



King County

Department of
Natural Resources and Parks
**Water and Land Resources
Division**

2002 Accomplishments

In the **Urban** Service Area the Small Habitat Restoration Program (SHRP) had 15 active projects, including 4 habitat restoration projects that were constructed, 3 projects that were maintained and monitored, and 3 technical assistance projects. ***A total of 42,000 square feet, or 0.96 acres, along 360 lineal feet of stream/river bank were restored or enhanced in 2002 in the Urban Service Area in 2002.***



Girl Scouts planting trees during a volunteer work day at the Chinook Bend SHRP project site.

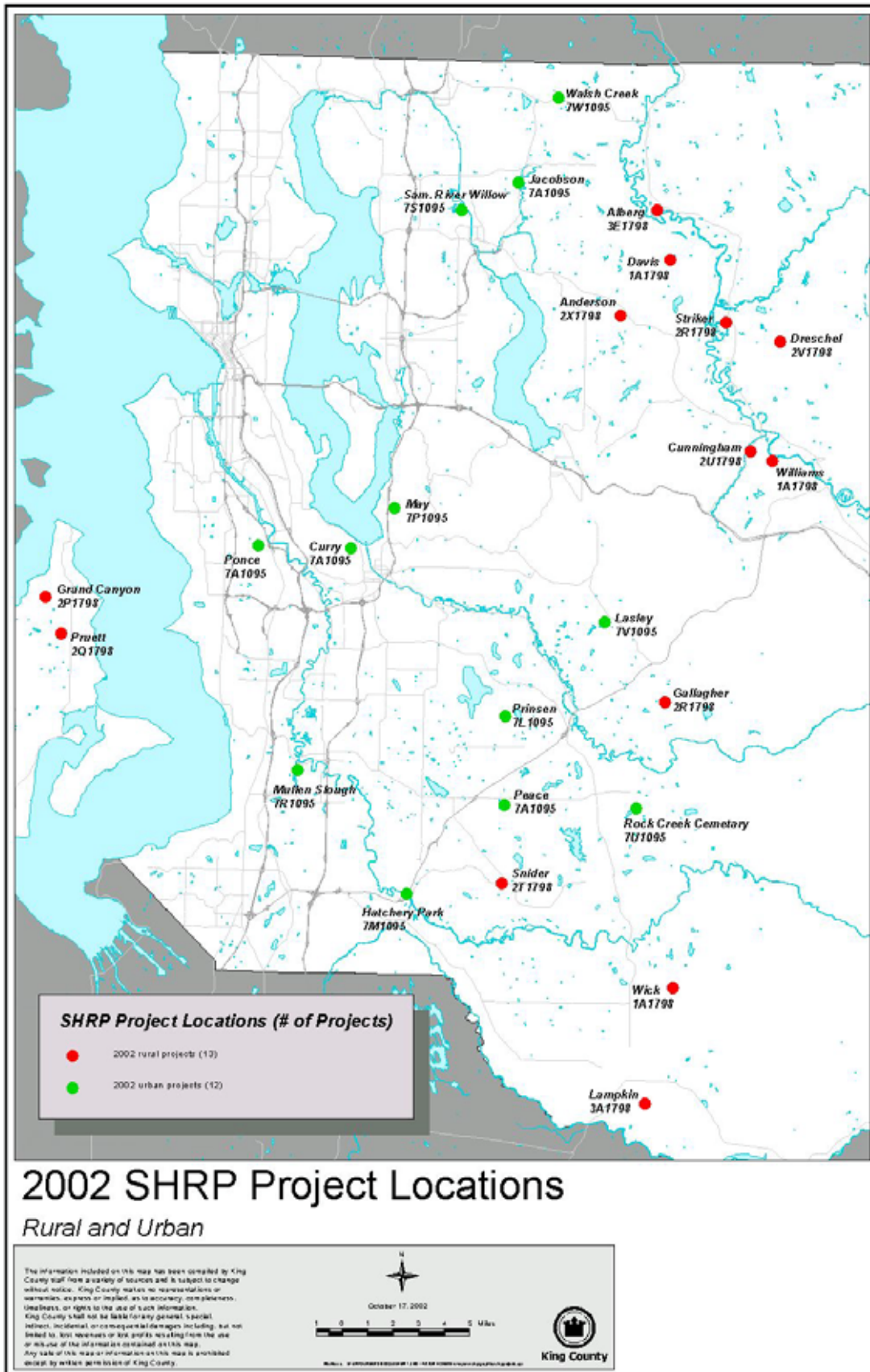
In the **Rural** Service Area, SHRP had 24 active projects, including 7 habitat restoration projects that were constructed, 3 projects that were maintained and monitored, and 4 technical assistance projects. ***A total of 800,000 square feet, or 18 acres, of stream/wetland buffer along 8,450 lineal feet (1.6 miles) of stream/river bank was restored or enhanced in the Rural Service Area in 2002.***

