

# St. Louis River Interlake Duluth Tar Site: *experiences with NRDAR*



Tribal Natural Resources Damage Assessment and Restoration (NRDAR)  
Conference

July 20, 2011

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1854 TREATY AUTHORITY

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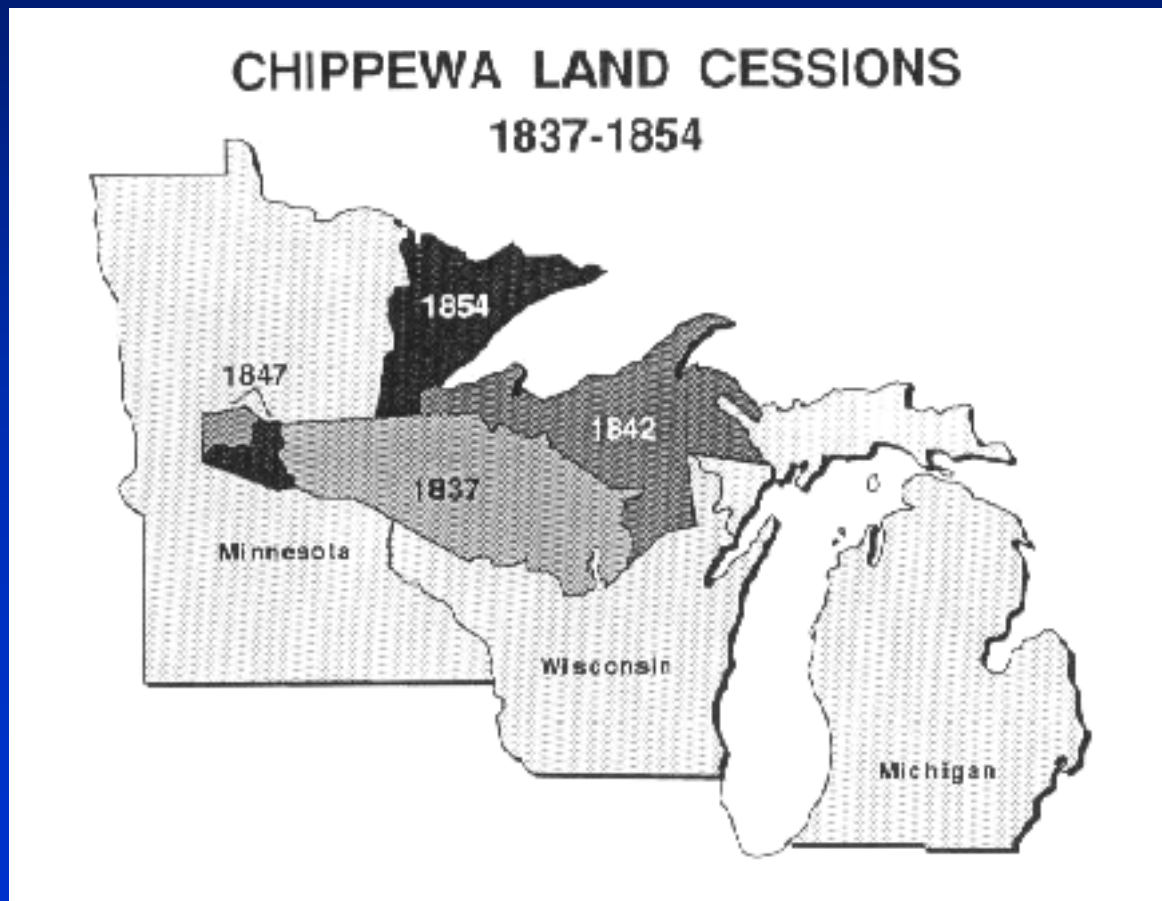
## Presentation Outline

- 1854 Treaty Authority Overview
- Site location and history
- Site remediation
- Site natural resource damage assessment and restoration



## 1854 Treaty Authority Overview

- On September 30, 1854, the Lake Superior Chippewa signed a treaty ceding northeastern Minnesota to the United States. The right to hunt, fish and gather on the ceded lands was retained.



