

**Aquatic Invasive Plants:**  
A New Focus for Alaskan Invasive  
Species Management

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# Meet *Elodea* – Alaska’s first invasive aquatic plant

- *E. nuttallii*, *E. canadensis*
- Popular aquarium plant (“oxygen weed”)
- Though native to much of North America, not native to Alaska
- Cold tolerant, survives freezing, fragments easily, can root at nodes
- Potentially devastating impacts to aquatic resources including fish habitat, recreation, and water quality



# Known Elodea infestations – 10/2012

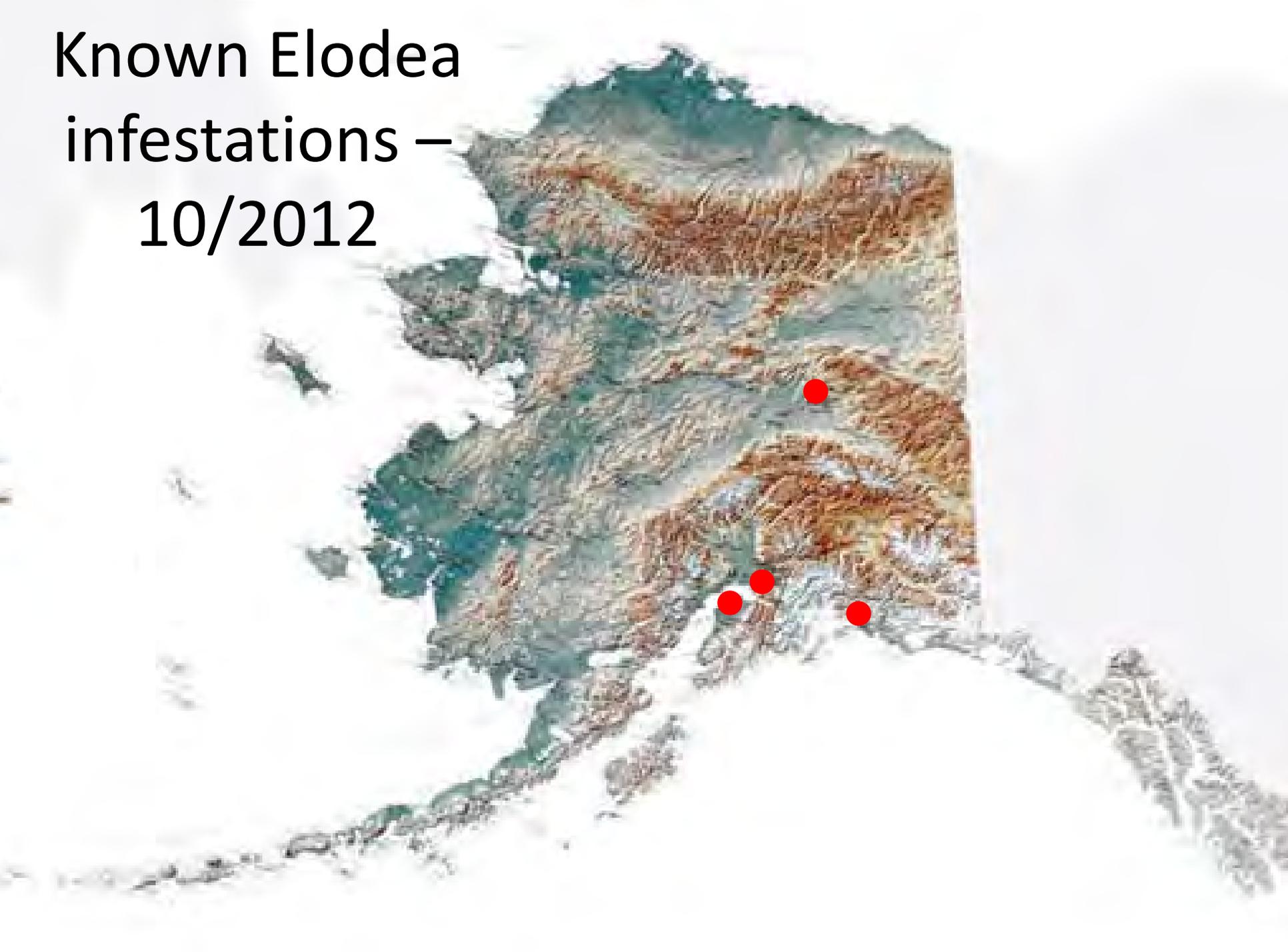




Image IBCAO  
Image © 2012 TerraMetrics  
Data SIO, NOAA, U.S. Navy, NGA, GEBCO

lat 60.222475° lon -149.684476° elev 1078 ft

# Kenai Peninsula Elodea Surveys 2012

- -Surveyed
- -Elodea documented

## Elodea documented:

Stormy Lake  
Daniels Lake

## No Elodea\*:

Longmere Lake  
Island Lake  
Sport Lake  
Scout Lake  
West Mackey  
East Mackey  
Wik Lake

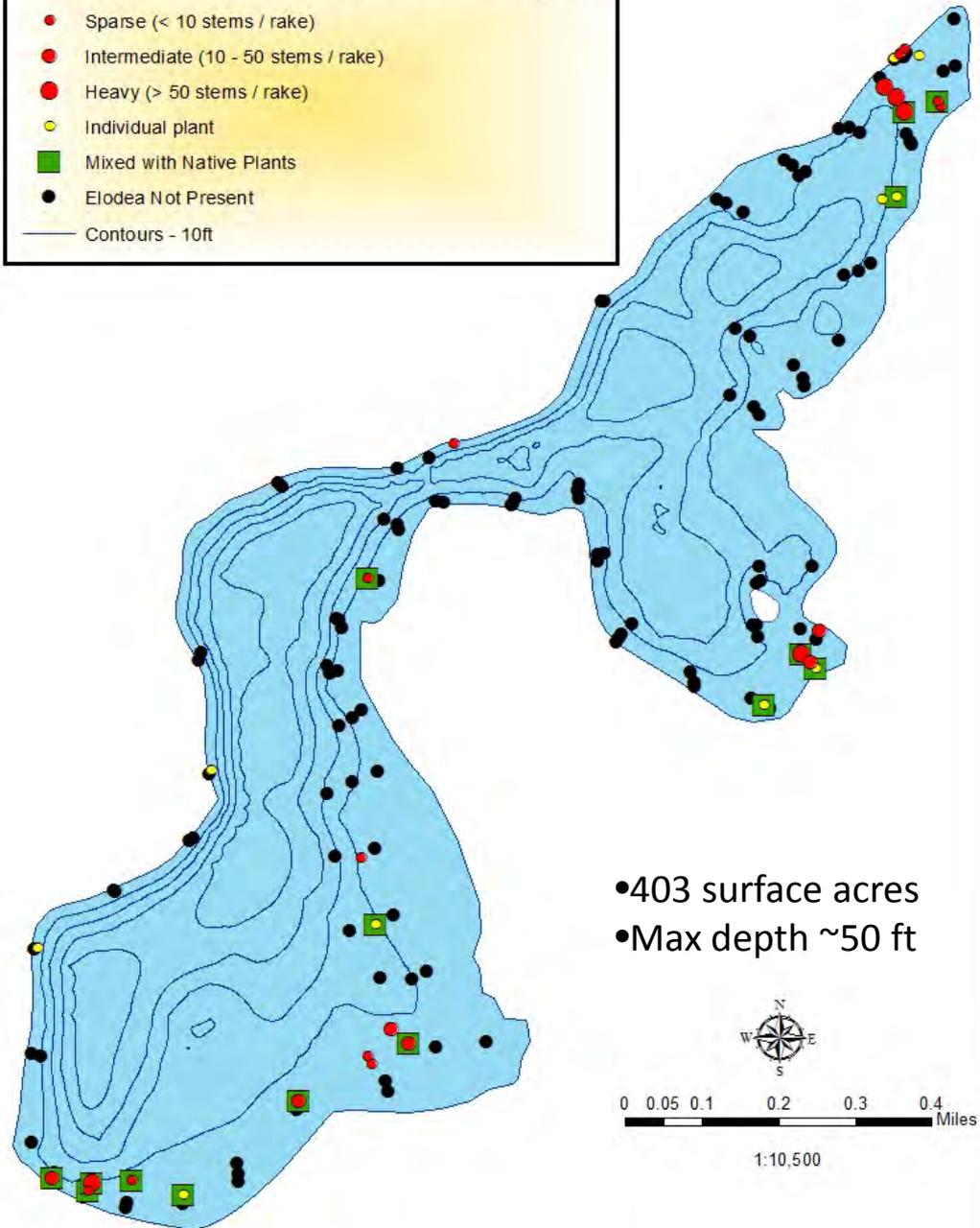
*\*brief spot check surveys at the end of the season*

