



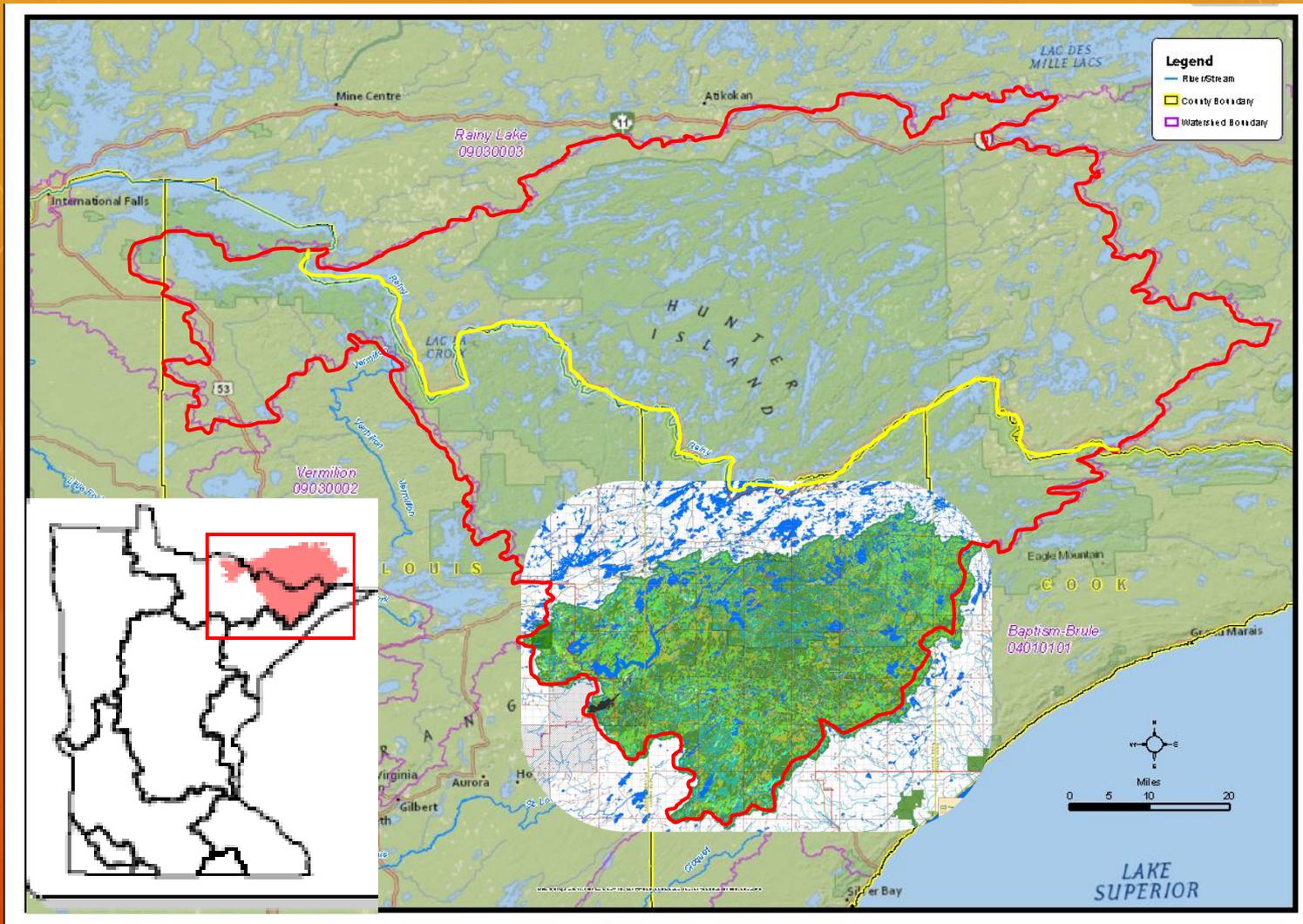
Collaborating in the
Involving **New**
Rainy River Watershed
Partners to protect
to Prevent and Control
water quality
Invasive Species

Derrick Passe, Lake County SWCD

Upper Midwest Invasive Species Conference, Oct. 2014



Rainy River Headwaters Watershed



Kawishiwi Watershed - a part of the Rainy River Headwaters

Kawishiwi Watershed Protection Project (KWPP)

A \$575,000 project designed to gather data on the Kawishiwi Watershed to determine what changes have already occurred, what are current trends and what are the causes.

CWLLA grant

CWP grant

Local cash

Volunteer contributions



**Minnesota Pollution
Control Agency**



**CLEAN
WATER
LAND &
LEGACY
AMENDMENT**

Collaborators

White Iron Chain of Lakes Association – A lake association, located East of Ely, Minnesota on the edge of the Boundary Waters Canoe Area Wilderness, approx. 200 households. Pledged \$175,000 in Local funding and in-kind donations.



