Document: 2000 Columbia River Basin Fish and Wildlife Program

Author: Northwest Power and Conservation Council Year: 2000

Link: http://www.nwcouncil.org/fw/program/2000/2000-19/

Qualitative: **Objectives**

- 1 Increase total adult salmon and steelhead runs above Bonneville Dam by 2025 to an average of 5 million annually in a manner that supports tribal and nontribal harvest. Within 100 years achieve population characteristics that, while fluctuating due to natural variability, represent on average full mitigation for losses of anadromous fish.
- 2 Halt declining trends in salmon and steelhead populations above Bonneville Dam by 2005. Obtain the information necessary to begin restoring the characteristics of healthy lamprey populations.
- 3 Restore the widest possible set of healthy naturally reproducing populations of salmon and steelhead in each relevant province by 2012. Healthy populations are defined as having an 80 percent probability of maintaining themselves for 200 years at a level that can support harvest rates of at least 30 percent.

Obj count: 3

Document: 2014 Columbia River Basin Fish and Wildlife Program

Year: 2014 Author: Northwest Power and Conservation Council

Link: http://www.nwcouncil.org/fw/program/2014-12/Program

Qualitative: **Objectives**

- 1 Restore the widest possible set of healthy, naturally reproducing and sustaining populations of salmon and steelhead in each relevant geographic level.
- 2 Within 100 years, achieve population characteristics that, while fluctuating due to natural variability, represent full mitigation for losses of fish.
- 3 As an interim objective, achieve smolt-to-adult return rates in the 2-6 percent range (minimum 2 percent; average 4 percent) for listed Snake River and upper Columbia salmon and steelhead.
- 4 As an interim objective, increase total adult salmon and steelhead runs to an average of 5 million annually by 2025 in a manner that emphasizes the populations that originate above Bonneville Dam and supports tribal and non-tribal harvest.
- 5 As an interim population objective, increase total adult runs for listed lower Columbia salmon and steelhead to meet NOAA Fisheries' FCRPS Biological Opinion.
- 6 Consistent with ESA efforts, increase total adult salmon and steelhead runs, with an emphasis on those above Bonneville Dam, by 2025 to an average of 5 million annually.
- 7 Halt declining trends in Columbia River Basin salmon and steelhead populations.
- 8 Achieve the four juvenile and adult fish passage performance standards consistent with the most recent NOAA Fisheries FCRPS Biological Opinion 3.

Obj count: 8

Document: Asotin Subbasin Plan

Author: Northwest Power and Conservation Council and Partners Year: 2004

LInk: http://www.nwcouncil.org/media/116948/Entire Plan.pdf

1 Interim spawner abundance target for steelhead in Asotin Creek was set at 400 adults. An interim spawner abundance target was not set for Asotin Creek spring Chinook. Planners suggested the Asotin Creek Chinook population could be included with the Lower Mainstem Tributary spawnina aggregation, which had an interim goal of 1,000 spawners

Obj count: 1

Document: Bonneville Power Administration - NPCC 2014 F&W Program Amendment **Recommendation - Objectives**

Author: Bonneville Power Administration, Northwest Power and Conservati Year: **2013**

Link: http://www.nwcouncil.org/media/6894057/4-Program-Objectives-staff-template-forrecommendation-summary-for-committee-101513-f.pdf

Qualitative: **Objectives**

- 1 Incorporate the hydro spill and dam passage strategies, performance standards, and in-river survival targets reflected in the 2008 FCRPS BiOp, as modified by the draft 2013 Supplemental BiOp.
- 2 Adopting performance metrics from the BiOps and Accords.
- 3 The total run size goal of 5 million fish returning to the mouth of the Columbia River annually remains relevant as a basinwide goal, and is—as required by legal obligations and agreements among fisheries managers outside the Program—composed of both hatchery and wild fish.

Obj count: 3

Document: Burns Paiute Tribe - NPCC 2014 F&W Program Amendment Recommendation - Objectives

Author: Burns Paiute Tribe, Northwest Power and Conservation Council Year: 2013

Link: http://www.nwcouncil.org/medig/6894057/4-Program-Objectives-staff-template-forrecommendation-summary-for-committee-101513-f.pdf

- 1 Add biological objectives that address the reintroduction of extirpated populations in nonblocked areas above Bonneville Dam.
- 2 [delete: Allow for biological diversity among and within populations and species] [add: Promote the increase of biological diversity among and within populations] to increase ecological resilience to environmental variability.
- 3 Add language that states: "The Council's Program incorporates the quantitative recovery criteria from ESA recovery plans. It also incorporates the more qualitative broad sense goals in some recovery plans that go beyond ESA delisting."
- 4 Adopt the ISAB's recommendation to establish quantitative biodiversity objectives for focal species and habitats. Incorporate ESA biodiversity objectives.
- 5 Incorporate ESA recovery productivity objectives.
- 6 Adopt the ISAB's recommendation to make the Basin-wide objective of 5 million salmon and steelhead by 2025 more specific with respect to wild and hatchery fish.
- 7 Expand anadromous goals to the Subbasin and Province levels and add specific and measurable objectives for resident fish and wildlife to support high level indicators.
- 8 Restore and increase the abundance of native resident fish species (add: (subspecies, stocks and populations)) throughout their historic ranges when (delete: original) (add: appropriate) habitat conditions exist or can be feasibly restored or improved.
- 9 (delete: Investigate reintroduction of) (Add: Take action) to reintroduce anadromous fish into blocked areas, where feasible.

- 10 (add: As an interim goal, contribute to) achieving smolt-to-adult survival rates (SARs) in the 2-6 percent range (minimum 2 percent; average 4 percent) for listed Snake River and upper Columbia salmon and steelhead.
- 11 Halt declining trends in Columbia River Basin salmon and steelhead populations (add: by 2024, especially those that originate above Bonneville Dam.) Significantly improve the smolt-to-adult return rates (SARs) for Columbia River Basin salmon and steelhead, resulting in productivity well into the range of positive population replacement. Restore healthy characteristics.
- 12 Halt declining trends in Columbia River Basin salmon and steelhead populations (add: by 2024, especially those that originate above Bonneville Dam.) Significantly improve the smolt-to-adult return rates (SARs) for Columbia River Basin salmon and steelhead, resulting in productivity well into the range of positive population replacement. Restore healthy characteristics.
- 13 Increase total adult salmon and steelhead runs, in a manner consistent with achieving recovery of ESA listed populations and prevents additional listings of listed species, above Bonneville Dam by 2025 to an average of 5 million annually in a manner that supports tribal and non-tribal harvest, achieving smolt-to-adult return rates in the 2-6 percent range (minimum 2 percent; average 4 percent) for listed Snake River and upper Columbia salmon and steelhead. (Add: Increase total adult runs for listed lower Columbia salmon and steelhead to achieve 75 percent of recovery goals (NOAA-F (30) 2013) by 2025.)
- 14 Adopt the ISAB's recommendation to develop productivity objectives that reflect differences among species and populations.
- 15 Within 100 years achieve population characteristics that, while fluctuating due to natural variability, represent on average full mitigation for losses of anadromous fish caused by development and operation of hydroelectric facilities in the Columbia Basin.
- 16 Add explicit measurable biological objectives to support the more general Program goals consistent with ISAB recommendations (ISAB 2013-1). Also refer to Section 5 of this document, Species Focused Recommendations. These should integrate with the current Council high level indicators and would clarify how to report against current biological objectives.

Obj count: 16

Document: Columbia Gorge Subbasin Plan

Author: Northwest Power and Conservation Council and Partners Year: 2004

Link: http://www.nwcouncil.org/media/20033/ColumbiaGorgeInvAssPlan.pdf

Qualitative: **Objectives**

- 1 Restore anadromous fishes to historical abundance in perpetuity.
- 2 Within 7 years, halt the declining trends in salmon, sturgeon, and lamprey populations upstream of Bonneville Dam.
- 3 Reestablish at least one chum salmon spawning population upstream from Bonneville Dam.

