



Washington
Department of
**FISH and
WILDLIFE**

ZERO-BASE BUDGET ANALYSIS

EXECUTIVE REPORT

AUGUST 2018



Table of Contents

Introduction	3
Key Zero-Base Budget Findings.....	4
Department Overview	5
WDFW and the Public	9
Review of Investments Made in the 2015-17 Biennium.....	13
WDFW Mission-Driven Outcome Overviews	16
○ Preserve and restore aquatic habitats and species	
○ Acquire and manage lands	
○ Preserve and restore terrestrial habitats and species	
○ Manage fishing opportunities	
○ Produce hatchery fish	
○ Manage hunting opportunities	
○ Provide recreational opportunities	
○ Business management and obligations	
Report Addenda and Other resources.....	33

Introduction

As part of the 2017-19 state budget, the Legislature asked the Washington Department of Fish and Wildlife (Department or WDFW) to conduct a zero-based budget (ZBB) analysis, SSB 5883, Sec. 307.

This document utilizes expenditure data from the 2015-17 biennium to address the proviso requirements and provide a succinct overview of the Department's mission, role in society, outcomes the Department strives for and the strategies the Department engages in to reach those outcomes. It provides background information for the Department's 2019 budget submittal, long-term funding plan, and the upcoming 2019-21 strategic plan.

Traditionally, the Department has represented its work and the associated costs based on the WDFW administrative programs. As a result of this zero-base budget review, the Department has fundamentally changed the way they represent their work and associated funding. Throughout this document, eight mission-driven outcomes and 51 strategies represent the work the Department does in service to its mission.

Proviso language

(d) The department, in cooperation with the office of financial management shall conduct a zero-based budget review of its operating budget and activities to be submitted with the department's 2019-2021 biennial budget submittal. Information and analysis submitted by the department for the zero-based review under this subsection shall include:

- (i) A statement of the statutory basis or other basis for the creation of each program and the history of each program that is being reviewed;
- (ii) A description of how each program fits within the strategic plan and goals of the agency and an analysis of the quantified objectives of each program within the agency;
- (iii) Any available performance measures indicating the effectiveness and efficiency of each program;
- (iv) A description with supporting cost and staffing data of each program and the populations served by each program, and the level of funding and staff required to accomplish the goals of the program if different than the actual maintenance level;
- (v) An analysis of the major costs and benefits of operating each program and the rationale for specific expenditure and staffing levels;
- (vi) An analysis estimating each program's administrative and other overhead costs;
- (vii) An analysis of the levels of services provided; and
- (viii) An analysis estimating the amount of funds or benefits that actually reach the intended recipients.

Key Zero-Base Budget Findings

- In the 2015-17 biennium, the Department acquired 91% of its funding from its four biggest funding sources – Federal funding (28.5%), User fees (23.1%), State and local contracts (21.2%) and General taxes (17.9%). The remaining 9% is comprised mostly of specialized and background license plate sales and state bonds.
- The Department has limited flexibility in how it spends much of its funding. State, local and federal contracts and funding come with specific statements of work; federal funds, such as Pittman Robertson and Dingell Johnson, come with specific restrictions on where the money can and cannot be spent; dedicated accounts have specific work in which those funds can be spent; even the state general fund comes with specific expectations from the legislature of work that will be completed. This restricts the Departments ability to redirect funds to shifting priorities.
- User fees, such as license dollars and Discover Pass purchases, provide only partial funding for management of fish and wildlife recreational and commercial opportunities. Other fund sources, such as federal, state and local contracts, pay for 77% of Department investments made in fishing opportunity management, 86% of costs for preserving and restoring ecosystems, 54% of investments to manage hunting opportunities, and 64% of the cost of maintaining business infrastructure.
- The Department invests the largest portion of its funding providing fishing opportunities with 46% of Department spending in the 2015-17 biennium made producing hatchery fish and managing fishing opportunities. Managing hunting opportunities accounted for 9% of the total agency spending, managing WDFW lands for hunting, fishing and conservation accounted for 14% of agency spending, preserving and restoring habitats accounted for 21% of agency investments and business management accounted for 10% of 2015-17 agency spending.
- The comprehensive work of the Department benefits non-consumptive recreational opportunities, though the Department currently invests very little in direct management or promotion of those opportunities. Those opportunities benefit passively from all work of the Department.

Department Overview

To preserve, protect, and perpetuate fish, wildlife, and ecosystems while providing sustainable fish and wildlife recreational and commercial opportunities.



Ecosystems are complex and multi-dimensional systems defined as “a biological community of interacting organisms and their physical environment.” Management of ecosystems and the fish and wildlife that reside within them is a complex task with work that often has impacts and variables spanning over multiple outcomes and benefitting many customer groups.

The mission of the Department contains two distinct, but integrated, mandates:

1. To preserve, protect, and perpetuate fish, wildlife and ecosystems (conservation)
2. ...while providing sustainable fish and wildlife recreational and commercial opportunities (consumption).


Throughout this document, eight key outcomes and fifty-one strategies represent the work of the Department. The outcomes and strategies depict what the Department does, how they do it and how it all connects to their mission.

WDFW Foundational Map

The eight agency outcomes and 51 strategies are outlined on the WDFW foundational map, which is available as an 11x17 printable addendum to this report. There are three key sections of this map: two that mirror the two distinct, but integrated, mandates reflected in the Department mission, and one that depicts the supporting business infrastructure.

Considerations to keep in mind while reviewing the WDFW foundational map:

- This map simplifies communication about the complex integration of work strategies impacting ecosystems by depicting each in a linear fashion, mapped to its primary outcome. However, the work and benefits applied to most Department strategies are not linear. It is important to remember that many strategies support more than one outcome. For example, the work to remove stream barriers is reflected in the “Preserve and Restore Aquatic Habitat” outcome and it also provides significant benefit to management of fishing opportunities as well as non-consumptive recreation as outdoor enthusiasts enjoy watching the fish travel upstream to spawning grounds.
- The orientation of items on the WDFW foundational map is of importance. Strategies identified within a column identify work that primarily contributes to the outcome header of the column. Therefore, reading the map implies a specific logic.
 - Example: In order to preserve, protect and perpetuate fish wildlife and ecosystems, the Department must preserve and restore terrestrial habitat and species. Therefore, the Department partners with private landowners to implement conservation strategies (T.2).

 To preserve, protect and perpetuate fish, wildlife and ecosystems while providing sustainable fish and wildlife recreational and commercial opportunities.			
Outcome 1: Preserve, Protect and Perpetuate Fish, Wildlife and Ecosystems			
Outcome 1.1: Preserve and Restore Aquatic Habitat & Species	Outcome 1.2: Acquire and Manage Lands	Outcome 1.3: Preserve & Restore Terrestrial Habitat & Species	
A.1 - Protect fish and their habitat from the effects of construction projects A.2 - Consult with business, landowners and governments regarding aquatic species impacts and benefits A.3 - Reduce risk & decrease devastation of all spp. A.4 - Ensure that there remains enough water in watersheds to allow for healthy fish populations A.5 - Structure fish survivability by removing stream barriers and appropriately addressing water diversions A.6 - Acquire funding for and complete habitat restoration projects A.7 - Recover and sustain diverse aquatic populations A.8 - Monitor and control aquatic invasive species A.9 - Study and plan for climate impacts on watersheds and resulting effects on aquatic benefits A.10 - Enhance protection of aquatic habitats	L.1 - Maintain and enhance habitat for hunting, fishing and conservation on WDFW owned & managed lands L.2 - Acquire new lands and sell lands that no longer support our mission L.3 - Build & maintain safe, sanitary and ecologically friendly water access sites L.4 - Ensure public safety on our lands	T.1 - Consult with business, landowners and governments regarding terrestrial species and land impacts and together T.2 - Partner with private landowners to implement conservation strategies T.3 - Study and plan for climate impacts on lands and resulting effects on species T.4 - Wildlife permitting and enforcement of regulations T.5 - Recover and sustain diverse wildlife populations T.6 - Respond to and mitigate wolf conflicts T.7 - Acquire funding for and complete habitat restoration projects	
Outcome 2: Recreational and Commercial Fishing Opportunities			
Outcome 2.1: Manage Fishing Opportunities	Outcome 2.2: Produce Hatchery Fish	Outcome 2.3: Manage Hunting Opportunities	Outcome 2.4: Non-consumptive recreational opportunities
F.1 - Enhance recreational fishing opportunities and regulations F.2 - Enhance commercial fishing opportunities and regulations F.3 - Develop, regulate, and implement fishery co-management plans F.4 - Monitor and manage fish populations F.5 - Monitor and manage shellfish populations F.6 - Self-recreational fishing licenses F.7 - Market fishing opportunities	P.1 - Produce trout and warm water game fish P.2 - Produce salmon and steelhead P.3 - Build and maintain hatcheries	H.1 - Enhance hunting opportunities and regulations H.2 - Provide hunter education opportunities H.3 - Set sustainable hunting seasons H.4 - Survey game populations & population trends H.5 - Study game species populations and their health H.6 - Respond to game species wildlife conflicts and dangerous wildlife (poorly) H.7 - Secure hunting access on private lands H.8 - Sell hunting licenses H.9 - Market hunting opportunities	R.1 - Develop, organize and promote wildlife viewing opportunities R.2 - Work directly benefiting non-consumptive opportunities
Business Management & Obligations			
B.1 - Provide agency leadership and strategy B.2 - Manage human resources B.3 - Maintain agency records	O.1 - Communicate agency matters with the public and legislative O.2 - Manage information technology O.3 - Respond to public safety incidents (poorly)	F.1 - Manage finances and contracts F.2 - Build and maintain Office Facilities F.3 - WDFW legal counsel	

*The WDFW foundational map is available as a printable 11x17 addendum to this report.

Preserve, Protect, and Perpetuate Fish, Wildlife and Ecosystems

The Department identifies three key outcomes with twenty-one associated strategies that primarily contribute to the preservation and protection of fish, wildlife, and ecosystems.

In order to be successful, the Department:

- Preserves and restores aquatic habitats and species;
- Acquires and manages lands for hunting, fishing and conservation; and
- Preserves and restores terrestrial habitats and species.

In order to:		Preserve, Protect and Perpetuate Fish, Wildlife and Ecosystems		
We:		Preserve & Restore Aquatic Habitat & Species	Acquire and Manage Lands	Preserve & Restore Terrestrial Habitat & Species
Manage Ecosystems	So we:	A.1 - Protect fish and their habitat from the effects of construction projects	L.1 - Maintain and enhance habitat for hunting, fishing and conservation on WDFW owned & managed lands.	T.1 - Consult with businesses, landowners and governments regarding terrestrial species and land impacts and legalities
		A.2 - Consult with businesses, landowners and governments regarding aquatic species impacts and legalities	L.2 - Acquire new lands and sell lands that no longer support serving our mission	T.2 - Partner with private landowners to implement conservation strategies
		A.3 - Reduce risk & decrease devastation of oil spills	L.3 - Build & maintain safe, sanitary and ecologically friendly water access sites	T.3 - Study and plan for climate impacts on lands and resulting effects on species
		A.4 - Ensure that there remains enough water in waterways to allow for healthy fish lifecycles	L.4 - Ensure public safety on our lands	T.4 - Wildlife permitting and enforcement of regulations
		A.5 - Ensure fish survivability by removing stream barriers and appropriately addressing water diversions		T.5 - Recover and sustain diverse wildlife populations
		A.6 - Acquire funding for and complete habitat restoration projects		T.6 - Respond to and mitigate wolf conflicts
		A.7 - Recover and sustain diverse aquatic populations		T.7 - Acquire funding for and complete habitat restoration projects.
		A.8 - Monitor and control aquatic invasive species		
		A.9 - Study and plan for climate impacts on waterways and resulting effects on aquatic lifecycles		
		A.10 - Enforce protection of aquatic habitats		

Provide Sustainable Fish and Wildlife Recreational and Commercial Opportunities

The Department identifies four key outcomes with twenty-one associated strategies that primarily contribute to providing sustainable fish and wildlife recreational and commercial opportunities.

In order to be successful, the Department:

- Manages fishing opportunities;
- Produces hatchery fish;
- Manages hunting opportunities; and
- Provides recreational opportunities.

Manage Commercial and Recreational Opportunities within Ecosystems	In order to provide:	Recreational and Commercial Fishing Opportunities		Hunting Opportunities	Non-consumptive recreational opportunities
	We:	Manage Fishing Opportunities	Produce Hatchery Fish	Manage Hunting Opportunities	Provide and Facilitate Recreational Opportunities
So we:	F.1 - Enforce recreational fishing opportunities and regulations	P.1 - Produce trout and warm water game fish	H.1 - Enforce hunting opportunities and regulations	R.1 - Develop, organize and promote wildlife viewing opportunities.	
	F.2 - Enforce commercial fishing opportunities and regulations	P.2 - Produce salmon and steelhead	H.2 - Provide hunter education opportunities	R.2 - Work directly benefitting non-consumptive opportunities.	
	F.3 - Develop, negotiate, and implement fishery co-management plans	P.3 - Build and maintain hatcheries	H.3 - Set sustainable hunting seasons		
	F.4 - Monitor and manage fin fish populations		H.4 - Survey game populations & population trends		
	F.5 - Monitor and manage shellfish populations		H.5 - Study game species populations and their health		
	F.6 - Sell recreational fishing licenses		H.6 - Respond to game species wildlife conflicts and dangerous wildlife (non-wolf)		
	F.7 - Market fishing opportunities		H.7 - Secure hunting access on private lands		
		H.8 - Sell hunting licenses			
		H.9 - Market hunting opportunities			

Foundational business management

The department requires a strong business management foundation in order to meet legal obligations and effectively support the work of the other seven mission-driven outcomes.

Business Management & Obligations	X.1- Provide agency leadership and strategy	X.2- Communicate agency matters with the public and legislature	X.3- Manage finances and contracts
	X.4- Manage human resources	X.5- Manage information technology	X.6- Build and maintain Office Facilities
	X.7- Maintain agency records	X.8- Respond to public safety incidents (police)	X.9- WDFW legal counsel

WDFW and the Public

The Department's mandate benefits every Washington citizen. To preserve, protect, and perpetuate fish, wildlife, and ecosystems contributes to a higher quality of life. Providing sustainable fish and wildlife recreational and commercial opportunities stimulate the state's economy and contributes to financial well-being, particularly in rural areas where outdoor recreational opportunities are abundant. There are four key subsets of the Washington State population that benefit directly from the mission of the Department:

- Citizens of Washington;
- Conservationists and outdoor enthusiasts;
- Recreational anglers, commercial fishers, and tribal fishing; and
- Hunters.

Citizens of Washington



There are 7.5 million Washington state citizens, most of which care about the ecological wellbeing and beauty of Washington state. As the primary governmental entity working to preserve, protect, and perpetuate fish, wildlife and ecosystems in the state, the Department is responsible for the public trust doctrine and stewardship of those publicly owned resources - the Department must serve those citizens through stewardship that perpetuates those resources over time.

Orcas, salmon, sage grouse, and many other species of concern are at a critical juncture, signifying concerning trends within our ecosystems. Continual decline of ecosystem health, if not mitigated, will continue to degrade the benefits that fish, wildlife and ecosystems offer to Washington State citizens.

Washington state population is expected to grow by 2 million people, nearly 25%, by 2040. This population growth risks impact to the health of Washington state ecosystems – those risks must

be effectively managed. Additionally, climate change threatens the future health of Washington ecosystems.

Outdoor enthusiasts and conservationists



The Department conducts a number of activities that support Washingtonians who enjoy getting outside, especially when there is a chance of seeing wildlife. From elk, osprey, and whales to pygmy rabbits, Taylor's checkerspot butterflies, and sage grouse, Washington offers a wide variety of watchable wildlife opportunities. The Department provides habitat information to local governments, so that land use decisions can protect critical habitat, and mitigate situations where species may become imperiled.

While the Department has had success restoring fishers to the Olympic and Cascade ranges, many species are becoming less common. Currently, the Department identifies 268 species of greatest conservation need and only has staff capacity to take action on approximately 10% of those species.

Recreational Anglers, Commercial, & Tribal Fishing



The Department serves about 750,000 to 800,000 people who fish recreationally in Washington each year. Approximately 60% of recreational anglers fish annually while others do so intermittently or one time. While anglers and commercial and tribal fisheries benefit from the work of most agency activities, the strategies to achieve the following outcomes most directly serve these communities:

- Preserving and restoring aquatic habitats and species ensures the sustainability of habitat for healthy fish lifecycles and promotes recovery of wild populations which could, in turn, lead to delisting of species from the ESA and improved fisheries.
- Acquiring and managing lands provides safe, sanitary and ecologically friendly water access sites.
- Managing fishing opportunities ensures that fishing is managed in such a way that the angler or commercial or tribal fishery achieves the greatest finfish and shellfish harvest opportunity within available resources.
- Producing hatchery fish at 81 hatchery complexes augments wild populations so there are more finfish to catch within marine and freshwater areas.

The Department manages various finfish from iconic salmon to marine tuna and halibut, to hatchery raised trout stocked in lakes. Additionally, the Department manages shellfish harvesting opportunities, from geoducks to crabs, shrimp, and razor clams and ensures seasons align with healthy shellfish for consumption.

Satisfaction among anglers and commercial and tribal fisheries is mixed. While many freshwater opportunities have been steady, the numerous threatened salmon runs have impacted, in many cases significantly, the Department's flexibility for setting fishing seasons. Understandably, this

has made anglers unhappy with their fishing opportunities that are not as abundant as in years past.

As a counter measure, the Department produces millions of hatchery fish annually. Habitat competition with wild fish stocks and ESA regulations limits the Department's ability to produce more hatchery fish in many cases. Improved habitat work will be essential to recover many wild populations, particularly restoring and protecting spawning grounds and removing barriers to fish passage in waterways.

Hunters



The Department serves about 180,000 hunters each year. Approximately 85% of hunters hunt annually, while the remaining hunt intermittently. While hunters benefit from the work of most Department activities, the strategies to achieve the following outcomes directly serve the hunting communities:

- Acquiring and managing lands provides public lands for affordable hunting access.
- Preserving and restoring terrestrial habitats and species ensures the sustainability of habitat for reproduction and health of game species populations.
- Managing hunting opportunities ensures opportunities are maximized within the resources available while maintaining sustainable game species populations.

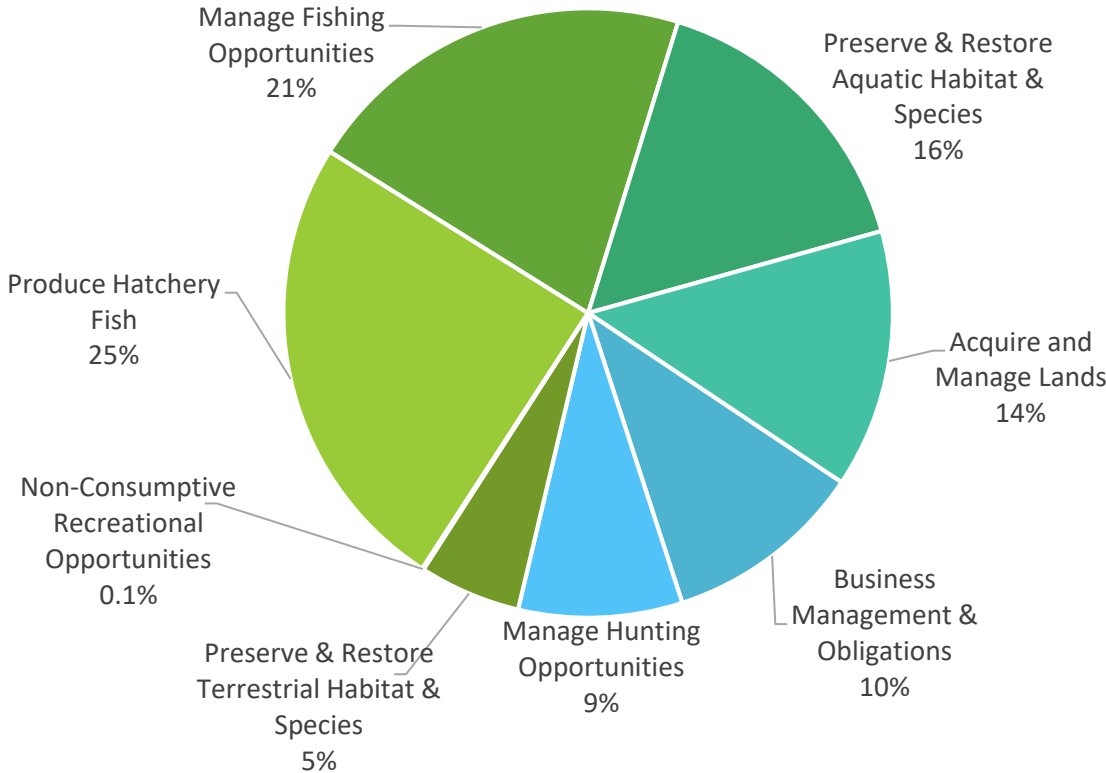
Despite the work benefitting hunters, their overall satisfaction appears to be declining, primarily due to loss of land access. Statewide land use issues, such as habitat fragmentation and human population growth, lead to concerning trends in game populations. Improving access is one of the best ways we can improve the hunting experience.

Review of Investments Made in the 2015-17 Biennium

Each outcome the Department invests in plays a unique role in the overall success of the Departments mission on behalf of all citizens of Washington. Funding from multiple sources contribute to the eight key Department outcomes. The below chart shows proportional investments made, by outcome, in the 2015-17 biennium.

Where did the Department invest?

*financial information includes operating, capital and interagency dollars



WDFW outcome	Total 2015-17 investments made (millions)
Produce Hatchery Fish	\$ 128.7M
Manage Fishing Opportunities	\$ 108.6M
Preserve & Restore Aquatic Habitat & Species	\$ 82.2M
Acquire and Manage Lands	\$ 71.9M
Business Management & Obligations	\$ 55.3M
Manage Hunting Opportunities	\$ 45.3M
Preserve & Restore Terrestrial Habitat & Species	\$ 28.0M
Non-Consumptive Recreational Opportunities	\$ 0.4M
Total	\$520.3M

Department funding source categories

Department funding comes through various sources. Each source has

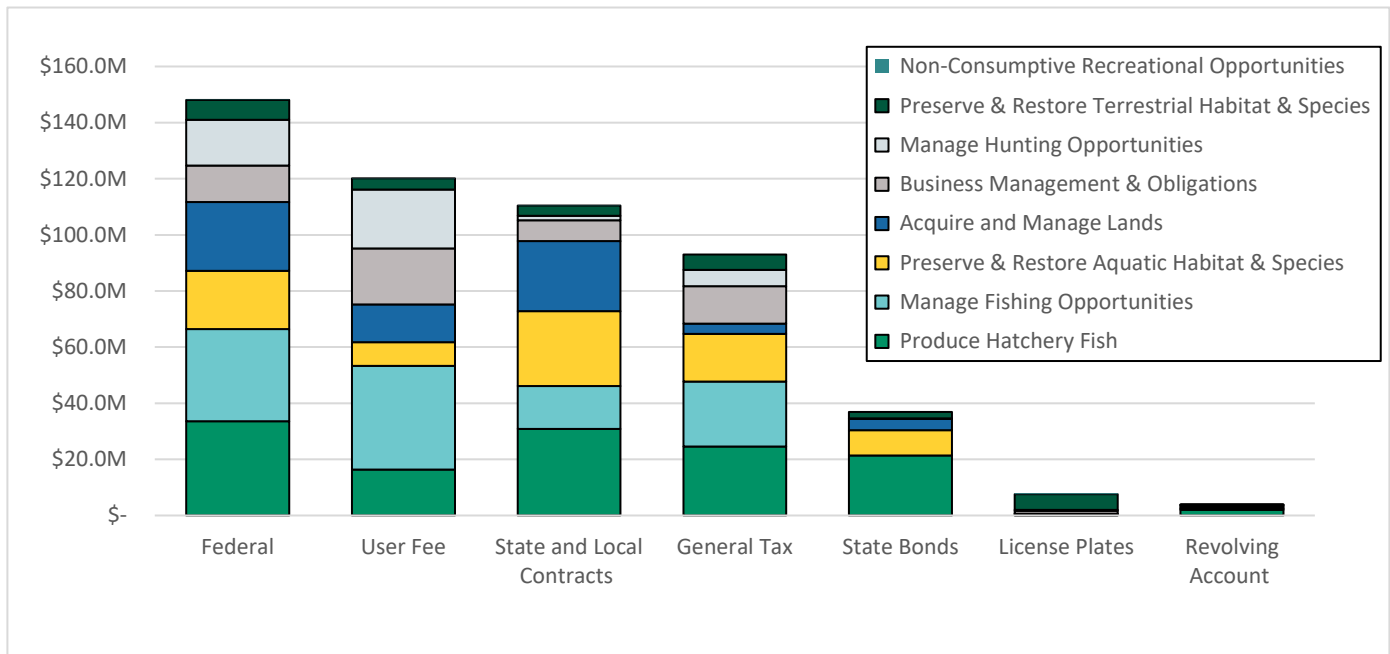
- User fees – This category includes various user fees, like hunting and fishing licenses and Discover Passes. These funds can be very flexible, but they can also have very restricted uses.
- General taxes – The state general fund draws most of its revenue from sales tax, property tax, and business taxes. The Legislature can use these funds for any purpose. The Department receives funds corresponding with expectations of work directed by the legislature. Appropriations to the Department can be flexible as long as the Department continues to complete the work originally directed by the legislature.
- Federal funding – The Department receives a variety of federal grant dollars. Some grant programs like Pittman-Robertson and Dingell-Johnson are excise taxes that hunters and anglers pay at the point of sale on certain equipment. The funds go to fish and wildlife agencies across the nation for resource management. Several ongoing federal sources are linked to Pacific fisheries and mitigation hatcheries to offset habitat loss from federal hydropower projects. Many awards are one-time grants for specific purposes. Federal funds are generally inflexible, with specific requirements and explicit statements of work for federal contracts.
- License plates – Revenue from customized and background Washington state license plates provide dedicated resources. The personalized license plate revenue goes to the management of non-game wildlife, while the game species background plates support game management.
- Revolving account – Capital equipment use revolving funds, where usage charges provide a dedicated, permanent fund for equipment maintenance and replacement.
- State and local contracts – This money is all directly from contracts originating within Washington State that contain a prescribed statement of work. This funding is inflexible.
- State bonds – State bond revenues helps the Department invest in large assets such as buildings and large equipment. Being project-specific, they are inflexible.

Fund sources identified as potentially flexible mean that the revenue could potentially be spent on more than one of the eight Department outcomes. It is important to note that the Department has minimal, and in many cases no flexibility, in how it spends approximately 54% of its funding. The remaining 46% of funding is often difficult to re-direct due to agency statutory obligations, legislative demands, and a requirement to “match” contract funds and federal dollars in certain work as a provision of receiving those funds.

2015-17 investments by fund source and outcome

*financial information includes operating, capital and interagency dollars

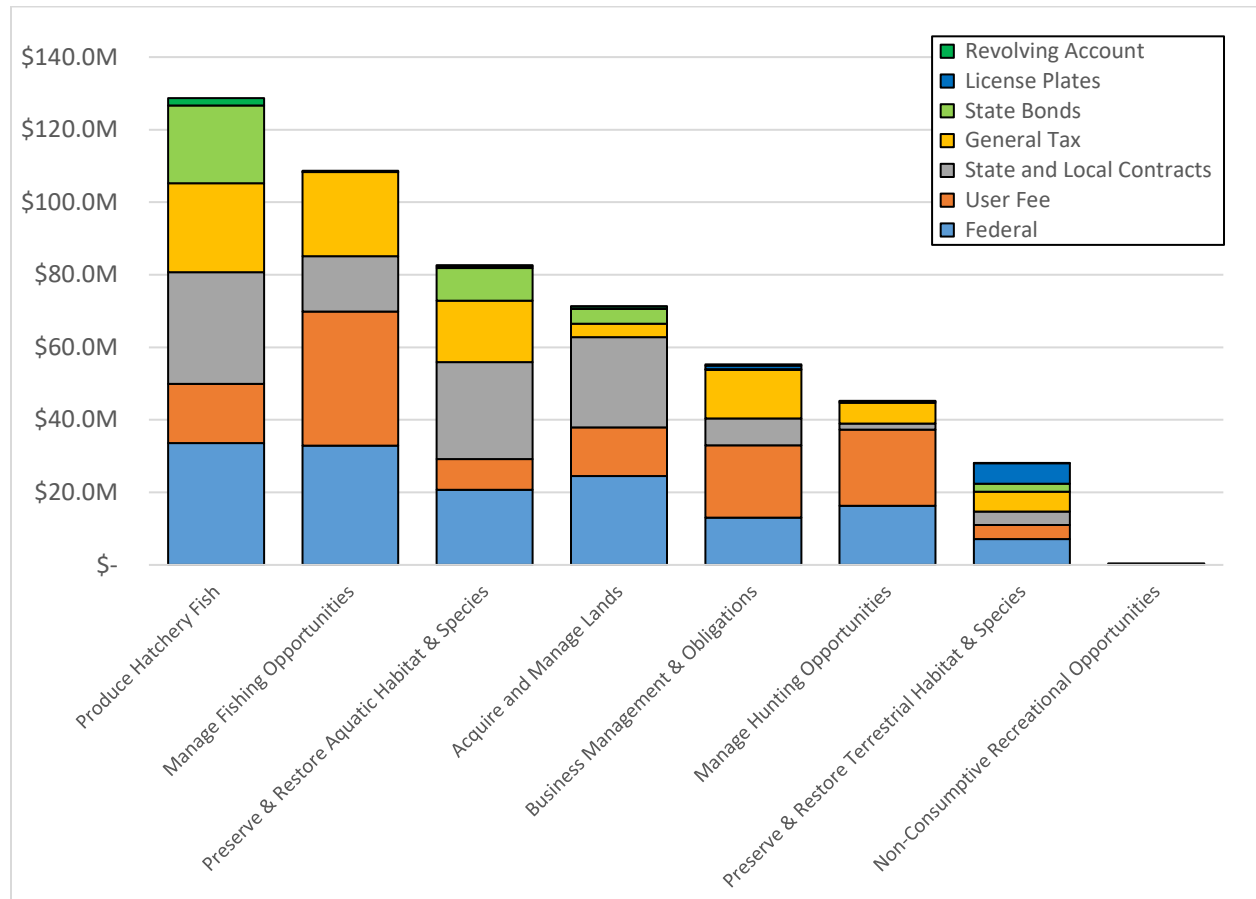
The Department's work is funded, in order of magnitude, by federal funding, user fees, state and local contracts, general tax, state bonds, license plates and revolving funds. Each funding source supports most of the eight WDFW outcomes in some way. The chart below depicts the investments made in the eight WDFW outcomes, by fund source, in the 2015-17 biennium.



2015-17 investments by outcome then fund source

*financial information includes operating, capital and interagency dollars

The Department's outcomes each receive significant funding from multiple sources. Proportionally, the Department spends very little funding to benefit non-consumptive recreational opportunities. However, those opportunities passively benefit from all work of the Department.



WDFW Mission-Driven Outcome Overviews

Key aspects of the Department's eight outcome areas are identified in the following one-page outcome summaries. To learn more information, view the expanded WDFW outcome details included as an addendum.