WICOLA



**Minnesota Pollution
Control Agency**

Provided an additional \$400,000 in the form of 2 grants to assess Kawishiwi Watershed health.

**\$34,000 dedicated to AIS Survey and Assessment.
\$52,000 dedicated to Public Outreach and Education.**

Collaborators

Lake County SWCD – Fiscal administration of Grant. Hired Project Coordinator. Participated on Oversight Committee and reported back to Lake County and Local Townships.



Superior National Forest – Comprises over 95% of the Project Area, managed by the **USFS**. Participated on the Project Oversight Committee.

Collaborators



Lake County - Fiscal Agent for Clean Water Partnership Grant (\$350,000).

Minnesota Sea Grant - Provided expert knowledge of AIS infestations and vectors in area, reviewed survey information, assisted with public outreach.



Identified AIS infestation limits, assessed impacts to Wild Rice, assisted with public outreach.

AIS Activities in Watershed before KWPP (Prior to February 2011)



- Water Quality Monitoring



WICOLA

- Water Quality Monitoring
- Blueberry Fest Booth



**Minnesota Pollution
Control Agency**

- Support of local residents
- Resource Protection Projects



AIS Activities in Watershed before KWPP (Prior to February 2011)



Superior National Forest

- Surveyed for **Rusty Crayfish** 2003-2006
- Initiated **spiny water flea** survey in 2004
- Found Non-native Invasive Plants at 159 of 267 sites in Kawishiwi Portion of BWCAW (2006)
- Developed NNIS booklet in partnership with **Friends of BWCAW** and **REI**



- Surveyed wild rice densities in watershed.

Activities during the Grant (February 2011- June 2013)

Participated in
Local Festivals.



Booth at Blueberry Fest in Ely,
staffed by Representatives from
Lake SWCD, MN DNR, MPCA, Sea
Grant, 1854 Treaty Authority and
WICOLA

Activities during the Grant (February 2011- June 2013)

Public Education

Video produced by North American Fishing (You Tube Video - "**Silent Invaders**" Spiny Water Flea PT 2 2013)



Boat Inspections by WICOLA



Coordinated Lake Service Provider Training by MN DNR

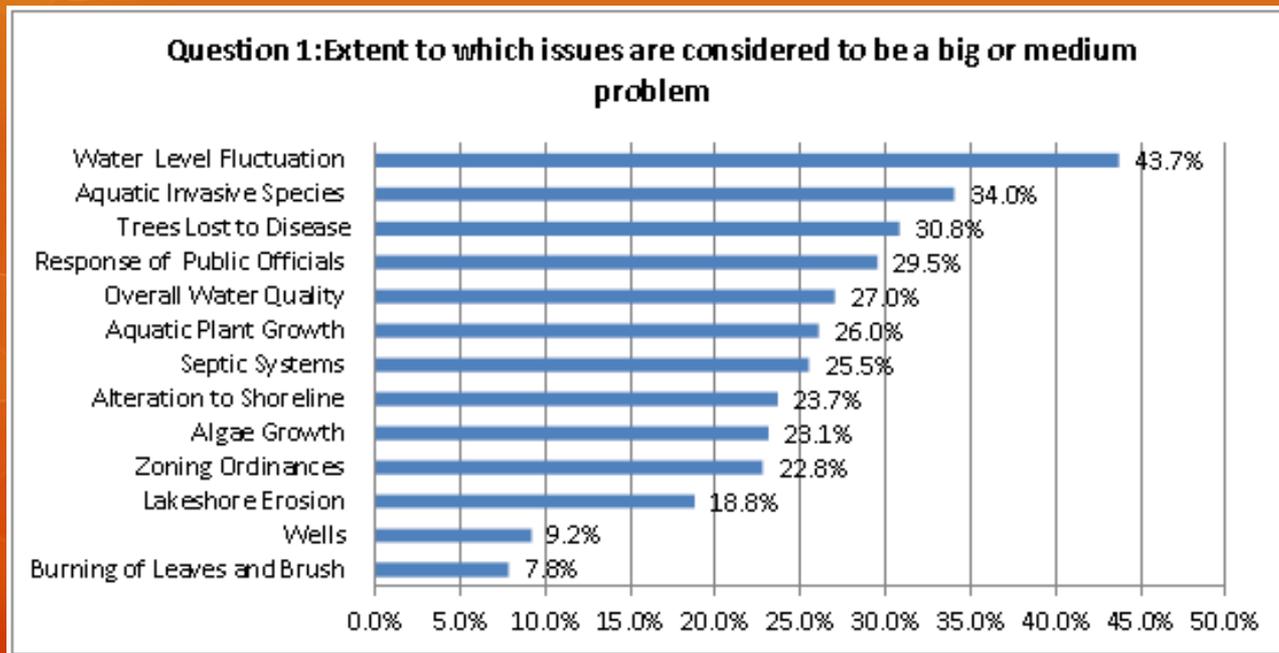
Activities during the Grant (February 2011- June 2013)

