



WINTER HYDROELECTRIC DAM FEASIBILITY ASSESSMENT

THE LAC COURTE OREILLES BAND OF LAKE SUPERIOR OJIBWE

PRESENTED BY JASON WEAVER



LAC COURTE OREILLES HISTORY

- WE ARE LOCATED IN SAWYER COUNTY IN THE NORTHWESTERN REGION OF WISCONSIN.
- WE HAVE 7,310 ENROLLED TRIBAL MEMBERS
- THE RESERVATION CONSIST OF 76,465 ACRES, ABOUT 10,500 ACRES ARE WATER
- WE HAVE ENTERED 4 SOVEREIGN TREATIES WITH THE U.S. GOVERNMENT. 1825, 1837, 1842 AND THE LA POINTE TREATY OF 1854 WHICH ESTABLISHED THE CURRENT RESERVATIONS AND PRESERVED OUR RIGHT TO HUNT, FISH AND GATHER IN THE NORTHERN REGIONS OF MN, WI AND MI.

LCO TRIBAL GOVERNMENT

- OUR OFF RESERVATION RIGHTS WERE AGAIN RECOGNIZED AFTER LITIGATION IN THE 1983 LAC COURTE OREILLES V. VOIGHT 700 F 2D 341 (7TH CIRCUIT)
- OUR TRIBE HAD TRADITIONAL GOVERNMENT THAT PROVIDED FOR THE WELFARE AND SAFETY OF THE MEMBERS. AFTER YEARS OF RESISTANCE LAC COURTE OREILLES ADOPTED AN INDIAN REORGANIZATION ACT TYPE CONSTITUTION IN 1966 WHICH ESTABLISHED OUR CURRENT TRIBAL GOVERNMENT AND SEVEN MEMBER TRIBAL COUNCIL.
- THIS CONSTITUTION ESTABLISHED OUR SOVEREIGN JURISDICTION, TRIBAL COURT, ORDINANCES, CONTRACTS, GOVERNMENTAL NEGOTIATIONS, BUSINESS AND HOUSING THAT WERE HARD TO ATTAIN FUNDING FOR WITHOUT A CONSTITUTION.

LAC COURTE OREILLES

- THE LAC COURTE OREILLES BAND OF LAKE SUPERIOR OJIBWE HAVE BEEN LOCATED IN WHAT IS NOW CALLED WISCONSIN FOR HUNDREDS OF YEARS. THE LOCATION WHERE THE DAM WAS BUILT IS CALLED PAH QUAH WONG WHICH MEANS “WHERE THE RIVER IS WIDE” IT WAS FORCED UPON MY TRIBE IN 1920. OVER 5000 ACRES OF RESOURCEFUL, RIVERS, LAKES, LANDS AND MANY HOMES WERE FLOODED BY NORTHERN STATES POWER. THEY WERE ASSISTED WITH HEAVY HANDED COERCION BY GOVERNMENT OFFICIALS WHO WERE TRUSTED TO BE OUR GUARDIANS AND PROTECT US AGAINST SUCH AGGRESSIVE ACTIONS.
- THE DAM CREATED A GREAT NEW RESOURCE IN THE CHIPPEWA FLOWAGE BUT RESIDENTS COMPLAINED ABOUT THE LACK OF RESOURCE MANAGEMENT AND CULTURAL SENSITIVITY.