Goals of outcome

- Ensure Washington's fish, wildlife and ecosystems can be enjoyed for generations to come.
- Improve aquatic habitat to effectively support recovery of wild fish populations.
- Maintain quality of currently healthy habitat.
- Sustain and improve opportunities for commercial and recreational fishing.
- Contribute to the economic vitality of communities that depend on natural resources and an outdoor-oriented quality of life.
- Effectively address challenges relating to the changing climate and a rapidly growing human population.
- Honor tribal treaty obligations.

Risks and threats impacting outcome

- Salmon and other aquatic life are directly threatened by loss of food availability, habitat loss, barriers to fish migration, pollution and degraded water quality, warmer water temperatures, reduced snow pack, and ocean acidification.
- Invasive species threaten native habitat and risk destruction of habitat for native species, irrigation for farming, hydroelectric dams and sewage treatment outflows.
- Washington is the second smallest western state with the second largest population, threatening habitat. The state is expecting growth of nearly two million people by 2040, a population increase of 25%, which threatens available habitat.

Opportunities to improve outcome

- Gain and utilize information regarding natural resource benefit to local economies in order link landowner and community decisions to preserving those benefits.
- Develop strong partnerships with landowners and communities to gain habitat and conservation value on private lands and to positively influence habitat importance in community planning.
- Increase habitat health through deploying restoration grants across public lands and willing private properties.
- Implement plans to recover state-listed species by advancing restoration and protection actions in each region of the state.
- Improve health of habitat in urban areas in order to elevate the health of the whole ecosystem.

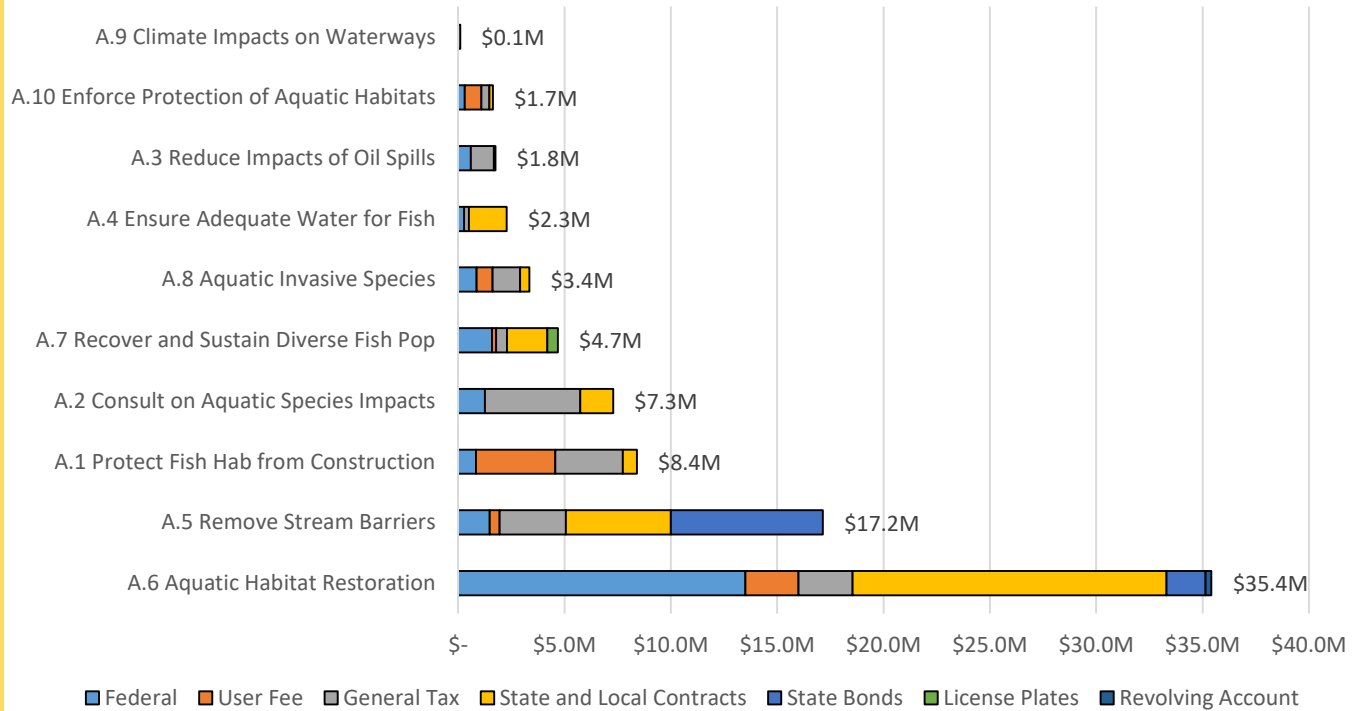
Preservation and restoration of aquatic habitats and species supports:

- Managing Fishing Opportunities
- Production of Hatchery Fish
- Managing Hunting Opportunities
- Acquiring and Managing Lands
- Preserving and Restoring Terrestrial Habitats and Species
- Providing Recreational Opportunities





Funding source by strategy during the 2015-17 biennium (\$82.2M)



Primary cost drivers

- Staff for studying, planning, assisting and enforcing preservation and restoration of Washington’s aquatic habitats and species.
- Grants to other entities for restoration, recovery actions.
- Acres of land restored.
- Geographic area covered for permitting, enforcement, support to private landowners, consultation with other governments, management impacts travel costs; vehicle maintenance, fuel, travel reimbursement.
- Sites monitored for impacts to fish and wildlife.

Relevant 2019 session legislative proposals

- Sustain Conservation*
 - This proposal preserves capacity for species ecology assessments, species recovery efforts, restoration project capacity, climate change planning capacity, and derelict fishing gear retrieval capacity.
- Improve Conservation
 - This proposal will ensure Department capacity to help guide salmon recovery priorities, more effectively engage with local governments in the ecologically strategic development and implementation of local ordinances, provide strategic landscape planning, and improve urban-wildland interface conservation.

*Represents work currently done by the Department that, if not approved and funded, will be reduced or eliminated.

Goals of outcome

- Maintain safe, modern and accessible lands that meet public expectations.
- Conserve and restore the diversity of Washington's fish and wildlife species, habitats, and ecosystems.
- Provide quality access for sustainable fishing, hunting, wildlife viewing, and other outdoor opportunities compatible with diverse, healthy ecosystems.
- Sustain our state's outdoors quality of life.
- Support state and local tourism industries and community character.
- Preserve working lands for agriculture, forestry, and other sectors of the outdoor economy, particularly in rural areas.
- Ensure public safety on WDFW lands and waters.

Risks and threats impacting outcome

- Infrastructure on WDFW lands takes on wear over the years, requiring upkeep, potentially posing safety risks if unaddressed.
- Invasive weeds degrade habitat quality and threaten long-term ecological integrity.
- Climate Change has increased incidents of wildfires, drought, floods, and other natural disasters.
- Recreation experiences suffer when habitat and infrastructure conditions degrade.

Opportunities to improve outcome

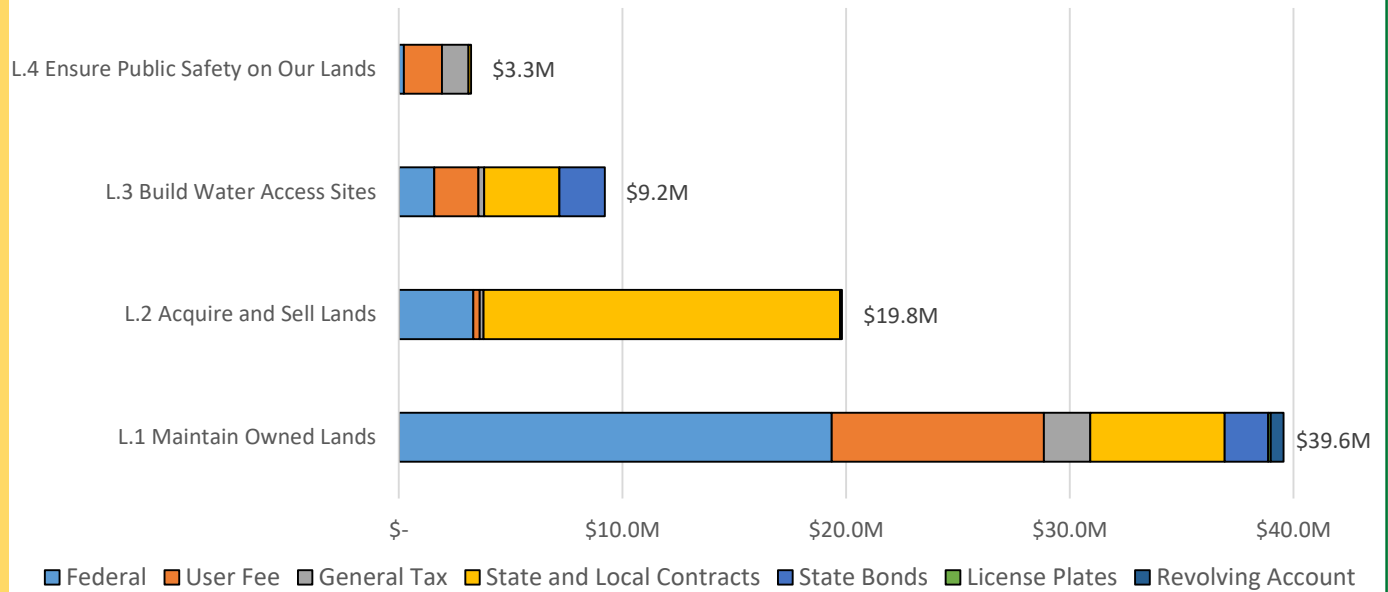
- Improve communication with the public about WDFW lands, where they are, and the value they provide to conservation, recreation, and local communities.
- Implement long-term management addressing poor road and facility conditions to improve and maintain quality of recreational opportunities on WDFW lands.
- Develop and implement a good statewide assessment of habitat restoration needs on WDFW owned and managed lands.
- Develop an effective way to utilize citizen scientists to measure the effectiveness of and adapt Department management activities.
- Engage the public in conversation and recreation to help solve challenges.
- Implement a publicly available facility inventory that will make it easier to obtain consistent, accurate information about WDFW wildlife areas and water access sites.
- Effectively incorporate preservation of cultural resources into planning in order to swiftly address habitat issues in culturally significant sites.
- There are private landowners who offer to donate their land to the Department and the Department cannot always accept the land due to maintenance capacity.

Acquiring and managing lands also supports:

- Managing Fishing Opportunities
- Production of Hatchery Fish
- Managing Hunting Opportunities
- Preserving and Restoring Aquatic Habitats and Species
- Preserving and Restoring Terrestrial Habitats and Species
- Providing Non-Consumptive Recreation



Funding source by strategy during the 2015-17 biennium (\$71.9M)



Primary cost drivers

- Staff for on-going habitat preservation work including weed management, habitat restoration, forest health improvements and access for people.
- Acquisition of ecologically important lands using federal funds and other grants awarded to WDFW by the Recreation and Conservation Office.
- Construction, repairs, and preventative maintenance on infrastructure such as bridges, fences and restrooms.
- Costs to provide public safety and fulfill and enforce legal requirements.
- Development and implementation of biological monitoring, scientific research efforts, and species and habitat research and monitoring and adaptive management efforts.

Relevant 2019 session legislative proposals

- Sustain Land Management*
 - This proposal preserves capacity for addressing invasive/noxious weeds, forest health treatments, and monitoring to inform adaptive management of stewardship actions. Additionally, this proposal ensures that public involvement in planning and public use permitting opportunities are maintained.
- Improve Land Management
 - This proposal provides additional capacity to provide quality stewardship and recreation opportunities on new wildlife areas and sites, increases noxious weed control, increases grazing monitoring on our lands, and adds enforcement presence.

*Represents work currently done by the Department that, if not approved and funded, will be reduced or eliminated.





Goals of outcome

- Recover and sustain diverse wildlife populations for the enjoyment of generations to come.
- Provide hunting and other recreational opportunities into the future.
- Contribute to the economic vitality of communities that depend on natural resources and an outdoor-oriented quality of life.
- Effectively address the dual challenge posed by the changing climate and rapidly growing human population.
- Honor tribal treaty obligations.

Risks and threats impacting outcome

- Species are directly threatened by loss of food availability, habitat loss, pollution and degraded water quality.
- Washington is the second smallest western state with the second largest population, affecting habitat availability and quality. The state's population is expected to increase by nearly 2 million people, almost 25%, by 2040.
- Climate Change has already increased incidents of wildfires, drought, floods, and other natural disasters and the Washington State climate is continuing to change.
- Human – wildlife conflict challenges the social acceptance of wildlife presence.
- As land is developed, available habitat becomes fragmented, impacting species.

Opportunities to improve outcome

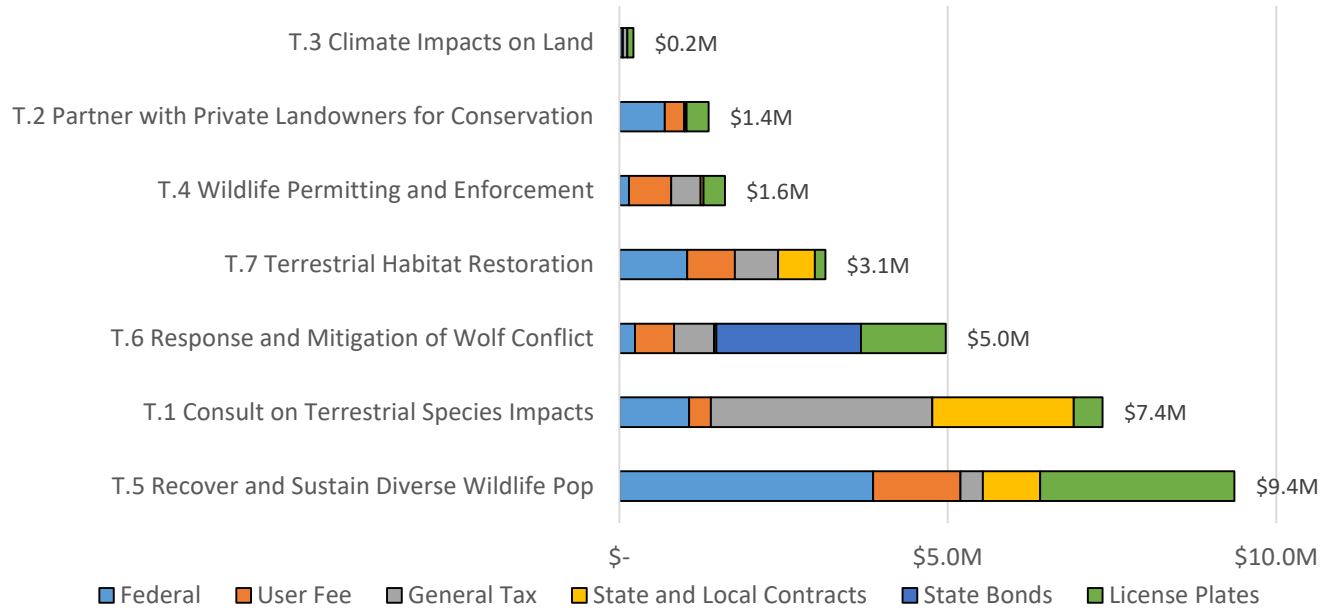
- Gain and utilize current information regarding how natural resources benefit local economies and then connect landowner and community decisions to preserving those benefits.
- Develop strong partnerships with landowners and communities to gain habitat and conservation value on private lands and to positively influence habitat decisions in community planning.
- Increase terrestrial habitat health through deploying restoration grants across public lands and willing private properties.
- Implement plans to recover state-listed species by advancing restoration and protection actions in each region of the state.
- Improve health of habitat in urban areas in order to elevate the health of the whole ecosystem.

Preservation and restoration of terrestrial habitats and species also supports:

- Managing Fishing Opportunities
- Managing Hunting Opportunities
- Acquiring and Managing Lands
- Preserving and Restoring Aquatic Habitats and Species
- Providing Non-Consumptive Recreation



Funding source by strategy during the 2015-17 biennium (\$28.0M)



Primary cost drivers

- Staff for studying, planning, assisting and enforcing preservation and restoration Washington’s terrestrial habitats and species.
- Grants to other entities for restoration, wildlife rehabilitation, and recovery actions.
- Acres of land restored.
- Geographic area staff must cover for permitting, enforcement, support to private landowners, consultation with other governments, management impacts.
- Travel costs; vehicle maintenance, fuel, travel reimbursement.
- Sites monitored for impacts to wildlife.

Relevant 2019 session legislative proposals

- Sustain Conservation*
 - This proposal preserves capacity for species ecology assessments, species recovery efforts, restoration project capacity and climate change planning capacity.
- Improve Conservation
 - This proposal will ensure Department capacity to help guide salmon recovery priorities, more effectively engage with local governments in the ecologically strategic development and implementation of local ordinances, provide strategic landscape planning, and improve urban-wildland interface conservation.

*Represents work currently done by the Department that, if not approved and funded, will be reduced or eliminated.

Goals of outcome

- Ensure healthy, sustainable fish and shellfish populations.
- Sustain and improve commercial and recreational fishing opportunities while ensuring conservation goals are met.
- Support a healthy economy.
- Honor tribal treaty obligations.
- Promote commercial and recreational fishing and economic viability of fishery-dependent local communities.

Risks and threats impacting outcome

- Recreational and Commercial Fishing opportunities are limited due to:
 - Decline in wild native fish populations.
 - Inadequate/unavailable data regarding ESA listed wild fish populations.
 - Health risks associated with water toxins and shellfish handling practices.
- These limitations are increasing or risk increase as a result of:
 - Changing environmental variables such as temperature and dissolved oxygen which impede healthy fish lifecycles.
 - Stream barriers to fish passage which stop historic fish runs from making it to the ocean and back to spawning grounds.
 - Illegal activity interfering with fisheries management & recovery of species.
 - Growing potential for introduction of aquatic invasive species.
- Work and costs to manage fishing opportunities continues to grow more intensive as a result of sustainability concerns leading to:
 - Increased costly requirements, such as installation of weirs, to implement federal ESA permits.
 - Upcoming biological opinion & requirements for Puget Sound Management.

Opportunities to improve outcome

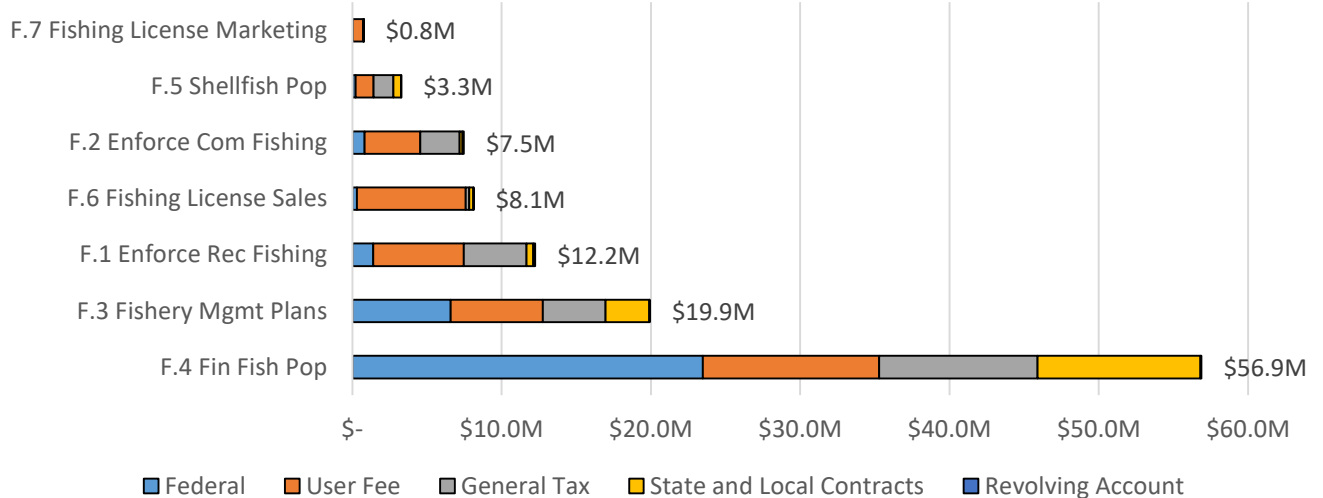
- Improve fish and shellfish health and stock assessments to track recovery efforts for imperiled species and maximize associated opportunities.
- Maximize opportunity while meeting conservation goals by monitoring harvest and effort of commercial and recreational fisheries.
- Decrease illegal activity through appropriately staffed fisheries enforcement.
- Effectively and transparently communicate season development and setting.
- Remove fish passage barriers.
- Increase hatchery production of fish within ESA requirements.

Managing fishing opportunities also supports:

- Production of Hatchery Fish
- Managing Hunting Opportunities
- Preserving and Restoring Aquatic Habitats and Species
- Providing Non-Consumptive Recreation



Funding source by strategy during the 2015-17 biennium (\$108.6M)



Primary cost drivers

- Staff primarily to monitor fish populations and health, conduct field investigations for monitoring and testing fisheries and associated plans, planning and negotiating fishing days, obtaining ESA permits, and enforcing fishing seasons and regulations.
- Equipment such as vehicles, boats, waders, durable tablets, fuel, survey flights.
- Laboratory costs.
- Staff and services for managing license sales (funded by license transaction fee).

Relevant 2019 session legislative proposals

- Sustain Public Health and Safety, Shellfish* - This proposal will ensure that the state does not lose enforcement patrols that ensure sanitary shellfish harvest.
- Sustain Fishing and Hatchery Production* - This proposal aims to preserve six hatcheries, warm-water game-fish opportunities, recreational shellfish opportunities, salmon species monitoring for ESA permitting needs and more.
- Sustain Conservation* - This proposal will preserve maintenance of long-term health of habitats including: Invasive weed control, habitat restoration capacity, derelict fishing gear retrieval capacity and more.
- Sustain CRSSE* - This proposal makes the Columbia River Salmon & Steelhead Endorsement permanent.
- Improve Conservation - This investment allows WDFW to help guide local salmon recovery priorities to areas and habitats that can maximize benefits.
- Improve Fishing - This investment would restore some hatchery production previously lost to budget cuts, provide monitoring capacity to maximize harvest opportunities while maintaining ESA compliance, effectively manage risk of shellfish disease and outbreak and maintain fish production on the lower Columbia River.
- RFEGs - This proposal maintains funding for 14 non-WDFW regional fisheries enhancement groups.

*Represents work currently done by the Department that, if not approved and funded, will be reduced or eliminated.



Goals of outcome

- Produce fit, healthy fish to benefit the citizens of Washington State while providing conservation to natural origin salmonids.
- Sustain our outdoors quality of life.
- Sustain local fishing industries.
- Honor tribal treaty obligations.
- Provide expanded economic benefit to Washington State citizens.
- Provide as many harvest opportunities as possible for commercial, recreational and tribal fisheries within our constraints.
- Conserve wild fish and provide sustainable, environmentally sound fisheries.

Risks and threats impacting outcome

- The factors that limit the Department's ability to produce fish:
 - Competition with wild fish limits permitted fish production quantity.
 - Constraints associated with the Endangered Species Act
 - Limited quantity and quality at facilities
 - Funding constraints and aging Infrastructure
- The Department is nearly at capacity for hatchery production of salmon and steelhead due to interactions with wild ESA listed fish or lack of funding and/or infrastructure to produce additional fish.

Opportunities to improve outcome

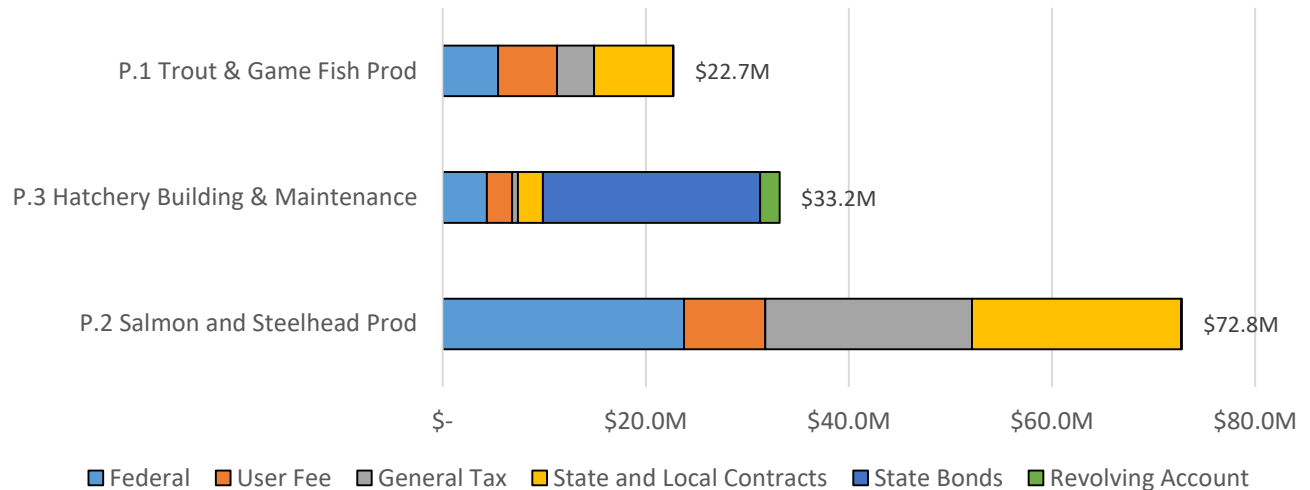
- Improve habitat which will increase natural origin fish abundance – this allows increased hatchery fish production.
- Produce more trout and warm water fish for stocking more lakes.
- Produce more salmon and steelhead within conservation limits to provide additional forage fish for Southern Residence Killer Whales and additional harvest opportunity when and where appropriate.
- Repair and improve infrastructure that is not operating optimally.

Producing hatchery fish also supports:

- Managing Fishing Opportunities
- Preserving and Restoring Aquatic Habitats and Species
- Providing Non-Consumptive Recreation



Funding source by strategy during the 2015-17 biennium (\$128.7M)



Primary cost drivers

- Staff for hatchery operations including rearing hatchery fish, managing the health of the fish, marking and tagging fish and collecting and spawning fish.
- Construction, repairs and preventive maintenance of hatchery facilities and aging infrastructure.
- Utilities for hatchery operations.
- Fish food.
- Marking and tagging fish supplies.
- Water quality and quantity.

Relevant 2019 session legislative proposals

- Sustain Fishing and Hatchery Production* - This proposal preserves current hatchery production at six facilities producing steelhead, rainbow trout, salmon, tiger muskie, kokanee, and sturgeon. Additionally, this proposal preserves monitoring functions that inform hatchery planning within ESA compliance.
- Sustain Conservation* - This proposal preserves capacity for species ecology assessments, species recovery efforts, restoration project capacity, climate change planning capacity, and derelict fishing gear retrieval capacity.
- Improve Conservation - This investment will ensure Department capacity to help guide salmon recovery priorities and more effectively engage with local governments in the ecologically strategic development and implementation of local ordinances.
- Improve Fishing - This proposal will increase hatchery production to restore some production previously lost due to budget cuts. Additionally, this will increase current levels of hatchery production on the lower Columbia River.

*Represents work currently done by the Department that, if not approved and funded, will be reduced or eliminated.



Goals of outcome

- Maintain healthy and abundant game species populations.
- Provide sustainable hunting opportunity and contribute to the Washington State outdoors & quality of life.
- Facilitate access to a traditional, sustainable high quality protein for the public.
- Ensure public safety by providing a quality hunter education program and enforcing state laws, rules, and regulations.
- Minimize negative game species impacts on people, including damaging impacts to crop and livestock operations.
- Facilitate public hunting access to private land.
- Support local economies that rely on hunting recreation.

Risks and threats impacting outcome

- Habitat availability and quality are the two biggest factors that affect game populations, and there are not currently good processes to affect these two factors on federal, private, and some state land.
- There is a trend upward requiring hunters to purchase expensive access passes from industrial forest landowners in Western Washington.
- Emerging diseases such as elk hoof disease, which is currently present in Washington, and chronic wasting disease which has not been seen in Washington yet but exists in many other states, impact the health and populations of game species.
- Expanding human populations in Washington state leads to loss of game habitat.
- Fewer citizens are being introduced to hunting opportunities and therefore not becoming hunters, reducing funding for game species conservation efforts.

Opportunities to improve outcome

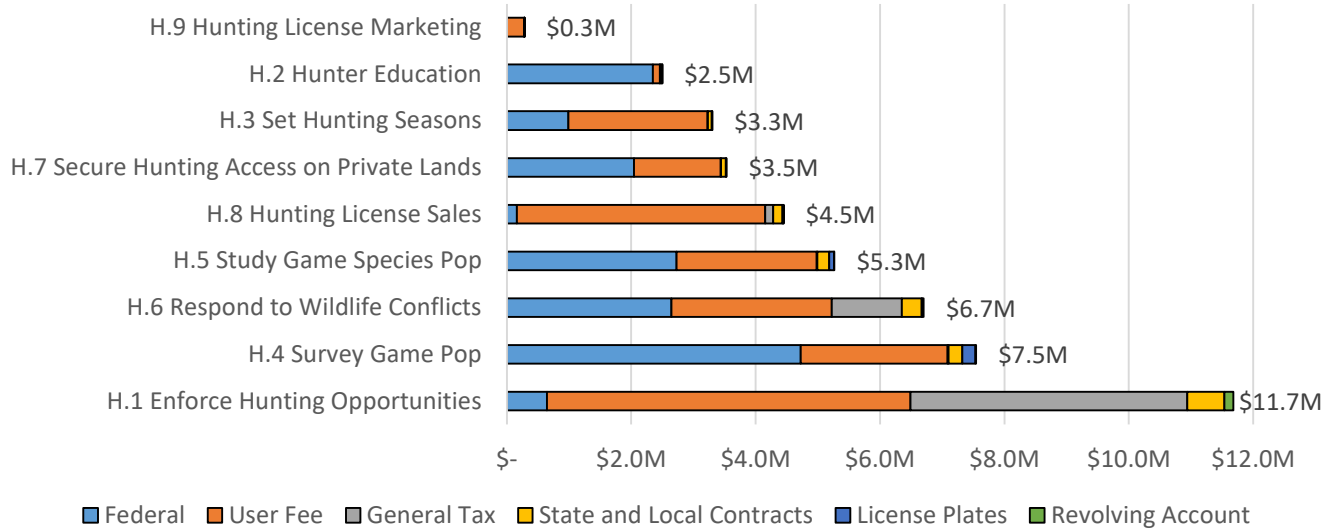
- Acquire and provide more hunting access to private forest lands.
- Protect, improve and increase game wildlife habitat on public and private land.
- Improve public tolerance of wildlife where conflicts with people and wildlife occur.
- Ensure adequate enforcement presence protecting public and private land habitat and increasing safety.
- Develop and implement a response and monitoring plan for potential diseases known to be a risk to the state.

Managing hunting opportunities also supports:

- Acquiring and Managing Lands
- Preserving and Restoring Terrestrial Habitats and Species
- Providing non-Consumptive Recreation



Funding source by strategy during the 2015-17 biennium (\$45.3M)



Primary cost drivers

- Staff and equipment for surveys and research, enforcement, wildlife depredation, hunter education, and hunting access.
- Helicopter and fixed wing flights.
- Radio collar and other wildlife capture.
- Responding to and compensating for wildlife-caused loss in crop or livestock value.
- Acquiring hunting privileges on private lands.
- Equipment and staffing for managing and selling hunting licenses (paid for fully by the license transaction fee).

