

# Hood Canal Integrated Watershed Plan

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## *Five-Year Strategic Priorities*

*Hood Canal Coordinating Council*

*May 2014*

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## Introduction

The Hood Canal Coordinating Council (HCCC) is a council of governments formed in 1985 to address water quality concerns and related natural resource issues in the watershed. The HCCC also acts as the Local Integrating Organization (LIO) for the Hood Canal Action Area under the structure established by Puget Sound Partnership to restore the health of Puget Sound, as defined in the Puget Sound Action Agenda.

As a council of governments with a regional focus, HCCC can advance strategic regional priorities in a way that individual jurisdictions cannot. Working together as the HCCC, the counties (Mason, Jefferson, and Kitsap) and tribes (Skokomish and Port Gamble S'Klallam) of Hood Canal provide a forum to advance important issues towards a shared regional vision.

## The Hood Canal Integrated Watershed Plan

In 2010, the Hood Canal Coordinating Council (HCCC) partnered with a diverse array of organizations, agencies, and individuals to initiate the development of The Hood Canal Integrated Watershed Plan (IWP). The IWP was intended to be a comprehensive strategic framework for advancing a shared regional vision by integrating the full range of existing and future natural resource management efforts across all relevant jurisdictions.

The IWP planning process was a mechanism through which participants could identify key ecological and social aspects of the watershed (focal components) valued by Hood Canal communities, establish an initial understanding of the status of these focal components, identify pressures impacting them, and develop a suite of strategies intended to improve their status and ultimately the benefits they provide the Hood Canal ecosystem and human communities.

The initial scope of the IWP was meant to be fully inclusive of all relevant ecological and social issues relevant to natural resource management and conservation in the Hood Canal watershed. However, the realities of a comprehensive planning process in a large ecologically and socially complex landscape challenged the planning partners' capacity to manage the process, complete the plan, and implement the resulting strategies.

After considerable time and effort was expended without the creation of a final comprehensive watershed plan, a decision was made to create a first iteration of the IWP with a less ambitious scope. This would allow implementation of a more tractable subset of strategies - with an emphasis on work the HCCC would lead and be responsible to accomplish. This document is the result of that effort. Its content draws from the substantial body of planning work completed to date but, as described above, has a narrowed scope.

The purpose of this document is to:

- Establish five-year strategic priorities for the HCCC to implement and guide regional actions towards the Vision
- Establish a framework for accountability of strategy implementation, identification of strategic gaps, and continuous evaluation and adaptive management

Other elements of the IWP and its supporting framework will continue to be developed as implementation of the five-year strategic priorities occurs. Strategy implementation will be evaluated annually and a comprehensive evaluation of both implementation and change in the status of the focal components (desired impact) will occur at the end of the first five years and will inform the development of the next iteration of the IWP. Subsequent versions will reflect an expansion, retraction, or shift in scope as informed by the evaluation process and an assessment of changing circumstances, improved understanding, and/or effectiveness of strategies.

## Vision

The overarching long-term vision developed through the IWP planning process is - *Humans benefit from and coexist sustainably with a healthy Hood Canal*. The strategic priorities laid out in the following pages has a shorter, five-year time horizon that will allow HCCC to take concrete steps to contribute towards this broader, long-term vision.

There are many diverse strategies and actions critical to achieving the vision of the IWP to improve the health of Hood Canal and communities in the watershed. These strategies are one piece of this bigger picture. By articulating a strategic vision for the Hood Canal Coordinating Council, our hope is that we can advance our partnerships with organizations around Hood Canal to further all the important efforts needed to protect the health of Hood Canal.

## Planning Approach

As explained above, the initial scope of the IWP planning process was narrowed to allow the HCCC to strategically focus its work on a sub-set of **focal components**, **pressures**, and **strategies**.

### Plan Elements

#### Focal Components

**Focal components** are the species, ecological systems, or social systems that communities in Hood Canal and the broader Puget Sound region value and desire to protect, restore, and steward. In the initial phase of the IWP planning process, fifteen focal components were selected. They included salmon, forest, forestry, shellfish, commercial shellfishing, riparian areas, rivers and streams, beaches, deltas and estuaries, bottomfish, recreation, cultural heritage, water for human health and prosperity, commercial fishing, and agriculture.

Through the “re-scoping” process described above the IWP steering committee selected five focal components that the HCCC is currently well positioned to address. These components were selected because of their importance to local communities, they are the emphasis of numerous management and conservation plans, and they link to other focal components. These five focal components include:

- Shellfish
- Commercial shellfishing
- Forests
- Forestry
- Salmon

While this plan only emphasizes five of the original fifteen it is important to recognize that interrelationship exist between many of these focal components and by improving the status of one it is possible that the status of others will also be improved.

### Primary Pressures

For the purposes of this plan, **pressures** are human activities or natural processes that have caused, or are causing the degradation or impairment of focal components. Under the initial scope of the IWP, planning participants identified up to 26 pressures that were impacting one or more of the 15 focal components.

