

Cordova Public Meeting:

Elodea in the Copper River Basin



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Elodea: Alaska's first submerged aquatic invasive plant

- Reproduces asexually by fragmentation
- Survives in water columns up to 30' deep
- Continues photosynthesis under Alaskan ice conditions when native plants have senesced
- Creates monocultures, lowering biodiversity



Why should we care?

- Lowers lakeshore property values
 - Launch sites
 - Shore habitats
- Impedes recreation impairs safety
 - Fouls boat propellers
 - Swimming
 - Affects floatplane launching
- Potentially degrades salmon spawning habitat
 - Slows stream velocities
 - Increases sedimentation rates
 - Increases dissolved oxygen
 - Prime invasive pike habitat

Fairbanks Chena Slough

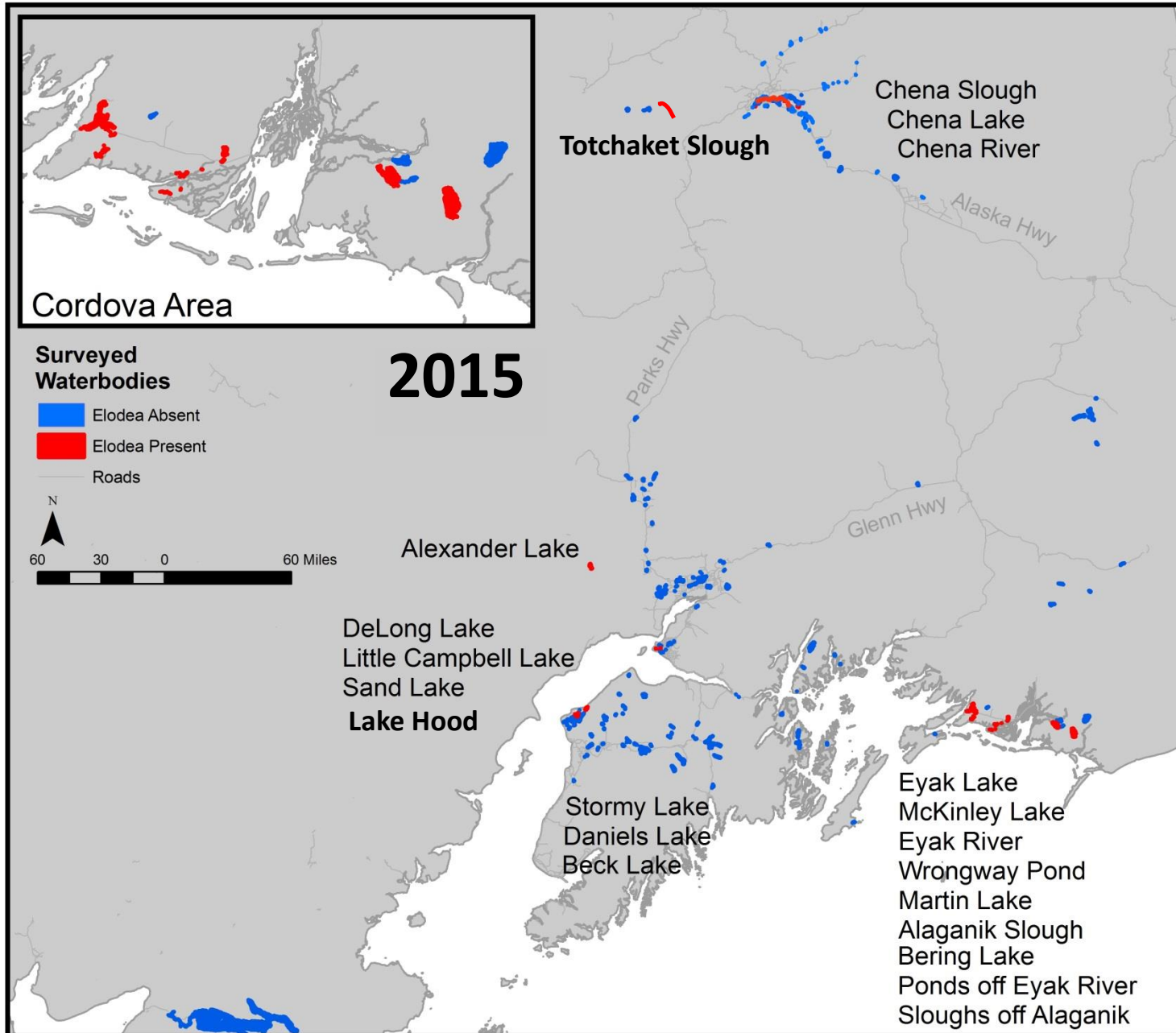


Anchorage Sand Lake



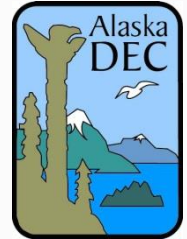
Mat-Su Alexander Lake

In Alaska



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

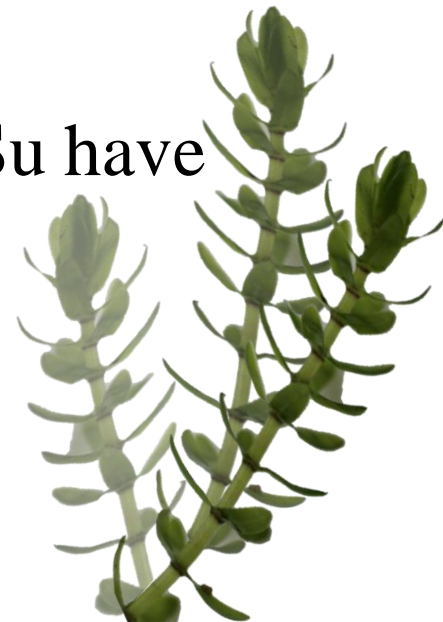
Management Decisions and Coordination: *A Statewide Elodea Management Plan*