Obj count: 3

Document: Columbia River Basin Fish and Wildlife Program - 2009 Amendments

Author: Northwest Power and Conservation Council Year: 2009

Link: http://www.nwcouncil.org/fw/program/program-2009-amendments/

- 1 Increase total adult salmon and steelhead runs to an average of 5 million annually by 2025 in a manner that emphasizes the populations that originate above Bonneville Dam and supports tribal and non-tribal harvest, and achieving smolt-to-adult return rates in the 2-6 percent range (minimum 2 percent; average 4 percent) for listed Snake River and upper Columbia salmon and steelhead.
- 2 Significantly increase the total adult salmon and steelhead runs in the Columbia River Basin, especially those that originate above Bonneville Dam, in a manner that supports tribal and nontribal harvest and complements regional harvest management agreements, such as the Columbia River Compact, the U.S. v Oregon Management Agreement, and the Pacific Salmon Treaty. Efforts to increase abundance must also be consistent with achieving recovery of ESAlisted populations and preventing additional ESA listings of species. Within 100 years, achieve population characteristics that, while fluctuating due to natural variability, represent on average full mitigation for losses of anadromous fish
- 3 Restore the widest possible set of healthy, naturally reproducing and sustaining populations of salmon and steelhead in each relevant ecological province.
- 4 Halt declining trends in Columbia River Basin salmon and steelhead populations, especially those that originate above Bonneville Dam. Significantly improve the smolt-to-adult return rates (SARs) for Columbia River Basin salmon and steelhead, resulting in productivity well into the range of positive population replacement. Continue restoration of lamprey populations.

Obj count: 4

Document: Colville Confederated Tribes - NPCC 2014 F&W Program Amendment Recommendation -**Objectives**

Author: Colville Confederated Tribes, Northwest Power and Conservation Year: 2013

Link: http://www.nwcouncil.org/media/6894057/4-Program-Objectives-staff-template-forrecommendation-summary-for-committee-101513-f.pdf

Qualitative: **Objectives**

1 Performance standards, and in-river survival targets reflected in the 2008/2010 FCRPS biological opinion and the 2008 CCT (15) Accord.

Obj count: 1

Document: Confederated Tribes of Grande Ronde - NPCC 2014 F&W Program Amendment **Recommendation - Objectives**

Author: Confederated Tribes of Grande Ronde, Northwest Power and Co Year: 2013

LInk: http://www.nwcouncil.org/media/6894057/4-Program-Objectives-staff-template-forrecommendation-summary-for-committee-101513-f.pdf

- 1 The Council's program incorporates the qualitative recovery criteria from ESA recovery plans. It also incorporates the more qualitative broad sense goals in some recovery plans that go beyond ESA delisting. The Program also recognizes that these goals do not reflect hatchery production goals for harvest, and such hatchery production targets will need to be determined.
- 2 The Program continues to include a set of quantitative goals and related timelines for anadromous fish, These include, among others, increasing total adult salmon and steelhead runs to an average of 5 million annually by 2025 in a manner that emphasizes the populations that originate above Bonneville Dam and supports tribal and non-tribal harvest, and achieving smoltto-adult return rates in the 2-6 percent range (minimum 2 percent; average 4 percent) for listed Snake River and upper Columbia salmon and steelhead.

- 3 Adopt ISAB recommendations to make basin-wide objective of 5 million salmon and steelhead by 2025 more specific with respect to wild and hatchery fish. Develop provincial objectives including population targets in the Lower Columbia province.
- 4 Adopt the ISAB recommendations to establish quantitative biodiversity objectives for foal species and habitats. Incorporate ESA biodiversity objectives.
- 5 Protect, enhance, restore, and connect freshwater habitat in the Columbia River mainstem and tributaries for the life history stages of naturally spawning anadromous and resident salmonds and Pacific lamprey. Protect and enhance ecological connectivity between aquatic areas, riparian zones, floodplains, and uplands in the mainstem.
- 6 Protect, enhance, restore and connect freshwater habitat in the mainstem for the life history stages of naturally spawning anadromous and resident salmonids and lamprey. Protect and enhance ecological connectivity between aquatic areas, riparian zones, floodplains, and uplands in the mainstem.
- 7 Adopt ISAB recommendations to make basin-wide objective of 5 million salmon and steelhead by 2025 more specific with respect to wild and hatchery fish. Develop provincial objectives including population targets in the Lower Columbia province.

Obj count: 7

Document: Conservation and Recovery Plan for Oregon Steelhead Populations in the Middle Columbia River Steelhead Distinct Population Segment

Author: ODFW Year: 2010

Link: http://www.dfw.state.or.us/fish/CRP/docs/mid columbia river/Oregon Mid-C Recovery Plan Feb2010.pdf

- 1 Recovery Objective to be achieved by the year 2050, working in concert with existing agreements and collaboratively with landowners and resource managers NOAA will define a suite of additional land and water resource management principles and practices that when followed will alleviate liability for possible ESA regulatory consequences to landowners and resource managers.
- 2 Recovery Objective to be achieved by the year 2050, land and resource managers work with communities and other interests in a coordinated manner to achieve broad sense recovery through a shared vision of conservation where options and choices are preserved for future generations.
- 3 Recovery Objective to be achieved by the year 2050, out-of-basin limiting factors are addressed equitably and in concert with in-basin limiting factors.
- 4 Recovery Objective to be achieved by the year 2050, All extant populations of Middle Columbia steelhead are capable of contributing ecological, social, cultural, and economic benefits on a regular and sustainable basis.
- 5 Recovery Objective to be achieved by the year 2050, extirpated populations (e.g. Willow Creek, Crooked River) are restored in a manner that engages landowner cooperation and does not subject landowners to ESA regulation based on the presence of previously extirpated populations until the introduced populations are self-sustaining and become part of the listed DPS.
- 6 Recovery Objective to be achieved by the year 2050, all currently extant Middle Columbia steelhead populations are highly viable.
- 7 Recovery Objective to be achieved by the year 2050, Middle Columbia steelhead are viable throughout the historical range and no longer need protection under the ESA.
- 8 By the year 2050, all extant populations of Middle Columbia steelhead are capable of contributing ecological, social, cultural, and economic benefits on a regular and sustainable basis.

- 9 By the year 2050, extirpated populations (e.g. Willow Creek, Crooked River) are restored in a manner that engages landowner cooperation and does not subject landowners to ESA regulation based on the presence of previously extirpated populations until the introduced populations are self-sustaining and become part of the listed DPS.
- 10 By the year 2050, all currently extant Middle Columbia steelhead populations are highly viable.
- 11 By the year 2050, Middle Columbia steelhead are viable throughout the historical range and no longer need protection under the ESA.
- 12 Recovery Objective to be achieved by the year 2050, landowners, land managers and agencies are provided with guidance on the protection and management of habitats to promote the recovery of Middle Columbia River steelhead.

Obj count: 12

Document: Cowlitz Indian Tribe - NPCC 2014 F&W Program Amendment Recommendation -**Objectives**

Author: Cowlitz Indian Tribe, Northwest Power and Conservation Council Year: 2013

Link: http://www.nwcouncil.org/media/6894057/4-Program-Objectives-staff-template-forrecommendation-summary-for-committee-101513-f.pdf

- 1 The Plan should include a biological objective calling for an increase of in the total adult return for salmon and steelhead populations in the lower river to achieve 75% of recovery goals by 2025. Biological objectives for all Columbia Basin salmon and steelhead populations should call for a halt to declining trends.
- 2 Add biological objectives that address the reintroduction of extirpated populations in nonblocked areas above Bonneville Dam.
- 3 "The Council's Program incorporates the quantitative recovery criteria from ESA recovery plans. It also incorporates the more qualitative broad sense goals in some recovery plans that go beyond ESA delistina."
- 4 Adopt the ISAB's recommendation to establish quantitative biodiversity objectives for focal species and habitats. Incorporate ESA biodiversity objectives.
- 5 Adopt the ISAB's recommendation to develop productivity objectives that reflect differences among species and populations.
- 6 Add explicit measurable biological objectives to support the more general Program goals consistent with ISAB recommendations (ISAB 2013-1). Also refer to Section 5 of this document, Species Focused Recommendations. These should integrate with the current Council high level indicators and would clarify how to report against current biological objectives.
- 7 Expand anadromous goals to the Subbasin and Province levels and add specific and measurable objectives for resident fish and wildlife to support high level indicators.
- 8 (delete: Investigate reintroduction of) (Add: Take action) to reintroduce anadromous fish into blocked areas, where feasible.
- 9 (add: As an interim goal, contribute to) achieving smolt-to-adult survival rates (SARs) in the 2-6 percent range (minimum 2 percent; average 4 percent) for listed Snake River and upper Columbia salmon and steelhead.
- 10 Restore the widest possible set of healthy, naturally reproducing and sustaining populations of salmon and steelhead in each relevant ecological province (add: by 2024)

