6.08 miles of Habitat Rehabilitated
*Whatcom County lowland streams*

**Resource Challenge (WRIA 1):**
Since the early 1900’s in Whatcom County, drainage improvement activities (ditch creation, channel straightening, and removal of invasive species, sediment, and riparian vegetation) in many lowland streams have taken place in order to enable the use of adjacent land for farming. Maintaining the lowland streams in a degraded state has contributed to the listing of many of these streams as impaired under the 303(d) list for parameters such as bacteria, dissolved oxygen, nutrients, pH, and temperature. It is recognized that, although good drainage is essential to enabling use of land for agricultural purposes, drainage maintenance activities negatively impact water quality, salmonids, shellfish and wildlife.

**Project Summary:**
Working with project partners and stakeholders, WCD led the effort to create three year plans enabling two Drainage Improvement Districts to maintain their watercourses using agreed upon Best Management Practices. Following drainage maintenance activities, WCD staff coordinated the planting of native shrub hedgerows along the watercourses to enhance wildlife habitat, improve water quality and reduce the need for future drainage maintenance by shading out Reed canarygrass infestations.

**Results and Accomplishments:**
More than 12,000 feet of stream were cleaned of Reed canarygrass and associated sediments and 32,130 feet of stream bank were planted into native shrub hedgerows. Adjoining fields are now draining as needed for productive agricultural use. The resulting shade from the densely planted hedgerows will facilitate continued drainage by preventing re-infestation of Reed canarygrass.

**Innovation / Highlight:**
The conflict between drainage maintenance and riparian function has led to situations of impasse throughout western Washington. Partners and stakeholders in Whatcom County have established methods of maintaining drainage and enhancing riparian areas in a way that works for everyone.

**Key Partners Involved:**
Local Drainage Improvement Districts
Private Landowners
Tennmile Watershed Project
Whatcom County Public Works
Washington Department of Ecology
Washington Department of Fish & Wildlife

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**WCD Board of Supervisors:**
Jerry Van Dellen, Richard Yoder, Sabina Gouran, Joyce Jimerson, Ed Stone

**Legislative Districts:**
State Legislative District # 42
Congressional District # 2

**Funding:**
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Annual Status Report of Natural Resources
Whatcom Conservation District

Background Information:
Since 1946, Whatcom Conservation District (WCD) has worked with landowners and farmers to manage Whatcom County’s abundant natural resources. WCD includes areas of Puget Sound seashore to the west, forested mountains to the east, and fertile agricultural lowlands in between. The District includes the Nooksack River Basin, the Drayton Harbor watershed, several smaller coastal drainages, and transboundary systems that drain north to Canada. The county’s 180,000 people live mostly in the city of Bellingham, with the smaller towns of Ferndale, Lynden, Blaine, Sumas, Birch Bay, Everson, and Nooksack growing rapidly. With 148,000 acres of land in farms, Whatcom County has a thriving agricultural industry dominated by dairies, beef, berries, silage crops, and seed potato production. A strong recreation and tourism industry exists, taking advantage of opportunities to enjoy the varied landscapes from the mountains to the bay.

Mission of Whatcom Conservation District
“To serve present and future generations of Whatcom County through a natural resource conservation program of leadership, partnership, and technical, educational, and financial assistance to foster a healthy, sustainable relationship, between people and the environment.”

Natural Resource Priorities and Goals:

Water Management
- **Water Quality** – Surface waters of the Nooksack basin meet TMDL bacteria standards; reduce nitrates in public water supply by 5ppm
- **Water Quantity** – Increase water storage by 1000acre/feet in Tenmile and Bertrand watersheds; develop two plans for water storage
- **Water Rights and Drainage** – Obtain Hydraulic Project Authorities for five drainage improvement districts to have fish-friendly management plans including ditch maintenance, riparian areas rehabilitation, and water storage

Land Stewardship
- **Small acreage farms** – Contact and distribute farm management booklets to 1000 hobby farmers to assist with resource protection and Critical Areas Ordinance compliance; encourage system for follow-up and evaluation of BMP implementation

Critical Areas Protection
- **Conservation Reserve Enhancement Program (CREP)** - Establish a permanent easement program for CREP enrolled lands; work through WACD CREP committee for CREP II concepts

Farmland Protection
- Work with Whatcom County to have 115,000 acres of agricultural land designated

Information – Education Priorities and Goals:
Educate residents, both rural and urban, about conservation-wise stewardship practices through a program of workshops, tours, media, and cooperation with other organizations and agencies.

Critical Geographic Areas:

Drayton Harbor Watershed
- California Creek and Dakota Creek sub-basins drain to important shellfish beds in Drayton Harbor and have experienced water quality degradation from poor farming and rural land use practices. The changing demographics in the relatively small watershed, with increased residential and hobby farm development, has presented opportunities to implement riparian rehabilitation actions and education programs to increase environmental awareness and facilitate behavioral changes to meet freshwater quality and habitat goals.

Lower Nooksack River Basin
- The Nooksack River watershed encompasses approximately 806 square miles and drains to tribal shellfish beds in Portage Bay. In 2000 the WA Department of Ecology (DOE) established fecal coliform pollution limits for the watershed through adoption of its “total maximum daily load” (TMDL) analysis. Several sub-basins (Kamm, Fishtrap, Bertrand, and Tenmile) where agriculture is the predominant land use continue to have geometric means higher than the established target and the greatest exceedences of the 90th percentile criteria.

Natural Resources Information & Status

Agriculture
- Over 89,000 acres zoned agriculture
- To date – Dairy nutrient management plans certified for over 39,000 acres

Forest Land
- Over 1 million acres zoned forest land, with over 80% publicly managed
- To date – WCD works with WA Dept of Natural Resources to promote the FireWise program.

Urban & Other
- Over 29,000 acres incorporated in cities – no conservation plans

Water Resources
- Major River system – Nooksack River with violations of standards for fecal coliform, ammonia, and dissolved oxygen documented in mainstem and key tributaries.