

## Our Vision

To restore salmon, steelhead, and trout to healthy harvestable levels and improve habitats on which fish rely.

## Goals and Strategies<sup>1</sup>

### **Wild salmon populations will be productive and diverse.**

- Sustain salmon productivity by providing wild spawner escapement, conserving genetic diversity, and meeting basic needs of salmon for spawning, rearing, and migration in watersheds and ecosystems. Stewardship of salmon will be the first priority in managing the resource.
- Meet the goal of the Endangered Species Act to return endangered and threatened species to the point where salmon no longer need the statute's protection.

### **We will have coordinated, science-based salmon recovery efforts.**

- Achieve cost-effective salmon recovery and use government resources efficiently.
- Use the best available science and integrate monitoring and research with planning and implementation.
- Ensure that citizens, salmon recovery partners, and state employees have timely access to the information, technical assistance, and funding they need to be successful.

### **Our habitat, harvest, hatchery, and hydropower activities will benefit wild salmon.**

- Freshwater and estuarine habitats are healthy and accessible.
- Rivers and streams have flows to support salmon.
- Water is clean and cool enough for salmon.
- Hatchery practices meet wild salmon recovery needs.
- Harvest management actions protect wild salmon.
- Compliance with resource protection laws is enhanced.

### **Citizens and salmon recovery partners are engaged.**

- Create partnerships among governments and citizens.
- Provide leadership, coordination, and technical assistance to create agreements on salmon recovery decision-making frameworks and recovery plans.
- Integrate scientific data with local knowledge and build in local flexibility and control.
- Inform, build support, involve, and mobilize citizens to assist in restoration, conservation, and enhancement of salmon habitat.

### **We will meet Endangered Species Act and Clean Water Act requirements.**

- Strengthen land, water, and fishery management policies, programs, and activities to avoid, minimize, and mitigate human impacts on salmon populations and their habitat.
- Seek Endangered Species Act compliance for state guidelines, regulations, and plans; permitting activities; funding of projects and activities; and state lands, facilities, and infrastructure.

# Introduction

Welcome to the sixth in the series of biennial “State of Salmon in Watersheds” reports. The purpose of these reports is to provide regular, concise summaries of high level information that tracks progress toward salmon recovery across Washington State.

Much progress has been made in salmon recovery across the state since passage of the Salmon Recovery Act in 1998. During the past 12 years, “State of Salmon in Watersheds” reports have documented how Washingtonians have responded to the challenges of protecting and restoring salmon and steelhead to healthy status. State, federal, and tribal agencies worked with local citizens and other partners to develop salmon recovery plans that have been adopted by the federal government. They continue to implement those plans by putting needed actions into place, and building better ways to document results.

This is the first “State of Salmon in Watersheds” report prepared by the Washington State Recreation and Conservation Office, into which the Governor’s Salmon Recovery Office was integrated by the Legislature in 2009. This report builds on the solid foundation of past reports, but is different in several important ways.

- It consolidates information from the Salmon Recovery Funding Board, the Forum on Monitoring Salmon Recovery and Watershed Health (Forum), and watershed planning efforts across the state.

