



RED CLIFF BAND OF LAKE SUPERIOR CHIPPEWA

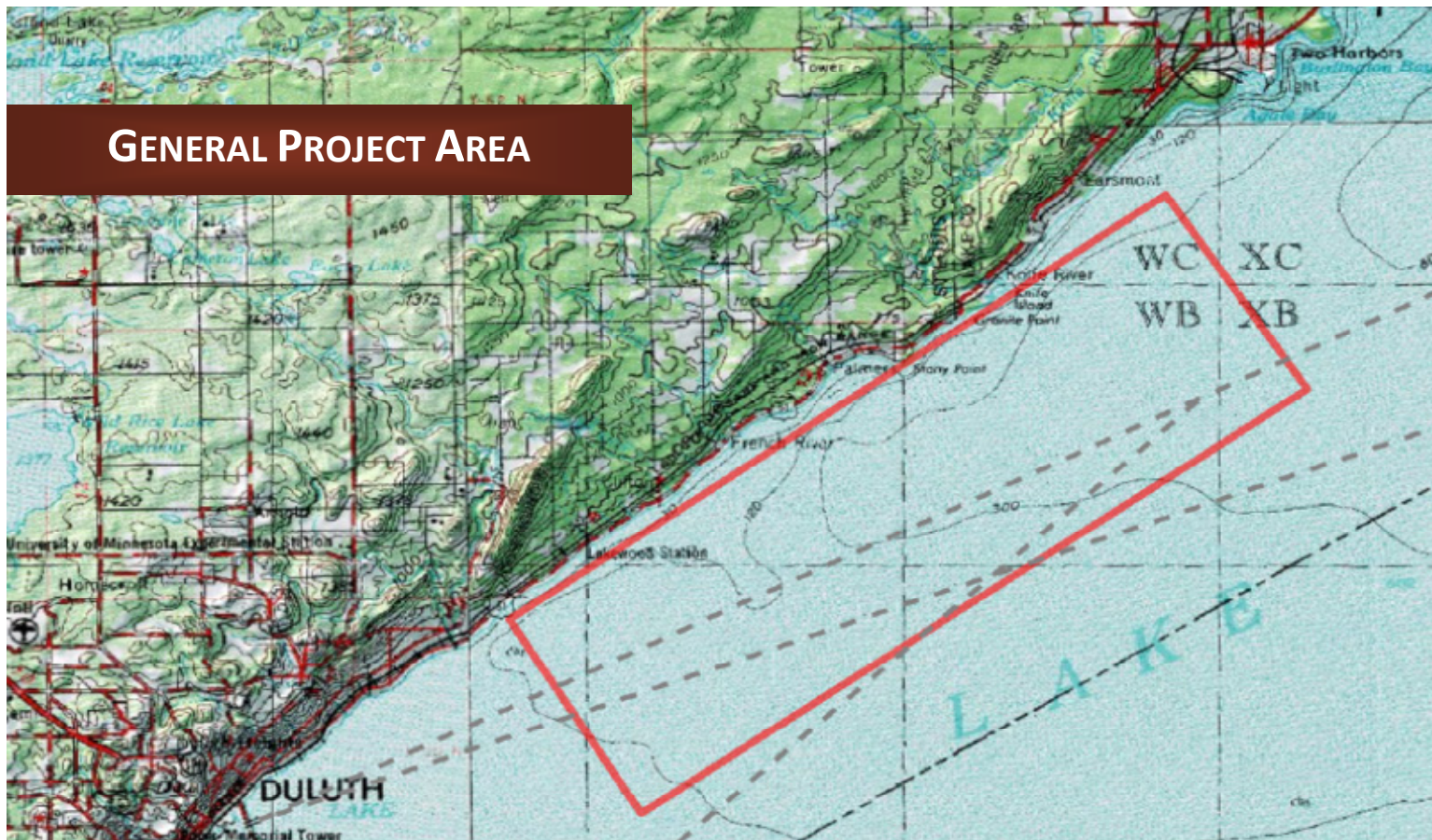
LAKE SUPERIOR BARRELS PROJECT

FUNDED BY: US DEPARTMENT OF DEFENSE—NATIVE AMERICAN LANDS ENVIRONMENTAL MITIGATION PROGRAM

Our Mission: “It is the mission of the Red Cliff Band to fully characterize the type and extent of Department of Defense (DoD) wastes, which have impacts on the economy, natural resources, and cultural uses within Chippewa Ceded Territory and to determine if further remedial work is required to preserve the rich natural resources of Lake Superior.

