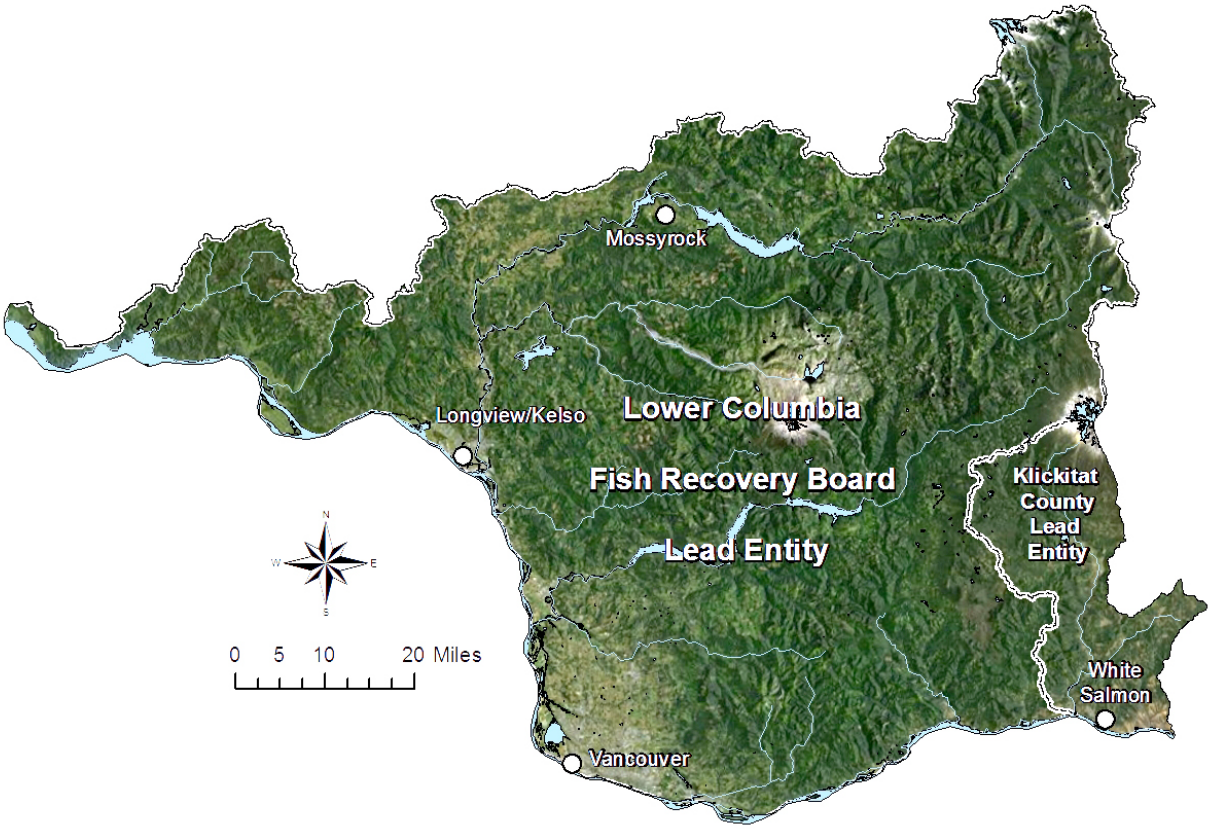
Lower Columbia River Salmon Recovery Region



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Region Overview

Geography

The Lower Columbia River Salmon Recovery Region encompasses Clark, Skamania, Cowlitz and Wahkiakum counties, and portions of Pacific, Lewis and Klickitat counties.

Water Resource Inventory Areas (WRIA)

Willapa (24) Chinook and Wallacut Rivers, Grays-Elochoman (25), Cowlitz (26), Lewis (27), Salmon-Washougal (28), and Wind/White Salmon (29)

Federally Recognized Tribe

Cowlitz Indian Tribe

Endangered Species Act Listings

Table 11. Lower Columbia River Salmon Recovery Region Listed Species

Species Listed	Listed As	Date Listed
Lower Columbia River Chinook	Threatened	March 24, 1999
Lower Columbia River Coho	Threatened	June 28, 2005
Columbia River Chum	Threatened	March 25, 1999
Lower Columbia River Steelhead	Threatened	March 19, 1998
Bull Trout	Threatened	June 10, 1998

Salmon Recovery Plan

Table 12. Lower Columbia River Salmon Recovery Region Recovery Plan

Lower Columbia River Salmon Recovery Region Recovery Plan	
Regional Organization	Lower Columbia Fish Recovery Board
Plan Timeframe	25 years
Actions Identified to Implement Plan	More than 350
Estimated Cost	$127 million (next six years, tier one reaches only)
Status	In July 2013, NOAA adopted the lower Columbia domain recovery plan[1] incorporating the Oregon, Washington, and White Salmon management plans, and the estuary module.
Implementation Schedule	A detailed strategy has been completed for implementing habitat actions in the recovery plan. SalmonPORT identifies reach-level