# Stormy Lake

- Discovered during pike removal
- Swanson River drainage
- Kenai FWR is looking into funding surveys
- Response plan to evaluate control options

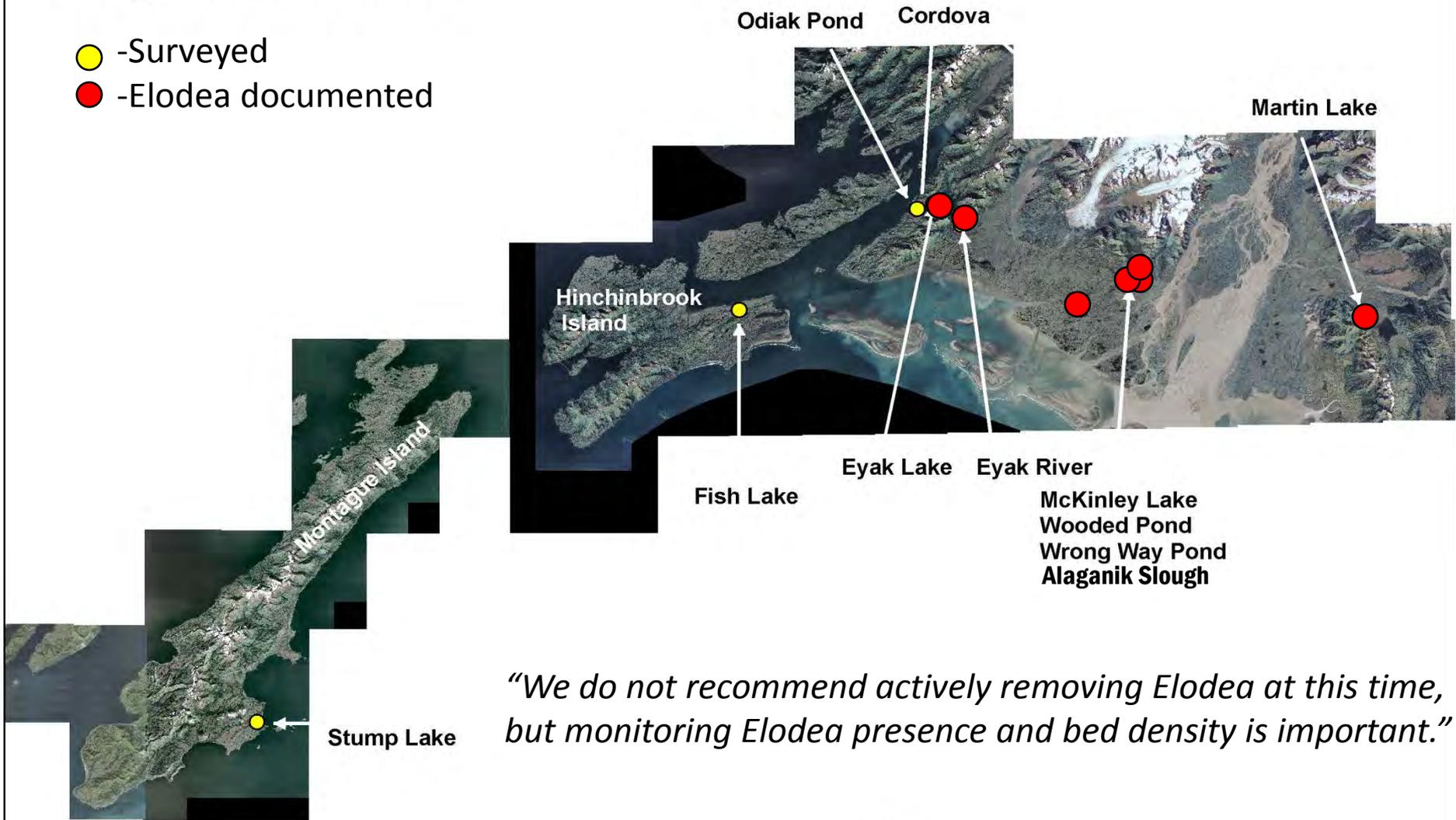
## Stormy Lake Elodea Survey - September 2012