Further, the Red Cliff Band is committed to the restoration and protection of natural resources within the ceded territory, and is dedicated to working with federal agencies to clean up, restore and protect the ecosystems of the ceded territory. The Red Cliff Band is also committed to ensuring that the US Government meet their Federal Trust Responsibilities associated with the lands and waters of the ceded territories. Their goal is to allow for the full use and enjoyment of the protected resources and ecological conditions supportive thereof, without restriction due to contamination.”

GENERAL PROJECT AREA



PROJECT BASICS

- The Red Cliff Band of Lake Superior Chippewa is conducting an investigation of approximately 1,500 55-gallon barrels dumped in Lake Superior by the US Army between 1959 and 1962.
- The barrels are from the Twin Cities Army Ammunition Plant and contain munitions parts and general production line debris.
- In 2012, Red Cliff plans to recover 70 randomly-selected barrels from the lake bottom and investigate the barrel contents.
- Red Cliff also plans to collect water and sediment samples from around the barrels to determine if any contaminants may have leaked into the environment.
- Samples collected from the barrels will help scientists evaluate whether or not the barrels may pose a risk to human health or the environment.
- The results of this investigation will be used to determine what further actions, if any, should be taken.



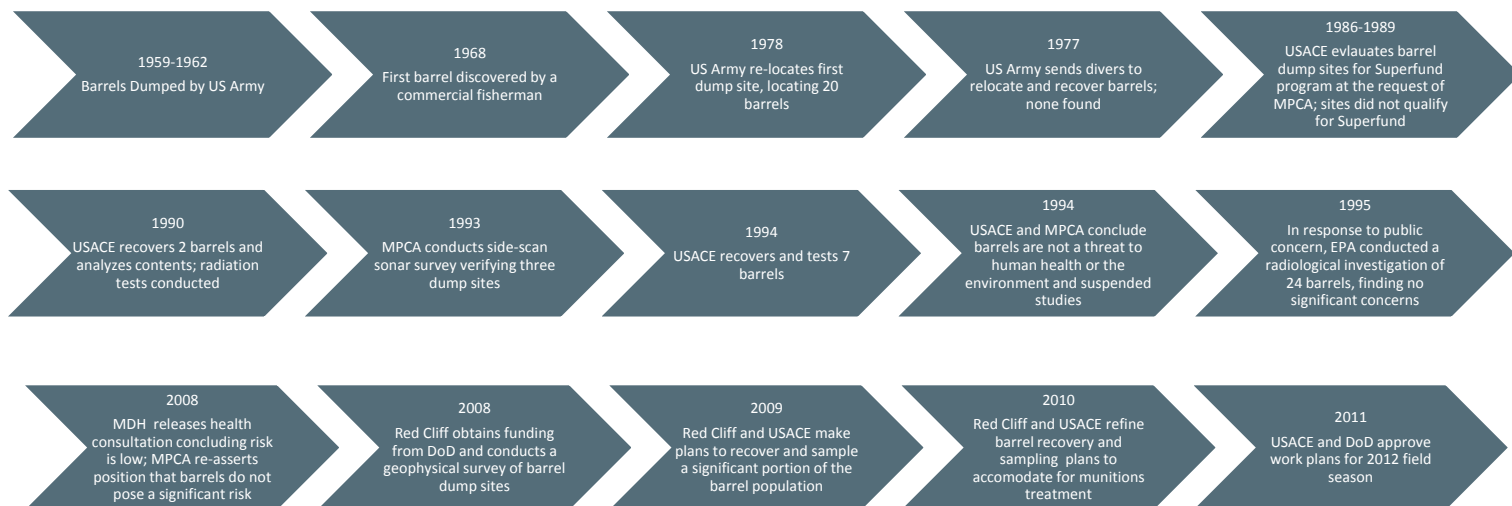


RED CLIFF BAND OF LAKE SUPERIOR CHIPPEWA

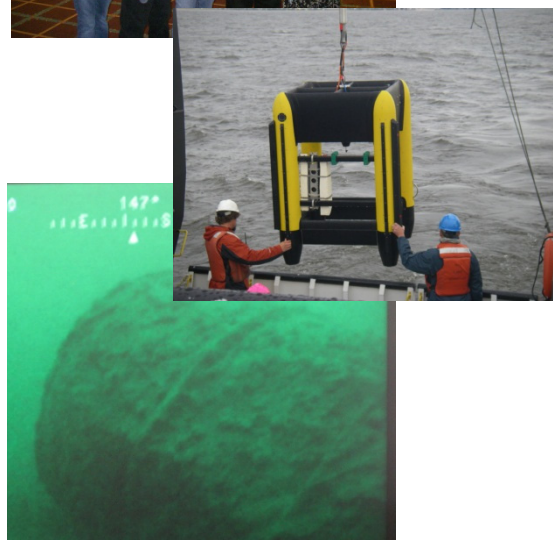
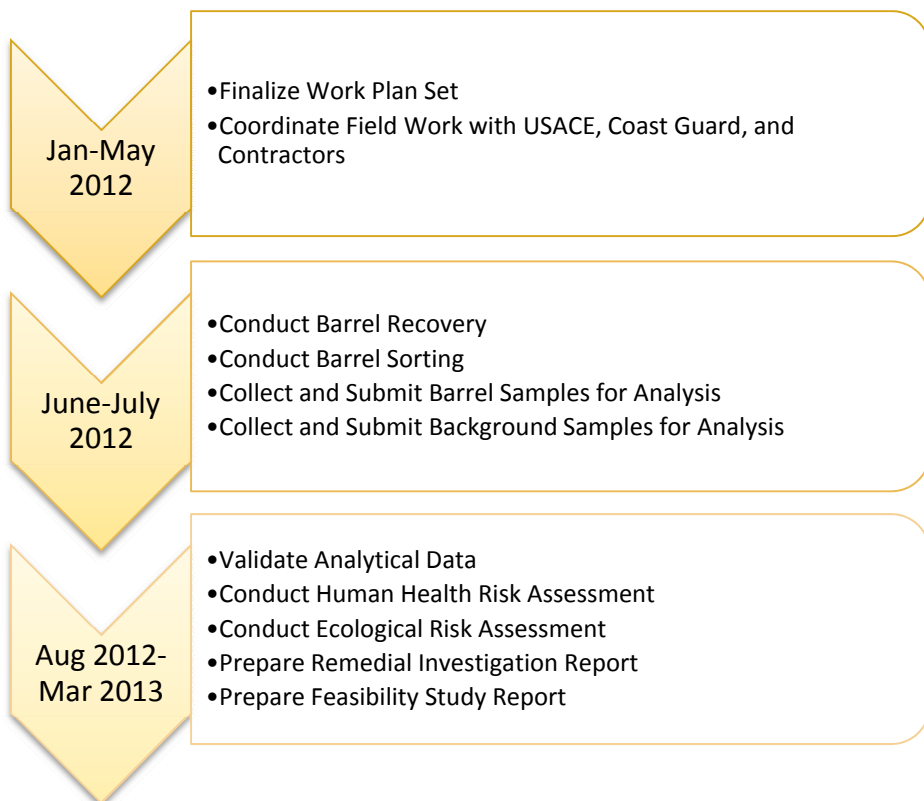
LAKE SUPERIOR BARRELS PROJECT

FUNDED BY: US DEPARTMENT OF DEFENSE—NATIVE AMERICAN LANDS ENVIRONMENTAL MITIGATION PROGRAM

HISTORIC OVERVIEW



PATH FORWARD





RED CLIFF BAND OF LAKE SUPERIOR CHIPPEWA

LAKE SUPERIOR BARRELS PROJECT

