will save nearly 41,750 kWhs/year of energy which will reduce the Marimn Health Coeur Center's electricity costs by \$2,600 per year. The project will create 0.8 jobs during construction and installation. The payback time for the Tribe's contribution to the project is within 8 years. This effort will help deepen the Tribe's solar impact with an associated reduction in carbon emissions of nearly 1.2 million pounds. This next step in the Coeur d'Alene Tribe's sustainable energy journey will prove the value of solar to the Worley community and help spur additional new solar development.



The solar energy generation will help reduce the total cost of operating the Tribe's youth recreation center.

Coeur Center Solar Project Goals

- Goal 1: Increase use of renewable energy and decrease the Tribe's carbon footprint on the Reservation and at the Coeur Center.
- Goal 2: Reduce energy costs at the Coeur Center.
- Goal 3: Provide a solar energy educational opportunity for Tribal community members and Reservation residents at the Coeur Center.
- Goal 4: Increase the number of Coeur d'Alene Reservation communities that have solar energy by providing the first solar project in Worley community.

Coeur Center funding

- US Department of Energy award
- Tribal Solar Accelerator Fund
- Bonneville Environmental Fund
- Carryover funds from previous projects





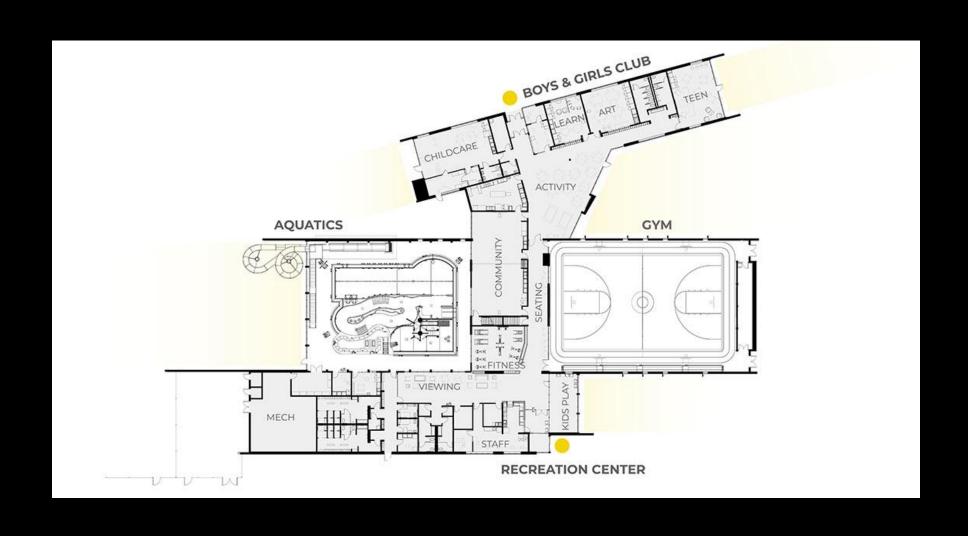


What's Been Completed?

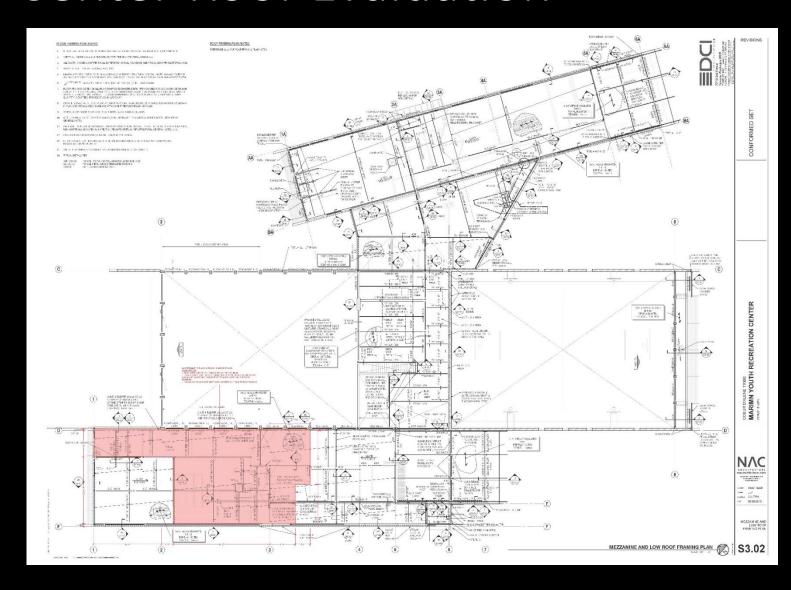
2022:

- Evaluated the roof of the Coeur Center for solar panels
- Submitted the initial National Environmental Policy Act information to U.S. DOE for the project
- Received the award from DOE in mid-September 2022
- Executed a funding agreement with Bonneville Environmental Foundation in support of this project
- Executed a funding agreement with Grid Alternatives Tribal Solar Accelerator Gap Fund (and attended TSAF summit in Summer 2023)
- Kick-Off meeting with an internal workgroup in December 2022