[1] *ESA Recovery Plan for Lower Columbia River Coho Salmon, Lower Columbia River Chinook Salmon, Columbia River Chum Salmon, and Lower Columbia River Steelhead*, NOAA, June 2013

Lower Columbia River Salmon Recovery Region Recovery Plan	
	restoration needs and priorities, and tracks habitat protection and restoration projects. The system also identifies and provides the ability to track implementation of all recovery plan actions, by federal and state agencies, local governments, and tribes.
Web Information	Lower Columbia Fish Recovery Board website: www.lcfrb.gen.wa.us and SalmonPORT Klickitat County Lead Entity Web page

Region and Lead Entities

The Lower Columbia Fish Recovery Board (Board) was established in Revised Code of Washington 77.85.200 to oversee and coordinate salmon and steelhead recovery efforts in the Lower Columbia River Salmon Recovery Region with the exception of WRIA 29b. The law also designated the Board as the lead entity for the entire region, except for the White Salmon River. The Board serves as the citizen's committee and final approval authority for the region's project list.

The Klickitat County Lead Entity was established under Revised Code of Washington 77.85.050 in 1999 to serve a geographic area consisting of WRIA 29b White Salmon and WRIA 30 Klickitat. WRIA 31 Rock-Glade was added to the Klickitat County Lead Entity's geographic area in 2011. WRIA 29b is in the Lower Columbia River Salmon Recovery Region and WRIAs 30 and 31 are in the Middle Columbia River Salmon Recovery Region. Klickitat County is the lead entity.

Regional Area Summary Questions and Responses

Describe the process and criteria used to develop allocations across lead entities or watersheds within the region?

The Lower Columbia Salmon Recovery Region currently receives an allocation of 15 percent of the statewide total for habitat projects by the SRFB. The Lower Columbia Fish Recovery Board is the lead entity for 17 of the 18 subbasins in the region. Klickitat County serves as the lead entity for the remaining subbasin, the White Salmon River. The Board does not review White Salmon River proposals. In prior years, $135,000 or 5% of the Lower Columbia project allocation has been made available to the Klickitat County Lead Entity for projects in the White Salmon River. The Klickitat County Lead Entity chose not to submit White Salmon projects this grant round. As a result, the full Lower Columbia funding allocation was committed to LCFRB project list.

The allocation of funding within and across the watersheds in the Lower Columbia Fish Recovery Board Lead Entity area is accomplished through a habitat strategy and project evaluation and

ranking process based on the goals, measures, actions, and priorities of the *Lower Columbia Salmon Recovery and Fish & Wildlife Subbasin Plan* (recovery plan)[2].

The *Lower Columbia Habitat Strategy*[3](habitat strategy) identifies protection and restoration needs and priorities using the same analytical methods and criteria across the region's 17 subbasins. The Board's project evaluation and ranking process uses the strategy as the basis for assessing a project's potential benefits to fish. It also applies uniform criteria in assessing each project's certainty of success and cost. As a result, the ratings and scores for projects are comparable allowing projects to be ranked and funding allocated within and across subbasins.

Habitat Strategy

The Lower Columbia Salmon Recovery Region includes more than 1,987 anadromous reaches encompassing 2,280 river miles and 268 estuary shoreline miles. Each reach supports from one to six Endangered Species Act-listed salmon and steelhead populations.

The *Lower Columbia Habitat Strategy* is based on and is consistent with the goals, measures, actions, and priorities of the recovery plan. It identifies reach-level restoration needs for both a multi-species and individual population basis. The strategy is based on an analysis of species presence, key life history stages affected, and key habitat limiting factors. During project development, the Lower Columbia Fish Recovery Board staff works with project sponsors to ensure that their proposals are consistent with the priorities in the strategy.

Reaches are ranked using a four-tier approach with Tier 1 reaches being the highest priority for protection and/or restoration and Tier 4 reaches being the lowest. A reach's tier designation is based on the following factors:

- The number of populations using a given reach;
- The recovery priority of the populations;
- The importance of the reach (actual and potential) to the performance of each population; and
- Potential use by other Columbia River basin stocks.

In addition to ranking reaches, the strategy uses the Ecosystem Diagnosis and Treatment model to identify and rank:

[2] Lower Columbia Fish Recovery Board, 2010, 2013
[3] www.lowercolumbiasalmonrecovery.org

- The relative importance of restoring or preserving conditions within a specific reach; and
- Reach-specific habitat restoration needs based on the reach-specific life history stages and their associated limiting factors. Restoration needs or habitat attribute priorities within a reach are rated as high, medium, or low.

