

SNOQUALMIE 2015

Building for Salmon Recovery and Watershed Health

February 2006



King County

Department of Natural Resources and Parks
Water and Land Resources Division



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INTRODUCTION TO SNOQUALMIE 2015



***Snoqualmie 2015* is 10 year vision to safeguard the Snoqualmie’s remaining natural resources and restore habitat for salmon listed under the Endangered Species Act.**

The Snoqualmie Watershed is a precious gem in a quickly urbanizing region. From alpine peaks to green pastures, the Snoqualmie contains the last remnants of the region’s defining elements: natural lands, agriculture, forestry, thriving rural communities, and recreation. Within the Snoqualmie Watershed lies King County’s healthiest natural habitat and wild salmon stocks. However, even the Snoqualmie has experienced the pressure of increased human population. Chinook salmon in the Snoqualmie have declined to less than 10% of historic levels and in 2001 American Rivers listed the Snoqualmie as one of our nation’s most endangered rivers.



In 1999, Chinook salmon and bull trout were listed as threatened under the federal Endangered Species Act, launching a new effort to restore habitat critical for salmonid

survival. In response, the Snohomish Basin Salmon Conservation Plan (Salmon Plan) was completed in 2005 with a strong technical foundation and clear priorities for restoration and protection efforts. The Salmon Plan, including the Snoqualmie and South Fork Skykomish watersheds, directs salmonid recovery efforts to where they will make the most difference. All local governments and numerous other organizations passed resolutions supporting implementation of Plan recommendations, paving the way for successful implementation.

The Snoqualmie Watershed is an increasingly important resource to all residents in the region who support saving wild salmon, buying locally grown produce, and who choose the watershed for hiking, biking, fishing, and other recreational activities. ***Snoqualmie 2015*** is the vision to ensure the watershed can support these multiple uses well into the future.

YEARS IN THE MAKING...

In 1995 King County launched Waterways 2000, a pilot effort to identify and protect a connected network of high quality habitat in the healthiest basins in King County. Of the sixteen basins that met the criteria established by the science panel, eleven of them are in the Snoqualmie/Skykomish watershed. This work set a solid basis for conservation efforts.

CLEAR AND MEASURABLE GOALS DIRECT OUR EFFORTS

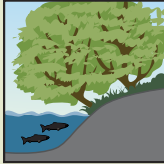
The Salmon Plan addresses the specific needs identified for salmonid recovery in the watershed:

1. Protection of spawning areas
2. Improvement of juvenile rearing habitat such as complex edge, quality riparian forests, and connected off-channel areas
3. Protection of forest cover across the basin

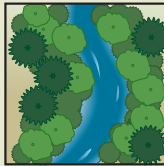
These needs serve as the starting point to guide actions to protect Chinook and other salmonid species.

Snoqualmie Watershed Goals for the Lower Snoqualmie, Tolt, and Raging Rivers

By the year 2015:



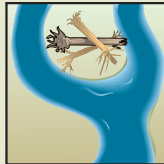
5.5 miles of restored edge habitat



125 acres of restored riparian conditions



70 acres of restored off-channel habitat



20 installations of large woody debris

Note:

There is additional important work needed in the tributary and the headwater areas that do not have quantitative goals. See Appendix B for more details on project sequencing.

The Salmon Plan outlines clear and achievable ten-year milestones for improvement in key habitat conditions critical for salmonid survival.

Applying the plan recommendations to conditions in the Snoqualmie Watershed, government and non-government partners developed a list of priority restoration and protection projects. The projects directly contribute to the 10 year watershed goals. The projects included have been evaluated for habitat value and project effectiveness. It is estimated that the region will need to spend approximately \$33 million on capital projects in the Snoqualmie Watershed to reach the plan's habitat goals by 2015.

PARTNERS IN IMPLEMENTATION

The success of this region's effort to recover Chinook salmon and save the natural wonder of the Snoqualmie rests with the contributions of a wide variety of organizations and individuals. No one group alone can do what is necessary. The Snoqualmie has a myriad of skilled and dedicated groups working on these common goals including:

- Cascade Land Conservancy
- City of Carnation
- City of Duvall
- City of North Bend
- City of Seattle
- City of Snoqualmie
- Ducks Unlimited
- King Conservation District
- King County
- Mountains To Sound Greenway Trust
- Snoqualmie Tribe
- Snoqualmie Watershed Forum
- Stewardship Partners
- Stilly-Snohomish Fishery Enhancement Task Force
- Tulalip Tribes
- Washington Trout

This book outlines a collaborative effort to build for recovery including detailed project descriptions. This book is intended to be updated on an annual basis to track our success in completing projects as well as adding new projects needed to meet our goals. Note the project tracking matrix that follows.

