

Memorandum to: Department of Natural Resources

From: Homer Soil and Water Conservation District

Subject: Annual Report

Date: September 30, 2014

This document represents the annual report of the Homer Soil and Water Conservation District (HSWCD) for fiscal year 2014 (July 1, 2013 – June 30, 2014). This report fulfills a component of the cooperative agreement between the Alaska Department of Natural Resources and the Homer Soil and Water Conservation District, as specified in cooperative agreements with the Department of Natural Resources and the Alaska Association of Conservation Districts.

PROGRAM GOALS:

LANDUSE

The Homer District promotes a landscape scale approach to understanding resource issues and implementing conservation programs. The District endeavors to work collaboratively with local and state agencies, steering committees, non-governmental organizations, and others in order to promote coordinated management strategies. A landscape level approach more fully recognizes connections within environmental systems that may not be apparent when addressing concerns in isolation.

Goal 1: Encourage incorporation of landscape systems into the planning process at any scale.

Objective 1: Through a collaborative process with various state and federal partnerships study the relationship between development in wetlands and its effect on wetland function.

Accomplishments:

Management strategies for maintaining wetland functions/value: The Homer District continued to build on the recently completed wetland assessment for all non-federal lands on the Kenai Peninsula. The District's focus was on phase two of this EPA funded project, the identification of management strategies and practices that could be used to maintain wetland functions and values. To do this, the conditions supporting particular functions/values were identified, and then ways to maintain those conditions were outlined. A menu of specific best management practices was also developed. These can be incorporated to minimize wetland impacts when siting, designing, and developing various land uses and activities. Both the functional assessment and the management strategies can now be accessed through the Kenai Peninsula Borough's interactive GIS.

Goal 2: Maximize best management practices to protect water and soil related resources.

Objective 1: Promote Low Impact Development techniques on private and public lands to enhance benefits of natural systems that support green infrastructure functions.

Accomplishments:

Low impact development techniques: Homer District consulted with several landowners over the year to help implement low impact development techniques. With funding from US Fish and Wildlife Service we ran a rain garden cost share program to slow stormwater and snowmelt runoff and increase infiltration. The District continues to provide general outreach on best management practices suitable for the lower Kenai Peninsula. Many of these BMPs are tied in to previously completed project and have been pulled together and presented on our updated website.



Example of a residential rain garden, Homer staff consulted with several landowners about the installation of rain gardens as a way to manage stormwater runoff.

Objective 2: Assist both private and public landowners in planning sustainable, multi-use recreational opportunities.

Accomplishments:

Trail Planning: The Homer District continues to actively collaborate with an array of agencies, landowners, and user groups to address trail related issues, including legal easements, environmental concerns due to poor trail design, and the maintenance of existing trails. Last December at our Local Working Group meeting we were able to identify priorities for area trails, providing the District important feedback on the needs of our community. As a result of this meeting we are continuing to work with State of Alaska, Department of Fish and Game, Kenai Peninsula Borough Planning Department, Cook Inlet Region, Inc., and local trail user groups to address both trespass issues and resource related concerns along the Watermelon Trail in the Anchor River/Fritz Creek Critical Habitat Area. A trail plan has been developed to address the immediate concerns and we are pursuing opportunities to see this plan implemented.



The entrance to the HDF Arboretum. This site is a prominent feature on the self-guided nature trail hike.

Homer Demonstration Forest: The Homer District has continued to take the lead in the management of the 360-acre state-owned Homer Demonstration Forest—just northwest of Homer city limits—and chairs the Homer Demonstration Forest Steering Committee. Ongoing projects include maintaining the self-guided nature trail, the summer trails system, and the arboretum. In the winter months the District maintains an MOU with the Kachemak Nordic Ski Club to provide Nordic ski trails for public use.

WATER QUALITY

Water is an essential resource – everything relies on a constant clean water supply, from wildlife habitat to large scale development projects. Our freshwater supply, (rainfall, snowmelt, runoff and infiltration), is distributed unevenly across the landscape, throughout the seasons, and from year to year. Programs that lead to a better understanding of this resource – and ways to manage water quality and quantity –are highly valued by the Homer District.

Goal 1: Protect Water Quality

Objective 1: Support efforts to understand both water quality and quantity within the Homer District.