CONSTRUCTION WAS APPROVED AND STARTED ON
THE CHIPPEWA RIVER IN 1920



**MANY HOMES WERE NEVER MOVED AS PROMISED.
THE CATHOLIC CHURCH WAS REBUILT BUT MANY
GRAVES WERE NEVER MOVED.**



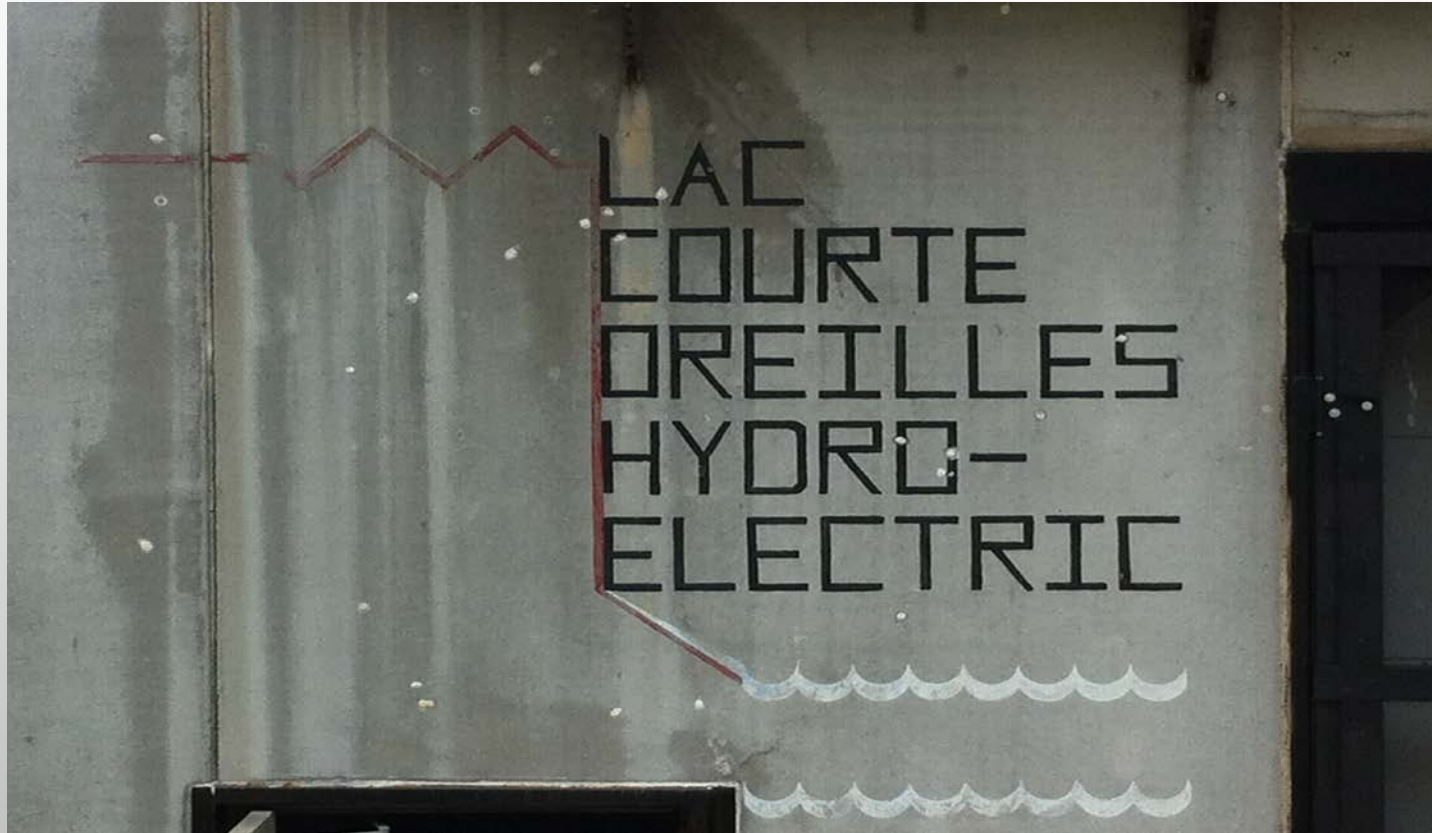
WHILE THE FLOWAGE AND DAM WERE FORCED
UPON US WE ENJOY THE BEAUTY IT BRINGS



**FISHING, BOATING AND SNOWMOBILING AND
WILDLIFE VIEWING ARE FAVORITE ACTIVITIES**



THE WINTER DAM WAS STARTED IN 1920 AND COMPLETED BY 1923
THE HYDROELECTRIC FACILITY WAS BUILT IN 1988.



ISSUES WITH DAM MANAGEMENT

- THE NATIVE COMMUNITY AND OUR NON NATIVE NEIGHBORS HAVE COME TO WORK TOGETHER IN ATTEMPTS TO MANAGE THE CHIPPEWA FLOWAGE TO PROVIDE FOR THE BEST HARVEST OF NATURAL RESOURCES, RECREATION AND TOURIST ATTRACTION.
- THE N.S.P. COMPANY MANAGED THE DAM FOR ENERGY PRODUCTION DOWN STREAM WITH OUT REGARDS TO HABITAT, ISLAND EROSION, WILD RICE BEDS OR ABILITY TO NAVIGATE THE WATERWAYS.
- ANNUAL DRAW DOWN LEVELS BETWEEN 11 AND 21 FEET WERE TYPICAL AND RUINED THE ABILITY TO NAVIGATE WATERS AND KILLED HABITAT

