

# The Coeur d'Alene Tribe

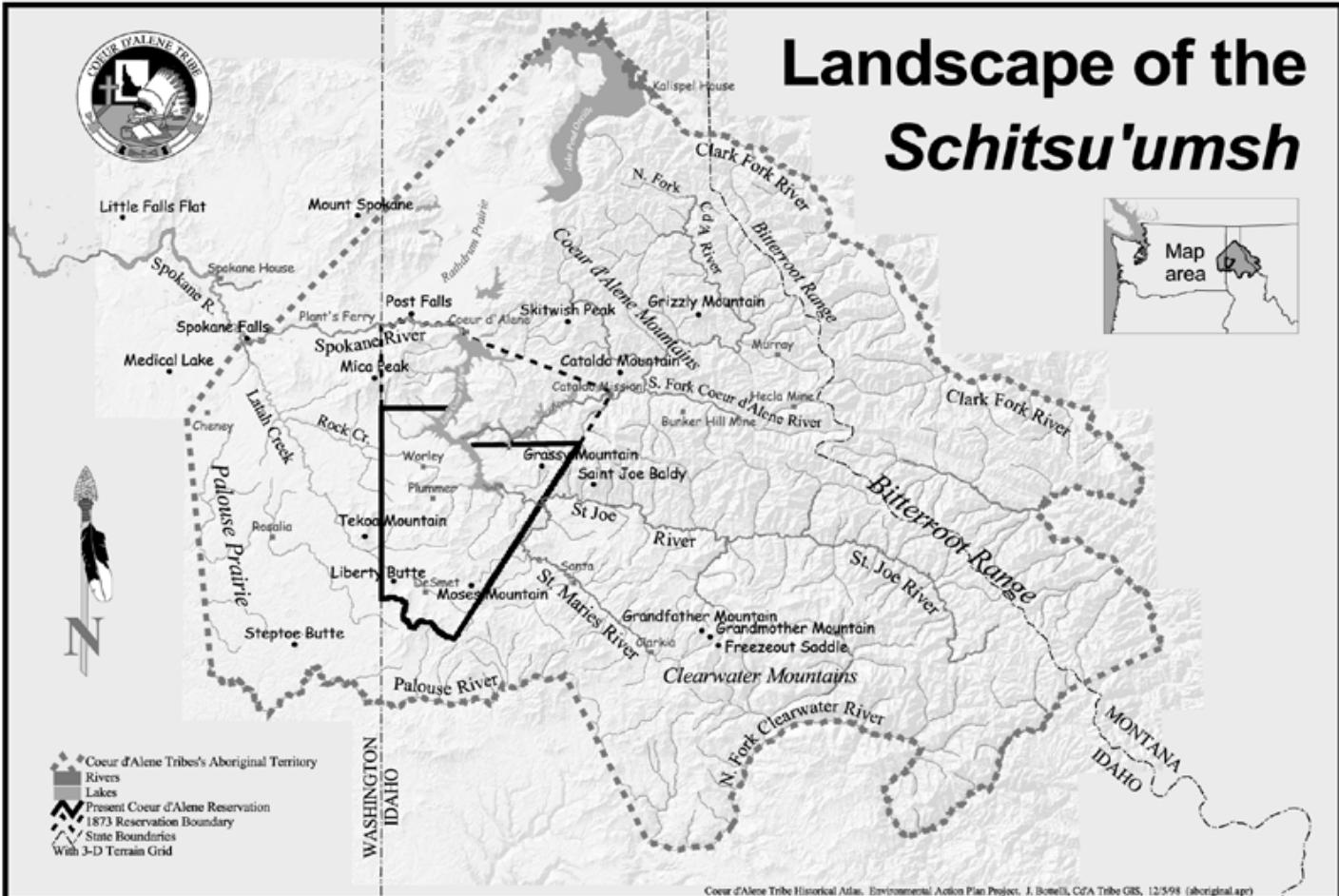
BENEWAH MARKET ENERGY EFFICIENCY PROJECT  
NOVEMBER 14, 2016

- Overview of the Coeur d'Alene Tribe
- Benewah Market Energy Efficiency Project
- Next Steps
- Lessons Learned
- Contact Information

