

# **Klickitat Lead Entity Region Salmon Recovery Strategy**

March, 2003

## Klickitat Lead Entity

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SDS Timber Co.  
Yakama Nation Fisheries  
U.S. Geological Survey  
Natural Resources Conservation District  
Columbia Land Trust  
U.S. Forest Service  
Northwest Service Academy  
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## 1.0 Introduction

The Klickitat Region Salmon<sup>1</sup> Recovery Strategy documents the vision for salmonid recovery and the goals and other components of the strategy for salmonid habitat recovery and protection in the Klickitat Lead Entity's geographic area. The strategy will be used for a number of functions, including the following:

- guiding the identification, sequencing, and prioritization of salmonid habitat projects for funding through the Salmon Recovery Funding Board (SRFB);
- recruiting project sponsors and guiding their efforts towards higher priority areas and projects;
- enlisting the support and active participation of landowners and the community at large in the effort to restore and protect salmonid habitat;
- assessing completed projects to determine if the desired results are realized, and to refine and retune the strategy and project guidance for maximum benefit to salmonids;
- seeking sources of project funding to augment SRFB monies; and
- serving as a tool for education and community outreach.

## 2.0 Vision

The vision for salmonid recovery is: "Within ten years, restore salmon, steelhead, and trout populations to healthy, self-sustaining, and harvestable levels and improve the habitat on which fish rely, with strong community support and participation in the Klickitat Lead Entity geographic area."

## 2.1 Mission

The Klickitat Citizen's Review Committee will support salmon recovery by identifying credible and fundable habitat protection and enhancement projects. This process will support related programs and activities that produce sustainable and measurable benefits for fish and fish habitat.

## 2.2 Goals

### Short Term Goals

- By June 30, 2003, prioritize geographic areas.
- By the year 2004, identify the habitat factors limiting salmonid recovery in the White Salmon River basin.
- By the year 2004, develop and implement a campaign to increase awareness of the Klickitat Lead Entity program and the opportunities for funding salmonid habitat projects.
- By the year 2004, make the public aware of projects that have been undertaken and are contributing to salmonid habitat recovery.
- Have at least five grant applications for prioritization in the fifth round of SRFB funding.
- By the year 2004, compile information on salmonid stock status and identify data gaps.

### Long Term Goals

- By the year 2007, have projects completed or underway that will mitigate key limiting factors in each of the top four priority geographic areas.
- By the year 2007, reduce the threat of substantial salmonid habitat degradation in the top four

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<sup>1</sup> In this strategy the terms "salmon" and "salmonid" are used interchangeably to refer to the family salmonidae, which includes chinook and coho salmon, steelhead, and cutthroat and rainbow trout.

- priority geographic areas.
- By the year 2007, have program in place to evaluate the effectiveness of restored habitat (including cost-benefit analysis) and monitor the changes in salmonid populations.
- By the year 2007, have outreach programs established with schools, tribal, and community organizations for awareness of and participation in protecting and monitoring areas successfully restored for salmonids.
- By the year 2010, have a salmonid stock assessment for the Klickitat Lead Entity area.

### **2.3 Measuring Success**

Progress will be measured by the number of man-made/caused limiting habitat factors that are mitigated. The criterion is whether or not the cause(s) of the limiting factor has/have been mitigated to the extent practicable. Success will be measured by the return of healthy native salmonids to harvestable and self-sustaining levels. When the statewide strategy for monitoring watershed health is established pursuant to SSD 5627, it will be incorporated in the Klickitat Salmon Recovery Region Strategy, as may be appropriate and practicable.

### **2.4 Socio-Economic Forces that Limit or Support the Vision and Goals**

#### Limiting Forces

- A number of residents in the Klickitat Lead Entity's geographic area oppose the acquisition of property by conservation organizations and government agencies.
- Actions that affect the profitability of the natural resource-based sectors of the economy can have significant impact on individuals and the community at large.
- A lack of understanding within the community regarding how man and salmonids can coexist.
- A lack of understanding of the options for salmonid recovery without harming the economic base.

