THE CONFEDERATED SALISH AND KOOTENAI TRIBES OF THE FLATHEAD RESERVATION

A People of Vision

Stop AIS

We are in this together!

Our Vision

The CSKT desire to keep the waters of the Flathead Indian Reservation clean, pure, and healthy. We want to do everything we can to make sure that future generations enjoy the same waters we have here today.

- Len TwoTeeth
  Tribal Elder

Aquatic Invasive Species (AIS)

- What Are Aquatic Invasive Species?
  - How Do They Get Here?
- What Can We Do To Prevent Them?

Aquatic Invasive Species – What are they?

- **AIS are any plant or animal that is not native to Montana that can impact water bodies and wetlands. AIS are transported by human activities to environments where they do not occur naturally and can establish reproducing populations in the wild. AIS can cause severe damage to local ecosystems, industry, and tourism.**

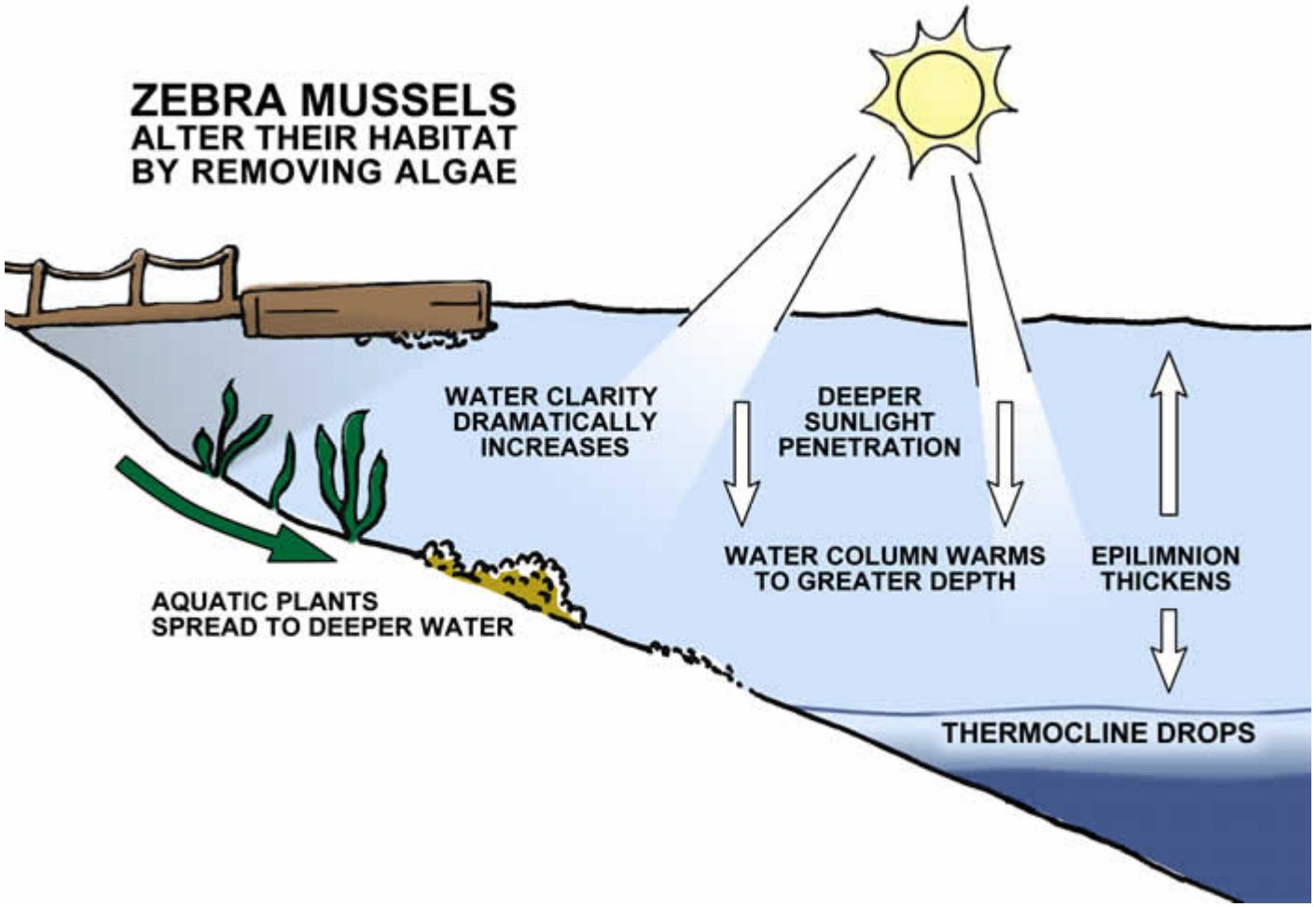
- **Examples include but are not limited to:**
  - ***Eurasian watermilfoil***
  - ***Quagga and Zebra mussels***
  - ***Whirling Disease***
  - ***Lake Trout***
  - ***Mysis shrimp***