# Overview of the Coeur d'Alene Tribe

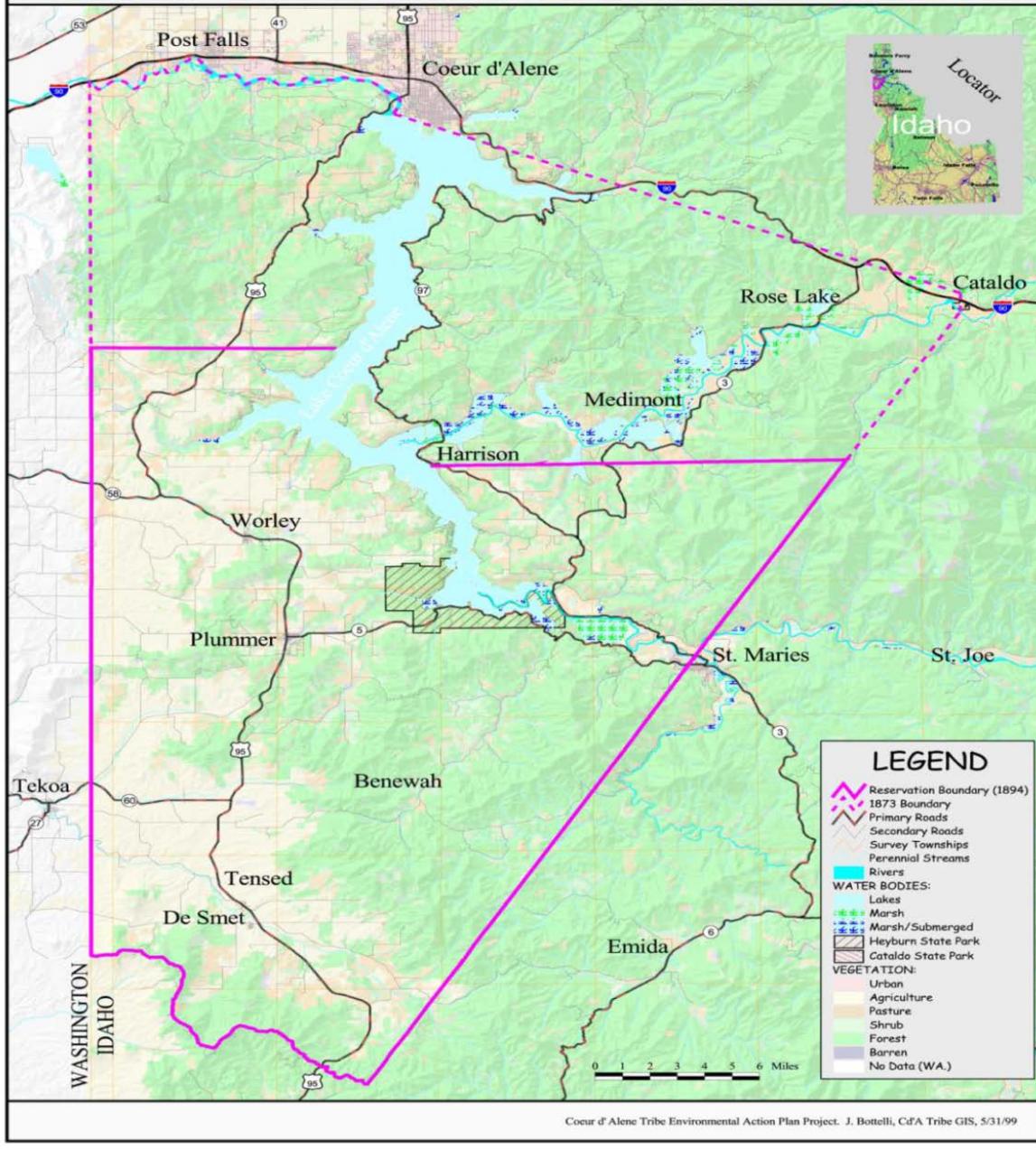
- The Coeur d'Alene Reservation is approximately 334,000 acres, not including Tribal submerged lands.
- Aboriginal territory = more than 5 million acres.
- 6,760 residents according to the 2010 Census.
- Tribal enrollment is ~2,361 and growing (June 2013).
- Tribe relies on forestry, agriculture, gaming, 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



# History of the Natural Resource Department

- In 1992, the Tribal Natural Resource Department was established as a stand-alone Department
- Currently, there are 12 programs in the NR Department: Air Quality, *Environmental Programs Office*, Culture, Fisheries, Forestry/Fire, Land Services, Language, Pesticides Circuit Rider, Tribal Historic Properties Office, Wildlife, and Language.
- The Environmental Programs Office in the NR Department is administering the energy efficiency work

# Prior Work: Energy Efficiency & Conservation Block Grant Funding

- June 2012 – The Tribe completed an Energy Efficiency Assessment Report working with McKinstry, Inc. for Coeur d'Alene Tribal government buildings. Energy conservation measures identified in 34 buildings evaluated included:
  - HVAC – Economizers, Programmable Thermostats, Heat Recovery, Heat Pump
  - Lighting Retrofits – Fluorescent, LED
  - Envelope Sealing and Insulation