Relevant 2019 session legislative proposals

- B1 Maintain Wildlife Conflict Response* – This proposal preserves the agency’s ability to effectively avoid or minimize impacts of negative wildlife interactions.
- B3 Maintain Land Management* – This proposal would preserve current abilities to maintain publicly available hunting lands.
- B5 Maintain Hunting* – This preserves current hunter education opportunities.
- B6 Maintain Conservation* – This proposal preserves capacity for species ecology assessments, recovery efforts, habitat restoration, and climate change planning.
- E1 Improve Conservation – This proposal improves overall ecosystem quality through strategic landscape planning, conservation through city and county planning engagement, and improve rates of voluntary conservation.
- E2 Improve Hunting – This proposal will provide funding for lands access grants as well as improve the game species conflict management nexus with hunting.
- E5 Lands Enhancement – This proposal provides additional capacity to improve operations and maintenance of WDFW lands and adds enforcement presence.

*Represents work currently done by the Department that, if not approved and funded, will be reduced or eliminated.



Goals of outcome

- Provide quality, sustainable wildlife-related recreational opportunities.
- Support state and local tourism and community character.
- Enable outdoor enthusiasts to experience Washington's natural heritage including wild places, native plants and animals, and healthy habitats.
- Develop strong relationships with outdoor educators, land trusts, conservation groups, and funding partners to promote delivery of wild lands conservation projects.
- Engage with conservation partners, recreation users, and other stakeholders to promote understanding of wild lands and wildlife values, appropriate use and purpose, and contribution of these lands to quality of life.
- Inspire Washington citizens and visitors to preserve, protect and perpetuate native fish, wildlife, and habitats.

Risks and threats impacting outcome

- Many recreation facilities on wildlife areas and water access sites were installed decades ago and have exceeded their useful life, are obsolete or defective, or do not meet current minimum standards (i.e. public expectations, ADA compliance, safety).
- A growing Washington population and more recreationalists risks adversely impacting fish, wildlife and ecosystems and requires thoughtful management.
- There are inadequate interpretation and guide resources at facilities and online resources are difficult to access.
- Without direct experience and engagement in recreation, the WA public may not understand or support conservation.

Opportunities to improve outcome

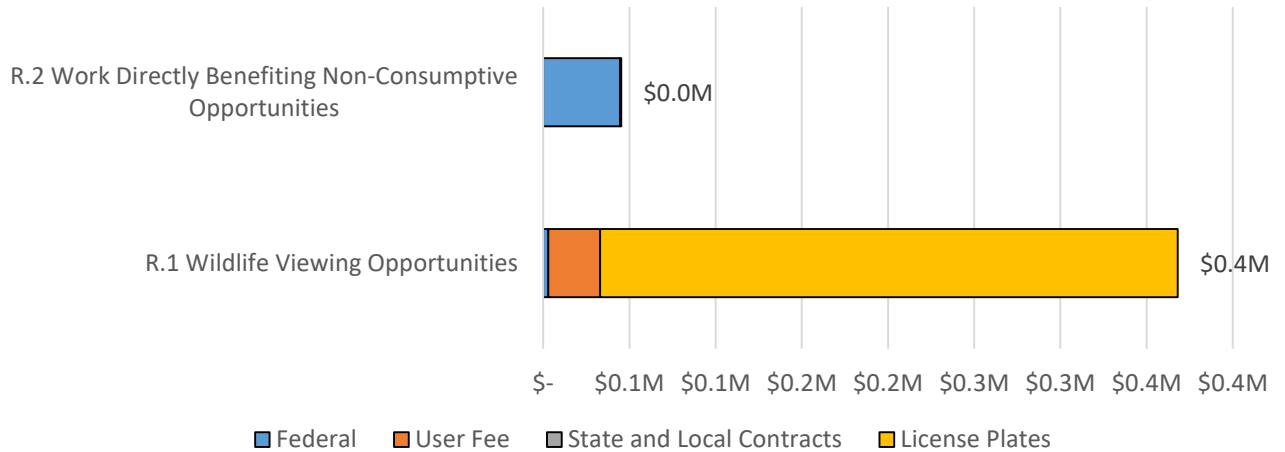
- Finalize watchable wildlife and recreation vision, strategy, and priorities for WDFW owned and managed lands. Implement recreation opportunities consistent with our recreation vision.
- Develop a good mechanism to quantify and communicate the benefits associated with recreation activities to the local economies.
- Provide updated and consistent recreation information to the public from the WDFW website and other outlets.
- Engage the public in watchable wildlife and on-the-ground science efforts.

Providing recreational opportunities also supports:

- Acquiring and Managing Lands
- Preserving and Restoring Terrestrial Habitats and Species
- Preserving and Restoring Aquatic Habitats and Species



Funding source by strategy during the 2015-17 biennium (\$0.4M)



Primary cost drivers

- Staff for effective stewardship.
- Grants to partners.

Relevant 2019 session legislative proposals

- Sustain Land Management*
 - This proposal preserves capacity for addressing invasive/noxious weeds, monitoring and evaluating landscapes, and ensuring that public involvement in planning and also public use permitting opportunities are maintained.
- Sustain Conservation*
 - This proposal preserves capacity for species ecology assessments, species recovery efforts, restoration project capacity, climate change planning capacity and derelict fishing gear retrieval capacity.
- Improve Conservation
 - This proposal will help guide salmon recovery priorities, more effectively engage with local governments in the development and implementation of local ordinances that protect habitat and wildlife, provide strategic landscape planning, and improve urban-wildland interface conservation.
- Improve Land Management
 - This proposal would increase grazing monitoring on our lands, provide additional capacity to improve operations and maintenance of public lands, increase noxious weed control, and add enforcement presence.

*Represents work currently done by the Department that, if not approved and funded, will be reduced or eliminated.



Goals of outcome

- Provide effective agency strategic direction and policy leadership.
- Communicate effectively with staff, stakeholders, the legislature and the public.
- Oversee efficient agency internal operations and a skilled, productive workforce that maximizes value from investment in WDFW administrative operations.
- Reduce agency financial, legal and cybersecurity risk.
- Provide central administrative and technology services in an efficient and effective manner, allowing field staff to focus on their biological and enforcement work.
- Ensure the agency conducts its business in compliance with state and federal laws (HR, finance, public records act, etc.).

Risks and threats impacting outcome

- Department executives are often caught in the crises and political turmoil that surrounds natural resource management which impacts their ability to dedicate time to long-term strategic leadership and performance management.
- As infrastructure for work becomes more technologically focused, management of digital resources requires swift adaptation by the Department. Replacing these technologies is expensive and competes with priority ecosystem management for funding.
- Cybersecurity threats are more sophisticated every year.

Opportunities to improve outcome

- Utilize the work completed in the long-term funding plan and zero-based budget process to develop a strong long-term strategic plan to guide the Department.
- Continue to simplify and improve the way the Department communicates with the public and the legislature about the challenges that impact the mission.
- Modernize and integrate digital systems, automate business processes, and streamline workflows.
- Implement effective and centralized records-management software.
- Implement an agency-wide system of performance management.
- Reorganize and standardize WDFW budget processes to more quickly and effectively communicate funding challenges.

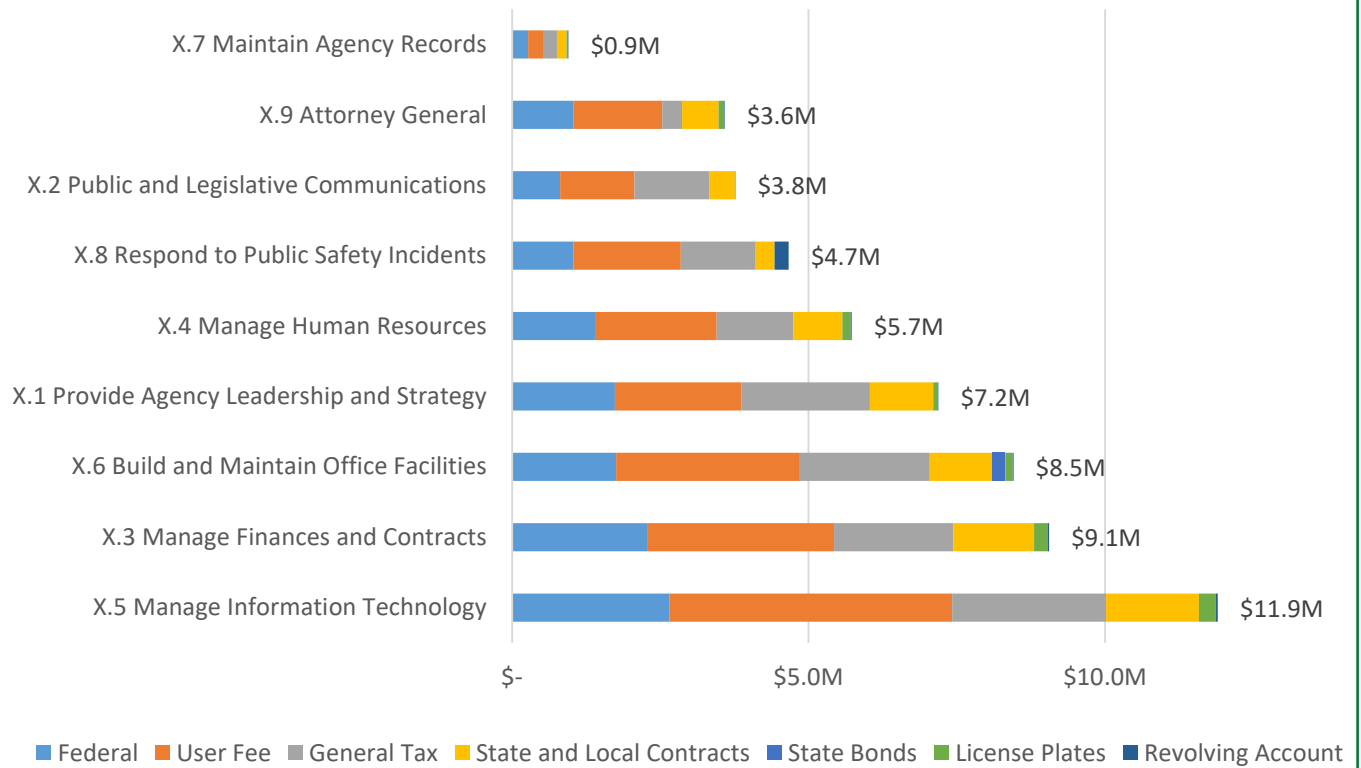
Business management and obligations exists exclusive to support:

- Managing Fishing Opportunities
- Production of Hatchery Fish
- Managing Hunting Opportunities
- Acquiring and Managing Lands
- Preserving and Restoring Aquatic Habitats and Species
- Preserving and Restoring Terrestrial Habitats and Species
- Providing Non-Consumptive Recreation





Funding source by strategy during the 2015-17 biennium (\$55.3M)



Primary cost drivers

- Staff to provide necessary business infrastructure.
- Various technology costs including computers, software licenses, data storage, internet connectivity, and systems maintenance.
- Business improvement initiatives such as the WDFW website replacement project.
- Office facility leases and other facility costs.
- Legal counsel from the Attorney General’s office.

How to learn more?

Matrix consulting group completed an organizational assessment of the Department in the winter of 2018. That report is [available on the WDFW website](#).

Learn more

If you would like to learn more about outcome statutory obligations, strategic details, funding details or other information, view the addenda to this document as well as the companion documents that were created in conjunction with the zero-base budget project.

WDFW Foundational Map

This [printable 11x17 foundational map](#) depicts the work of the Department and how it connects to the Department mission.

Addenda to this document

The report addenda Includes:

- Expanded WDFW outcome budget details
- ESA policy summary
- Legal requirements- tribal fisheries and hatcheries
- Administrative funding details

Companion documents

[WDFW Organizational Assessment](#) – performed by Matrix Consulting

[Long-term funding plan](#) – Developed in coordination with Ross Strategic and the citizen-led WDFW Budget & Policy Advisory Group

2019 Legislative session decision packages, (OFM submission by 9/14/2018)



Washington
Department of
**FISH and
WILDLIFE**

ZERO-BASE BUDGET REPORT

ADDENDA

AUGUST 2018



Contents

Contents.....	2
Introduction.....	2
Expanded Outcome Details.....	3
Preserve and Restore Aquatic Habitats and Species.....	3
Acquire and Manage Lands.....	19
Preserve and Restore Terrestrial Habitats and Species.....	34
Manage Fishing Opportunities.....	46
Produce Hatchery Fish.....	55
Manage Hunting Opportunities.....	60
Provide Recreational Opportunities.....	70
Business Management and Obligations.....	79
Fishery and Hatchery Policy Implications Associated with the Federal Endangered Species Act.....	87
WDFW Legal Requirements Regarding Tribal Fisheries.....	89
Overhead (Indirect) at WDFW.....	91

Introduction

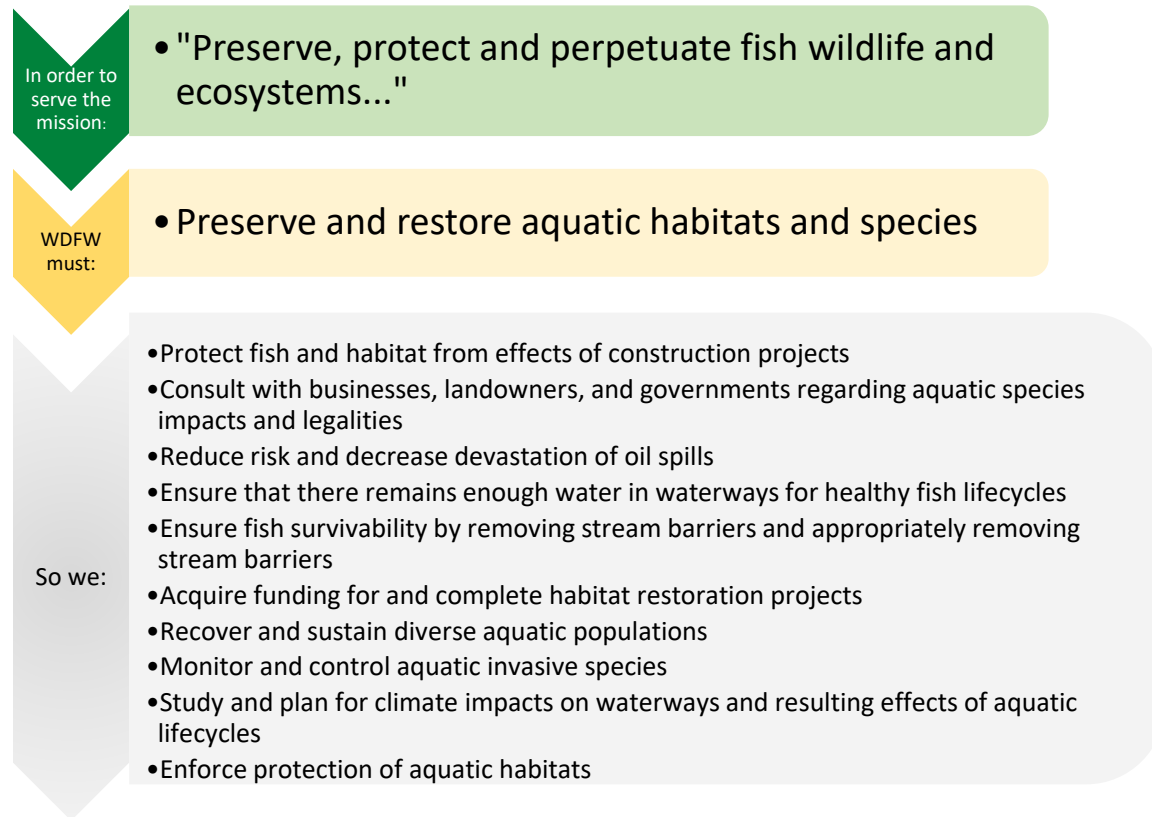
As part of the 2017-19 state budget, the Legislature asked the Washington Department of Fish and Wildlife (Department or WDFW) to conduct a zero-based budget (ZBB) analysis, SSB 5883, Sec. 307.

This document provides additional information to supplement the WDFW zero-base budget executive report, which is available on the WDFW website, [here](#). This report utilizes expenditure data from the 2015-17 biennium to address the proviso requirements and provide a succinct overview of the Department’s mission, role in society, outcomes the Department strives for and the strategies the Department engages in to reach those outcomes. It provides background information for the Department’s 2019 budget submittal, long-term funding plan, and the upcoming 2019-21 strategic plan.

Traditionally, the Department has represented its work and the associated costs based on the WDFW administrative programs. As a result of this zero-base budget review, the Department has fundamentally changed the way they represent their work and associated funding. Throughout this document, eight mission-driven outcomes and 51 strategies represent the work the Department does in service to its mission.

Expanded Outcome Details

Preserve and Restore Aquatic Habitats and Species



Introduction and overview

Perpetuating and managing wildlife, fish, and shellfish into the future requires habitat. Washington is the second smallest western state with the second largest human population, which has resulted in historic and ongoing impacts to habitat for fish and wildlife. Washington Department of Fish and Wildlife's (WDFW) efforts to prevent additional impacts to habitat protects what remains in Washington, sustaining populations of fish and game, and contributing to the recovery of state and federally listed species. Habitat protection activities include protecting habitat from the effects of construction projects (A.1); assisting others to avoid, minimize, or compensate for the effects of their activity on habitat (A.2); reducing the risk and devastation of oil spills (A.3.); ensuring enough water remains in waterways for fish (A.4); monitoring and controlling invasive species (A.8); and enforcing the rules we have to protect habitat (A.10).

Restoration activities correct habitat impacts that have occurred over time, which is often necessary to recover imperiled or declining species, or to increase populations that have commercial or recreational value. Where possible, the Department repairs the health of ecosystems, which results in more sustainable restoration and lasting public investment. This work benefits both aquatic and terrestrial wildlife when it restores riparian areas because approximately 85% of Washington's wildlife species have been known to use

riparian habitat associated with rivers and streams (Thomas et al. 1979, Brown 1985). Restoration activities include improving fish passage by removing stream barriers and screening water diversions (A.5); acquiring funding for and completing restoration projects (A.6); and developing and implementing plans to recover species (A.7).

Effectively addressing the dual challenge posed by the changing climate and a rapidly growing human population is fundamental to WDFW's success in the 21st century in all of these areas. Climate change is already bringing significant changes to aquatic resources: rising air temperatures and altered precipitation patterns are leading to water shortages and water temperatures that can be lethal to fish and aquatic wildlife. Groundwater is also likely to change in relation to climate and land use, leading to the need to balance the control of streamflow for power production with the instream flow needs of species, and to incorporate climate change information into hatchery design and the siting of fish passage and barrier removal. In order to make these adjustments the Department must also develop the scientific understanding that will enable habitat and species strategies to be both resilient and adaptive in the face of ongoing climate changes. WDFW studies and plans for climate impacts on lands and resulting effects on species (A.9).

Strategies to preserve and restore aquatic habitats and species

A.1 – Protect fish and their habitat from the effects of construction projects

State law requires the Department to issue permits called Hydraulic Project Approvals (HPAs) for work in or near waters of the state to ensure construction and other work is done in a way that protects fish and shellfish. Examples of common projects include dredging, water diversions, bridges, culverts, marinas, residential docks and streambanks and marine shoreline protection. WDFW monitors implementation and effectiveness of the HPA program to ensure fish protection is achieved.

A.2 – Consult with businesses, landowners and governments regarding the aquatic species impacts and legalities

WDFW shares scientifically-based recommendations to assist businesses, landowners and governments to avoid, minimize, or compensate for the effects their work will have on fish, aquatic wildlife, and aquatic habitats. This science is used by people with responsibilities for land use and growth, shoreline management, timber harvest, energy projects and transmission lines, integrated natural resource strategies, or by landowners who want to protect and enhance habitat on their property.

A.3 – Reduce risk and decrease devastation of oil spills

WDFW plays an important role in the State Oil Spill Response Team by working with industry, tribes and other government agencies to develop spill contingency plans to reduce the risk of potential impacts to fish and wildlife. We provide 24/7 on call biologists to quickly identify natural resources at risk and how to protect them, manage oiled wildlife rescue operations, and investigate natural resource damages, which is used to compensate the public for the loss of the fish and wildlife resources.

A.4 – Ensure that there remains enough water in waterways to allow for healthy fish lifecycles

WDFW investigates how changes in water flow affect habitat for different fish species. That information is used by the Department of Ecology to understand the potential effects on fish and wildlife of minimum instream flow rules, new water rights, acquiring water rights for conservation, and flow restoration projects. This expertise is also used in the development of statewide water policy and water management in watersheds that cross borders of adjacent states or Canada.

A.5 – Ensure fish survivability by removing stream barriers and appropriately addressing water diversions

WDFW identifies, prioritizes, and helps remove barriers to upstream fish migration, in order for fish to reach spawning and rearing habitat. WDFW also assists others to screen commercial, industrial, agricultural, electrical, and domestic water diversions to ensure fish stay in streams or rivers instead of being drawn into manmade water systems.

A.6 – Acquire funding for and complete habitat restoration projects

WDFW administers several grant programs that grant money to effective and high priority projects that restore fish habitat, remove fish passage barriers, advance salmon recovery, and recover watersheds. In addition, we acquire grant funds or contracts to implement restoration projects on WDFW-managed lands, other public lands, or lands of willing private landowners.

A.7 – Recover and sustain diverse aquatic populations

The Department works to sustain diverse fish and wildlife that are dependent on aquatic habitat, from species common in backyards to the rarest endangered species. We evaluate population status, assess risks to species' long-term sustainability and persistence, and develop and implement plans to recover and/or maintain viable populations. We use landscape level plans and strategies to ensure habitat is suitable and available for all species living within that habitat. Finally, we work cooperatively with partners who can influence the conservation trajectory and leverage resources, expertise, and on-the-ground actions to support healthy wildlife populations.

A.8 – Monitor and control aquatic invasive species

To protect Washington's ecosystems and economy, the Department monitors the pathways by which aquatic invasive species are introduced. The Department:

- Conducts targeted inspections of commercial and recreational boats entering the state and requires decontamination
- Monitors high use lakes and the Columbia River to detect aquatic invasive species
- Initiates rapid response when invasive species are detected
- Helps manage aquatic invasive weeds such as *Spartina* on public and private lands in order to maintain healthy aquatic habitat
- Conducts broader public outreach and education to help boat owners proactively identify invasive species and prevent introduction.

A.9 – Study and plan for climate change impacts on waterways and resulting effects on aquatic lifecycles.

WDFW works in collaboration with the Climate Impacts Group at the University of Washington, the Northwest Climate Science Center, and other state and federal agencies to prioritize climate science research, and utilize climate science products to determine the potential effects on waterways and fish populations so that we can proactively plan for and manage the effects of these changes. WDFW also conducts science on the stream and river functions (including what changes are expected to occur in climate change scenarios) and how to design culverts and bridges that consider these functions and fish needs.

A.10 – Enforce protection of aquatic habitats

WDFW Enforcement helps protect aquatic habitat by enforcing rules and permits for construction work in or near waters of the state, actively patrolling for unpermitted projects, and proactively enforcing laws preventing the introduction, spread, and transportation of aquatic invasive species. WDFW is currently conducting a pilot program to learn how we can better use civil compliance tools to assist landowners and contractors to come into compliance with fish protection requirements for construction projects, thereby avoiding use of criminal authority.

Connection to agency mission & strategic plan

The Department's goals to "*conserve and protect native fish and wildlife*" and "*Provide sustainable fishing, hunting, and other wildlife-related recreational and commercial experiences*" will not be possible over time if habitat for fish and wildlife diminishes significantly in quality or quantity, or is inaccessible to the species that depend on it. The activities described above help ensure fish and wildlife that are dependent on aquatic habitat will persist at healthy levels over time.

Protection and recovery of habitat and species also contributes to the Department's goal to "*Promote a healthy economy, protect community character, maintain an overall high quality of life, and deliver high quality customer service.*" Habitat supports sustainable fish and wildlife populations, which in turn are the basis for robust commercial and recreational fishing, hunting, and watchable wildlife economies and the communities that depend on them. When fish and wildlife decline, state and federal laws that demand conservation restrict our ability to harvest or, in the case of fisheries, to produce hatchery fish. Therefore, WDFW's work to achieve healthy habitat and fish and wildlife populations is also an investment in the present and future of the natural resource economy and way of life.

Legal Requirements & Statutory Authority

A.1 – Protect fish and their habitat from the effects of construction projects

[RCW 77.55](#), [RCW 90.74](#), Case law

A.2 – Consult with businesses, landowners and governments regarding aquatic species impacts and legalities

- Growth management and shoreline management - [RCW 36.70A](#), [RCW 90.58](#), [WAC 365-190-130\(4\)](#), [WAC 173-26-201\(2\)\(c\)](#), Case law
- Forest Practices - [RCW 77.55.361](#), [WAC 220-660-060](#), [WAC 222-16-080](#)
- Energy - Federal Fish and Wildlife Coordination Act, Northwest Power Act, Federal Power Act and Federal Clean Water Act. [RCW 90.16.050](#) and [WAC 197-11-920](#)

A.3 – Reduce risk and decrease devastation of oil spills

- Oil Pollution Control Act (federal), Northwest Area Contingency Plan (federal), RCWs [82.23B](#), [77.55](#), [90.48](#), [90.56](#), The United States Fish and Wildlife Service has delegated their authority to manage the oiled wildlife response to the WDFW Oil Spill Team in Washington, and this team is a permanent member of Washington's Resource Damage Assessment Committee.

A.4 – Ensure there remains enough water in waterways to allow for healthy fish lifecycles

- RCW - Establishment of Instream Flows in Rule (RCW [90.22](#), [90.54](#), [90.82](#)), Water Rights Application Review (RCW [77.57.020](#)), WDFW’s mandate to preserve, protect, perpetuate, and manage Washington’s fish and wildlife (RCW [77.04.012](#)), Restoration of stream flow and use of trust water rights (RCW [90.38.040](#) [Yakima basin], [90.42.080](#), [90.90.010](#) [Columbia River basin], RCW [90.92](#) [Walla Walla]).
- WAC - Instream flow protection program and water resource management (WAC [173-501 to 173-564](#)), Priority processing of water right applications with environmental benefit (WAC [173-152-050](#))
- Case Law - [Postema Decision 2000](#), [Swinomish Decision 2013](#), [Foster Decision 2015](#), [Hirst Decision 2016](#)
- WDFW Policy - Managing instream flows and water projects (POL [5204](#)), Reviewing water right applications (POL [5205](#)), Fish Protection at water diversions/flow control structures and fish passage ([POL M5001](#)), Requiring or recommending mitigation (POL [M5002](#))

A.5 – Ensure fish survivability by removing stream barriers and appropriately addressing water diversions

- [RCW 77.57](#), RCW [77.95.160-180](#), federal “Culvert Case”

A.6 – Acquire funding for and complete habitat restoration projects

- Regional Fishery Enhancement Groups - [RCW 77.95](#)
- Fish Barrier Removal Board – RCW [77.95.160-180](#) (as above in fish passage)
- Estuary and Salmon Restoration Program – capital budget appropriations since 2006 managed jointly with Recreation and Conservation Office ([RCW 77.85](#)) and PSP (prioritized in the Action Agenda [RCW 90.71](#))
- Office of Columbia River, Columbia River Water Management Program ([RCW 90.90](#)) and the Yakima Basin Integrated Plan (including the Teanaway Community Forest) ([RCW 90.38](#)). Office of the Chehalis Basin ([RCW 43.21A.730](#))
- National Estuary Program - Federal funding agreement with the Environmental Protection Agency ([section 320 of the Clean Water Act](#))
- Puget Sound Nearshore Ecosystem Restoration Project - partnership with the Army Corps of Engineers, authorized by Congress ([PL 114-322 §1401\(4\)](#))
- Lower Columbia Restoration – Federal funding agreement with the Bonneville Power Administration

A.7 – Recover and sustain diverse aquatic populations

- Classifying wildlife [RCW 77.12.020](#) and [RCW 77.08.022](#)
- [Determining the conservation status of species](#) so as to provide additional protection, whether state endangered ([RCW 77.15.120](#)), or sensitive or threatened ([RCW 77.15.130](#))
- Endangered Species Act ([16 U.S.C. § 1531 et seq.](#))

A.8 – Monitor and control aquatic invasive species

- Aquatic invasive species – [Federal Nonindigenous Aquatic Nuisance Control Act of 1990](#), [National Invasive Species Act of 1996](#), and [Lacey Act of 1900](#). Numerous state legislative Acts since 2000 with most current directives codified under [Chapter 77.135 RCW](#) for Invasive Species, [Chapter 220-640 WAC](#) for Invasive/Non-Native Species, and [Chapter 220-650 WAC](#) for Ballast Water

- Aquatic weed control - [RCW 17.10](#) – Noxious Weeds Control Boards, [RCW 17.15](#) – Integrated Pest Management, [RCW 17.26](#) – Control of Spartina and Purple Loosestrife
- [WDFW Policy and Procedure 5310](#) – Managing Invasive Species

A.9 – Study and plan for climate impacts on waterways and resulting effects on aquatic lifecycles

- [RCW 43.21M](#), “INTEGRATED CLIMATE CHANGE RESPONSE STRATEGY”, [WDFW Policy 5408](#) requires evaluating risks to climate-sensitive activities and integrating appropriate response into decision making, project design and implementation.

A.10 – Enforce protection of aquatic habitats

- [RCW 77.15](#) Fish and Wildlife Enforcement Code, [RCW 7.84](#) and [RCW 9A.20](#) Crimes and Punishments, [RCW 77.55.291](#) Civil Penalty and [WAC 220-660-480](#) Compliance with HPA Provisions and [WDFW Policy 5212](#) Monitoring Compliance with the State Hydraulic Code ([Chapter 77.55 RCW](#))

Ecosystem and opportunity management connections

Preserving and restoring aquatic habitats and species supports our ability to be successful with:

- Manage Fishing Opportunities, strategies F.3-F.5, because healthy species and habitats result in fish to catch and also the removal of conservation constraints on harvest.
- Production of Hatchery fish, strategies P.1 and P.2, because availability of water at the right time of the year supports hatchery production, and healthy species and habitats result in the removal of conservation constraints on production.
- Manage Hunting Opportunities, strategies H.3-H.5, because healthy species and habitats result in game animals to harvest and also the removal of any conservation constraints on harvest.
- Acquire and Manage Lands for Hunting, fishing and conservation, strategies L.1-L.2, because our understanding of the status of species and their habitats helps focus acquisition in the places where it will make a difference for conservation.
- Preserve and Restore Terrestrial Habitats and Species, strategies T.1-T.3, T.5, and T.7, because efforts to conduct science, gather data, or develop effective habitat protection and restoration techniques informs both aquatic and terrestrial activities.
- Non-consumptive recreational opportunities, strategies T.1 and T.2, because healthy species and habitats result in fish and wildlife to view and enjoy.