#### Supporting Forces

- A number of residents in the Klickitat Lead Entity's geographic area are dependent on a healthy tourism industry and benefit from the visitors drawn to the area by good sport fishing and other outdoor recreation activities.
- There are voluntary habitat recovery and protection initiatives that have been underway in the Klickitat Lead Entity area for many years. Their success can be built upon.
- Tribes rely on self-sustaining populations of species of salmonid for revenue and for custom and tradition.
- Agricultural and forest landowners have access to public and private programs to help fund riparian efforts that will benefit salmonid habitat.
- The natural areas of the region have retained significant species diversity and abundance valued and respected by many of the citizens who choose to live in the Klickitat Lead Entity's geographic area.

#### Addressing Limiting Forces

The Klickitat Lead Entity will address the limiting factors through such efforts as the following:

- informing landowners about tax diversion opportunities and sources of funding available to compensate them for loss of revenues from historic land uses, such as the Natural Resource Conservation Service's CREP (Conservation Reserve Enhancement Program) and Washington Department of Natural Resources' FREP (Forestry Riparian Easement Program);

- encouraging landowners who have participated in successful conservation easement and acquisition projects to discuss the benefits and address the concerns of other landowners;
- publicizing and encouraging other volunteer efforts such as Yakama Salmon Corps and AmeriCorps programs for young men and women; and
- publicizing projects that benefit salmonids and how the concerns of residents were addressed.

## 2.5 Current State of Scientific Knowledge that Limits or Supports the Vision and Goals

### Limiting State of Scientific Knowledge

- The limiting habitat factors analysis for Water resource Inventory Area (WRIA) 29 does not adequately address the Little White Salmon River or White Salmon River basins above the barriers present in the lower reaches of these rivers.
- There is limited information on stock status.
- There is no information on the frequency at which steelhead can access habitat above the waterfall on the Little Klickitat River.
- There is little information on the surface water and groundwater relationships in lower Klickitat River tributaries.
- There is little information on the surface water and groundwater relationships in Little White Salmon River and White Salmon River tributaries.

### Supporting State of Scientific Knowledge

- Pursuant to the State Watershed Planning Act, efforts to develop “level 1” assessments of water resources and habitat are near completion in both WRIA 29 and WRIA 30.
- Assessments are underway (e.g., Swale Creek Assessment and the Klickitat River Fish Barriers Survey) and proposed (e.g., Steelhead Passage Assessment and the Assessment of the White Salmon Watershed using the Ecosystem Diagnosis and Treatment methodology) that will increase the knowledge base.

## 3.0 Policy Framework

The primary salmonid species guiding habitat prioritization are those listed under the Federal Endangered Species Act and spring-run chinook salmon, regardless of Endangered Species Act status, due to their cultural significance.

The Klickitat County Lead Entity will use the following policy framework for habitat protection and restoration.

- Recognize that adequate protection may preclude the need for future restoration.
- Use scientific principles and information consistent with recovery of healthy salmonid populations as the basis to identify and establish geographic priorities for habitat protection and restoration. Science-based principles include:
  - freedom for stream channel movement;
  - consideration of the time needed for regeneration of the natural process that salmonids are dependent upon at various life stages;
  - maintain biological diversity;
  - improve connectivity of critical habitats;
  - analysis of the overall landscape context of the watershed; and
  - incorporate the needs and impacts of people in the analysis and priority-setting process.

- Focus on salmonid habitat protection and restoration of higher priority geographic areas.
- Incorporate socio-economic and cultural based principals in planning and priority setting processes. Socio-economic and cultural based principals include following:
  - consideration of cultural factors, such as the special significance of spring-run chinook salmon to native peoples;
  - consideration of economic factors;
  - consideration of tax-base factors;
  - consideration of recreation and tourism factors; and
  - consideration of factors affecting quality of life.

### **3.1 Relationship to Other Salmon Recovery Efforts**

#### Relationship to Other Policies

- The technical policies of the strategy are based on the policies set by the Joint Natural Resource Council.
- The vision for salmonid recovery is consistent with the State and Federal definitions of recovery.

