

**Decision:** Determine process/steps for Forum to weigh in on LIO structure, membership and geographical extent decision

**Background:** Topic discussed during Jan. and Apr. PDC meetings and the Feb. and May Forum meetings.

LIO Coordinator, Jessica Hamill, provided a brief history of the LIO activities to date and relayed that the LIO is reevaluating structure and function to address frustrations including: lack of effectiveness, frustration that level of effort is not in line with results, disengagement of some members, and continuing questions on appropriate geographic scope. LIO was also motivated by a memo (from S. Central LIO) that pointed to a re-evaluation of the LIO boundaries and exploration of integrating functions with WRIA-based salmon recovery groups.

LIO is exploring their:

- Geographic extent
- Structure, including relationship to salmon recovery groups
- Membership
- Function/activities

LIO has developed new DRAFT Vision, Objectives, and Criteria (not adopted or fully vetted)

Vision

*"Implement priority actions, identify additional actions to address gaps, and continue to integrate additional goals and priorities (local and regional) that have been identified in the LIO Ecosystem Recovery Plan."*

Objectives

- Be more strategic about targeting existing funding opportunities
- Communicate our goals and priorities to stakeholders and decision-makers with the goal of bringing more resources to the LIO
- Accelerate implementation of our recovery strategies
- Examine alternative structure models that integrate the LIO with other watershed forums and local representation at the State level

LIO has identified criteria that the *new* LIO model(s) should meet/possess

- Broad Expertise
  - Ability to address any aspect of ecosystem recovery within the LIO Ecosystem Recovery Plan and broader associated watershed planning processes/documents
- Leadership
  - Broadly involves and engages leadership (management and elected officials) at local level
- Collaborative Implementation
  - Provide regional and local feedback and support loops (State, Federal, and local)
- Continuity/adaptability
  - Membership adaptable over time and able independent of geographic boundaries
- Efficiency
  - Commiserate level of input relative to anticipated outcomes/goals

LIO 2017 – 2018 workplan includes:

- Strategic Implementation:
  - development and implementation of a funding strategy;
  - implement strategies in Ecosystem Recovery Plan
  - address gaps and barriers to ecosystem recovery;
  - develop review, recommend NTAs; prioritize local NTAs for funding

- Continued plan development:
  - setting local goals for vital signs like floodplains;
  - establishing monitoring indicators for recovery
  
- Adaptive management:
  - address ongoing planning needs like status and trends,
  - approve Final Plan, and
  - sequencing priority actions/efforts;
  - LIO priority alignment with regional efforts (i.e. Implementation Strategies)
  
- Communication:
  - development and implementation of a communications strategy
  
- Other:
  - includes regional coordination
  - LIO structure evaluation
  - address emerging/critical ecosystem recovery concerns

**For a sense of the universe the LIO covers, see attached:**

- LIO Priority Components and Vital Signs
- LIO Ecosystem Recovery Strategies
- 2016 Near Term Actions

# Key pieces of the LIO Ecosystem Recovery Plan

## LIO Priority Components and Vital Signs

High Priority Ecosystem Component Vital Signs		Human Health and Quality of Life Linkages	
Chinook Salmon * <sup>1</sup>	Freshwater Quality * <sup>3</sup>	Good Governance	Economic Vitality
Floodplains *	Shoreline Armoring	Cultural Wellbeing	Sense of Place <sup>10</sup>
Estuaries * <sup>2</sup>	Marine Water Quality	Sound Stewardship	Outdoor Activity <sup>11</sup>
Land Development and Cover *	Shellfish Beds <sup>4</sup>		
Summer Stream Flow *	Toxics in Fish		
Medium Priority Ecosystem Component Vital Signs			
Marine Shorelines and Nearshore *	Freshwater Wetlands *		
Onsite Sewage Systems <sup>5</sup>	Drinking Water <sup>7</sup>		
Eelgrass <sup>6</sup>	Marine Sediment Quality		
Low Priority Ecosystem Component Vital Signs			
Pacific Herring <sup>8</sup>	Birds		
Orcas	Local Foods <sup>9</sup>		