- Sparse (< 10 stems / rake)
- Intermediate (10 - 50 stems / rake)
- Heavy (> 50 stems / rake)
- Individual plant
- Mixed with Native Plants
- Elodea Not Present
- Contours - 10ft



# Elodea Surveys 2012 Chugach National Forest

- -Surveyed
- -Elodea documented



*"We do not recommend actively removing Elodea at this time, but monitoring Elodea presence and bed density is important."*



0    5    10    20 Miles

# Fairbanks

- Still 'isolated' to Chena Lake, Chena Slough, and Chena River
- Fairbanks SWCD exploring:
  - Suction dredging
  - Herbicides



# Chena Slough



- Effective:
  - Suction dredging
  - Hand pulling
  - Barriers
- Ineffective:
  - Clipping



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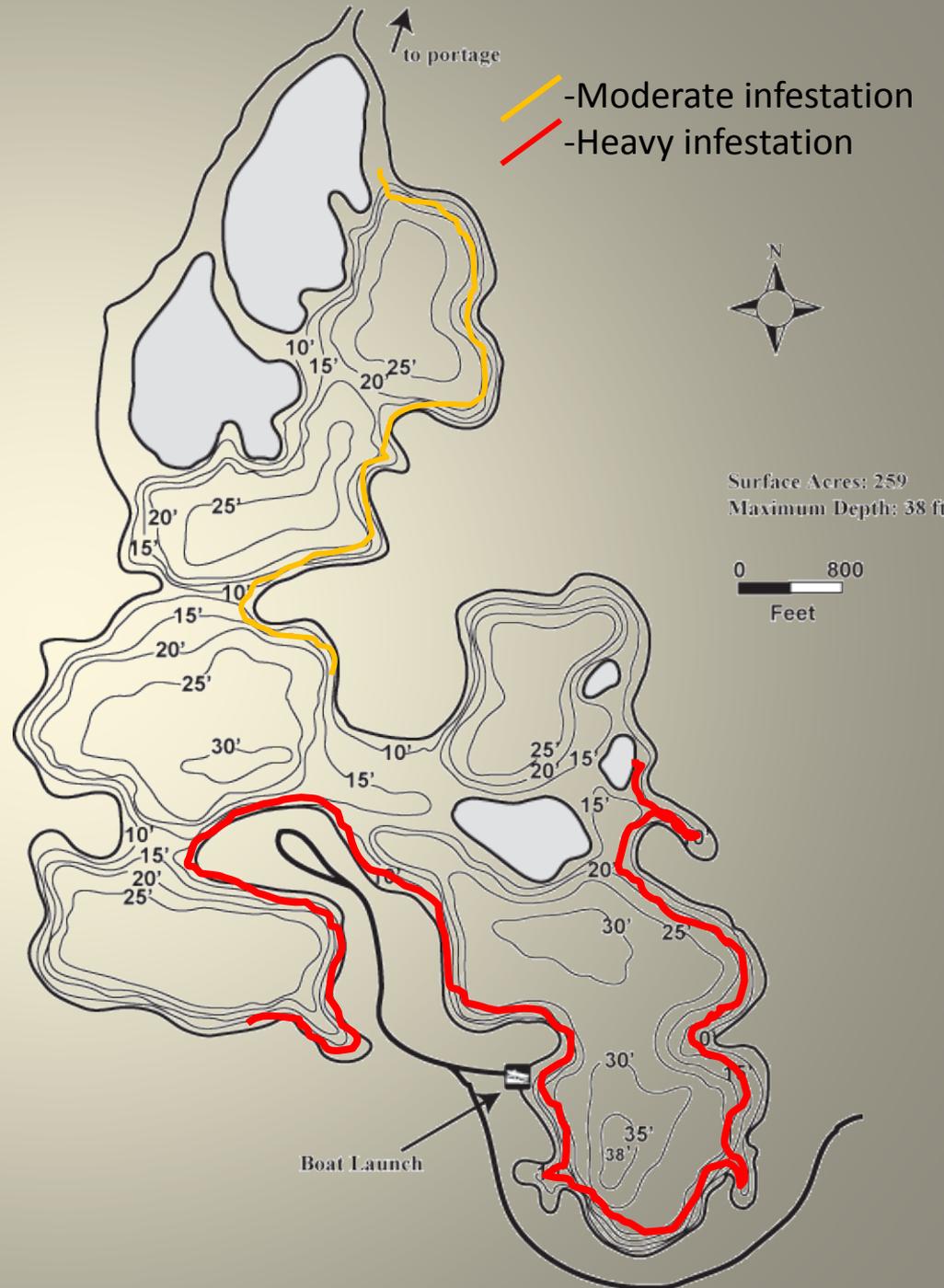
Diver operated dredging is complicated and increases risk, but is necessary to reach deeper rooted Elodea