Preserving and restoring aquatic habitats and species is supported by:

- Manage Fishing Opportunities, strategies F.1-F.5, because managing fishing opportunity ensures enough wild fish reproduce to ensure future healthy populations, as well as maintaining anglers’ interest in and understanding of the importance of both fishery and habitat management.
- Production of Hatchery fish, strategies P.1-P.3, because producing hatchery fish consistent with Hatchery Scientific Review Group reforms results in appropriate interactions between hatchery and wild fish.

- Manage Hunting Opportunities, strategies H.1-H.7, because managing hunting opportunities ensures enough game reproduce to ensure future healthy populations, as well as maintaining hunters' interest in and understanding of the importance of both game population and habitat management.
- Acquire and Manage Lands for Hunting, fishing and conservation, strategies L.1-L.2, because acquiring and managing land in the places where it will make a difference for conservation contributes to healthy species and habitat.
- Preserve and Restore Terrestrial Habitats and Species, strategies T.1-T.3, T.5, and T.7, because efforts to conduct science, gather data, or develop effective habitat protection and restoration techniques informs both aquatic and terrestrial activities.
- Non-consumptive recreational opportunities, strategies R.1 and R.2, because promoting wildlife viewing and taking action to benefit non-consumptive opportunities helps maintain the public's interest in and understanding of the importance of preserving and restoring aquatic habitat and species.

General Budget Overview

Primary cost drivers

1. Staff to complete habitat restoration work, coordinate with businesses, private landowners and governments regarding impacts and legalities, enforce protection of aquatic habitats and mitigate threats to healthy habitat such as oil spills and construction projects.
2. Grants to other entities for restoration, wildlife rehabilitation, recovery actions
3. Acres of land restored
4. Area covered for permitting, enforcement, support to private landowners, consultation with other governments, management impacts travel costs; vehicle maintenance, fuel, travel reimbursement
5. Sites monitored for impacts to wildlife

2015-17 investment breakdown by fund source and strategy

	Federal	User Fee	General Tax	State and Local	State Bonds	License Plates	Revolving Account	Grand Total
A.6 Aquatic Habitat Restoration	\$ 13.5M	\$ 2.5M	\$ 2.5M	\$ 14.8M	\$ 1.8M		\$ 0.3M	\$ 35.4M
A.5 Remove Stream Barriers	\$ 1.5M	\$ 0.5M	\$ 3.1M	\$ 4.9M	\$ 7.1M			\$ 17.2M
A.1 Protect Fish Hab from Construction	\$ 0.8M	\$ 3.7M	\$ 3.2M	\$ 0.7M				\$ 8.4M
A.2 Consult on Aquatic Species Impacts	\$ 1.3M		\$ 4.5M	\$ 1.5M				\$ 7.3M
A.7 Recover and Sustain Diverse Fish Pop	\$ 1.6M	\$ 0.2M	\$ 0.5M	\$ 1.9M		\$ 0.5M		\$ 4.7M
A.8 Aquatic Invasive Species	\$ 0.9M	\$ 0.8M	\$ 1.3M	\$ 0.4M				\$ 3.4M
A.4 Ensure Adequate Water for Fish	\$ 0.3M		\$ 0.2M	\$ 1.8M				\$ 2.3M
A.3 Reduce Impacts of Oil Spills	\$ 0.6M		\$ 1.1M	\$ 0.1M				\$ 1.8M
A.10 Enforce Protection of Aquatic Habitats	\$ 0.3M	\$ 0.8M	\$ 0.4M	\$ 0.2M				\$ 1.7M
A.9 Climate Impacts on Waterways			\$ 0.1M					\$ 0.1M
Total	\$ 20.7M	\$8.4M	\$ 16.9M	\$ 26.3M	\$ 9.0M	\$ 0.5M	\$ 0.3M	\$ 82.2M
% of total	25%	10%	21%	32%	11%	1%	0%	

Major costs, benefits and rationale

A major cost of this work is that of employees. The habitat and species work described here often sits at the intersection of public benefit and private property rights, so success in this outcome requires working with others rather than dictating decisions, even when we have regulatory responsibilities or oversight of a program. Experience and literature demonstrate the best way to work effectively with others is through person-to-person interaction, so we try to embed employees in communities around the state where there is both a need for protection and an opportunity for restoration. There is also benefit of co-location of employees who analyze, plan for, and problem solve around similar issues. As a result, employees in the headquarters office conduct studies aimed at management questions, strategize and prioritize where work will best deliver outcomes, develop policies and rules for application statewide, negotiate large-scale agreements, and provide guidance and training in their area of expertise. Employees who do work that is very specialized (water resources and aquatic invasive species) or episodic (oil spills) are also located in our headquarters office and provide service throughout the state where and when it is needed. Success in this work requires both a presence in communities throughout the state and an ability to develop studies and strategies at a statewide scale.

In all cases, greater clarity of the public policy objective and the desired outcome helps the Department target limited staff and other resources as effectively as possible. Further, most work is about developing species and habitat insights and strategies, and implementing techniques that will be durable over time and improve the resilience of broader ecosystems and groups of species.

A.1 – Protect fish and their habitat from the effects of construction projects

State law requires the Department to issue hydraulic project approvals (HPAs) for work in or near waters of the state. The Department currently issues about 2,300 HPAs annually. Biologists are located throughout the state to assist permit applicants, including responding to emergency situations to issue permits for emergency work to protect infrastructure and fish habitat. Although resources are limited, we monitor implementation and effectiveness of permits for a short list of high risk/volume project types, including water crossings and marine shoreline armoring. We have streamlined the permit application process, including creating an online system that is visible to the public and accepting joint aquatic resource permit applications with other agencies.

A.2 – Consult with businesses, landowners and governments regarding the aquatic species impacts and legalities

Biologists are located throughout the state to provide accurate and accessible assistance to landowners, businesses, and decision-makers regarding their land use actions. These biologists work directly with communities and local governments regarding land use planning and implementation, with the forest industry and other regulators, and in some cases with energy project proponents to implement existing licenses or consider fish and wildlife effects of new projects. The Department also has land use, forest practices, and energy project experts in the headquarters office to strategize and prioritize where work will best deliver outcomes, develop policies and rules for application statewide, negotiate large-scale agreements, develop and implement plans to adaptively manage policies and programs, and provide guidance and training in their area of expertise.

A.3 – Reduce risk and decrease devastation of oil spills

Preventing oil impacts to listed endangered species, commercial, and recreational fish, wildlife, and their habitats helps maintain healthy populations and provides access to recreational and commercial fisheries and non-consumptive uses of natural resources. Although the risk of spills and the associated workload has been increasing since the 1990's the funding for the team has not been adjusted to account for inflation, equipment replacement needs, or salary adjustments. The team has lost 40 percent of its staff over the past ten years due to this problem. Efforts are underway to once again approach the legislature in 2018 for a funding fix. Without a funding fix, the WDFW Oil Spill Team anticipates significant budget shortfalls as soon as Fiscal Year 2018 of the current biennium.

A.4 – Ensure that there remains enough water in waterways to allow for healthy fish lifecycles

The expertise required to be effective in this work is quite specific, so a team of water resource specialists is supervised from our headquarters office, and deployed throughout the state to offer real-time and modeled evaluations of the effects of water flow additions and withdrawals on aquatic resources.

A.5 – Ensure fish survivability by removing stream barriers and appropriately addressing water diversions

Ensuring fish passage and installing screens are simple and effective ways to increase fish populations and maximize the opportunity for juvenile out-migration and adult returns needed to achieve fisheries and salmon/steelhead recovery objectives. Department research has documented not only immediate fish use of upstream habitat, but also increases in the number of fish that return as offspring of those first recolonizers.

A.6 – Acquire funding for and complete habitat restoration projects

Many imperiled species are in danger due to negative impacts to their habitats that have occurred over time. Recovery of these species is very unlikely without some restoration of the ecosystems and habitats they depend on. As noted above, the Department focuses on restoring the health of ecosystems and the processes that sustain them, which results in more sustainable restoration and lasting public investment. This approach also contributes to the resilience of these ecosystems, reducing their vulnerability to the effects of climate change.

A.7 – Recover and sustain diverse aquatic populations

Prioritizing limited resources to recover and sustain diverse aquatic populations is influenced by several key components including

- Priorities identified in our state wildlife action plan
- Action led by partners that creates opportunity or mobilizes additional resources
- Funding requirements (e.g., often tied to specific habitats/actions/threats/species)
- Actions that have the best chance to influence the conservation trajectory in a positive direction.
- Opportunities to leverage our capacity and expertise
- Actions for which we have expertise

A.8 – Monitor and control aquatic invasive species

The scope of this program is statewide and covers both freshwater and marine ecosystems. Since aquatic invasive species (AIS) are not constrained by state boundaries, AIS management requires extensive local, regional, national, and international coordination and cooperation.

- Prevention: Preventing the introduction of new AIS is a cornerstone of AIS management and includes indirect actions such as education and outreach and direct actions such as vessel inspections.
- Early Detection: Monitoring for new AIS detections to provide most effective management opportunities at lowest cost.
- Rapid Response: Expedited management actions taken when new AIS are detected for the time-sensitive purpose of containing or eradicating the species before it spreads or becomes further established.
- Containment: Management actions to physically prevent the spread of AIS from an infested location such as barriers or quarantine the movement of human controlled conveyances such as boats.
- Control: Management actions intended to reduce the population number of AIS to a level that significantly limits their ability to reproduce and spread.
- Eradication: Management actions intended to kill, destroy, remove, or otherwise eliminate AIS from a water body or property.

A.9 – Study and plan for climate change impacts on waterways and resulting effects on aquatic lifecycles.

The Department utilizes the climate science conducted by experts such as the University of Washington’s Climate Impacts Group, and wherever possible collaborates with these folks to add fish, wildlife, and habitats to their investigations. Where these investigations are not tailored enough to WDFW management questions, WDFW conducts studies regarding the likely effects of climate projections on Washington’s fish, wildlife, and habitats. The Department also uses in-house climate expertise to identify how to adapt existing programs and facilities to the likely effects of ongoing changes in climate related features such as rain and snow fall, stream flow, habitats, and sea levels.

A.10 – Enforce protection of aquatic habitats

The Department currently has one inspector to conduct compliance visits and provide compliance assistance, as well as implement civil enforcement of the laws and regulations associated with construction projects in state waters. As a result, there is still a heavy reliance on criminal enforcement by fish and wildlife officers, who are located throughout the state. Even in cases where we are able to document criminal violations, we typically don’t have success advancing criminal prosecutions, which means fish don’t get the protection they deserve. This pattern is borne out in our data and statistics, as well as feedback directly from local prosecutors.

Performance Management

Performance Metrics

Below you will find a list of many of the measures for which the Department is able to compile data and some for which the Department would like to collect data but is not currently. The Department is in the process of developing a performance-based system of management and strategic planning.

A.1 – Protect fish and their habitat from the effects of construction projects

- Increase the HPA compliance rate from 80% to 90% by 2020.
- Maintain HPA customer satisfaction
- Ensure 99% of HPAs are processed within timelines
- Improve the effectiveness of HPAs issued for culvert crossings and marine shoreline protection

A.2 – Consult with businesses, landowners and governments regarding aquatic species impacts and legalities

Existing metrics include:

- GMA/SMA - Reduce the rate of loss of priority habitat (oak woodland) from 0.4% (123 acres) to 0.1% (34 acres), and Reduce the annual rate of conversion of marine and freshwater riparian habitat in Puget Sound from 0.13% to 0.10%
- Timber Harvest - # forest practices hydraulics projects reviewed for concurrence, # standard forest practices reviewed for fish protection, # forest practices hydraulic project pre-application consultations provided to landowners, # of water type determinations or modifications reviewed, # (and type of) technical assistance visits/calls delivered to forest landowners or DNR

Metrics for which we can get data, but isn't compiled now include:

- GMA/SMA - % local jurisdictions w/ PHS in ordinances, % of regional biologist time spent on PHS assistance
- Energy - Consultation with all energy developers prior to submission of permit applications, no net loss of direct habitat function and value from energy projects and the goal of stability, or compensation of unavoidable loss.

A.3 – Reduce risk & decrease devastation of oil spills

- Maintain a 24/7/365 response capability. Respond to all spill notifications within 15 minutes by phone and to the office within an hour.
- Develop and maintain fish and wildlife resource at risk information for the state's Geographic Response Plans.
- Participate in every industry sponsored worst case spill-drill.
- Review every oil company spill contingency plan.
- Provide two citizen volunteer classes per year for oiled wildlife response.
- Issue emergency HPA's for oil spill response.
- Participate in all Natural Resource Damage Committee meetings and efforts.

A.4 – Ensure that there remains enough water in waterways to allow for healthy fish lifecycles

- Review and make recommendations on water right applications as forwarded by Ecology
- Conduct studies measuring the impact of flow changes on fish habitat
- Design, conduct, and consult on flow restoration projects that improve fish habitat.
- Review and consult on Irrigation Efficiency projects that reduce withdrawals and improve fish habitat.
- Monitor Trust Water acquisitions to ensure state held water rights are maintained instream.

A.5 – Ensure fish survivability by removing stream barriers and appropriately addressing water diversions

- Identify and prioritize fish passage barriers for correction. Coordinate the implementation of the resulting barrier removal strategy.
- Increase the miles of stream habitat opened from 55 miles to 110 miles per year by 12/31/2026

- Increase the number of fish passage barriers corrected from 60 to 120 per year by 12/31/2026
- Number of Fish Barrier Removal Board projects implemented
- Increase the percentage of Endangered Species Act-listed salmon and steelhead populations at healthy, sustainable levels from 16% to 25% by 2022.
- Demonstrate increasing trend in Puget Sound Chinook populations from one in 2010 to five.
- Puget Sound Chinook and steelhead - Stop the Decline: Cooperative Habitat Strategy with Tribes.
- Provide leadership to further salmon recovery in specific geographic areas.

A.6 – Acquire funding for and complete habitat restoration projects

- Increase the acreage of Puget Sound estuaries restored in the 16 major rivers from 2,260 acres between 2006 and 2012 to 5,028.
- Increase the percentage of Endangered Species Act-listed salmon and steelhead populations at healthy, sustainable levels from 16% to 25% by 2022.
- Demonstrate increasing trend in Puget Sound Chinook populations from one in 2010 to five.
- Puget Sound Chinook and steelhead - Stop the Decline: Cooperative Habitat Strategy with Tribes.
- Increase the recovery rate of current state-listed species from 28% to 35% by 2020.
- Provide leadership to further salmon recovery in specific geographic areas

Metrics we'd like to collect include:

- # projects implemented to improve terrestrial ecosystems
- # acres restored to improve habitats
- % change in acreage/coverage of priority habitats

A.7 – Recover and sustain diverse aquatic populations

- Existing metrics - # of recovery plans, conservation plans, action plans/strategies, # of status reports, periodic status reports
- Metrics for which we can get data, but isn't compiled - Species recovery objectives defined in recovery plans, Population trends

A.8 – Monitor and control aquatic invasive species

- AIS metrics collected currently include: # of watercraft inspected, # of boaters that clean/drain/dry their watercraft between use, and # shipping vessels inspected
- AIS metrics we'd like to collect include: # new AIS detected/established in state waters, # successful rapid response events, # AIS eradicated from state waters, % vessels compliant ballast water management requirements, and % vessels compliant with biofouling management requirements
- Aquatic weeds - # acres weed control, # species treated, # dollars spent on treatment, # weed grants secured

A.9 – Study and plan for climate impacts on waterways and resulting effects on aquatic lifecycles

- # plans or projects that have integrated climate considerations (this measures implementation of policy, and our overall success at our goals as stated in that policy)

- Effectiveness at communicating resource manager needs for climate science with science providers (NW Climate Science Center)
- Monitor the response to climate change of select habitats and species in order to update programs and general technical assistance.
- # of agency sponsored research projects that have incorporated climate.
- # of educational and capacity building workshops or other events.
- # of climate-related outreach materials produced for public, stakeholders and/or staff
- Technical assistance guidance is updated to reflect climate considerations

A.10 – Enforce protection of aquatic habitats

- Number of compliance visits
- Number of violations
- Number of violations voluntarily corrected
- Number and amount of civil penalties
- Number of unpermitted projects
- Number of violations forwarded to prosecutor’s office, and number of violations prosecuted

Assessment of services provided and actions we can or cannot take to improve results for Washington

The Department considers the balance between spending limited resources (a) to take action and deliver results, and (b) to study/plan/strategize so actions are smarter and we know whether they work. We cannot eliminate either activity without risking the outcomes articulated above.

One action that would assist the Department to improve the fish, aquatic wildlife, and aquatic habitats would be to hire a natural resource economist and community outreach specialists for each of the Department’s six administrative regions. Because this work often depends on working effectively with others, including individuals and communities whose primary objective is not fish and wildlife conservation, a natural resource economist could help articulate the benefits of healthy fish, wildlife, and habitats, as well as the costs of losing these resources. Further, community outreach specialists will help biological staff to better understand and engage effectively with communities.

A.1 – Protect fish and their habitat from the effects of construction projects

Although the time needed to assist permit applicants varies significantly, we know there are places in the state where the permit workload is too high to effectively deliver both customer service and effective fish protection. One action to improve customer service and fish protection is to implement statewide the system of entry professional habitat biologists (Bio 2s) that exists in the Puget Sound. These biologists to support more senior permit writers by working on lower risk and more routine activities.

An additional action we could take is to expand implementation and effectiveness monitoring. Additional monitoring and investigation into the effects of climate change would ensure HPAs are providing adequate fish protection, including over time in the face of climate change. Another possible action is to develop more programmatic-type permits, which would create efficiency for low-risk and routine permit types. However, fish protection may be reduced because biologists don’t provide on-site technical assistance to those applying for programmatic-type permits.

A.2 – Consult with businesses, landowners and governments regarding aquatic species impacts and legalities

As noted immediately above, one action to improved results in land use and forest practices work is to implement statewide the system of entry professional habitat biologists (Bio 2s) that exists in the Puget Sound. For energy work, the Department’s current mitigation guidelines have helped us to achieve no net loss of project impacts and provided clarity to energy developers regarding what mitigation expectations will be. However, we need to update and modernize these guidelines to incorporate evolving scientific literature, on topics such as indirect affects to habitat functions or species specific impacts. Land use, forest practices, and energy functional areas would benefit from additional monitoring and updating technical guidance to reflect current understanding of the effects of climate change. These actions enable the Department to manage these programs adaptively over time to continue to deliver results.

A.3 – Reduce risk & decrease devastation of oil spills

Planning, preparedness, and response activities are scalable but a reduction in these activities will likely lead to increased impacts to fish and wildlife resources at the time of an oil spill. Less time could be spent reviewing oil company contingency plans, geographic response plans, and participating in oil spill drills. Response activities could be limited based on the size or type of event, although there is no way to control the size or type of spills that occur. Damage assessment activity could be reduced but there is a direct connection between damage assessment and benefit to fish and wildlife resources. A team vacancy over the past three years has already required a reduction in services.

A.4 – Ensure that there remains enough water in waterways to allow for healthy fish lifecycles

Current effort around maintaining adequate water levels is focused on basins with instream flow rules or other statutory water plans (e.g., Yakima Basin Integrated Plan) because these basins have existing frameworks for understanding flow deficits and determining the most efficient and effective instream flow work to address those deficits. An additional action that could expand and help prioritize instream flow work statewide would be to model and map flow deficits across the state. Work relating to irrigation efficiencies, trust water monitoring, and water right review are dictated by the Department of Ecology and cannot be changed.

A.5 – Ensure fish survivability by removing stream barriers and appropriately addressing water diversions

An additional action to increase results in this functional area is to increase funding to the Department’s watershed-based fish barrier surveys. Further, increasing pass-through funding dedicated to the Fish Barrier Removal Board will enable more prioritized fish barriers to be removed.

A.6 – Acquire funding for and complete habitat restoration projects

An additional action would be to increase the number of restoration actions implemented that directly increase fish populations that are constraining harvest, thereby contributing to both recovery and opportunity. Similarly, increasing restoration actions that directly affect federally-listed species will increase recovery and possibility of de-listing, which would remove regulatory constraints on activities in surrounding communities. An additional benefit is achieved when the restoration also contributes to the resilience of the ecosystems these species depend on, reducing their vulnerability to the effects of climate change.

A.7 – Recover and sustain diverse aquatic populations

We currently have 44 state-listed species and 268 Species of Greatest Conservation Need. We are significantly under-staffed and under-resourced to meet the conservation needs of all these species. It is difficult, and in some cases impossible, to even do the minimum action of survey/monitoring to understand the status of each species. In some cases, there is considerable research to be done to better understand the threats these species are facing. Research is expensive, labor-intensive, and time consuming. In the best case scenarios, we have good information on the species status and trend, we understand the threats, and have devised strategies to address those threats. However, even in those best-case scenarios we are often lacking the resources or sometimes the political will to implement the needed recovery actions at the scale required. Despite these challenges we are making progress on a select number of species, and have even recently delisted several iconic species including the Bald Eagle and Peregrine Falcon. We have active working groups and are implementing recovery programs for at least 18 of our state-listed species. With additional resources we could expand our internal capacity and also work with external entities to implement recovery actions at a more meaningful scale.

A.8 – Monitor and control aquatic invasive species

As noted above, increasing staff in one or more of the following areas would improve results: prevention (e.g., ballast water inspectors); early detection of new AIS and weed introductions and rapid response to those detections; as well as containing, controlling, or even eradicating AIS and aquatic weeds that have already been introduced to Washington.

A.9 – Study and plan for climate impacts on waterways and resulting effects on aquatic lifecycles

Additional actions to improve results in this functional area are to increase the number of WDFW programs, policies, and infrastructure that have been evaluated for resilience to the effects of climate change, so as to continue to deliver fish, wildlife, and habitat results. Together, these represent a more comprehensive program to adaptively manage in the face of ongoing change.

A.10 – Enforce protection of aquatic habitats

An additional action is to build on the success of our single compliance inspector by developing a more robust, statewide compliance program that includes an ability to visit sites before, during, and after construction to assist landowners and contractors to be in compliance. This approach gives landowners a fair opportunity to understand the law and what they need to do to come into compliance. Such an approach may also compensate for decreased oversight associated with increasing programmatic-type permits. In addition, fish and wildlife officers help deter criminal activity before it begins. In some cases, there may be one officer for an entire county or multiple counties. Enforcement Officers are uniquely trained and equipped, and increased officer presence results in additional compliance with the laws and rules that both protect fish, wildlife, and habitat resources, and provide sustainable recreational and commercial opportunities.

Acquire and Manage Lands

In order to serve the mission:

- "Preserve, protect and perpetuate fish wildlife and ecosystems while providing sustainable fish and wildlife recreational and commercial opportunities"

WDFW:

- Acquires and manages lands for the benefit of conservation, hunting, and fishing

So we:

- Maintain and enhance habitat for conservation, hunting, and fishing on WDFW owned and managed lands
- Acquire new lands and sell lands to maintain a lands portfolio that serves our mission
- Build and maintain safe, sanitary and ecologically friendly water access sites
- Ensure public safety on our lands

Introduction & Overview

The Washington Department of Fish and Wildlife (WDFW) owns and manages over one million acres of land throughout Washington State. These lands provide habitat for fish and wildlife, as well as recreational opportunities for the public, such as hunting, fishing, and wildlife viewing. WDFW's land base is strategically developed based on the conservation needs of fish and wildlife and provides sustainable fishing, hunting, wildlife viewing, and other recreational opportunities when compatible with healthy and diverse fish and wildlife populations and their habitats. This is different than the focus of other state, federal, and local public lands. Before considering the acquisition of property, the Department evaluates several factors, including the threat to the conservation and recreation values of that property, whether acquisition is the best approach to achieve the desired conservation result, and whether better alternatives exist, such as conservation easements (purchasing only a property right that ensures management consistent with defined conservation values, with underlying ownership retained by a private landowner), voluntary conservation actions by property owners, or ownership by other conservation entities. Once lands are added, the Department manages them to provide conservation, hunting, fishing, and wildlife watching benefits for the public in accordance with the objectives of the acquisition goals as well as requirements of the funding sources.

L.1 - Maintain WDFW owned and managed lands

- The Department manages more than 1 million acres of land, divided into 33 wildlife management areas. Staff members manage these lands to maintain and improve fish and wildlife habitat and provide wildlife-related recreational opportunities. This is accomplished through a variety of actions, including weed control, ecosystem restoration, timber thinning and management (to help control wildfire and improve habitat quality), the utilization of farming and ranching where compatible, the removal of garbage and litter, and the maintenance, repair, and construction of infrastructure necessary to keep agency lands in good working order and safe for the public (fences, signs, parking lots, trails, culverts, water control structures, wells, and irrigation systems). The Department also conducts wildlife surveys, restores and enhances habitat for game species and a diversity of other fish and wildlife, and manages public uses on Department-managed lands to protect habitat and ensure compatibility with fishing, hunting, and other wildlife-related recreation
- WDFW Real Estate Services maintains the official Title and Records Inventory for all Department owned and managed lands. Records are routinely analyzed to respond to external and internal proposals for certain changes in the use of WDFW land. The Department advises on whether a proposal would result in violation of state or federal funding source contractual requirements resulting in the need for mitigation (e.g., utility and road easements, restoration projects, etc.) In order to accomplish this work, the Department has a team that provides the business functions required in order to own and manage real property, including land use permitting (e.g., recreational or commercial uses, agricultural and/or grazing leases) and water rights management.

L.2 - Acquire new lands and sell lands that no longer support our mission

- WDFW acquires land through full ownership, as well as conservation easements, in an effort to 1) conserve and restore the diversity of Washington's fish and wildlife species and their habitats, and 2) provide sustainable fishing, hunting, and other recreational opportunities when compatible with healthy and diverse fish and wildlife populations. The Department only purchases land from willing sellers at fair market value and does not condemn land. Through land acquisition and management, the Department provides a vital line of defense against the loss of our state's critical habitat and species. The Department looks for opportunities to sell lands no longer meeting the intended purpose and mission. These transactions require consistency with the requirements of the funding source for the acquisition and usually require replacement of an equal amount and quality of land that does meet the original purpose.

L.3 - Build and maintain safe, sanitary, and ecologically friendly water access

- The Department maintains more than 600 water access sites statewide that provide boating and fishing access to lakes, rivers, and marine areas. Sanitation includes garbage removal, facility cleaning, and septic pumping. Maintenance, repair, and construction activities are necessary to keep agency lands in good working order and safe for the public. Maintenance includes upkeep on fences, boat launches, and parking lots.

L.4 - Ensure public safety on our lands

- WDFW Enforcement regulates closed areas, closed roads, and land use for safety and conservation. They respond to public safety issues such as natural disasters (including floods, fires, and severe storms), and take general law enforcement calls for service.

Connection to agency mission & strategic plan

WDFW manages lands on our 33 wildlife areas and over 600 water access sites. The Department also has agreements with some state and federal land managers to manage their lands. In total, the Department holds and manage over 1 million acres of land on behalf of the people of the state of Washington. These lands are managed to maintain and enhance ecological integrity, which includes restoring degraded ecosystems, providing habitat for healthy fish and wildlife populations and maintaining and restoring landscape connectivity.

WDFW purchases new lands needed for specific recovery needs of species or to prevent negative impacts that would occur on important habitats if the land was not brought into public ownership. WDFW's role in land recreation is unique amongst other local, state, and federal land managers. While some other entities provide a more developed and directed experience – such as State, National, or County Parks, who provide abundant facilities including campgrounds, trails, and other services – WDFW lands focus on habitat protection, restoration for fish and wildlife, and recreation.

Recreation on WDFW-managed lands is a less developed opportunity for exploration, adventure, and a range of fish and wildlife-dependent activities such as hunting, fishing, and wildlife watching. WDFW-managed lands tend to be at the middle elevations that are more accessible year-round to people and wildlife, and also closer to human populations than some other conservation lands. These transitional zones are often high in habitat value and critical to support seasonal movements of animals. They are also attractive for different forms of development and use, which present a threat to the ongoing ability of fish and wildlife to thrive.

WDFW lands contribute to the local community character. Many working lands that provide quality habitat are at threat for development and/or are not available for public use while in private ownership. Where consistent with the overall goal of maintaining and enhancing ecological integrity, we maintain farming and ranching on our ownership, thus preserving the rural character of these places that may otherwise be developed. This maintains both ecological value and community character for these open spaces and further benefits the public by opening up formerly private lands to public use.

Additionally, WDFW provides critical enforcement services on our lands for public safety and protection of our natural resources.

Benefits from WDFW owned and managed lands

- Hunters – 33 Wildlife Areas, nearly 1 million acres available for public hunting and fishing
- Recreational boating and fishing population – over 600 water access sites distributed across 38 counties
- Wildlife watching population – 33 Wildlife Areas, nearly 1 million acres available for wildlife viewing
- Non-consumptive recreation population – 33 Wildlife Areas, nearly 1 million acres available for dispersed, fish and wildlife compatible recreation

- WDFW lands provide ecosystem services for the WA public (functioning ecosystems, flood control, watershed values, carbon sequestration, clean air, clean water, species conservation, reduced fire risk, etc.) from 33 Wildlife Areas, nearly 1 million acres
- WDFW lands contribute to local economies from working lands activities (agriculture, forest management, grazing), recreation, and tourism on 33 Wildlife Areas, nearly 1 million acres and over 600 water access sites

Legal Requirements & Statutory Authority

[RCW 77.12.037](#) - Acquisition, Use and Management of Property

- The commission may acquire by gift, easement, purchase, lease, or condemnation lands, buildings, water rights, rights-of-way, or other necessary property, and construct and maintain necessary facilities for purposes consistent with this title. The commission may authorize the director to acquire property under this section, but the power of condemnation may only be exercised by the director when an appropriation has been made by the legislature for the acquisition of a specific property, except to clear title and acquire access rights-of-way.
- The commission may sell, lease, convey, or grant concessions upon real or personal property under the control of the Department.

[RCW 77.12.210](#) – Department property – Management, sale

- The director shall maintain and manage real or personal property owned, leased, or held by the Department and shall control the construction of buildings, structures, and improvements in or on the property. The director may adopt rules for the operation and maintenance of the property.

[RCW 77.12.220](#) – Acquisition or transfer of property

- For purposes of this title, the commission may make agreements to obtain real or personal property or to transfer or convey property held by the state to the United States or its agencies or instrumentalities, units of local government of this state, public service companies, or other persons, if in the judgment of the commission and the attorney general the transfer and conveyance is consistent with public interest.

[RCW 79a.15 RCW](#) – Acquisition of Habitat Conservation and Outdoor Recreation Lands

- It is therefore the policy of the state to acquire as soon as possible the most significant lands for wildlife conservation and outdoor recreation purposes before they are converted to other uses, and to develop existing public recreational land and facilities to meet the needs of present and future generations.” (Aimed at creating a program similar to PR for the management, conservation, and restoration of fishery resources.)

[RCW 77.12.880](#) - Wildlife Program Management: The Department shall manage wildlife programs in a manner that provides for public opportunities to view wildlife and supports nature-based and wildlife viewing tourism without impairing the state's wildlife resources.

[RCW 84.34.010](#) – Open Space, Agricultural, Timberlands – Current Use – Conservation Futures

- “The legislature hereby declares that it is in the best interest of the state to maintain, preserve, conserve and otherwise continue in existence adequate open space lands for the production of food, fiber and forest crops, and to assure the use and enjoyment of natural resources and scenic beauty for the economic and social well-being of the state and its citizens. The legislature further declares that assessment practices must be so designed as to permit the continued availability of open space lands for these purposes, and it is the intent of this chapter so to provide. The legislature further declares its intent that farm and agricultural lands shall be valued on the basis of their value for use as authorized by section 11 of Article VII of the Constitution of the state of Washington.”