As funding has permitted, additional analyses have been conducted within selected subbasins to identify potential specific project sites within priority reaches.

The strategy is incorporated in SalmonPORT. It includes an interactive map of salmon recovery and watershed health projects associated with a reach, description of species present, and factors affecting their recovery. SalmonPORT also links specific assessments, strategies and design documents to each subbasin.

Project Evaluation and Ranking Process

All projects in the region are evaluated and ranked using the same criteria. Each project's ranking is based on its benefits to fish, certainty of success, and cost.

The habitat strategy provides the basis for determining a project's benefits to fish. Specifically, the evaluation of a project's benefits to fish is based on:

- The ranking of the target reaches;
- The importance of the habitat needs or attributes addressed by the project; and
- The estimated effectiveness of a project at protecting or restoring the targeted habitat attributes.

The extent to which a project addresses key habitat attributes and their effectiveness is based on the review of the project and related data by Board staff and the Technical Advisory Committee. Additionally, the size of the area being treated and the project objectives and approach are considered. To allow a comparison among projects, the size of the area being treated is measured in "habitat units," which generally are equivalent to 500 feet of stream length.

Per Lower Columbia Fish Recovery Board policy, the Technical Advisory Committee also considers requests to change a stream reach tier or fish population rating. These tiers and population ratings are taken from the recovery plan and reflect the importance of specific fish populations and stream reaches to recovery efforts. If a project sponsor believes that these ratings are not correct, the sponsor may request that the ratings be changed. Sponsors must provide technical data and information to support their change requests. Changes to stream reach tiers or population ratings were requested for five proposals. Staff reviewed these requests

with Washington Department of Fish and Wildlife biologists. The Technical Advisory Committee considered the findings and concluded that none of the reach tier rating should be changed.

A project's certainty of success is based on the Technical Advisory Committee's review of the project using the following criteria:

- The project's objectives and scope;
- Technical approach;
- Coordination and sequencing with other recovery work;
- Technical, physical, legal, or funding uncertainties;
- Sponsor capabilities;
- Community and landowner support; and
- Stewardship;

The Technical Advisory Committee also evaluates each project to determine if the cost is reasonable relative to the work performed and the likely benefits. This evaluation is based on professional judgment taking into consideration labor, material, and administrative costs in comparison to past projects. The following questions guide the Technical Advisory Committee's cost evaluation:

- Is the requested amount reasonable relative to the likely benefits? Projects receiving a "high" rating must demonstrate exceptional benefit for the cost;
- Has the sponsor obtained significant in-kind or cash match beyond the required minimum for the project type;
- Is the total project cost reasonable relative to the amount and type of work being proposed;
- Are costs well described and justified; and
- Are more appropriate fund sources available for the project?

Projects are given high, medium, or low ratings for benefits to fish, certainty of success, and cost as well as numerical scores. Projects are placed in four ranked groupings based on their ratings and are then ranked within their group using their numerical score to generate a regional ranking of projects. If a project receives a low rating in any category, it is not recommended for funding.

This approach ensures that high priority reaches for one or more primary population(s) rates higher for funding than reaches used only by lower priority populations. If projects were ranked only by their numerical scores, projects focusing on restoration of high priority reaches used only by a single primary population would rank lower than projects focusing on lower priority reaches and/or multiple lower priority populations. This practice is also the reason why a project in a higher priority group may have a lower numerical score than a project in a lower priority group.

Based on the Technical Advisory Committee's recommendations and the Board's deliberations, the Board submitted a ranked list of 21 projects to the SRFB (including 7 alternates and 4 projects proposed for funding through the Intensively Monitored Watershed funds).

Because the LCFRB acts as both the lead entity and regional organization for this area, answers to questions 2, 4, and 5 have been combined below.

How was the regional technical review conducted?

The Lower Columbia Fish Recovery Board adopted its updated grant round schedule, policies, and habitat strategy on February 7. The call for projects was announced February 12. LCFRB staff held a grant round information workshop on February 20 and conducted in-office consultations with each sponsor during February and March. The Board received 25 complete draft applications on April 10. Site visits were conducted in early May. Members of the Board andTechnical Advisory Committee, and the RCO grant manager attended the site visits. Site tours were also conducted virtually via the Internet for 5 of the 25 projects because of travel logistics. On May 14-15, the Technical Advisory Committee conducted formal reviews of the draft applications. The goal of this review is to assist project sponsors in preparing final applications that are technically sound and complete. Project sponsors were provided the opportunity to present and discuss their projects with the Technical Advisory Committee. Detailed comments were recorded and provided to sponsors to assist them in preparing their final applications. Comments were also submitted by the SRFB Review Panel and added to the comment matrices. Sponsors are required to identify where and how they addressed each of the Technical Advisory Committee's and SRFB Review Panel's comments in their final applications.