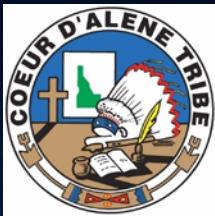
# Prior Work: Energy Efficiency & Conservation Block Grant Funding

- June 2012 – The Tribe also completed an Energy Efficiency & Conservation Strategy (EE&CS)
- McKinstry's energy audits were generally at ASHRAE Level 1
  - (ASHRAE: American Society of Heating, Refrigerating and Air-Conditioning Engineers)

# Prior Work: Energy Efficiency Feasibility Study (EEFS)

- The Tribe applied for and was awarded a U.S. Department of Energy, Energy Efficiency and Deployment in Indian Country grant in 2011 to conduct an EE Feasibility Study on all Tribal buildings
- Procured an energy consultant firm to perform in depth energy assessments:





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: Energy Efficiency Feasibility Study (EEFS)

- Completed Energy Assessment Field Work
  - 36 Tribal Buildings Evaluated (October 29 – November 9, 2012)
  - Level 3 ASHRAE energy audits (investment grade)
- Completed Energy Assessment Feasibility Study
  - Completed draft for review in November 2013
  - Completed final draft report in November 2014
  - Closed out the DOE grant in December 2014

# Energy Efficiency Feasibility Study

- Report Format
  - 6 Main Sections
    - Executive Summary
    - Field Energy Assessment Initial Findings Report
    - Utility Billing Analyses Report
    - Energy Conservation Measures Prioritization Report
    - Potential Funding Sources and Strategies for ECM Implementation
    - Appendices

# Benewah Market Energy Efficiency Project

- Teaming Up
  - The Environmental Programs Office
  - The Tribal Development Corporation
- In 2013 applied for The Tribal Renewable Energy and Energy Efficiency Deployment Assistance grant
  - Using the energy audits that the Tribe completed in the EECBG and the EEFS reports

# Coeur d'Alene Tribe Benewah Market

- Plummer, ID
- Approximately 16,000 square feet
- Addition Completed in the 1980's



# Benewah Market Energy Efficiency Project

- Benewah Market EE Project Goals:
  - Goal 1: Increase energy efficiency and reduce energy costs
  - Goal 2: Increase health and safety of the food that are sold
  - Goal 3: Decrease operations and maintenance costs
  - Goal 4: Increase the economic viability

# Benewah Market Energy Efficiency Project

- The Benewah Market EE Project has:
  - Reduce the total volume and thermal capacity of refrigeration and freezer cases on the sales floor
  - Replace the existing aging floor cases with high efficiency cases with doors (where applicable) and integrated controls
  - Replace the existing 16 individual compressors for the refrigeration cases and walk-ins

# Benewah Market Energy Efficiency Project

- The Benewah Market EE Project has:
  - Replace the existing roof top condensers
  - Replace 15 evaporators in the walk-in coolers and freezers with high efficiency units equipped with electronically commutated motors and integrated control features
  - Replace and reconfigure refrigerant lines