IN 1973 TRIBAL MEMBERS AND AIM SUPPORTERS OCCUPIED
THE WINTER DAM WHICH UTIMATLEY RESULTED IN TRIBAL
OWNERSHIP



LAC COURTE OREILLES DAM

- THE NEGOTIATIONS BETWEEN NSP, FERC, WISCONSIN DEPT. OF NATURAL RESOURCES, CHIPPEWA FLOWAGE ALLIANCE AND THE LCO TRIBE RESULTED IN THE 1984 CHIPPEWA RESERVOIR SETTLEMENT AGREEMENT.
- TRIBE GAINED OWNERSHIP OF THE DAM, COORDINATED FLOW MANAGEMENT WITH ALL PARTIES AT THE TABLE AND PERMITS TO BUILD A SIPHON TYPE HYDROELECTRIC DAM.
- RETURN OF 4500 ACRES OF LAND AND ISLANDS AROUND AND IN THE FLOWAGE
- THE HYDRO ELECTRIC DAM WAS BUILT IN 1988 WITH A LOAN FROM XCEL ENERGY. (WE ARE STILL PAYING IT OFF)
- CURRENTLY OPERATED AND MAINTAINED BY TRIBAL MEMBERS

**THE HYDROELECTRIC DAM IS LOCATED IN A VERY
REMOTE PART OF THE CHIPPEWA FLOWAGE**



THE DAM SUFFERED FROM LACK OF REPAIR AND MAINTENANCE FOR MANY YEARS BECAUSE WE DIDN'T HAVE THE HUMAN CAPITAL TO MANAGE IT EFFECTIVELY.



IN ORDER TO OPERATE MORE EFFICIENTLY THE TRIBE NEGOTIATED A MANAGEMENT CONTRACT TO RENEWABLE WORLD ENERGIES. TRIBAL MEMBERS ARE STILL HIRED TO OPERATE THE DAY TO DAY OPERATIONS AND BUILD OUR HUMAN CAPITAL



**THE WINTER DAM GENERATES APPROXIMATELY
10,900,000 KWH ANNUALLY**



THE NEED FOR A HYDRO DAM FEASIBILITY STUDY

- WE WANT TO KNOW HOW EFFICIENT THE DAM IS CURRENTLY OPERATING AT
- WHAT MAINTENANCE ISSUES WERE NOT BEING PROPERLY ADDRESSED
- WE WANTED AN IDEA OF WHAT UPGRADES TO THE DAM WOULD BE COST EFFECTIVE AND HELP US IMPROVE ENERGY PRODUCTION WITH THE LOWER AMBIENT WATER LEVELS WE HAVE HAD IN THE PAST 10 – 15 YEARS
- ADDRESS NEGOTIATIONS OF A POWER PURCHASE AGREEMENT AND GREEN CREDIT OWNERSHIP.

KISER HYDRO ENGINEERING

- AFTER APPLYING AND RECEIVING THIS GRANT THE TRIBE NEGOTIATED A CONTRACT WITH KISER HYDRO TO CONDUCT A FEASIBILITY STUDY THAT WOULD ANSWER SOME OF THESE QUESTIONS.
- WE CREATED A PLAN THAT WOULD FOCUS ON INVESTIGATING OUR CURRENT DAM EQUIPMENT, COST EFFECTIVE IMPROVEMENTS AND INCREASE ENERGY PRODUCTION

FEASIBILITY STUDY

- THE DRAFT FEASIBILITY STUDY SHOWS THAT WE ARE OPERATING AROUND 86% EFFICIENCY
- WE ARE LOSING ENERGY PRODUCTION POTENTIAL BECAUSE OF THE OVERSIZED TURBINES AND THEIR INABILITY TO EFFICIENTLY PRODUCE UNDER CERTAIN FLOW CONDITIONS
- AERATION OF THE DRAFT TUBES MAY PROVIDE SMOOTHER OPERATION AT LOWER FLOWS AND IMPROVE EFFICIENCY.

WHAT'S LEFT?

- WE ARE WAITING ON THE FINAL STUDY AND IT WILL INCLUDE OPTIONS FOR IMPROVING PRODUCTION, OPERATING EFFICIENTLY AND A COST BENEFIT ANALYSIS TO ASSIST OUR TRIBAL GOVERNMENT IN MAKING DECISIONS REGARDING FUTURE IMPROVEMENTS.

- **MII GWITCH**