History

Since 1995 SHRP has performed 165 habitat restoration projects, an average of 21 projects constructed each year. Technical assistance has been provided on 133 projects. The SHRP website (<http://dnr.metrokc.gov/wtd/shrp/>) averages 252 “hits” per month and includes an on-line project application and technical assistance, including basic restoration and enhancement guidelines for designing, planting, and maintaining projects.

Mission

The Small Habitat Restoration Program (**SHRP**) completes small-scale habitat restoration projects in stream corridors and wetlands. The goal of SHRP projects is to restore habitat-forming processes for fish and wildlife. Projects include stabilizing eroding streambanks, installing livestock fencing, controlling invasive weeds, planting native vegetation and providing technical assistance to landowners. Individual project costs typically range from \$5,000 to \$50,000. Projects are constructed on private or public property as long as they provide benefits to the public at large.



Novack Fish Passage Enhancement Project

SHRP's on-the-ground success translated into real improvements for fish and wildlife. Results from Washington Department of Fish and Wildlife spawning surveys in the Patterson Creek Basin showed that the Novack Fish Passage Enhancement Project, constructed by SHRP in 2001, successfully restored fish passage and access to 1.5 miles of upper Patterson Creek.



The Novack Fish Passage Enhancement Project used WCC crews to remove a large accumulation of reed canarygrass, sediment and organic debris in an abandoned agricultural ditch. Removing this sediment and debris allowed Patterson Creek to establish a new course through an adjacent forested wetland and bypass the field where the channel had become completely with the reed canarygrass.

WDFW spawning data from index reaches both above and below the project site showed that, while fish have consistently been observed in the reach downstream of the project, virtually none had been observed upstream of the project for at least 15 years. However, during the 2001-2002 spawning season, a total of 284 coho (live and dead—many may have been observed more than once) were observed in the upstream reach. Circumstances point directly to the SHRP project as the cause for this increase. The project cost was approximately \$15,000.

Urban Service Area Projects

2002 Urban SHRP Construction

SHRP Projects constructed in the Urban Service Area restored and enhanced approximately 42,000 square feet, or 0.96 acres, of stream/wetland buffer along 360 lineal feet of stream/river bank.

- ***Ponce Volunteer Planting (Private property):***
Provided plants and plan for volunteer planting. Enhanced approximately 200 square feet of buffer along 60 feet of class 1 stream.
- ***Mullen Slough (KC ownership):***
Restored approximately 31,800 square feet of buffer of Green River by eradicating blackberry and planting natives in buffer/floodplain of Mullen Slough. Blackberry is cut and covered with weed fabric. Planting will begin in the fall of 2003 after blackberry has been covered for at least one growing season.
- ***Prinsen: (Private property):***
Enhancement of 5,000 square feet of buffer of Shadow Lake. Project area is part of a large wetland bog complex adjacent to Shadow Lake. The removal of invasive species including Scotch broom, blackberry and loosestrife was completed in the fall of 2002. Planting with native species will occur in the winter of 2003. SHRP is coordinating with Rainer Audubon on the placement of wood duck boxes on the shoreline of Shadow Lake.
- ***Walsh (Private Property):***
Planted forested area (approximately 5,000 square feet along 100 feet of stream) with cedar trees where beaver had once inundated area. Coordinated technical biological report on beaver management for mussel conservation.



Wendy Walsh shows Western pearlshell mussel (Margaritifera falcata) from Bear Creek.

2003 Urban Service Area SHRP Design and Planning

Significant design and planning work was accomplished on five different projects within the Urban Service Area during 2002.