#### Relationship to Other Programs

- As they come available, the strategy will draw from the work products of the watershed planning efforts underway pursuant to RCW 90.82. Some Citizens Review Committee members are members of the WRIA 29 or WRIA 30 planning unit.
- The strategy considers information from the subbasin summaries generated under the Northwest Power Planning Council's processes.
- The strategy considers information from the habitat limiting factors analyses that were published by the Washington Conservation Commission pursuant to RCW 77.85.
- The Klickitat Citizens Review Committee will participate in Ecosystem Diagnosis and Treatment modeling efforts with the intent of utilizing the modeling results in project prioritization.

The Klickitat Citizens Review Committee recognizes the above referenced studies and model are works in progress and may have limitations. Their work products will be used as tools, but not the answer. They will be revised as more data and information become available.

#### Relationship to Regulations

- The strategy recognizes the regulatory driver for salmonid recovery and considers whether or not a species is listed under the Endangered Species Act in the prioritization of fish species and the strategy will consider critical habitat designations in identifying priority areas.

### **3.2 Tools and Resources for Strategy Implementation**

A number of organizations (Washington Departments of Fish and Wildlife, Ecology, and Natural Resources; Yakama Nation Fisheries; Conservation Districts; timber companies; US Geologic Survey and Natural Resource Conservation Service; etc.) have technical specialists actively working within the Klickitat Lead Entity's geographic area. Support from these organizations will be sought to fill needs related to such functions as technical advice, project sponsorship, and liaison with landowners.

### 3.3 Habitat and Stock Prioritization

The Klickitat Citizens Review Committee's recovery approach is to protect, restore, or enhance the areas that provide the most benefit to salmonids.

#### Significant Sub-watershed Identification

Significant sub-watersheds will be identified in order to help guide protection and restoration programs in the Klickitat Lead Entity's geographic area. A sub-watershed will be determined to be significant if any one of the following criteria is met:

- the sub-watershed was identified as a stronghold for the species;
- the sub-watershed provides the primary spawning and/or rearing habitat within the watershed;
- the sub-watershed is the only known occupied habitat within a watershed and is fairly isolated from populations in other watersheds, and thus is significant from a distribution standpoint; or
- the sub-watershed is known or strongly suspected to support a stable, strong population of a species.

#### Stock Prioritization

Salmonid stocks were categorized into three tiers in order to help guide protection and restoration programs in the Klickitat Lead Entity's geographic area. Tier 1 is the highest priority and is composed of salmonid stocks that are either listed under the Federal Endangered Species Act or are native to the watershed and have exceptionally high cultural value. Tier 2 stocks are all naturally spawned salmonids that are native to the watershed, but are not in Tier 1. Tier 3 stocks are all naturally spawned salmonids that are not native to the watershed and do not have a negative impact on Tier 1 or 2 species.

##### Tier 1:

- Lower Columbia River Evolutionary Significant Unit (ESU) Chinook Salmon (*Oncorhynchus tshawytscha*);
- Spring Run Chinook Salmon (*Oncorhynchus tshawytscha*);
- Summer Run Mid-Columbia River ESU Steelhead (anadromous *Oncorhynchus mykiss*);
- Winter Run Mid-Columbia River ESU Steelhead (anadromous *Oncorhynchus mykiss*);and
- Bull Trout (*Salvelinus confluentus*).

##### Tier 2:

- Lower Columbia River ESU Coho Salmon (*Oncorhynchus kisutch*);
- Resident Cutthroat Trout (*Oncorhynchus clarki*);
- Coastal Cutthroat Trout (*Oncorhynchus clarki*);
- Mountain Whitefish (*Prosopium williamsoni*); and
- Rainbow Trout (resident *Oncorhynchus mykiss*).

##### Tier 3:

- Coho Salmon (*Oncorhynchus kisutch*) in WRIA 30;
- Tule Fall Chinook (*Oncorhynchus tshawytscha*).and
- Upriver Bright Fall Chinook (*Oncorhynchus tshawytscha*).

