

**Alaska Sustainable Salmon Fund (AKSSF)  
2008 Framework for Southeast Alaska**

<b>GOAL 1 – HABITAT</b>	
<b>Protect and restore freshwater, estuarine and marine salmon and steelhead habitats to maintain resource productivity.</b>	
<b>Objective</b>	<b>Information Need/Issues</b>
1-A. Identify, protect and manage spawning, incubation, rearing overwintering and migration habitats to mitigate or prevent human-induced perturbations beyond the bounds of natural variation.	(1A-1) Monitor development projects or activities to ensure protection of salmon and steelhead habitat.
	(1A-2) Quantify flow requirements for life stages of salmon and steelhead and secure reservations of water on important salmon- and steelhead-producing systems.
	(1A-3) Develop and improve information sharing systems to provide managers and the public readily available information on salmon and steelhead habitat.
	(1A-4) Catalog anadromous water bodies.
	(1A-5) Identify and analyze location and patterns of important salmon and steelhead spawning, incubation, rearing, overwintering and migration habitat, including site-specific habitat characteristics (e.g., vegetation, substrate, hydrology/hydraulics, water quality) in freshwater, estuarine or marine environments.
	(1A-6) Establish baselines for water quality and quantity for salmon and steelhead water bodies
	(1A-10) Evaluate the relationship between amount, quality and pattern of habitat types and salmon and steelhead productivity.
1-B. Detect and predict short- and long-term changes in salmon and steelhead habitat.	(1B-1) Evaluate ocean conditions and cycles that affect nearshore salmon and steelhead productivity.
	(1B-2) Evaluate the individual and cumulative effects of human activities on salmon and steelhead habitat.
	(1B-4) Detect and evaluate effects of global climate change on salmon and steelhead habitat.
	(1B-5) Evaluate contaminant burdens in salmon.
	(1B-6) Evaluate the role of salmon escapement in food webs of aquatic and terrestrial ecosystems.
	(1B-8) Evaluate freshwater conditions and cycles that affect salmon and steelhead productivity.
	(1B-9) Evaluate estuarine conditions and cycles that affect salmon and steelhead productivity.

**GOAL 1 – HABITAT (continued)**

<b>Objective</b>	<b>Information Need/Issues</b>
<p>1-C. Restore habitat and fish passage that has been degraded by human activity.</p>	<p>(1C-1) Identify, assess, prioritize and plan for restoration of fish passage and riparian spawning and rearing habitats that have been degraded by human activity.</p>
	<p>(1C-2) Restore fish passage and riparian, spawning, and rearing habitats that have been degraded by human activity. The restoration project must include monitoring (commensurate to the project scale) that documents the project has been implemented as planned (e.g., built as designed, revegetated as planned, etc.)</p>
	<p>(1C-4) Review and analyze effectiveness of mitigation/restoration projects to continue to improve mitigation/restoration techniques.</p>
<p>1-D. Evaluate the effectiveness of programs that protect, maintain and restore salmon habitat and improve, where appropriate.</p>	<p>(1D-1) Evaluate existing policies and standards to ensure adequate protection of salmon habitat.</p>
	<p>(1D-3) Evaluate and improve protocols to monitor the effectiveness of riparian and stream habitat protection measures.</p>

**GOAL 2 – STOCK ASSESSMENT**  
**Collect information needed to sustain high potential productivity of wild salmon and steelhead stocks.**

