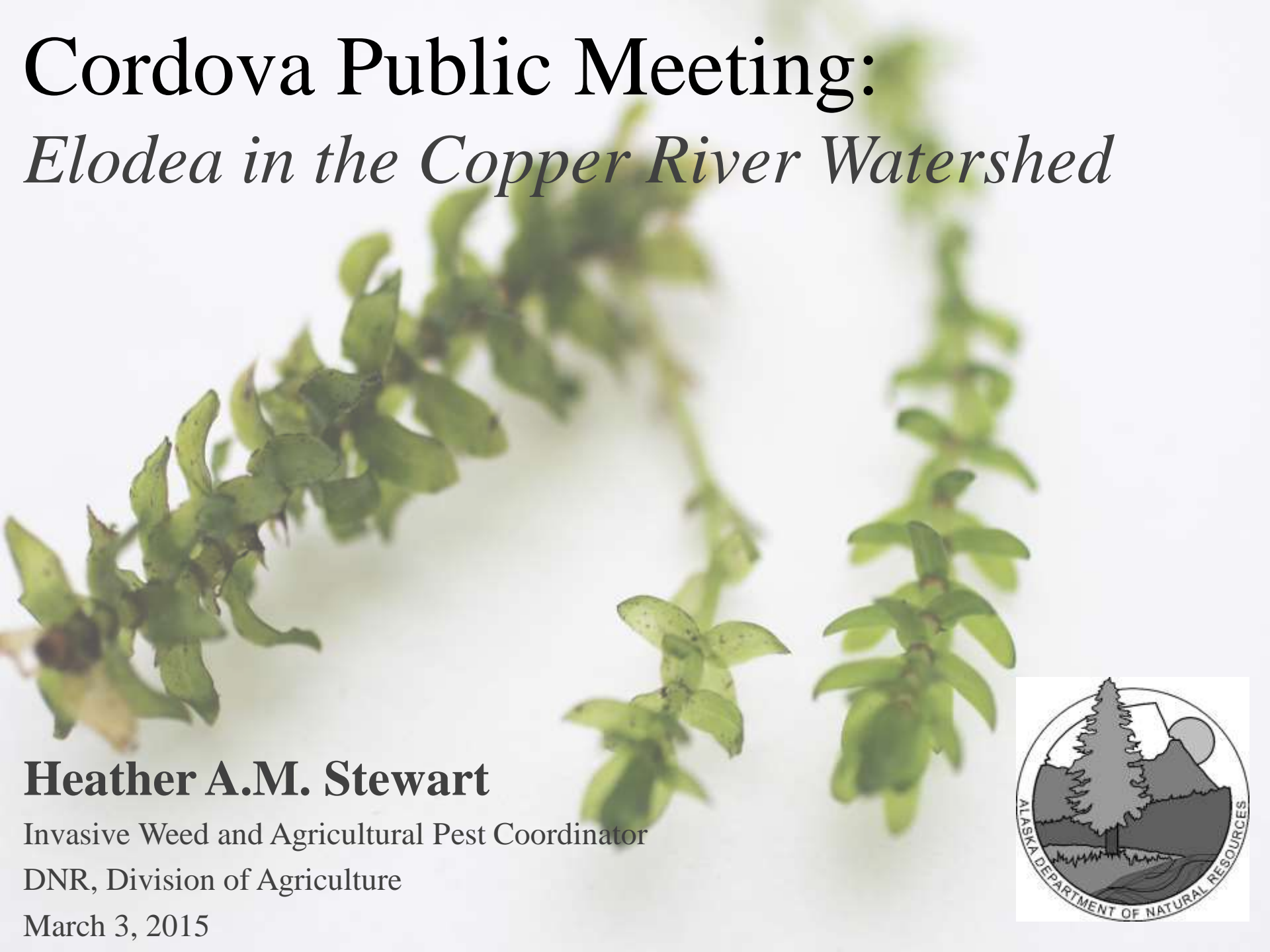


Cordova Public Meeting:

Elodea in the Copper River Watershed



Heather A.M. Stewart

Invasive Weed and Agricultural Pest Coordinator

DNR, Division of Agriculture

March 3, 2015



Overview

- Introduction to elodea
 - What makes this plant a threat?
- Elodea in Alaska
 - Timeline of discovery around the state
- State involvement with elodea
 - MOU
 - Quarantine
- Statewide elodea management plan
- Next steps for the state

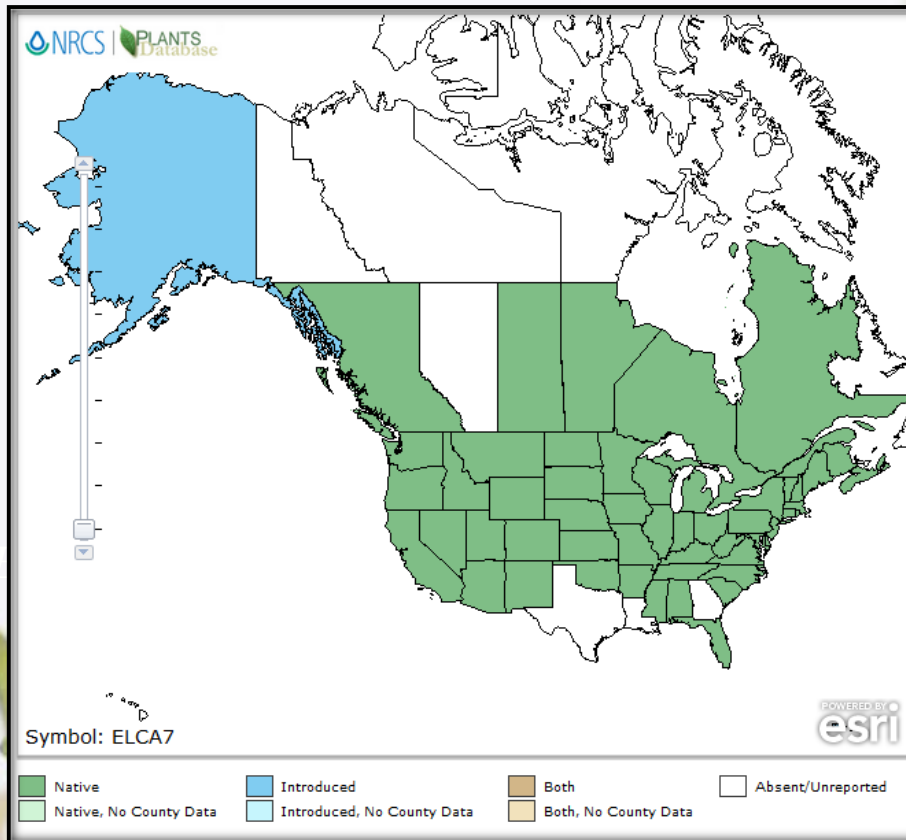


Elodea:

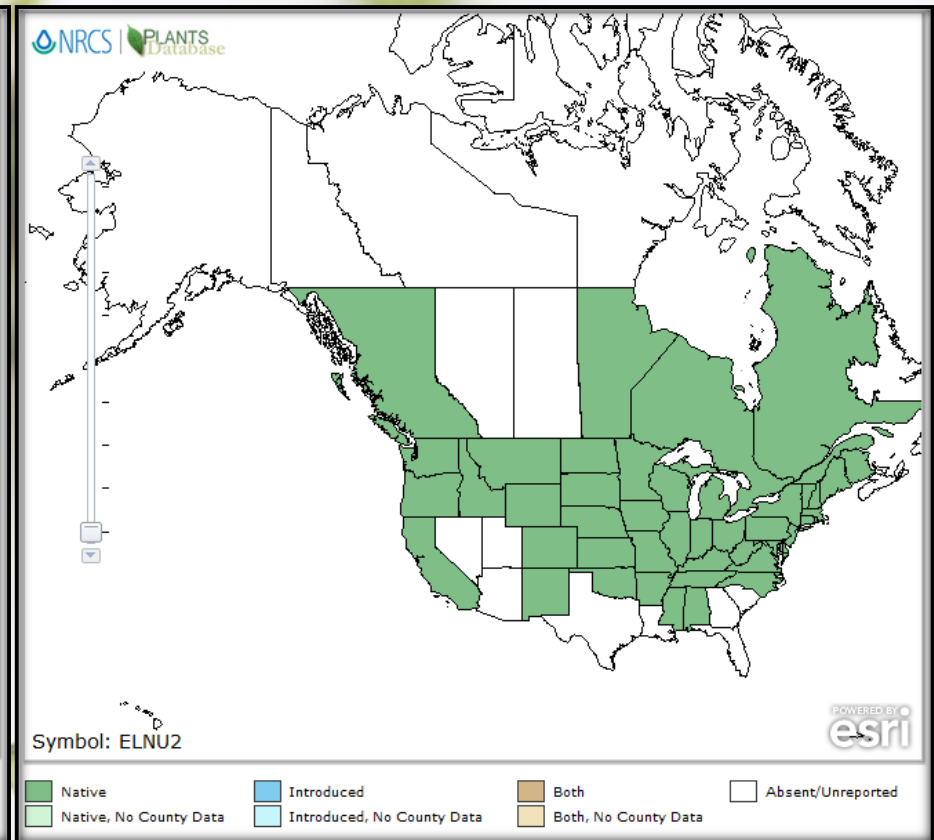
Alaska's first freshwater submersed aquatic invasive plant

- Invasive: (per Executive Order 13112)
 - Non-native to the ecosystem under consideration
 - Whose introduction causes or is likely to cause economic or environmental harm or harm to human health
- *Elodea nuttallii*, *Elodea canadensis* and hybrids
 - Native to temperate N. America: Great Lakes and St. Lawrence Valley
 - *Elodea nuttallii* considered invasive in Europe
 - Responsible for local extinctions of an endangered plant in Norway
 - Often problematic in its native range in Canada (south of 51°N), where populations reduce the navigability of waterways

Elodea canadensis



Elodea nuttallii



- *Elodea* is grown deliberately as an aquarium plant
- Spreads vegetatively by fragmentation
- Most likely introduced to Alaskan natural waters because of the aquarium trade
 - Unintentional spread by recreational equipment