#### **4.0 Klickitat Lead Entity Area**

The Klickitat Lead Entity geographic area encompasses WRIA 30 and the area of WRIA 29 extending from the Little White Salmon River east, inclusive. Most of the land area and nearly all salmonid habitat in WRIA 30 are within the Klickitat River basin. The Klickitat River drains approximately 1,350 square miles of Klickitat and Yakima Counties and enters the Bonneville Pool of the Columbia River at river mile (RM) 180.4. That portion of WRIA 29 that is within the Klickitat Lead Entity's geographic area includes the Little White Salmon River and White Salmon River basins and a few small drainage systems that flow directly into the Columbia River, including Catherine, Jewett, and Major Creeks. The Little White Salmon River drains approximately 135 square miles of Skamania County and enters the Bonneville Pool of the Columbia River at RM 162. The White Salmon River drains approximately 386 square miles of Yakima, Skamania, and Klickitat Counties and enters the Bonneville Pool of the Columbia River at RM 167.

#### **4.1 Habitat Conditions in the Klickitat River Basin**

The following outline highlights salmonid distribution within the Klickitat River basin.

- Steelhead spawning in the mainstem Klickitat River is concentrated between RM 5.2 and RM 50, with occasional spawning above Castile Falls (RM 64). Tributary spawning occurs in Swale, Wheeler, Summit, and White Creeks and the Little Klickitat River.
- Bull trout – US Fish and Wildlife Service recently proposed the Klickitat River basin to be one of three “core areas” within the Lower Columbia Recovery Unit for bull trout and has proposed designating the following areas as critical habitat:
  - the mainstem Klickitat River from its confluence with the Columbia River to Castile Falls (RM 64.2);
  - the West Fork of the Klickitat River from its confluence with the Klickitat River at RM 63.0 upstream 4.5 miles (Per US Fish and Wildlife, “maintaining the resident bull trout population in the West Fork Klickitat River and its tributaries is essential because it is the only known population in the Klickitat drainage.”);
  - Little Muddy Creek for a distance of 2.1 miles to the confluence with Crawford Creek and extending 0.8 miles up Clearwater Creek and 2.1 miles up Trappers Creek; and
  - Fish Lake Stream for a distance of 6.0 miles to the confluence with Two Lakes Stream and extending 4.3 miles up an unnamed tributary that meets Fish Lake Stream at RM 5.0 and also extending 0.8 miles up Two Lakes Stream.
- Spring chinook spawning occurs in the mainstem Klickitat River between RM 53.8 and RM 64. Spawning has been observed in the mainstem Klickitat River as far up as RM 84, but little spawning occurs above Castile Falls at RM 64. Tributary spawning is not known to occur, but juveniles have been found rearing in the lower reaches of several tributaries.
- Fall (upriver bright and Tule) chinook spawning occurs in the mainstem Klickitat River between RM 5.2 and RM 42.0.
- Coho spawning occurs in the mainstem Klickitat River between RM 5.2 and RM 42.0, as well as in Summit, White, and Swale Creeks and the lower Little Klickitat River.
- Resident rainbow trout are found throughout the Klickitat River basin. Naturally producing populations exist within the mainstem from RM 85 to the Columbia River confluence and in virtually all tributaries.

- Resident cutthroat trout were observed in two tributaries of the Klickitat basin, McCreedy and Summit Creeks, in limited numbers during census work of the 1980s. In the late 1990s, known locations of cutthroat trout were reinvestigated with no cutthroat trout observed. Coastal cutthroat trout are known to occur in the Klickitat basin, but historic and present distribution and status are relatively unknown.

The northern half (roughly 56%) of the Klickitat River basin is within the Yakama Nation Reservation. Approximately 90% of the non-reservation land in the basin is privately held. Approximately 75% of the basin is forested and mostly managed for commercial timber production. Most of the forestlands have active grazing allotments. Most of the remaining 25% is agricultural land and approximately 25% of the arable land is irrigated.