### Treaty of 1854

**Article 11.** ...And such of them as reside in the territory hereby ceded, shall have the right to hunt and fish therein, until otherwise ordered by the President.



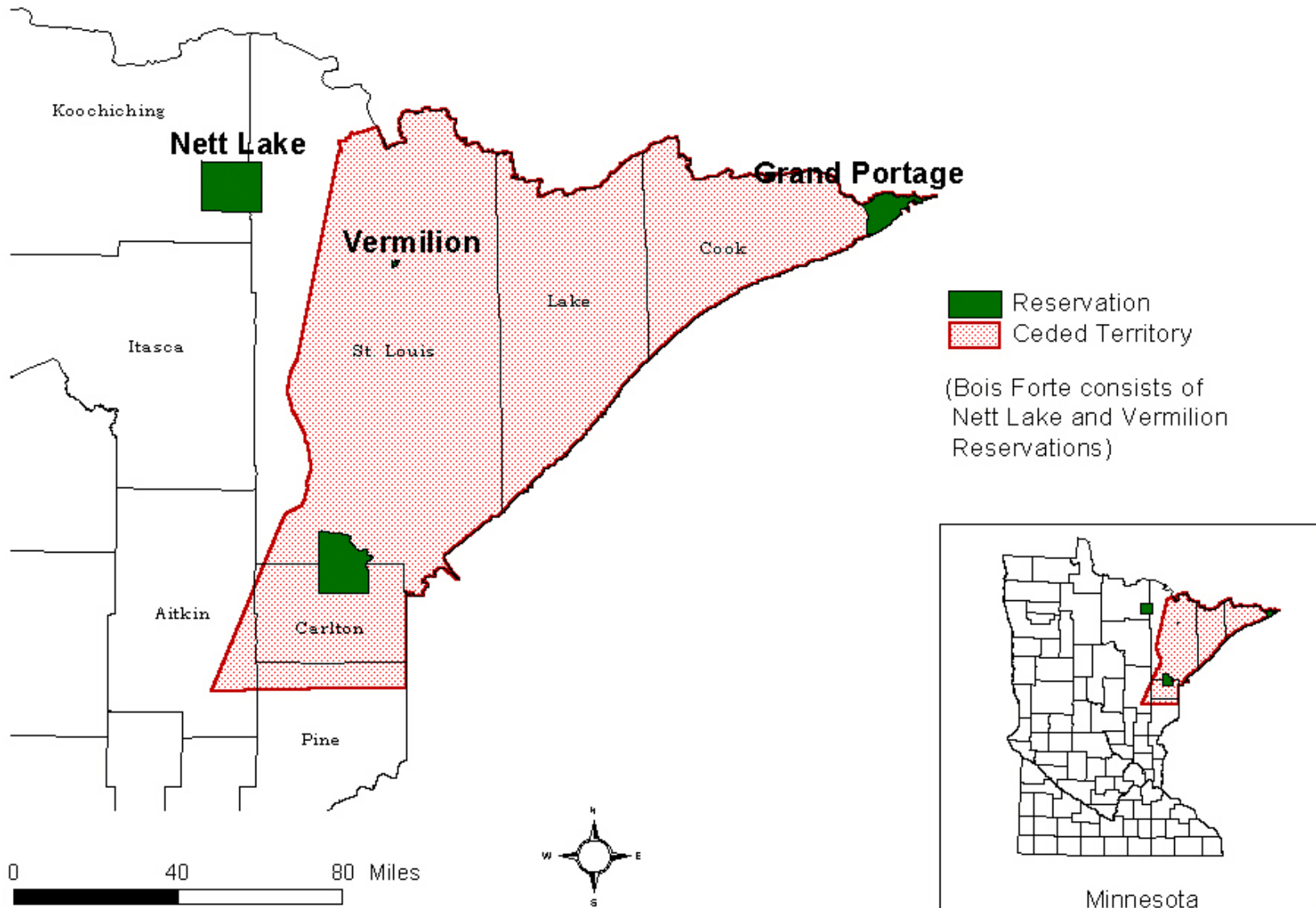
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## *1854 Treaty Authority Overview*

- The 1854 Treaty Authority is an inter-tribal natural resource management agency that manages the **off**-reservation hunting, fishing, and gathering rights of the Bois Forte and Grand Portage Bands of Lake Superior Chippewa in the territory ceded under the Treaty of 1854.
- The 1854 Authority consists of three divisions:
  - Administrative Division
  - Enforcement Division
  - Resource Management Division
- Together these divisions work to preserve, protect, and enhance the 1854 Treaty rights and the 1854 Ceded Territory resources.