- 11 Halt declining trends in Columbia River Basin salmon and steelhead populations (add: by 2024, especially those that originate above Bonneville Dam.) Significantly improve the smolt-to-adult return rates (SARs) for Columbia River Basin salmon and steelhead, resulting in productivity well into the range of positive population replacement. Restore healthy characteristics.
- 12 [delete: Allow for biological diversity among and within populations and species] [add: Promote the increase of biological diversity among and within populations] to increase ecological resilience to environmental variability.
- 13 Increase total adult salmon and steelhead runs, in a manner consistent with achieving recovery of ESA listed populations and prevents additional listings of listed species, above Bonneville Dam by 2025 to an average of 5 million annually in a manner that supports tribal and non-tribal harvest, achieving smolt-to-adult return rates in the 2-6 percent range (minimum 2 percent; average 4 percent) for listed Snake River and upper Columbia salmon and steelhead. (Add: Increase total adult runs for listed lower Columbia salmon and steelhead to achieve 75 percent of recovery goals (NOAA-F (30) 2013) by 2025.)
- 14 Incorporate ESA recovery productivity objectives.
- 15 Within 100 years achieve population characteristics that, while fluctuating due to natural variability, represent on average full mitigation for losses of anadromous fish caused by development and operation of hydroelectric facilities in the Columbia Basin
- 16 Adopt the ISAB's recommendation to make the Basin-wide objective of 5 million salmon and steelhead by 2025 more specific with respect to wild and hatchery fish.

Obj count: 16

Document: Deschutes River Subbasin Plan

Year: 2004 Author: Northwest Power and Conservation Council and Partners

Link: http://www.nwcouncil.org/media/118290/EntirePlan.pdf

- 1 Middle Deschutes River Assessment Unit
 - Provide suitable habitat conditions for restored self-sustaining populations of sockeye salmon in the Metolius/Lake Billy Chinook and Link Creek/Suttle Lake habitat complexes when passage is reestablished at the Pelton Round Butte Complex.
 - Provide efficient fish passage for focal fish species to all historic fish habitat in the assessment unit and provide connectivity between spawning and rearing habitats in the tributaries and mainstem Deschutes River.
- 2 Lower Westside Deschutes Assessment Unit
 - Increase summer steelhead habitat capacity to produce 5,348 adult fish (EDT projection) with habitat restoration.
 - Increase spring Chinook salmon habitat capacity by the equivalent of 702 adult fish (EDT projection).
 - Increase fall Chinook salmon habitat capacity to produce 1,549 adult fish (EDT projection).
 - Maintain the genetic diversity, adaptiveness, and abundance of the wild indigenous redband trout, steelhead, spring and fall Chinook salmon, bull trout, and Pacific lamprey in the Lower Westside Deschutes Assessment Unit.
- 3 Lower Eastside Deschutes Assessment Unit
 - Maintain the life history diversity of the wild redband trout in the Willow Creek system.
 - Increase the summer steelhead habitat capacity by 425 or more adult fish.
 - Provide efficient fish passage to all historic fish habitat in the assessment unit and provide connectivity between spawning and rearing habitats in the tributaries and mainstem Deschutes River.

- 4 Lower Crooked River Assessment Unit
 - Provide fish passage at Pelton Round Butte Complex and within the assessment unit.
 - Provide suitable habitat capacity for potential production of up to 1,016 summer steelhead adults returning annually to the subbasin.
 - Provide suitable habitat capacity for potential production of up to 1,052 spring Chinook adults returning annually to the subbasin.
- 5 Upper Crooked River Assessment Unit
 - Consider restoring native anadromous fish populations (including steelhead, chinook and Pacific lamprey) upstream of Bowman and Ochoco dams, if passage is achieved at Pelton Round Butte Project, Opal Springs Dam and other artificial barriers downstream from this assessment unit.

Obj count: 5

Document: Draft Clearwater Subbasin Management Plan

Author: Northwest Power and Conservation Council and Partners Year: 2004

Llnk: http://www.nwcouncil.org/media/19923/managementplan.pdf

Qualitative: **Objectives**

1 Increase the number of naturally spawning adults to achieve recovery goals within 24 years, amounting to a 4 to 6% SAR for spring/summer Chinook, 3% for fall Chinook, and 4% for steelhead as measured at Lower Granite Dam.

Obj count: 1

Document: Entiat Subbasin Plan

Author: Northwest Power and Conservation Council and Partners Year: 2004

Link: http://www.nwcouncil.org/media/20208/MgmtPlan.pdf

- 1 Population natural productivity is sufficient to maintain its abundance above the viable level.
- 2 Maintain populations at a level that allows meaningful opportunity for tribal and non-tribal hunting and fishing rights.
- 3 Populations should be sufficiently abundant to provide important ecological functions throughout its life cycle.
- 4 Populations are large enough to have a high probability of surviving environmental variation of the patterns and magnitudes observed in the past as well as those expected in the future.
- 5 Restore populations to a point where they no longer require the protection of the ESA.
- 6 Populations should be sufficiently large to maintain genetic diversity over a long term.
- 7 The population that includes naturally spawning hatchery fish exhibits sufficient productivity from naturally produced spawners to maintain population abundance above viability thresholds in the absence of supplemented hatchery production.
- 8 Populations do not exhibit sustained declines in abundance that span multiple generations and affect multiple brood-year cycles.
- 9 Populations do not exhibit trends or shifts in traits that portend declines in a population's growth rate.
- 10 Populations have sufficient abundance for compensatory processes to provide resilience to environmental and human caused disturbances.

Qualitative: **Objectives**

- 11 Natural rates of straying among subpopulations should not be substantially increased or decreased by human actions.
- 12 Key subpopulations (highly productive) should be maintained to support other subpopulations with lower productivity.
- 13 Populations exhibit sufficient productivity during fresh water life history stages to maintain abundance above thresholds, even during poor ocean (or other relevant environmental) conditions

Obj count: 13

Document: ESA Recovery Plan for the White Salmon River Watershed

Author: NOAA Fisheries Year: 2013

Llnk: http://www.westcoast.fisheries.noaa.gov/publications/recovery-planning/salmon-steelhea d/domains/willamette lowercol/lower columbia/final plan documents/white salmon reco very plan june 2013.pdf

Qualitative: **Objectives**

1 Restore White Salmon River salmon and steelhead populations to viable status.

Obj count: 1

Document: Hood River Subbasin Plan

Author: Northwest Power and Conservation Council and Partners Year: 2004

Llnk: http://www.nwcouncil.org/media/20628/Entire document.pdf

Qualitative: **Objectives**

- 1 Achieve and increase in habitat carrying capacity from 13,860 smolts to 20,000 by 2019. This assumes a 3% smolt to adult survival to meet the 600 adult objective.
- 2 Achieve an increasing trend in the number of adult fall chinook returning to the Hood River by 2019.
- 3 Achieve an average spawning escapement of 125 natural-origin spring chinook returning to the Hood River by 2014, and an average spawning escapement of 200 by 2019.
- 4 Achieve a natural smolt production increase from the current estimated range of 15,700 smolts to 20,000 smolts by 2019. A one percent smolt to adult return will produce the adult objectives in SCh-1.
- 5 Achieve and maintain an average wild/natural origin spawning population of 1,100 adult winter steelhead returning to the Hood River by 2019.
- 6 Retain the genetic integrity of wild winter steelhead in the Hood River subbasin.
- 7 Achieve and maintain an average wild/natural origin spawning population of 600 adult summer steelhead returning to the Hood River by 2019.
- 8 Maintain the unique genetic character of wild summer steelhead in Hood River.
- 9 Achieve and maintain a naturally-spawning spring chinook population made up of a stock that is adapted to the Hood River.