The following are key limiting factors identified in the SALMONID HABITAT LIMITING FACTORS FINAL REPORT WATER RESOURCE INVENTORY AREA 30 KLICKITAT WATERSHED:

#### Access

- Poor design and operation of the fishway/tunnel complex at Castile Falls;
- difficult passage at Lyle Falls;
- difficult passage at Little Klickitat River Falls;
- restoration of Lower Snyder Creek; and
- inaccessible or partially assessable habitat due to numerous road culvert barriers throughout the watershed.

#### Floodplains/Wetlands/Riparian Areas

- Degraded habitat along the Little Klickitat River (above RM 12);
- degraded riparian habitat along Swale Creek (RM 0 to RM 14); and
- degraded meadow and riparian habitat along the mainstem Klickitat River above Castile Falls (RM 77 to RM 85).

#### Sediment

- Naturally-generated glacial sediments entering the Klickitat River at RM 53.8 and RM 63.1;
- damaged meadows and eroded/compacted streambanks along the Klickitat River (RM 77 to RM 85);
- eroded/compacted streambanks along the Little Klickitat River (above RM 12);
- eroded/compacted streambanks along Swale Creek (RM 0 to RM 14); and
- chronic erosion from stream-adjacent logging roads (various locations in the watershed).

#### Water Quantity/Quality

- Lack of riparian shading along Swale Creek (RM 0 to RM 14); and
- lack of riparian shading along the Little Klickitat River (above RM 12).

## **4.2 Habitat Conditions in the White Salmon River Basin**

The single largest loss of anadromous fish habitat in the White Salmon River basin occurred with the construction of Condit Dam and the resultant loss of usable habitat above the barrier. The White Salmon River supports 1.2 miles of anadromous fish spawning and rearing habitat below the powerhouse and another 1.8 miles between the powerhouse and the dam. Approximately 40 miles of habitat exists above the dam, but is inaccessible to anadromous fish. The second major habitat loss occurred when the lower

White Salmon River was flooded after the construction of Bonneville Dam.

The US Forest Service classified federal managed stream channels in the White Salmon River basin based on the Rosgen classification system, which incorporates channel slope, meander width ratio, channel entrenchment, sinuosity, and width to depth ratio. Rosgen “A and B” channels have moderate to low sinuosity, moderate to low width to depth ratio, moderate to high gradient and high to moderate entrenchment. Type “A” and “B” channels are dominant in White Salmon River watershed and currently provide excellent rainbow trout rearing habitat and limited spawning habitat.

US Fish and Wildlife Service recently proposed the White Salmon River basin to be one of three “core areas” within the Lower Columbia Recovery Unit for bull trout, and has proposed critical habitat designation for the mainstem of the White Salmon River from its confluence with the Columbia River upstream to RM 16.

The USDA Forest Service manages 50% of the land within the White Salmon River basin. The President’s Forest Plan (ROD) categorizes the basin as a Tier 2 Key Watershed. National Forest habitat is considered fair to excellent depending on the location. Habitat in the lower mainstem and tributaries (state and private ownership) is judged to be poor to excellent. Current problems include increased peak flows, sedimentation, lack of large woody debris, increased width-to-depth ratios, lack of riparian vegetation, and elevated water temperature.

Steps to address the gap between the current and desired conditions for the White Salmon River basin include:

- increase riparian vegetation;
- reduce sediment delivery to streams;
- slow runoff rates;
- increase water storage capacity and reduce stream energies;
- closure on and implementation of how fish passage will be addressed at Condit Dam;
- enhance channel complexity; and
- ensure adequate recruitment of large woody debris into the system.

### **4.3 Habitat Conditions in the Little White Salmon River Basin**

Historically, the Little White Salmon River had about 2 miles of anadromous fish spawning and rearing habitat, almost all of which was eliminated by the construction of Bonneville Dam and the inundation of this habitat. A barrier at the Little White Salmon Hatchery limits fish passage for the short distance between the hatchery barrier and the natural barrier. There is limited potential anadromous habitat above the natural barrier due to the steep gradient and other barrier falls locate between the Little White Salmon Hatchery and the Willard Hatchery at RM 6. Type “A” and “B” channels are dominant in the Little White Salmon River watershed and provide excellent rainbow trout rearing habitat and limited spawning habitat.