After the review session, one project was withdrawn due to its low stream reach and population rating. A second project was withdrawn based on SRFB Review Panel statement that they would identify the project as a Project of Concern. A third project was withdrawn after a landslide altered the project site, resulting in the need for further design and engineering analysis.Twenty-two final applications were submitted by the June 19 deadline. On July 9 and 10, the Technical Advisory Committee scored and ranked projects on their benefits to fish, certainty of success,

and cost as described earlier. Following the Technical Advisory Committee's evaluation, four projects were recommended for funding set aside by the SRFB for projects within Intensively Monitored Watersheds (IMW). In the Lower Columbia, the Abernathy, Mill and Germany Creek Complex is one of the four state IMWs funded by the SRFB. These projects will be submitted to the SRFB in September for early funding consideration. Both the IMW and regional ranked project lists were adopted by the LCFRB on August 1 and submitted to the SRFB on August 1 and 15 respectively. For the 2014 Round, the rank lists are a result of 21 final applications from 9 sponsoring organizations for projects in 9 of the 18 Lower Columbia subbasins.

What criteria were used for the regional technical review?

All projects in the region are evaluated and ranked using the same criteria. Each project's ranking is based on its benefits to fish, certainty of success, and cost.

- **Benefits to Fish**

  Each project receives a "benefits to fish" rating of high, medium, or low and a numerical score of up to 200 points. The scoring is based on the:

  - Importance of the fish populations targeted by project to the recovery of lower Columbia River salmon and steelhead;
  - Importance of the river segment or reach targeted by the project to those populations;
  - Importance of the habitat attributes addressed by the project; and
  - Likely effectiveness of a project in protecting or restoring the targeted habitat attributes.

  The information on the importance of the populations, river reaches, and habitat attributes is provided in SalmonPORT. The extent to which a project addresses key habitat attributes and its effectiveness is based on the review of the project and related data by the Board's staff and the Technical Advisory Committee. Consideration is given to the size of the area being treated and the project's objectives and approach. To allow a comparison among projects, the size of the area being treated is measured in "habitat units," which generally are equivalent to 500 feet of stream length.

- **Certainty of Success**

  The Technical Advisory Committee assigns each project a certainty of success rating of high, medium, or low and a numerical score of up to 200 points. The scoring is based on the:

- The project's objectives and scope;
- Technical approach;
- Coordination and sequencing with other recovery work;
- Technical, physical, legal, or funding uncertainties;
- Sponsor capabilities;
- Community and landowner support; and
- Stewardship.

- **Cost**

  The Technical Advisory Committee assigns each project a cost rating of high, medium, or low, and a numerical score of up to 100 points. The cost score is based on the:

  - Request amount relative to the likely benefits; Proportion of matching funds pledged;
  - Total project cost relative to the amount and type of work being proposed; and
  - Justification and description of costs.

  Only projects receiving high or medium ratings for benefits to fish, certainty of success, and cost are considered for funding. These projects are placed into four priority groupings depending on their ratings:

  - Group 1 – Projects with all high ratings
  - Group 2 – Projects with two high ratings and one medium rating
  - Group 3 – Projects with one high rating and two medium ratings
  - Group 4 – Projects with three medium ratings

  Within each group, projects are ranked based on their grand total numerical scores.

Who completed the regional review (name, affiliation and expertise) and are they part of the regional organization or independent?

Projects are reviewed by the Technical Advisory Committee and submitted to the Board who reviews the recommended ranking and approval the final list. The Board may remand issues back to the Technical Advisory Committee or amend the list based on policy considerations such as the need to build sponsor capacity or to better address community concerns or interests.

Technical Advisory Committee

The Lower Columbia Fish Recovery Board Technical Advisory Committee was established pursuant to Revised Code of Washington 77.85.200. The principle role of the 15-member Committee is to advise the Board on technical matters relating to habitat protection and restoration. By statute, the Washington Departments of Fish and Wildlife, Ecology, Transportation, and Natural Resources are required members. The Board added additional members from federal and state agencies, local government, and private business to augment the breadth and depth of technical expertise. The table below lists current Technical Advisory Committee members.

Conflict of Interest

The Board recognizes that, given the Technical Advisory Committee's experience and expertise in fish-related issues, some members may have knowledge of or some connection to a proposal. That does not necessarily prevent a Technical Advisory Committee member from participating in the project evaluation process. It is the policy of the Board that Technical Advisory Committee members conduct an unbiased review of the proposals. If, for any reason, a member believes that he or she cannot be unbiased, the member is expected to recuse himself or herself from the process. If a Technical Advisory Committee member stands to gain personally if a proposal is funded, this is a legal conflict of interest and the Technical Advisory Committee member must recuse himself or herself. For the record, no conflicts were noted.