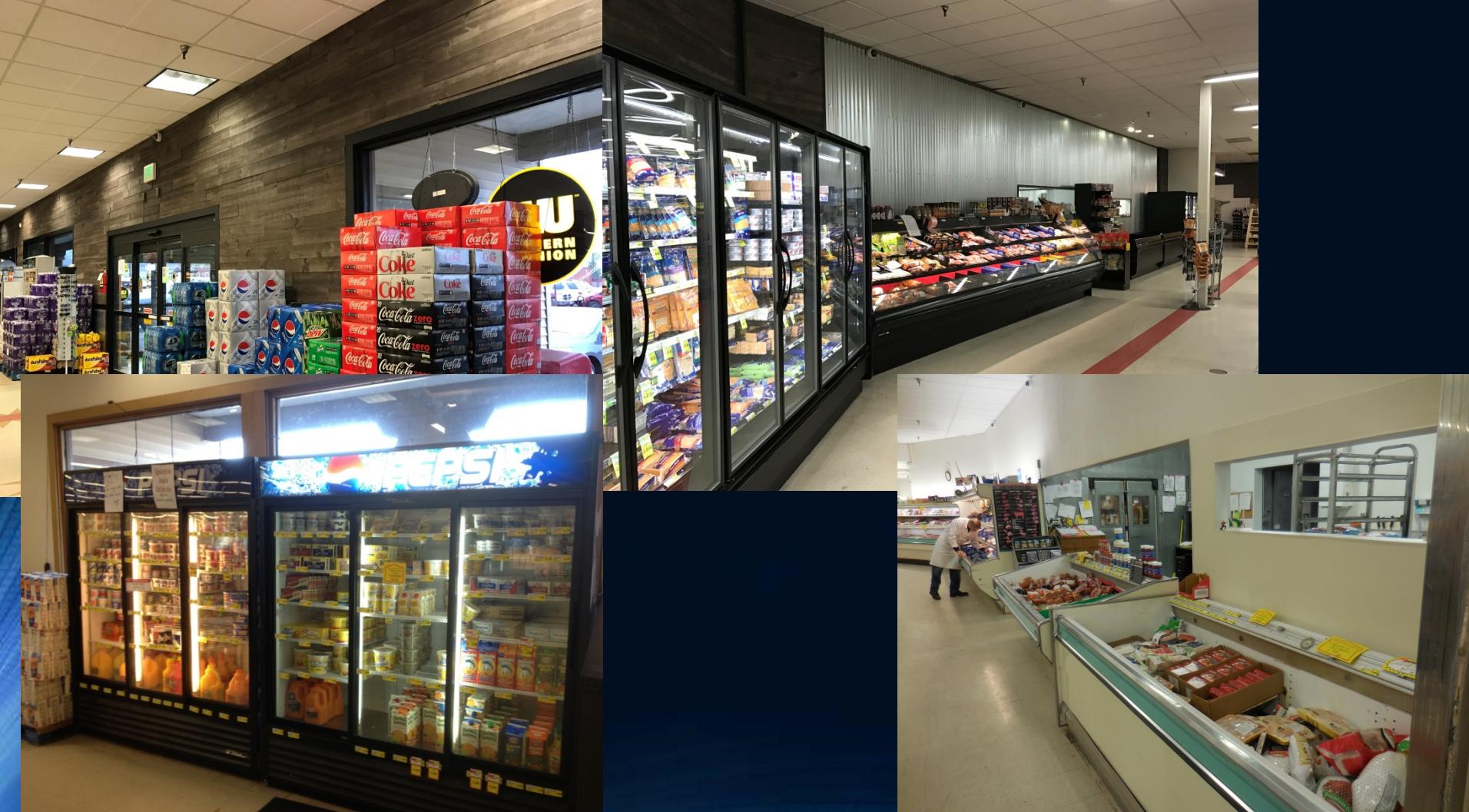
# Benewah Market Energy Efficiency Project

- The Benewah Market EE Project is projected to:
  - Save at least 30.8% of the total energy used at the Market
  - Save at least \$16,065 per year in energy costs to the Market

# Creating the “New” Benewah Market

- The new energy efficient refrigeration and freezer cases are a part of a larger strategy to improve the overall function and appearance of the Benewah Market
- Store Remodel
  - Worked with Design Firm to create a new look – Industrial Theme
  - Entire Interior remodel
  - Focus on changing Bakery and Deli
  - New Outdoor Sign with Digital Reader board
  - Focus on Food & Native American Heritage

# The “New” Benewah Market



# New Cases & Freezers

- Lower operating costs
- Lower maintenance cost
  - Internally & Externally
- Improve Perception of overall store
- Improvement in Food Quality
- Tribal Pride in Store & Community
- Community Support & Appreciation
- Increase store Sales



# Deli Remodel

- New Counters, Repaint w/ laminate paneling & Flooring



# Produce Department Remodel



# B Street Bakery



# Outdoor Digital Sign & Artwork

- Native American Artist – Smoker Marchand



# Progress to Date

- Construction Process is complete
  - We are currently working through final punch list
  - Approval from BPA & City for energy incentives



# What's Next ?

- Energy Measurement period for one year
  - Necessary to determine energy use savings for DOE and grant
  - Necessary for BPA to determine size of energy rebate
- Complete remodel of market
  - Floors, paint ceiling, signage, & other design elements
- Replace lighting with LED
  - We will be working with BPA and the City of Plummer on a rebate prior to install
  - Necessary given the darker envelope within the market

# Lessons Learned

- Sometimes your first bid is the best and lowest
  - Learned a lot about an industry, technology and refrigeration
- Securing the commitment for energy incentives can be challenging
- Amazing how fast time moves

# Contact Information

- If you would like more information or to discuss anything further, please contact:
- Tiffany Allgood, Environmental Action Plan Coordinator, at (208) 686-8802, [tallgood@cdatribe-nsn.gov](mailto:tallgood@cdatribe-nsn.gov) or
- James Alexie, CEO of CDA Tribe Development Corporation
- 208-686-1948. [jalexie@cdatribe-nsn.gov](mailto:jalexie@cdatribe-nsn.gov)

Thank you for your time today