

September 28, 2017

RE: Recommended Priorities for Salmon Recovery and the Chinook Implementation Strategy.

Tribes, through coordination of the Tribal Management Conference (TMC), recommend the following actions as priority areas that will help focus and support overall progress in continued efforts to protect and restore the Puget Sound ecosystem, and that will advance and accelerate salmon recovery and restoration. Additionally, the TMC aspires to see these priorities incorporated into the Partnership's "Chinook Implementation Strategy" and to be recognized as having outlined priority focus areas for the strategy, and to guide in its implementation. These priorities are by no means exclusive, nor are they meant to supplant the exhaustive list of strategies identified and vetted through the PSP process last fall. However, they are intended to emphasize critical pathways that must be achieved for the recovery of salmon.

Identifying these priority actions is only the first step. Next steps will include working with a wide variety of partners – including but not limited to local governments, regulatory agencies, and other decision-makers – to identify responsible parties for many of these actions, and determine how to implement the actions and how to pay for them. Implementation for many of these actions might be different in urban than in rural areas.

Recommended Priorities for Salmon Recovery:

1. Outcome: Protect all remaining salmon habitat, optimize a net gain in ecosystem function and habitat productivity, and build a region-wide accountability system that is comprehensive, accessible, and transparent.

a. Implementing tasks:

- i. Continue to engage with local implementing entities (including, but not limited to, tribes, counties, cities, lead entities, WRIAs etc.) on preservation of salmon habitat, issues relating to land use, critical areas, and other issues affecting salmon recovery and restoration work.
- ii. Evaluate land use policies and their effectiveness in protecting habitat critical to salmon and salmon recovery.
- iii. Develop a regional definition and application of critical areas and ecologically important habitat, including coordination of data (GIS exercise) to compile this overlay.
- iv. Develop a standardized habitat assessment methodology and decision framework that supports regulatory alignment and harmonization of plans, processes, voluntary measures, and actions among agencies and across all levels of government to achieve standardized habitat objectives necessary to support the recovery and further protection of all treaty resources, meet multi-benefit planning goals, and create efficiencies and cost savings for the public, governments and their staff.
- v. Establish science-based standards region-wide when protecting and restoring effective riparian zones on all salmon and steelhead streams. Include other key biological attributes such as floodplains, off channel habitats and riverine wetlands. (*e.g. establishing effective riparian management guidance manual, work currently underway by WDFW*).

- vi. Monitor and report on landowner use and implementation of incentive-based programs to address salmon habitat protection and restoration needs. Regional coordinating entities can use monitoring data to track local progress and pursue adaptive management and corrections as needed; and where necessary, tailor program implementation to local conditions to achieve salmon recovery goals at the watershed scale.
- vii. Identify, review, and address regulatory regimes and mechanisms that adversely impact fisheries resources, including regulatory exemptions that adversely, or potentially adversely impact fish habitat.
 - Guidance: consider engaging JLARC or the State Auditor, and/or the SRC Regulatory Subcommittee, to help with this task.
- viii. Improve practices: Incorporate ecosystem deliverables as a design element of, and outcome for, all future public and private capital projects. Public projects designed for infrastructure improvements will include as measurable outcomes improvement of the environmental baseline with an emphasis on maximizing ecosystem benefits to salmon populations. Private capital projects will be incentivized to improve ecosystem deliverables through expedited SEPA and local permit review and approval.
- ix. Develop an acquisition strategy that values conservation easements and property acquisitions on ecosystem services provided to the region.
- x. Create a balance sheet for habitat gain and loss in the watershed.
- xi. Enforce and improve compliance with existing regulations (*e.g. Track enforcement and compliance reporting for results, and variance reporting.*)
- xii. Modify hydraulic code to include enhanced civil enforcement authorities that would allow WDFW to issue stop work and administrative orders, inspect properties, and increase civil fines.
- xiii. State agencies meet regularly to coordinate salmon recovery actions.

2. Outcome: Water Quantity and Water Quality: Establish and enforce water quantity and quality standards that protect, conserve, and restore water resources for salmon.

a. Implementing tasks: Water Quantity

- i. Ensure sufficient water for fish including via instream flow rules.
- ii. No authorization of new appropriations (including permit-exempt appropriations) if they would impair senior water rights (including state instream flow rights adopted by rule) or adversely affect fisheries resources.
- iii. Initiate discussions and identify specific actions around water science, management and conservation (e.g. moving to a pricing system, assessing water availability, water storage opportunities).
- iv. Plan for future needs and changing climate and ecosystem conditions: Protect and improve, where needed, the water holding capacity of watershed uplands to increase groundwater, augment summer low flows and reduce flood risks.

b. Implementing tasks: Water Quality

- i. Effectively implement and enforce existing regulations and report periodically.
- ii. Address and manage water quality parameters, including:
 1. Excess nutrient loading (e.g. Nitrogen) for all sources, and with specific attention to pathways associated with wastewater treatment outfalls
 2. Elevated temperatures
 3. Sediment
- iii. Incentivize and accelerate stormwater management for new and existing development.

3. Action: Improve management of predation and mortality factors that inhibit salmon recovery.

a. Implementing tasks

- i. Develop a white paper review of all recent science and studies of pinniped predation on juvenile, sub adult, and adult salmon, and include a section on potential management options.
- ii. Marine Mammal Protection Act: As science continues to demonstrate the impact on salmon by marine mammals, modification of the Act to allow targeted management of pinnipeds on salmon should be pursued.
- iii. Identify contributing factors that exacerbate predation and mortality and implement solutions.
 - Guidance: Identify contributing factors and test management actions to address predation. Direct resources to fix known factors contributing to increased predation (e.g. address specific infrastructure, haul-out sites proximate to salmon populations of concern, adjustments to hatchery release strategies).