[RCW 17.15.005](#) – Integrated Pest Management

- The legislature declares that it is the policy of the state of Washington to require all state agencies that have pest control responsibilities to follow the principles of integrated pest management.

Ecosystem and opportunity management connections

Acquiring and Managing Lands for Hunting, Fishing and Conservation supports our ability to be successful with:

- WDFW lands contribute to F.1, F.2, F.4, and F.5 through providing healthy habitat for fish lifecycles as well as water access sites for fishing opportunities.
- WDFW lands are essential to provide land for the hatchery infrastructure and support P.1, P.2, P.3
- WDFW lands support A.4, A.5, A.6, A.7, A.8, A.9, A.10 through providing land held in the public trust with ecological integrity maintained.
- WDFW lands support T.5, T.7 through providing land held in the public trust with ecological integrity maintained.
- WDFW lands are critical to supporting H.1, H.2, H.4, H.5 and provide valuable public land to maintain affordable hunting access.
- WDFW lands support R.1, R.2 through public land access for recreational opportunities.

Acquiring and Managing Lands for Hunting, Fishing and Conservation is supported by:

- T.1, T.2, T.3, T.5, T.7 because that work feeds in valuable information in order to effectively manage landscapes.
- H.6 because human, wildlife conflict with game species can occur on or adjacent to our lands.

General Budget Overview

Primary cost drivers

1. Acquisition costs (capital funds for purchase and related survey and assessment costs, staff funds for project management)
2. Construction costs
3. Staff costs for land stewardship (weed control, fire response, litter control, forest health, estuary restoration, salmon restoration, other habitat restoration, etc.)
4. Construction, repairs, and preventative maintenance of wildlife area facilities and infrastructure, including bridges, dams and access sites (buildings, fences, toilets, parking lots, roads)
5. Staff costs to manage public access
6. Staff costs for enforcement
7. Costs to fulfill legal requirements (cultural resources, Endangered Species Act, Forest Practices Act, Road Maintenance and Abandonment Planning, fees associated with Attorney General's Office consultations)
8. Developing and implementing biological and effectiveness monitoring (including Ecological Integrity Monitoring)
9. Developing and implementing scientific research efforts
10. Developing and implementing species and habitat survey and monitoring efforts
11. Staff time for operating and capital budget development and planning for wildlife area facilities and infrastructure, as well as land acquisition
12. Staff time for wildlife area plans, conservation plans, resource management plans, and recreation plans
13. Staff time for records maintenance

Breakdown of 2015-17 investments by funding source and strategy

	Federal	User Fee	General Tax	State and Local	State Bonds	License Plates	Revolving Account	Grand Total
L.1 Maintain Owned Lands	\$ 19.4M	\$ 9.5M	\$ 2.1M	\$ 6.0M	\$ 1.9M	\$ 0.1M	\$ 0.6M	\$39.6M
L.2 Acquire and Sell Lands	\$ 3.3M	\$ 0.3M	\$ 0.2M	\$ 15.9M	\$ 0.1M			\$19.8M
L.3 Build Water Access Sites	\$ 1.6M	\$ 2.0M	\$ 0.3M	\$ 3.4M	\$ 2.0M			\$ 9.2M
L.4 Ensure Public Safety on Our Lands	\$ 0.2M	\$ 1.7M	\$ 1.2M	\$ 0.1M				\$ 3.3M
Total	\$24.5M	\$13.4M	\$ 3.7M	\$ 25.4M	\$ 4.1M	\$ 0.1M	\$ 0.6M	\$71.9M
% of total	34%	19%	5%	35%	6%	0%	1%	

Major costs, benefits and rationale

Land management support

- Costs:

- Six full-time employees (FTEs) and associated travel costs; includes Division Manager, three Section Managers, two financial analysts (accounting and budget emphasis), grant coordination, contract management, budget administration, policy work, cross-programmatic coordination, legislative analysis, strategic partnerships
- Benefits:
 - Division leadership, internal agency alignment of work on WDFW lands, implementation of strategic direction and prioritized work, alignment of policies with mission and Division needs, successful legislative budget requests, funded grants, community engagement and support
- Rationale:
 - Management and support for 140 statewide staff, management of over 640 grants/contracts (including 80 active ag leases, 55 active grazing leases, 36 land use agreements, and 18 rental agreements), policy and rule compliance

Wildlife area land management staffing and stewardship operations

- Costs:
 - 104 total FTEs: 24 FTEs statewide subject matter experts (weed team, foresters, prescribed fire crew, cultural resource management, grazing and shrub steppe management); 21 wildlife area managers FTEs, assistant managers, technicians; three LSO supervisors
 - Equipment, goods and services, contracts, fire suppression, forest health, weed control, infrastructure (buildings, roads, parking lots, toilets, fences, irrigation, signs, dikes, water control structures, etc.), outreach, partnerships, environmental compliance, cultural resource management, grant application and coordination, evaluation and monitoring, restoration, agriculture, etc.
 - Securing grants and contracts leverages stewardship accomplishments for both habitat management and hunting and fishing recreation
 - Volunteer management to support stewardship
- Benefits:
 - Land stewardship management in perpetuity, ecological integrity maintenance, habitat restoration, species protection
 - Quality of life – value in open lands and outdoor opportunities
 - Local economic and community culture benefits (agriculture, grazing, forestry, recreation, tourism), staff connected to the community
- Rationale:
 - Need staff, equipment, contracts, etc. to provide land stewardship
 - Regionally based staff, connected to the community, improves relationships and efficacy
 - Protect State investment in public lands and infrastructure

Planning/Recreation/Outreach staffing

- Costs:
 - Four FTEs and significant travel costs to work on cross-division planning for development of wildlife area plans and recreation plans
 - Associated community engagement
 - Cross-programmatic coordination
 - Wildlife Area Advisory Committee creation, facilitation and management \
- Benefits:
 - Community engagement and support
 - Clear vision, goals, and management for conservation and recreation on WDFW lands
 - Alignment of agency goals in the management of our lands
- Rationale:
 - In order to provide transparency to the public and clear direction for management of our lands, need staff members to facilitate cross-programmatic planning, public outreach, and engagement, and integrate cross-programmatic and community, recreation user, and partner interests into management

Water access site staffing

- Costs:
 - One statewide coordinator and 2-3 water access managers per region, totaling 15 statewide; staffing adjusted with budgets
 - Estimated \$3,100 annual Operations and Maintenance per site
 - Interagency agreements leveraged at about 40 sites to increase operational efficiencies
 - Ranges from specific work projects to complete transfer of site management
 - Contractual services used at some sites to meet management needs, such as portable toilets and tree services
 - Not used widely due to remote location of many sites and constraints imposed by union contracts
 - Coordination of WWRP State Land Development and Boating Facilities Program grant applications
- Benefits:
 - Quality of life – high quality recreational opportunities
 - Economic lift through recreation – fishing, boating, waterfowl hunting, sightseeing, tourism, etc.
 - Provide public access to recreational fisheries managed by the Department
 - Secure grant funding for facility (re)development projects (RCO) and maintenance (ECY litter funds)
- Rationale:

- Need staff to maintain sites for public recreation uses
- Protect agency investment in thousands of individual land transactions during the past 100+ years to provide public recreation access to state waters
- Continue to provide reliable, long term public access to fisheries that are critically important, both economically and culturally, to local communities

Real estate services (Headquarters and regional)

- Costs:
 - Eight HQ staff members and six Regional lands agents coordinate to update and maintain agency Title and Records Inventory, including water rights, monitor grant compliance, and perpetual funding commitments; make timely payment of property assessments and Payment in Lieu of Taxes (PILT), process requests for temporary or long term land use (permits and/or leases), coordinate land acquisition approval and grant application process, manage transactions including land purchase, disposition and exchanges.
- Benefits:
 - Maintain a strategic land portfolio
 - Accurate documentation of agency records related to owned and managed lands
 - Ensure appropriate use of WDFW land (e.g. temporary and permanent permits),
 - Regional staff located in and engaged with communities served; ensure appropriate land use consistent with funding requirements
 - Timely permit issuance, legal compliance and protection of natural and cultural resources, consistent and successful grant funding for acquisitions
 - Accurate, thorough real property due diligence prior to acquiring or disposing of lands
 - Ongoing partnerships with other public and private landowners and conservation organizations.
- Rationale:
 - Meet legal requirements to document and protect property rights
 - Ensure compliance with state and federal grant requirements and ongoing compliance
 - Ensure agency's strategic land management and acquisition priorities complement other agency efforts (e.g. species and habitat restoration, leveraging conservation on private lands, collaborative landscape-level conservation partnerships, etc.)

Strategic scientific research

- Costs:
 - Science Division has 12 HQ-based employees that manage research of all wildlife and are responsible for maintaining wildlife survey and harvest data as well Global Information Systems (GIS) data.
 - Sixteen scientists deployed statewide conduct species-specific research used for management.

- Benefits:
 - Science-based stewardship of WDFW lands
 - Data stewardship
 - Accurate information about species, habitats, and facilities on WDFW lands
 - Spatial data and maps

- Rationale:
 - The employees in this Division help us conduct more complicated and long term research.
 - They also maintain the systems where many of the data we collect are stored.
 - They help collect and analyze species and habitat condition data
 - They coordinate with universities to conduct agency relevant research.
 - They develop maps for our public outreach efforts (management plans, website, project specific proposals, land acquisitions)

Infrastructure Support

- Costs:
 - FTEs: 8.3 technical, engineering, construction and related permitting staff in support of acquiring and managing lands

- Benefits:
 - Ensures the agency's facilities and infrastructure are maintained and comply with standards necessary for public safety
 - Improving the quality of service to users
 - Meeting the agency's goals in a cost-effective manner
 - Target facilities capital budget strategies to minimize degradation and lifecycle costs

- Rationale:
 - The Capital and Asset Management Program (CAMP) provides technical and professional engineering, construction, and maintenance to sustain facilities, infrastructure and ecosystems in support of the agency's real property assets.
 - CAMP provides planning, permitting, design, construction, surveying, project management and public works contracting activities in the development of the agency's capital budget.

Law Enforcement and public safety

- Costs:
 - Total FTEs: 155 FTEs Statewide
 - Commissioned peace officers are subject matter experts in enforcing all state laws and rules of the Department regarding state lands;
 - Thirteen Command staff statewide, 23 First-Line Supervisors, 94 Field Staff, 25 Administrative/Professional staff (non-commissioned)
 - Field-deployed equipment (patrol vehicles, vessels, off-road-vehicles, snowmobiles, etc.)

- Administrative support in terms of outreach, partnerships, environmental compliance, state-mandated peace officer training, grant application and administration, etc.
- Benefits:
 - Statewide authority to enforce all the laws of the State of Washington with a specific focus on natural resource conservation enforcement work
 - Improved safety for those visiting our lands
- Rationale:
 - Need staff, equipment, contracts, etc. to provide adequate enforcement of Department rules and state law, especially on State-owned lands
 - Regionally based staff with specific emphasis on Community Oriented Policing and the “21st Century Model of Policing”
 - Protect State investment in public lands and infrastructure

Performance Management

Performance Metrics

Below you will find a list of many of the measures for which the Department is able to compile data and some for which the Department would like to collect data but is not currently. The Department is in the process of developing a performance-based system of management and strategic planning.

Metrics the Department has data for:

- # species, habitats and ecosystems of concern on our lands
- # acres owned/managed
- # Wildlife areas (areas, complexes, units)
- # water access sites
- # recreation infrastructure (campgrounds, boat ramps)
- # new acres acquired
- # acres sold
- # agriculture, grazing, and commercial recreation permits issued
- Board feet of timber removed
- # timber sales
- # acres of forested lands treated for forest health (prescribed burning, mechanical treatment)
- # of/value of grants secured (restoration, development, acquisition)
- # acres restoration/ restoration projects complete
- # user groups engaged (Wildlife Area Advisory Committees, etc.)
- # acres weed management (upland and wetland/aquatic)
- Weed species treated
- \$ spent on weed management
- \$/acre for land management

- # conservation easements
- # grants secured
- # fishing access easements
- # water access site redeveloped
- Raw data from over 20 vehicle counters deployed to collect visitor use data (water access sites and a couple of wildlife areas – Wenas, Skagit)
- Enforcement presence (time spent) on wildlife areas including # investigations, # citations, # infraction completed on wildlife areas
- # acres acquired for specific species, habitat or ecosystem

Potential metrics for which the Department does not currently maintain data:

- # and condition of all recreation infrastructure (including trails, parking lots, kiosks, etc.)
- \$/acre needed for sustainable maintenance of high quality ecological integrity and quality recreational opportunities
- \$ needed for ecological monitoring
- # of cooperative land management agreements
- # and distribution of volunteer efforts on WDFW lands
- Extrapolation of car counter data

Assessment of services provided and actions we can or cannot take to improve results for Washington

Ecological integrity

- Weed Control – Good overall management procedures are in place, but significant challenges remain. Our relationship with county weed boards and weed districts is respectful and productive, and we participate in planning and facilitation of larger landscape projects and coordinated weed management area plans working across ownerships. However, we don't have the resources to measure ecological integrity or invasive weeds that degrade habitat quality and threaten long-term ecological integrity. More funding is needed.
- Ecological Integrity Management (EIM) (monitoring, maintaining and improving) – We have methods in place to develop specific monitoring protocols, but we do not have funding to implement them. Once we implement the monitoring, we will have more information about the maintenance and improvement/restoration needs.
- Habitat Restoration Needs (estuary, wetland, forest health, shrub-steppe, other) – We need a good statewide assessment (links to EIM), as we are doing significant work improving and reconnecting estuary and wetland habitats, restoring forest health (thinning, burning), restoring habitat after wildfire, and, to a limited extent, rehabilitating old fallow agriculture fields. Work is funding dependent and typically accomplished with capital or grant funds.
- Fire Suppression – Protect priority habitats, human health and safety, and infrastructure from wildfire through suppression contracts with the Washington Department of Natural Resources and local fire districts. Funding is adequate.

- Conservation of At-Risk Species – We have developed a set of conservation measures associated with management actions. We need to find mechanisms to ensure implementation due to cost and staff capacity limitations.
- Mitigation Role – Provide mitigation services to other local and federal agencies by managing WDFW public lands to maintain habitat integrity at a level commensurate with mitigation funding.
- Surveys for Animals, Plants, and Cultural Resources – Surveys on WDFW lands are limited, and a greater effort is needed to plan and implement adequate management.
- Stewardship Infrastructure - Infrastructure to conserve agency lands in good working order and safe for the public (fences, signs, parking lots, trails, culverts, water control structures, wells, and irrigation systems) must be maintained and replaced when necessary. Funds are inadequate, creating a large maintenance backlog. In some cases, deferred maintenance results in the need for infrastructure replacement.
- Equipment Infrastructure – Equipment is typically used well beyond the life expectancy, resulting in high maintenance costs and inefficiencies.

Provide places for recreation:

- Recreation Opportunities on our Lands- Need clear vision and clear access to information about what can be done where, partnerships, and community coordination. We need to identify places for community partnership opportunities to enhance the offerings on our lands consistent with the regional and local needs, as well as the WDFW niche. Staff capacity to do this work has been unavailable due to other priorities.
- Inventory and Outreach Recreational Opportunities- We offer significant recreation opportunities on our lands, but need to inventory them and be able to communicate about them to varied interests, as well as demonstrate how local and regional values are integrated and how these lands contribute to local and state economies.
- Recreational Facilities- Many recreation facilities on wildlife areas and water access sites have exceeded their useful lives, are obsolete or defective, or do not meet current minimum standards (public expectations, ADA compliance, etc.). Toilets and concrete plank boat ramps are just two examples of the types of facilities that can be found at many of the agency's 600+ water access sites.
- Recreation facility upgrade/replacement projects are included in the biennial capital program project list, but only a portion of these are funded each biennium due to other competing agency priorities. The projects get rolled over to subsequent biennial project lists where they remain until they are funded, some of which never reach a high enough priority for available funds.

- Recreational Facility Funding- Grant proposals for (re)development of wildlife area or water access recreational facilities are submitted to RCO during each funding cycle. Grants received are typically from the Washington Wildlife and Recreation Program – State Land Development and Boating Facilities Program.
- State and Local Tourism, Community Character, Outdoor Quality of Life, Working Lands- We provide significant opportunities for recreation and working lands. The Lands Showcase is a WDFW initiative aimed at increasing public awareness of the conservation and recreation resources managed by WDFW and the benefits they provide to the people of Washington
- Sustainable Funding - We know that we don't have enough to provide full funding to manage the conservation and recreation work. We need a clear approach to quantify our needs and compare them with what we have

Public safety

- Enforcement- The concept of “if you don't go, you don't know” – meaning, if officers are not on the landscape, or are spread far too thin on the landscape, effective deterrence of criminal activity is diminished. In some cases, there may be one officer for an entire county or multiple counties. Enforcement officers are uniquely trained and extremely well-equipped to handle any Law Enforcement situation they encounter regardless of where they are in the state. Simply put, more officers create more deterrence for illegal activity and an increased ability to regulate activity and enforce state law and Department rules on state-owned or controlled lands. We have officers with training, equipment and authority, but the number of officers per wildlife area is scant.

Maintain lands strategies that meet WDFW mission and goals

- The Department has identified strategic acquisition priorities.
- We coordinate with local, regional, and state partners on overall conservation and recreation needs and how WDFW land ownership fits in (where our land exists and where additions could enhance public opportunities and protect public values).
- WDFW is competitive at the state and federal levels for land acquisition funding for critical additions to our lands portfolio, utilizing diverse sources for multiple values (e.g. endangered species habitat, game habitat, hunting, fishing, boating access, working lands, etc.).
- WDFW developed a new internal system in 2016 to manage Title and Records named the Land Information System (LIS). This system integrates spatial and tabular data on agency owned and managed lands, yet our permanent paper files remain the source of numerous historical agreements and documents that may not be available electronically.
- Safeguarding our files requires modernized storage and handling and continual updating of electronic records. We are maintaining agency property management records sufficiently
- Meeting customer expectations, both from coworkers and the public, for timely response to inquiries related to permitting (temporary and long term), as well as land management (leases,

ownership issues, monitoring of conservation easements) and acquisitions, should be a priority, yet we do not have capacity to deal with the volume.

- Some of the information on recreation and commercial permitting, agricultural, and other working lands leases and status of transactions hasn't been very visible to the public, and we are working with our web content update to improve that.

Actions we can take when and if funding is available:

- Improved noxious weed control.
- Full development and implementation of Ecological Integrity Monitoring – each ecosystem type (e.g. shrub-steppe, east-side mixed conifer forests, etc.).
- Fulfill equipment need list (\$1.5 million backlog).
- Address deferred maintenance of infrastructure.
- Assess and address statewide high priority restoration needs.
- Finalize recreation vision, strategy, and template for place-based recreation planning.
- Inventory our recreation infrastructure and communicate it effectively.
- Determine place-based priorities consistent with our recreation vision for non-consumptive recreation, and work to fund and implement.
- Communicate our property acquisition and management status more effectively.
- Improve our property records management.
- Survey WDFW public lands for animals, plants, and cultural resources.

Actions we currently cannot perform due to staffing capacity

- The Department currently does not have capacity to:
 - Perform required compliance monitoring on conservation easements on private lands acquired with state and/or federal funding.
 - Update lands inventory to prioritize properties for disposal of land or fund staff time and appraisals necessary to complete the land disposals.
 - Respond timely to private landowner requests for land exchanges and do not have capacity to conduct land exchanges.
 - Support trespass investigations/resolutions, pay for the transactional costs of land donations, preliminary acquisition project management and analysis work needed before grant or other funding is in-hand.

Actions we cannot take:

- Provide recreation that is not consistent with our recreation vision and mission.
- Pay payments in-lieu of taxes (PILT) or assessment contrary to legislative direction.
- Purchase lands at above market value.
- Manage lands contrary to federal, state, local contract obligations or title restrictions.

Preserve and Restore Terrestrial Habitats and Species



Introduction & Overview

Washington is the second smallest western state with the second largest human population, which has resulted in historic and ongoing impacts to wildlife habitat. Washington Department of Fish and Wildlife's (WDFW) efforts to prevent additional impacts to species and habitat protects what remains in Washington, sustaining populations of wildlife including game, and contributing to the recovery of state and federally listed species. Protection activities include consulting with businesses, landowners and governments re: terrestrial species and land impacts and legalities (T.1), partnering with private landowners to implement conservation strategies (T.2), wildlife permitting and enforcement (T.4), and responding to and mitigating wolf conflicts (T.6).

Restoration activities correct habitat impacts that have occurred over time, which is necessary to recover imperiled or declining species or increase commercially and recreationally valuable populations. Wherever possible, the Department restores the health of ecosystems, which results in more sustainable restoration and lasting public investment. Restoration activities include developing and implementing plans to recover and sustain diverse wildlife populations (T.5), acquiring funding for and completing habitat conservation projects (T.7).

Effectively addressing the dual challenge posed by the changing climate and a rapidly growing human population is fundamental to WDFW's success in the 21st century in all of these areas. WDFW studies and plans for climate impacts on lands and resulting effects on species (T.3).

T.1 – Consult with businesses, landowners and governments regarding terrestrial species and land impacts and legalities

Proactive conservation and management before species populations and habitats are degraded is less costly, reduces intersection with regulation, creates more resilience to threats and change (improves sustainability), and retains ecosystem services for human well-being. WDFW shares science and recommendations to assist businesses, landowners and governments to avoid, minimize, or compensate for the effects their work will have on wildlife and habitats. This science is used by people with responsibilities for land use and growth, shoreline management, timber harvest, energy projects and transmission lines, or by landowners who want to protect and enhance habitat on their property. Where possible, the Department also assists partners to be in compliance with state or federal laws that require fish and habitat protection.

T.2 – Partner with private landowners to implement conservation strategies

WDFW works with private landowners who want to voluntarily improve wildlife habitat, understand the value of lands and waters they steward, and sustain working lands – agriculture, rangeland, and forest. Our biologists provide technical assistance to improve wildlife habitat, document working lands practices that benefit wildlife and fish, and help landowners qualify for federal programs that conserve, restore or improve wildlife habitat.

T.3 – Study and plan for climate impacts on lands and resulting effects on species

The Department works with the Climate Impacts Group at the University of Washington, the Northwest Climate Science Center, and other state and federal agencies to utilize climate science products to determine the potential effects on terrestrial habitats and species so we can proactively plan for and manage the effects of these changes.

T.4 – Wildlife permitting and enforcement of regulations

The Department issues permits for wildlife rehabilitation, falconry, taxidermy, and scientific collection. Wildlife rehabilitation permits regulate facilities statewide according to national standards to improve the health of orphaned, injured or sick wildlife so they can be released back into the wild. Falconry permits regulate individuals who train raptors to hunt game animals in cooperation with a human. Scientific collection permits provide authorization, guidance and reporting standards for scientists/researchers, educators/educational institutions, and museums, aquariums/zoos who want to take native wildlife for the purposes of research. The Department licenses taxidermists to create mounts of certain otherwise regulated wildlife species (e.g., deer, elk, waterfowl)

T.5 – Recover and sustain diverse wildlife populations

The Department works to sustain diverse wildlife, from species common in backyards to the rarest endangered species. We evaluate population status, assess risks to species' long-term sustainability and persistence, and develop and implement plans to recover and/or maintain viable populations. We use landscape level plans and strategies to ensure habitat is suitable and available for all species living within that habitat. Finally, we work cooperatively with partners who can influence the conservation trajectory and leverage resources, expertise, and on-the-ground actions to support healthy wildlife populations.

T.6 – Respond to and mitigate wolf conflicts

Respond to and mitigate wolf conflicts: Addressing gray wolf-livestock conflicts is an essential function of the Department. The return of wolves to Washington brings with it conflicts with livestock. The ranching and farming industry is a vital component of the Washington economy and provides important open space and habitats that support a wide variety of wildlife including wolves. Maintaining healthy wolf populations while minimizing negative wolf-livestock interactions relies on informing and assisting the public, employing proactive deterrent measures and providing quick effective response once conflicts and property damage occur.

T.7 – Acquire funding for and complete habitat restoration projects

WDFW administers several grant programs that award money to effective and high priority projects that restore and connect habitats, advance species recovery, and recover ecosystems. In addition, we acquire grant funds or contracts to implement restoration projects on WDFW-managed lands, other public lands, or lands of willing private landowners.

Connection to agency mission & strategic plan

As noted above, perpetuating and managing wildlife, fish and shellfish into the future requires habitat. The Department's goals to *"conserve and protect native fish and wildlife"* and *"Provide sustainable fishing, hunting, and other wildlife-related recreational and commercial experiences"* would not be possible over time if habitat for fish and wildlife diminishes significantly in quality or quantity, or is inaccessible to the species that depend on it. The activities described above help ensure wildlife will persist at healthy levels over time.

Protection and recovery of habitat and species also contributes to the Department's goal to *"Promote a healthy economy, protect community character, maintain an overall high quality of life, and deliver high quality customer service."* Habitat supports sustainable wildlife populations, which in turn are the basis for robust hunting and watchable wildlife economies and the communities that depend on them. When wildlife decline, state and federal laws that demand conservation may restrict a community's activities or the public's ability to harvest game. So WDFW's work to achieve healthy habitat and wildlife populations is also an investment in the present and future of the natural resource economy and way of life.

Additionally, where specific species have unique needs or cause conflict with their human neighbors, such as wolves, helping to manage those interactions is a fundamental part of the Department's goal to promote healthy economies, communities, and quality of life.

Legal Requirements & Statutory Authority

Overall, the legislative intent of this work is described by [RCW 43.21C](#): "To declare a state policy which will encourage productive and enjoyable harmony between humankind and the environment; (2) to promote efforts which will prevent or eliminate damage to the environment and biosphere; (3) and [to] stimulate the health and welfare of human beings; and (4) to enrich the understanding of the ecological systems and natural resources important to the state and nation."

T.1 – Consult with businesses, landowners and governments regarding terrestrial species and land impacts and legalities

- Growth management and shoreline management - [RCW 36.70A](#), [RCW 90.58](#), [WAC 365-190-130\(4\)](#), [WAC 173-26-211\(2\)\(c\)](#), Case law

- Forest Practices - [RCW 77.55.361](#), [WAC 220-660-060](#), [WAC 222-16-080](#)
- Energy - [Federal Fish and Wildlife Coordination Act](#), [Federal Power Act](#) and [Federal Clean Water Act](#), [RCW 90.16.050](#) and [WAC 197-11-920](#)

T.2 – Partner with private landowners to implement conservation strategies

- [RCW 77.04.012](#) “...shall work cooperatively with volunteer groups and individuals to achieve the goals of this title to the greatest extent possible.” This includes voluntary participation by private landowners with us to conserve and manage wildlife, fish, and habitats.

T.3 – Study and plan for climate impacts on lands and resulting effects on species

- [RCW 43.21M](#). State agencies shall incorporate climate change adaptation plan actions into policies and programs; consider the strategy when designing, planning, and funding infrastructure projects; and incorporate natural resource adaptation actions and alternative energy sources when designing and planning infrastructure projects.

T.4 – Wildlife permitting and enforcement of regulations

- [WAC 220-450-030](#) Live wildlife—Taking from the wild, importation, possession, transfer, and holding in captivity. States that it is unlawful to take live wildlife, wild birds, or game fish from the wild without a permit issued by the director except as otherwise provided by Department rule.
- [RCW 77.12.467](#) Directs the Department to establish a wildlife rehabilitation program and sets rules around grants that the agency is mandated to distribute to facilities throughout the state.

T.5 – Recover and sustain diverse wildlife populations

- [RCW 77.12.020](#) Empowers the Director or the Fish and Wildlife Commission (FWC) to classify native wildlife species as game animals, fur-bearers, game birds, predatory birds, and protected or endangered wildlife. Also empowers the FWC to designate deleterious exotic wildlife.
- [WAC 220-610-110](#) Process for determining and categorizing the conservation status of species as endangered, threatened, or sensitive.
- Additional protections provided by ([RCW 77.15.120](#) and [RCW 77.15.130](#)) for state endangered and sensitive or threatened species, respectively.
- Endangered Species Act ([16 U.S.C. § 1531 et seq.](#))

T.6 – Respond to and mitigate wolf conflicts

- [RCW 77.15.120](#). Unlawful taking of endangered fish or wildlife. Defines “take” of an endangered species and outlines penalties for infractions.

T.7 – Acquire funding for and complete habitat restoration projects

- [WAC 365-190-130](#) "Fish and wildlife habitat conservation" means land management for maintaining populations of species in suitable habitats within their natural geographic distribution so that the habitat available is sufficient to support viable populations over the long term and isolated subpopulations are not created.... Fish and wildlife habitat conservation areas contribute to the state's biodiversity and occur on both publicly and privately owned lands.”
- WWRP, [RCW 43.41.270](#) Washington Wildlife and Recreation Program provides funding for a broad range of land protection and outdoor recreation, including park acquisition and development, habitat conservation, farmland and forestland preservation, and construction of outdoor recreation facilities.