- ***Hatchery Park (KC Parks Property)***
Develop strategies for restoring native scrub-shrub & forested plant communities in Japanese knotweed-infested KC property.
- ***Sammamish River Willow Planting (KC Parks Property)***
Plant 480 l.f. reach of Sammamish River including 9,600 s.f. of buffer.
- ***Rock Creek Cemetery (KC Property)***
This project was recommended to SHRP by the Friends of Rock Creek. The project will involve controlling invasive reed canary grass and planting native vegetation. Planting should occur in the winter of 2003 following wet-season observation of the affected reaches.
- ***Lasley (Private Property):***
Stabilize bank and plant 275 feet of buffer on Issaquah Creek. Use heavy equipment and biostabilization techniques to stabilize bank. Start bank work in June 2003 and planting in Fall/Winter 2002/2003.
- ***May Valley (Private Property)***
This project includes invasive control and planting of native plants in the buffer of May Creek where it parallels I-405. This project was tabled in 2002 because it was potentially going to be addressed by other projects. This project will be revisited in 2003.

2002 Technical Assistance Projects

Technical assistance projects provide property owners with the advice and expertise they need to make their own ecological improvements and to be good stewards of their lands. Three property owners within the Urban Service Area received such assistance this year from SHRP.

- ***Jacobson (Private property):***
Planting and design consultation for revegetation of cleared buffer on Bear Creek.
- ***Peace (Private property):***
Assistance and education regarding revegetation of stream.
- ***Curry (Private properties):***
Provided resources for native plant revegetation. This project was referred to Drainage Investigation and Inspection Services to resolve drainage issues. There is also an active grading violation on the site. Once this is resolved, SHRP may offer further assistance on this project.

2002 Urban Monitoring and Maintenance

Monitoring and maintenance activities on three past SHRP projects within the Urban Service Area helped to ensure their success.

- *Arbor Lake*
- *Cavanaugh Pond (Provided maintenance on two acres of an extensive invasive control and revegetation project.)*
- *White Center Heights*

Rural Service Area Projects

2002 Rural Construction

Approximately 800,000 square feet, or 18 acres of stream/wetland buffer along 8,450 lineal feet (1.6 miles) of stream/river bank was restored or enhanced in the Rural Service Area in 2002.

- ***Grand Canyon of the Vashon (Maury-Vashon Island Land Trust Property):***

Stabilized a rapidly eroding ravine that is a source of sediment to salmon-bearing Shinglemill Creek, downstream. The project used hand labor to construct terraces and willow fascines to establish vegetation on very steep, sandy hillsides. The project directly affected 3,100 feet of stream buffer, but had beneficial effects for much of Shinglemill Creek, one of Vashon's few streams that support coho and chum salmon.

- ***Point Robinson Park (KC Property, Vashon Parks District and US Coast Guard):***

In 2001 a habitat management plan (HMP) was developed for this Vashon Parks district waterfront park. The goal of this project is to stabilize eroding coastal bluffs and banks, and to reestablish a forested coastal plant community of native conifers. Planting of about 7,500 square feet of buffer along 150 feet of shoreline occurred in early 2002.



Abel Eckhardt oversees construction of willow fascines at the "Grand Canyon" of Vashon Island

- **O'Hanley (Private property):**

The goal of this ongoing project is to restore fish and wildlife habitat on 153 acres of private property that include Harris Creek, numerous Class 1 wetlands, and the Snoqualmie River. In 2002 work focused on restoring 3.5 acres of buffer of the Snoqualmie River and on 0.7 Acres of wetland buffer of an off-channel slough. Over 2 acres of blackberry and 1.5 acres of reed canary grass was cut and prepared for planting.



WCC Corps members plant alder in the cardboard sheet mulch on the O'Hanley SHRP project

15,000 Sq. feet of cardboard was placed and planted with alders salvaged from a development site. In addition, 30,000 square feet of the buffer of the wetland slough was planted with sitka spruce and western hemlock. Volunteers and the Washington Conservation Corps will do more planting this area in the winter of 2003.

- **Chinook Bend (King County ownership):**

The goal of this ongoing project is to reforest a 60-acre floodplain of the Snoqualmie River. In 2002, approximately 15 acres of the site was planted, mostly by volunteers and members of the Snoqualmie Tribe. When plantings are completed, this project will affect 4,500 lineal feet of Class 1 stream.

- **Neal Road (KC ownership):**

A habitat management plan (HMP) was prepared in 2001 to restore fish and wildlife habitat on property acquired by King County using early action salmon recovery funds. This 50-acre site contains Class 2 wetlands, 2000 lineal feet of Snoqualmie River streambank and an abandoned meander channel used by juvenile salmonids. Initial project construction/planting occurred in Fall 2001. Further planting of about 10,000 square feet along 100 lineal feet of river occurred in 2002 and will continue in 2003.