United Kingdom:
weed harvester



Chena Slough

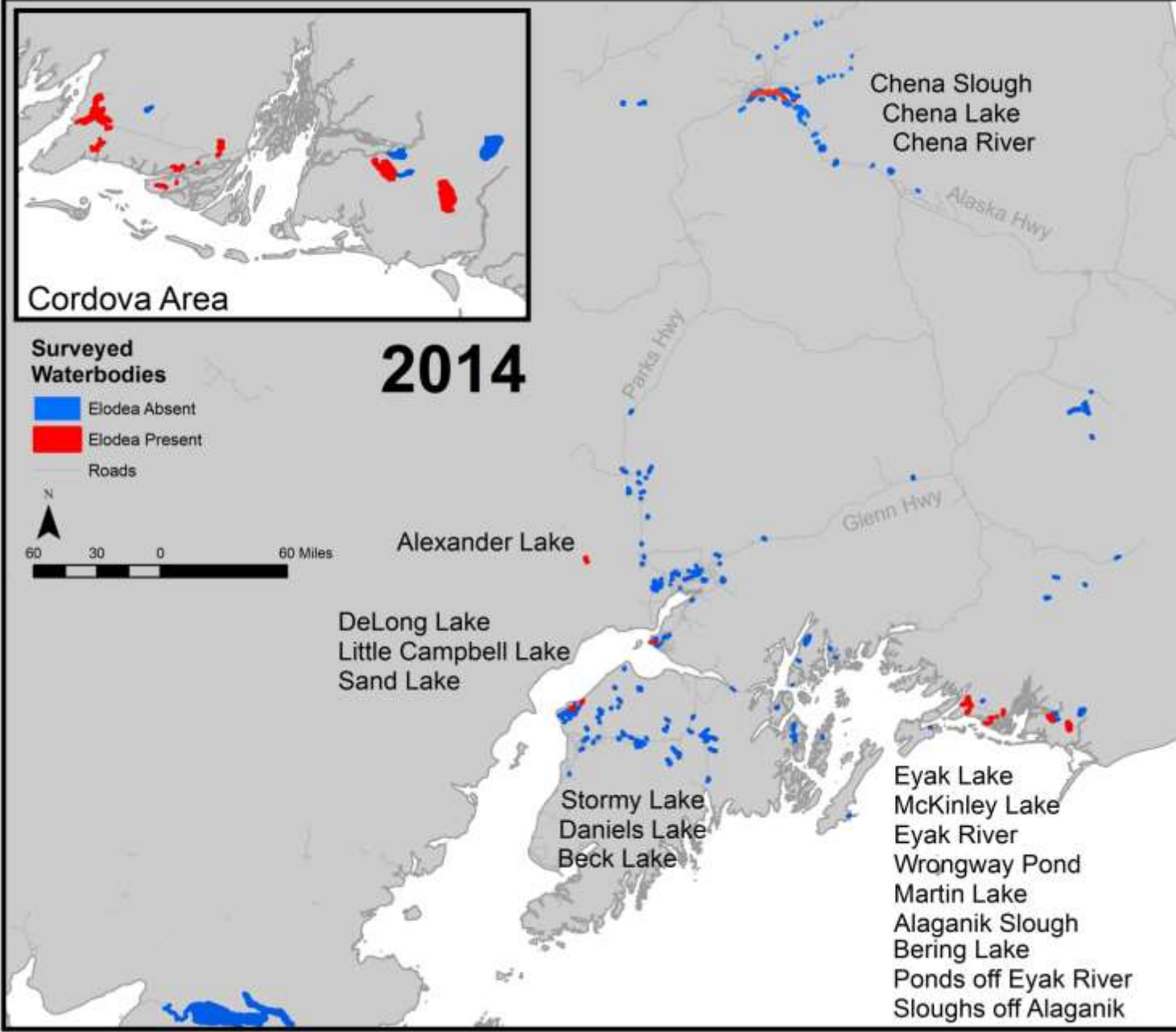


2001



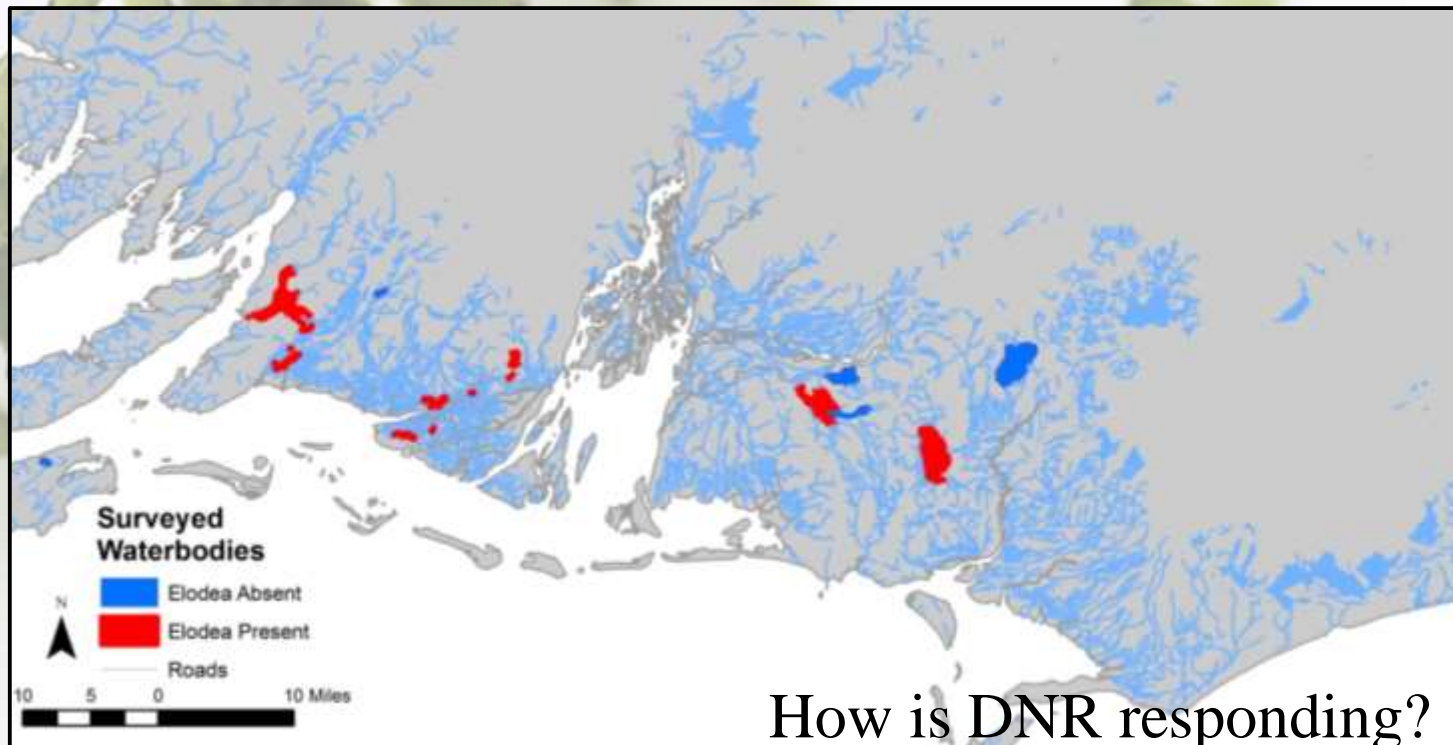
2011

In Alaska



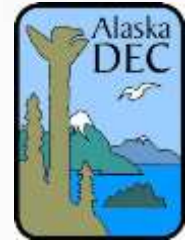
In Alaska

- ~270 waterbodies surveyed
- ~19 waterbodies with elodea infestations
- ~9 waterbodies with elodea infestations in the Cordova area



Memorandum of Understanding

January 15, 2013



- Recognizes DNR as lead agency for freshwater aquatic invasive plants
 - Assistance provided by other agencies
- Agencies will analyze existing management methods for Alaska and prioritize critical areas
- Efficient permitting process for control methods
 - Statewide need to eradicate elodea
 - Expand public outreach and education
- Statewide plan and coordination for effective interagency response
 - Implement a plan for eradication
- Initiate efforts to eliminate further introduction and spread of Elodea to the state



Regulatory Action

- There are no aquatic species in the state's list of prohibited and noxious weeds
 - Terrestrial and agriculturally oriented
 - Changing the list is a timely process and not the priority of the current legislation
- However, to fulfill the MOU's responsibilities of eliminating further introduction, DNR is was able to initiate an *emergency quarantine*
 - Elodea and other potentially invasive species included



THE STATE
of ALASKA
GOVERNOR SEAN PARNELL

Department of Natural Resources

DIVISION OF AGRICULTURE
Central Office

1800 Glenn Highway, Suite 12
Palmer, Alaska 99645-6736
Main: 907.745.7200
Director's fax: 907.745.7112
Marketing & ARLP fax: 907.745.7242
Inspection fax: 907.745.7254

EXTERIOR QUARANTINE OF AQUATIC INVASIVE WEEDS

Authority: AS 03.05.010
AS 03.05.027
AS 03.05.040
AS 44.37.030
AS 03.05.090

11 AAC 34.130
11 AAC 34.140
11 AAC 34.160
11 AAC 34.170
AAC 34.115

Establishment of Quarantine: The Director of the Division of Agriculture under the authority as the State Quarantine Officer hereby establishes a quarantine at the boundaries of Alaska to prevent the entry of the following aquatic invasive weeds.