The USDA Forest Service manages approximately 79% of the Little White Salmon River basin. The President’s Forest Plan (ROD) categorizes the basin as a Tier 2 Key Watershed. Habitat in the Little White Salmon River basin is considered fair to excellent depending on the location. Throughout the basin there continues to be a need to restore riparian vegetation, reduce sediment delivery to streams, enhance channel complexity, and ensure adequate recruitment of large woody debris into the system. The Washington Department of Ecology has designated stream segments of the Little White Salmon River subbasin as water quality impaired. The 303(d) list identifies segments that do not meet the standards of the Federal Clean Water Act. This basin had pH below 6.5 on a number of occasions, but (as reported in the Subbasin Summary) the Forest Service believes this data may be suspect to equipment or operator

error.

Steps to address the gap between the current and desired conditions for the Little White Salmon River basin include:

- restore riparian vegetation;
- reduce sediment delivery to streams;
- enhance channel complexity; and
- ensure adequate recruitment of large woody debris into the system.

## 5.0 Encouraging Participation in Priority Actions

Project sponsors will be encouraged to participate in high priority actions by the following means:

- the Klickitat Lead Entity will recruit project sponsors for high priority actions;
- the Klickitat Lead Entity Region Salmon Recovery Strategy will be distributed to people and organizations with the capacity to play a primary or supporting role the implementation of priority actions;
- prospective project sponsors will be made aware that priority actions will be more competitive when projects are prioritized for funding; and
- the Klickitat Lead Entity will promote the activities and accomplishments of projects to the public and organizations to foster understanding of salmon recovery as a non-threatening change to established socio-economic values.

## 5.1 Project Ranking Process

The Klickitat Citizens Review Committee has established evaluation criteria and a weighting scheme for ranking projects on its project list that is submitted the SRFB (Salmon Recovery Funding Board). Committee members score each project based on seven criteria. A project can earn up to 20, 15, 10, or 5 points for each criterion, with a maximum total score of 100 points possible. The project scores of all Committee members are then totaled to determine the project list ranking.

<u>Criteria</u>	<u>Possible Score</u>
• What is the project’s benefit to salmonids? .....	20 Points
• How does the project integrate with other salmon recovery efforts? .....	20 Points
• What technical process was used for identifying this project? .....	5 Points
• Is the project approach to protection or restoration cost-effective and well designed? .....	15 Points
• What expertise and experience does the project sponsor have in project management and implementation? .....	10 Points
• What is the certainty of success? .....	20 Points
• How does the project address socio-economic and cultural values? .....	<u>10 Points</u>
	Total: 100 Points

The technical committee evaluates proposed projects for technical merit prior to the Klickitat Citizens Review Committee ranking them. For the fourth round of prioritizing projects for SRFB funding, the Technical Advisory Group ranked projects base on five criteria, salmon benefits, certainty of success, project design, monitoring, and cost effectiveness. For each criterion, projects were given a score of high (three points), medium (two points), or low (one point).

## 5.2 Priorities in Habitat Protection, Restoration, and Enhancement, and Assessment

### Protection

Protecting properly functioning stream channel and floodplain habitat from degradation is a priority. Protecting biological productivity and diversity by preventing the introduction and spread of invasive aquatic plants (e.g., Eurasian watermilfoil), animals (e.g., New Zealand mudsnail), and pathogens and parasites (e.g., *Myxobolus cerebralis*) is also a priority. The scope and approach of protection projects should be commensurate with the quality of the habitat, its benefit to fish, and the nature and timing of the threats. They should also provide for the most cost-effective use of resources. Tools for protecting habitat may include conservation agreements or easements, water rights banking, incentives, acquisition, and/or public information/relations.

### Restoration

Restoring the complexity of the stream channel and floodplain is a priority. Restoration projects may be accomplished with both short-term and long-term objectives. For example, large woody debris may be secured to stabilize erosive banks, allowing interim stream bank protection and salmonid habitat, while passive restoration and re-vegetation will ensure proper functioning riparian conditions for the long term.