For the purposes of this plan, the IWP steering committee identified four that they determined were either the most important across all selected focal components or were strongly associated with ongoing HCCC programs. Primary pressures selected for this iteration of the IWP includes:

- Commercial and residential development
- Transportation and service corridors
- Climate change and ocean acidification
- Wastewater discharges and stormwater runoff

### Key Strategies

The third primary element of this plan are the **strategies** – defined as a set of common or related actions intended to achieve specific goals associated with improving the status of focal components. As with focal components and pressures, the IWP Steering Committee made careful decisions to include only a sub-set of existing or potential strategies that are designed to address the primary pressures or are those that the HCCC is uniquely positioned as a regional entity to address and advance.

Strategies are organized into three general categories – those that the HCCC will lead and implement, those that are being or will be led by other partner organizations or agencies and may receive some level of HCCC support, and a final category containing strategies identified as important through the IWP planning process, but that require more information to fully develop and describe.

## Evaluation and Adaptive Management

The current state of knowledge regarding the status of ecological and social systems in Hood Canal and valued Hood Canal species is imperfect. This reality, along with an acknowledged level of uncertainty regarding the effectiveness of strategies, requires systematic and continuous evaluation of progress towards achieving desired outcomes.

Evaluation of implementation success and strategy design will occur annually through internal development and review of work plans. A comprehensive review of strategy effectiveness, and resulting plan updates will occur at the end of the five-year time horizon of this iteration of the IWP.

## Communicating Progress

The approach for measuring and communicating progress toward desired impacts to Hood Canal communities and regional stakeholders has been initiated with the identification of a set of indicators (Appendix 1) associated with each focal component that will then be used to produce an annual state of the Hood Canal report. The structure and appearance of the report will link directly to the IWP website.

## Focal Components

### Shellfish

Shellfish are native bivalves (e.g., geoduck, littleneck, horse, butter, cockle, bentnose clams, Olympia oysters, blue mussels, etc.) and naturalized bivalves (e.g., Pacific oyster and Manila Clam) occurring primarily in the intertidal habitats of Hood Canal. For the purposes of the IWP, the “shellfish” focal component does not include crabs and shrimp, which are included in other focal components.

### Goal

The long-term goal for shellfish is to ensure healthy bivalve populations throughout Hood Canal to provide ecological services and for recreational, subsistence, and ceremonial harvest on designated public and private tidelands.

A healthy shellfish population provides key ecosystem services such as bioirrigation, bioturbation, sediment and shoreline stabilization, essential fish habitat, shellfish habitats, significant filtering capacity, eutrophication control, enhanced benthic-pelagic coupling, among others.

In December 2011, the Washington State Shellfish Initiative (WSI) was unveiled and includes a series of actions that apply to Hood Canal. The WSI recognizes the importance of shellfish as a cultural and economic resource to industry, citizens, and Tribes.

## Commercial Shellfishing

Commercial shellfishing is the culturing and harvesting of bivalves. Commercial shellfish can occur on large or small scales and rely on many marine support services and clean water to be successful. For the purposes of IWP, the “commercial shellfishing” focal component does not include crabs and shrimp, which are contained in the “commercial fishing” focal component.

### Goal

The goal of commercial shellfishing is to provide opportunities throughout Hood Canal for the culture and harvest of shellfish on designated tidelands.

Commercial shellfishing is a critical economic driver and natural resource based industry in the Hood Canal watershed. Commercial shellfishing provides family wage jobs and key ecosystem services such as bioirrigation, bioturbation, sediment and shoreline stabilization, essential fish habitat, shellfish habitats, significant filtering capacity, eutrophication control, enhanced benthic-pelagic coupling, among others. Clean water is essential to the harvest and production of shellfish. The WSI recognizes the importance of shellfish as a cultural and economic resource to industry, citizens and tribes. It includes a series of water quality restoration and protection actions and identifies research needs on ocean acidification that apply to Hood Canal.

## Forests

This focal component includes upland, riparian, and coastal forests that support a range of forest types, age classes, and species and are managed for public and private protected lands, working lands, and residential ownership. Improvements to forests will improve habitat conditions for freshwater life history stages of salmonids.

### Goal

Restore and maintain healthy functioning forests for the protection of aquatic and terrestrial resources on forestland throughout the Hood Canal area.

Healthy functioning forests will require an optimum balance maintained between three types of forest management by:

1. Increasing forest diversity;
2. Maintaining the area and productivity of managed timber lands; and
3. Maintaining forest cover in residential lands.

Comprehensive forest practice laws and regulations govern forestry activities on Federal, State and private timberlands in the Hood Canal watershed and throughout Washington State. These laws and regulations, including Federal and State Habitat Conservation Plans as well as the Washington Forests and Fish Law, have been approved by the Federal agencies and are designed to meet Federal Endangered Species Act requirements as well as compliance with the Clean Water Act on working forest lands in Washington State.

## Forestry

Management of forests for harvest of timber to produce and sell timber products, and requires mills for processing, market access/demand, and public support.

### Goal

To maintain a healthy forest industry in the commercial forest of the Hood Canal region, while providing the benefits of a healthy functioning forest ecosystem.

Historically the timber industry has been the largest commercial industry in the Hood Canal region. Maintaining jobs that the forest industry provides is important to the economic health and well-being of the region. Proper management of riparian, wetland, nearshore, and upland areas in the commercial forests can be achieved by following prescriptions already described in federal and state laws and regulations currently in place covering the Federal, State, and privately owned forest lands in Western Washington.