Table 13. Lower Columbia Fish Recovery Board Technical Advisory Committee Membership

Member	Affiliation	Expertise
Daniel Evans	Lower Columbia Estuary Partnership	Bachelor of Arts, ecology, Wetlands Scientists Certification
Stephanie Ehinger	NOAA-Fisheries	Master of Science, limnology, microbiology, physiology
Jim Fisher	Private consultant	Bachelor of Science, zoology and chemistry
Angela Haffie	Washington Department of Transportation	Master of Science, environmental sciences
Baker Holden	U.S. Forest Service	Bachelor of Science, fisheries biology
Dave Howe	Washington Department of Fish and Wildlife	Bachelor of Science, natural resource science
Kelley Jorgensen	Private consultant	Bachelor of Science, Northwest ecology and natural history
Allen Lebovitz	Washington Department of Natural Resources	Master of Science in forestry and environmental studies
Steve Manlow	U.S. Army Corps of Engineers	Bachelor of Science, ecosystems analysis; Bachelor of Arts, biology
Ron Rhew	U.S. Fish and Wildlife Service	Master of Science, entomology
Doug Stienbarger	Washington State University Extension	Master of Science, land management

Member	Affiliation	Expertise
Randy Sweet	Private consultant and Lower Columbia Fish Recovery Board member	Masters of Science, geology and biology
Shannon Wills	Cowlitz Indian Tribe	Master of Science, geology
Open	Washington Department of Ecology	
Open, Ex-Officio	Governor's Salmon Recovery Office	

Lower Columbia Fish Recovery Board

The Board serves as the citizen committee and has final approval authority for the region's project list. The Board also is responsible for the resolution of any dispute arising from the Technical Advisory Committee's decisions. The Board may remand issues back to the Technical Advisory Committee or amend the list based on policy considerations such as the need to build sponsor capacity or to better address community concerns or interests. The table below provides a list of Lower Columbia Fish Recovery Board members. In approving the final ranked list, Board members were asked to disclose any legal conflict of interest they may have had with the projects.

Conflict of Interest

As with the Technical Advisory Committee, the Board recognizes that, given members' experience and expertise in fish-related issues, some members may have knowledge of or some connection to a proposal. That does not necessarily prevent a Board member from participating in approving the ranked list. If, for any reason, a Board member believes that he or she cannot be unbiased, the member is expected to recuse himself or herself from the process. If a member stands to gain personally if a proposal is funded, the member must recuse himself or herself. For the record, no conflicts were noted.

Table 14. Lower Columbia Fish Recovery Board Membership

Member	Affiliation
Taylor Aalvik	Cowlitz Indian Tribe
The Honorable Bob Anderson	Skamania County commissioner
The Honorable Blair Brady	Wahkiakum County commissioner
The Honorable Lee Grose	Lewis County commissioner
The Honorable Jim Irish	Southwest Washington cities representative, mayor of La Center
Tom Linde	Skamania County citizen designee
Irene Martin	Wahkiakum County citizen designee
The Honorable Tom Mielke	Clark County commissioner
Todd Olson	Hydro-electric operators representative, PacifiCorp
Don Swanson	Southwest Washington environmental representative
The Honorable Randy Sweet	Cowlitz County citizen designee, private property designee and Port of Kalama commissioner
The Honorable Dean Takko	Washington State Legislature, 19th Legislative District

Member	Affiliation
The Honorable Charles TenPas	Lewis County citizen designee, and Lewis County Public Utilities District commissioner
Jade Unger	Clark County citizen designee
The Honorable Dennis Weber	Cowlitz County commissioner

Were there any projects submitted to the SRFB for funding that were not specifically identified in the regional implementation plan or habitat work schedule? (If so please provide justification for including these projects to the list of projects recommended to the SRFB for funding. If the projects were identified in the regional implementation plan or strategy but considered a low priority or is a low priority area, please provide justification.)

All projects on the Board's final project list stem directly from the habitat strategy and all projects target high priority populations and river reaches (Table 15).

The strategy is based on, and is consistent with, the goals, measures, actions, and priorities of recovery plan. It identifies reach-level restoration needs on both a multi-species and individual population basis. The strategy is based on an analysis of species presence, key life history stages affected, and key habitat limiting factors. During project development, the Board's staff works with project sponsors to ensure that their proposals are consistent with the priorities in the habitat strategy. For a number of subbasins, the Board has further refined the habitat strategy by identifying site-specific project opportunities within a given reach. The Board has worked with agencies, sponsors, and landowners to complete several assessment and project identification efforts. These include:

- Lower Kalama Off-Channel Habitat Assessment,
- Eagle Island Siting and Designs,
- Grays River Restoration Technical Report,
- Woodward Creek Habitat Restoration Project Siting and Design,
- Lower Cowlitz River and Floodplain Habitat Restoration Project Siting and Design,
- Lower East Fork Lewis River Strategy, and
- Abernathy and Germany Creeks Intensively Monitored Watershed Treatment Plan.