Debris barriers are important to keep Elodea fragments from flowing downstream



# Chena Lake



- Partnership between Fairbanks North Star Borough, US Fish and Wildlife, Fairbanks SWCD
- Pursuing outreach and mechanical control initially. Borough will evaluate herbicides in the future

# Anchorage



- 7 additional lakes surveyed 2012 – no Elodea found
- Anchorage SWCD has funding to pursue control of Elodea
- Sand Lake is the current priority statewide due to its floatplane use and proximity to Lake Hood

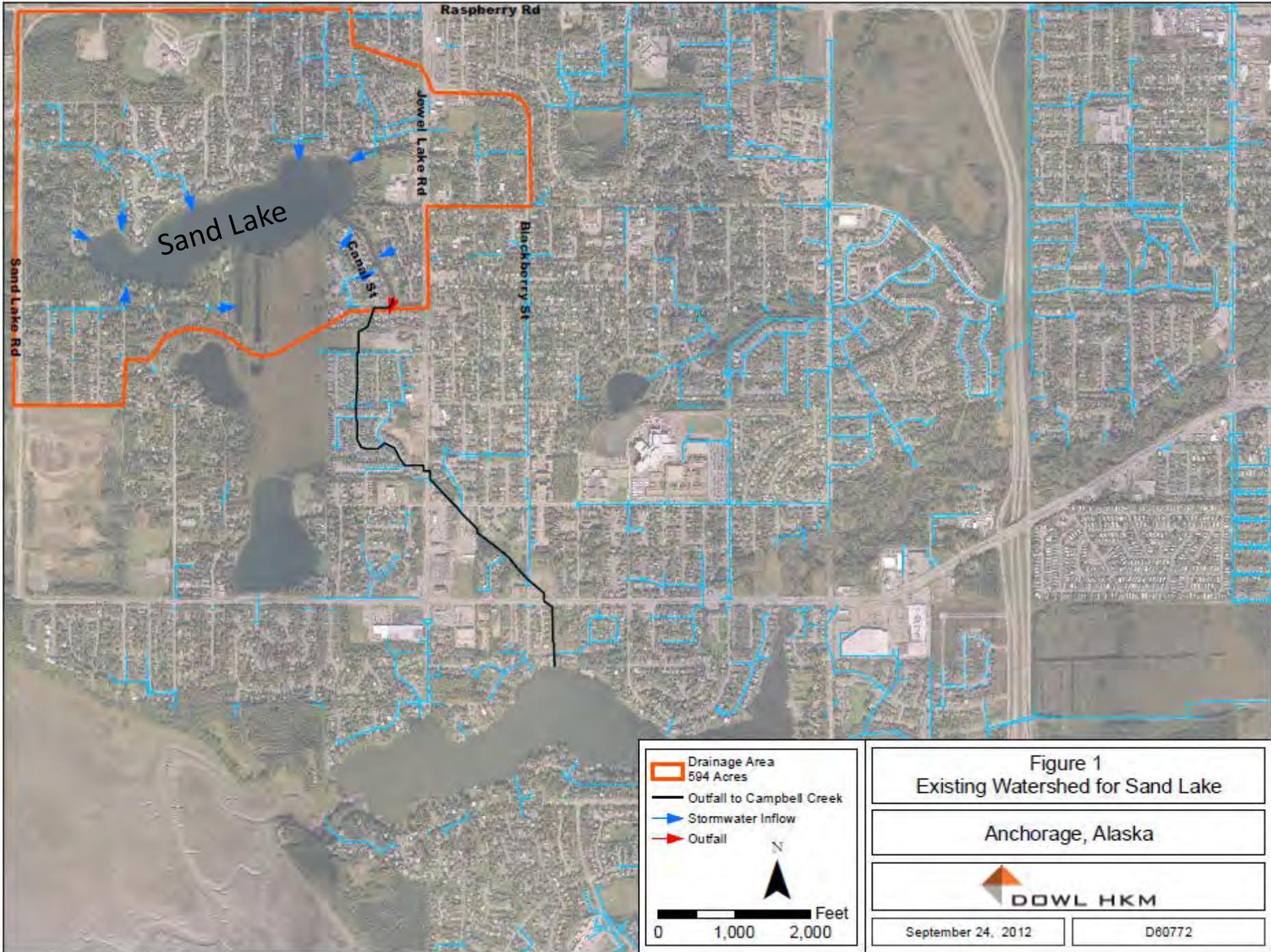
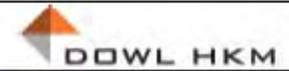