Restoration measures may include:

- provide fish access to disconnected stream sections;
- remove dikes (or similar structures) that prevent stream channel migration;
- remove man-made passage barriers, particularly culverts;
- screen water intakes to prevent impingement or stranding of juvenile fish;
- use mechanical means to encourage natural development of riparian areas;
- implement upland management practices that reduce sediment delivery to streams;
- use engineering techniques to increase complexity of permanently altered habitats;
- purchase water shares for in-stream flow benefits; and/or
- plant native vegetation.

### Assessment

The following are some of the assessments needed to improve our understanding of salmonid habitat and productivity in the Klickitat Lead Entity area.

- Little Klickitat River Waterfall Passage – Potentially, about 25 miles of fair to excellent steelhead habitat exists above the 16-foot waterfall at RM 6.1 on the Little Klickitat River. In order to prioritize the area above the waterfall, credible information is needed on the stream flow conditions required for steelhead to pass the waterfall and on the frequency with which steelhead can access the habitat above the waterfall.
- Assessment of the White Salmon River Basin – The WRIA 29 Limiting Habitat Factors Analysis does not adequately address the area above Condit Dam in the White Salmon River basin. An assessment of the White Salmon River basin, such as a rigorous habitat limiting factors analysis and/or an Ecosystem Diagnosis and Treatment modeling study, is needed to support both planning and project prioritization in the basin.
- Resident and Coastal Cutthroat Survey – Investigation efforts are needed to determine the distribution and status of resident and coastal cutthroat trout populations in the Klickitat

basin.

- Hydrology – A clear understanding of groundwater and surface water is needed to effectively guide all facets of fish restoration and enhancement activities. A better understanding is needed of groundwater to surface water relationships, particularly for the Little Klickitat River, Wheeler Creek, Dillacort Creek, Swale Creek, Little White Salmon River, and White Salmon River.
- Flow Gages – Flow gaging for the Little White Salmon River has been identified as a high priority in the WRIA 29 Assessment. Turbidity should also be measured during winter months to track long-term trends.

### 5.3 Projects Funded to Date

To date, the following seventeen projects in the Klickitat Lead Entity area have been funded through the SRFB process:

<u>Project</u>	<u>Project Type</u>	<u>Sponsor</u>
• Snyder Creek Fish Passage (Mill #1)	Restoration	Klickitat County
• Klickitat Mill Restoration #2	Restoration	Klickitat County
• Rootwad Distribution and Storage	Restoration	Klickitat County
• Swale Creek Ponds	Restoration	Klickitat County
• Swale Creek Riparian Restoration	Restoration	Klickitat County
• Lacey In-Stream Project	Restoration	Klickitat County
• Little Klickitat Riparian Restoration	Restoration	Klickitat County
• Swale Creek Restoration Assessment	Non-Capital	Yakama Nation Fisheries
• Surveyor’s Creek Passage Enhancement Fisheries	Restoration	Yakama Nation
• Klickitat River Meadows Restoration	Restoration	Yakama Nation Fisheries
• Diamond Fork Creek Meadows Restoration	Restoration	Yakama Nation Fisheries
• Dillacourt Canyon	Acquisition	Columbia Land Trust
• Logging Camp Creek Fish Passage	Restoration	Klickitat County
• Projects Maintenance	Non-Capital	Klickitat County
• Klickitat River Fish Barriers Survey	Non-Capital	Northwest Service Academy
• Trout Creek Passage Improvement	Fish Passage	Yakama Nation Fisheries
• Logging Camp Canyon – Phase 1	Acquisition	Columbia Land Trust

### 6.0 Klickitat Lead Entity and Committees

Klickitat County was established as Lead Entity 1999 pursuant to Chapter 77.85 of the Revised Code of Washington (RCW) for a geographic area composed of WRIA 30 and the area of WRIA 29 extending from the Little White Salmon River east, inclusive. As the Klickitat Lead Entity, Klickitat County formed the Klickitat Citizens Review Committee in 1999. That same year, the Conservation Commission developed habitat limiting factors analyses for WRIs 29 and 30. Since it was established, the Klickitat Citizens Review Committee has developed prioritized project lists with the advice and support of the Technical Advisory Group, which is an independent group of scientists and resource managers with expertise and interest in the Klickitat Lead Entity’s geographic area.