PEST: Aquatic plants listed below.

Canadian waterweed
Western nuttallii
Brazilian waterweed
Hydrilla
Eurasian watermilfoil

(*Elodea Canadensis*)
(*Elodea nuttallii*)
(*Egeria densa*)
(*Hydrilla verticillata*)
(*Myriophyllum spicatum*)

This list is comprised of the most recent and accepted scientific and common names of the quarantine plant species. Regulated status also applies to all synonyms of these botanical names.

STATES REGULATED: ALL

MATERIALS REGULATED: All plants and plant parts of the regulated plants.

RESTRICTIONS: It is prohibited to import, transport, buy, sell, offer for sale, or distribute plants or plant parts of the regulated species within the state of Alaska. It is further prohibited to intentionally transplant wild plants and/or plant parts of these species within the state of Alaska.

DISPOSITION OF VIOLATIONS: All shipments of quarantined articles arriving in Alaska in violation of this quarantine shall be immediately shipped out of the state or destroyed by burning or other method approved by the Division of Agriculture. All costs for shipment out of state or destruction shall be performed at the expense of the owner, owners, or duty authorized agent.

Franci Havemeister, Director

3/5/14
Date

- Additional species from aquarium trade
- Reported as invasive in other lower 48 states with hardiness to survive Alaska
- DNR has an exemption form for use in education and research
- Stopping known vectors of intentional spread and preventing new infestations to natural systems

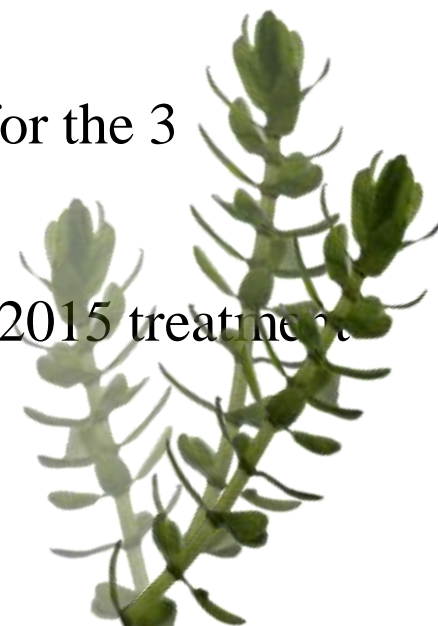
Management Decisions and Coordination: *A Statewide Elodea Management Plan*



- Eradication is the goal!
- An adaptive document utilized by federal, state, and local agencies and groups to manage elodea
 - Components include: Need for action, integrated management methods, permit requirements, continued monitoring goals, local efforts, and **implementation**
- *Partners include:* DNR, USFWS, Kenai National Wildlife Refuge, USFS, Anchorage Park Foundation, Homer Soil and Water Conservation District, Fairbanks SWCD, Copper River Watershed Project

What's next for around the state?

- Fairbanks was the first to test manual removal of elodea biomass in 2013-2014
 - Labor-intensive, time consuming and largely ineffective
 - Collection of fragments downstream after raking methods considered a major challenge
 - Collaborating with SePRO Corporation to evaluate other methods of control for ultimate eradication
- Kenai is the first to use herbicide treatment
 - John Morton will be discussing the case study
- USFWS funding available for 2015-2017 treatments for the 3 Anchorage infestations
- Pending Mat-Su Fish Habitat Partnership funding for 2015 treatment for Alexander Lake
- *What's next for Cordova?*



Heather A.M. Stewart

Invasive Weed and Agricultural Pest Coordinator

heather.stewart@alaska.gov

907-745-8721



Thank you