Project Tracking Matrix

Project Number	Lead Organization	Project Name	Current Project Phase	Total Cost
32	Cascade Land Conservancy	Middle Fork Snoqualmie River Valley Invasive Weed Removal Project	1st year completed	70,000
50	City of Carnation	Lower Tolt River Acquisitions	In negotiation	286,000
26	City of Duvall	Coe-Clemons Creek Restoration	Design, construction and planting for Phase 1 completed	250,000
34	City of North Bend	Ribary Creek Restoration	Phase 1 in design	60,000
36	City of Snoqualmie	Sandy Cove Park Restoration	Scoping	75,000
49	City of Snoqualmie	City of Snoqualmie Natural Area Acquisitions	49 parcels identified	unknown
40	Ducks Unlimited	Wetlands Enhancement and Creation at Chinook Bend Natural Area	Site survey completed, in design	640,000
27	King Conservation District	Conservation Reserve Enhancement Program (CREP) Plantings	Scoping	275,000
1	King County	Camp Gilead Off Channel Reconnection	Scoping	250,000
2	King County	Cherry Creek Mouth Restoration	Scoping	780,000
3	King County	Chinook Bend Reach Restoration	Scoping	600,000
4	King County	Deer Creek Channel Relocation	Scoping	150,000
5	King County	East Fork Weiss Creek Fish Passage Improvement	Scoping	450,000
41	King County	Fall City Natural Areas Acquisition	Parcels identified	1,500,000
6	King County	Gonneson Revetment Removal	Scoping	400,000
7	King County	Harris Creek Tributary Fish Passage Improvement	Scoping	200,000
8	King County	Lower Raging River Restoration	Scoping	3,250,000
9	King County	Lower Tolt River Floodplain Reconnection	In design	5,100,000
10	King County	McElhoe/Person Levee Setback	Scoping	1,000,000
11	King County	NE 52nd Place Fish Passage Improvement	Scoping	450,000
12	King County	NE 67th Place Fish Passage Improvement	Scoping	150,000
42	King County	Patterson Creek - State DNR Land Acquisition	Parcels identified	2,500,000
43	King County	Patterson Creek - Stevlingson Acquisition	Parcels identified	425,000
13	King County	Raging River Kerriston Reach Restoration	Scoping	200,000
44	King County	Raging River Preston Reach Acquisition	Funded	425,000
14	King County	Raging River Preston Reach Restoration	In design	780,000
15	King County	Snoqualmie River Byers Riparian Restoration	Scoping	120,000
16	King County	Snoqualmie River Fall City Reach Reconnection	Scoping	2,500,000
17	King County	Snoqualmie River Footbridge Off Channel Reconnection	Scoping	500,000

Project Number	Lead Organization	Project Name	Current Project Phase	Total Cost
45	King County	Snoqualmie River Goneson Levee Acquisition	Parcel identified	250,000
18	King County	Snoqualmie River Riparian Restoration	Ongoing	100,000
19	King County	Stillwater Habitat Restoration	Scoping	900,000
46	King County	Stossel Creek Acquisitions	Parcel identified	3,500,000
20	King County	Stout Property Riparian Restoration	Scoping	unknown
22	King County	Tolt River Natural Area Floodplain Reconnection	Scoping	1,300,000
47	King County	Tolt River Natural Area Acquisitions	Parcels identified and prioritized	2,500,000
48	King County	Tolt River San Souci Acquisitions	Partially funded	4,000,000
21	King County	Three Forks Natural Area Restoration	Restoration partially completed	50,000
39	Seattle City Light	Tolt River Restoration	Management plans in development	unknown
38	Snoqualmie Tribe	Snoqualmie Tribal Community Conservation Corps	Scoping	175,267
29	Stewardship Partners	Jubilee Farm Riparian Restoration	Scoping	65,000
28	Stewardship Partners	HerbCo Farm	Scoping	18,000
33	Stewardship Partners	Oxbow Farm Channel Enhancement	Scoping	46,000
24	Stewardship Partners	Cherry Valley Dairy Stream Enhancement	Scoping	45,000
30	Stewardship Partners	Lower Snoqualmie Restoration and Maintenance Crew	Ongoing	75,000
35	Stewardship Partners	Salmon-Safe Certification and Marketing	8 farms certified in the valley	25,000
31	Stilly-Snohomish Fisheries Enhancement Task Force	McCormick Park Restoration	Restoration underway	200,000
23	Washington Trout	Cherry Creek Floodplain Restoration	Design completed	621,600
37	Washington Trout	Shared Goats for Snoqualmie Salmon	Scoping	398,568
25	Washington Trout	Cherry Valley Pump and Flood Gate Facility	Monitoring in progress	37,650

HABITAT RESTORATION PROJECTS



INTRODUCTION

The Snohomish Basin Salmonid Recovery Technical Committee is a group of federal, state, local, and tribal scientists who have been convened to provide technical support to the Snohomish Basin salmon recovery effort. The technical committee developed various scientific documents determining Chinook conservation goals. These were the scientific foundation for the Snohomish Basin Salmon Conservation Plan that describes a strategic approach to recovering Chinook salmon populations in the Snohomish River basin.

The 2005 Snohomish Basin Salmon Conservation Plan identifies nine high priority problem areas impacting Chinook salmon populations and their habitat in the Snohomish Basin:

- Loss of channel area and complexity due to bank protection and diking of the river and major tributaries, cutting off the channel from its floodplain;
- Dearth of in-channel large woody debris;
- Flood flows that scour redds (fish nests made in gravel) at high frequencies;
- Increased sediment input to streams as a result of slope failures;
- Poor quality riparian forests;
- Loss of wetlands due to draining for land conversion that eliminates habitat and reduces water retention;

- In redd mortality due to siltation or water quality contamination;
- Urbanization (road construction, commercial and residential construction, additional bank hardening) that further reduces Chinook salmon viability in the basin; and
- Artificial barriers (dams, tide gates, diversions, culverts, pump stations) that prevent juveniles from reaching rearing habitat.

Though full recovery of Chinook will take more than 10 years, the projects listed in this section will provide critical support to the long-term recovery of salmonids and their habitat in the Snohomish Basin.

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restoration project map-front

restoration project map-back