# 2006 Annual Report (July 1, 2005 to June 30, 2006)



**Washington Conservation Districts** assisting land managers with their conservation choices

### **Thurston Conservation District**

### **Featured Natural Resource Accomplishment of the Year**

## **Thomsen Riparian & Waste Storage Improvements**

Nisqually Watershed - Thurston County

#### **Resource Challenge:**

The Thomsen "Lower Farm" is located on McAllister Creek, where fecal coliform, dissolved oxygen and temperature were identified as problems in TMDL study conducted by the Department of Ecology in 2003. Livestock access was causing erosion and increased turbidity. Lack of native vegetation in this area resulted in a lack of shade, filtering capability, and natural nutrients. The TMDL study recommended best management practices for bacteria reduction and control of nutrients in the creek. The landowner has been under pressure to deal with the lack of adequate manure storage at this 347 acre facility.

#### **Project Summary:**

The landowner utilized four (4) cost-share funding sources to install fencing and riparian plants on this site. A manure storage facility was designed for the farm. Construction is slated for later this summer. Fencing was installed on this site over the course of several months. A total of six (6) acres of riparian habitat were planted. Each tree and shrub was fitted with a plastic biodegradable plant protector, used to protect the plants from wildlife and mowing equipment. The landowner signed a planting agreement, which obligates her to maintain the planting site by controlling the reed canary grass and watering for a period of 3 years, until the plants become well established. The Conservation District will monitor the project for a period of 3 years as well, to determine the condition of the plants and rate of survivability.

#### **Results and Accomplishments:**

A total of 16,336 feet of riparian fencing was installed to exclude the cattle from McAllister Creek and drainage ditches, which run throughout the fields. Twenty-four (24) gates were installed so that the cattle could be moved between fields. The fencing has an expected lifespan of 10 years. Troughs were installed prior to this period so that livestock continue to have access to water. After the fencing project was complete, six (6) acres of riparian area was planted with 5,600 trees and shrubs to help restore the area. Over time the plants will filter nutrients from the farm, and provide shade and large woody debris (LWD) to the creek system. The manure storage structure was

designed and in the permitting stage at the end of this reporting period. Construction of the 30x60 foot facility is scheduled for late summer 2006. Also implemented were nutrient mgmt., forage harvest mgmt., and irrigation water mgmt. By applying nutrients & irrigating at the proper rates and proper time, runoff and nutrient loading is controlled. The efforts on the farm will significantly reduce the detrimental impact on stream health in McAllister Creek.



Planting along McAllister Creek

#### **Key Partners Involved:**

USDA Natural Resources Conservation Service Salmon Recovery Funding Board (IAC) Washington State Conservation Commission District's Cluster Engineer

#### **For More Information Contact:**

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#### Thurston Board of Supervisors:

Doug Rushton, Fred Colvin, Nora Mena, David Hall, and Harry Petersen

#### **Legislative Districts:**

State Legislative District # 2, 20, 22 and 35 Congressional District #3 & 9

## Funding for above project:

State: \$29,500 Federal: \$80,000 Private: \$32,500 Total \$142,000

## **Annual Status Report of Natural Resources**

## **Thurston Conservation District**

## **Background Summary of the Thurston Conservation District**

The Thurston Conservation District has been serving the residents of Thurston County since 1948. The 2005 population was 224,100. Total land mass is 737 square miles (471,819 acres). Approximately 74,400 acres are in farm production (~1300 farms). Our major watersheds include Nisqually, Henderson, Chehalis, Deschutes, Eld, and Totten.

#### **Mission of the Thurston Conservation District**

Our mission is, "To conserve, sustain, and protect our natural resources for the people of Thurston County through: rural and urban partnerships, fostering volunteerism, cooperation, education, leadership, and technical and financial assistance."

#### **Natural Resource Priorities and Goals:**

<u>Surface Water Quality</u>: By Dec. 2008, data from a key monitoring station in each critical geographic area will meet or exceed water quality standards.

<u>Riparian Protection & Restoration</u>: By June 2007, restore 5 miles of riparian buffers.

<u>Shellfish Areas</u>: By 2008, the Nisqually shellfish area will be harvestable.

<u>Land Use Conversion</u>: By 2009, the rate of open space land conversion (loss) will be reduced by 50%.

<u>Small Acreages Management</u>: Beginning in 2006, every purchaser of 5 acres or more will receive a personal contact by TCD offering assistance.

<u>Invasive/Exotic Species</u>: By 2006, invasive/exotic species will be listed by location and degree of problem in each critical geographic area.

#### Information – Education Priorities and Goals:

- By December 2006 provide at least 6 workshops, 15 community presentations, and 6 educational newspaper articles reaching 150,000 homes.
- By December 2006 train 2200 teachers and students in water quality monitoring methods.
- By December 2007 have a minimum of 150 participants in the Watershed Education Pledge Programs in the Henderson, Nisqually and Deschutes watersheds.
   Participants will implement over 2,000 actions, aimed at improving water quality.
- Host an annual Open House and Conservation Tour to educate policymakers, agencies, and landowners about the services we provide, the projects we have done, and the water quality issues that need to be addressed.

#### **Critical Geographic Areas:**

The Totten/Eld watershed is located in both Mason and Thurston Counties and contains several streams. Land use consists of mainly forestry, shellfish harvesting and small farms. Much work was done in the early 90s to restore water quality and reduce closures in the shellfish harvest area. This watershed was chosen as our top critical geographic area in order to maintain the improved water quality status. Our second critical geographic area is the Skookumchuck



A winter confinement area is established on a Henderson watershed farm utilizing cost sharing funds.

watershed, consisting mainly of agriculture (including forestry) activities. The goal here is to sustain the existing water quality. The Henderson Inlet is third, due to the shellfish downgrades and gravity of the problem. This area consists of numerous waterfront properties and farms which contribute to poor water quality. Twenty-eight percent (28%) of the District's tax assessment is dedicated to work in the Henderson/Nisqually Shellfish Protection District.

#### **Natural Resources Information & Status**

<u>Surface Water</u> - TMDL studies have been completed by Department of Ecology in Nisqually, Henderson, Deschutes, and Eld/Totten watersheds. The district is involved in the technical advisory groups for each of the TMDLs. All Water Quality Implementation Plans are in various stages of completion.

- A riparian assessment has been completed on all streams in Thurston County. This year, just over 4 miles (22,230 feet) of riparian area was planted with native plants.
- Just over 3 miles of fence was installed in 2006.
  <u>Agriculture</u> There are approximately 1300 farms (cropland and rangeland) operating in Thurston County, designating 74,400 acres of land to agriculture.
- 186 conservation plans have been developed in the past 5 years.
- 15 dairy nutrient management plans have been developed in the past 5 years.
- Farmers have implemented just over 3,000 best management practices in the past 5 years.

<u>Urban and Other</u> – Thurston County is one of the fastest growing counties in the state. TCD is meeting the demand by developing programs targeted at the urban landowner. Pets, septic systems and overuse of fertilizers in urban areas are having a significant impact on water quality.

- To date, we have 85 participates in the Watershed Pledge program. Participants have implemented over 1200 actions geared at improving water quality. Actions include picking up pet waste, having septic systems pumped/ and/or inspected, and reducing fertilizer use.
- We have developed 22 conservation plans for landowners with the Shellfish Protection Districts over the past 3 years.
- We have sold 158,800 native plants to residents of Thurston County in the past 5 years during our annual plant sale event.
- We have analyzed 823 soils test in the past 5 years.