Figure 1  
Existing Watershed for Sand Lake

Anchorage, Alaska



September 24, 2012

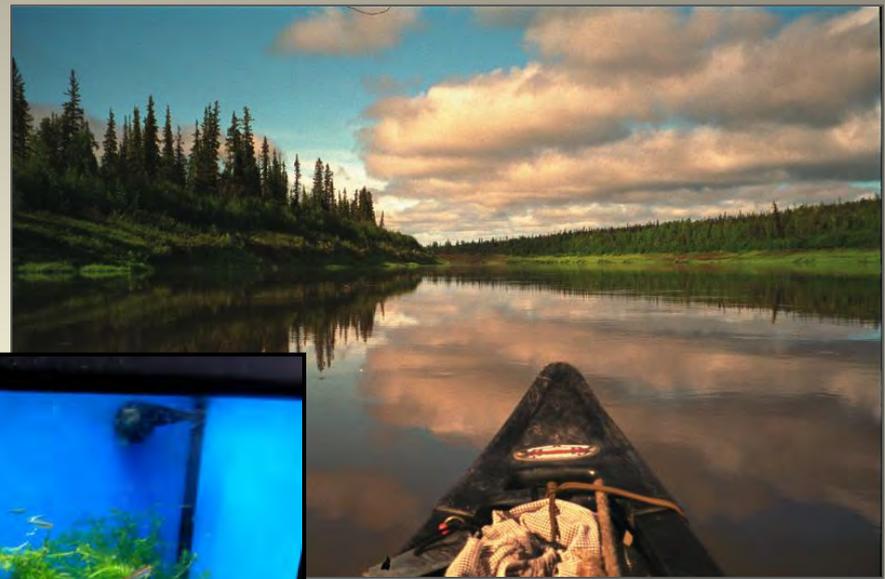
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# Sand Lake

## Anchorage SWCD PROJECT TIMELINE:

- Hydrology analysis
- Vegetation surveys at Sand Lake
- Adjacent landowner public process
  - >100 private landowners
- Control permitting
- Treatment summer 2013





# Where are the gaps?

- Funding
  - Currently have funding for 1-2 years in some places, but Elodea will require long-term management
  - Need allotment of funds NOW to quickly address priority infestations
- Coordination
  - Projects are piecemeal, need statewide oversight to manage this statewide problem

- DNR has legal authority over freshwater aquatic plants





**Oregon:** “To implement the AIS Prevention Program a new user fee (AIS Prevention Permit, \$5) on watercraft was established. Revenue generated from AIS Prevention Permit sales were \$939,282 in 2011.”

**Minnesota:** “Most of the revenue for the Invasive Species Account comes from a \$5 surcharge on watercraft licenses and a \$2 surcharge on non-resident fishing licenses. These two sources generate approximately \$1,600,000/year.”

**Idaho:** “The law requires boaters to contribute to the Idaho Invasive Species Fund (IISF). The Idaho Department of Agriculture is responsible for management of the IISF program. Boats registered outside of Idaho will need to purchase an IISF sticker for \$22.00; non-motorized vessels must purchase a \$7.00 sticker annually. “

An underwater photograph showing a white, worm-like creature swimming horizontally across the middle of the frame. The background is a dense field of brown and green rocks or coral on a seabed. The water is clear and blue.

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