

SOUTHEAST CONFERENCE - RESOURCE CONSERVATION AND DEVELOPMENT PROGRAM

PROJECT SUMMARIES

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Submitted by Paul Coffey, RC&D Coordinator with the USDA Natural Resource Conservation Services.



CRAIG TERMINAL CHINOOK SALMON FISHERY

The Craig Terminal Chinook Salmon Project was conceived and lead by the City of Craig in an effort to increase the availability of Chinook Salmon on the West Coast of Prince of Wales Island for all user groups. More available salmon for the commercial industry translates into a better industry for commercial fishermen and higher raw-fish tax receipts for the City of Craig, and other communities where the returning fish are landed. The Charter Fishing industry would have more fish available, increasing the number of user-days, lodging nights, restaurant meals served, fuel, tackle, etc. In addition, more fish are available for subsistence and sports-fishing user groups. RC&D contribution to this project included providing assistance during the research and planning phases, and during some of the construction operations.

COMMUNITY WATERSHED STEWARDSHIP PROJECT

Beginning in 2001, Southeast Conference entered into a partnership with the Alaska Department of Fish and Game (ADF&G) to support the efforts of two existing community watershed councils, and to assist in the creation of up to four additional watershed councils. ADF&G had access to a portion of the Pacific Northwest Salmon Recovery Fund and dedicated a portion of it to the Southeast Sustainable Salmon Fund (SSSF). \$700,000 of the SSSF was brought by ADF&G to the partnership with Southeast Conference to provide some financial support to developing watershed councils for two years, at which time the councils should have enough resources at their disposal to be self-supporting. Existing councils in Juneau and Klawock, and new councils developed in Haines, Skagway, Yakutat, and Kasaan by 2004 were able to finance planning documents and hire project coordinators. Implementation of individual watershed council projects in Southeast has resulted in nearly \$10 Million spent to date on local employment and purchase of local goods and services. Project work lead by the watershed councils continues to contribute to environmental quality and to the local economy.

PRINCE OF WALES COMMUNITY FIRE PROTECTION

This project was intended to share training and resources to develop better response capability among the fire departments on Prince of Wales Island. Some joint training sessions were held and surplus equipment was shared among departments. The results of



this project continue to benefit the residents and property owners in Prince of Wales Island communities, as the island's fire departments continue to develop their working relationships with each other.

SOUTHERN SOUTHEAST LOCAL EMERGENCY PLANNING COMMITTEE (SSLEPC)

With the establishment of the SSLEPC, more than 22 communities and/or regions within Alaska have emergency planning committees. The SSLEPC includes all of the communities in Southern Southeast Alaska south of Wrangell, except Ketchikan and Metlakatla. The purpose of the SSLEPC, and other LEPCs in general, is to plan for, and be able to respond effectively to, large-scale natural or man-made disasters. The key concept is to have a prepared response to emergencies instead of reacting to emergencies. The SSLEPC has conducted exercises in tsunami response by local emergency responders, large-scale shelter exercise for people displaced from their homes by a mock landslide, and a school shooter/arsonist exercise which challenged the coordinated response capabilities of local and State of Alaska Fire, EMS, and Police personnel. Additional planning exercises are planned for earthquake and other emergency situations.

CRAIG WOOD-FIRED BOILER

In 1994, the City of Craig was exploring options for replacing the heating fuel at the Craig Aquatic Center from propane to oil. The RC&D Coordinator joined forces with the UAF Cooperative Extension Service agent to make a presentation to the City Administrator displaying the potential benefits of using local wood waste instead of fossil fuels. The idea was well-received, the project was modified to include heating the Craig Elementary School and the Craig Middle School, and the Craig Wood-Fired Boiler was ignited about four years later.

The Craig wood-fired heating system is not a boiler, per se, but a hydronic heating system, i.e., the water never boils. Wood chips are gasified in a high-heat, low-oxygen environment, then the gases are burned to heat water to about 180 degrees. The water circulates to the Aquatic Center and the two schools and heats the existing systems via heat exchangers that take heat from the wood-fired system and transfer it to the pool and school hot-water systems.