These assessments identified site-specific project opportunities, prioritized them according to the Lower Columbia Fish Recovery Board project evaluation criteria, developed cost estimates, and provided a number of designs in varying degrees for high priority projects. In addition to the LCFRB-sponsored assessments, the Cowlitz-Wahkiakum Conservation District was funded to

complete strategies for the Coweeman and Skamokawa Rivers. The results of all the assessments directly resulted in six final proposals submitted this year (5 restoration projects and 1 final design project).

Table 15. Fish and Priority Tier Reaches Addressed by the Project

	Salmon Populations and Recovery Plan Designations										
	Steelhead		Chinook		Chum	Coho	OOB	Reach Tiers			
Species and Tier Priorities*	Winter	Summer	Fall	Spring				1	2	3	4
SF Toutle Riparian Restoration	P		P			P		✓			
Abernathy Creek Cameron Site	P		P		P	C		✓			
SFK Toutle@ Johnson Creek Restoration	P		P			P		✓	✓		
Grays River Satterlund Site	P		C		P	P		✓			
Haapa Habitat Restoration Project	C		P		P	C		✓			
Upper Washougal Chaffee		P						✓			
Columbia- Pacific Passage Habitat Restoration	P		P		P	P	P		✓		✓
Wind River Community Based Strategy Development	S	P	C		C	P		✓	✓	✓	✓
Abernathy Creek Davis Site	P		C		P	P			✓		
Toutle River Confluence Off-Channel Restoration Phase 1	P		P	C		P		✓			
Dougan Creek Confluence Restoration	C	P	P			C			✓		✓
Clear Creek Fish Passage	C		P			P		✓	✓		✓
Lower Elochoman Community Based Strategy Development	C		P		P	P		✓	✓		✓
Abernathy Creek Wisconsin Site Project	P					C		✓			
NF Lewis 13.5 Enhancement	C		P		P	C		✓			
Upper Hamilton Creek Restoration	P					P		✓			
Lower Kalama Restoration- Phase I	P	P	C	C	C	C	P		✓		
Abernathy Headwaters Design	P	P				C		✓	✓		
Muddy-Clear Restoration Design	C	P				C			✓		
Washougal Racetrack Restoration	C	P	P			C			✓	✓	
Greenleaf Creek	P					P		✓	✓		

OOB = Other Columbia River Basin stocks
P = Primary
C = Contributing
S = Stabilizing
*For purposes of this report the four projects scheduled for funded with the Intensively Monitored Watershed fund retain their position on this list.

How did your regional review consider whether a project:

- **Provides benefit to high priority stocks for the purpose of salmon recovery or sustainability? In addition to limiting factors analysis, SaSI, and SSHIAP[4], what stock assessment work has been done to date to further characterize the status of salmonid species in the region?**

  The consistency of a project with the priorities of the recovery plan is an integral element in the project evaluation and ranking process and criteria. The consistency of the overall project list with the recovery plan is determined based on three factors. Specifically, the project evaluation assesses whether the projects on the list target:

  - Priority populations for recovery;
  - Priority reaches;
  - Priority limiting factors or habitat attributes;
  - Benefits to other Columbia Basin stocks[5]; and
  - Chum Populations outside of the Lower Gorge and Grays River subbasins

  The recovery plan sets three population priorities or categories: primary, contributing, and stabilizing. The table below provides the definitions for these categories. While highest priority is given to primary populations, it should be noted that the NOAA-approved recovery plan requires improvement in the abundance, productivity, spatial distribution, and diversity for all populations, except stabilizing, to achieve recovery.

Table 16. Population Classifications

Population Classification		Viability Goal	Description	Persistence Probability*
P	Primary	High (H) or Very High (VH)	Low (negligible) risk of extinction (represents a "viable" level)	95-99%
C	Contributing	Medium	Medium risk of extinction	75-94%
S	Stabilizing	Low	Stable, but relatively high risk of extinction	40-74%

*100-year persistence probabilities.

Reach priorities are established in two steps. First, reaches are grouped into ranked tiers using the criteria in Table 17. Reaches are then ranked within tiers based on:

[4] SaSI=Salmonid Stock Status; SSHIAP=Salmon and Steelhead Habitat Inventory and Assessment Program

[5] While out-of-basin stocks are not considered in the recovery, the Lower Columbia Fish Recovery Board recognizes the importance of estuarine habitat where upriver stocks use these areas during their migration seasons.

- The number of populations using a reach;
- The recovery priority of each population;
- The importance of the reach (actual and potential) to the performance of each population; and
- The importance of the reach to each population is rated as high, medium, or low based on Ecosystem Diagnosis and Treatment analysis.