**Notes:**

- \* Six components identified as very high priority in 2015
- Habitat components identified by Sno-Stilly LIO that were not included in the regional PSP Vital Sign list
- 1 Includes other salmonids
- 2 Includes smaller streams, estuarine wetlands, tidal marshes, and mudflats
- 3 Includes stormwater
- 4 Includes all classified commercial/recreational shellfish beds
- 5 Includes wastewater discharged to sewer systems, and municipal sewage
- 6 Includes other habitat-forming submerged vegetation (bull kelp, etc.)
- 7 Includes groundwater
- 8 Includes Pacific herring, surf smelt, sand lance, and other forage fish
- 9 Includes fish, shellfish, wild game, fowl, and plants (but not farmed species/crops)
- 10 Includes shoreline access
- 11 Includes beaches and all nature-based recreation and work

Summary of Sno-Stilly LIO Strategies

ID	Recovery/Strategy	Description
SSLIO 01.1	Nearshore protection	Develop and implement nearshore protection actions to minimize new shoreline armoring, including educating homeowners on ecological services and risks, strengthening the permit requirements for single-family residences, improving enforcement (capacity and consistency), and improving regulatory consistency and alignment.
SSLIO 01.2	Nearshore restoration	Develop and implement nearshore restoration to reduce shoreline armoring, including mapping high priority opportunities; educating homeowners on ecological services and erosion risks; developing and implementing softshore protection techniques; and, where possible, removing, relocating, or redesigning infrastructure (bridges, roads, and utilities) that requires shoreline hardening.
SSLIO 02.1	Integrated planning	Develop integrated planning for multi-benefits across land uses (agriculture, flood risk, and habitat) to include future projections (e.g., climate change and growth) and resiliency planning.
SSLIO 03.1	Improve funding for restoration	Develop an integrated funding strategy for large capital levee setback or removal projects.
SSLIO 04.1	Outreach for stormwater stewardship	Implement an outreach campaign—building on existing outreach efforts—to change behaviors of residential and commercial/industrial property owners related to the products they use and the manner in which they dispose of them, and to improve stormwater management practices to reduce non-point source pollution.
SSLIO 05.1	Non-point source assessment and product stewardship	Investigate non-point source contaminants and sources, provide corrective measures where possible, and implement product stewardship (e.g., pharmaceuticals and fertilizers) management strategies.
SSLIO 06.1	Stormwater retrofit and LID	Retrofit legacy stormwater systems for better treatment and infiltration.
SSLIO 07.1	On-site sewage system management	Provide outreach, technical assistance, incentives, and enforcement for improved on-site septic system management.
SSLIO 08.1	Implementation of GMA recognizing Puget Sound recovery goals	Increase support for a regionally consistent high standard for local interpretation and implementation of the GMA, including mapping where increased density would be more appropriate and reducing inappropriate conversion from development. Strategy actions include a funding, outreach, and assistance package; mitigation where needed; changes to the Comprehensive Plan designations and associated zoning regulations that guide permitting; improved enforcement capacity, funding, and training; and an outreach campaign to appropriate communities to increase demand for directed density.
SSLIO 09.1	Stream flow protection	Develop a stream flow protection strategy to better define the relationship between land use, withdrawals, and summer flows; and provide protection to improve low flows.
SSLIO 10.1	Freshwater and estuarine protection	Develop and implement freshwater and estuarine protection to minimize new armoring and levees, including updating regulations to incorporate salmon recovery, improving regulatory consistency and alignment, educating homeowners on ecological services and risks, and providing outreach around the benefit of floodplain ecosystems.
SSLIO 10.2	Freshwater and estuarine restoration	Develop and implement freshwater and estuarine restoration to reduce armoring and levees, including mapping restoration opportunities; educating homeowners on ecological services and risks; developing and implementing softshore protection techniques; providing incentives in the riparian zone; and, where possible, removing, relocating, or redesigning infrastructure (bridges, roads, and utilities) that requires shoreline hardening.

