

Elodea



Frequently Asked Questions

What is Elodea?

Elodea sp. is a submerged aquatic plant commonly known as “waterweed”. Elodea is popularly sold in the aquarium trade and often used in science classrooms to teach students about plant cells and photosynthesis, and can therefore be widely distributed. Elodea is native to North America and its range extends into southern British Columbia, but it is not considered native to Alaska. A [letter](#) written by representatives from the United States Forest Service dated April 8, 2013, explains the non-native status of Elodea in Alaska. The following websites provide excellent descriptions of Elodea and Elodea management: [Texas A&M AQUAPLANT](#); [Washington State Dept. of Ecology](#).

Where has Elodea been found in Alaska?

1982: Eyak Lake in Cordova; the original infestation was found in an isolated location near Mavis Island, but Elodea has since spread throughout the lake

2010: Chena Slough in Fairbanks

2011: Sand, DeLong, and Little Campbell Lakes in Anchorage

2011 - 2014: Copper River Delta, including McKinley Lake, Wooded Pond, Wrong Way Pond, Martin Lake, Bering Lake, and several ponds and sloughs neighboring Eyak River and Alaganik Slough

2012: Stormy and Beck Lakes on the Kenai Peninsula

2013: Daniels Lake on the Kenai Peninsula

2014: Alexander Lake in the Mat-Su Borough

2015: Lake Hood in Anchorage & Totchaket Slough near Fairbanks

The Alaska Plant Materials Center provides detailed information on Elodea distribution in Alaska, including maps of survey locations: <http://plants.alaska.gov/invasives/elodea.htm>

Why are we concerned about Elodea in Alaska?

Elodea is a concern to Alaska because of its potential to replace native plant species, alter aquatic habitat, impede recreation, and reduce property values. Cold weather and ice do not pose a barrier to Elodea's survival, and it has the ability to reproduce and establish from just a fragment of a plant. Given the high amount of float plane traffic and recreational boating in Alaska, there are plenty of opportunities for Elodea to spread to new locations unless properly managed.

The Alaska Natural Heritage Program scored Elodea an invasiveness ranking of 79 out of 100 based on its ecological impact, biological attributes, ability to spread, distribution, and response to control efforts; see more [here](#).

What are our options for managing Elodea?

Management considerations include mechanical control (i.e. raking, suction dredging, hand pulling and harvesting), biological control, and chemical control. With a statewide goal to eradicate Elodea from Alaska, chemical control methods are the most suitable option. The herbicide active ingredient being considered for use in Alaska is Fluridone.

Mechanical options will only temporarily reduce, not eradicate, an infestation, requiring ongoing and long-term management and costs. In addition, mechanical methods risk spreading the plant by fragmentation. There are no biological control options approved for use in the state of Alaska.

[Click here for a full description of these options.](#)

What is Fluridone and how does it work?

Fluridone is a selective, systemic herbicide approved for use by the U.S. Environmental Protection Agency in 1986 and used in places throughout the United States to treat invasive weeds such as Elodea, Hydrilla, Eurasian watermilfoil, and others. Fluridone works by inhibiting photosynthesis in plants by destroying chlorophyll pigments.

The manufacturer of Fluridone used on the Kenai Peninsula and Anchorage Elodea management projects is SePRO, and the product is called Sonar. Both liquid and pellet forms of the product were used.

For more information see:

- [FAQ written by the Kenai Peninsula Cooperative Weed Management Area](#)
- [FAQ written by the Cornell Extension Service about the use of Fluridone to treat a Hydrilla infestation in New York](#)
- [A Pesticide-Use Risk Assessment for Fluridone conducted for the U.S. Forest Service](#)

How can I prevent Elodea from spreading?

Be sure to check float planes for plant fragments prior to take-off and remember to Clean, Drain, and Dry boats and other recreational equipment that you are trailering or otherwise moving between locations. A video created by the Pacific State Marine Fisheries Council shows you how to inspect and decontaminate floatplanes, available [here](#).

Report any invasive plants that you find to 1-877-INVASIV (468-2748) or contact Heather Stewart, Alaska Department of Natural Resources Invasive Weeds and Agricultural Pest Coordinator, Heather.Stewart@alaska.gov. Any Elodea discovered in Cordova or on the Copper River delta can also be reported to the Copper River Watershed Project at 907-424-3334.

Properly dispose of aquarium plants and animals - never dump them into Alaska's waterways!

Other Resources:

[FAQ from the Fairbanks Cooperative Weed Management Area](#)