4. Action: Emphasize funding and implementation of Science and monitoring actions to support Puget Sound Salmon recovery.

a. Implementing tasks

- i. Emphasize funding support for efforts that build our understanding of ecological interactions that likely influence how Puget Sound salmon populations perform.
 - (1). Continue to support study of Salish Sea food web dynamics - including zooplankton monitoring, modeling and investigating Chinook predator / prey relationships.
 - (2). Increase scope and thoroughness of assessments and research on forage fish spawning, rearing habitats and requirements.
- ii. Improve monitoring of pollutants (e.g. metals, hydrocarbons, PAHs, PBDEs) associated with stormwater and other sources. These point or nonpoint sources need to be identified and assessed to improve our understanding of their impacts to salmon resources.
- iii. Support efforts that improve our knowledge of things integral to managing Chinook and steelhead and tracking their recovery, including:

- (1). Co-manager (WDFW, Tribes) fish in / fish out monitoring of natal Chinook populations.
 - (a). e.g. Utilizing the Juvenile Migrant Data Exchange (JMX) and Adult Fish Data Exchange (AMX) to share information between co-managers for fish in/out monitoring.
 - (2). Habitat status and trends monitoring throughout Puget Sound (*e.g. a survey of current habitat to assess the amount of habitat lost since Chinook were listed.*)
 - (a). e.g. An accessible habitat status and trends monitoring program informs local restoration efforts with a useful data platform
 - (b). e.g. Establish a regional baseline inventory of common datasets necessary for analyzing habitat conditions for Chinook, *i.e.* current (2017) shoreline armoring inventory along freshwater and saltwater habitats across the entire region, including but not limited to docks, bulkheads, boat rails, man-made structures, etc. that are not permitted.
 - (c). Monitor and evaluate habitat and fish trends at the scale of watersheds, to assess how processes are functioning – and (if applicable) how land cover is changing (relate to Common Indicators project). Use that monitoring information to inform management.
 - (d). Evaluate new remote sensing technologies to help monitor habitat condition and identify critical habitat areas for acquisition or restoration.
 - (e). Better connect habitat monitoring results and trends with entities implementing regulatory, incentive, restoration, and protection programs. Engage with these programs so they have the right information on where to target and focus program implementation.
 - (3). Comprehensive juvenile Chinook restoration effectiveness monitoring linked to the restoration strategies and goals in watershed recovery plans.
- iv. Invest in making better estimates so we can better manage and recover Chinook
 - (1). Invest funding and capacity to improve accuracy and precision for Chinook populations where status and trends estimates of key life stages (e.g., escapement, juvenile migrants, etc.) are lacking, or highly uncertain.
 - (a). e.g. Utilize the Adult Fish Data Exchange (AMX) to manage and share adult fish data between co-managers. Due to rollout in production in Fall of 2017.
 - (2). Evaluate existing watershed-scale efforts for “lessons learned” on actions that have been successful – or not successful. Share information and conclusions with all watershed-scale efforts for adaptive management of their program implementation.
 - v. Align recovery endpoints to actual Chinook biology and how recovery actions are really implemented.
 - (1). Align targets of Chinook populations to all life stages linked to the recovery strategies within recovery plan chapters.
 - vi. Develop a framework to determine how salmon are responding to current habitat protection, restoration, and management actions.

- vii. Develop a better understanding of the causes of poor marine survival of steelhead (and Chinook and other species) in Puget Sound through support of the Salish Sea Marine Survival Project's research program.
 - (1). Provide political, technical, and financial support to partners as they translate research results into management/recovery actions
- viii. Evaluate potential threats from emerging contaminants of concern from wastewater and stormwater as they relate to salmon and their food web.
- ix. Incorporate traditional knowledge into science and monitoring efforts.
- x. Improve forecasting of climate change impacts on salmon.
- xi. Create an open and shared georeferenced database, clearinghouse, and/or roadmap for science and monitoring data.

5. Develop a viable, effective funding and communications strategy that provides 50-100x the current funding for protection and restoration from new and existing sources.

- a. Implementing tasks
 - i. Communication strategy and Public outreach:
 - (1). Develop a strategy to enable and mobilize the public to take actions to protect salmonid habitat and support funding of recovery actions
 - ii. Funding mechanisms and funding sources: Explore and utilize other sources of funding, in addition to tribal, state, and federal sources. Examples of sources may include private donors (individual), foundations, charitable foundations, etc.
 - iii. Acquisition strategy: increase focus on habitat/ lands essential for protection and restoration.
 - iv. Identify partners and co-benefits of salmon recovery actions.
 - v. Share data with state and local governments.

6. Develop and implement a climate change mitigation and adaptation strategy for salmon recovery.

- a. Implementing tasks
 - i. Assess risk of climate change to salmon recovery and share assessment(s) and analysis with watersheds to incorporate into planning processes.
 - ii. Integrate climate change adaptation framework to salmon habitat restoration plans in Puget Sound.
 - iii. Integrate climate change guidance when reviewing and evaluating project proposals for restoration projects.

7. Integrated spill planning, prevention, and response plans developed.

- a. Implementing tasks

- i. Align local and regional prevention and response plans, and allocate resources.
- ii. Strengthen and integrate spill response readiness of state, tribal and local governments, and other necessary stakeholders.

8. Continue to restore degraded habitat and fish populations, via projects captured in Lead Entities' four-year work plans.

9. Update the Puget Sound Salmon Recovery Plan and watershed chapters.