One of the biggest AIS threats today is posed by invasive mussels (Zebra and Quagga). They entered the Great Lakes in the ballast water of ocean going ships in 1986. Since then they have spread to 29 states.

- Today, the Columbia watershed in the only mussel free watershed left in America!

Damages Caused by Mussels

- Ecologic



Mussels cover every surface- a race for space

Mussels strip food (phytoplankton and zooplankton) out of the water column

Native plant and animal communities collapse due to starvation

Water quality is permanently altered. Mussels make the water clearer- but not cleaner. They can concentrate toxins on the shoreline.

Beaches are changed into sharp edged, smelly places.

If invasive mussels get to Flathead Lake, we could go

From this

To this……

In less than 6 months, **every square yard of shoreline** could be coated with more than 35,000 mussels!

Impacts

•Byssal threads secrete a powerful glue, enabling the mussels to form dense colonies on rocks, metal, plastic, concrete, pipes, ropes, boats, motors and practically any other submerged object.

Before zms

After zms

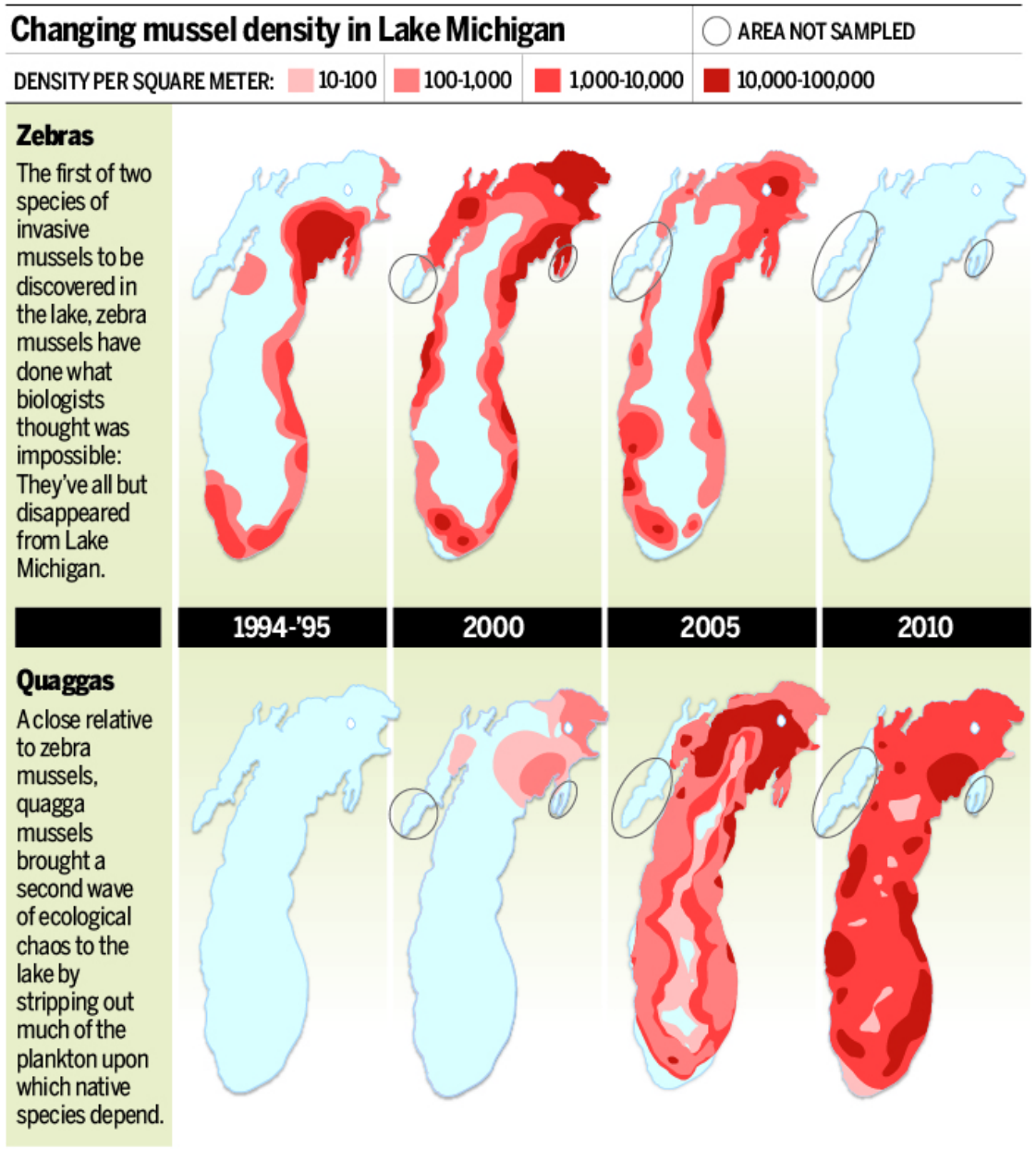
On boats and motors

On inside of pipe

On stick

On golf ball

On remains of beer can



Not all invasive mussels are created equal…..

Lake Michigan was one of the first Great Lakes to be impacted by Zebra Mussels. They quickly coated the shoreline between 1986-1994.

When Quagga mussels invaded Lake Michigan, they quickly wiped out the Zebra mussels and have now caused even greater infestations.

Last year- quagga mussels were identified in the waters of Montana……

Damages Caused by Mussels

- Economic

If Quagga or Zebra mussels infest the Flathead….

- Lake front property along Flathead Lake is currently valued at 6-8 billion dollars. This contributes a huge property tax base to the state economy.
- AIS population would cause a 13-19% drop in property value within 3 years! (That equals 1.5 billion reduction!)
- Impacts to tourism, hydropower, and infrastructure (water intake pipes, stormwater drains, wastewater systems) are predicted to cost > $95 million each year if AIS hit the waters of the Flathead basin.