## **6.1 Klickitat Citizens Review Committee**

A major function of the Klickitat Citizens Review Committee is to fulfill the citizens committee functions prescribed in RCW 77.85, which are as follows:

- evaluate projects proposed to promote salmon habitat (RCW 77.85.050(1)(b));
- compile a list of habitat projects, establish priorities for individual projects, define the sequence for project implementation, and submit these activities as the habitat project list (RCW 77.85.050(1)(c));
- identify potential federal, state, local, and private funding sources (RCW 77.85.050(1)(c));
- describe the adaptive management strategy (RCW 77.85.060(2)(e));
- develop and implement habitat project lists that maximize the benefits from project mitigation while reducing project design and permitting costs (RCW 77.85.100(1)); and
- coordinate voluntary collaborative efforts between habitat project proponents and mitigation project proponents (RCW 77.85.100(4)).

Additionally, the Klickitat Citizens Review Committee seeks to increase community support for the salmon recovery process. It provides guidance and leadership to the community in accomplishing salmon recovery, with positive benefits to the participating landowners and the community at large.

## **6.2 Mission Statement**

The Klickitat Citizen's Review Committee will support salmon recovery by identifying credible and fundable habitat protection and enhancement projects. This process will support related programs and activities that produce sustainable and measurable benefits for fish and fish habitat.

## **6.3 Bylaws**

### Name

The name of the committee shall be the "Klickitat Citizens Review Committee."

### Geographic Area of Concern

The Committee's geographic area of concern is Water Resource Inventory Area 30 and Eastern Water Resource Inventory Area 29 in Klickitat, Skamania and Yakima Counties containing salmonid species.

### Purpose

The purpose of the Committee is to fulfill the requirements of the citizens committee pursuant to Chapter 77.85 RCW (ESHB 2496 Salmon Habitat Recovery Funding Act). Specifically, this includes establishing and prioritizing projects on or within the Klickitat salmon recovery region and the development and adoption of "Klickitat Salmon Recovery Region Strategy."

### Nature of the Organization

The function of the Committee is to serve as an advisory committee to the Salmon Recovery Funding Board. The Committee shall be staffed and administered by the Klickitat Lead Entity, which is Klickitat County.

### Duration

The Committee shall continue its work until dissolved by any of the following: the Legislature, SRFB, Washington Department of Fish and Wildlife, the Governor, or the Klickitat Lead Entity.

### Committee Membership

The Committee shall consist of ten voting members (identified by Klickitat Lead Entity) unless changed by the Klickitat Lead entity. Committee members shall serve three-year terms. The Committee may submit to the Klickitat Lead Entity nominations for appointment to the Committee. Previous members may serve at the Lead Entity's discretion.

#### Meetings

Meetings shall be open to the public and advertised to the extent practicable. The regular meeting schedule shall be the first Thursday of each month. Meeting frequency, time and location shall be at the discretion of the Committee. Meeting minutes will be recorded and distributed to all Committee members prior to the next meeting.

#### Absentee Policy

A Committee member seat (as represented by the primary or alternate appointee) that misses three consecutive meetings or four meetings in a 12-month period may forfeit his/her position on the Committee membership. The Lead Entity is responsible for Committee member appointments.

#### Quorum

A quorum shall consist of a majority of filled seats. A quorum is required for holding an official meeting. Meetings will occur when there is not a quorum though no decisions will be made.

#### Passing Vote

Consensus shall be the preferred method of decision-making. If consensus cannot be reached on any matter, then a vote will be called and must receive a majority to pass.

#### Bylaws

Committee members shall operate with written ground rules that specify its mission and operating procedures. Ground rules may be altered by Lead Entity with recommendations from Committee members.

### **6.4 Technical Committee**

The role of the technical committee is to provide solid technical advice to the Klickitat Citizens Review Committee on the identification, sequencing and prioritization of projects for salmonid recovery and the assessment of the technical merits of candidate projects submitted to the Klickitat Citizens Review Committee.