Ecosystem and opportunity management connections

Preserve & Restore Terrestrial Habitats and Species supports our ability to be successful with:

- Manage Hunting Opportunities, strategies H.3-H.5, because healthy species and habitats result in game animal to harvest and also the removal of any conservation constraints on harvest
- Acquire and Manage Lands for Hunting, fishing and conservation, strategies L.1-L.2, because our understanding of the status of species and their habitats helps focus acquisition in the places where it will make a difference for conservation
- Preserve and Restore Aquatic Habitats and Species, strategies A.2, A.3, A.6-A.9, because efforts to conduct science, gather data, or develop effective habitat protection and restoration techniques informs both aquatic and terrestrial activities
- Non-consumptive recreational opportunities, strategies R.1 and R.2, because healthy species and habitats result in fish and wildlife to view and enjoy

Preserve & Restore Terrestrial Habitats and Species is supported by:

- Manage Hunting Opportunities, strategies H.1-H.7, because managing hunting opportunities ensures enough game reproduce to ensure future healthy populations, as well as maintaining hunters' interest in and understanding of the importance of both game population and habitat management
- Acquire and Manage Lands for Hunting, fishing and conservation, strategies L.1-L.2, because acquiring and managing land in the places where it will make a difference for conservation contributes to healthy species and habitat
- Preserve and Restore Aquatic Habitats and Species, strategies A.1-A.9, because efforts to conduct science, gather data, or develop effective habitat protection and restoration techniques informs both aquatic and terrestrial activities
- Non-consumptive recreational opportunities, strategies R.1 and R.2, because promoting wildlife viewing and taking action to benefit non-consumptive opportunities helps maintain the public's interest in and understanding of the importance of preserving and restoring wildlife habitat and species

General Budget Overview

Primary cost drivers

1. Staff to complete habitat restoration work, coordinate with businesses, private landowners and governments regarding impacts and legalities, and respond to human-wildlife conflicts.
2. Acres of land restored results in capital expenditures
3. Area covered for permitting, enforcement, support to private landowners, consultation with other governments, management impacts travel costs; vehicle maintenance, fuel, travel reimbursement
4. Sites monitored for impacts to wildlife
5. Grants to other entities for habitat restoration, wildlife rehabilitation, recovery actions

Breakdown of 2015-17 investment by funding source and outcome

	Federal	User Fee	General Tax	State and Local	State Bonds	License Plates	Grand Total
T.5 Recover and Sustain Diverse Wildlife Pop	\$ 3.9M	\$ 1.3M	\$ 0.3M	\$ 0.9M		\$ 3.0M	\$ 9.4M
T.1 Consult on Terrestrial Species Impacts	\$ 1.1M	\$ 0.3M	\$ 3.4M	\$ 2.2M		\$ 0.4M	\$ 7.4M
T.6 Response and Mitigation of Wolf Conflict	\$ 0.2M	\$ 0.6M	\$ 0.6M		\$ 2.2M	\$ 1.3M	\$ 5.0M
T.7 Terrestrial Habitat Restoration	\$ 1.0M	\$ 0.7M	\$ 0.7M	\$ 0.6M		\$ 0.2M	\$ 3.1M
T.4 Wildlife Permitting and Enforcement	\$ 0.1M	\$ 0.6M	\$ 0.5M			\$ 0.3M	\$ 1.6M
T.2 Partner with Private Landowners for Conservation	\$ 0.7M	\$ 0.3M	\$ 0.0M			\$ 0.3M	\$ 1.4M
T.3 Climate Impacts on Land		\$ 0.0M	\$ 0.1M			\$ 0.1M	\$ 0.2M
Total	\$ 7.1M	\$ 3.9M	\$ 5.5M	\$ 3.7M	\$ 2.2M	\$ 5.6M	\$ 28.0M
% of total	25%	14%	20%	13%	8%	20%	

Major costs, benefits and rationale

A major cost of this work is that of employees. The habitat and species work described here often sits at the intersection of public benefit and private property rights, so success in this outcome requires working with others rather than dictating decisions, even when we have regulatory responsibilities or manage a program. Experience and literature demonstrate the best way to work effectively with others is through person-to-

person interaction, so we try to embed employees in communities around the state where there is both need for protection and opportunity for restoration. There is also benefit of co-location of employees who analyze, plan for, and problem solve around similar issues. As a result, employees in the headquarters office conduct studies aimed at management questions, strategize and prioritize where work will best deliver outcomes, develop policies and rules for application statewide, negotiate large-scale agreements, and provide guidance and training in their area of expertise. Employees who do work that is very specialized (some wildlife permitting or developing statewide policies and approaches for wolf conflicts) are also located in our headquarters office and provide service throughout the state where it is needed. Success in this work requires both a presence in communities throughout the state and an ability to develop studies and strategies at a statewide scale.

In all cases, greater clarity of the public policy objective and the desired outcome helps the Department target limited staff and other resources as effectively as possible. Further, most of the functions here are about developing species and habitat insights and strategies, and implementing techniques that will be durable over time and improve the resilience of broader ecosystems and groups of species.

T.1 – Consult with businesses, landowners and governments regarding terrestrial species and land impacts and legalities

Proactive conservation and management before species populations and habitats are degraded is less costly, reduces intersection with regulation, creates more resilience to threats and change (improves sustainability), and retains ecosystem services for human well-being. Biologists are located throughout the state to work directly with communities and local governments regarding land use planning and implementation, with the forest industry and other regulators, and in some cases with energy project proponents to implement existing licenses or consider fish and wildlife effects of new projects. The Department also has land use, forest practices, and energy project experts in the headquarters office to strategize and prioritize where work will best deliver outcomes, develop policies and rules for application statewide, negotiate large-scale agreements, and provide guidance and training in their area of expertise.

For energy work specifically:

- Costs – Energy developer communication, consultation, and guidance as well as working with wildlife, habitat and conservation partners to identify, create and develop appropriate measures of mitigating harmful effects on native Washington Wildlife. Staff time reviewing of applications, study plans, pre-construction and post construction monitoring, NEPA SEPA documentation, negotiation on mitigation measures, participating in natural resource committees that are established to monitor the project and tech expertise, and reviewing operational management plans.
- Benefits –First is the benefit directly to the energy generating projects and developers by reducing the risk of delays and additional costs of development. The residents of Washington, by ensuring projects are considering impacts to native wildlife and doing what is appropriate to reduce impacts. The benefits of having skilled staff that know the permit processes for specific projects and impact elements of these specific projects. By funding to have staff on hand with that expertise, project move forward quickly and our boosting our customer service.
- Rationale – With the large scale of many of these projects and wide range of habitats and species potentially impacted, quality customer service and technical expertise are the driving factors. Having

the staff on hand with the wildlife and habitat expertise for any specific project type or associated impact analysis allows to provide the superior customer service and technical expertise expected.

T.2 – Partner with private landowners to implement conservation strategies

Wildlife and fish species and habitats, natural disturbance regimes, and ecological processes (e.g. migration) cannot be conserved or recovered *only* on public lands. Private landowners who provide large tracts of land under good stewardship and management contribute significantly to the public good, integrity of adjacent wildlands, and the long-term sustainability of fish and wildlife for all of the reasons we enjoy and need them – wildlife and wildlands recreation economy, working lands economies, quality of life, and hunting, fishing, and viewing opportunities.

- Costs – Private landowner outreach, communication, and relationship building and retention rely on 1) trust and the reputation of qualified biologists with a good balance of technical knowledge and communication skills (retention, morale, safety, and continuing education for biologists); 2) responsiveness of those biologists to private landowner requests (proximity to the work, travel, capacity to meet demand); and 3) availability of incentives (developed through relationships with partners, funding sources, and regulatory assurances tools) to support landowners' willingness to conserve or restore wildlife populations and/or habitats over the time that it takes to see results.
- Benefits – For the private landowner, the relationships, defensible best practices, and availability of voluntary incentives limit risk; landowners can invest in fish and wildlife habitat improvement and species' conservation and recovery with less personal or operation risk to ongoing working land operations.
- Rationale – Focused primarily in eastern Washington where Farm Bill [State Acres for Wildlife Enhancement](#) (SAFE), part of the Conservation Reserve Program (CRP), provide the greatest overlap in financial and technical guidance incentives with a State Wildlife Action Plan defined need to improve wildlife habitats: [Palouse Prairie](#) (Whitman, Asotin, Columbia, and Garfield counties); [Sage and Sharp-Tailed Grouse](#) (Douglas County); [Shrub-Steppe](#) (Lincoln, Grant, Adams, and Okanogan counties); and [Ferruginous Hawk](#) (Adams, Benton, Franklin and Walla Walla counties). Additional focus in eastern Washington where the Pygmy Rabbit Safe Harbor Agreement is implemented to support immediate recovery actions. Private landowners who steward wetland, forest, prairie and oak, and other habitats related to SGCN have a need and often request our technical services and conservation incentives – a need we cannot currently meet. Ideally, we would have private lands biologists focused on conservation technical guidance, tool development and program delivery in every district to engage and support voluntary private landowner cooperation.

T.3 – Study and plan for climate impacts on lands and resulting effects on species

- The Department utilizes the climate science conducted by experts such as the University of Washington's Climate Impacts Group, and wherever possible collaborates with these folks to add fish, wildlife, and habitats to their investigations. Where these investigations are not tailored enough to WDFW management questions, WDFW conducts studies regarding the likely effects of climate projections on Washington's fish, wildlife, and habitats. The Department also uses in-house climate expertise to identify how to adapt existing programs and facilities to the likely effects of ongoing changes in climate related features such as rain and snow fall, stream flow, habitats, and sea levels.

T.4 – Wildlife permitting and enforcement of regulations

- Less than one staff member is dedicated to wildlife permitting, with other staff assisting as needed.

T.5 – Recover and sustain diverse wildlife populations

- Prioritizing how we spend limited resources is influenced by several key components including
- Priorities identified in our state wildlife action plan
- Action led by partners that creates opportunity or mobilizes additional resources
- Funding requirements (e.g., often tied to specific habitats/actions/threats/species)
- Actions that have the best chance to influence the conservation trajectory in a positive direction.
- Opportunities to leverage our capacity and expertise
- Actions for which we have expertise (e.g., sometimes what's needed is community outreach and marketing, but current staff are biologists).

T.6 – Respond to and mitigate wolf conflicts

- Benefits-Decreased conflict reduces costs to producers and helps maintain a viable local economy.
- Rationale-Efforts are targeted to increase social tolerance for a sustainable wolf population across a landscape heavily influenced by human population.

T.7 – Acquire funding for and complete habitat restoration projects

Many imperiled species are in danger due to impacts to their habitats that have occurred over time. Recovery of these species is very unlikely without some restoration of the ecosystems and habitats they depend on. As noted above, the Department focuses on restoring the health of ecosystems and the processes that sustain them, which results in more sustainable restoration and lasting public investment. This approach also contributes to the resilience of these ecosystems, reducing their vulnerability to the effects of climate change. That said, staffing and expenditures in this area are very limited, in favor of concentrating limited resources on doing similar work on WDFW-managed lands and the work of partners. Some restoration of terrestrial habitats is funded by others to compensate for impacts to habitats or species.

Performance Management

Performance Metrics

Below you will find a list of many of the measures for which the Department is able to compile data and some for which the Department would like to collect data but is not currently. The Department is in the process of developing a performance-based system of management and strategic planning.

- # of recovery plans, conservation plans, action plans/strategies, # of status reports, periodic status reports.
- # plans or projects that have integrated climate considerations (this measures implementation of policy, and our overall success at our goals as stated in that policy)
- Effectiveness at communicating resource manager needs for climate science with science providers (NW Climate Science Center)
- Monitor the response to climate change of select habitats and species in order to update programs and general technical assistance.

- # of agency sponsored research projects that have incorporated climate.
- # of educational and capacity building workshops or other events.
- # of climate-related outreach materials produced for public, stakeholders and/or staff
- Technical assistance guidance is updated to reflect climate considerations
- # of landowners in process or enrolled in each state or federal program we “host” (e.g. CRP SAFE, Farm Bill EQIP, other Farm Bill Programs, USFWS Partners, Safe Harbor Agreements, Candidate Conservation Agreements with Assurances, Douglas County Multi-species General Conservation Plan)
- # of acres enrolled in each state or federal program we host (i.e., specific SAFE conservation projects)
- # of animals reintroduced to private lands voluntarily participating in projects with us (state and federal projects)
- # of landowners/managers receiving direct compensation
- Amount of money distributed to private landowners as a **direct** result of management plans or technical guidance we provide (first degree work)
- A number of additional measures are tracked nationally: [Association of Fish and Wildlife Agencies State Wildlife Grant Effectiveness Measures \(2011\)](#)
- Growth Management Act/Shoreline Management Act - Reduce the rate of loss of priority habitat (oak woodland) from 0.4% (123 acres) to 0.1% (34 acres) by 2016, and Reduce the annual rate of conversion of marine and freshwater riparian habitat in Puget Sound from 0.13% to 0.10% by 2016
- Timber Harvest - # forest practices hydraulics projects reviewed for concurrence, # standard forest practices reviewed for fish protection, # forest practices hydraulic project pre-application consultations provided to landowners, # of water type determinations or modifications reviewed, # (and type of) technical assistance visits/calls delivered to forest landowners or DNR.
- # projects implemented to improve terrestrial ecosystems
- # acres restored to improve habitats
- % change in acreage/coverage of priority habitats
- Species recovery objectives defined in recovery plans, Population trends.
- GMA/SMA - % local jurisdictions w/ Priority Habitats and Species referenced in its ordinances, % of regional biologist time spent on PHS assistance
- Energy - Consultation with all energy developers prior to submission of permit applications, no net loss of direct habitat function and value from energy projects and the goal of stability, or compensation of unavoidable loss.

Assessment of services provided and actions we can or cannot take to improve results for Washington

The Department considers the balance between spending limited resources (a) to take action and deliver results, and (b) to study/plan/strategize so actions are smarter and we know whether they work. We cannot eliminate either activity without risking the outcomes articulated above.

One action that would assist the Department to improve the fish, aquatic wildlife, and aquatic habitats would be to hire a natural resource economist and community outreach specialists for each of the Department’s six administrative regions. Because this work often depends on working effectively with others, including

individuals and communities whose primary objective is not fish and wildlife conservation, a natural resource economist could help articulate the benefits of healthy fish, wildlife, and habitats, as well as the costs of losing these resources. Further, community outreach specialists will help biological staff better understand and engage effectively with communities.

T.1 – Consult with businesses, landowners and governments regarding terrestrial species and land impacts and legalities and T.2 – Partner with private landowners to implement conservation strategies

Although there is variation, we know there are places in the state where the workload is too high to work effectively with all landowners and land use decision makers whose work may affect wildlife or habitat. One action to improve customer service and fish protection is to implement statewide the system of entry professional habitat biologists (Bio 2s) that exists in the Puget Sound. These biologists to support more senior permit writers by working on lower risk and more routine activities. For energy work, the Department's current mitigation guidelines have helped us to achieve no net loss of project impacts and provided clarity to energy developers regarding what mitigation expectations will be. However, we need to update and modernize these guidelines to incorporate evolving scientific literature, on topics such as indirect affects to habitat functions or species specific impacts. Land use, forest practices, and energy functional areas would benefit from additional monitoring and updating technical guidance to reflect current understanding of the effects of climate change. These actions enable the Department of manage these programs adaptively over time to continue to deliver results.

T.3 – Study and plan for climate impacts on lands and resulting effects on species

Additional actions to improve results in this functional area are to increase the number of WDFW programs, policies, and infrastructure that have been evaluated for resilience to the effects of climate change, so as to continue to deliver fish, wildlife, and habitat results. Together, these represent a more comprehensive program to adaptively manage in the face of ongoing change.

T.4 – Wildlife permitting and enforcement of regulations

WDFW issues wildlife permits for a variety of reasons under [WAC 220-440](#), such as depredations permits for livestock or commercial crops, private property damage, and personal safety. The conflict rules were updated in 2010 so that the Wildlife Program is the sole grantor of permits and the administrative processes associated with them. The Enforcement program is charged with ensuring compliance with issued permits and specific scientific research data is obtained, such as samples of tongue tissue and upper incisors of cougar depredations.

T.5 – Recover and sustain diverse wildlife populations

We currently have 44 state-listed species and 268 Species of Greatest Conservation Need. We are significantly under-staffed and under-resourced to meet the conservation needs of all these species. It is difficult, and in some cases impossible, to even do the minimum action of monitoring to understand the status of each species. In some cases, there is considerable research to be done to better understand the threats these species are facing. Research is expensive, labor-intensive, and time consuming. In the best case scenarios, we have good information on the species status and trend, we understand the threats, and have devised strategies to address those threats. However, even in those best-case scenarios we are often lacking the resources or sometimes the political will to implement the needed recovery actions at the scale

required. Despite these challenges we are making progress on a select number of species, and have even recently delisted several iconic species including the Bald Eagle and Peregrine Falcon. We have active working groups and are implementing recovery programs for at least 18 of our state-listed species. With additional resources we could expand our internal capacity and also work with external entities to implement recovery actions at a more meaningful scale.

T.6 – Respond to and mitigate wolf conflicts

De-listing the gray wolf is dependent on the dispersal of breeding pairs across all three recovery zones in the state. The resources invested so far have helped facilitate wolf recovery in the eastern one-third of the state. However, these resources have not increased commensurate with the increased population and territory.

T.7 – Acquire funding for and complete habitat restoration projects

As noted above, this function is currently limited, due in part to limited availability of funding for restoration of imperiled ecosystems. An action to improve results in this functional area would be to increase the number of restoration actions implemented that directly affect federally-listed species, which will increase recovery and possibility of de-listing, which would remove regulatory constraints on activities in surrounding communities. An additional benefit is achieved when the restoration also contributes to the resilience of the ecosystems these species depend on, reducing their vulnerability to the effects of climate change. Increasing such projects may require identifying novel fund sources.

Manage Fishing Opportunities



Introduction and Overview

According to an [independent economic analysis of Washington's fisheries](#), "commercial and recreational fishing conducted in Washington fisheries directly and indirectly supported an estimated 16,374 jobs and \$540 million in personal income in 2006." Managing these fisheries is complex, with multiple overlays of court orders, international treaties and agreements, and federal and state statutes. Navigating these legal frameworks to successfully co-manage ecologically complex multi-species fisheries with our partnering entities is exceedingly difficult and resource-intensive. A substantial additional layer of complexity was added to the workload of the Department each time a new species was listed under the federal Endangered Species Act (ESA), starting with several salmon populations in 1998.

Federal permits must now be acquired for many fisheries and catches carefully monitored to ensure compliance with incidental take permit levels. Many salmon, steelhead, and ground fish fisheries are now carefully targeted through time, area, and gear restrictions, or through the implementation of mark-selective fisheries targeting hatchery-origin salmon and steelhead. For additional information regarding the legal requirements and policy implications associated with the federal ESA please see the ESA policy summary included at the end of this report.

F.1 – Enforce recreational fishing opportunities and regulations.

WDFW enforces time, place, and manner of recreational fishing opportunities and regulations. The Department proactively patrols and responds to citizen and stakeholder complaints regarding illegal recreational fishing and provides a regulatory presence to deter illegal or unethical activities in areas where recreational fishing is prominent.

F.2 – Enforce commercial fishing opportunities and regulations.

WDFW enforces time, place, and manner of commercial fishing opportunities and regulations. The Department proactively patrols and responds to citizen and stakeholder complaints regarding illegal commercial fishing and provide a regulatory presence to deter illegal or unethical activities in areas where commercial fishing is prominent.

F.3 - Develop, negotiate, and implement fishery co-management plans.

The Department co-manages all marine fisheries with treaty tribes and neighboring states and countries, implementing laws, court orders, and international agreements. These plans ensure that fisheries are conducted to meet federal ESA requirements and associated conservation goals.

F.4 - Monitor and manage finfish populations.

Fish populations are assessed, monitored, and evaluated to ensure harvest and resource management actions are sustainable and based on sound science. Department staff conduct field investigations to:

- Count juveniles
- Count adults returning to freshwater
- Test fisheries before the season opens to verify abundance estimates
- Understand the life-cycle and migration patterns of fish
- Collect and analyze data on fish population genetics

Department staff also develop and utilize fish management harvest models to inform fishery management decisions.

F.5 - Monitor and manage shellfish populations.

Shellfish resources are assessed, monitored and evaluated to ensure harvest and resource management actions are sustainable and based on sound science. To understand what fishery resources are available, Department staff conduct shellfish population surveys to determine harvest levels. The Department develops and uses shellfish management harvest models that consider the annual variability of shellfish abundance to maximize recreational and commercial opportunities while minimizing risks to wild shellfish populations. The Department co-manages shellfish fisheries with treaty tribes, implementing laws and court orders. These shellfish harvest management plans ensure that fisheries are conducted to meet associated conservation goals.

F.6 – Sell recreational fishing licenses

The Department coordinates with a network of over 600 license dealer shops throughout the state and manages the license sales system and associated customer service needs. These services make it easy and convenient for recreational anglers and the commercial fishing industry to purchase and maintain licenses. The Department sells recreational fishing licenses to nearly 800,000 anglers annually.

F.7 – Market fishing opportunities

Many Washingtonians are unaware of the fishing opportunities that are available to them. The Department has a fairly new marketing unit organizes events and campaigns, such as the Fishing Derby, in order to effectively communicate fishing opportunities throughout the state.

Connection to agency mission & strategic plan:

Included in the Department's mandate is "maintain the economic well-being and stability of the fishing industry in the state" ([RCW 77.04.012](#)). Fisheries are managed to provide sustainable opportunity while ensuring that native fish and shellfish populations are conserved for future generations.

Legal Requirements & Statutory Authority

Co-Management with Indigenous Peoples: Treaties, U.S. v. Washington and U.S. v. Oregon Court Cases, and Legislation

Many of Washington's fisheries are co-managed with Native American tribes in a unique government-to-government relationship defined by treaties, court decisions, and legislation. In 1854 and 1855, at the direction of the Indian Office in Washington, D.C., Isaac Stevens and Joel Palmer (superintendents for Indian Affairs in the Washington and Oregon territories, respectively), concluded eleven treaties with Indian tribes in Washington Territory and adjacent parts of Oregon Territory. The U.S. government now recognizes 25 tribes as parties of the [Stevens-Palmer Treaties](#). Through those treaties, the tribes have reserved the right to take up to 50% of the harvestable fish and shellfish within their respective usual and accustomed fishing places. In addition, there are 9 federally recognized tribes that are not party to one of the Stevens-Palmer treaties. To minimize potential conflict, and to promote effective and efficient management of fisheries resources subject to both state and tribal management, the Department and tribes have developed a cooperative management approach to exercise their respective authorities and to achieve our shared conservation objectives. For additional information regarding the legal requirements regarding tribal fisheries please see tribal fisheries legal requirements at the end of this report.

International Treaties and Conventions

Treaties, conventions, and agreements have been negotiated between the United States and foreign nations to improve the management of species that migrate across international boundaries. The U.S. has treaties with Canada that significantly affect the management of fisheries in Washington for Pacific halibut, salmon, Pacific whiting, and albacore tuna.

Federal Statutes

Three key federal fishery management statutes are the Magnuson Stevens Fishery Conservation and Management Act ([MSA](#)), the Columbia River Compact, and the Endangered Species Act (ESA).

The Pacific Fishery Management Council ([PFMC](#)) is one of eight regional fishery management councils established by the MSA for the purpose of managing fisheries in the federal waters (3-200 miles offshore) of the Exclusive Economic Zone (EEZ) off the coasts of California, Oregon, and Washington. There are a total of

19 Council members, 14 of which are eligible to vote on matters brought before the PFMC. Voting members include representatives from the National Marine Fisheries Service ([NMFS](#)), the states of Washington, Oregon, California, and Idaho, and the coastal treaty tribes.

The PFMC manages coastal fisheries on a species-specific basis through Fishery Management Plans (FMPs). There are currently FMPs for salmon, groundfish, coastal pelagic species, which include Pacific sardine, northern anchovy, and market squid, and highly migratory species, which includes albacore tuna, and a few coastal pelagic sharks. The fishery management measures developed by the PFMC are implemented by the National Marine Fisheries Service (NMFS).

In addition, through the MSA, the states of Washington, Oregon, and California have been delegated the authority to manage the coastal Dungeness crab fishery. That is, each state may regulate the activities of all vessels fishing in the EEZ waters adjacent to that state. The state also regulates fisheries that occur in the EEZ that are not managed under the PFMC (e.g., pink shrimp, spot prawn, and hagfish).

The Columbia River Compact is charged by congressional and statutory authority ([Chapter 77.75.010 RCW](#)) to adopt seasons and rules for Columbia River commercial fisheries. In recent years, the Compact has consisted of the Oregon and Washington agency directors, or their delegates, acting on behalf of the Oregon Fish and Wildlife Commission and the Washington Fish and Wildlife Commission. When addressing commercial seasons for salmon, steelhead, and sturgeon, the Compact must consider the effect of the commercial fishery on escapement, treaty rights, and sport fisheries, as well as the impact on species listed under the Endangered Species Act (ESA). Although the Compact has no authority to adopt sport fishing seasons or rules, it is an inherent responsibility of the Compact to address the allocation of limited resources among users.

In 1991, Snake River sockeye were listed as an endangered species under the federal ESA. The subsequent listings of chinook, coho, chum, sockeye, steelhead, bull trout, green sturgeon, eulachon, and three species of rockfish in Puget Sound have resulted in a fundamental transformation of fishery and hatchery management.

The stated purpose of the ESA, approved by Congress in 1973, is to protect species and "the ecosystems upon which they depend." The law is administered by NMFS for saltwater species and by the U.S. Fish and Wildlife Service (USFWS) for freshwater species. For salmon and steelhead, the primary goal of the ESA is to restore wild, naturally spawning populations at risk of becoming extinct. Hatchery fish may be included in some listings, primarily as a means of preserving genetic characteristics of wild populations in decline.

Under the ESA, it is illegal to "take" (i.e., kill or harm) even a single member of a listed population without federal approval. This provision applies to a wide range of activities, from fisheries management to land development. Under the law, the Department must obtain approval to authorize any fishery or operate any hatchery program that could affect listed species. Fisheries in Washington are now operated under more than 50 permits that strictly limit impacts to ESA-listed fish. Similarly, the Department has submitted nearly 200 permit applications to operate hatchery programs that might pose a risk to ESA-listed species. For additional information regarding the legal requirements regarding the federal ESA please see the FAQ section.

State Statutes & Washington Administrative Code

The Washington State Legislature has vested the Commission and the Director with the authority to exercise discretion in the management of state fish and wildlife resources belonging to the people of the state. When exercising management discretion, the Legislature has established a set of broad management guidelines, with conservation as the paramount objective and subsidiary policy guidelines that must also be considered where consistent with the conservation objective. The provisions of [Chapter 77.04.012 RCW](#) of the Fish and Wildlife Code of the State of Washington establish important guiding principles for the management of state fish and wildlife resources.

1) Conservation. “The commission, director, and the Department shall preserve, protect, perpetuate, and manage the wildlife and food fish, game fish, and shellfish in state waters and offshore waters.”

2) Economic Well Being of Fishing Industry. “In a manner consistent with this goal [conservation], the Department shall seek to maintain the economic well-being and stability of the fishing industry in the state.”

3) Orderly Fisheries and Enhancement of Fishing. “The Department shall promote orderly fisheries and shall enhance and improve recreational and commercial fishing in the state.”

The legislature has provided the Department with statutory authority and direction for a broad range of activities, including fishery management, operation of hatchery programs, cooperative and volunteer programs, dispensing commercial and recreational fishing licenses, and the control of aquatic invasive species.

Ecosystem management connections

Managing fishing opportunities supports our ability to be successful with:

Preserving and restoring aquatic habitats and species. Information collected from both monitoring fish populations and fisheries harvest is used to contribute to this outcome.

Successful management of fishing opportunities is also supported by:

P.1 Produce trout and warm water game fish

P.2 Produce salmon and steelhead

P.3 Build and maintain hatcheries

A.1 Protect fish and their habitat from the effects of construction projects

A.2 Consult with business, landowners and governments re: aquatic species impacts and legalities

A.3 Reduce risk & decrease devastation of oil spills

A.4 Ensure that there remains enough water in waterways to allow for healthy fish lifecycles

A.5 Ensure fish survivability by removing stream barriers and appropriately addressing water diversions

A.6 Acquire funding for and complete habitat restoration projects

A.7 Recover and sustain diverse aquatic populations

A.8 Monitor and control aquatic invasive species

A.9 Study and plan for climate impacts on waterways and resulting effects on aquatic lifecycles

A.10 Enforce protection of aquatic habitats

L.1 Maintain and enhance habitat for hunting, fishing and conservation on WDFW owned & managed lands

L.2 Acquire new lands and sell lands that no longer support serving our mission

L.3 Build & maintain safe, sanitary and ecologically friendly water access sites

General Budget Overview

Primary cost drivers

- Staff costs to conduct field investigations for monitoring and testing fisheries, enforcing fishing seasons and regulations and planning and negotiating fishing days.
- Equipment: Boots, waders, vehicles, boats, durable tablets to use in the field, flights to do counts of fish, fuel
- Laboratory costs

Breakdown of 2015-17 investments by funding source and strategy

	Federal	User Fee	General Tax	License Plates	State and Local	Revolving Account	Total
F.4 Fin Fish Pop	\$ 23.5M	\$ 11.8M	\$ 10.6M		\$ 10.9M	\$ 0.1M	\$ 56.9M
F.3 Fishery Mgmt Plans	\$ 6.6M	\$ 6.2M	\$ 4.2M		\$ 2.9M	\$ 0.0M	\$ 19.9M
F.1 Enforce Rec Fishing	\$ 1.4M	\$ 6.1M	\$ 4.2M		\$ 0.4M	\$ 0.1M	\$ 12.2M
F.6 Fishing License Sales	\$ 0.3M	\$ 7.3M	\$ 0.2M	\$ 0.03M	\$ 0.3M	\$ 0.0M	\$ 8.1M
F.2 Enforce Com Fishing	\$ 0.8M	\$ 3.7M	\$ 2.6M		\$ 0.2M	\$ 0.1M	\$ 7.5M
F.5 Shellfish Pop	\$ 0.2M	\$ 1.2M	\$ 1.3M		\$ 0.5M	\$ 0.0M	\$ 3.3M
F.7 Fishing Marketing	\$ 0.0M	\$ 0.7M	\$ 0.0M	\$ 0.002M	\$ 0.0M	\$ 0.0M	\$ 0.8M
Total	\$ 32.9M	\$ 37.0M	\$ 23.2M	\$ 0.03M	\$ 15.3M	\$ 0.3M	\$ 108.6M
% of total	30%	34%	21%	0%	14%	0%	

Major benefits

- Commercial and recreational fisheries are a big business in Washington State. Each year, fishing related activities generate more than \$540 million in economic activity and support over 16,000 jobs.
- Statewide 155 commissioned peace officers enforce all state laws with a focus on natural resource conservation enforcement work.
- Management staff develop fisheries management plans for fish and shellfish with other countries, states and tribal governments to allocate harvestable resources while meeting associated conservation goals.
- Staff monitor and manage fish and shellfish species to assess population status and where appropriate determine harvestable surplus.
- The listing of species under the federal ESA requires significant workload to ensure that any management actions do not jeopardize the recovery of the listed species.

Performance Management

Performance Metrics

Below you will find a list of many of the measures for which the Department is able to compile data and some for which the Department would like to collect data but is not currently doing so. The Department is in the process of developing a performance-based system of management and strategic planning.

Metrics with present data:

- Number of recreational licenses sold
- Ex-vessel value of commercial fisheries
- Number of harvest management agreements completed with co-managers
- Angler effort in intensively monitored fisheries
- Fish and shellfish abundance and survival metrics for intensively monitored populations
- Portion of harvest share available to state managed fisheries actually harvested in some fisheries
- Meet defined service level agreement on WILD system defects
- Prepare report of all sales, churn rate, participation and editorials by the third Monday of each month
- Increase new anglers
- Angler effort in less intensively monitored fisheries
- Fish and shellfish abundance and survival metrics for less intensively monitored populations

Metrics we do not have data available for:

- Angler effort in passively monitored fisheries
- Return on marketing investment
- Current economic benefits assessment
- Angler preferences

Assessment of services provided and actions we can or cannot take to improve results for Washington

Commercial and recreational fisheries are at risk due to increasing costs, increasing requirements to secure ESA permits, higher standards for fishery monitoring, and flat to declining funding.

F.1 – Enforce recreational fishing opportunities and regulations; and F.2 – Enforce commercial fishing opportunities and regulations.

The concept of “if you don’t go, you don’t know” – meaning, if officers are not on the landscape, or are spread far too thin on the landscape, effective deterrence of criminal activity is diminished. In some cases, there may be one officer for an entire county or multiple counties. Enforcement officers are uniquely trained and extremely well-equipped to handle any Law Enforcement situation they encounter regardless of where they are in the state. Simply put, more officers create more deterrence for illegal activity and an increased ability to regulate activity and enforce state law and Department rules on state-owned or

controlled lands. The Department has officers with training, equipment and authority, but the number of officers per wildlife area is scant.