## First Sequence of Sno-Stilly LID Priority NTAs Summary Analysis

**SUMMARY:** These NTAs support stormwater related education and outreach, behavior changes campaigns, floodplain protection and restoration, estuarine restoration, and reach scale planning.

The first sequence of priority NTAs address the following strategies/local priorities: Outreach for Stormwater Stewardship, Freshwater and Estuarine Protection and Restoration, Nearshore Protection and Restoration, Implementation of GMA, Stormwater Retrofit and LID, Non-point Source Assessment and Product Stewardship, Integrated Planning, and Onsite Sewage System Management. The strategies that overlap with the most NTAs are Freshwater and Estuarine Protection and Restoration and Outreach for Stormwater Stewardship.

The first sequence of 2016 NTAs supports the following Implementation Strategy pathways: Floodplains (Corridor Project Implementation and Regional FbD Approach), Shellfish (Reduce Bacterial and Viral Pathogens and Improve Shellfish Culture), Estuaries (Increase Area of Tidal Estuaries and Improve Function and Resilience), Land Development/Cover (Preserve Ecologically Important Lands in Working Lands and Rural Areas and Build Regional Support to Protect Ecologically Important Lands).

The regional vital signs benefiting from implementation of these NTAs include: Freshwater Quality, Chinook, Summer Stream Flows, Floodplains, Land Development/Cover, Toxics in Fish, Marine Water Quality, Estuaries, and Shellfish Beds. The vital signs that overlap with the most NTAs are: Floodplains, Marine and Freshwater Quality, and Land Development/Cover.

NTA ID	NTA Title	Short Description	Owner Name	Cost	Funded (fully or partially)
<b>HABITAT</b>					
2016-0169	Marine Resources Committee, Snohomish Estuary Cleanup	Restore estuarine and nearshore habitats. Remove derelict vessels and creosote to improve habitat in the Snohomish Estuary for a number of species, including Chinook salmon.	Snohomish County MRC	\$ 1,500,000	Partially - local
2016-0071	Living with Beavers Program	Expand upon and market a technical assistance and cost-share program to encourage residents of Snohomish County to allow beavers to remain on their property.	Snohomish Conservation District	\$ 50,000	Fully - local
2016-0133	Watershed Education for Decision Makers: Stillaguamish Basin	Increase the awareness and involvement of local decision-makers in local environmental issues, especially related to water quality, stormwater, shellfish protection, and salmon recovery.	Sound Salmon Solutions	\$ 35,000	Fully
2016-0069	Richardson Creek Barrier Removal	Remove a passage barrier at the mouth of Richardson Creek, a high-priority salmon spawning and rearing stream in the Woods Creek watershed, opening up 3.9 miles of habitat.	Snohomish Conservation District	\$ 188,000	-
2016-0045	Balancing Fish, Farms, and Floods in King County's Snoqualmie Watershed	Implement a buffer task force initiative to provide a riparian buffer strategy that balances salmon recovery with agricultural viability, and develop a long-term strategy for agricultural land management in the Snoqualmie Agricultural Production District.	King County Department of Natural Resources and Parks	\$ 400,000	-
2016-0257	Snohomish Conservation District Free Trees Program	Expand the Free Trees Program to reach more small-parcel landowners in urban and rural areas and provide free trees to landowners where increased forest coverage will result in a public benefit.	Snohomish Conservation District	\$ 30,000	-
2016-0165	Eelgrass and Forage Fish Mapping in Snohomish County	In collaboration with the Stillaguamish Tribe, map eelgrass and forage fish throughout Snohomish County to fill existing data gaps essential to restoration planning.	Snohomish County Marine Resources	\$ 260,000	-
2016-0084	Arlington South Slough Fish/Flood Project	Address the floodplain connectivity-limiting factor in the South Slough through flood modeling and design.	City of Arlington	\$ 490,000	-