## Salmon

This component includes all native salmonids that use marine and freshwater systems in the Hood Canal Action Area.

### Goal

Restore, protect, and maintain healthy, native, diverse, and harvestable natural and hatchery salmon and steelhead populations in the Hood Canal watershed.

All life stages of the salmon, from egg deposition to carcass decomposition, play an important role in the natural environment including: carrying nutrients from the river to the ocean and back again, benefiting forests and other ecosystems; contributing to a vital part of the food chain as many species, such as orcas and bald eagles, rely on salmon as part of their diet; and acting as an indicator of general ecosystem health. The overall goal for Hood Canal salmon populations will require an increase in the abundance, escapement, productivity, and diversity of summer chum salmon, Chinook salmon, coho salmon, steelhead, and bull trout. The goal also seeks to increase recreational, ceremonial, and subsistence landings of salmon and other anadromous fish after meeting sustainable escapement rates for both natural and hatchery populations. Current recovery chapters and management plans will provide the basis for actions to implement.

## Pressures

As described above, pressures are defined as activities that can, directly or indirectly, negatively impact the status of the selected focal components. Pressures were identified and each was subjectively rated by estimating the scope, severity, and irreversibility relative to each focal component. Ratings were combined to estimate an overall rating for each pressure. The three pressures that carried a “very high” rating were selected as priorities for HCCC (1-3 below). A fourth was added given it is currently the emphasis of HCCC’s Pollution Identification and

Control (PIC) program and HCCC's development of a Hood Canal Regional Stormwater Retrofit Plan.

- Commercial and residential development
- Transportation and service corridors
- Climate change and ocean acidification
- Wastewater discharges and stormwater runoff

### Primary Pressures

All the following pressures impact each of the five focal components included in this plan.

#### Commercial and residential development

The conversion of terrestrial habitat for development can represent a significant and long lasting (or permanent) impact to ecological systems and the species that depend on them to fulfill their life cycles. The impact can be localized to the area developed or have a larger landscape scale impact as habitats are disconnected and fragmented and ecological processes are disrupted.

Residential and commercial development in Hood Canal having the most substantial impact on focal components occurs in rural areas, along shorelines, and within Urban Growth Areas.

#### Transportation and service corridors

Transportation and service corridors include logging roads, primitive roads, secondary roads, and highways. Of special concern are those that occur along Hood Canal shorelines and that cross critical estuaries and waterbodies. Impacts are the result of the construction and maintenance of these corridors as well as their ongoing use. They can create barriers to migrating terrestrial and aquatic species, disrupt ecological process that shape and maintain habitats, and lead to the direct mortality of species.

#### Climate change and ocean acidification

Long-term climatic changes that are outside the historic range of variation experienced by the ecosystems of Hood Canal are expected to produce impacts to ecosystem structure, ecological processes, and human well-being. This pressure will impact all focal components with particular near-term impacts to shellfish and commercial shellfishing as climate change leads to decreases in ocean pH levels – leading to high mortality of young developing shellfish.

#### Wastewater discharges and stormwater runoff

Wastewater discharges and stormwater runoff can introduce excess nutrients, toxic materials, and sediment into aquatic systems. The primary sources in Hood Canal are onsite sewage systems (OSSs) from residential and commercial properties and stormwater runoff from developed areas. OSSs that are failing can result in bacterial pollution and increased nutrient pollution to Hood Canal. Hood Canal

already experiences chronic low dissolved oxygen and high nutrient loading and this pressure can exacerbate this issue.

In addition to ecological impacts, shellfishing growing area closures due to failing OSS and decreased water quality after rain events are related to this pressure.

## Strategies

### Strategy Categories

Strategies are organized into the following three general categories:

1. **Hood Canal Coordinating Council Strategic Priorities** are those where HCCC is the lead for implementation, provides the capacity and resources, and is accountable for achieving objectives and long-term outcomes. These have been selected or approved as priorities by the HCCC Board of Directors and will often require the action of a regional policy body.
2. **Other Regional Strategic Priorities** are managed at a local or regional scale and are led by other partner organizations. The HCCC has no substantive role at the time of this plan's development other than to provide support.
3. **Additional Strategies** identified through the IWP planning process that will be implemented with little or no HCCC involvement or where more information is required to provide further detail

Within both of these general categories we have organized strategies by the types:

- A. Policy and Regulatory Strategies
- B. Ecological Restoration, Remediation, or Enhancement
- C. Education, Outreach, and Communications Strategies

### Hood Canal Coordinating Council Strategic Priorities<sup>1</sup>

#### A – Policy and Regulatory Strategies

##### ***Strategy A1: Complete an inventory and assessment of existing county wide planning policies***

HCCC will investigate countywide planning policies and determine gaps or opportunities to align or improve consistency across jurisdictional boundaries in order to improve protection and stewardship of focal components.

For example, various forest plans are in effect within the Hood Canal watershed. Aquatic Habitat Conservation Plans govern forestry activities on Federal, State and private timberlands. They have been approved by the Federal agencies, and are designed to meet Federal Endangered Species Act requirements, as well as Clean Water Act compliance on commercial forest lands in Washington State. These plans will need to be assessed together to determine if the actions required in the plans are adequate to meet the Forest goal of this plan.