F.3 - Develop, negotiate, and implement fishery co-management plans

The Department cooperatively manages fisheries with treaty tribes and neighboring states and countries, implementing laws, court orders, and international agreements. These plans ensure that fisheries are conducted to meet federal ESA requirements and conservation goals. To be successful the Department is continually working to develop better ways of involving stakeholders in the process to ensure transparency in decision making. Additional resources, specifically FTEs, to improve communication in order to increase the level of understanding and trust by constituents during development of fishery management plans is needed.

F.4 - Monitor and manage fin fish populations

The Department monitors and manages fin fish populations statewide to ensure conservation objectives are met and fisheries are conducted within established conservation guidelines. Current funding is not adequate to meet growing conservation requirements and provide sustainable commercial and recreational fisheries.

On Washington's coast, additional resources are needed to monitor trip and catch information to meet Pacific Salmon Treaty and federal permit requirements and to support ongoing population assessment work using creel surveys, adult spawner escapement estimates, and genetic analysis.

In Puget Sound the Department needs additional resources to secure and implement federal ESA permits for the [Puget Sound Chinook Harvest Management Plan](#). Funding is also needed to complete the [Puget Sound Early Marine Survival study](#) and implement actions. Additional long-term funding is also needed to monitor selective fisheries for salmon and to intensively monitor new and developing fisheries e.g., [Skagit River wild steelhead catch and release](#).

F.5 - Monitor and manage shellfish populations

The program goal of shellfish fishery sustainability has been improved with precautionary management actions in the geoduck, sea cucumber, sea urchin, shrimp and crab fisheries. When indicated, local shellfish populations are assessed and managed for recovery. This will ensure future commercial and recreational harvest opportunity.

The Department's commitment to long-term sustainability of Washington's fisheries also requires program emphasis on assessing long-term threats to Washington's shellfish resources from changing ocean conditions. Funding for increased monitoring of physical variables (e.g. temperature, dissolved oxygen) and the abundance of sensitive life stages (larvae or juveniles) could provide a baseline to track these threats moving forward and identify problem areas.

The program goal of promoting shellfish population health by reducing disease risks from introduction and transfer of shellfish diseases could be improved with additional monitoring of high-risk sites for emergent disease risks such as OHV-1.

F.6 – Sell recreational fishing licenses

The Department transitioned to a new license sales system in December 2016. This new system allows for a more customer focused experience as well as providing the Department the opportunity flexibly adapt the utility of the system based on customer needs. Furthermore, this new system provides reporting features and functionality to easily provide agency feedback and information.

F.7 – Market fishing opportunities

The marketing unit is relatively new and is currently exploring opportunities to reach new user groups including youth, women and minorities. Additionally, the marketing unit is focusing efforts on R4: *recruit* new anglers, *retain* current anglers, *reactivate* anglers that stopped buying licenses and considering agency and conservation *relevancy* into the future.

Produce Hatchery Fish

In order to serve the mission:

- "...provide sustainable fish and wildlife recreational and commercial opportunities"

WDFW must:

- Produce hatchery fish

So we:

- Produce trout and warm-water game fish
- Produce salmon and steelhead
- Build and maintain hatcheries

Introduction & Overview

Produce fit, healthy fish to benefit the citizens of Washington State while providing conservation to natural origin salmonids.

P.1- Produce trout and warm water game fish

- The Department operates hatcheries for trout and warm water game fish production that benefit recreational fisheries. This activity includes the entire fish production cycle: collecting eggs from broodstock; raising fish from eggs until release age; and transporting fish to lakes and waterways. These fish are produced exclusively for recreational fishing.
- WDFW's mission is to preserve, protect and perpetuate fish, wildlife and ecosystems while providing sustainable fish and wildlife commercial and recreational opportunities. Producing trout and warm water game fish provides statewide recreational fishing opportunities to constituents while meeting the Department's Strategic Goals. Angling opportunities provided by WDFW also contributes to local economies through sales of equipment, lodging, dining, etc.

P.2- Produce Salmon and Steelhead

- The Department operates hatcheries for fish production that benefit commercial and recreational fisheries and fulfill obligations to maintain tribal fishing rights. Production at hatcheries is conducted consistent with ESA requirements and hatchery reform goals. This activity includes the entire fish production cycle for salmon and steelhead: raising fish from eggs until release age; coded-wire tagging and/or marking release groups, possible transport to their release location; collecting eggs upon their return.
- Producing salmon and steelhead not only provide angling opportunities but also help enhance and protect wild runs of salmon and steelhead and meet Department goals 2 and 3. Hatchery production also allows the Department to meet management plans and court ordered directives (*US v. WA*, for example). Angling opportunities for steelhead and salmon also contribute to local economies through guide and charter services, equipment sales, dining, lodging, etc.

P.3- Build and maintain hatcheries

- The Department performs maintenance, repairs and construction activities necessary to keep hatcheries in good working order and to expand facilities, when appropriate, to meet new functions. Transport fish in support of fish production operations (P.1 and P.2)

Connection to agency mission & strategic plan

Production of hatchery fish is critical for the majority of fishing opportunities throughout Washington State – trout and anadromous salmon and steelhead fisheries rely on hatchery fish in our waterways. In addition, hatchery conservation programs contribute to protecting and preserving natural runs of salmon and steelhead as mentioned in Department Goal 1. Hatchery programs also help us meet co-manager agreed to management plans and court ordered directives (*US v. WA*, for example). Angling opportunities help the Department meet strategic goals by contributing to local economies.

Legal Requirements & Statutory Authority

- [RCW 77.44.010](#): Warm Water game fish enhancement program
- Court cases/treaties – [US v. Washington](#), [US v. Oregon](#)
- ESA requires that the Department mitigates interactions between wild and hatchery fish stocks.
- Federal Energy Regulatory Commission Agreements require Hydro Electric Mitigation
- [Pacific Salmon Treaty](#)
- See addendas; Legal Requirements, ESA Policy Summary - for additional information

Ecosystem and opportunity management connections

Producing hatchery fish supports our ability to be successful with:

F.3 Develop, negotiate and implement fishery co-management plans

F.4 Monitor and manage fin fish populations

A.2 Consult with business, landowners and governments re: aquatic species impacts and legalities

A.4 Ensure that there remains enough water in waterways to allow for healthy fish lifecycles

A.7 Develop and implement plans to recover and sustain diverse fish populations

L.1 Maintain WDFW owned & managed lands

R.1 Organize and promote wildlife viewing opportunities

General Budget Overview

Primary cost drivers

1. Staff for hatchery operations
2. Hatchery construction & maintenance
3. Utilities for hatchery operations
4. Fish food
5. Fish Health
6. Marking and tagging of hatchery fish
7. Construction, repairs and preventive maintenance of hatchery facilities and infrastructure
8. Transportation of fish between hatcheries and release sites
9. Capital budget development and planning for hatchery facilities and infrastructure
10. Water quality and quantity...gravity-fed or pump-fed will impact utility costs

Breakdown of 2015-17 investments by funding source and strategy

	Federal	User Fee	General Tax	State and Local	State Bonds	Revolving Account	Grand Total
P.2 Salmon and Steelhead Prod	\$ 23.8M	\$ 8.0M	\$ 20.3M	\$ 20.6M		\$ 0.1M	\$ 72.8M
P.3 Hatchery Building & Maintenance	\$ 4.4M	\$ 2.5M	\$ 0.6M	\$ 2.5M	\$ 21.4M	\$ 1.9M	\$ 33.2M
P.1 Trout & Game Fish Prod	\$ 5.5M	\$ 5.8M	\$ 3.6M	\$ 7.8M		\$ 0.0M	\$ 22.7M
Total	\$33.6M	\$ 16.3M	\$24.6M	\$ 30.8M	\$ 21.4M	\$ 2.0M	\$ 128.7M
% of total	26%	13%	19%	24%	17%	2%	

Major costs, benefits and rationale

- Costs of complying with ESA/protecting wild fish
 - ESA compliance limits hatchery production which in turn limits harvest opportunities and economic benefits to Washington citizens
 - Increased monitoring and evaluation costs
 - Relaxing current ESA constraints would allow increased salmon and steelhead production allowing increased prey based forage for Southern Resident Orca populations
- Maximizing production as a way to get value from capital investment
 - WDFW releases the highest number of a quality product allowed based on compliance, utilizing the full extent of the capital investment and within current funding allocation
 - Significant capital investments are required to meet ESA compliance
- Marking salmon and steelhead
 - Allows maximum harvest opportunities while conserving wild fish populations
- Limitations to production –
 - Competition with wild fish

- Poor water quality
- Budget constraints
- Aging Infrastructure
- Permits
- Agreements and contracts
- Outreach and Education
 - Hatcheries have educational value by providing opportunities to learn about the life cycle of fish and the impacts that fish have in our ecosystem
 - Provide tourism opportunities
 - Provide eggs/carcasses for educational opportunities in classrooms
 - Job skills training
 - Frontline for public relations for WDFW
- Co-Ops & Public & Private Partnerships
- Carcass distribution
 - Fish carcasses are placed strategically into watersheds to add marine derived nutrients pivotal to recovery and maintenance of ecosystems
 - Carcasses are sold to generate revenue for Regional Fishery Enhancement Groups
 - Carcasses are donated for food banks/nutrition programs, educational purposes and research

Performance Management

Performance Metrics

Below you will find a list of many of the measures for which the Department is able to compile data and some for which the Department would like to collect data but is not currently. The Department is in the process of developing a performance-based system of management and strategic planning.

Metrics with present data:

- Number of lakes stocked annually with trout
- Number locations planted with warm water specie
- Number of anglers
- Number of angler days
- Number of marked fish
- Number of steelhead released annually
- Number of salmon released annually
- Number of catchable trout/warm water game fish released annually
- Commercial Harvest
- Commercial Tribal Harvest
- Recreational Salmon Harvest
- Recreational Steelhead Harvest
- Number of sites with salmon or steelhead releases each year
- Number of eggs taken

- Number of fish used for broodstock
- Number of fish returning to the hatcheries
- Number of carcasses sold to benefit Regional Fisheries Enhancement Groups
- Number of carcasses donated to food banks
- Number of carcasses donated for education/research
- Survival and distribution of hatchery fish

Metrics we do not have current data for:

- Average cost per salmon & steelhead released
- Average cost per trout/warm water species released

Assessment of services provided and actions we can or cannot take to improve results for Washington

- Over the past five years, WDFW hatchery production included an average annual release of 18 million trout, 148 million salmon and steelhead, and 47 thousand warm water species into our waterways. There were over 5 thousand separate locations planted each year. Of the salmon and steelhead released each year, over 100 million are marked and/or tagged.
- With additional funding we would be able to produce more trout and stock more lakes. However, we are at or near capacity for hatchery production of salmon and steelhead due to interactions with wild ESA listed fish or lack the funding and/or infrastructure to produce additional fish.
- Production is near maximum capacity in these areas:
 - Western Washington rivers
- Production could be enhanced in these areas:
 - Eastern Washington lakes
- Hatcheries collect an average of 600 thousand adult salmon and steelhead, and 194 million eggs each year. Returning adult salmon and steelhead are checked for marks and tags, and over 85 thousand return with a coded wire tag each year. Of the returning adults 150 thousand are planted for an opportunity to spawn or be harvested.
- WDFW spawns an average of 233 thousand fish. Fish of usable quality are donated to foodbanks, tribes, and school groups, and the remainder are sold to a contract buyer with revenue going to regional fisheries enhancement groups. Some fish are used for nutrient enhancement by placing them in streams where they may have naturally died had they not come back to the hatchery. Unusable quality fish are disposed of.

Manage Hunting Opportunities



Introduction & Overview

The principles that define the North American Model of Wildlife Management are steeped in the hunting tradition. Hunters were the original conservationists and are still a critical economic driver of wildlife conservation through license fees and taxes on sales of firearms, ammunition, and archery equipment in North America. As the state's Wildlife Management Agency, the Washington Department of Fish and Wildlife (WDFW) is entrusted to manage the public's wildlife in a sustainable manner. Managing these wildlife species while providing sustainable hunting opportunities into the future is one of the most important services that this agency provides. A summary of this work is provided below.

H.1- Enforce hunting opportunities and regulations

WDFW Enforcement regulates hunting opportunities by patrolling open and closed areas of the State of Washington. They enforce rules and laws pertaining to the method, time, location, and manner in which wildlife is hunted. The regulation of hunting is continuous, regardless of season or user group.

H.2- Provide hunter education opportunities

The Department coordinates activities to provide skills to students throughout the state for safe and responsible firearm handling, hunting, and trapping. Nearly 1,000 instructors donate approximately 26,000 volunteer hours to teach 10,000-13,000 students annually.

H.3- Set sustainable hunting seasons

The Department conducts public meetings and works with advisory groups and hunting organizations to develop hunting season recommendations that are presented to the Fish and Wildlife Commission for potential adoption. Data from game population surveys and hunter harvest are used to inform these decisions to ensure sustainability. In addition, pheasants are released in various locations in Washington to provide hunting opportunity and help support the recruitment, retention, and reactivation of hunters.

H.4- Survey game populations and population trends

Department employees conduct wildlife surveys to collect information on the age, sex, number, location, and distribution of game birds and animals. These data help determine if populations are decreasing, increasing, or stable, which aids the Department in establishing hunting opportunities that ensure population conservation.

H.5- Study game species populations

The Department uses traditional research techniques and develops state-of-the-art methods to investigate different aspects of wildlife natural history, disease, and population changes. Examples of these activities include assessing elk herd health, investigating how wolves and other predators interact with moose, deer, and elk populations, and developing black bear population estimation techniques.

H.6- Respond to wildlife conflicts and dangerous wildlife (non-wolf)

Conflict issues involving public safety with bear, cougar, moose, and wolves are generally resolved by WDFW Enforcement. Non-public safety related conflict issues with deer, elk, turkey, and bear timber damage are resolved through the Wildlife Program. For this subset of wildlife conflict, a primary objective of WDFW is to minimize conflict and assist landowners with prevention, mitigation, and, when necessary, compensation for property damage or loss (as provided by law). Many times, hunting is an important tool to help reduce conflict. Conflict issues with small game, furbearers, and unclassified species (raccoons, beavers, coyotes) are typically handled through self-assistance materials or a certified Wildlife Control Operator. WDFW Enforcement responds to and proactively educates the public on dangerous wildlife encounters (wildlife conflict) with humans. They also regulate feeding or attracting large wild carnivores under RCW 77.15.790.

H.7- Secure hunting access on private lands

The future of hunting depends on the ability of hunters to gain access to land. With more than half of the state's landmass in private ownership private lands play a very important role in providing both wildlife

habitat and hunting opportunity. Since the mid-1900s, the Department has established agreements with private landowners encouraging them to maintain and enhance habitats to sustain healthy and productive fish and wildlife populations and allow hunters access to their lands. The Department has succeeded in opening over one million acres of private farmland, timberland, and wetland for hunting, fishing, and wildlife viewing activities.

H.8 – Sell hunting licenses

The Department coordinates with a network of over 600 license dealer shops throughout the state and manages the license sales system and associated customer service needs. These services make it easy and convenient for recreational anglers and the commercial fishing industry to purchase and maintain licenses. The Department sells recreational fishing licenses to nearly 800,000 anglers annually.

H.9 – Market hunting opportunities

Many Washingtonians are unaware of the hunting opportunities that are available to them. The Department has a fairly new marketing unit organizes events and campaigns in order to effectively communicate hunting opportunities throughout the state.

Connection to agency mission & strategic plan

By managing for hunting opportunity we are helping reach three of the goals that are spelled out in the WDFW Strategic Plan.

Goal 1: Conserve and protect native fish and wildlife.

The population monitoring, protection, and research help us assure that wildlife populations will endure and provide future generations the opportunities to enjoy an abundant wildlife resource. Because of careful management, Washington hunters have the opportunity to hunt 10 big game animals, 19 small game species, and 42 migratory bird species.

Goal 2: Provide sustainable fishing, hunting, and other wildlife-related recreational and commercial experiences.

About 192,000 people hunt in Washington. Most of those hunt big game (163,000), but many also hunt small game (93,000). About 98 percent of Washington hunters are residents of the state. Harvested wildlife is a great source of naturally grown protein, and hunters spend approximately 2.3 million days afield hunting big game, small game, and game birds annually.

Goal 3: Promote a healthy economy, protect community character, maintain an overall high quality of life, and deliver high-quality customer service.

Hunters are an important economic driver in Washington State. According to the [2011 United States Fish and Wildlife National Survey of Fishing, Hunting, and Wildlife Associated Recreation](#), hunters go afield an average of 12 days apiece each year. They spend over \$300,000,000 on hunting trips (e.g., gas, lodging, food) and associated hunting equipment, including over \$15 million in hunting license sales.

Legal Requirements & Statutory Authority

[RCW 77.04.012](#) Mandate of Department and commission - gives the Department the authority and mandate to do the following:

- The commission, director, and the Department shall preserve, protect, perpetuate, and manage the wildlife and food fish, game fish, and shellfish in state waters and offshore waters.
- The Department shall conserve the wildlife and food fish, game fish, and shellfish resources in a manner that does not impair the resource.
- The commission may authorize the taking of wildlife, food fish, game fish, and shellfish only at times or places, or in manners or quantities, as in the judgment of the commission does not impair the supply of these resources.
- The commission shall attempt to maximize the public recreational game fishing and hunting opportunities of all citizens, including juvenile, disabled, and senior citizens.

[RCW 77.12.020](#) Wildlife to be classified - authorizes the Fish and Wildlife Commission to classify wild animals as game animals and wild birds as game birds. This classification is required to allow legal hunting.

[RCW 77.12.150](#) Games seasons- authorizes the director to use emergency rule making to affect a change to a hunting season.

[RCW 77.12.140](#) Acquisition or sale of wildlife - authorizes the Department to remove wildlife that is destroying or injuring property.

[RCW 77.12.790](#) Eastern Washington pheasant enhancement program - establishes the eastern Washington pheasant enhancement account/program and ties.

[Chapter 77.36 RCW](#) Wildlife Damage – Authorizes the commission to establish rules (including method, species, disposal, and compensation) for property damage and threats to human safety caused by wildlife.

Ecosystem and opportunity management connections

Managing hunting opportunities supports our ability to be successful with:

- L.1, L.2
- Managing hunting contributes data and information of terrestrial species to support T.4, T.5, T.7.
- Managing hunting contributes to the conservation of game species which provide opportunities for wildlife watching in support of R.1.
- Providing hunter education courses contributes to safety of all hunters throughout Washington state, supporting X.8

Managing hunting opportunities is supported by:

- L.1, L.2 support hunting opportunities by offering affordable hunting access to lands held within the public trust.
- T.1- T.5, T.7 support hunting by ensuring habitat health for game species is preserved.

General Budget Overview

Primary cost drivers

1. Staff costs for wildlife law enforcement, conducting surveys and research, responding to wildlife nuisance and depredation, hunter education, and providing access to private land.
2. Equipment costs (vehicles and other tools needed to conduct the work).
3. Helicopter and fixed wing cost (used to conduct many of the wildlife surveys).
4. Radio collar and other wildlife capture costs (includes drugs needed for immobilization and animal welfare).
5. Costs associated with paying producers for wildlife-caused losses in crop or livestock value.
6. Costs associated with acquiring hunting and fishing privileges on private lands.

Major costs, benefits and rationale

1. Staff costs

Staff costs for hunter education, conducting surveys and research, responding to wildlife nuisance, depredation and wildlife law enforcement.

Each of the six regions has a Wildlife Program manager that supervises Wildlife field employees. The six administrative regions are divided into 17 districts statewide, and each district usually has two biologists. In addition, the Department employs about 20 wildlife conflict management biologists and 17 private lands biologists distributed around the state. These employees are the backbone for managing hunting opportunities for the public, and without their efforts it would be almost impossible to gather the information required to properly manage the state's hunted wildlife. This on-the-ground effort is essential to provide ample hunting opportunity and maintain game populations into the future. The conflict and private lands biologists also provide a service that promotes wildlife and hunting on private lands. About 50 percent of Washington is private land, and without cooperation from private landowners, the Department could not effectively manage the resource.

There are 10 HQ-based employees who administer statewide game species management in addition to statewide wildlife conflict and private lands access management. There are 10 species specialists supervised by HQ and deployed statewide to conduct research and help monitor the game species they are assigned. These staff members ensure field operations are effective by providing state-of-the-art science, technical direction and help conducting wildlife surveys. Headquarters-based staff also manage the statewide budgets that are needed to complete this work.

There are 12-HQ based employees who manage research of all wildlife (including game species) and are responsible for maintaining wildlife survey and harvest data, as well as Global Information Systems (GIS) data for game species. Sixteen scientists are also deployed statewide to conduct species specific research used for management. These employees assist with conducting more complicated and long term research. They also maintain the systems where many of the collected data are stored. They help collect and analyze harvest data essential for responsible game management, and coordinate with universities to conduct agency relevant research.

Hunter Education Division administers the Hunter Education and Master Hunter programs. This division currently has one hunter education field coordinator in each region to coordinate and support volunteer instructors. However, two of the field coordinators positions are part-time (Regions 1 and 2). The employees of this division facilitate a quality educational experience that significantly contributes to reducing hunting incidents, and teaches firearm safety, wildlife conservation and identification, hunting responsibility, hunting regulations, and basic first aid/survival, etc. The program contributes to recruitment of new hunters and associated hunting license purchases, and therefore plays an important role in safety, economic vitality, and quality of life.

2. Equipment costs (vehicles and other tools needed to conduct the work)

Most equipment costs are related to vehicle and travel cost associated with the activities described in this document. Much of what the Department does would be impossible without using these resources.

3. Aerial surveys (used to conduct many of the wildlife surveys)

Many surveys and enforcement activities require helicopter and fixed wing aircrafts. The Department typically contracts with vendors to accomplish these tasks. The cost associated with flying can be substantial given the large areas staff members have to cover.

4. Radio collar and wildlife capture costs (includes drugs needed for immobilization and animal welfare)

An effective method to monitor wildlife movement and survival is to collar animals with radio or GPS transmitters. This method can have a high initial cost, but the information gathered cannot be effectively recorded any other way. It becomes cost effective when the amount of data collected is weighed against the amount of time saved for biologists to complete other tasks.

5. Wildlife damage

The Department incurs costs associated with the obligation to pay crop and livestock producers for losses caused by wildlife. By law, the Department is obligated to pay for commercial crop losses caused by deer or elk and for livestock losses caused by bears, wolves, or cougars.

6. Private lands

The Department invests over \$500,000 per biennium in contracts with private landowners to improve wildlife habitat and allow public hunting. Since over half of the state is in private ownership, this is a key investment in current and future hunting opportunities in Washington.

Breakdown of 2015-17 investments by funding source and strategy

	Federal	User Fee	General Tax	State and Local	License Plates	Revolving Account	Grand Total
H.1 Enforce Hunting Opportunities	\$ 0.6M	\$ 5.8M	\$ 4.5M	\$ 0.6M		\$ 0.1M	\$ 11.7M
H.4 Survey Game Pop	\$ 4.7M	\$ 2.4M		\$ 0.2M	\$ 0.2M		\$ 7.5M
H.6 Respond to Wildlife Conflicts	\$ 2.6M	\$ 2.6M	\$ 1.1M	\$ 0.3M			\$ 6.7M
H.5 Study Game Species Pop	\$ 2.7M	\$ 2.3M		\$ 0.2M	\$ 0.1M		\$ 5.3M
H.8 Hunting License Sales	\$ 0.2M	\$ 4.0M	\$ 0.1M	\$ 0.1M			\$ 4.5M
H.7 Secure Hunting Access on Private Lands	\$ 2.0M	\$ 1.4M		\$ 0.1M			\$ 3.5M
H.3 Set Hunting Seasons	\$ 1.0M	\$ 2.2M		\$ 0.1M			\$ 3.3M
H.2 Hunter Education	\$ 2.3M	\$ 0.1M					\$ 2.5M
H.9 Hunting License Marketing		\$ 0.3M					\$ 0.3M
Total	\$ 16.3M	\$ 21.0M	\$ 5.8M	\$ 1.6M	\$ 0.3M	\$ 0.1M	\$ 45.3M
% of total	36%	47%	13%	4%	1%	0%	

Performance Management

Performance Metrics

Below you will find a list of many of the measures for which the Department is able to compile data and some for which the Department would like to collect data but is not currently. The Department is in the process of developing a performance-based system of management and strategic planning.

Metrics with present data:

- # of hunting licenses sold
- Demographics of our hunting public
- Population estimates for many game species
- Harvest data for many game species
- Hunter effort information for many game species
- Amount of contact that WDFW Enforcement has with hunters
- Acres of private land access
- Number of private land cooperators
- Mapping/GIS layers
- Monthly and annual # of hunter education classes offered (2015-2017)

- Monthly and annual # of hunter education students registered, passed, failed, etc. (2014-2017)
- 2012 age distribution of hunter education students
- Monthly and annual measures of meeting hunter education public demand (# class seats available, # students registered) (2015-2017)
- Monthly and annual rates for student pass, fail, incomplete, and no-show (2014-2017)
- Monthly and annual # of hunter education deferrals (2014-2017)
- Monthly and annual # of hunter education exemptions (field skills portion of online course) (2014-2017)
- Annual # of hunter education instructors
- Annual # of volunteer instructor hours accrued
- Meet defined service level agreement on WILD system defects
- Prepare report of all sales, churn rate, participation and editorials by the third Monday of each month
- ROI on marketing investment
- Increase new hunters
- Increase female hunters
- Increase youth hunters
- Age distribution of hunter education students
- Average cost per hunter education student
- # and % of hunter education graduates who purchase a future hunting license
- Number of private lands contracts
- Costs of different programs

Metrics the Department does not have current data for:

- Historical private property data (properties that were once enrolled)
- Average cost per private land property
- Harvested animals (counts) on private properties enrolled in our program/hunter success rates
- Overall level of private land access per property (available hunt days per year)
- Overall hunter satisfaction
- Overall private landowner satisfaction

Assessment of services provided and actions we can or cannot take to improve results for Washington

Maintain healthy and abundant game species

Although the Department has sufficient protocols in place to monitor game species, there is certainly room for improvement. Many monitoring protocols are currently being reviewed and new ones are being developed to improve the information used to manage harvest of game species. Habitat availability and quality are the two biggest factors that affect game populations, and there are not currently good processes to affect these two factors on federal, private, and some state land.

Provide hunting opportunity

The Department does well in providing hunting opportunity. General seasons are maintained for many of the abundant game species, including longer seasons when the resource allows. Opportunity means different things to different people, and it is important to be aware of that and try to provide as much diversity of opportunity as possible.

Provide opportunity for high quality protein

This goes along with the bullet above. Washington's hunter success rate is fairly high given that the Department is maximizing opportunity. Hunters harvest and consume over 40,000 big game and over 500,000 small game animals (e.g., waterfowl, pheasant, forest grouse, turkey, rabbit) annually. The quality of this natural food source has long been a value of traditional hunters and it is one of the developing thoughts for people choosing to hunt into the future.

Boost local economy

Hunters are an important economic driver in Washington State. According to the United States Fish and Wildlife National Survey of Fishing, Hunting, and Wildlife Associated Recreation, hunters go afield an average of 12 days apiece each year and spend over \$300,000,000 on hunting trips (e.g., gas, lodging, food) and associated hunting equipment, including over \$15 million in hunting license sales.

Create partnerships with private landowners to ensure healthy and abundant game species populations and encourage public access for hunting and fishing.

The Department has a long history of working with private landowners to provide habitat and hunting and fishing access and with over a million acres under agreement, has been relatively successful. That said, with over half of Washington State in private ownership, fostering good relationships with private landowners is very important to Washington's wildlife and its hunters and anglers and there is always room to improve. At this point in history, it has become extremely clear that more must be done to work with private forest landowners to allow hunting and fishing on their lands. A very concerning trend toward requiring hunters and anglers to purchase an expensive access pass from industrial forest landowners in western Washington has emerged over the past five years and the Department is committed to using available resources and tools to develop hunting and angling land access opportunities for the public. While WDFW wants to prioritize this work, the authorities granted to the agency are limited and it will be important to look for creative solutions that may include working with the legislature to ensure future hunting and fishing opportunity.

Hunter Education

The Department's Hunter Education program is very successful, and with changes that were made in recent years, should be set to make even more improvements into the future. We will continue to struggle at times to provide as many hunter education classes as demand indicates, but investments in regional coordinators should help. Currently, WDFW has one hunter education field coordinator in each region to coordinate and support volunteer instructors. However, two of the field coordinators positions are part-time (Regions 1 and 2). Additional funding would allow WDFW to make one or both positions full time, to better serve the instructors and the public in those regions. Additionally, we envision one or both of those full-time positions to also coordinate volunteer projects in those regions, thereby accomplishing more wildlife and habitat conservation and land management projects utilizing volunteers.

Additionally, the rate at which hunter education graduates purchase a future hunting license is relatively low. WDFW is in the process of developing a Hunter Recruitment, Retention and Reactivation (R3) Plan. This exciting opportunity to develop a R3 program within the Department will require additional resources, both in staff and funding. With the national R3 plan completed, Washington is poised to begin developing a state program.

Enforcement

WDFW Law Enforcement has done some great work over the years and will continue to do so. One challenge is to ability to recruit and retain officers. There are multiple reasons this challenge exists and the Department will continue to work on strategies to help address those challenges into the future.

Provide Recreational Opportunities

In order to serve the mission:

- "Preserve, protect and perpetuate fish wildlife and ecosystems while providing sustainable fish and wildlife recreational and commercial opportunities"

WDFW:

- Provides recreational opportunities

So we:

- Develop, organize and promote wildlife viewing opportunities
- Complete other work that directly benefits non-consumptive opportunities

Introduction & Overview

Outdoor lifestyles are a well-recognized and significant part of Washington's identity and economy, and healthy wildlife populations contribute to our enjoyment of the outdoors and the economic vitality of Washington ([Legislative Findings 2003 c 317 § 1](#)). Recreational opportunities receive passive benefit derived from the overall scope of the Department mission. School-children visiting a hatchery, a wildlife watcher enjoying the beauty of a large bull elk in the wilderness and hikers enjoying the spring wildflowers are all examples of non-consumptive recreationists benefiting from the work of the other Department outcomes.

Consistent with the Department mission, WDFW uniquely meets the non-consumptive recreational need for communities, interested groups, conservation partners, and individuals – both in person and online – as the Department:

- 7.1 Organizes and promotes wildlife viewing opportunities *and*
- 7.2 Performs other work with the primary benefit to non-consumptive recreational opportunities.
- Contributes to all other Department work, passively benefitting recreation.

Management of Department lands provides significant opportunity for non-consumption recreation. The details in this outcome reflect work on WDFW owned and managed lands with an estimated \$8 million in investments, categorized in “acquire and manage lands” outcome, that can be attributed to the cost-share benefitting non-consumptive recreationalists.

WDFW’s role in public lands recreation is unique among land managers. While some other public recreation land managers – like state, national, and county parks – provide a more developed or directed experience with recreation facilities (i.e., developed campgrounds, trails, play fields), WDFW lands and opportunities on non-WDFW owned property offer a wildland experience with fewer developed facilities, opportunity for natural world exploration and adventure, and a range of native fish and wildlife-related recreation.