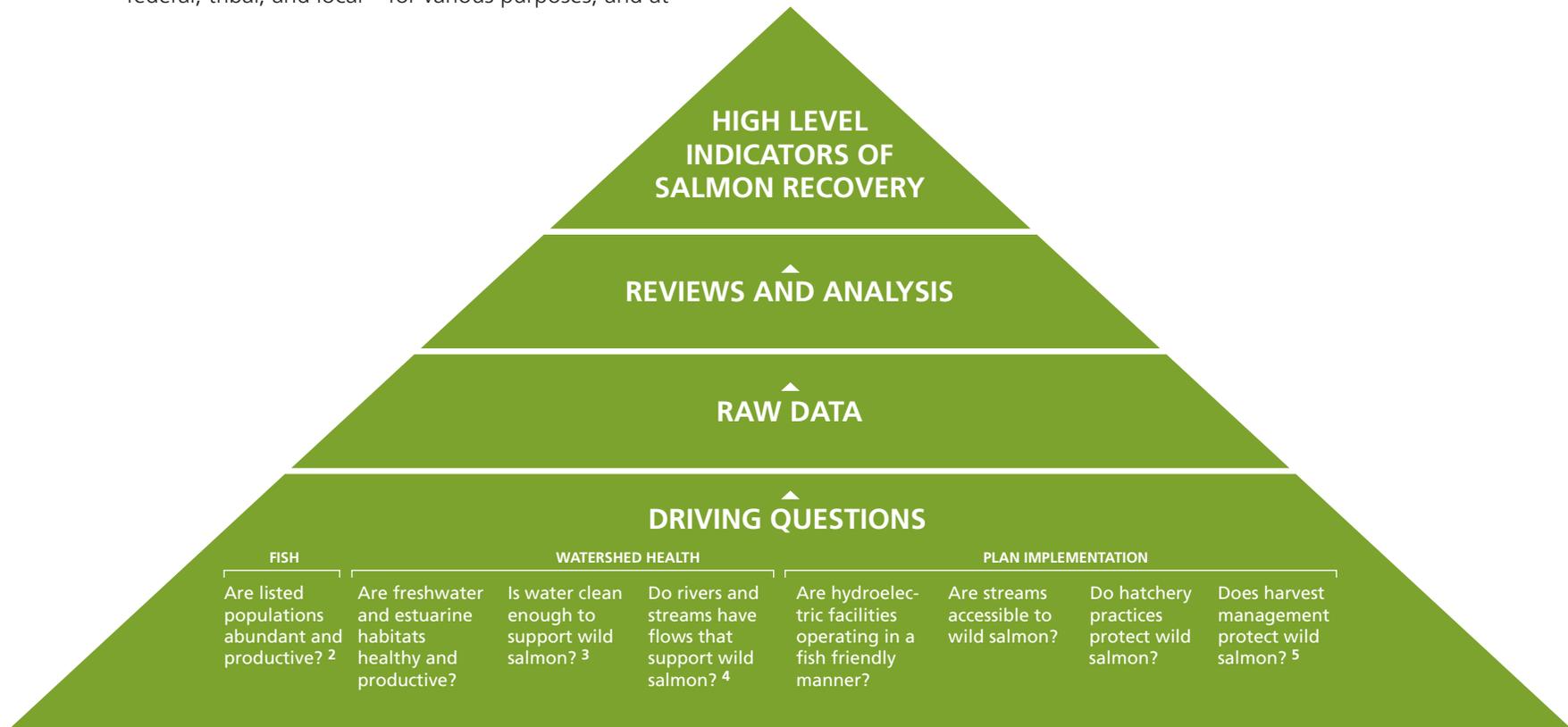
- It has fewer statewide summary charts.
- It places more emphasis at the salmon recovery region scale – that is the scale at which listings and eventual de-listings can occur.
- It provides more information on trends in fish, watershed conditions, and recovery actions over time.
- It identifies overarching threats to the long-term success of recovery.

We are committed to communicating the status of salmon and the health of our watersheds to the Governor, legislators, Congress, and the public. All recovery partners must work on ways to better share information and to track and report progress. We must identify and address key data gaps that hinder our ability to manage our collective efforts along the long road to recovery.

The high level questions of most interest to decision-makers drive what information is compiled for this report. The questions resulting from the work of the Joint Natural Resources Cabinet in 2000, are reflected in Washington's "Statewide Strategy to Recover Salmon," and are consistent with the state's "2002 Comprehensive Monitoring Strategy."

The pyramid below places high level questions at the base. Complex raw data are collected from many sources – state, federal, tribal, and local – for various purposes, and at

multiple scales – watershed, salmon recovery region, and statewide to help answer those questions. After being organized and analyzed, and included in technical or management reports, the information is then compiled into the indicators reported here. High level indicators are short and easy-to-understand, and sit at the top of the pyramid – they are simple, brief, and clear ways to track progress of salmon recovery.



## Strategic Approach to Fish and Watershed Health Monitoring

We have made much progress in focusing on the most important monitoring needs across the state. Washington's "Comprehensive Monitoring Strategy and Action Plan" identified high priority statewide monitoring actions. In addition, the Forum has been working for a number of years with state, federal, tribal, local, and regional recovery organizations. It has made significant strides to improve coordination and efficiencies among disparate monitoring programs.

### New Salmon, Watershed Health, and Implementation Indicators

This report is focused on indicators that address questions in three general categories – fish, watershed health, and plan implementation. While much remains to be done, the report reflects significant progress in our strategic approach to tracking progress in all three categories. The most important influence on that progress has been the Forum.

Telling the salmon recovery and watershed health stories in meaningful but simple ways is challenging. To address those challenges in 2009, in response to legislative direction, the Forum adopted the small set of high level indicators for salmon recovery and watershed health that are listed below.