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<sup>1</sup> See Appendix 2 for a summary table of the strategies presented in this section.

### **Objectives and Activities**

Objective A1.1: By 2015, opportunities for alignment of land use policies will be identified

Objective A1.2: By 2017, a strategic oriented plan that protects aquatic areas not currently being protected through local regulations and existing HCP requirements is in place.

Activity A1.2.1: Convene a group of the timber industry to establish measures of working forests

Activity A1.2.2: Review Aquatic Habitat Conservation Plans

Activity A1.2.3: Review local land use ordinances

Activity A1.2.4: Design a plan to align the aquatic protections identified within each HCP and local ordinances

## **B – Ecological Restoration, Remediation, or Enhancement**

### ***Strategy B1: Fully Implement the Hood Canal Pollution Identification and Correction (PIC) Program***

The purpose of the Hood Canal Regional PIC program is to assess Hood Canal Action Area surface waters impacted by fecal and nutrient pollution, and to prioritize and implement cleanup projects. The PIC program addresses sources of pollution from onsite septic systems (OSS), stormwater, and animal waste.

By finding sources of pollution to Hood Canal, steps can be taken to make infrastructural or behavioral changes to fix the problem and improve water quality. Good water quality is critical for shellfish harvest and public health. A fully implemented PIC program requires monitoring and shoreline surveys to identify sources of pollution; outreach, education, investigations, OSS operation and maintenance programs, and enforcement to correct pollution sources, and organizational structure to maintain the program.

### **Objectives and Activities**

Objective B1.1: By 2017, in Kitsap, Mason, and Jefferson identify and investigate approximately 40 hotspots, conduct 125 parcel surveys, and develop and implement plans to correct fecal sources.

Activity B1.1.1: Establish organizational structures to support regional PIC work

Activity B1.1.2: Establish regional monitoring at high priority locations for selected parameters

Activity B1.1.3: Conduct shoreline survey projects in high priority areas

Activity B1.1.4: Investigate high concentrations of bacteria or nutrients, and follow up where a problem is identified

Activity B1.1.5: Develop and implement education programs to address high priority behaviors

Activity B1.1.6: Develop pilot nutrient studies to advance PIC work for nutrient sources

***Strategy B2: Carry out HCCC's role as the Lead Entity for salmon recovery***

Hood Canal Coordinating Council is both the Lead Entity for Hood Canal salmon recovery and the regional recovery organization for Hood Canal and eastern Strait of Juan de Fuca summer chum salmon.

HCCC will develop a process for prioritizing acquisition, protection and restoration actions and continue to target funding to the highest priority salmon recovery actions. HCCC will lead the implementation of the following recovery plans:

- Hood Canal and Eastern Strait of Juan de Fuca Summer Chum Salmon Recovery Plan (2005)
- Business Plan for Hood Canal/Eastern Strait of Juan de Fuca Summer Chum Salmon (2013)

As a regional body HCCC has the ability to leverage regional political support for larger projects.

**Objectives and Activities**

Objective B2.1: By 2015, HCCC will establish a prioritized list of recovery actions and a funding strategy to implement them.

Activity B2.1.1: Under direction of the Board, HCCC will complete a salmon recovery prioritization to identify the list of actions in priority order for recovering summer chum, Skokomish Chinook and Mid Hood Canal Chinook by Spring 2015.

Activity B2.1.2: HCCC will work with partners to develop a funding strategy by 2015 for the 10 highest priority actions for salmon recovery and track and publish progress on funding of these projects through 2016.

Activity B2.1.3: HCCC will work with partners to secure funding and/or develop feasibility studies for the top 10 priority projects by spring 2016.

Activity B2.1.4: As a project selected for state funding under the floodplains by design, the Skokomish Tribe, Mason Conservation District and Department of Ecology will implement the Skokomish Estuary floodplain project with initial construction completed by Fall 2015.

Activity B2.1.5: North Olympic Salmon Coalition will complete final design and begin initial construction of the Kilisut Harbor restoration project as funded by PSAR large capital request and ESRP by Fall 2014.

***Strategy B3: Implement and manage the HCCC In Lieu Fee Mitigation Program***

The HCCC established an In Lieu Fee (ILF) Mitigation Program and will continue to manage the program that provides mitigation for unavoidable adverse impacts from

development projects within the HCCC's ILF Programs' service area. Specific mitigation projects and progress of the ILF program will be reported as part of the 2016 Action Agenda update. This strategy is a Near Term Action (NTA) for the 2014 Action Agenda.

The HCCC will utilize the In Lieu Fee program as a mechanism for salmon habitat restoration and protection projects in the Hood Canal watershed. The In Lieu Fee program is a tool that can support design and implementation of priority salmon recovery projects as well as support progress towards goals of other components.

### **Objectives and Activities**

Objective B3.1: By 2015,

Activity B3.1.1: HCCC will continue to work with local jurisdictions for the implementation of the In Lieu Fee Mitigation Program as a mitigation alternative for project applicants, ongoing through Spring 2016. HCCC staff will meet with county staff at least once per year to review the implementation of the ILF program within each local jurisdiction.