Document: Imnaha Subbasin Management Plan

Author: Northwest Power and Conservation Council and Partners Year: 2004

Link: http://www.nwcouncil.org/medig/20692/lmngha Plan.pdf

Qualitative: **Objectives**

- 1 Achieve escapement objectives within 24 years. The plan identified that criteria would include a time element (persistence) and an abundance element; however both were under review during the development of the plan.
- 2 Establish the abundance and productivity of anadromous stocks and how they compare to other Snake River stocks.

Obj count: 2

Document: Klickitat Subbasin Plan

Author: Northwest Power and Conservation Council and Partners Year: 2004

Link: http://www.nwcouncil.org/media/119037/EntirePlan.pdf

Qualitative: **Objectives**

- 1 Long-term: Increase reduced populations of native fish and wildlife to sustainable sizes.
- 2 Long-term: Increase quantity and quality of reduced and degraded habitat to amounts that will sustain native fish and wildlife species.

Obj count: 2

Document: Lower Columbia Fish Recovery Board - NPCC 2014 F&W Program Amendment **Recommendation - Objectives**

Author: Lower Columbia Fish Recovery Board, Northwest Power and Cons Year: 2013

Link: http://www.nwcouncil.org/media/6894057/4-Program-Objectives-staff-template-forrecommendation-summary-for-committee-101513-f.pdf

Qualitative: **Objectives**

- 1 Adopt biological objectives for Lower Columbia salmon and steelhead populations.
- 2 Add a biological objective calling for an increase in the total adult run for listed Lower Columbia salmon and steelhead to achieve 75 percent of recovery goals by 2025.
- 3 Revise the biological objectives to call for a halt in the declining trends for all Columbia Basin salmon and steelhead populations.

Obj count: 3

Document: Methow Subbasin Plan

Author: Northwest Power and Conservation Council and Partners Year: 2004

Llnk: http://www.nwcouncil.org/media/6905450/EntirePlan.pdf

Qualitative: **Objectives**

1 Maintain the genetic diversity/integrity and population structure of the locally adapted stocks (natural and artificially propagated stocks), consistent with VSP criteria developed through the TRT for recovery planning.

2 Increase the natural spawning escapement to pre-1980 numbers in the Methow Subbasin by 2013, consistent with at least 3,500 adults past Wells Dam.

Obj count: 2

Document: Native Fish Society - NPCC 2014 F&W Program Amendment Recommendation - Objectives

Year: 2013 Author: Native Fish Society, Northwest Power and Conservation Council

Llnk: http://www.nwcouncil.org/media/6894057/4-Program-Objectives-staff-template-forrecommendation-summary-for-committee-101513-f.pdf

Qualitative: **Objectives**

- 1 Make the objective of 5 million salmon and steelhead by 2025 more specific with respect to wild and hatchery fish. (ISAB 2013-1)
- 2 Adopt the ISAB's recommendation to establish quantitative biodiversity objectives for focal species and habitats. Incorporate ESA biodiversity objectives.
- 3 Adopt the ISAB's recommendation to develop productivity objectives that reflect differences among species and populations.
- 4 Adopt the ISAB's recommendation to make the Basin-wide objective of 5 million salmon and steelhead by 2025 more specific with respect to wild and hatchery fish.
- 5 Add explicit measurable biological objectives to support the more general Program goals consistent with ISAB recommendations (ISAB 2013-1). Also refer to Section 5 of this document. Species Focused Recommendations. These should integrate with the current Council high level indicators and would clarify how to report against current biological objectives.
- 6 Develop quantitative and realistic objectives for harvest based on stakeholder input. (ISAB 2013-1)
- 7 Develop productivity objectives that reflect differences among species and populations. (ISAB 2013-1)
- 8 Establish quantitative biodiversity objectives for focal species and habitats that can be achieved by 2025. (ISAB 2013-1).
- 9 Develop quantitative objectives for other species of fish and wildlife in addition to salmonids. (ISAB 2013-1)
- 10 Develop quantitative objectives for the environmental (ecosystem) characteristics needed to achieve biological objectives for population performance. (ISAB 2013-1)
- 11 Establish spawner abundance goals (escapement) for each species and race in each watershed based on an estimate of the carrying capacity of each watershed (subbasin plans). This process would be refined with additional monitoring and evaluation.
- 12 Establish sustainable, viable population objectives that also include utilization goals for each salmon and steelhead population in Columbia River subbasins

Obj count: 12

Document: Nez Perce Tribe - NPCC 2014 F&W Program Amendment Recommendation - Objectives

Author: Nez Perce Tribe Protect, Northwest Power and Conservation Coun Year: 2013

Link: http://www.nwcouncil.org/media/6894057/4-Program-Objectives-staff-template-forrecommendation-summary-for-committee-101513-f.pdf

- 1 Protect, enhance, restore, and connect freshwater habitat in the mainstem for the life history stages of naturally spawning anadromous and resident salmonids and lamprey. Protect and enhance ecological connectivity between aquatic areas, riparian zones, floodplains, and uplands in the mainstem.
- 2 The Council will consult with... to determine the possibility of adopting hydrosystem survival performance standards for non-listed populations of anadromous fish including lamprey. Efforts should be implemented to adopt and interim passage standard for adult Pacific lamprey of 80% per mainstem dam to be accomplished within 10 years and to improve passage further in subsequent years.
- 3 Restore the widest possible set of healthy, naturally reproducing and sustaining populations of salmon and steelhead in each relevant ecological province [add: by 2024.].
- 4 Increase total salmon and steelhead runs, in a manner consistent with achieving recovery of ESA listed populations and prevents additional listings of listed species, above Bonneville Dam by 2025 to an average of 5 million annually in a manner that supports tribal and non-tribal harvest, achieving smolt-to-adult return rates in the 2-6 percent range (minimum 2 percent; average 4 percent) for listed Snake River and upper Columbia salmon and steelhead. Increase total adult runs for listed lower Columbia salmon and steelhead to achieve 75 percent of recovery goals (NOAA-F (30) 2013) by 2025. Within 100 years achieve population characteristics that, while fluctuating due to natural variability, represent on average full mitigation for losses of anadromous fish caused by development and operation of hydroelectric facilities in the Columbia Basin."
- 5 Take action to reintroduce anadromous fish into blocked areas, where feasible.
- 6 Add biological objectives that address the reintroduction of extirpated populations in nonblocked areas above Bonneville Dam.
- 7 Enhance, restore, and connect freshwater habitat in the Columbia River mainstem and tributaries for the life history stages of naturally spawning anadromous and resident salmonids and Pacific lamprey.
- 8 Add explicit measureable biological objectives to support the more general program goals consistent with ISAB recommendations.
- 9 Halt declining trends in Columbia River Basin salmon and steelhead populations [add: by 2024.]. Significantly improve the smolt-to-adult return rates (SARs) for Columbia River Basin salmon and steelhead, resulting in productivity well into the range of positive population replacement.
- 10 Promote the increase of biological diversity among and within populations to increase ecological resilience to environmental variability.

Obj count: 10

Document: NOAA - NPCC 2014 F&W Program Amendment Recommendation - Objectives

Author: NOAA, Northwest Power and Conservation Council Year: 2013

Link: http://www.nwcouncil.org/media/6894057/4-Program-Objectives-staff-template-forrecommendation-summary-for-committee-101513-f.pdf

- 1 Identify/estimate the current capacity of individual sub-basins to support of produce anadromous fish.
- 2 For threatened and endangered species, incorporate, at a minimum, ESA recovery productivity objectives from final recovery plans.
- 3 Adopt the ISAB's recommendation to establish quantitative biodiversity objectives for focal species and habitats.