Accomplishments:

Wetland Working Group: The Homer District had an active role with both coordination and facilitation of quarterly wetland working group meetings through the past year. These meetings serve as an important opportunity to learn about various projects related to research to better understand our watersheds and wetlands, or projects directed at addressing related impacts of development on wetland and stream hydrology. By meeting regularly there are increased opportunities to pool resources among area wide agencies and non-governmental organizations addressing similar problems. These meetings provide a valuable way to identify and prioritize the research needs on the Kenai Peninsula.



Completing a snow survey at the Bridge Creek site, this is one of four local courses maintained by the Homer District.

Snow Survey: Homer Soil and Water, through a cooperative agreement with the NRCS, has continued to complete snow surveys along local snow courses on the southern Kenai Peninsula. Snow pack was measured at several sites, and data on snow depth and snow water equivalent (SWE) were recorded to be used for forecasting streamflow and groundwater recharge. The data collected is submitted to the NRCS snow survey program and incorporated into monthly state wide snow survey reports December through May.

Goal 2: Promote and support sound management and protection of wetlands on non-federal lands on the Kenai Peninsula.

Objective 1: Support ongoing efforts to collect data to increase available information for sound management of wetland resources.

Accomplishments:

Wetland Mapping: The Homer District provided staff support to Kenai Watershed Forum’s project to map wetlands in the Matanuska - Susitna Borough; the District’s ecologist assisted with field work throughout the summer of 2013. Staff assisted the NRCS Field Office to identify wetlands subject to USDA wetland conservation program requirements to facilitate conservation planning.

Kenai Peninsula Field Office Technical Guide: To assist NRCS in completing wetland functional assessments for clients the District formatted the wetlands planning information previously compiled into the Kenai Peninsula Field Office Technical Guide (FOTG). By tailoring the information to NRCS project goals this product can aid NRCS field staff in the identification of program participants’ wetlands functions.

Goal 3: Work with partner agencies to assist in the protection of salmon habitat.

Objective 1: Work with our partners to increase knowledge about salmon and their use of freshwater and marine habitats, the potential threats to salmon and their habitats, and to restore critical habitat that has been degraded.

Accomplishments:

Fox River Critical Habitat Area: The Homer District continues to prioritize stream crossings that negatively impact local stream ecology, hydraulics, and fish passage. With funding through a cooperative agreement with US Fish and Wildlife, our office has commenced a project to refurbish and relocate bridges that cross the fingers of Wallace Creek in the Fox River Critical Habitat Area. This project addresses current degradation concerns of critical riparian habitats that support juvenile salmon. Coordinating closely with Alaska Department of Fish and Game, both Division of Habitat and the Land and Refuge Program, bridge designs have been finalized and all permits are in place to see this project completed in the coming year.



One of the bridge crossings at the fingers of Wallace Creek in the Fox River Critical Habitat Area. By relocating the bridge to higher, drier ground there should be reduced impact by ORV use. Part of this project includes a revegetation plan to ensure the re-establishment of native grasses.

Restoration Needs Assessment: The Homer District’s Natural Resource Technician participated throughout the year in several stakeholder meetings to help identify and prioritize restoration projects on the southern Kenai Peninsula. Organizations we have worked with include the Kenai Peninsula Borough, Alaska Department of Fish and Game, US Fish & Wildlife Service, and the Kenai Peninsula Fish Habitat Partnership. High priority projects identified for

the southern peninsula include addressing runoff and sedimentation into streams along poorly designed ORV trails, and erosion control at the Slide Hole, a popular fishing hole on the Anchor River. A common denominator in all projects considered is the need to protect riparian habitat.

Public outreach: With funding from the Kenai Peninsula Fish Habitat Partnership we developed material for a wayside exhibit at the Stariski Creek pull out along the Sterling Highway. Content focused on fish passage issues associated with under sized culverts and restoration efforts after the 2002 floods on the Lower Peninsula.

AGRICULTURE

The Homer District provides agricultural support to our cooperators in a variety of ways. Through collaboration with state and federal agencies the District works as a strong advocate for agriculture; working closely with the NRCS we provide technical and planning assistance to local producers for implementing conservation practices on their lands; and by maintaining strong relationships with diverse organizations involved with promoting agriculture and their products we support new opportunities provided to farmers and ranchers.

Goal 1: Provide support for agricultural activities in the Homer District.

Objective 1: Assist with the development of farm and ranch conservation plans.

Conservation Planning: District staff assisted with resource inventories and technical assistance related to conservation planning for our cooperators. The Homer District Board of Supervisors reviewed and provided comments on several land use permits submitted to Alaska DNR – Division of Agriculture. We were also able to provide on-site monitoring of NRCS agricultural easement properties, focusing on invasive weed surveys and contracted reclamation work. The District sponsored a range technician/student intern to work with the NRCS Range Specialist to help complete local hayland studies, provide general assistance to area ranchers, and to assist with the range assessment on Islands in the Maritime Refuge.