Activity B3.1.2: HCCC will strive to implement mitigation projects within the 3-year post-credit sale time frame, ongoing through Spring 2016. Project implementation could include one marine project and one freshwater wetland project.

Activity B3.1.3: HCCC will continue to work with watershed partners to identify potential receiving areas and place acceptable sites on a roster of potential mitigation receiving areas, ongoing through Spring 2016. HCCC will target 2 receiving areas per Service Area for a total of 8.

### ***Strategy B4: Complete the Monitoring and Adaptive Management Framework for Chinook salmon***

The HCCC will work with various partners, State and Federal agencies, and the Tribes to complete Phase I of the Monitoring and Adaptive Management Framework for both Skokomish Chinook and Mid Hood Canal Chinook by June 2014. Monitoring protocols and plans for both Chinook salmon recovery chapters will be completed by spring 2016.

### **Objectives and Activities**

Objective B4.1: By Summer 2014, the HCCC will approve a Skokomish Chinook Monitoring and Adaptive Management Framework.

Objective B4.2: By Summer 2014, the HCCC will approve a Mid Hood Canal Chinook Monitoring and Adaptive Management Framework.

Objective B4.3: By Spring 2015, the HCCC will develop a process for developing monitoring protocols for priority indicators for both Skokomish Chinook and Mid Hood Canal Chinook.

***Strategy B5: Identify potential climate change adaptation strategies for Hood Canal***

By Fall 2014, HCCC will convene a climate change forum with our members to identify unique vulnerabilities and potential adaptation strategies for the Hood Canal Action Area. As part of the Integrated Watershed Plan (IWP) process and working with our members and partners, HCCC will determine climate adaptation approaches that can be incorporated into the IWP and various plans in progress.

**Objectives and Activities**

Objective B5.1: A Hood Canal climate change report, summarizing the results of the conference, distributed to Hood Canal community by December 2014.

Objective B5.2: Climate change mitigation and adaptation strategies and actions are incorporated into relevant focal components of IWP by Fall 2015.

Objective B5.3: Climate change related indicators are incorporated into relevant focal components of the IWP by Fall 2015.

***Strategy B6: Develop a Hood Canal Regional Stormwater Retrofit Plan***

HCCC is developing a Hood Canal Regional Stormwater Retrofit Plan to coordinate stormwater and low impact development retrofit efforts on a regional scale that will be completed by the summer of 2014. The Plan will include conceptual designs for 10-12 retrofit projects in the Hood Canal Action Area, which will be implemented by the county governments or other partners, as funding is available.

Stormwater retrofit and low impact development practices improve water quality, help protect shellfish beds, decrease flooding risks, and increase aquifer recharge.

**Objectives and Activities**

Objective B6.1: The HCCC will complete and distribute the Hood Canal Regional Stormwater Retrofit Plan with priority retrofit projects to jurisdictions, regional partners, and relevant state agencies by Fall 2014.

Objective B6.2: HCCC will provide support to Hood Canal jurisdictions to plan and seek funds for implementing 2 priority retrofit projects through Spring 2016.

Objective B6.3: HCCC will track jurisdiction implementation and barriers to implementation (such as funding constraints) of priority retrofit projects through Spring 2016.

***C - Outreach, Education, and Communications Strategies***

***Strategy C1: Develop outreach and communications tools to raise public awareness and support***

The HCCC will work with outside experts to assess needs and develop tools to design and deliver outreach and communications materials including the IWP website and the annual state of Hood Canal report.

This strategy assumes that human behaviors that impair focal components is a result of lack of understanding or competing values and that well-crafted communications and outreach will allow community members to better understand

the connection between their actions and the health of related focal components. It is also assumed that greater knowledge will lead to greater appreciation and therefore a desire to improve active stewardship.

### **Objectives and Activities**

Objective C1.1: By 2015, the IWP website will be fully functioning

Objective C1.2: By 2015, the first annual state of the Hood Canal document will be completed.

## **2 – Other Regional Strategic Priorities**

### **A - Policy and Regulation Strategies**

#### ***Strategy A2: Designate Hood Canal as a No Discharge zone for vessels***

The implementation of no-discharge zones will allow appropriate entities to regulate and enforce no-discharge zones and limit expansion of marinas and moorings and keep shellfish beds open.

The implementation of shellfish protection districts facilitate the development of total maximum daily load clean up plans and water district plans to address sources limiting further pollution.

Marine sanitation devices are not adequate for treating vessel waste in Puget Sound. Implementation of a no-discharge zone in Puget Sound regulation would limit vessel discharges, improving water quality, and protecting public health.

#### ***Strategy A3: Implement closure response plans, clean water district plans, and shellfish protection districts***

Where bacteria problems exist counties, Washington Department of Health, and tribes will implement the following plans:

- Annas Bay Clean Water District Plan
- Bivalve Management Plan for Public Tidelands in Region 5. Admiralty Inlet
- Bivalve Management Plan for Public Tidelands in Region 8. Hood Canal
- Jefferson County Clean Water District Plan
- Lilliwaup Clean Water District Plan
- Lower Hood Canal Protection District Plan
- Skokomish River Total Maximum Daily Load Clean Up Plan
- Union River Total Maximum Daily Load Clean Up Plan

#### ***Strategy A5: Reduce the use of seepage pits and eliminate cesspools***

Reduce the use of seepage pits and eliminate cesspools as discovered in all Hood Canal shoreline (marine and freshwater) properties.