- 4 Make the Basin-wide objective of 5 million salmon and steelhead by 2025 more specific with respect to wild and hatchery fish.
- 5 Council's goal is to apply the available resources in the most effective way possible to achieve protection, mitigation, recovery, and delisting of threatened and endangered species in the shortest possible time.
- 6 Develop productivity objectives that reflect differences among species and populations.
- 7 The objective should incorporate ESA viability criteria as minimum targets and should reflect the broad sense recovery goals developed by local stakeholders for ESA recovery plans. We recommend the development of milestones, which could include meeting FCRPS and other biological opinions' performance standards and ESA viability criteria. Development of these objectives should actively engage co-managers and stakeholders.
- 8 For threatened and endangered species, incorporate, at a minimum, ESA spatial structure diversity objectives from final recovery plans.
- 9 Develop quantitative objectives for the environmental (ecosystem) characteristics needed to achieve biological objectives for population performance. (ISAB 2013-1)
- 10 Incorporate ESA recovery objectives as minimum targets for threatened and endangered species.
- 11 Develop quantitative objectives for other species of fish and wildlife in addition to salmonids. (ISAB 2013-1)
- 12 Establish quantitative biodiversity objectives for focal species and habitats that can be achieved by 2025. (ISAB 2013-1)
- 13 Develop productivity objectives that reflect differences among species and populations. (ISAB 2013-1)
- 14 Make the objective of 5 million salmon and steelhead by 2025 more specific with respect to wild and hatchery fish. (ISAB 2013-1)
- 15 Promote the increase of biological diversity among and within populations to increase ecological resilience to environmental variability.
- 16 Add a biological objective that addresses the reintroduction of extirpated populations in nonblocked areas above Bonneville Dam.

Obj count: 16

Document: NSIA and ANWS - NPCC 2014 F&W Program Amendment Recommendation-Objectives

Author: NSIA and ANWS, Northwest Power and Conservation Council Year: 2013

Link: http://www.nwcouncil.org/media/6894057/4-Program-Objectives-staff-template-forrecommendation-summary-for-committee-101513-f.pdf

Qualitative: **Objectives**

- 1 Adopt the NOAA-F recovery goals for salmon and steelhead listed under the WESA as interim quantitative performance benchmarks for these populations.
- 2 Maintain existing Basin-Level Biological Objectives that set a goal of five million adult fish retuning annually to the Columbia River.

Document: ODFW - NPCC 2014 F&W Program Amendment Recommendation - Objectives

Author: ODFW, Northwest Power and Conservation Council Year: 2013

LInk: http://www.nwcouncil.org/media/6894057/4-Program-Objectives-staff-template-for-recommendation-summary-for-committee-101513-f.pdf

- 1 Protect, enhance, restore, and connect freshwater habitat in the Columbia River mainstem and tributaries for the life history stages of naturally spawning anadromous and resident salmonids and Pacific lamprey.
- 2 Within 100 years achieve population characteristics that, while fluctuating due to natural variability, represent on average full mitigation for losses of anadromous fish caused by development and operation of hydroelectric facilities in the Columbia Basin.
- 3 Add biological objectives that address the reintroduction of extirpated populations in nonblocked areas above Bonneville Dam.
- 4 Add language that states: The Council's Program incorporates the quantitative recovery criteria from ESA recovery plans. It also incorporates the more qualitative broad sense goals in some recovery plans that go beyond ESA delisting.
- 5 Adopt the ISAB's recommendation to establish quantitative biodiversity objectives for focal species and habitats. Incorporate ESA biodiversity objectives.
- 6 Adopt the ISAB's recommendation to make the Basin-wide objective of 5 million salmon and steelhead by 2025 more specific with respect to wild and hatchery fish. Adopt the ISAB's recommendation to develop productivity objectives that reflect differences among species and populations. Incorporate ESA recovery productivity objectives.
- 7 Add explicit measurable biological objectives to support the more general Program goals consistent with ISAB recommendations (ISAB 2013-1). Also refer to Section 5 of this document, Species Focused Recommendations. These should integrate with the current Council high level indicators and would clarify how to report against current biological objectives.
- 8 Expand anadromous goals to the Subbasin and Province levels and add specific and measurable objectives for resident fish and wildlife to support high level indicators.
- 9 (delete: Allow for biological diversity among and within populations and species) Promote the increase of biological diversity among and within populations to increase ecological resilience to environmental variability." ... Rationale ... 'In most cases, in order to attain broad sense species recovery such that environmental, social, and economic values can be broadly attained, Fish and Wildlife Program goals should exceed the legal step of ESA delisting. However, for listed species, ESA delisting should be an intermediate step towards the longer term Fish and Wildlife Program goals, and the objectives, plans, as well as quantitative and qualitative measures of delisting-based recovery should be deliberately incorporated into the Program if achievement of this delisting objective is intended to be met.
- 10 (delete: Investigate reintroduction of) (Add: Take action) to reintroduce anadromous fish into blocked areas, where feasible.
- 11 (add: As an interim goal, contribute to) achieving smolt-to-adult survival rates (SARs)in the 2-6 percent range (minimum 2 percent; average 4 percent) for listed Snake River and upper Columbia salmon and steelhead.
- 12 Restore the widest possible set of healthy, naturally reproducing and sustaining populations of salmon and steelhead in each relevant ecological province (add: by 2024).
- 13 Halt declining trends in Columbia River Basin salmon and steelhead populations by 2024, (delete: especially those that originate above Bonneville Dam). Significantly improve the smolt-to-adult return rates (SARs) for Columbia River Basin salmon and steelhead, resulting in productivity well into the range of positive population replacement.

- 14 Increase total adult salmon and steelhead runs, in a manner consistent with achieving recovery of ESA listed populations and prevents additional listings of listed species, above Bonneville Dam by 2025 to an average of 5 million annually in a manner that supports tribal and non-tribal harvest, achieving smolt-to-adult return rates in the 2-6 percent range (minimum 2 percent; average 4 percent) for listed Snake River and upper Columbia salmon and steelhead. (add: Increase total adult runs for listed Lower Columbia salmon and steelhead to achieve 75 percent of recovery goals (NOAA-F (30) 2013) by 2025.").
- 15 (add: Restore healthy characteristics) (delete: Continue restoration) of lamprey, (add: sturgeon, and eulachon) populations.

Obi count: 15

Document: Okanogan Subbasin Plan

Author: Northwest Power and Conservation Council and Partners Year: 2004

Link: http://www.nwcouncil.org/fw/subbasinplanning/okanogan/plan/

- 1 Recovery and maintenance of key populations must achieve two broad objectives: 1) Restore populations to a point where they no longer require the protection of the ESA, and 2) Maintain populations at a level that allows meaningful opportunity for tribal and nontribal hunting and fishina riahts
- 2 Salmonid habitat should not be destroyed faster that is naturally created.
- 3 Populations do not exhibit trends or shifts in traits that portend declines in a population's growth rate.
- 4 Populations do not exhibit sustained declines in abundance that span multiple generations and affect multiple broodyear cycles.
- 5 Populations exhibit sufficient productivity during fresh water life history stages to maintain abundance above thresholds, even during poor ocean (or other relevant environmental) conditions.
- 6 The population that includes naturally spawning hatchery fish exhibits sufficient productivity from naturally produced spawners to maintain population abundance above viability threshold in the absence of supplemented hatchery production.
- 7 Populations should be sufficiently abundant to provide important ecological functions throughout its life cycle.
- 8 Populations should be sufficiently large to maintain genetic diversity over a long term.
- 9 Populations have sufficient abundance for compensatory processes to provide resilience to environmental and human caused disturbances.
- 10 Some salmonid habitat should be maintained that appear suitable or marginally suitable, even though it currently contains no fish.
- 11 Natural rates of straying among subpopulations should not be substantially increased or decreased by human actions.
- 12 Populations are large enough to have a high probability of surviving environmental variation of the patterns and magnitudes observed in the past as well as those expected in the future.
- 13 Increase the natural spawning escapement to match production levels sought in the HGMPs, HCP and to fully seed the Okanogan River system (including portions of the Upper Middle Mainstern subbasin).