Soil and Forage Testing Services: The Homer District continued to provide soil testing for our cooperators, for participants in the NRCS Environmental Incentives Program we worked with the NRCS to provide nutrient management plans. For local producers not enrolled in NRCS programs we coordinated with University of Alaska Fairbanks, Cooperative Extension Service, to provide nutrient management plans to cooperators based on their objectives. In addition the District provides forage testing services for local hay producers.



Collecting samples for a local hayland study. A Student internship was sponsored by the District to assist the NRCS Range Specialist with a variety of projects.

Objective 2: Work with cooperators District-wide to manage invasive weeds that threaten to degrade agricultural resources on the Kenai Peninsula.

Integrated pest management plans: The District worked with several agricultural producers to promote an integrated approach to pest management and to help develop IPM that could be easily adopted into their settings. One of the targeted invasives in the Homer area is fall dandelion (*Leontodon autumnalis*), an increasingly prevalent invasive in hay fields to the east of Homer.

Weed Free Forage Certification: The Homer District’s invasive plant coordinator completed training and is now available to inspect and certificate crops as weed free. It’s anticipated that with increased outreach we can promote weed free forage as a tool to decrease the inadvertent spread of invasive plants through the sale and transportation of hay.

Partnership Collaboration/Outreach: The Homer District worked closely with several organizations to support agricultural activities on the lower Kenai Peninsula. Various organizations include the Alaska Farm Bureau, The Homer Farmers Market, USDA Farm Service Agency, and Cooperative Extension Service. As part of its outreach efforts, the Homer District continues to produce and distribute newsletters. The newsletter is mailed to all cooperators, as well as to our partners, and provides updates on both District and

NRCS programs, as well as events that may benefit producers.



Kenai Peninsula Ag Forum –The District was a sponsor of this event, and two of the board members participated on a panel discussion during the forum.

INVASIVE PLANT PROGRAM

Invasive species are one of the foremost threats to local ecosystems. The Homer District continues to be a leader in increasing awareness and promoting management of invasive plants that are becoming a problem on the Kenai Peninsula. This past year the District funded a full time invasive plant coordinator to increase our capacity for invasive species management on non-federal lands across the peninsula, increase our public outreach efforts, and to provide more one-on-one time with individuals seeking technical advice on how to eradicate or manage their invasive weeds.

Objective 1: Work collaboratively with partners in the Kenai Peninsula Cooperative Weed Management Area (KP-CWMA) to promote outreach and effective coordination of resources to address identified concerns of the KP-CWMA



Members of the KP-CWMA applying herbicide to Stormy Lake. This was the first application in a multi-year plan for the eradication of elodea on the Kenai Peninsula

CWMA Coordination: This past year the District’s Invasive Plant Coordinator officially took on the role of coordinator for the Kenai Peninsula Cooperative Weed Management Area (KP-CWMA). This proved to be a busy year as the KP-CWMA took on the project to eradicate elodea, an aquatic perennial that was first reported on the Peninsula in the fall of 2012. Elodea is a particularly injurious invasive resulting in compromised water quality, reduced dissolved oxygen, and adverse impacts to native fisheries. After the CWMA

developed an integrated management plan the District took on the lead role in working with several state and federal agencies to secure funding, apply for permits for herbicide application, and run a public outreach program to inform land owners of the plan and the schedule of events. With everything in place this summer the District took on a large role in the implementation of IPM, providing crucial support when it came time to treat the infested lakes on the peninsula. The District will continue to work on this project to complete treatment prescriptions and to monitor efficacy. Additional task as the KP-CWMA coordinator include maintenance of the website, providing quarterly updates on management activities to partners, and running an outreach program to increase awareness of priority species in our area.

Objective 2: Maintain early detection and rapid response (EDRR) efforts prevent the establishment of new invasives and maintain biodiversity of native habitats.

Invasive plant surveys: A significant amount of staff time was dedicated to surveying and inventorying invasive species, the first step to define region wide priorities. Using a systematic approach all fresh water lakes determined to be at risk of exposure to elodea were surveyed during the summer months of 2013. Confirming that the infestation was limited to 3 lakes on the peninsula was an important element to setting the goal of eradication. In addition terrestrial surveys were completed in remote areas, – including approximately 23 miles of ATV trails into the back country. Staff traveled to Seldovia to map the movement of reed canary grass infestation, and to measure the impacts on the Jaklof Creek watershed. The Homer District will work with the Seldovia Native Association to develop an IPM to control – and eventually eradicate this infestation. All new infestations have been recorded into the Alaska Exotic Plants Information Clearinghouse (AKEPIC).