**First Sequence of Sno-Stilly LIO Priority NTAs  
Summary Analysis**

NTA ID	NTA Title	Short Description	Owner Name	Cost	Funded (fully or partially)
<b>Shellfish</b>					
2016-0306	Financing Options for Healthy Onsite Sewage Systems	Provide affordable financing options and education to help residents in the Snohomish-Stillaguamish watersheds maintain healthy onsite sewage systems through grants, rebates, and workshops.	Snohomish County	\$ 206,950	Partially - region
<b>Stormwater</b>					
2016-0159	Mountains to Sound: Collaborative K-12 Education Pilot Program	ECO Net partners in the Stillaguamish Watershed will coordinate "Mountains to the Sound" programmatic lesson plans for grades 3-5 in the Stillaguamish Watershed so that teachers have a centralized repository for lessons, scheduling and training.	Stillaguamish Tribe	\$ 78,552	Partially - region
2016-0811	Fisherman's Harbor Stormwater Quality Improvement Project	Provide treatment to the primary significant sources of untreated stormwater being discharged to the Fisherman's Harbor development area including three Port of Everett and two City of Everett stormwater outfalls.	City of Everett/Port of Everett	\$4,500,000	Partially
2016-0218	Puget Sound Starts... at My School!	Involve students, staff, and families in the design, installation, and maintenance of four low impact development projects on school campuses in Everett and Mill Creek.	Snohomish Conservation District	\$ 97,200	Fully - region
2016-0162	Latino Stormwater and Low-Impact Development Outreach Project in Southwest Snohomish County	Improve water quality conditions in selected southwest Snohomish County streams and lakes by increasing engagement with underserved local Latinos in stormwater pollution efforts.	WSU Snohomish County Extension	\$ 76,185	-
2016-0262	Snohomish County Natural Yard Care Behavior Change Campaign	Implement a Natural Yard Care Behavior Change campaign to decrease toxic loading in Snohomish County in alignment with King County.	Snohomish County Surface Water Management	\$ 231,483	-
2016-0163	Pet Waste Reduction through Veterinary Clinic Outreach	Change dog owner behavior to encourage scooping, bagging, and trashing pet waste by initiating more than 16,000 conversations between vet clinic staff and clients, potentially removing over 136,000 pounds of fecal matter in 1 year.	WSU Snohomish County Extension	\$ 103,371	-
2016-0083	Arlington Stormwater Treatment and Emerging Contaminant reduction	Complete design and install infrastructure needed to release reclaimed water to Old-town stormwater wetland to provide dry-season hydrological support and treatment of endocrine disruptors.	City of Arlington	\$ 68,985	-

## Second Sequence of Sno-Stilly LIO Priority NTAs Summary Analysis

**SUMMARY:** These NTAs support stormwater related education and outreach, floodplain protection and restoration, as well as fish passage and estuarine restoration, and monitoring. The second sequence of NTAs address the following strategies/local priorities: Freshwater and Estuarine Protection and Restoration, Outreach for Stormwater Stewardship, On-site Sewage System Management, Non-point Source Assessment and Product Stewardship, Integrated Planning, Nearshore Protection and Restoration, and Stream Flow Protection. The strategies that overlap with the most NTAs are Freshwater and Estuarine Protection and Restoration.

This second sequence of 2016 NTAs supports the following Implementation Strategy pathways: Floodplains (Corridor Project Implementation and Regional FbD Approach), Shellfish (Reduce Bacterial and Viral Pathogens, and Protect Upgraded Areas), Estuaries (Increase Area of Tidal Estuaries and Improve Function and Resilience), Land Development/Cover (Preserve Ecologically Important Lands in Working Lands and Rural Areas and Build Regional Support to Protect Ecologically Important Lands).

The regional vital signs benefitting from implementation of these NTAs include: Freshwater Quality, Chinook, Swimming Beaches, Floodplains, Land Development/Cover, Marine Water Quality, Estuaries, Shellfish Beds, and Shoreline Armoring. The vital signs that overlap with the most NTAs are: Land Development/Cover, Freshwater Quality, and Chinook.