### **Objectives and Activities**

Objective A5.1: Meeting of Local health jurisdictions convened by July 2014 to assess and determine if Onsite Management Plan strategies relevant to cesspools

and seepage pits on shoreline properties adequately address human health and safety.

Objective A5.2: Identify sites with no records available by July 2014.

Objective A5.3: By July 2015, local health jurisdictions locate and verify all shoreline seepage pits and cesspools. Conduct field investigations for all shoreline properties that have no records for seepage pits available.

Objective A5.4: Local health jurisdictions create a management plan for seepage pits, which includes inspection frequency and education on funding, or replacement options for decommission.

Objective A5.5: Management plan for seepage pits in Hood Canal adopted by county Boards of Health by December 2015, if not in existing plans.

## B – Ecological Restoration, Remediation, or Enhancement Strategies

### ***Strategy B7: Implement other salmonid conservation and management plans***

Recommendations to meet the goals of the salmon focal component include implementation of the strategies and actions as captured in the following recovery plans and chapters as well as updates. The plans impacting Hood Canal salmon resources are being implemented by a number of state, federal, and tribal governments as well as other entities. Strategies and actions for steelhead will be further defined once funding is available for recovery plan development.

#### Puget Sound Salmon Recovery Plan (Volume I, 2005)

Recover self-sustaining, harvestable salmon runs in a manner that contributes to the overall health of Puget Sound and its watersheds to allow us to enjoy and use this previous resource in concert with our region's economic vitality and prosperity.

#### Mid Hood Canal Chinook Salmon Recovery Chapter (Volume II of Puget Sound Recovery Plan, 2005)

Recover and obtain delisting of Mid Hood Canal Chinook salmon populations in Hood Canal by meeting the stock, abundance and escapement goals as defined in the 2005 recovery chapter.

#### Skokomish Chinook Salmon Recovery Chapter (2010, awaiting NOAA approval)

Obtain approval of draft recovery chapter by NOAA.

Recover and obtain delisting of Skokomish spring Chinook salmon populations in Hood Canal by meeting the stock, abundance and escapement goals as defined in the 2010 draft recovery chapter. Recovery will mean that the population is self-reproducing and have at least a 95% probability of persistence over a 100 year period. Recovery also means there is successful re-establishment of runs in both the North and South forks of the Skokomish River.

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#### Comprehensive Coho Management Plan (1998)

Develop and implement improved coho management approaches that support the maintenance and restoration of wild stocks in a manner that reflects the region's fisheries objectives (resource protection, allocation, and harvest stabilization), production constraints, and production opportunities in accordance with the Plan.

#### Steelhead

Implement the 2008 Statewide Steelhead Management Plan.

Implement the 2012-2013 Hood Canal Steelhead Harvest Management Plan.

Develop a comprehensive understanding of why steelhead populations remain low and in some cases continue to decline.

Develop a Steelhead Recovery Plan Framework for Hood Canal, based on work in progress coordinated by Long Live the Kings, which will support future development of a recovery plan once funding is available.

#### Salmon & Steelhead Hatchery and Genetic Management Plans

Implement salmon and steelhead hatchery and genetic management plans for all hatchery programs.

#### Hood Canal Salmon Management Plan (1985)

Implement guidelines as outlined in the Plan for the harvest, protection, rehabilitation and enhancement of salmon resources originating from or passing through Hood Canal waters from the mouth of Hood Canal southward.

#### Puget Sound Chinook Management Plan (updated in 2010)

Implement guidance as outlined in the Plan to meet the objectives of the exploitation rates and spawning escapement goals.

### **3 – Other Regional Strategic Priorities...**

Strategy A4: Designate Hood Canal as an Invasive-free Zone

Strategy A6: Oil spill readiness and response

Strategy A7: Expanded public access to restroom, disposal, and sanitary facilities

Strategy A8: Develop a comprehensive shellfish enhancement plan

Strategy A9: Improved enforcement and prosecution of illegal wild animal harvest

Strategy B8: Clean up contaminated sites and creosote piles

Strategy B9: Replace Port Gamble outfall

Strategy B10: Enhance public access to shellfish harvesting areas

Strategy B11: Promote native shellfish restoration

Strategy C2: Expand public outreach and education

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## **Appendices**

Appendix 1 - Indicators

Appendix 2 - Strategy Summary Table

**Appendix 1: Indicators for inclusion in the annual State of Hood Canal report card.**

<b>Focal Component</b>	<b>Indicator</b>	<b>Units</b>	<b>Sample Frequency</b>	<b>Current Status</b>	<b>Desired Future Condition</b>	<b>Responsible to Measure</b>
Shellfish	Shellfish spatial distribution	Acres where shellfish are present	TBD	TBD	TBD	TBD
Shellfish	Shellfish densities	Number of shellfish per square meter	TBD	TBD	TBD	TBD
Shellfish	Acres of harvestable shellfish growing areas in Hood Canal	Acres	TBD	TBD	TBD	TBD
Shellfish	Emergency closures	Number of acres	TBD	TBD	TBD	TBD
Commercial Shellfishing	Value of shellfish		TBD	TBD	TBD	TBD
Commercial Shellfishing	Number of permits pending or issued		TBD	TBD	TBD	TBD
Forestry	Value of harvested timber	Stumpage value	TBD	TBD	TBD	TBD
Forest	Extent of forest cover by type	Acres of evergreen, deciduous, mixed	TBD	TBD	TBD	TBD