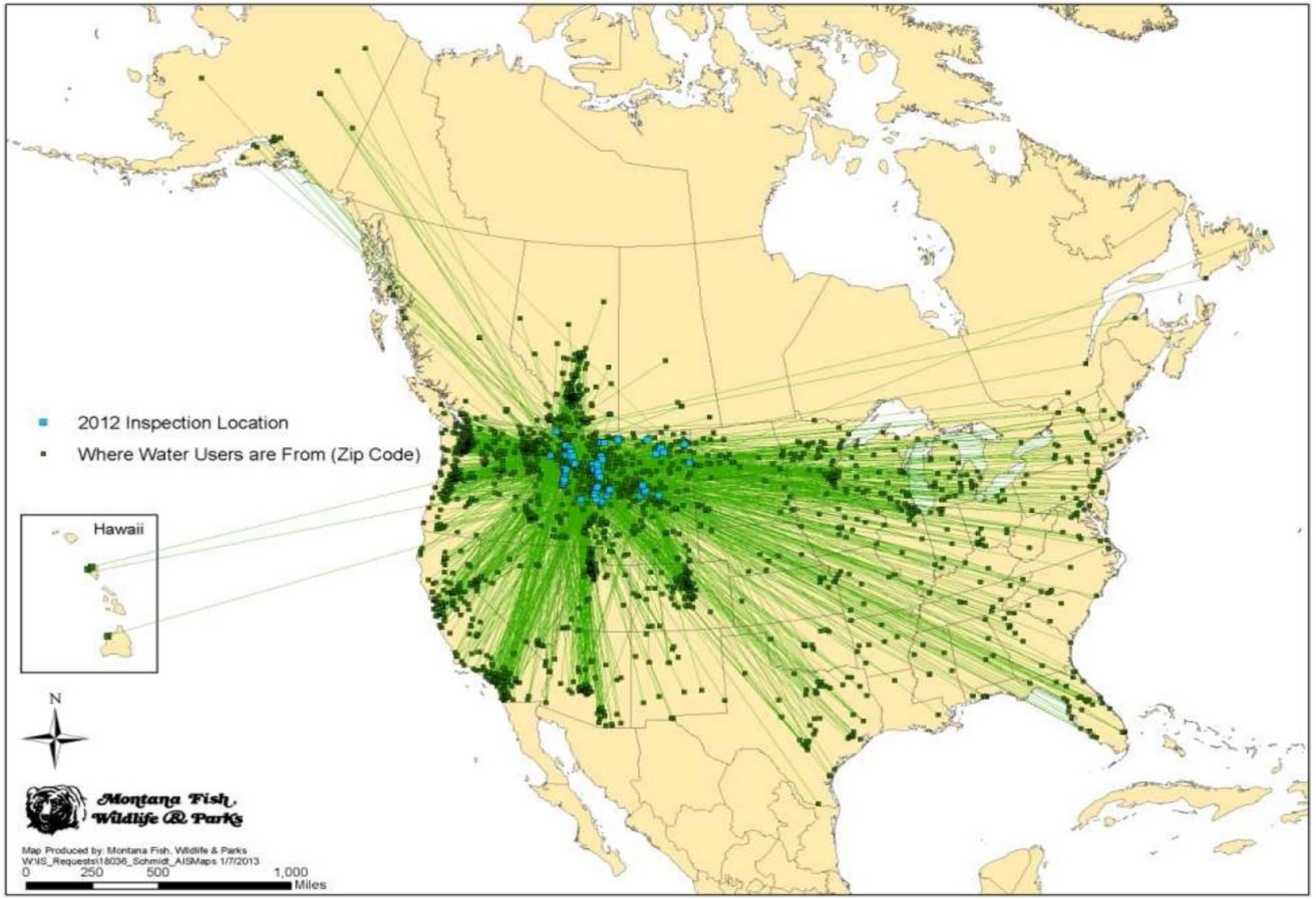


Figure 5. Water User Movement into Montana in 2012

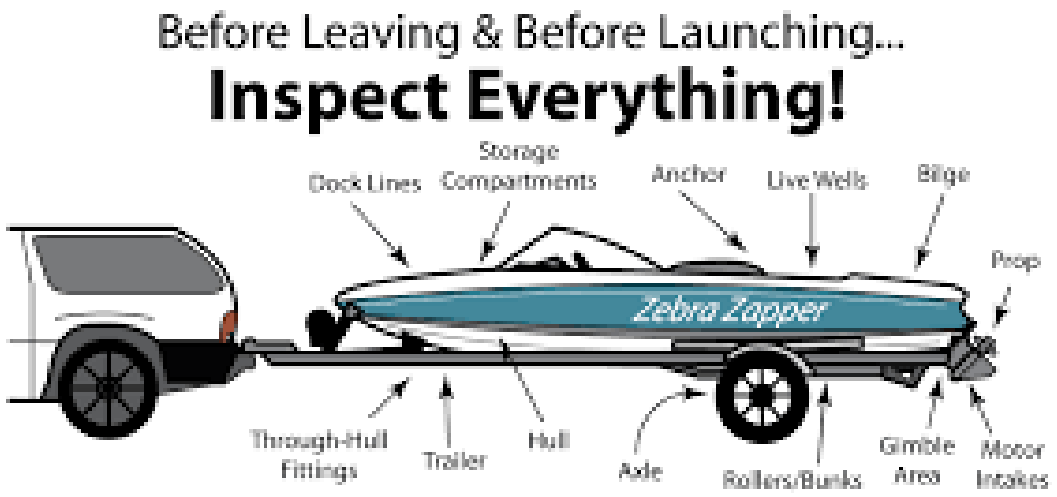
How Do AIS Move?

AIS can be carried in the live wells and bilge tanks of boats, bait buckets,
and even float inside undrained waders. Young mussels (called veligers) can also attach to kayaks, canoes, and paddleboards.

Anything that can go in the water can transport invasive mussels….even your dog!

What Can We Do To Prevent AIS?

CLEAN. DRAIN. DRY.



Remember:

*Invasive mussels can survive for up to five days out of the water.

*Invasive can survive indefinitely in any residual water left in or on your watercraft.

We Can Do This!!

There Are Success Stories!
Lake Tahoe!
Minnesota and its 10,000 lakes!
Idaho Waters!

Let’s stop AIS!