# 1854 Ceded Territory





## Natural Resource Damage Assessment and Restoration (NRDAR)

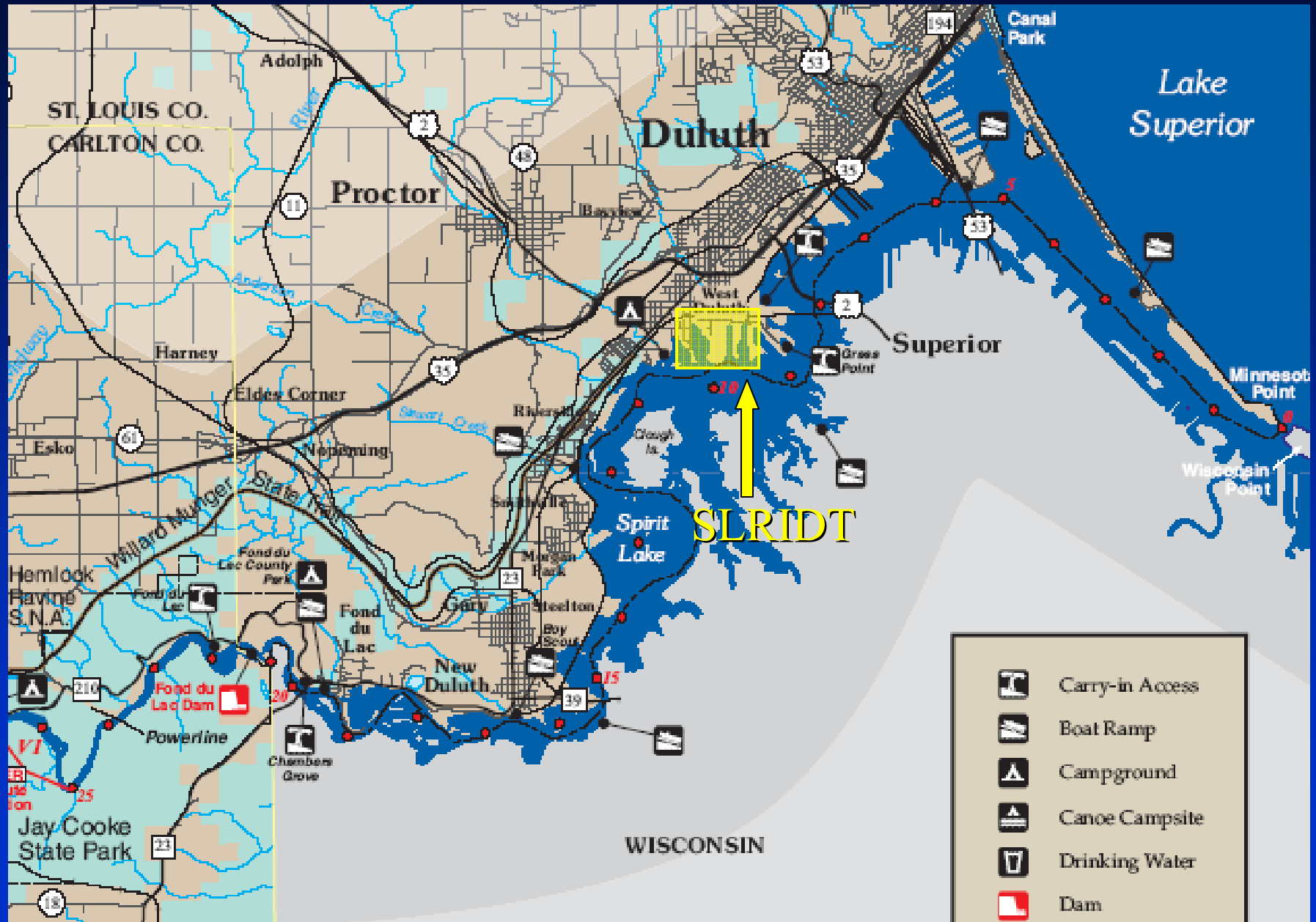
Why is 1854 Treaty Authority involved?

