

Chena Slough Elodea Eradication Project

Frequently Asked Questions

Q: What is Elodea and where has it been found in Alaska?

- Elodea is the first invasive aquatic plant to become established in Alaskan water bodies.
- Elodea has infested Chena Slough, Chena Lake, and Totchaket Slough in interior Alaska
- Other Elodea infestations in Alaska include lakes in Kenai, Anchorage, Matsu, and Cordova

Q: How does Elodea threaten our rivers and lakes?

- Grows in thick mats and chokes up rivers
- Outcompetes native plants
- Degrades fish habitat
- Impedes boating
- Creates unsafe conditions for float planes

Q: How does Elodea spread?

- Breaks apart into fragments when disturbed
- Can reproduce from plant fragments
- Fragments can be spread to other water bodies by floatplanes, boats, animals, and flowing water, and start new infestations

Q: How is Elodea being managed in Alaska?

- The Alaska Department of Natural Resources (ADNR) issued a statewide quarantine on Elodea in 2014, prohibiting sale or transport of Elodea in the State of Alaska. The statewide management goal is to eradicate Elodea in the state of Alaska. Elodea infestations in Kenai and Anchorage have been successfully treated with the aquatic herbicide fluridone.

Q: What are the plans for management of the Elodea infestation in Chena Slough?

- The Fairbanks Elodea Steering Committee has reviewed control options for Elodea in Chena Slough in 2011 (www.fairbankssoilwater.org/userfiles/pdfs/Control_Options.pdf) and has conducted suction dredging trials in 2013-14(www.fairbankssoilwater.org/userfiles/pdfs/Chena_Slough_Trials.pdf). Suction dredging was not found to be a feasible or effective method of eradication of the large, dense Elodea infestation in Chena Slough. The Committee is therefore pursuing an herbicide-mediated eradication program with the safe and effective aquatic herbicide fluridone to eradicate Elodea in Chena Slough.

Q: Where is the Elodea treatment area in Chena Slough?

- The Elodea Treatment Area extends from the Plack Rd crossing to the mouth of Chena Slough where it enters the Chena River. The Elodea infestation begins about 1.5 miles downstream of Plack Rd, and extends to the mouth of Chena Slough.

Q: What is fluridone?

- Fluridone is a selective systemic herbicide used for the control of aquatic plants. Fluridone is absorbed by plant roots and shoots. It inhibits the formation of carotenoid pigments, allowing UV light to destroy chlorophyll which is essential for photosynthesis. Unable to photosynthesize, the plant slowly starves and dies. Elodea is susceptible to the effects of fluridone when it is applied at concentrations as low as 4-8 parts per billion (ppb). 30-90 days of exposure is required to achieve the desired level of aquatic plant management.

Q: When is the fluridone treatment in Chena Slough expected to begin, and how long will it take?

- The Elodea infestation in Chena Slough will be treated with liquid and pelleted forms of fluridone. The liquid will be administered continuously for 12 weeks from a stationary drip station starting in late June 2017. Pelleted fluridone will be applied by boat over two 3-4 days periods in late June and early August 2017. The target concentration of fluridone in slough water is 4-8ppb. It is expected to take 3-4 years of treatment to eradicate Elodea from Chena Slough. Updates and notifications will be posted at www.fairbanksoilwater.org

Q: Does fluridone use pose any human health risks?

- According to the US EPA and the State of Alaska, fluridone poses negligible risks to human health and the environment when used according to label instructions. Water is safe for swimming, fishing and drinking below EPA limits of 150 parts per billion (ppb). A 150lb. adult would have to drink over 1,000 gallons of water to observe any toxic effects. For more details see http://www.fairbankssoilwater.org/user-files/pdfs/Fairbanks_EA.pdf

Q: What impact will the proposed treatment have on fish and wildlife?

- At the proposed treatment levels (4-8 ppb) no impacts on fish or wildlife are expected. For more detailed information, please see the Environmental Assessment (EA) and DEC Pesticide Use Permit (PUP) documents at www.fairbankssoilwater.org

Q: Can I water my garden with Slough water during treatments?

- The EPA recommends certain plants should not be irrigated with water containing more than 10 ppb fluridone. Tomatoes, cucumbers, and peppers are especially sensitive, and should not be watered with concentrations of 5 ppb or higher.
- Following treatment, fluridone levels in slough waters will be tested periodically throughout the summer. The results of these tests, including location, will be available on the FSWCD website, along with any irrigation recommendations.

Q: Will fluridone contaminate my well water?

- Fluridone has a strong affinity to bind with soil particles, and therefore is not expected to move past the top few inches of sediment. Due to the low mobility of fluridone through the fine-grained organic rich sediments that dominate Chena Slough, it is not expected to enter groundwater. A sample of private wells within the treatment area will be tested for fluridone following the treatment. The results will be made publicly available on the FSWCD website.

Q: What if fluridone is detected in wells?

- The target in-water fluridone concentration is 4-8ppb, whereas the EPA allows 150ppb of fluridone to be present in potable water sources. Therefore, in the extremely unlikely event that fluridone is detected in wells, the concentration will still be far below the allowable limits for drinking.

Q: What has public involvement in this project been?

- **The Fairbanks Elodea Steering Committee has held public scoping meetings in North Pole and Fairbanks, held educational events, and invited public input on the Chena Slough Elodea eradication plans at Steering Committee meetings. The DEC PUP, EA, and DNR permits all had 30-day public commenting periods in May 2016 and February 2017 respectively. For more details, go to www.fairbankssoilwater.org/userfiles/pdfs/DEC_Public_Comments.pdf.**