- 14 Monitor and evaluate level of survival of Okanagan sockeye salmon at various stages of their fresh water life history (egg to fry, fry to smolt, and smolt-to-spawner) to fill data gaps (necessary for stock conservation and management planning)
- 15 Maintain the genetic diversity/integrity and population structure of the locally adapted stocks (natural and artificially propagated stocks), consistent with VSP criteria developed through the TRT for recovery planning.
- 16 Key subpopulations (highly productive) should be maintained to support other subpopulations with lower productivity subpopulations.
- 17 Population natural productivity is sufficient to maintain its abundance above the viable level.
- 18 Re-introduce sockeye into Skaha Lake to improve fry survival during rearing, improve adult survival during pre-spawn holding and serve as an experimental pilot program for re-introduction into Okanagan Lake. Improve survival of sockeye in the mainstem migration corridor

Obj count: 18

Document: Pacific Fishery Management Council - NPCC 2014 F&W Program Amendment **Recommendation - Objectives**

Author: Pacific Fishery Management Council, Northwest Power and Cons Year: 2013

LInk: http://www.nwcouncil.org/media/6894057/4-Program-Objectives-staff-template-forrecommendation-summary-for-committee-101513-f.pdf

Qualitative: **Objectives**

- 1 Adopt the NOAA-F recovery goals for salmon and steelhead listed under the WESA as interim quantitative performance benchmarks for these populations.
- 2 Maintain goal of five million adult fish retuning annually to the Columbia River.
- 3 Expanding the quantitative performance goals to include hatchery and wild population objectives would help consistency with HSRG requirements that hatchery program have quantifiable performance goals such as the abundance of fish harvested and the abundance of spawning fish.

Obj count: 3

Document: Proposed ESA Recovery Plan for Snake River Sockeye Salmon (Oncorhynchus nerka)

Author: NOAA Fisheries Year: 2014

LInk: http://www.westcoast.fisheries.noaa.gov/publications/recovery-planning/salmon_steelhea d/domains/interior columbia/snake/snake river sockeye salmon recovery plan.pdf

- 1 Resilience to the potential impact of catastrophic events.
- 2 Combination of abundance and productivity sufficient to sustain a population (in the absence of hatchery supplementation) at levels that will maintain genetic and spatial diversity.
- 3 Populations distributed in a manner that insulates against loss from a local catastrophic event and provides for recolonization of a population that is affected by such an event.
- 4 Maintaining long-term evolutionary potential.
- 5 Sustaining natural production across a range of conditions, allowing for adaptation to changing environmental conditions.
- 6 Population level persistence in the face of year-to-year variations in environmental influences.

Obj count: 6

Document: Recovery Plan for the Rock Creek Population of the Middle Columbia River Steelhead

Distinct Population Seament

Author: NOAA Fisheries Year: 2009

Link: http://www.westcoast.fisheries.noaa.gov/publications/recovery_planning/salmon_steelhea

d/domains/interior columbia/middle columbia/mid-c-rock-crk.pdf

Qualitative: **Objectives**

1 Rock Creek steelhead population to be restored to a sufficiently robust condition to support

recovery of the Mid-Columbia steelhead DPS.

Obj count: 1

Document: Regional Fisheries Enhancement Group Coalition - NPCC 2014 F&W Program Amendment

Recommendation - Objectives

Author: Regional Fisheries Enhancement Group Coalition, Northwest Pow Year: 2013

LInk: http://www.nwcouncil.org/media/6894057/4-Program-Objectives-staff-template-for-

recommendation-summary-for-committee-101513-f.pdf

Qualitative: **Objectives**

1 Escapement goals that account for a range of biological processes related to adult salmon spawning and dying (i.e., sediment flushing through red excavation, and nutrients provided by dying fish).

Obj count: 1

Document: Salmon Subbasin Management Plan

Author: Northwest Power and Conservation Council and Partners Year: 2014

Link: http://www.nwcouncil.org/media/119926/Salmon Subbasin Management Plan.pdf

Qualitative: **Objectives**

1 Increase the number of naturally spawning adults to achieve recovery goals within 24 years, amounting to a 4 to 6% SAR for spring/summer Chinook, 3% for fall Chinook (minimum), 4% for sockeye (minimum), and 4% for steelhead (minimum) as measured at Lower Granite Dam and in the tributaries

Obj count: 1

Document: Save Our Wild Salmon Coalition - NPCC 2014 F&W Program Amendment

Recommendation - Objectives

Author: Save Our Wild Salmon Coalition, Northwest Power and Conservati Year: 2013

Link: http://www.nwcouncil.org/media/6894057/4-Program-Objectives-staff-template-for-

recommendation-summary-for-committee-101513-f.pdf

Qualitative: **Objectives**

1 Halt declining trends in Columbia River Basin salmon and steelhead populations [add: by 2024] [delete: especially those that originate above Bonneville Dam.] Significantly improve the smolttoadult return rates (SARs) for Columbia River Basin salmon and steelhead, resulting in productivity well into the range of positive population replacement. [add: Restore healthy characteristics] [delete: Continue restoration) of lamprey, [add: sturgeon, and eulachon] populations.

- 2 Within 100 years achieve population characteristics that, while fluctuating due to natural variability, represent on average full mitigation for losses of anadromous fish caused by development and operation of hydroelectric facilities in the Columbia Basin.
- 3 Restore the widest possible set of healthy, naturally reproducing and sustaining populations of salmon and steelhead in each relevant ecological province [add: by 2024].
- 4 Restore the widest possible set of healthy, naturally reproducing and sustaining populations of salmon and steelhead in each relevant ecological province [add: by 2024].
- 5 Increase total adult salmon and steelhead runs, in a manner consistent with achieving recovery of ESA listed populations and prevents additional listings of listed species, above Bonneville Dam by 2025 to an average of 5 million annually in a manner that supports tribal and non-tribal harvest, achieving smolt-to-adult return rates in the 2-6 percent range (minimum 2 percent; average 4 percent) for listed Snake River and upper Columbia salmon and steelhead. Increase total adult runs for listed lower Columbia salmon and steelhead to achieve 75 percent of recovery goals (NOAA-F (30) 2013) by 2025.

Obj count: 5

Document: Snake Hells Canyon Subbasin Plan

Author: Northwest Power and Conservation Council and Partners Year: 2004

Link: http://www.nwcouncil.org/media/22339/Snake Hells Canyon Plan.pdf

Qualitative: **Objectives**

- 1 Increase SARs of naturally produced spawning adults to at least 4 to 6% for spring chinook, 3% for fall chinook, and 4% for steelhead, as measured at Lower Granite Dam, to increase natural production and harvest of fish populations.
- 2 Increase migratory fish productivity and production, as well as life stage-specific survival, through in-subbasin habitat improvement.

Obj count: 2

Document: Trout Unlimited - 2014 F&W Program Amendment Recommendation - Objectives

Author: Trout Unlimited, Northwest Power and Conservation Council Year: **2013**

Link: http://www.nwcouncil.org/media/6894057/4-Program-Objectives-staff-template-forrecommendation-summary-for-committee-101513-f.pdf

- 1 Establish quantitative objectives for diversity of salmon and steelhead populations.
- 2 Establish quantitative biodiversity objectives for focal species and habitats that can be achieved by 2025. (ISAB 2013-1)
- 3 Adopt the ISAB's recommendation to make the Basin-wide objective of 5 million salmon and steelhead by 2025 more specific with respect to wild and hatchery fish.
- 4 Objectives should be adjusted for periods of low, average, and high marine survival
- 5 Adopt the ISAB's recommendation to develop productivity objectives that reflect differences among species and populations.
- 6 Adopt the ISAB's recommendation to establish quantitative biodiversity objectives for focal species and habitats. Incorporate ESA biodiversity objectives.
- 7 Make the objective of 5 million salmon and steelhead by 2025 more specific with respect to wild and hatchery fish. (ISAB 2013-1)