AIS Survey

Q 18 Protect Kawishiwi	Number	Percent of those responding to question
Very Important	701	88.62%
Somewhat important	78	9.86%
Not very important	8	1.01%
Not at all important	4	0.51%
Total	791	100.00%

Table 26. Importance of Protection of Kawishiwi Watershed

Lake Parcel Ownership	Count	Percent of total	Number of returns
Lake shore parcel taxpayers	1303	59.0%	559
Non-lake shore parcel taxpayers	907	41.0%	251
Totals	2210	100%	810



KWPP Aquatic Species Survey Report,
(Mason and Mason 2012)

Activities during the Grant (Feb 2011- June 2013)

	Birch	White Iron	Farm	Garden	South Farm *	Dumbbell Lake @
Found Crayfish/Total Sites	22/59	19/36	19/25	24/25	22/22	6/6
Rusty/Total Number of Crayfish	44/69	26/35	76/78	353/353	131/173	166/166
Sites with Rusty/ Total Sites with Crayfish	6/22	13/19	19/19	24/24	22/22	6/6
Density of Rustys / Trap	7.3	2.0	4.0	14.7	6.0	27.7
Density of Natives / Trap	1.6	1.3	2.0	N/A	3.2	

AIS Survey

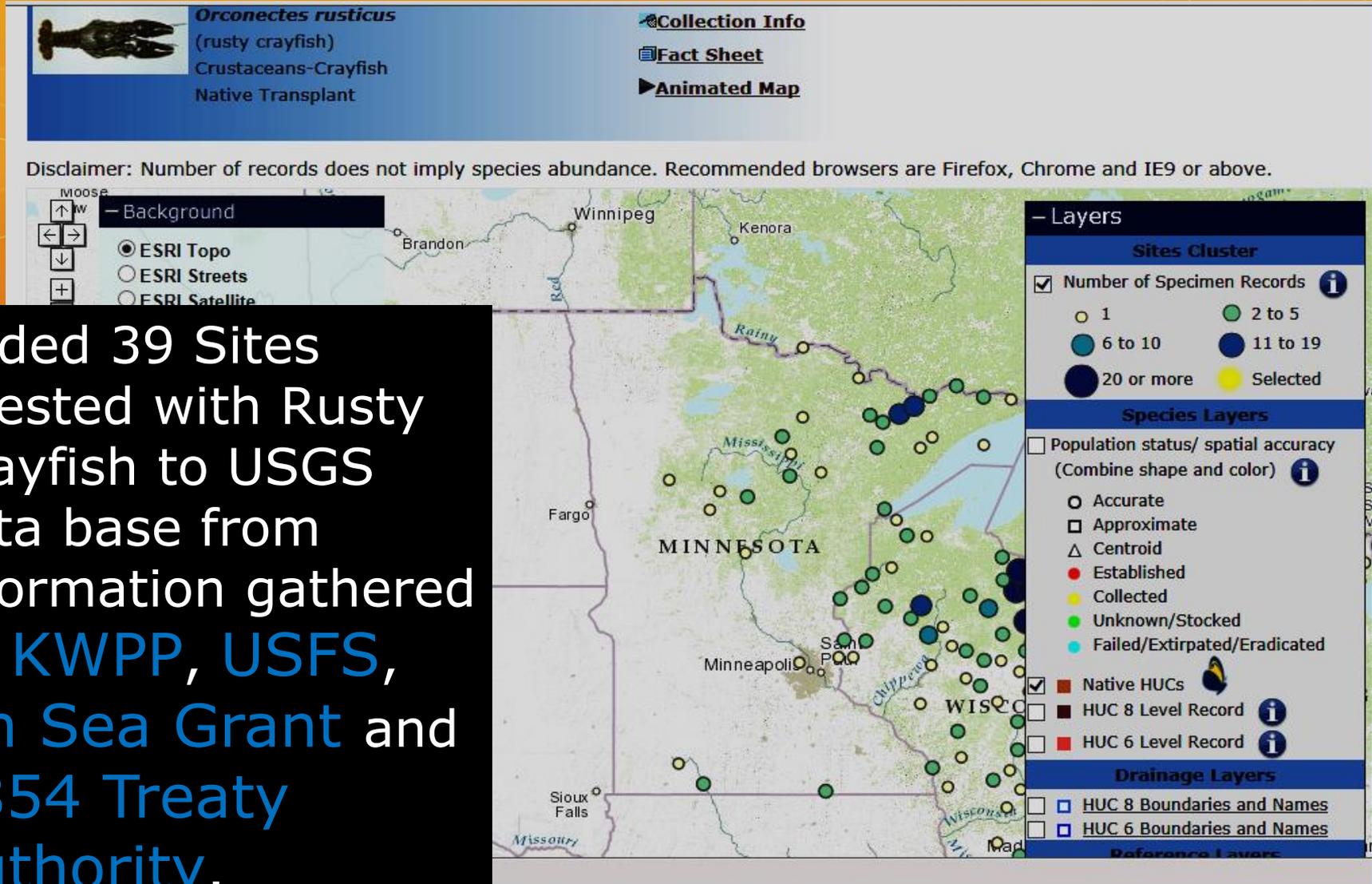
AIS Survey

2011 Crayfish Survey

* - No Rusty Crayfish were found in South Farm in 2007.
 @ - Only 2 Rusty Crayfish were found in Dumbbell Lake in 2005.



The Grant is over, Now What? (June 2013 – Present)



Added 39 Sites infested with Rusty Crayfish to USGS data base from information gathered by **KWPP, USFS, Mn Sea Grant** and **1854 Treaty Authority**.