Focal Component	Indicator	Units	Sample Frequency	Current Status	Desired Future Condition	Responsible to Measure
Salmon	Number of spawners by population	Spawning abundance measured by populations of Summer Chum, Steelhead and Chinook. Reported as a number either annually or seasonally Spawning spatial distribution and diversity measured at Hood Canal scale for Summer Chum and Chinook. Reported annually or every 2-5 years as presence/absence	TBD	TBD	TBD	TBD

## Hood Canal Integrated Watershed Plan - Strategy Table

Strategy	Lead Organization /Agency	2014 Relevant Action Agenda Sub-Strategy	Focal Component	Pressures Addressed
<b>1 – Hood Canal Strategic Priorities</b>				
<b>A – Policy and Regulatory Strategies</b>				
Strategy A1: Complete an inventory and assessment of existing countywide planning policies	HCCC		<ul style="list-style-type: none"> <li>• Forests</li> <li>• Forestry</li> <li>• Commercial Shellfishing</li> <li>• Salmon</li> <li>• Shellfish</li> </ul>	<ul style="list-style-type: none"> <li>• Commercial and residential development</li> </ul>
<b>B – Ecological Restoration, Remediation, or Enhancement Strategies</b>				
Strategy B1: Fully implement the Pollution Identification and Correction Programs and Pollution correction action teams	HCCC and all member jurisdictions	C9.4 Develop and implement local and tribal pollution identification and correction programs	<ul style="list-style-type: none"> <li>• Shellfish</li> <li>• Commercial Shellfishing</li> <li>• Salmon</li> </ul>	<ul style="list-style-type: none"> <li>• Wastewater discharges and stormwater runoff</li> <li>• Commercial and residential development</li> </ul>
Strategy B2: Carry out HCCC's role as the Lead Entity for salmon recovery	HCCC	A6.1 Implement high priority projects identified in each salmon recovery watershed's three-year workplan.	<ul style="list-style-type: none"> <li>• Salmon</li> <li>• Shellfish</li> </ul>	<ul style="list-style-type: none"> <li>• Dams</li> <li>• Culverts</li> <li>• Freshwater Shoreline Infrastructure</li> <li>• Marine Shoreline Infrastructure</li> <li>• Invasive Species</li> </ul>
Strategy B3: Implement and manage the HCCC In Lieu Fee Mitigation Program	HCCC	A2.2 Implement and maintain priority freshwater and terrestrial restoration projects	<ul style="list-style-type: none"> <li>• Shellfish</li> <li>• Commercial Shellfishing</li> <li>• Salmon</li> </ul>	<ul style="list-style-type: none"> <li>• Marine Shoreline Infrastructure</li> <li>• Wastewater discharges and stormwater runoff</li> </ul>

Strategy	Lead Organization /Agency	2014 Relevant Action Agenda Sub-Strategy	Focal Component	Pressures Addressed
Strategy B4: Complete the Monitoring and Adaptive Management Framework for Chinook salmon	HCCC	A6.1 Implement high priority projects identified in each salmon recovery watershed's three-year workplan.	• Salmon	<ul style="list-style-type: none"> <li>• Dams</li> <li>• Culverts</li> <li>• Freshwater Shoreline Infrastructure</li> <li>• Marine Shoreline Infrastructure</li> <li>• Invasive Species</li> </ul>
Strategy B5: Identify potential climate change adaptation strategies for Hood Canal	HCCC	D2.1 Advance the coordination of local recovery actions via local integrating organizations	<ul style="list-style-type: none"> <li>• Shellfish</li> <li>• Commercial Shellfishing</li> <li>• Salmon</li> <li>• Forest</li> <li>• Forestry</li> </ul>	<ul style="list-style-type: none"> <li>• Climate change and ocean acidification</li> </ul>
Strategy B6: Develop a Hood Canal Regional Stormwater Retrofit Plan	HCCC	C2.5 Provide focused stormwater-related education, training, and assistance.	<ul style="list-style-type: none"> <li>• Shellfish</li> <li>• Commercial Shellfishing</li> <li>• Salmon</li> </ul>	<ul style="list-style-type: none"> <li>• Wastewater discharges and stormwater runoff</li> </ul>
<b>C – Education, Outreach, and Communications Strategies</b>				
Strategy C1: Develop outreach and communication tools to raise public awareness and support	HCCC		<ul style="list-style-type: none"> <li>• Shellfish</li> <li>• Commercial Shellfishing</li> <li>• Salmon</li> </ul>	<ul style="list-style-type: none"> <li>• Wastewater discharges and stormwater runoff</li> <li>• Animal harvesting</li> <li>• Invasive species</li> </ul>
<b>2 – Other Regional Strategic Priorities</b>				
<b>A – Policy and Regulatory Strategies</b>				
Strategy A2: Designate Hood Canal as a No Discharge Zone for vessels	WA Department of Ecology		<ul style="list-style-type: none"> <li>• Shellfish,</li> <li>• Commercial Shellfishing</li> <li>• Salmon</li> </ul>	<ul style="list-style-type: none"> <li>• Wastewater discharges and stormwater runoff</li> </ul>