- Treaty rights and resources within 1854 Ceded Territory
- Authorized by resolution





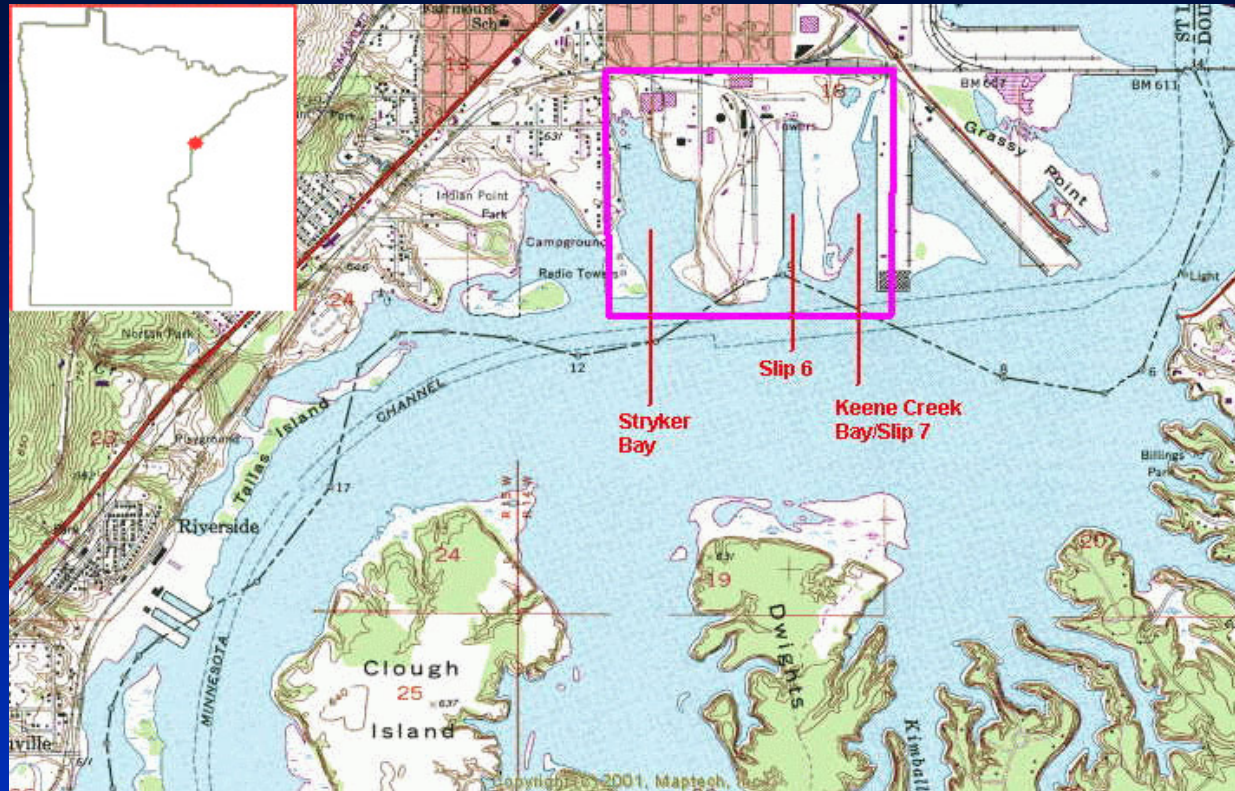
# St. Louis River Interlake Duluth Tar (SLRIDT) Site



*map courtesy of Minnesota Department of Natural Resources*



# St. Louis River Interlake Duluth Tar (SLRIDT) Site





## SLRIDT Site History

- Long history of industrial use: Duluth Iron and Steel Co. plant in 1890 → Zenith Furnace Company → Interlake Iron Company → Duluth Tar and Chemical
- Tar and chemical facilities until 1940s, iron plant until 1960s (industrial discharges through about 1962)
- Meat packing companies until 1970s
- Hallett Dock Company until 2006

