

Agency: Department of Natural Resources**Project Title:****Project Type: Other**

Study, Survey, and Potential Treatment of Elodea in Sand Lake

State Funding Requested: \$40,000
Future Funding May Be Requested**House District: Anchorage Areawide (11-27)****Brief Project Description:**

Study, Survey and Potential Treatment of Elodea in Sand Lake.

Funding Plan:

Total Project Cost:	\$115,000
Funding Already Secured:	(\$75,000)
FY2014 State Funding Request:	<u>(\$40,000)</u>
Project Deficit:	\$0

*Funding Details:**The Legislature appropriated \$75,000 in FY13.***Detailed Project Description and Justification:**

The State Departments of Natural Resources, Environmental Conservation, and Fish and Game have signed an inter-department Memorandum of Understanding (MOU) regarding invasive freshwater aquatic plants, specifically Elodea spp. As stated in the MOU, management and coordinative authority for submersed and partially emerged freshwater invasive aquatic plants, is the responsibility of the DNR, operating through the Anchorage Soil and Water Conservation District, with assistance provided as needed by DF&G and DEC.

The plant Elodea is overgrowing in Sand Lake, causing issues for the residents and users, virtually filling up the canal, and there is concern that it may interfere with the floatplane traffic and other recreational uses of the lake. The ASWCD is currently working on a project to eradicate the Elodea. Additionally, there is a statewide discussion regarding Elodea, its possible effects and the best way to eradicate/control the plant.

Because of the statewide discussion, and Sand Lake being the first project of its kind in the state, a discussion of methods, possible effectiveness of each option, and the economic viability and do-ability of each option, is necessary and has been undertaken by the ASWCD under direction of the DNR. The Sand Lake project is being looked at as the model project to be considered as part of the statewide discussion.

The Anchorage Soil and Water Conservation District will provide monthly reporting to the Department of Natural Resources regarding project expenses and progress. When possible the DNR will offer assistance to the ASWCD to ensure the project remains on time and on budget.

**\$40,000
Approved**

Project Timeline:

The ASWCD began this project August 1, 2012 and eradication/control will be complete by October 1, 2014, with ongoing monitoring and tracking through FY2015 to ascertain the effectiveness and all other elements, for reporting and incorporation into the statewide discussion.

Entity Responsible for the Ongoing Operation and Maintenance of this Project:

The Anchorage Soil and Water Conservation District under direction of the DNR

Grant Recipient Contact Information:

Name: Ryan Stencil
Title: Operations Manager, ASWCD
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Anchorage, Alaska 99501
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Has this project been through a public review process at the local level and is it a community priority? Yes No

**Memorandum of Understanding
between
The Alaska Department of Natural Resources,
Alaska Department of Fish and Game, and
Alaska Department of Environmental Conservation**

With Regard to Invasive Freshwater Aquatic Plants

January 15, 2013

Memorandum of Understanding between the Alaska Department of Natural Resources (hereinafter "DNR"), the Alaska Department of Fish & Game (hereinafter "DF&G"), and the Alaska Department of Environmental Conservation (hereinafter "DEC") (jointly referred to herein as the "Parties");

WHEREAS, the Parties recognize that *Elodea spp.* is an aquatic plant that is a noxious weed in Alaska, which is degrading fish habitat and displacing native flora and fauna. *Elodea spp.* alters freshwater habitats by decreasing the flow of water and increasing sedimentation;

WHEREAS, DNR oversees the Division of Agriculture ("DoA"), Soil and Water Conservation Districts ("SWCDs") and the Division of Mining, Land and Water ("DMLW"). The Invasive Weeds Program within the DoA manages invasive weeds and agricultural pests through its strategic plan that identifies the goals and action strategies needed to accomplish objectives that would be reviewed on an annual basis. The SWCDs are one of the cooperative entities that assist in invasive weeds and agricultural pest management, education, outreach, and removal. DMLW is the land manager who is responsible for permitting the use of mechanical methods of removal in state waters;

WHEREAS, the Division of Sport Fish within DF&G is tasked with managing the threat invasive species pose to the aquatic ecosystems of the state. In 2002 ADF&G developed a statewide management plan for aquatic species wherein it identified aquatic species considered to be the highest threat, pathways for introduction, and management actions;

WHEREAS, the Pesticide Control Program within DEC is responsible for protecting public health and the environment through regulation of pesticide use, sale and distribution in Alaska;

WHEREAS, there are different methods for eradication of invasive aquatic plants including manual or mechanical removal, herbicide application, and use of biological control organisms. Each method has its advantages and disadvantages with regard to efficacy, permitting, effect on surrounding ecosystem, and costs;

WHEREAS, the Parties wish to cooperate in the undertaking of eradicating *Elodea spp.* in Alaska;

NOW, THEREFORE, the Parties agree as follows:

1. Management and coordinative authority for submersed and partially emerged freshwater invasive aquatic plants, is the responsibility of DNR with assistance provided as needed by DF&G and DEC.
2. DNR will work with DF&G and DEC to conduct an examination of existing management methods for aquatic invasive plants and chart a strategic plan that prioritizes critical areas, provides permitting requirements, and addresses advantages and disadvantages of eradication methods.
3. The Parties will develop a coordinated and efficient permitting process for all methods of control by providing the end-users a list of permits required along with corresponding points of contact. This coordination may also include an examination of one or more general permits related to invasive aquatic plants in freshwater.
4. The Parties will provide each other with quarterly summary information on aquatic invasive plant issues so that each agency is fully aware and adequately informed.
5. The Parties will conduct a statewide dialogue with regard to permits needed to eradicate freshwater aquatic invasive plant species and expand public outreach and education programs on freshwater aquatic invasive plants and the need for and methods of eradication.
6. The Parties agree to develop a plan to better coordinate an effective interagency response, in the case of a detected invasive aquatic plant population that has not dispersed widely, to verify, delineate, contain, and when feasible, implement the plan to eradicate freshwater invasive aquatic plants.
7. The Parties will initiate efforts to examine the most effective and least costly method to eliminate further introduction of *Elodea* to the State, including education, outreach, and even prohibition of sales or distribution of *Elodea* in the State of Alaska.

The Parties have caused this Memorandum of Understanding to be executed as of the date of the last signature below.

Alaska Department of Natural Resources

By: _____

Name: Ed Fogels

Title: Deputy Commissioner

Alaska Department of Fish & Game

By: Cora Campbell

Name: Cora Campbell

Title: Commissioner

Alaska Department of Environmental Conservation

By: Larry Hartig 1/16/13

Name: Larry Hartig

Title: Commissioner

Memorandum

Date: February 1, 2013

Re: Sand Lake Vegetation Management Project, Progress Report

The Anchorage Soil and Water Conservation District (District) is submitting this progress report as an interim update to the Sand Lake Vegetation Management Project.

Summary

The project is on track and on budget as of January 31, 2013. There are currently seven (7) main project tasks, as outlined and discussed below.

- a. **Project Management.** The District has assembled a team of subject-matter experts to assist in meeting project objective, along with on-going assistance from contractors at DOWL engineers (hydrological assistance) and Northern Economics (project oversight, economic analysis), both in Anchorage. Other team members include David Kaplan, Fisheries Biologist, and a number of advisors on aquatic vegetation and lake remediation. Additional advisors and project team members may be added, depending on results of research and data analysis, as additional needs are identified, and as the project progresses.
- b. **Public process.** Team members collected public lists of property owners, home owner associations, and other parties. Stakeholder meetings are tentatively scheduled in February and March, and will continue throughout the project's life. A public meeting open to all interested parties, organizations, etc. will be held following stakeholder meetings and the incorporation of stakeholder comments and concerns into the project report.
- c. **Research.** Reports, data, aerial photographs, interviews, and historical files have been located and assembled into preliminary format. These include aerial photos from the early 1950's through present day, reports on drainage and wetlands issues, all identified studies/reports/data/plans applicable to Sand Lake, along with information from the Alaska Department of Fish and Game related to fisheries management at Sand Lake. All sources are posted at: www.aswcd.org/sandlake.html. Additional material(s) may be added if discovered. Hydrological research has been completed: Sand Lake accepts drainage from an area approximately 594 acres (mapping attached as Figure 2). A Fisheries Biologist is working with the ASWCD on this project, his draft report is attached.
- d. **Sand Lake Sampling.** Initial comprehensive field-based sampling is scheduled for February 2013, with emphasis on water chemistry, lake-bottom sampling, and presence

or absence of elodea and other aquatic vegetation. Continuing sampling will be contained to data shown to be necessary by the initial comprehensive data, i.e. if initial comprehensive data shows an element to not be of concern, funds may not be expended on that element as the sampling protocol progresses.

- e. **DNA analysis.** Species identification will require a DNA analysis of Sand Lake elodea with samples from Chena Slough as the issue of species and hybrids has arisen from the literature search. This is important to this project in the decision of eradication or control, and is important to the statewide discussion that is underway.
- f. **Reporting.** Team members started work with a draft report outline and it has been revised as work has progressed, especially as related to maps and historical information related to Sand Lake. This report will become the basis of stakeholder discussion and decision making, and will eventually outline the final plan, to be determined, and the data, information, rationale and reasoning behind those decisions.
- g. **Action Plan, Monitoring.** This task will start with field sampling and analysis. Additional sampling, possible management action, and monitoring will be scheduled once analysis is complete. Stakeholders have been updated and their input incorporated into the plan, and a plan is accepted by the stakeholders. Sampling, baseline and data collection will continue through 2013.

Work Schedule, 2013

The final list of property owners will form the mailing (contact) list for public meetings, estimated to be conducted in mid-February or early March. On-the-ice sample for water chemistry and potential vegetation samples will start in approximately three weeks, at the end of February.

As results are developed, team members will analyze them and update the draft project report. Barring unknown delays, this project draft report should be ready for final review by the end of August. This may be accelerated, as field sampling and other factors progress. A project timeline detailing all steps/elements followed as Figure 2.