- 8 Adopt the ISAB's recommendation to establish quantitative biodiversity objectives for focal species and habitats. Incorporate ESA biodiversity objectives.
- 9 Develop productivity objectives that reflect differences among species and populations. (ISAB 2013-1)
- 10 Adopt the ISAB's recommendation to develop productivity objectives that reflect differences among species and populations.
- 11 Develop quantitative objectives for other species of fish and wildlife in addition to salmonids. (ISAB 2013-1)
- 12 Develop quantitative objectives for the environmental (ecosystem) characteristics needed to achieve biological objectives for population performance. (ISAB 2013-1)
- 13 Establish quantitative objectives for diversity of salmon and steelhead populations.
- 14 Establish quantified escapement objectives (adult wild spawners) for each species in each watershed, which can then be aggregated for basin-wide goals.
- 15 Objectives should be adjusted for periods of low, average, and high marine survival.
- 16 Adopt the ISAB's recommendation to make the Basin-wide objective of 5 million salmon and steelhead by 2025 more specific with respect to wild and hatchery fish.
- 17 Develop quantitative and realistic objectives for harvest based on stakeholder input. (ISAB 2013-1)
- 18 Develop quantitative objectives for the environmental (ecosystem) characteristics needed to achieve biological objectives for population performance. (ISAB 2013-1)
- 19 Establish quantified escapement objectives (adult wild spawners) for each species in each watershed, which can then be aggregated for basin-wide goals.
- 20 Develop quantitative objectives for other species of fish and wildlife in addition to salmonids. (ISAB 2013-1)
- 21 Establish quantitative biodiversity objectives for focal species and habitats that can be achieved by 2025. (ISAB 2013-1)
- 22 Develop productivity objectives that reflect differences among species and populations. (ISAB 2013-1)
- 23 Develop quantitative and realistic objectives for harvest based on stakeholder input. (ISAB 2013-1)
- 24 Make the objective of 5 million salmon and steelhead by 2025 more specific with respect to wild and hatchery fish. (ISAB 2013-1)

Obj count: 24

Document: Tucannon Subbasin Plan

Author: Northwest Power and Conservation Council and Partners Year: 2004

LInk: http://www.nwcouncil.org/media/120068/Entire_Document.pdf

Qualitative: **Objectives**

1 The Columbia Conservation District Board (subbasin planning lead) expressed concern regarding the inclusion of numeric fish population goals in this subbasin plan. Board members noted that numeric fish population goals were not applicable to this habitat based subbasin plan. They considered the Snake River Salmon Recovery Planning process to be the appropriate forum through which numeric fish population goals were to be discussed and developed for the region.

Document: Umatilla Subbasin Plan

Author: Northwest Power and Conservation Council and Partners Year: 2004

Link: http://www.nwcouncil.org/media/120142/EntirePlan.pdf

Qualitative: **Objectives**

- 1 Maintain and enhance natural production, productivity, abundance, life history characteristics and genetic diversity of fish and mussels throughout the Umatilla Basin using habitat protection and improvement.
- 2 Maintain the Birch Creek sub-population as a natural steelhead sanctuary (not supplemented).
- 3 Restore and maintain diverse and productive natural populations of Chinook and coho in the Umatilla Subbasin using hatchery reintroductions.
- 4 Maintain, augment, and enhance natural production, productivity, abundance, life history characteristics and genetic diversity of steelhead, Chinook, coho, and lamprey throughout the Umatilla Basin using hatchery supplementation and out-planting

Obj count: 4

Document: Upper Columbia River Tribes - NPCC 2014 F&W Program Amendment Recommendation -**Objectives**

Author: Upper Columbia River Tribes, Northwest Power and Conservation Year: 2013

Link: http://www.nwcouncil.org/media/6894057/4-Program-Objectives-staff-template-forrecommendation-summary-for-committee-101513-f.pdf

Qualitative: **Objectives**

- 1 Include a goal of a restored, resilient and healthy CRB that includes ecosystem-based function based on the UCUT (27)s recommended river and reservoir operations (in-development).
- 2 Maintaining quantitative benchmark within the Fish and Wildlife Program and expanding them to include sustainable and useable abundance, distribution, and genetic viability objectives as interim quantitative performance objectives for UCB populations and use of a UCUT (27) report card to report on population performance relative to these objectives.

Obj count: 2

Document: Upper Columbia Spring Chinook Salmon and Steelhead Recovery Plan

Year: 2007 Author: Upper Columbia Salmon Recovery Board

Link: http://www.ucsrb.org/library/plans/

- 1 Recovery Objective Increase the productivity (spawner:spawner ratios) of naturally produced steelhead within each population to levels that result in low risk of extinction.
- 2 Reclassification Objective Increase the abundance and productivity of naturally produced spring Chinook within each population in the Upper Columbia ESU to levels that would lead to reclassification of the FSU as threatened under the FSA.
- 3 Reclassification Objective Increase the abundance and productivity of naturally produced steelhead within each population in the Upper Columbia DPS to levels that would lead to reclassification of the DPS as threatened under the FSA.
- 4 Reclassification Objective Increase the current distribution of naturally produced steelhead in the Upper Columbia DPS and conserve genetic and phenotypic diversity.

- 5 Recovery Objective Restore the distribution of naturally produced steelhead to previously occupied areas (where practical) and allow natural patterns of genetic and phenotypic diversity to be expressed.
- 6 Reclassification Objective Increase the current distribution of naturally produced spring Chinook in the Upper Columbia ESU and conserve genetic and phenotypic diversity.
- 7 Recovery Objective Increase the abundance of naturally produced steelhead spawners within each population in the Upper Columbia DPS to levels considered viable.
- 8 Recovery Objective Restore the distribution of naturally produced spring Chinook to previously occupied areas (where practical) and allow natural patterns of genetic and phenotypic diversity to be expressed.
- 9 Recovery Objective Increase the productivity (spawner:spawner ratios and smolts/redds) of naturally produced spring Chinook within each population to levels that result in low risk of extinction
- 10 Recovery Objective Increase the abundance of naturally produced spring Chinook spawners within each population in the Upper Columbia ESU to levels considered viable.

Obj count: 10

Document: Upper Snake River Tribes Foundation - NPCC 2014 F&W Program Amendment **Recommendation - Objectives**

Author: Upper Snake River Tribes Foundation, Northwest Power and Conse Year: 2013

LInk: http://www.nwcouncil.org/media/6894057/4-Program-Objectives-staff-template-forrecommendation-summary-for-committee-101513-f.pdf

- 1 Adopt the ISAB's recommendation to establish quantitative biodiversity objectives for focal species and habitats. Incorporate ESA biodiversity objectives.
- 2 Add biological objectives that address the reintroduction of extirpated populations in nonblocked areas above Bonneville Dam.
- 3 Within 100 years achieve population characteristics that, while fluctuating due to natural variability, represent on average full mitigation for losses of anadromous fish caused by development and operation of hydroelectric facilities in the Columbia Basin.
- 4 Halt declining trends in Columbia River Basin salmon and steelhead populations (add: by 2024, especially those that originate above Bonneville Dam.) Significantly improve the smolt-to-adult return rates (SARs) for Columbia River Basin salmon and steelhead.
- 5 Restore the widest possible set of healthy, naturally reproducing and sustaining populations of salmon and steelhead in each relevant ecological province (add: by 2024).
- 6 (add: As an interim goal, contribute to) achieving smolt-to-adult survival rates (SARs) in the 2-6 percent range (minimum 2 percent; average 4 percent) for listed Snake River and upper Columbia salmon and steelhead.
- 7 (delete: Investigate reintroduction of) (Add: Take action) to reintroduce anadromous fish into blocked areas, where feasible.
- 8 Upper Snake River Tribes Foundation Increase total adult salmon and steelhead runs, in a manner consistent with achieving recovery of ESA listed populations and prevents additional listings of listed species, above Bonneville Dam by 2025 to an average of 5 million annually in a manner that supports tribal and non-tribal harvest, achieving smolt-to-adult return rates in the 2-6 percent range (minimum 2 percent; average 4 percent) for listed Snake River and upper Columbia salmon and steelhead. (Add: Increase total adult runs for listed lower Columbia salmon and steelhead to achieve 75 percent of recovery goals (NOAA-F (30) 2013) by 2025.)