## Primary contaminants of concern

- polycyclic aromatic hydrocarbons (PAHs), mercury (benzene, toluene, ethylbenzene, xylenes, arsenic, cadmium, chromium, copper, lead, nickel, zinc)



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## SLRIDT Site Remediation

- Site included on Superfund National Priorities List in 1983
- Responsible parties identified: XIK Corporation (formerly known as the Interlake Corporation), Honeywell International, Domtar, and Beazer East.
- Three units identified for remediation: tar seeps, soils, sediments
- Remediation completed at tar seeps (1994) and soils units (1997)
- Remedial investigation/feasibility study for sediment operable unit re-opened in 2000

*the great dredge vs. cap debate*

## SLRIDT Site Remediation (continued)

- Record of Decision (2004) – dredge / cap hybrid
- Remediation completed spring 2011

1. Stryker Bay - dredge, cap, surcharge
2. Slip 6 - contained aquatic disposal facility
3. Slip 7 – dredge, cap





## SLRIDT Site NRDAR – *natural resource trustees*

Trustee Council and Workgroup established - Memorandum of Agreement signed in 2001

- Minnesota Pollution Control Agency
- Minnesota Department of Natural Resources
- Fond du Lac Band of Lake Superior Chippewa
- 1854 Treaty Authority (representing the Bois Forte and Grand Portage Bands of Lake Superior Chippewa)
- U.S. Department of the Interior (as represented by the U.S. Fish and Wildlife Service and the Bureau of Indian Affairs)
- U.S. Department of Commerce (as represented by the National Oceanic and Atmospheric Administration)

State of Wisconsin?



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## SLRIDT Site NRDAR – *tasks completed*

- **Preassessment Screen (Sept 2001)**

*releases of hazardous substances have occurred, resources have been adversely affected, data available, response unlikely to restore or replace (or compensate) for injuries*

- **Notice of Intent (December 2001)**

*intend to proceed with assessment*

- **Assessment Plan (September 2002)**

*methods to document and evaluate potentially injured resources*



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## SLRIDT Site NRDAR – *tasks completed*

- **Comparative Preliminary Estimate of Damages (March 2003)**  
*describe service losses for different remedial alternatives*

timing was key (during RI/FS, before record of decision in 2004),  
cooperative/coordinated assessment concept

- **Settlement negotiations (2007 – 2009)**  
*trustees developed list of potential restoration projects*

- **Natural Resource Exposure and Injury Determination Report  
(work ongoing)**

*provide the basis for the necessary and appropriate restoration of natural  
resources lost or injured*

provide foundation for Restoration and  
Compensation Determination Plan (RCDP)



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## SLRIDT Site NRDAR

### Service losses and quantification

- Habitat – invertebrates, fish, wildlife, vegetation, ...  
Habitat Equivalency Analysis (HEA)
- Recreational Use – fishing, boating, ...  
Resource Equivalency Analysis (REA)
- Tribal Use – subsistence, cultural, ...  
qualitative description



## SLRIDT Site NRDAR

### Tribal use service losses and associated restoration

- largely in conjunction with other services
- some concern if fully quantifying  
“half counting” instead of “double counting”
- careful not to split/label projects, but  
“tribal” restoration projects identified



### Focus on restoration

*return natural resources to their baseline condition of services by focusing on habitat-based projects and other actions that restore, replace, and/or acquire the equivalent of lost services provided by the natural resources*



## SLRIDT Site NRDAR

So, to summarize...

- Trustee Council formed in 2001
- Record of Decision in 2004
- settlement negotiations (2007 – 2009) unsuccessful to date
- remediation completed in 2011
- work ongoing on Natural Resource Exposure and Injury Determination Report and further scoping of restoration projects

## Natural Resource Damage Assessment and Restoration: St. Louis River Interlake Duluth Tar Site

### Successes

- Trustee Council and Workgroup
- Coordination with remediation

### Challenges

- Learning curve
- Significant commitment for small staff size
- Moving target of remediation



*NRDAR – another tool in the toolbox, utilize elsewhere?*



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