Is that all?

(June 2013 – Present)



Trapped Crayfish on the Kawishiwi River and in BWCAW lakes to determine extent of Infestation into BWCAW. (July 2014)

Conservation Corps, USFS, Lake SWCD, MN DNR, Outward Bound, 1854 Treaty Authority

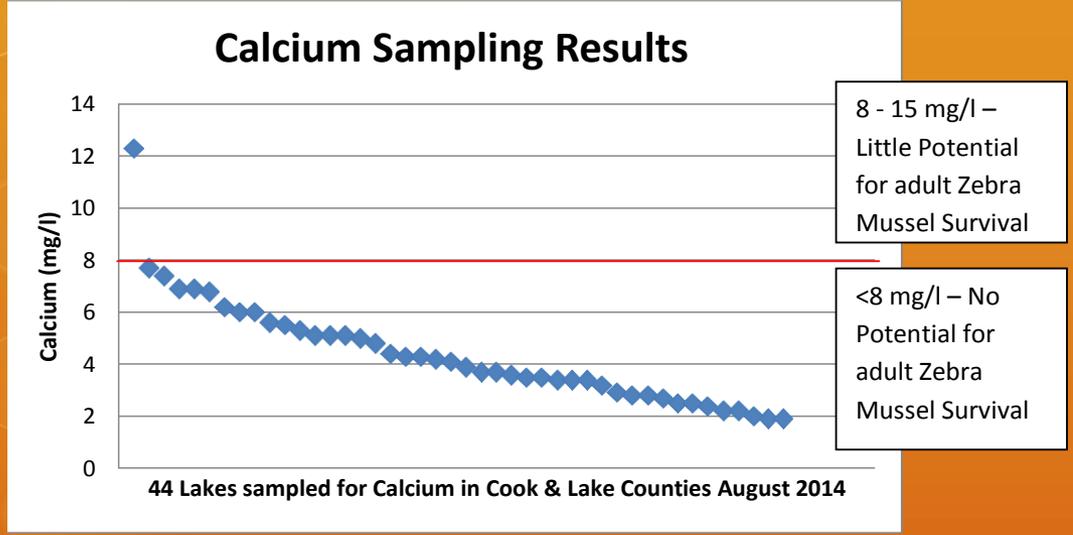
And getting the message out... (June 2013 – Present)



Parades, classroom presentations, community festivals. (Lake SWCD, Cook SWCD and Invasives Team, MN Sea Grant.)

Involving New Partners (June 2013 – Present)

- Calcium sampled in 46 lakes in Cook and Lake Counties



Calcium sampling by **WICOLA** in conjunction with existing **MPCA, Lake and Cook County SWCDs** Surface Water Assessment Grants (Aug/Sept 2014)



Sampling for Spiny Water flea at the same time that volunteers are doing Secchi readings - **MPCA and WICOLA**



Collaborators

Lake County, MN



SAINT LOUIS COUNTY
MINNESOTA



Minnesota Pollution Control Agency



Minnesota Department of Natural Resources

nmw
Northeastern Minnesotans for Wilderness



NATURAL RESOURCES RESEARCH INSTITUTE



USDA FOREST SERVICE



Thank you for your attention!

Questions?



Derrick Passe
Rainy River Coordinator
Derrick.Passe@Co.Lake.MN.US
763-286-0570