- 9 Expand anadromous goals to the Subbasin and Province levels and add specific and measurable objectives for resident fish and wildlife to support high level indicators.
- 10 Add explicit measurable biological objectives to support the more general Program goals consistent with ISAB recommendations (ISAB 2013-1). Also refer to Section 5 of this document, Species Focused Recommendations. These should integrate with the current Council high level indicators and would clarify how to report against current biological objectives.
- 11 Adopt the ISAB's recommendation to make the Basin-wide objective of 5 million salmon and steelhead by 2025 more specific with respect to wild and hatchery fish.
- 12 Adopt the ISAB's recommendation to develop productivity objectives that reflect differences among species and populations.
- 13 Add language that states: "The Council's Program incorporates the quantitative recovery criteria from ESA recovery plans. It also incorporates the more qualitative broad sense goals in some recovery plans that go beyond ESA delisting."
- 14 Incorporate ESA recovery productivity objectives.
- 15 [delete: Allow for biological diversity among and within populations and species] [add: Promote the increase of biological diversity among and within populations] to increase ecological resilience to environmental variability.
- 16 Incorporate ESA Recovery Plans: objectives and measureable recovery criteria.

Obj count: 16

Document: Washington State Governor's Salmon Recovery Office - NPCC 2014 F&W Program **Amendment Recommendation - Objectives**

Author: Washington State Governor's Salmon Recovery Office, Northwest Year: 2013

Link: http://www.nwcouncil.org/media/6894057/4-Program-Objectives-staff-template-forrecommendation-summary-for-committee-101513-f.pdf

- 1 Add biological objectives that address the reintroduction of extirpated populations in nonblocked areas above Bonneville Dam.
- 2 Expand anadromous goals to the Subbasin and Province levels and add specific and measurable objectives for resident fish and wildlife to support high level indicators.
- 3 (delete: Investigate reintroduction of) (Add: Take action) to reintroduce anadromous fish into blocked areas, where feasible.
- 4 add: As an interim goal, contribute to) achieving smolt-to-adult survival rates (SARs) in the 2-6 percent range (minimum 2 percent; average 4 percent) for listed Snake River and upper Columbia salmon and steelhead.
- 5 Restore the widest possible set of healthy, naturally reproducing and sustaining populations of salmon and steelhead in each relevant ecological province (add: by 2024).
- 6 Halt declining trends in Columbia River Basin salmon and steelhead populations (add: by 2024, especially those that originate above Bonneville Dam.) Significantly improve the smolt-to-adult return rates (SARs) for Columbia River Basin salmon and steelhead, resulting in productivity well into the range of positive population replacement. Restore healthy characteristics.
- 7 Within 100 years achieve population characteristics that, while fluctuating due to natural variability, represent on average full mitigation for losses of anadromous fish caused by development and operation of hydroelectric facilities in the Columbia Basin.

- 8 Increase total adult salmon and steelhead runs, in a manner consistent with achieving recovery of ESA listed populations and prevents additional listings of listed species, above Bonneville Dam by 2025 to an average of 5 million annually in a manner that supports tribal and non-tribal harvest, achieving smolt-to-adult return rates in the 2-6 percent range (minimum 2 percent; average 4 percent) for listed Snake River and upper Columbia salmon and steelhead. (Add: Increase total adult runs for listed lower Columbia salmon and steelhead to achieve 75 percent of recovery goals (NOAA-F (30) 2013) by 2025.
- 9 Add explicit measurable biological objectives to support the more general Program goals consistent with ISAB recommendations (ISAB 2013-1). Also refer to Section 5 of this document, Species Focused Recommendations. These should integrate with the current Council high level indicators and would clarify how to report against current biological objectives.

Obj count: 9

Document: WDFW - NPCC 2014 F&W Program Amendment Recommendation - Objectives

Author: WDFW, Northwest Power and Conservation Council Year: 2013

Link: http://www.nwcouncil.org/media/6894057/4-Program-Objectives-staff-template-forrecommendation-summary-for-committee-101513-f.pdf

Qualitative: **Objectives**

- 1 (add: As an interim goal, contribute to) achieving smolt-to-adult survival rates (SARs) in the 2-6 percent range (minimum 2 percent; average 4 percent) for listed Snake River and upper Columbia salmon and steelhead.
- 2 Increase total adult salmon and steelhead runs, in a manner consistent with achieving recovery of ESA listed populations and prevents additional listings of listed species, above Bonneville Dam by 2025 to an average of 5 million annually in a manner that supports tribal and non-tribal harvest, achieving smolt-to-adult return rates in the 2-6 percent range (minimum 2 percent; average 4 percent) for listed Snake River and upper Columbia salmon and steelhead. (Add: Increase total adult runs for listed lower Columbia salmon and steelhead to achieve 75 percent of recovery goals (NOAA-F (30) 2013) by 2025.
- 3 Within 100 years achieve population characteristics that, while fluctuating due to natural variability, represent on average full mitigation for losses of anadromous fish caused by development and operation of hydroelectric facilities in the Columbia Basin.
- 4 Halt declining trends in Columbia River Basin salmon and steelhead populations (add: by 2024, especially those that originate above Bonneville Dam.) Significantly improve the smolt-to-adult return rates (SARs) for Columbia River Basin salmon and steelhead, resulting in productivity well into the range of positive population replacement. Restore healthy characteristics.
- 5 (add: As an interim goal, contribute to) achieving smolt-to-adult survival rates (SARs) in the 2-6 percent range (minimum 2 percent; average 4 percent) for listed Snake River and upper Columbia salmon and steelhead.
- 6 Expand anadromous goals to the Subbasin and Province levels and add specific and measurable objectives for resident fish and wildlife to support high level indicators.
- 7 Add explicit measurable biological objectives to support the more general Program goals consistent with ISAB recommendations (ISAB 2013-1). Also refer to Section 5 of this document, Species Focused Recommendations. These should integrate with the current Council high level indicators and would clarify how to report against current biological objectives.
- 8 Restore the widest possible set of healthy, naturally reproducing and sustaining populations of salmon and steelhead in each relevant ecological province (add: by 2024).

Document: Wenatchee Subbasin Plan

Author: Northwest Power and Conservation Council and Partners Year: 2004

Link: http://www.nwcouncil.org/media/23001/MamtPlan.pdf

Qualitative: **Objectives**

1 Maintain populations at a level that allows meaningful opportunity for tribal and nontribal hunting and fishing rights

2 Restore populations to a point where they no longer require the protection of the ESA

Obj count: 2

Document: Wy Kan Ush Mi Wa Kish Wit Spirit of the Salmon - The Columbia River Anadromous Fish Restoration Plan of the Nez Perce, Umatilla, Warm Springs, and Yakama Tribes; 2014

Update

Author: Columbia River Intertribal Fish Commission Year: 2014

Link: http://plan.critfc.org/assets/wy-kan-update.pdf

Qualitative: **Objectives**

1 Within 7 years, halt the declining trends in salmon, sturgeon, and lamprey populations originating upstream of Bonneville Dam.

- 2 Restore anadromous fishes to historical abundance in perpetuity.
- 3 Within 25 years, increase the total adult salmon returns above Bonneville Dam to 4 million annually and in a manner that sustains natural production to support tribal commercial as well as ceremonial and subsistence harvest opportunities.
- 4 Hood River escapement goal of 205 natural origin spring Chinook.
- 5 Yakima River total escapement goal of 5000 coho with 3500 of natural origin.
- 6 Wenatchee River escapement goal of 1500 natural origin coho.
- 7 Methow River escapement goal of 1500 natural origin coho.

Obj count: 7

Document: Yakima Basin Fish and Wildlife Recovery Board - NPCC 2014 F&W Program Amendment

Recommendation - Objectives

Author: Yakima Basin Fish and Wildlife Recovery Board, Northwest Power Year: 2013

Link: http://www.nwcouncil.org/media/6894057/4-Program-Objectives-staff-template-for-

recommendation-summary-for-committee-101513-f.pdf

Qualitative: **Objectives**

1 Identify recovering all listed ESUs and DPSs to levels that meet recovery criteria in ESA-listed recovery plans as a Program goal.

Document: Yakima Subbasin Plan

Author: Northwest Power and Conservation Council and Partners Year: 2004

LInk: http://www.nwcouncil.org/media/23192/Supplement.pdf

Qualitative: Objectives

- 1 Aquatic technical committee could not come to consensus on biological abundance targets for each of the focal species due to policy dilemmas.
- 2 To restore this watershed sufficiently to support self-sustaining and harvestable populations of indigenous fish and wildlife.

Obj count: 2

Total count: 290