- 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, Cook Inlet Aquaculture Association



Statewide Elodea Eradication : *What's happening around the State?*

- Mat-Su:
 - Mat-Su Fish Habitat Partnership funding for starting treatments in 2016 Alexander Lake
 - Cook Inlet Aquaculture Association conducted remote surveys in float-plane accessible lakes
 - No Elodea has been found
 - A total of ~60 waterbodies in the Mat-Su have been surveyed
 - Alexander is still the only one with Elodea



Statewide Elodea Eradication : *What's happening around the State?*

- Fairbanks was the first to test manual removal of elodea biomass in Chena Slough 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
 - Public Meeting 18th of June with Dr. Andrew Skibo

- Totchaket Slough
 - Tanana Chiefs forestry program discovered infestation 17 August this year
 - Surveyed by NPS and USFWS last week



- Totchaket is getting added to permits

Statewide Elodea Eradication : *What's happening around the State?*

- Kenai Peninsula was the first to utilize herbicides for eradication in 2014
- 2015: Only treating Daniels Lake



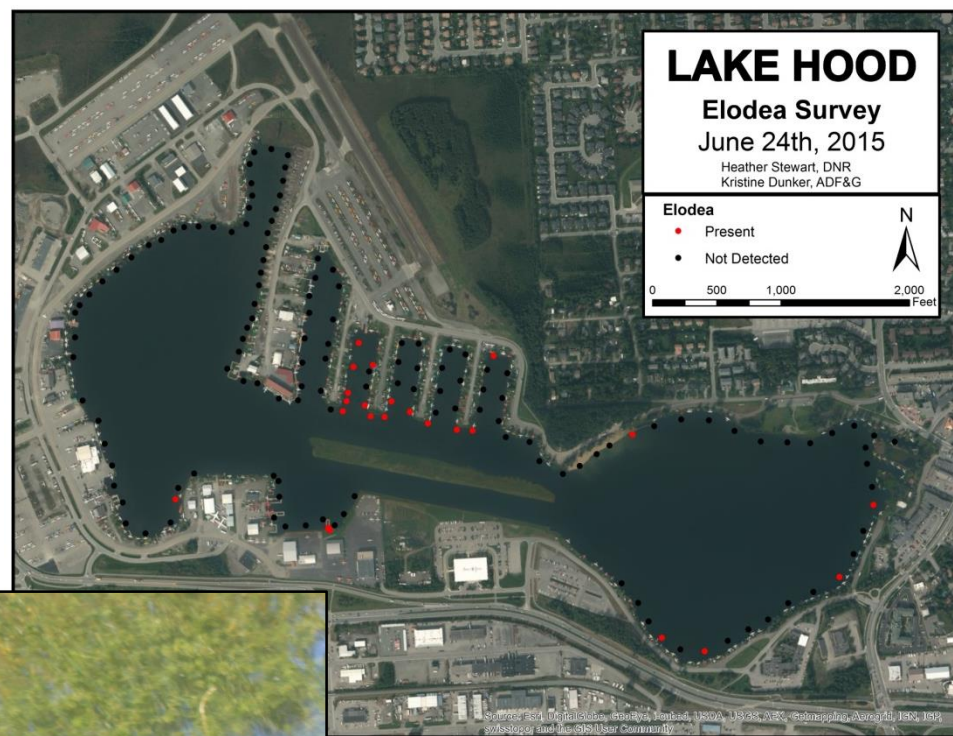
Statewide Elodea Eradication : *What's happening around the State?*

- Anchorage started fluridone treatments in August of 2015 in three lakes: DeLong, Little Campbell and Sand



**DeLong an Sand Lake:
3 weeks after treatments**

- Lake Hood:
 - Elodea found June 11th by NPS
 - DOT management asks DNR: What can we do?
 - Herbicide plan put together using both diquat and fluridone: both herbicides in there 2005 Aquatic Vegetation Management Plan
 - Kenai Borough asks USFWS: What can we do?
 - Purchases diquat
 - DNR applies for DEC Emergency Pesticide Use Permit Exemption
 - And gets other permits
 - Collaborative group applies diquat July 24th: 44 days after Elodea's discovery!
 - Fluridone application to follow: September 22nd, 23rd



What's next for the Copper River Water Basin and Cordova?

- Is eradication possible?
 - How is eradication possible?
- How can I stay informed and educate myself?
- How can I be an active participant in eradication efforts?
 - What is my role in the process?

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Thank you