NTA ID	NTA Title	Short Description	Owner Name	Cost (Current Phase)	Funded (fully or partially)
2016-0310	Integrated Floodplain Management	Facilitate the implementation of multiple-benefit floodplain restoration and protection projects in the Snohomish and Stillaguamish basins by increasing cooperation and coordination among fish, farm, and flood control stakeholders.	Snohomish County	\$ 250,000	Fully - region
2016-0070	Native Growth Protection Area Plantings in Priority Rural Areas	Develop targeted outreach materials and strategies to connect with high-priority native growth protection areas. Restore 4 acres of riparian habitat in Snohomish County to address documented water quality impairments.	Snohomish Conservation District	\$ 80,000	-
2016-0261	Woods Creek Culvert Barrier Removal	Remove four fish passage barriers on Woods Creek, a tributary to the Skykomish River.	Snohomish Conservation District	\$ 550,000	-
2016-0171	Marine Resources Committee, Port Susan	Reduce and prevent new construction of shoreline armoring in the Port Susan Marine Stewardship Area. Target communication with landowners of priority sites for armor removal, protection, and restoration.	Snohomish County Marine Resources Committee	\$ 290,000	-
2016-0046	Tolt River Mouth and Frew Floodplain Reconnection Feasibility and Design	Design two floodplain reconnection projects on the Tolt River near the confluence with the Snoqualmie River. Remove and set back the left bank at the mouth of the Tolt River and Lower Frew levees to restore floodplain processes.	King County Department of Natural Resources and Parks	\$1,600,000	-
2016-0067	Stillaguamish Priority Riparian Plantings	Reach out to landowners and plant riparian areas identified in the newly released Stillaguamish Temperature TMDL Adaptive Assessment and Implementation Project report completed by Snohomish County.	Snohomish Conservation District	\$ 69,000	-

**Second Sequence of Sno-Stilly LIO Priority NTAs  
Summary Analysis**

NTA ID	NTA Title	Short-Description	Owner Name	Cost (Current Phase)	Funded (fully or partially)
2016-0025	Working Buffers to Improve Riparian Buffer Width and Function	Provide technical assistance and cost-share funding to install agroforestry practices on working farms as a way of widening traditional riparian buffers.	Snohomish Conservation District	\$ 70,000	-
2016-0007	Snoqualmie Hydrology	Investigate low-flow hydrology in the lower mainstem Snoqualmie River (below Snoqualmie Falls) and identify opportunities for habitat enhancement and protection.	Snoqualmie Indian Tribe	\$ 150,000	-
2016-0102	Olaf Strad Channel Relocation Design	Design plans for the relocation of 1,100 feet of the channel of Olaf Strad Creek (part of the Quilceda Creek system) away from the road to create spawning and rearing habitat, improve water quality, and create a native riparian buffer of the creek.	Adopt A Stream Foundation	\$ 50,000	-
2016-0260	Portage Creek Culvert Barrier Removal	Remove two adjacent fish passage barriers on Portage Creek, a tributary to the Stillaguamish River, and replace it with one single crossing, thus opening approximately 9 miles of salmon bearing streams.	Snohomish Conservation District	\$ 175,000	-
2016-0036	Snohomish Watershed Floodplain Invasive Species Removal and Restoration	Restore and maintain riparian ecosystems in the Snohomish watershed by re-establishing native plant communities and engaging landowners in the long-term stewardship of their property.	King County DNRP; WLRD; RRS; Noxious Weed Control Program	\$ 700,500	-
<b>Shellfish</b>					
2016-0395	Lower Stillaguamish Pollution Identification and Correction Program	Continue working with partner agencies to identify and remove sources of fecal coliform and nutrient pollution in the Lower Stillaguamish River basin, primarily from onsite sewage systems, livestock manure, and household pet waste.	Snohomish County	\$ 300,000	-
<b>Storm water</b>					
2016-0183	Stormwater Outreach and Education Collaboration and Best Management Practices Prioritization	Collaborate with organizations from the Stillaguamish / Snohomish watersheds to prioritize local stormwater best management practices that can be addressed through outreach and education. Coordinate and prioritize actions to improve on-the-ground success.	WSU Snohomish County Extension	\$ 31,980	-