In 2010, the Forum also adopted technical protocols for the collection of data on each of its salmon and watershed health indicators. Information on these protocols can be found on the Forum's Web site. Future "State of Salmon in Watersheds" reports will track state agency use of those protocols. As always, the underlying information on all indicators is accessible from data sources identified throughout this report.

To know if progress is being made, it is important to track implementation of recovery actions. This report tracks a smaller set of implementation indicators at the regional scale, some of which also are rolled up and reported at the statewide scale.

### High Level Indicators Adopted by the Forum<sup>6</sup>

#### Salmon

- Adult spawners
- Adults harvested
- Juvenile out-migrants (smolts)

#### Watershed Health

- Land use and land cover
- Biological health (in-stream)
- Stream physical habitat
- Riparian condition
- Water quality
- Water quantity (stream flow)

#### Implementation Indicators

- Plan implementation progress
- Funding
- Fish-friendliness of hydropower projects
- Barriers to fish passage
- Hatchery practices meeting scientific standards
- Watershed cleanup plans
- In-stream flows and flow augmentation

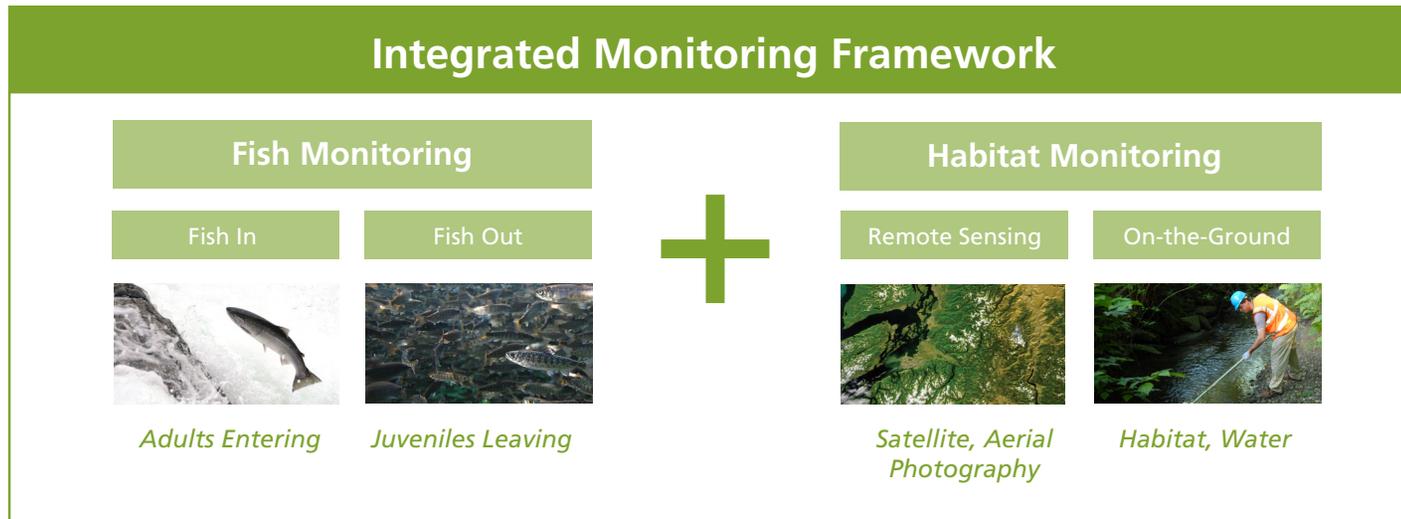
## A New Monitoring Approach: Integrated Statewide Monitoring Framework<sup>7</sup>

In 2007, the Forum completed an integrated statewide framework for monitoring of listed salmon and their habitat. Statewide implementation of the framework began in the Puget Sound salmon recovery region in 2009 with the collection of a limited set of habitat data. Similar data will be collected in all other regions, and then rotated over time to get trend information. This information will be contained in future reports. Importantly, the framework also provides a way for statewide watershed condition data to be incorporated with finer scale (e.g., local watershed) data, and vice versa. The key will be use of design and sampling protocols that are consistent with those adopted by the Forum. When implemented over time, the

framework will provide information on trends in Forum-adopted indicators at regional and statewide scales. That information will address high-level questions such as:

- What are the trends in salmon populations?
- What are the trends in watershed health and habitat condition?

The framework calls for simultaneous and continuous monitoring of juvenile and adult salmon in at least one primary population per major population group for all listed species statewide. Habitat monitoring will efficiently complement the fish monitoring, to better understand how fish are responding to our recovery actions.



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