Floor Plan of the Coeur Center



Coeur Center Roof Evaluation



2023

- Developed RFP for design/build, reviewed proposals, and awarded contract for 36 kW installation
- Conducted additional roof study with original contractor to see if we could expand footprint
- Kickoff meeting with contractor, Nimiipuu Energy and first walk-through with master electrician
- Scheduled training for Coeur d'Alene Tribal community members in early December in Lapwai



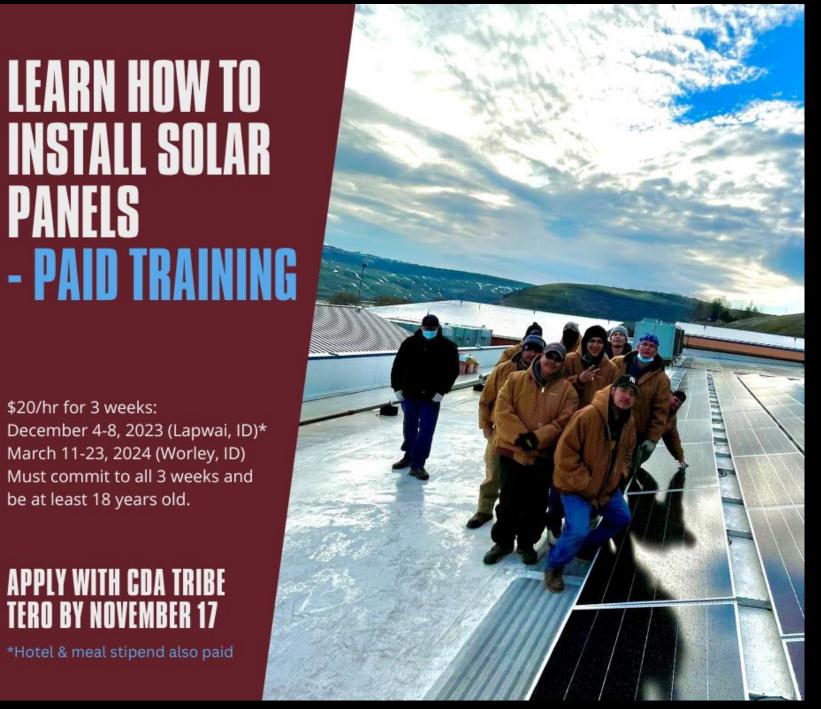
LEARN HOW TO INSTALL SOLAR **PANELS**

\$20/hr for 3 weeks:

December 4-8, 2023 (Lapwai, ID)* March 11-23, 2024 (Worley, ID) Must commit to all 3 weeks and be at least 18 years old.

APPLY WITH CDA TRIBE TERO BY NOVEMBER 17

*Hotel & meal stipend also paid



2024

- Continue to coordinate with Tribal departments throughout the project and especially before installation
- Begin coordination for the electrical inspection(s)
- Work with the Tribe's Historic Preservation Officer prior to installation
- Procure proposed system materials
 - 36.08 k solar system on 1/12 pitch roof
 - Jinko 410 modules
 - Solaredge SE40KUS inverter
 - Panelclaw FR5 Racking system
- Proposed system will save 31.56 t CO₂, produce 44.64 Mw estimated power annually

Next Steps

- Final project design and review (Marimn and Tribe)
- Installation March 2024
- Final inspection and system commissioning
- Collect energy use and cost data for one year and include the results in a final project report

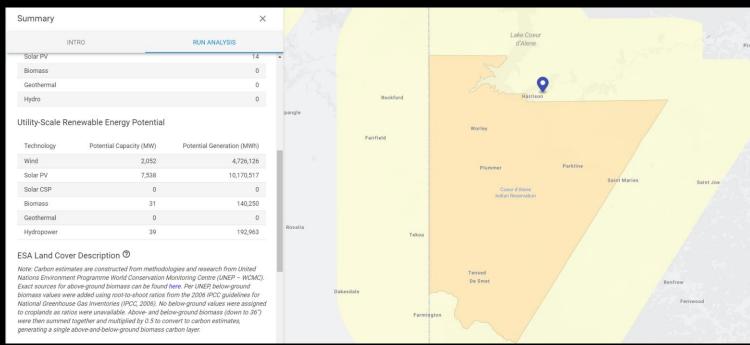
Lessons Learned

- Anticipate where internal delays may be
 - Learning curve on advertising, reviewing, and getting approvals for contract
 - Staff changes and disruptions
 - Force majeure Tribal Council disruptions
 - EPO program changes and reorganization
 - Additional partner needs
 - Learning the nuts and bolts of solar development have great internal and trustworthy partners!
 - Connect energy development with broader community goals



Lessons Learned

- We are still developing our energy goals and strategies:
 - Community resilience
 - Energy Sovereignty
 - Energy savings
 - Emissions reduction
 - Solar for All?



The return of the smłich: sye'us'uslsh