- **Whitney Bridge Park (KC ownership):**

This project enhanced 29,250 square feet (0.67 acres) of streamside buffer with a mixture of deciduous and coniferous trees. This project affected 450 lineal feet along the Green River. Construction began in Summer, 2001 and is ongoing.

- ***Patterson Creek Tributary 0383 (KC and Private ownership):***

This project was awarded a \$61,300 matching grant from the National Fish and Wildlife Foundation to fund a stream corridor restoration plan on this tributary to Patterson Creek. This project affects approximately 50,000 square feet (1.14 acres) of streamside buffer and 1,000 lineal feet of a Class 2 salmon-bearing (coho) tributary to Patterson Creek.



KC Parks crews construct log skidder bridge to provide equipment access on Patterson Trib 383 SHRP project.

2002 Rural Technical Assistance Projects

Four property owners in the Rural Service Area received technical assistance from the SHRP staff during 2002.

- ***Wick Property Restoration Plan (Private property):***
Developed and wrote a restoration plan for streamside property owners.
- ***Cherry Creek Tree Farm (Private property)***
Advised property owners on riparian management and flood hazard reduction.
- ***Alberg (Private property):***
Worked with Stewardship Partners to develop a restoration plan for property owner on Snoqualmie River.
- ***Rose/Ketchum (Private Property):***
Advised property owner on reed canary grass control with shade and buffer plantings.

2002 Rural SHRP Planning and Design

Significant planning and design work was accomplished during 2002 on ten SHRP projects to be constructed in the Rural Service Area.

- ***Hansen (Private property):***
This project will fence and establish approximately 4.8 acres of streamside buffer to stabilize streambank erosion, manage LWD, and control livestock access. The project will affect 2,090 lineal feet of Patterson Creek, a Class 2 salmon-bearing stream 37,005 square feet (0.84 acres) of Class 1 and 2 wetland. Construction is pending property owner approval.
- ***Striker (Private property):***
Plant buffer of Indian Creek with willow and cottonwood. exclude beaver, voles and deer with fencing. Shade reed canary grass. Work will begin in January, 2003.
- ***Lampkin (Private property):***
Fence buffer to exclude livestock and plant natives. Pending property owner approval.
- ***Anderson (Private and KC ownership):***
Retrofit a past SHRP project (Novack, 2001) to permit fish and flows to pass beaver dam. Also assist neighboring property owner with beaver dam related flooding problems. To be constructed in Summer, 2003.
- ***Snider (Private property):***
Improve buffer to class 2 wetland by cutting and covering blackberry and planting natives. Start work in January, 2003.
- ***Gallagher (Private property):***
Backwater culvert and weir to provide fish passage, fence and plant stream. Construction scheduled for Summer, 2003.
- ***Cunningham (Private property):***
Replace ½ acre of invasive blackberries with native trees and shrubs. Scheduled installation January 2003.
- ***Three Forks Restoration Plan (KC ownership):***
Develop a management and restoration plan for a large parcel on the South Fork Snoqualmie River owned by KC Parks. Scheduled for completion in January, 2003.
- ***Pruett (Private property):***
Fence and plant stream buffer to reduce channel downcutting and livestock impacts. Pending property owner approval.
- ***Drechsel (Private property):***
Restore fish passage to good quality spawning and headwater wetland rearing habitat by replacing a failing culvert. Scheduled for Summer, 2003.

2002 Rural Monitoring and Maintenance

Monitoring and/or maintenance helped ensure the success of three past SHRP projects within the Rural Service Area.

- ***Novack Fish Passage Project***
- ***Pt. Robinson***
- ***Bucholtz/Wendell***

SHRP Program Goals for 2003

SHRP staff recognize that continual improvement in the delivery of ecological restoration and enhancement services is necessary in order to maximize habitat improvements with available resources. Specific goals for the coming year include:

1. Implement projects that provide cost-effective fish and wildlife habitat restoration and provide technical assistance services.
2. Expand and establish SHRP services in the rural service area.
3. Improve program management and project coordination by developing a project application and tracking database.
4. Work more closely with Basin Stewards. To this end, SHRP staff have been assigned to basins and will rely more heavily on Basin Stewards to make property owner contacts and negotiations.