Strategy	Lead Organization /Agency	2014 Relevant Action Agenda Sub-Strategy	Focal Component	Pressures Addressed
Strategy A3: Implement closure response plans, clean water district plans, and create shellfish protection districts	The jurisdiction where the closure or protection district is located and WSDOH		<ul style="list-style-type: none"> <li>• Shellfish</li> <li>• Commercial Shellfishing</li> <li>• Salmon</li> </ul>	<ul style="list-style-type: none"> <li>• Wastewater discharges and stormwater runoff</li> <li>• Commercial and residential development</li> </ul>
Strategy A5: Reduce the use of seepage pits and eliminate cesspools	Local Health Jurisdictions	C9.4 Develop and implement local and tribal pollution identification and correction programs.	<ul style="list-style-type: none"> <li>• Shellfish</li> <li>• Commercial Shellfishing</li> <li>• Salmon</li> </ul>	<ul style="list-style-type: none"> <li>• Wastewater discharges and stormwater runoff</li> </ul>
B – Ecological Restoration, Remediation, or Enhancement Strategies				
Strategy B7: Implement other salmonid recovery and management plans		A6.1 Implement high priority projects identified in each salmon recovery watershed’s three-year workplan.	<ul style="list-style-type: none"> <li>• Salmon</li> </ul>	<ul style="list-style-type: none"> <li>• Dams</li> <li>• Culverts</li> <li>• Freshwater Shoreline Infrastructure</li> <li>• Marine Shoreline Infrastructure</li> <li>• Invasive Species</li> </ul>

### 3 – Additional Strategies

#### A – Policy and Regulatory Strategies

<b>Strategy</b>	<b>Focal Component</b>	<b>Pressures Addressed</b>
Strategy A4: Designate Hood Canal as an Invasive-free Zone	<ul style="list-style-type: none"> <li>• Shellfish</li> <li>• Commercial Shellfishing</li> <li>• Salmon</li> </ul>	<ul style="list-style-type: none"> <li>• Invasive species</li> </ul>
Strategy A6: Oil spill readiness and response	<ul style="list-style-type: none"> <li>• Shellfish</li> <li>• Commercial Shellfishing</li> <li>• Salmon</li> </ul>	<ul style="list-style-type: none"> <li>• Oil and Hazardous Material Spills</li> </ul>
Strategy A7: Expanded public access to restroom, disposal, and sanitary facilities	<ul style="list-style-type: none"> <li>• Shellfish</li> <li>• Commercial Shellfishing</li> <li>• Salmon</li> </ul>	<ul style="list-style-type: none"> <li>• Wastewater discharges and stormwater runoff</li> </ul>
Strategy A8: Develop comprehensive shellfish enhancement plan	<ul style="list-style-type: none"> <li>• Shellfish</li> </ul>	<ul style="list-style-type: none"> <li>• Animal harvesting</li> </ul>
Strategy A9: Improved enforcement and prosecution of illegal wild animal harvest	<ul style="list-style-type: none"> <li>• Shellfish</li> <li>• Commercial Shellfishing</li> <li>• Salmon</li> </ul>	<ul style="list-style-type: none"> <li>• Animal harvesting</li> <li>• Shellfish Aquaculture</li> </ul>

#### B – Ecological Restoration, Remediation, or Enhancement Strategies

Strategy B8: Clean up contaminated sites and creosote pilings	<ul style="list-style-type: none"> <li>• Shellfish</li> </ul>	<ul style="list-style-type: none"> <li>• Toxics and legacy contaminants</li> </ul>
Strategy B9: Replace Gamble outfall	<ul style="list-style-type: none"> <li>• Shellfish</li> <li>• Commercial Shellfishing</li> <li>• Salmon</li> </ul>	<ul style="list-style-type: none"> <li>• Wastewater discharges and stormwater runoff</li> </ul>
Strategy B10: Enhance public access to shellfish harvesting areas	<ul style="list-style-type: none"> <li>• Shellfish</li> </ul>	<ul style="list-style-type: none"> <li>• Shellfish aquaculture</li> </ul>
Strategy B11: Promote native shellfish restoration	<ul style="list-style-type: none"> <li>• Shellfish</li> </ul>	<ul style="list-style-type: none"> <li>• Animal harvesting</li> </ul>

#### C – Education, Outreach, and Communications Strategies

Strategy C2: Expand public outreach and education	<ul style="list-style-type: none"> <li>• Shellfish</li> <li>• Commercial Shellfishing</li> <li>• Salmon</li> </ul>	<ul style="list-style-type: none"> <li>• Wastewater discharges and stormwater runoff</li> <li>• Animal harvesting</li> <li>• Invasive species</li> </ul>
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