FUNDED BY: US DEPARTMENT OF DEFENSE—NATIVE AMERICAN LANDS ENVIRONMENTAL MITIGATION PROGRAM

2012 BARREL INVESTIGATION

- Recovery and sampling of 70 barrels
- Radiological screening
- Munitions/explosives screening
- Full chemical analyses on barrel contents

2012 WATER AND SEDIMENT STUDIES

- Collect water and sediment from each barrel site before the barrel is disturbed
- Collect background water and sediment samples on the edges of the project site
- Full chemical analyses of barrel contents

DO THE BARRELS POSE ANY RISK TO HUMANS? THE ENVIRONMENT?

That is a great question, and we hope to know the answer to this by late 2012! This project has been designed to scientifically evaluate the risk that the barrels pose to humans and the ecosystem. To ensure this is done properly, a statistically significant set of samples will be collected and sent to an accredited laboratory for analysis. These include samples of lake water, sediment, and barrel contents.

Background water and sediment samples collected from around and outside of the project area will help project scientists understand whether other contamination sources, such as inland pollution sources that runoff into the lake, are influencing the project data.

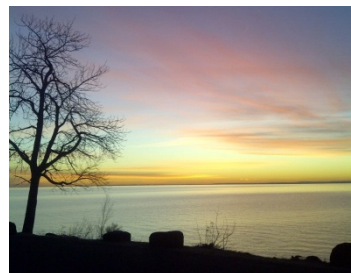
Once the analytical data is available from the laboratory, the EPA Risk Assessment Guidelines (RAGs) and Ecological Risk Assessment Guidelines (E-RAGs) will be used to model potential risk. The human health risk assessment will include evaluations for different populations including the general public and tribal members and others who practice subsistence lifestyles dependent on lake fish. The human health risk modeling will help determine whether concentrations of chemicals or metals found in the water, sediment, or barrels could potentially cause cancer or other health risks.