Table 17. Reach Tier Designation Rules

Reaches	Rule
Tier 1	All high priority reaches (based on Ecosystem Diagnosis and Treatment) for one or more primary populations.
Tier 2	All reaches not included in Tier 1 and which are medium priority reaches for one or more primary species and/or all high priority reaches for one or more contributing populations.
Tier 3	All reaches not included in Tiers 1 and 2 and which are medium priority reaches for contributing populations and/or high priority reaches for stabilizing populations.
Tier 4	Reaches not included in Tiers 1, 2, and 3 and which are medium priority reaches for stabilizing populations and/or low priority reaches for all populations.

Additional consideration is given for other upper Columbia Basin stocks using the tidally influenced reaches of tributary streams and the importance of such reaches to these stocks.

- **Addresses cost-effectiveness**

  The Technical Advisory Committee considers the cost of a project during its evaluation of final applications. The consideration of cost is based on professional judgment taking into consideration labor, material, and administrative costs in comparison to past projects. The following questions guide the Technical Advisory Committee's cost evaluation:

  - Is the request amount reasonable relative to the likely benefits? High scoring projects should demonstrate exceptional benefit for the cost;
  - Has the sponsor obtained significant in-kind or cash match beyond the required minimum for the project type;
  - Is the total project cost reasonable relative to the amount and type of work being proposed;
  - Are costs well described and justified; and

- Are more appropriate fund sources available for the project?

Local Review Processes

Provide project evaluation criteria and documentation of your local Citizens Advisory Group and Technical Advisory Group ratings for each project, including explanations for differences between the two groups' ratings.

Lower Columbia Fish Recovery Board Lead Entity

The LCFRB serves as both the regional recovery organization and the lead entity for all WRIAs in the region except for the White Salmon, for which Klickitat County is the lead entity. The project evaluation criteria for the review process are described above in the regional section.

Identify your local technical review team

Lower Columbia Fish Recovery Board Lead Entity

The Technical Advisory Committee members are identified above in the regional section.

Explain how and when the SRFB Review Panel participated in your local process, if applicable.

Lower Columbia Fish Recovery Board Lead Entity

No SRFB Review Panel members attended the site visits or draft application review.
Ms. Michelle Cramer attended the final application evaluation and ranking meeting. She actively engaged in discussions with Technical Advisory Committee members and sponsors. Formal comments on the draft applications were received from the entire SRFB Review Panel on May 30 and were included in the comment matrices to assist sponsors in completing their final applications. Review Panel participation can provide early notice of issues of potential concern to the review panel and allow sponsors an opportunity to address or resolve these issues in their final applications. Sponsors received a comment matrix for each proposal and were required to submit the matrix with their final applications indicating how and where in the final applications the comments were addressed. The Board requests that the SRFB and SRFB Review Panel consider the Technical Advisory Committee comments in their project reviews.

Explain how multi-year implementation plans or habitat work schedules were used to develop project lists

Lower Columbia Fish Recovery Board Lead Entity

Salmon recovery priorities and actions are guided by the NOAA-approved lower Columbia domain recovery plan for both the Columbia estuary and main stem, and the subbasin tributaries. The Board's habitat strategy serves as its 6-year implementation work schedule. It is reviewed annually as described earlier and is consistent with the priorities outlined in the recovery plan. When individual subbasin strategies are completed, information on site-specific project opportunities are incorporated. This information is captured in SalmonPORT and helps sponsors target high priority areas and restoration types to craft their proposals.

With regard to the 21 projects (included 4 projects in the IMW) on the final Lower Columbia River Salmon Recovery Region's project list, at a minimum, all projects:

- Benefit Tier 1 and/or Tier 2 reaches;
- Target one or more primary populations identified in the recovery plan; and
- Target one or more high priority restoration or protection needs.

Explain how comments of technical, citizen, and policy reviews were addressed in finalizing the project list. Were there any issues about projects on the list and how were those resolved?

Lower Columbia Fish Recovery Board Lead Entity

The public was provided opportunities to comment on both the draft and final proposals. Comments were submitted for:

- Greenleaf Creek
- Clear Creek Fish Passage
- Lower Elochoman Community Based Strategy
- Wind River Community Based Strategy
- Abernathy Headwaters Design

Public comment is taken at both Board and TAC meetings. All written comments received during the TAC review process were provided to the TAC for consideration. All comments received throughout the process were included in the Board's action summary. Sponsors were given the opportunity to respond to public comments on their projects. The Board reviewed all pertinent information along with staff's findings in making a recommendation. All proposals listed in Table 15 above were included on the regional ranked list for funding.