The first infestation of Japanese Knotweed was reported and subsequently treated, on the Lower Kenai Peninsula. This is a perfect example of EDRR – preventing the establishment of new noxious plant. Above is a photo in Juneau showing the size this plant can get.

EDUCATION

Educational programs continue to be an important component of our annual work plan. Conservation education helps people of all ages understand and appreciate our natural resources and instills a sense of stewardship. An informed and engaged public leads to wise decisions about resource development. The District partnered with several state and federal agencies, non-profits, and peninsula schools to increase the variety of District educational offerings during FY14.

Objective 1: Provide for public outreach to increase landowner awareness and understanding of how common land uses and activities on the lower Kenai Peninsula can affect our resources.

Public workshops and Events: This past year the Homer District hosted or facilitated several meetings aimed at reaching a wide audience to improve informed discussions on resource concerns. In collaboration with the KP-CWMA we facilitated the annual weed workshop – an event focused on topics such as vectors of invasive species introduction, herbicide use in Alaskan soils, and elodea eradication. Last winter the District hosted a Local Working Group meeting, an open forum that was well attended by several state, federal, native, and non-profit organizations to help determine natural resource issues, problems, and opportunities within our District that deserve attention. Staff presented at the quarterly wetland working group meeting, at annual events such as the Kenai Peninsula Agricultural Forum, USFWS Earth Day Celebration, and the Kachemak Bay Research Reserve’s “What’s New in the Bay” – a series of presentations on local research activities.



A pollinator garden installed on Main Street, Homer – this project serves as a demonstration community garden, creating an edible greenway, enhancing the walkability of this part of town. Several of the neighboring businesses have committed to participate with the annual maintenance.

Objective 2: Provide support for natural resource education opportunities on the Kenai Peninsula

Environmental Education: The Homer District continued to look for ways to work with local schools to promote environmental education. Some of the highlights for this year include the development of the School Yard Habitat at West Homer Elementary School, working with the Homer High School Natural Resources class to teach technical field skills, providing staff to organize and lead field trips in the Homer Demonstration Forest, and working with four peninsula schools to get their People’s Gardens established.

School Gardens: This past spring we entered into an agreement with the Kenai Peninsula School District to establish a school market garden pilot program during the 2014 growing season. The goal of this project is to provide an educational site to teach about local food

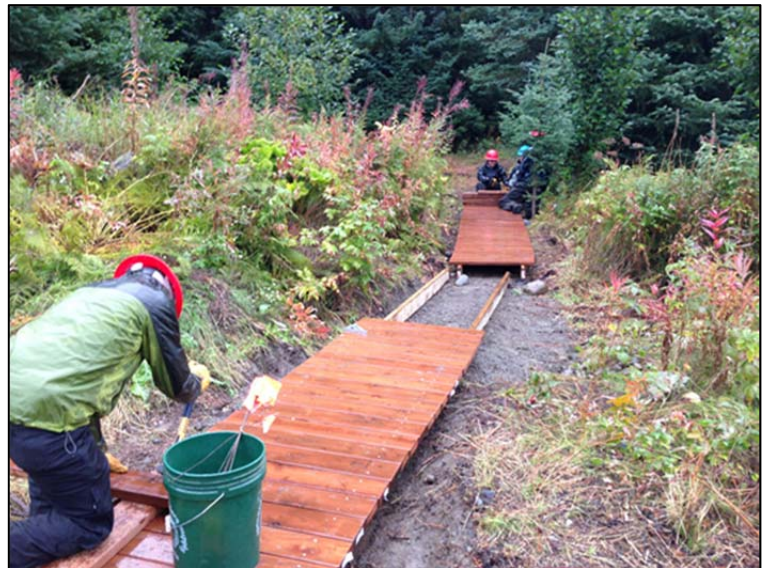


production, farm operations, business plans, and marketing. The hope is that this will serve as a model to establish a self-sustaining technical program for schools on the peninsula. The goal for next year is to sell shares in exchange for produce, with the proceeds being invested back into the program.

Students at Homer Flex High School install an irrigation system in the school garden. Student interns learned a range of skills from building long term soil health to constructing raised beds.