In the first year of operation, the facility burned \$97,000 less propane than in previous years. As the bugs get worked-out of the system and the operation becomes more routine, additional savings are expected.

KLAWOCK CAUSEWAY BREACH – ESTUARY ENHANCEMENT

In 1966, when the road connecting Klawock Island to the rest of Prince of Wales Island was built, there was no structure placed under the causeway to allow water, or fish, to pass from one side of the road to the other. Recently, it was suggested that the construction of the causeway occurred at about the same time that the sockeye salmon population in the Klawock River declined, with further speculation that the causeway construction blocked access to over 400 acres of intertidal zone used as rearing habitat for salmon migrating out of the river each spring. This project will install a concrete box culvert under the Klawock-Hollis highway which will restore passage of water and fish under the highway, just east of Anchorage Street in Klawock. The expected result of this project is an increase in the survival of salmon smolts leaving the Klawock River system.

NAUKATI SHELLFISH NURSERY DEVELOPMENT

As the science of shellfish mariculture develops, it has become evident that growing oysters from seed to adult is expedited by rearing the oyster seed in a nursery. Nursery care increases the growth rate, manipulates the oyster to a more marketable shape and, after transfer of the oyster to a farm, reduces the time to maturity by 50%, from four to two years. In addition, the nursery care increases the survival rate of the oysters grown by the farmer. This project assisted the development and expansion of the Naukati Shellfish Nursery which, in turn, increased the profitability of oyster farming and increased local farming employment.

THREE-MILE CREEK RESIDENTIAL FLOOD CONTROL

With the scarcity of flat, developable land in Southeast Alaska, it is no surprise that the Three-Mile Creek floodplain was developed into a residential subdivision. Unfortunately, that development came with the risk of flooding. After a significant rainfall event on November 22, 2005, many of the homes in the Three-Mile subdivision experience flooding to some degree, most with flooded property and driveways, some with water high enough



to trap people in their homes. The Klawock Watershed Council utilized some of their watershed restoration funding to install drainage structures in and around the subdivision to improve drainage through the area. Right-sized culverts and ditches were installed where inadequate drainage existed prior to the flooding. About a dozen homes and families benefited from the project.

OCEANSALASKA MARINE SCIENCE CENTER

The shellfish industry in Southeast Alaska has the potential to expand several times the size it is now, but some governmental and geographic constraints need to be overcome before that can happen. Some of the best water quality in the world for growing oysters occurs in Southeast Alaska. Unfortunately, those growing conditions occur a long way from potential markets. Research has to be accomplished to find a way to increase the shelf-life of fresh oysters so that the industry can deliver a fresh, quality product to the market despite the shipping distances involved. The OceansAlaska Marine Science Center project was undertaken to find ways to solve this problem. A necessary component of delivering a quality product to market is testing for paralytic shellfish poisoning (PSP). The only PSP lab in the State was recently moved to Anchorage from Palmer, a big improvement for the Southeast shellfish industry. However, the industry needs a lab in Southeast. One of the goals of the OceansAlaska project is to encourage the State government to provide a lab in Southeast to expedite the delivery of a safe, tested product to market. The Southeast Conference RC&D Coordinator assisted in getting the OceansAlaska project off the ground.

HARRIS RIVER TRAIL AND RECREATION SITE

For many years, the community of Hollis had a single-log footbridge to provide hiking, hunting, and fishing access to the south side of the Harris River. At the north side of the bridge, there was a fire pit, an old decrepit picnic table, and parking in the ditch for a couple of vehicles. With an Alaska DNR timber sale in the planning stages for the south side of the river, the Hollis Community Council partnered with the State DNR and the US Forest Service to plan for an upgrade to the streamside facilities. DNR planned to install a bridge to access the timber sale area which, after the sale, would provide vehicle and pedestrian access to the south side of the river. The Forest Service provided design assistance to the development of a day-use area which includes a picnic shelter, parking lot, pit toilet vault, barbeque grills and a campfire ring. Grant funding also became available to build a trail



along the river for fishing access and access to an old historic mining site. RC&D support to this project included coordination among the agencies and community council and site planning.