The ecological risk assessment will model impacts to key species in the food chain such as benthic organisms, fish, bald eagle, river otter, and the red fox. This modeling will help clarify what impacts the barrels have on the food chain. If any species appear to be affected by the chemical or metal concentrations found during 2012 field work, additional ecosystem risk modeling will be conducted to clarify how the ecosystem may be impacted.

The Remedial Investigation report will summarize what was found in the barrels and whether any risk to human health or the ecosystem was found. If human health or ecosystem risks are found in the Remedial Investigation, the Feasibility Study report will summarize options and recommendations for further actions.

For more information about the EPA risk assessment models that will be used for this project, visit:

www.epa.gov/riskassessment



Photos, top to bottom: sunrise view of project area (J. Thiemann), bald eagle, river otter, red fox (US Fish & Wildlife Service).



RED CLIFF BAND OF LAKE SUPERIOR CHIPPEWA

LAKE SUPERIOR BARRELS PROJECT

FUNDED BY: US DEPARTMENT OF DEFENSE—NATIVE AMERICAN LANDS ENVIRONMENTAL MITIGATION PROGRAM

FREQUENTLY ASKED QUESTIONS

Q: Why is Red Cliff managing this project?

A: Red Cliff has retained hunting, fishing and gathering rights, which include commercial fishing, in the US waters of Lake Superior and approximately the northern third of Wisconsin and Minnesota. Commercial and subsistence fishing have been a part of survival for Ojibwe people since before European settlement. Today, many Red Cliff tribal members are still involved in commercial and sustenance fishing in Lake Superior.

In addition, the Ojibwe people are strongly connected culturally to the water, and the health of Lake Superior is a significant cultural priority. Water plays a critical role in the circle of life. Lake Superior is a source of fish and water for the Red Cliff Tribe. It provides life, and is imperative to the Tribe's subsistence lifestyle and ceremonial uses. Members of the Red Cliff Tribe feel that protecting the waters of Lake Superior is an inherent responsibility.

Q: What organizations are involved in this project?

A: The Red Cliff Environmental Program Office administers this project and the Red Cliff NALEMP Committee provides oversight and guidance to the Red Cliff Tribal Council. In addition, the US Department of Defense provides funding and plan review, the US Army Corps of Engineers—Omaha District acts as the fiscal agent and reviews work plans, and the US Coast Guard is responsible for establishing and enforcing the restricted project work area. EMR, Inc. is the environmental consulting firm responsible for project coordination, work plan development, field work execution, data analysis, and reporting (i.e., Remedial Investigation Report, Feasibility Study Report).

Q: What is the Department of Defense's role in this project?

A: The US Department of Defense is funding this project through the Native American Lands Environmental Mitigation Program (NALEMP). The role of the Department of Defense in the actual project is limited. In addition to funding, they have reviewed project plans for compliance with federal environmental and safety regulations, and will be accepting responsibility for project-derived waste (barrel contents). Government agencies will review reports and results, but do not have any influence on Red Cliff's decision-making process for implementing the barrel investigation, analyzing results, or making conclusions regarding human health or ecological risk.

Q: How will barrels be recovered?

A: The depth of water in the project area is up to 400 ft. Therefore, it is necessary to utilize a Remotely Operated Vehicle (ROV) to perform this work. The ROV will be piloted by an operator using video and GPS to locate each target barrel. Once the barrel is within sight, water and sediment samples will be collected from around the barrel. Then, the ROV will collect the barrel and bring it to the surface, where a crane will bring it onboard the project boat. Once on the boat, samples will be collected from the barrel and the barrel contents will be sorted for onshore disposal. Materials will be recycled or disposed of in properly licensed landfills as appropriate.

Q: How will everything be documented?

A: All barrel recovery and sorting operations will be recorded by video. Detailed field notes will be collected during field work. Analytical results from the laboratory will document chemicals, metals, and other potential contaminants found in each sample. A Red Cliff representative will be on board to ensure all work is thoroughly documented.

Q: Can I take my boat out and watch the barrels being pulled and sorted up close?

A: Unfortunately, due to safety concerns, the project area will be restricted during barrel recovery. Anyone entering restricted work space will be asked to leave immediately, and the US Coast Guard will provide enforcement if needed. We appreciate the public's cooperation in helping us complete this project safely.