School Yard Habitat: District staff continued to work with faculty and staff at West Homer Elementary School to incorporate interpretative sites along the School Yard Habitat trail that was put in last year as part of the US Fish & Wildlife School Yard Habitat program. Several sites have been identified and correlated with Alaska state educational curriculum standards. Over the past year we have developed lessons on forest succession, planted a pollinator garden, and set up a weather station. We have also been in the planning stages with the Homer Middle School, gearing up to establish a School Yard Habitat behind their school.

A section of trail at West Homer Elementary School. In collaboration with District staff, school faculty, and local naturalist a total of 11 interpretative sites were identified, highlighting such topics as wildlife habitat preferences, botany, successional process; and nutrient cycling (log/leaf litter decay).



Objective 2: Create locally supported, self-sufficient People’s Gardens (community gardens) that will address community needs for better nutrition, improve community access to healthy foods, and provide significant educational opportunities about growing food.

People's Garden: With funding from the National Institute of Food and Agriculture the District continued to support People's Gardens across the Lower Peninsula. People's Gardens provide a resource for participating organizations to develop programs ranging from teaching life skills, to providing service projects, and to promoting science based education. Participants include



public schools, health care facilities, and faith based organizations. Feedback reflects that these gardens provide many benefits. These benefits include donations to the local food bank, recreation and relaxation, and therapeutic opportunities.

Students at Fireweed Academy prepare their garden beds for planting. The plan is to have potatoes ready to harvest when they return to the classroom in the fall.

ADMINISTRATION/MANAGEMENT

To meet District goals the Board relies on staff to run day to day operations. This year the District employed 3.5 full time positions, maintained regular office hours to better serve the public, and provided management to all programs. The cooperator base increased, an array of individuals and organizations received technical assistance, and the District continued to strengthen our partnerships with both governmental and non-governmental entities.

Objective 1: Provide oversight and guidance to all District projects, identify and develop programs and projects that promote the District's mission, and seek funding for all District activities and operations.

Project Administration: The District Manager administered all District programs and projects, including program budgets and documentation of expenditures. Several funding opportunities were explored, resulting in securing funds for our programs through both state and federal grants. New partnerships were formed, promising a good year ahead with the introduction of new programs.

Public Presence: In addition to the participation in the many events highlighted throughout this report the District mailed out quarterly newsletters and redesigned the website so that it can become a better tool for its users. Many District projects were highlighted in local news media, with several stories on local radio stations and area wide newspapers.

Objective 2: Support the Board of Supervisors' development and travel to bi-annual AACD conferences, as well as recruitment of new board members. Maintain membership in state and national associations.

District Board of Supervisors: The Board of Supervisors provides review and general oversight of all District programs. Supervisors meetings were held monthly, allowing

interactions with an array of landowners and land managers with a variety of resource concerns and requests for assistance. The board worked closely with NRCS Homer field office to provide input on their programs and priorities and to advise them on resource issues and concerns within the District. The Homer District was represented throughout the year at Alaska Association of Conservation Districts board meetings and attended both the fall and spring meetings. In addition to AACD the District is a member of the National Association of Conservation Districts.



The Homer Board of Supervisors during a work session. The Board meets the second Wednesday of the month – all meetings are open to the public and we encourage our cooperators and partners to attend to help identify our priorities and conservation related projects.

SOURCES OF INCOME

USDA National Institute of Food and Agriculture	\$29,284.42
USDA Natural Resource Conservation Service	\$25,899.24
Kenai Watershed Forum	\$16,014.93
Kenai Fish Habitat Partnership	\$4,444.98
US Fish and Wildlife Service	\$53,103.65
Environmental Protection Agency	\$34,563.90
Kachemak Heritage Land Trust	\$607.03
State Funds – Department of Commerce	\$45,305.27
State Funds NRCDB	\$2,500.00
Homer District Funds	\$2,439.46
Soil Test Services	<u>\$1,923.00</u>
TOTAL	\$216,085.88

EXPENSES BY CATEGORY

Personnel	\$138,640.46
Payroll Taxes	\$13,863.51
Workman’s Comp	\$6,697.97
Insurance	\$2,260.33
Supplies	\$20,439.85
Travel	\$8,847.54
Contractual	\$21,006.06
Operations	<u>\$4,330.11</u>
TOTAL	\$216,085.88

SIGNATURES

Report Prepared by: Tara Schmidt

Date

District Chair, Chris Rainwater

Date

District Board Member

Date