### Third Sequence of Sno-Stilly LIO Priority NTAs Summary Analysis

**SUMMARY: These NTAs focus on climate resiliency, agricultural strategy development, increasing incentives for infill development.** The third sequence of NTAs address the following strategies/local priorities: Outreach for Stormwater Stewardship, Freshwater and Estuarine Protection and Restoration, Nearshore Protection and Restoration, Integrated Planning, and Implementation of GMA Recognizing Puget Sound Recovery Goal. The strategies that overlap with the most NTAs are Freshwater and Estuarine Protection and Restoration, Integrated Planning, and Nearshore Protection and Restoration.

This third sequence of 2016 NTAs supports the following Implementation Strategy pathways: Floodplains (Corridor Project Implementation, Cost Subsidy and Risk Tolerance, and Regional FbD Approach), Shellfish (Reduce Bacterial and Viral Pathogens, Reduce Risk of Oil Spills, and Improve Shellfish Culture), Estuaries (Increase Area of Tidal Estuaries and Improve Function and Resilience), Land Development/Cover (Preserve Ecologically Important Lands in Working Lands and Rural Areas and Build Regional Support to Protect Ecologically Important Lands).

The regional vital signs benefitting from implementation of these NTAs include: Freshwater Quality, Shellfish Beds, Swimming Beaches, Commercial Fisheries, Quality of Life, Recreational Fisheries, Sound Behavior, Birds, Eelgrass, Estuaries, Chinook, Marine Water Quality, Toxics in Fish, Land Development/Cover, Summer Stream Flows, and Floodplains. The vital signs that overlap with the most NTAs are: Freshwater Quality, Land Development/Cover and Chinook.

NTA ID	NTA Title	Short Description	Owner Name	Cost (Current Phase)	Funded (fully or partially)
<b>HABITAT</b>					
2016-0259	Haystack Creek Culvert Barrier Removal	Remove four fish passage barriers on Haystack Creek, a tributary to Tychman Slough and the Skykomish River, opening 2.3 miles of anadromous salmonid habitat.	Snohomish Conservation District	\$ 550,000	-
2016-0258	Bigelow Creek Rechannelization South Wetland Complex Habitat Enhance	Establish off-channel habitat, restore Bigelow Creek to its predevelopment alignment, and create intertidal habitat.	City of Everett	\$2,058,598	-
2016-0315	Model Volunteer Program for Oil Spill Response / Assessment	Create and implement a community-based oil spill assessment and response effort that will serve as a model for other regions. Expand nearshore benthic/intertidal citizen science data collection and quality.	WSU Snohomish County Extension	\$ 56,150	-
2016-0075	Snohomish County Climate Resilient Agriculture Strategy	Develop an agriculture strategy for Snohomish County that incorporates climate change projections into a plan for a resilient, economically viable, and community-sustaining agricultural industry into the future.	Snohomish Conservation District	\$ 190,000	-
2016-0391	Initiatives to Support Infill in Urban Growth Areas in Snohomish County	Support opportunities and incentives to increase capacity and accommodate growth in urban areas with three independent initiatives.	Snohomish County Planning and Development Services	\$ 500,000	-
2016-0074	Climate Resiliency in Snohomish River Floodplain	Develop climate resilient approaches to achieving net benefits to agriculture and salmon habitat in the Snohomish River floodplain.	Snohomish Conservation District	\$ 665,000	-
2016-0403	Shoreline Inventory Snohomish County	Supplement the inventory and analysis of shoreline conditions in Snohomish County.	Snohomish County	\$ 350,000	-
<b>Stormwater</b>					
2016-0374	Urban Climate Resiliency in the Snohomish Basin	Develop social marketing strategies and two demonstration projects for urban climate resilience in new and planned developments in the Snohomish Basin.	Snohomish Conservation District	\$ 87,000	-