SHELLFISH MARICULTURE WEEKEND WARRIOR PROJECT

As mentioned in the OceansAlaska Project above, there is a tremendous potential for the oyster industry in Alaska to grow many times over. One of the challenges for a new oyster farmer is working an oyster farm for two or three years, without any income, until the oysters have grown to a marketable size. The Weekend Warrior project, through a grant from USDA Rural Development, provided farming equipment to the Naukati Shellfish Nursery which is available by lease to beginning shellfish farmers. The equipment is owned and maintained by the Nursery at the Nursery site. The beginning farmers visit the site on weekends for the first two years of oyster growth in order to undertake the labor-intensive process of cleaning and sorting oysters which is necessary to promote faster growth. This project allows the beginning farmers to maintain their current employment and continue to receive a paycheck prior to the time that the oyster farm generates any income. The farmer can also use this two-year window to learn about state-of-the-art growing methods from Nursery staff to improve the opportunity for a successful farming operation. When the new oysters are ready for market and begin to provide a financial return to the farmer, the beginning farmer leaves their old job behind and moves full-time into shellfish farming.

COMPRESSED WOOD FUEL PILOT PROJECT

The high cost of shipping fossil fuels to Southeast Alaska, and an abundant supply of local wood fiber, launched a partnership among a group of entities to examine the potential to manufacture compressed-wood products to be used for fuel. UAF Cooperative Extension, the Nature Conservancy, the City of Craig, the USFS PNW Research Station, the Southeast Conference RC&D, and others collected a variety of wood products and wood-waste products for the project. Six samples (shredded spruce, shredded hemlock, shredded Alaska cedar, redcedar planer shavings, whole-tree chipped alder, and multi-species hog fuel) were dried locally and shipped to Connecticut to a compressed-wood bricking plant for testing. All of the samples were compressed into bricks and test-burned for BTU



output. The results were very promising and indicated that Southeast Alaska tree species were very suitable for development of a heating fuel industry for local residential and commercial applications, using wood and waste-wood for which there was no prior market.

PRINCE OF WALES ISLAND SHOOTING RANGE

This project has received intermittent interest from local communities. There has long been interest in developing a shooting range on POW, but the preferred locations are on US Forest Service land. Siting the facility on federally-managed land has been a difficult proposition, and there are no private landowners with sufficient quantity of land that have expressed an interest in a shooting range. This project is still in the concept phase.

EMERGENCY SIREN SYSTEM – TSUNAMI WARNING

This is an RC&D project lead by the Southern Southeast Local Emergency Planning Committee (SSLEPC). SSLEPC has been planning for the establishment of a siren system in Prince of Wales west coast communities to warn of an approaching tsunami, or other impending or occurring disasters. The siren system would be the mechanism to alert residents to listen to a locally broadcast emergency message that would explain the nature of the emergency and give information about how to respond.

SOUTHEAST ISLAND SCHOOL DISTRICT VOCATIONAL-TECHNICAL CURRICULUM

Southeast Island School District (SISD) would like to develop a vocational-technical curriculum to teach local youth the building trades. SISD intends to use local contractors and locally manufactured building materials to erect student-built homes to ease the housing shortage for teachers in rural Southeast communities. At the same time, the students would be learning a trade that will enable them to enter the workforce and earn a living, rather than become marginally productive members of their communities after high school graduation.

THORNE BAY DISTRICT HEATING PLAN

This is a joint effort between the US Forest Service – Thorne Bay Ranger District and the Southeast Island School District's Thorne Bay School. Planning is underway to develop a



wood-fired district heating facility that would provide affordable heat from local biomass fuels to offset the reliance on expensive, imported fossil fuels.

CRAIG – KLAWOCK BIKE PATH EXTENSION

A bike path that is nearly a mile long currently connects the community of Craig to the Craig High School, located on the road to the neighboring village of Klawock. Extension of the bike path approximately 4.5 miles to Klawock would increase the safety of bikers, walkers, and runners who currently use the shoulder of the State highway. The proposed location of the new bike path would be underneath a powerline corridor that parallels the State highway. A hard-surface path away from the highway would not only provide safe passage for bikers and pedestrians, but would allow access to the local power utility for line maintenance.