Project List Summary Table

Following is a project list summary reflecting the region's project list as submitted on November 11, 2014. For the Lower Columbia River Salmon Recovery Region, there are 21 projects, totaling $2,700,000 and $1,976,794in matching funds, and $997,000 for IMW projects.

In prior years, $135,000 or 5% of the Lower Columbia project allocation has been made available to the Klickitat County Lead Entity for projects in the White Salmon River. The Klickitat County Lead Entity chose not to submit White Salmon projects, this grant round. As a result, the full Lower Columbia funding allocation was committed to LCFRB project list.

Table. 20. Lower Columbia Fish Recovery Board Proposed Projects

Rank	Project Number	Name	Sponsor	Primary Fish Stock Benefited	Priority in Recovery [1]
1	14-1338	SF Toutle Riparian Restoration	Lower Columbia Fish Enhancement Group	Winter Steelhead, Fall Chinook, Coho	CH I-81, I-87
	14-1311	Abernathy Creek Cameron Site	Cowlitz Indian Tribe	Winter Steelhead, Fal Chinook, Coho, Chum	
3	14-1335	SF Toutle @ Johnson Creek Restoration	Lower Columbia Fish Enhancement Group	Winter Steelhead, Fall Chinook, Coho	CH I-81, I-85, I-87, I-92
4	14-1292	Grays River Satterlund Site	Wahkiakum Conservation District	Winter Steelhead, fall Chinook, Summer Chinook, Coho	CH C-74, C-78, C-81
5	14-1339	Haapa Habitat Restoration Project	Lower Columbia Fish Enhancement Group	Winter Steelhead, Fall Chinook, Coho	CH K-191, K-195, K-198
6	14-1336	Upper Washougal Chaffee Property	Lower Columbia Fish Enhancement Group	Summer Steelhead	CH N-87, N-96
7	14-1380	Columbia Pacific Passage Habitat Restoration Project	Columbia River Estuary Study Taskforce	Winter Steelhead, Fall Chinook, Chum, Coho, and out-of-basin stocks	CH B-50, B-52
8	14-1392	Wind River Community Based Strategy Development	Lower Columbia Fish Recovery Board	Winter Steelhead, Summer Steelhead, Fall Chinook, Coho	CH P-139, P-142, P-144, P-146, P-176, P-149
9	14-1296	Abernathy Creek Davis Site	Cowlitz Conservation District	Winter Steelhead, Fal Chinook, Coho, Chum	
10	14-1337	Toutle River Confluence Off-Channel Restoration – Phase 1	Lower Columbia Fish Enhancement Group	Winter steelhead, Summer Chinook, Fall Chinook, Coho	CH I-81, I-87 I-92
11	14-1360	Dougan Creek Confluence Restoration	Lower Columbia Fish Enhancement Group	Winter steelhead, Summer Steelhead, Fall Chinook,Coho	CH N-87, N-96

Rank	Project Number	Name	Sponsor	Primary Fish Stock Benefited	Priority in Strategy[1]
12	14-1308	Clear Creek Fish Passage	Wahkiakum County	Winter Steelhead, Fall Chinook, Coho	CH D-91
13	14-1391	Lower Elochoman Community Based Strategy Development	Lower Columbia Fish Recovery Board	Winter Steelhead, Fal Chinook, Coho, Chum	CH D-84, D-88, D-89, D-90, D-91, D-92
14	14-1310	Abernathy Creek Wisconsin Site	Cowlitz Indian Tribe	Winter Steelhead, Coho	
15	14-1344	NF Lewis 13.5 Enhancement	Lower Columbia Fish Enhancement Group	Winter Steelhead, Fal Chinook, Coho, Chum	CH K-191, K-195, K-198
16	14-1176	Upper Hamilton Creek Restoration	Lower Columbia Estuary Partnership	Coho, Winter Steelhead	CH O-68, O-71, O-74, O-78
17	14-1342	Lower Kalama Restoration – Phase 1	Lower Columbia Fish Enhancement Group	Winter & Summer Steelhead, Fall & Spring Chinook, Coho, Chum, and out-of-basin stocks	CH J-84, J-90
18	14-1459	Abernathy Headwaters Design	Cowlitz Indian Tribe	Winter Steelhead, Coho	
19	14-1309	Muddy-Clear Restoration Design	Cowlitz Indian Tribe	Winter and Summer Steelhead, Coho	CH K-191, K-195, K-198
20	14-1340	Washougal Racetrack Restoration Design	Lower Columbia Fish Enhancement Group	Winter and Summer Steelhead, fall Chinook, Coho	CH N-87, N-92, N-96
21	14-1177	Greenleaf Creek	Lower Columbia Estuary Partnership	Winter Steelhead, Coho	CH O-68, O-74, O-78

[1] Lower Columbia Salmon Recovery and Fish & Wildlife Subbasin Plan, Volume II (LCFRB 2010, 2013)