Objective	Information Need/Action
2A. Assess salmon and steelhead escapements. Estimate and periodically evaluate escapement goal approach and the escapement goal ranges to achieve sustained yield and maintain production.	(2A-1) Obtain reliable temporal/spatial estimates of escapements by age/sex/length.
	(2A-2) Identify the limiting factors for depressed stocks.
	(2A-3) Collect and evaluate data regarding harvest by stock by brood year, for hatchery and wild stocks.
	(2A-4) Develop data analyses, databases, or models for establishing escapement goals or for fishery management needs.
	(2A-5) Develop, evaluate, and implement methods to estimate escapement, including: evaluating existing escapement estimates and developing cost-effective technologies to estimate a larger proportion of total escapements.
	(2A-6) Estimate freshwater smolt production and/or marine survival for key stocks of interest.
2B. Assess stock status to apply in management systems to achieve escapement goals.	(2B-1) Determine genetic baselines for management, conservation, and restoration efforts.
	(2B-2) Develop a list of stocks by stock status category using available biological information.
	(2B-3) Develop cost-effective stock identification methods.
2C. Identify and catalog management units (stock aggregations, meta-populations).	(2C-1) Identify and assess management units for each species, based on an understanding of the phenotypic and genotypic characteristics.
2D. Establish information sharing system.	(2D-1) Standardize historical data to be usable in a data series for integrated analysis, including stock status and habitat quality.
	(2D-2) Develop public access to salmon and salmon habitat data via web.
	(2D-3) Improve data management infrastructure.
2E. Assess the affect of hatchery production on wild salmon stocks.	(2E-1) Quantify straying rates.
	(2E-2) Develop methods to determine acceptable straying rates.
	(2E-3) Assess impacts of large-scale enhancement on wild stocks.
	(2E-4) Determine the effects of hatchery straying on escapement indicator stock surveys.
2F. Identify and assess the impact of invasive species on wild salmon and steelhead to minimize interaction.	(2F-1) Determine distribution and extent of invasive species in Southeast Alaska.
	(2F-3) Determine the effects and potential effects of invasive species on wild salmon and steelhead.

**GOAL 3: SALMON AND STEELHEAD MANAGEMENT SYSTEMS**

**Maintain effective and biologically-sound salmon and steelhead management systems to regulate human activities that affect salmon and steelhead.**

Objective	Information Need/Issues
<p>3A. Develop and implement management systems for wild and enhanced fish production to achieve cultural, social, and economic objectives within acceptable biological limits.</p>	(3A-1) Incorporate stock assessment and fishery information to meet allocation and management objectives.
	(3A-2) Conduct ethno-historic and ethnographic research describing patterns of subsistence use of wild salmon and steelhead, and investigate changes in those patterns of use through time.
	(3A-3) Collect and analyze information to forecast and manage inseason to achieve management objectives.
	(3A-4) Evaluate the effects of management actions on cultural, social and/or economic benefits.
	(3A-6) Collect information on by-catch.
	(3A-8) Develop, evaluate, and update fishery management plans, including regulatory plans, hatchery management plans, and other plans and regulations affecting wild salmon stocks. Ensure that commercial, recreational, and subsistence uses of salmon are addressed.
	(3A-9) Contribute to the development and updates of Regional Comprehensive Salmon Enhancement Plans for Southeast Alaska.
	(3A-11) Evaluate hatchery marine survivals and production strategies and determine effective production and harvest strategies.
<p>3B. Minimize adverse impacts to wild stocks from enhancement.</p>	(3B-1) Develop release strategies that minimize the extent to which enhanced fish compete with and prey on wild salmon.
	(3B-2) Implement plans to control and minimize straying rates.
	(3B-3) Ensure enhanced production is adequately marked.
	(3B-4) Provide an adequate recovery and analysis program.
	(3B-5) Improve accounting of returns to terminal harvest areas to estimate total run size.
	(3B-6) Develop management tools to effectively harvest enhanced fish.
<p>3C. Develop management tools to meet the Annexes of the Pacific Salmon Treaty, revised for 2009-2018.</p>	(3C-1) Develop stock assessment programs to implement abundance-based management and allocation of Chinook, sockeye, and coho stocks between Alaska and Canada on the Taku, Stikine, and Alsek transboundary rivers.
	(3C-2) Develop more comprehensive stock assessment projects and analysis to meet allocations for sockeye, pink, coho, and chum salmon in the Northern Boundary Area (southern Southeast Alaska and northern British Columbia).

<b>GOAL 3 – SALMON AND STEELHEAD MANAGEMENT SYSTEMS (Continued)</b>	
<b>Objective</b>	<b>Information Need/Issues</b>
3C – (Continued)	(3C-3) Fill significant data gaps to implement several obligations required of Alaska regarding the Chinook chapter in the current Pacific Salmon Treaty Agreement, such as escapement, wild-stock CWT, incidental mortality, and stock contribution (genetic and coded wire tag) estimation programs.
	(3C-4) Meet mitigation obligations for Alaska specified in the current Pacific Salmon Treaty Agreement.
3D. Restore self-sustaining wild salmon and steelhead stocks, where appropriate.	(3D-1) For wild salmon and steelhead stocks that are below historic levels, determine if there are limiting factors and take action to restore the population, where appropriate.