To serve recreationalists, the Department:

- Provides places for actively experiencing wildlife-related recreation.
- Builds infrastructure to serve wildlife viewers and outdoor recreation enthusiasts (e.g. wildlife viewing areas, trails, parking areas, restrooms, boat ramps, and interpretive signage/kiosks).
- Manages lands to support safe and enjoyable public access (litter and weed control, facility maintenance, etc.).
- Develops and provides tools to make outdoor recreation more convenient (e.g. directional guides/maps, tours, interpretive displays, and presentations).
- Initiates watchable wildlife projects and outdoor events (assist, train, and deliver).
- Funds development of key native wildlife attractions in their natural habitats and ways to protect and promote them.

Examples of non-consumptive recreational activities include wildlife festivals, citizen science, bird-watching, land-based whale watching, fish-migration viewing, beach-combing, target shooting, outdoor learning, outdoor skill-building, self-guided outdoor experiences, community-centric resources to interpret local wildlife and fish resources, and active lifestyle opportunities that allow the public direct contact (e.g. kayaking, tubing, wading, snowshoeing, mountain biking, hiking) with wilderness and wild native places for first-hand wildlife and habitat experiences.

The quality of outdoor recreation activities is dependent upon our ability to conserve fish, wildlife, and their habitats. While most outdoor recreationists contribute to conservation efforts through a variety of means, there may be additional opportunities for them to contribute directly to the Department’s conservation efforts that are foundational to their outdoor activities.

Connection to agency mission & strategic plan

We actively plan, manage, and develop facilities, sites, and locations to facilitate the public’s enjoyment of the outdoors. We participate in, lead, or help organize, provide funds for, and conduct outreach about events, festivals, self-guided exploration and learning, and other tools that support wildlife viewing and wildlife-based outdoor experiences.

Awareness of, engagement in, and data contribution to native wildlife and fish conservation resulting from firsthand experience and supported/enhanced outdoor lifestyles supports the Department's ability to conserve and protect native fish and wildlife. Wildlife-related recreational experiences, like bird watching, salmon migration watching, elk watching, or whale watching provide recreational opportunities. Community economies and character supported by wildlife-related recreation like destination hiking, bird watching, photography, target shooting, bird dog training/trails, kayaking, and wildlife viewing experiences such as the Othello Sandhill Crane Festival, Whale Trail sites, birding "hotspots", and fish-migration viewing promote a healthy economy.

Goals & Populations Served

The Department strives to build and maintain a network of conservation partners, engaged communities, communications specialists, and the public, both in person and online, who understand the value of, participate in, and are willing to commit support for wildlife viewing and wildlife-based outdoor recreation. This network would foster durable community-supported conservation solutions, maintain and improve opportunities for future generations to experience Washington's wildlife and fish resources firsthand, and contribute to a wildlife-based outdoor economy.

Legal Requirements & Statutory Authority

[RCW 77.04.055](#) Commission Duties (excerpt): *"... maximize ... outdoor recreational opportunities compatible with healthy and diverse fish and wildlife populations."*

[RCW 77.12.880](#) Wildlife Program Management (full text): *"The Department shall manage wildlife programs in a manner that provides for public opportunities to view wildlife and supports nature-based and wildlife viewing tourism without impairing the state's wildlife resources."*

[RCW 77.32.560](#) Watchable Wildlife purpose (excerpt): *"... initiating partnerships with communities to jointly develop watchable wildlife projects, building infrastructure to serve wildlife viewers, assisting and training communities in conducting wildlife watching events, developing destination wildlife viewing tools and aides, and offering grants to assist rural communities in identifying key wildlife attractions and ways to protect and promote them."*

[RCW 77.12.068](#) Responsible Wildlife Viewing (excerpt): *"... shall disseminate information ..., whale and wildlife viewing guidelines, and other responsible wildlife viewing messages to educate Washington's citizens on how to reduce the risk of disturbing southern resident orca whales."*

[RCW 46.68.425](#) Special License Plate Fees: Wild on Washington (Bald Eagle plate) deposited per [RCW 77.12.170](#) and appropriate fund use defined by [RCW 77.32.560](#).

Rationale: Healthy, self-sustaining, native populations of fish and wildlife and the habitats on which they depend provide invaluable ecosystem services, quality of life, property value, and economic drivers through outdoor recreation. People conserve what they care about. Firsthand experiences and outdoor activities connect people with the natural resources that sustain us and our economy, provide a sense of place and

civic pride, build healthy and resilient people, and engage families in their community and active, life-long learning.

Agency Connections

Providing outdoor recreation supports our ability to be successful with:

- Preserving and restoring aquatic habitats and species through building awareness of issues potentially impacting our aquatic habitats and species and building an appreciation of our ecosystems.
- Managing lands because citizens engage in citizen science contributions while recreating on our lands.
- Preserving and restoring terrestrial habitats and species through building awareness of issues potentially impacting our terrestrial habitats and species and building an appreciation of our ecosystems.
- Communicating Department matters with the public and legislature through engagement of a user group with participants who often do not hunt or fish.

Providing outdoor recreation is supported by:

- Preserving and restoring aquatic habitats and species without which, recreational experiences and opportunities would be diminished due to increasingly degraded ecosystems.
- Acquiring and managing lands because those lands are available to the citizens of Washington for recreational purposes.
- Preserving and restoring terrestrial habitats and species without which, recreational experiences and opportunities would be diminished due to increasingly degraded ecosystems.
- Management of fishing opportunities through conservation efforts for ESA listed fish and opportunities to see them in Washington waterways.
- Production of hatchery fish, providing local opportunities to engage in the fish production cycle and educate and interest future recreationalists.
- Management of hunting opportunities to ensure hunting safety that will not danger recreationists as well as preserving and perpetuating game species to the benefit of wildlife viewing.
- Foundational business management such as IT infrastructure, financial management and strategic leadership.

General Budget Overview

Primary cost drivers

- Staff – to provide and manage public access, integrate community recreation value through public engagement, build awareness and understanding, and facilitate positive outdoor experiences. Staff develop, maintain, and implement current opportunities and a watchable wildlife strategy to focus our watchable wildlife work to best support public opportunity, interest, and understanding; attend events to provide information, training, and guided field experiences with wildlife viewing tools (e.g. binoculars, mobile apps like WDFW’s Report Wildlife Observations, eBird Northwest, or iNaturalist)

and outdoor skills (e.g. observation, navigation, hiking, safety, trail conservation, respect for private property); and serve public access and safety on our sites.

- Stewardship - to keep lands and facilities open and safe for the public’s recreation. This includes litter and weed control, and the construction repairs and preventative maintenance of facilities and infrastructure, including bridges, dams, buildings, information kiosks, fences, toilets, parking lots, roads, wildlife viewing platforms, trails, interpretive signage, boat ramps, and other infrastructure to support recreation.
- Tools – development and maintenance of smartphone applications and web-based information that enhance outdoor recreation experiences including [eBird Northwest](#), WDFW’s [Report Wildlife Observations](#), WDFW’s Partnerships in Conservation and Science Portal, [The Great Washington State Birding Trail map series](#), [Wildlife Areas](#) and [Water Access Sites](#) access and resources information online, [Backyard Sanctuaries](#) certification, Weekender, and [WDFW’s Instagram](#) and other social media messaging for current wildlife recreation events.
- Data storage and information technology for tools, databases, and observations.
- Grants to partners who enable public wildlife-viewing experiences (e.g. Whale Trail, Audubon’s Sagebrush Songbirds, Woodland Park Zoo Amphibian Project, eBird Northwest).
- Land acquisition, easements, contracts, and agreements – To provide wildlife-, fish- and habitat-focused recreation opportunities on our own sites; work collaboratively with other landowners and managers to provide similar recreation opportunities and services; and, be able to direct appropriate and context-sensitive activities, messages, and learning with contemporary accurate information.

Breakdown of 2015-17 investments by funding source and strategy

	Federal	User Fee	License Plates	Grand Total
R.1 Wildlife Viewing Opportunities		\$ 0.03M	\$ 0.34M	\$ 0.4M
R.2 Work Directly Benefiting Non-Consumptive Opportunities	\$ 0.04M			\$ 0.04M
Total	\$ 0.05M	\$0.0M	\$ 0.3M	\$ 0.4M
% of total	11%	7%	81%	

Major costs, benefits and rationale

According to [a study completed in 2015](#), every year millions of people spend at least **\$21.6 billion** associated with outdoor recreation in Washington and **\$4.6 billion** comes into our economy from out-of-state visitors coming to enjoy Washington’s outdoors. Each area of the state can benefit from our lands and water access, viewing opportunities, events, and other information we provide that support and enhance outdoor enjoyment.

WDFW has limited specific funding directed to facilitate watchable wildlife opportunities and wildlife-based outdoor recreation. These currently include funds from the Watchable Wildlife Eagle License Plate (state), Personalized License Plate (state), Pittman-Robertson Grants (federal), Dingle-Johnson Grants (federal), State Wildlife Grants (federal), and Section 6 habitat acquisition grants (federal).

Watchable Wildlife

Costs:

- Total full-time employees (FTEs): One dedicated Community Outreach and Education specialist.
- Development and maintenance of smartphone applications and web-based information that enhance outdoor recreation experiences, including eBird Northwest, WDFW's Report Wildlife Observations, WDFW's Partnerships in Conservation and Science Portal, The Great Washington State Birding Trail map series, etc.
- Data storage and information technology for tools, databases, and observations.
- Grants to partners who enable public wildlife-viewing experiences (e.g. Whale Trail, Audubon's Sagebrush Songbirds, Woodland Park Zoo Amphibian Project, eBird Northwest).
- Volunteer/coordinator mileage for travel across the state.

Benefits:

- Local economic and community culture benefits (recreation, tourism).
- Staff connected to the community.
- Connecting Washingtonians to the outdoors and wildlife, which promotes a conservation ethic.

Rationale:

- Need staff, online tools, storage, contracts, etc. to provide recreation opportunities and to collect citizen science to inform conservation.
- Providing grants to partners across the state connects the agency to these communities and improves relationships and efficacy.

Performance Management

Performance Metrics

Below you will find a list of many of the measures for which the Department is able to compile data and some for which the Department would like to collect data but is not currently. The Department is in the process of developing a performance-based system of management and strategic planning.

Metrics with present data:

- # wildlife areas for recreation (acres, areas, complexes, units)
- # water access sites
- # recreation infrastructure (campgrounds, boat ramps)
- # user groups engaged (WAAC, etc.)
- # water access sites restored
- Raw data from over 20 car counters for visitor use data (water access sites and a couple of wildlife areas – Wenas, Skagit)

Metrics the Department does not have current data for:

- Numbers, types, and interests of recreation users at each of our wildlife areas and water access sites
- Changes in numbers, types, and interests of users over time
- Understanding of the customer experience at our lands, how we can provide the best service, and develop facilities/projects of interest to most users
- There is no comprehensive survey or study of our lands to document the number, types, and interests of WDFW land users, including those who use water access sites. However, we have initiated a pilot program at water access sites to assess the number of visitors. This includes installing vehicle counters at select water access sites and developing a sampling methodology to extrapolate these results into statewide numbers. Pilot results may inform framework for conducting on wildlife areas.
- Compared to state parks, which are generally smaller in size and have defined entry and exit points, our lands are hundreds and thousands of acres in size, and can often be accessed at multiple (defined and undefined) entry points, making it logistically difficult to accurately count visitors.
- We use social media and other online tools/information, and continue to develop these technologies/applications to reach visitors from all over the state and beyond; however, there are logistical challenges in engaging users directly in planning and decision-making about site specific recreation
- # and condition of all recreation infrastructure (including trails, parking lots, kiosks, etc.)
- \$/acre needed for sustainable maintenance of high quality ecological integrity and quality recreational opportunities
- # and distribution of volunteer efforts on WDFW lands
- Extrapolation of car counter data

Additional sources of available data:

- State Comprehensive Outdoor Recreation Plan (SCORP) - provides recreation participation rates statewide, including top recreation activities on our lands and water access sites (<https://www.rco.wa.gov/recreation/scorp.shtml>).
- USFWS Survey of Hunting, Fishing and Wildlife-Related Recreation – identifies number of recreation users engaged in these activities, as well as the dollars spent to support their recreation interests. This data is provided at the national and state level.
- Through development of our wildlife area plans, we develop questionnaires to solicit public input, including recreation use and needs, but this is not consistently done statewide and not by all wildlife areas at the same time. Each planning effort includes public meetings, advisory committee meetings, and other stakeholder meetings, as necessary, to understand and/or connect with specific user needs and interests. Agency website and printed materials are used to share information and collect input at the beginning of the process and when a draft plan has been developed. Draft plans are also taken through the State Environmental Policy Act (SEPA) process, which requires review and response to public and external agency comments.
- Wildlife Area Advisory Committees – established for each wildlife area, members of the public and other agencies/organizations that represent the various users and interests of the wildlife area participate in wildlife area planning, volunteer, and other management activities.

- The Recreation Access Proviso (2016 legislation) final report including WA State Outdoor Recreation Survey Report (<http://ruckelshauscenter.wsu.edu/projects/current-projects/recreation-fees-in-washington/>).

Assessment of services provided and actions we can or cannot take to improve results for Washington

Statewide Recreation Strategy for WDFW Lands Initiated in 2017. This statewide strategy will include vision and principles, recommendations for statewide rules to provide more clarity about recreation on WDFW lands, and a robust process for developing recreation plans at each wildlife area.

Wildlife Area-specific Outreach. Outreach activities to reach audiences interested/using specific wildlife areas, the agency expects to reach out to recreation users/conservation partners statewide to inform and collect input. Statewide rule changes will follow state rule-making requirements, including collecting public comment, and Fish and Wildlife Commission deliberations/approval.

Discover Pass Website Improvement. Now supports sales of Discover Passes – the recreational access pass that is required for access on WDFW lands (as well as DNR and State Parks lands). This will allow collection of more complete customer data, including who is using which lands, how often they visit, etc., and could be a useful data source for us in the future.

Lands Showcase. The Department has launched a Lands Showcase initiative that has several goals tied to outdoor recreation, including: Raised public and political awareness of WDFW wildlife areas and water access sites (including the work that occurs on them, their value and benefits to Washingtonians), and increased visibility of WDFW land locations and how to access them, which will lead to increased compatible uses of our wildlife areas and water access sites.

Provide Places for Recreation:

- Recreation opportunities on our lands: Need clear vision and clear access to information about what can be done where, partnerships, community coordination.
- Identify places for community partnerships to enhance the offerings on our lands consistent with the regional and local needs, as well as the WDFW niche.
- We offer significant recreation opportunities on our lands, but need to inventory and communicate them effectively to the public, and also quantify and promote their values to local and state economies.
- Many recreation facilities on wildlife areas and water access sites were installed decades ago and have exceeded their useful life, are obsolete or defective, or do not meet current minimum standards (public expectations, ADA compliance, etc.). Examples of such water access facilities are toilets and concrete plank boat ramps.
- Many recreation facility upgrade / replacement projects are included in the biennial capital program project list, but most are not completed due to other competing agency priorities. The projects get rolled over to subsequent biennial project lists until they languish into oblivion or are removed because they were handled through an alternative funding source.
- Grant proposals for (re)development of WLA or water access recreational facilities are submitted to RCO during biennial each funding cycle. Grants received are typically from the WWRP/SLD and BFP categories.

- More users mean more impacts to fish and wildlife populations and more wear and tear on infrastructure. Managing dispersed recreation – including camping, hiking, target shooting, etc. – may require additional restrictions in the future and/or funding to develop infrastructure (e.g. trails or target shooting improvements) to support safe recreation and protect conservation values.

State and local tourism, community character, outdoor quality of life, working lands:

- We provide significant opportunities for recreation and working lands, but we do not have a good mechanism to quantify and communicate the benefits associated with these values.
- Maintain land portfolio that meets agency mission and goals:

Actions we can take

- Provide updated and consistent recreation information to the public – website redesign, facility inventory, visitor map development.
- Fulfill equipment need list for developing and maintaining recreational infrastructure.
- Finalize watchable wildlife and recreation vision, strategy, and template for place-based recreation planning.
- Determine place-based priorities consistent with our recreation vision for non-consumptive recreation, work to fund and implement.

Business Management and Obligations

In order to serve the mission:

- "Preserve, protect and perpetuate fish wildlife and ecosystems while providing sustainable fish and wildlife recreational and commercial opportunities"

WDFW:

- Manages agency business functions and meets legal obligations.

By:

- Providing agency leadership and strategy
- Communicating agency matters with the public and legislature
- Managing finance and contracts, human resources, information technology and agency records
- Building and maintaining office facilities
- Responding to public safety incidents (using our police authority)
- Providing WDFW legal counsel

Introduction & Overview

Business Management & Obligations include various strategic and technical support roles that are foundational to agency operations and success. This work comprehensively supports the entire agency as opposed to being focused on any one outcome derived from the agency mission. These roles include:

Technical Support of WDFW

- X.3- Manage finances and contracts
- X.4- Manage human resources
- X.5- Manage Information Technology
- X.6- Build and maintain office facilities
- X.7- Manage agency records
- X.8- Respond to public safety incidents

Strategic Support of WDFW

- X.1- Provide agency leadership and strategy
- X.2 Communicate agency matters with the public and legislature
- X.9- Agency legal counsel

**Extensive review of the functions covered within this section can be found within the Matrix Consulting Report that was completed January 2018.

X.1 – Provide agency leadership and strategy

The Department Director, Deputy Director and Policy Director lead teams overseeing the agency’s strategic trajectory. Agency-wide strategic planning and plan management, lean process improvement and conflict transformation work are key parts of the work included here.

X.2 – Communicate agency matters with the public and legislature

In order to facilitate effective communication with the legislature, constituencies and the public, WDFW has a team for legislative affairs and a team for public affairs. The work of the public affairs unit includes press releases, communication with reporters, logistics for public appearances and managing the effect from politically sensitive wildlife issues such as fisheries co-management negotiations and wolf depredation of livestock. The public affairs team is currently engaged in a project to replace the WDFW website with a modern and accessible version. The Department’s legislative affairs unit collaborates with legislators from around the state to ensure that they are well-informed of the impacts of their legislative decisions have on fish, wildlife and ecosystems.

X.3 – Manage finances and contracts

WDFW fiscal and contracts staff perform various accounting and contracting duties including payroll processing, asset management, contract and grant management, bill payment, account reconciliations and receipt of funds. At any given time, the department is actively managing thousands of contracts with private and public entities in order to expand recreation opportunities and perform conservation work.

X.4 – Manage human resources

WDFW employs approximately 1800 permanent employees and many seasonal staff at any given time. The Department's human resources division ensures fair hiring practices, ethical management of people, coordination with unions and adherence to collective bargaining agreements. Additionally, the Department manages various volunteers such as hunter safety instructors.

X.5 – Manage Information Technology

For any modern organization, technology systems are a foundational part of smooth operations. Among other technology needs, WDFW manages access for staff to the statewide network, various applications and systems, databases and security protocol. Additionally, information technology staff provide customer service and technical support to staff throughout the agency so that those staff can focus their time on their areas of expertise.

X.6 – Build and maintain office facilities

The Department performs maintenance, repair and construction activities necessary to keep agency owned administrative facilities in good working order and, when necessary, improves a facility to meet a new needs.

X.7 – Manage agency records

The Department is rich with records from scientific data, to rulemaking records to financial logs and more. The Department has a small unit that focuses on effective management of agency records as well as furnishing those records when a public disclosure request is made.

X.8 – Respond to public safety incidents (police)

The Department's 155 fully commissioned enforcement officers who patrol the state's wildlife areas sometimes come upon situations that require police response that is not fish or wildlife related. An officer responding to a car accident or an officer who checks someone's fishing license and finds that person to have an active warrant are a few examples of ways in which WDFW Enforcement engages in police-work.

X.9 – WDFW legal council

The Department requires the assistance and expertise of the Office of the Attorney General to understand and mitigate legal risk. When legal actions are taken against the Department, the Attorney General represents the Department as legal counsel.

Connection to Agency Mission / Strategic Plan

The strategic services help set direction and strategic planning for the agency while the technical services provide the infrastructure foundation to support the implementation of agency strategies. This direction and support are critical for success of Department strategy.

Goals

- Strong, clear agency direction and leadership.
- Effective, convenient system and network for license sales, including strong customer service.
- Efficient agency internal operations and a skilled, productive workforce.
- Maximize value from investment in WDFW administrative operations.
- Decrease agency financial risk.
- Compliance with all state, federal and local regulations regarding financial management, contracting, budget, human resources, records management, technology and technology security.

- Communicate effectively with staff, stakeholders, the legislature and the public.
- Set the tone for agency culture and commitment to results and public service.
- Provide central administrative and technology services in an efficient and effective manner, allowing field staff to focus on their biological and enforcement work.
- Ensure the agency conducts its business in compliance with state and federal laws (HR, finance, public records act, etc.).

Legal Requirements, Statutory Authority, and Rationale for the Function

There are a multitude of legal requirements and rationale that necessitate the existence of the business functions and obligations. Generally, WDFW must follow all laws and regulations that any normal business may follow as well as additional governmental legal requirements:

- State and federal law regarding accounting, governmental practices, contracting, ethics
- Office of the Chief Information Officer (OCIO) IT policies
 - Security
 - Spending
 - Infrastructure
- HR & labor law
- Public records law & case law
- RCW 77.15.075 - “Fish & Wildlife Officers shall have and exercise, throughout the state, such police powers and duties as are vested in sheriffs and peace officers generally. Fish and wildlife officers are general authority Washington peace officers.”

Ecosystem and opportunity management connections

Providing business services supports our ability to be successful with all aspects of operation:

The technical services within Business Management and Obligations provide the foundational business needs for any organization to run effectively in today’s world. The strategic services within Business Management and Obligations provide clarity of intent and direction for all work that occurs throughout the agency. Therefore, all sub-functions have some reliance on leadership and agency strategy.

Providing business services is supported by all other outcomes:

The sub-functions across the agency provide a feedback loop to inform and adjust the Department’s business strategies.

General budget overview

Primary cost drivers

1. Staff to maintain effective business infrastructure, lead the agency and communicate to the public and legislature.
2. Technology infrastructure and hardware.
3. Maintenance of office facilities.
4. Legal expenses through the Office of the Attorney General.

	Federal	User Fee	General Tax	State and Local Contracts	State Bonds	License Plates	Revolving Account	Grand Total
X.5 Manage Information Technology	\$ 2.7M	\$ 4.8M	\$ 2.6M	\$ 1.6M		\$ 0.3M		\$ 11.9M
X.3 Manage Finances and Contracts	\$ 2.3M	\$ 3.1M	\$ 2.0M	\$ 1.4M		\$ 0.2M		\$ 9.1M
X.6 Build and Maintain Office Facilities	\$ 1.8M	\$ 3.1M	\$ 2.2M	\$ 1.1M	\$ 0.2M	\$ 0.1M		\$ 8.5M
X.1 Provide Agency Leadership and Strategy	\$ 1.7M	\$ 2.1M	\$ 2.2M	\$ 1.1M		\$ 0.1M		\$ 7.2M
X.4 Manage Human Resources	\$ 1.4M	\$ 2.1M	\$ 1.3M	\$ 0.8M		\$ 0.1M		\$ 5.7M
X.8 Respond to Public Safety Incidents	\$ 1.0M	\$ 1.8M	\$ 1.3M	\$ 0.3M			\$ 0.2M	\$ 4.7M
X.2 Public and Legislative Communications	\$ 0.8M	\$ 1.3M	\$ 1.3M	\$ 0.4M				\$ 3.8M
X.9 Attorney General	\$ 1.0M	\$ 1.5M	\$ 0.3M	\$ 0.6M		\$ 0.1M		\$ 3.6M
X.7 Maintain Agency Records	\$ 0.3M	\$ 0.3M	\$ 0.2M	\$ 0.2M				\$ 0.9M
Total	\$ 13.0M	\$ 20.0M	\$ 13.4M	\$ 7.4M	\$ 0.2M	\$ 1.0M	\$ 0.3M	\$ 55.3M
% of total	24%	36%	24%	13%	0%	2%	1%	

Performance Management

Performance Metrics

The Department is in the process of developing a performance-based system of management that is integrated with Department strategic planning. Below, you will find a list of current measures for the Department's technical infrastructure.

Metrics with present data:

Budgeting

- Fiscal note revisions requested by OFM (%)
- Fiscal notes submitted on time (%)
- Fiscal notes funded in operating budget legislation (%)
- Maintenance level decision packages funded (%)
- Performance level decision packages funded (%)

Contracting

- Grant applications submitted by contracts staff (#)
- Funds received from grants (\$)
- # of unauthorized financial commitments received by the CFO

Accounting

- Time from payable contract request submission to sending to the other party
- Collect non-fuel related receipts for Comdata and Voyager credit cards by the 5th of every month (%)
- Receive all receipts for Voyager and Comdata cards assigned to a vessel or piece of equipment (%)
- Overspent contracts
- Aging invoices over 90-days
- Late fees on payables per month
- Payment (OPF) processing turnaround time
- P-card processing turnaround time
- Payroll processing errors
- Payment turnaround time against process date for contracts payables
- Inventory compliance for asset management

Records Management

- Legal costs (settlements and lawsuits) for public disclosure requests
- Provide records training to staff to comply with policy 1005

Information technology

- IT funding spent on improving operations vs. running operations
- Fully satisfied ITS customers
- Staff satisfaction survey scores

Licensing and Marketing

- Meet defined service level agreement on WILD system defects

- Prepare report of all sales, churn rate, participation and editorials by the third Monday of each month
- decrease returnable documents charges
- Idea, does not currently have data: ROI on marketing investment
- Increase new anglers
- Increase new hunters
- Increase female hunters
- Increase youth hunters
- Cross-train all customer service reps to know all 3 units

Information Governance

- Average time spent per request
- Cost recovery of expenses resulting from a public disclosure request

Assessment of services provided and actions we can or cannot take to improve results for Washington

- Business areas are generally staffed at or near the minimum required to maintain functional business infrastructure, making service disruptions fairly common if staff change jobs or are sick.
- WDFW Staff are generally satisfied with the business infrastructure, they recognize that coordination on business improvements and collaboration across the state can be improved.
- Automation and digitization of our administrative processes would significantly improve efficiency. This has a cost of implementation barrier.
- The WDFW organizational assessment, completed by Matrix Consulting, contains recommendations for improving operational effectiveness. Many of these recommendations are being implemented currently within the Department. Some of the most important recommendations are:
 - The executive management team should enhance efforts at communicating decisions reached to the entire organization to enhance understanding of Department priorities, changes in policy and ensure greater consistency throughout the organization.
 - Improve communications during the budget process, including explaining to the Legislature the consequences and impacts to the Department of new programs or initiatives that have no funding identified.
 - The Commission should take a more active role in overseeing the Department and conducting administrative duties assigned to it such as: participating in the development of the Department strategic plan; evaluation of the Director; and development, approval and oversight of the Department budget.
 - The strategic plan's goals and objectives should be supported by performance measures which can be tracked and reported upon.
 - Develop and propose a phased approach to fee increases to the Legislature to help balance the State Wildlife Account.
 - Request the Legislature to adopt language allowing for annual increases to fees based on a cost factor (Cost of Living Adjustment or Consumer Price Index) as this is a best management practice.
 - The strategic plan should outline the trends and challenges facing the Department in each of its program areas and geographical regions.

- The Department should implement new online public engagement tools to solicit a higher-quality of public input.
- The Department should develop a strategic vision for the Agency's outreach efforts and plan. Additional regional staff responsibilities for public outreach should be developed and implemented.
- Consolidate all Budget Analysts under the direction of the Chief Budget Officer in order to standardize approaches to budget development, tracking and reporting.
- Procure and install a new enterprise resource planning system that replaces CAPS (budget allotment system) as a budget development tool, and is also compatible with the State's The Allotment System (TALS) and Budget Development System.

Fishery and Hatchery Policy Implications Associated with the Federal Endangered Species Act

Endangered Species Act

The purpose of the Federal Endangered Species Act (ESA) is to conserve threatened and endangered species and their ecosystems. **The listing of a species as threatened or endangered makes it illegal to "take" (harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to do these things) that species.** Federal agencies may be allowed limited take of species through interagency consultations with NOAA Fisheries and the US Fish and Wildlife Service. Non-federal individuals, agencies, or organizations may have limited take through special permits with conservation plans.

Permits and Legal Requirements

Fishery activities and hatchery operations that occur within regions with ESA-listed salmon and steelhead populations need to be evaluated and permitted through the federal government to ensure consistency with the ESA. There are different processes in the ESA that can be followed to allow for this permitting, depending on the specifics of the fisheries or hatchery operations and the federal listing designation; ESA section 4(d) or section 10(a)(1)(A) are common processes used to permit fishery activities and hatchery programs.

Under ESA, the agency is required to submit a permit application (formally called a Biological Assessment (BA)) for its fishery and hatchery activities to secure ESA coverage. For fisheries, the BA is most often in the form of a fishery or harvest management plan. For hatcheries the BA takes the form of a Hatchery Genetic Management Plan (HGMP). The harvest management plans and HGMPs are technical documents that thoroughly describe the activities, management and conservation strategies, and anticipated ESA impacts.

Under ESA, NOAA Fisheries reviews and evaluates the fishery management plans or HGMPs and issues its permit, most often in the form of a Biological Opinion (BiOp). The BiOp permit provides the agency with its ESA coverage and outlines its specific legal obligations and requirements associated with fishery and hatchery activities (i.e., "take" prohibitions and "Terms and Conditions"). These obligations and requirements include but are not limited to limits on fisheries, requirements for hatchery capital improvements, and specific monitoring, evaluation, and reporting requirements. Given that most of the state's fisheries and hatchery programs in some way interact with or impact ESA-listed salmon and steelhead, almost all of the agency's fishery and hatchery activities operate under this ESA legal framework. For example, even on the Washington coast where Chinook or steelhead are not ESA listed, there may be ESA concerns in the mixed stock ocean fisheries or in the estuaries and bays where ESA-listed fish may dip in.

Conservation Benefits

Operating within this ESA framework provides the agency ESA coverage, and more importantly ensures the agency is conducting its fishery activities and operating its hatcheries in a manner that is consistent with ESA and contributing to recovery of listed fish.

Business Costs and Impacts

The costs to manage fisheries and hatcheries has increased substantially over the several decades. This is in large part due to the progress in fisheries and hatchery science, tools, and approaches that have allowed for more precise management techniques that achieve both fishery harvest and conservation goals. Examples include mass marking of hatchery fish, mark-selective fisheries, and conservation measures that protect targeted populations. More recently, declining populations and resulting ESA listings across Washington state have increased further the costs of managing fisheries and hatcheries. Specifically, increased requirements associated with ESA permits and terms and conditions have resulted in the need for more comprehensive monitoring and evaluation programs, more funding for capital improvement projects, and more transparency and reporting. Together, in general, this has substantially increased the costs of salmon fisheries across Washington State.

WDFW Legal Requirements Regarding Tribal Fisheries

U.S. v. Washington and U.S. v. Oregon

Through treaties that were signed by the federal government in 1854-55, the signatory tribes reserved, among other things, the right of “taking fish, at all usual and accustomed fishing grounds and stations,” in exchange for ceding lands they historically roamed.

Treaty rights are not granted to tribes, but rather are “grants of rights from them—a reservation of those not granted.” *United States v. Winans*, 198 U.S. 371, 380-81 (1905). Treaties take precedence over conflicting state laws by reason of the Supremacy Clause of the U.S. Constitution, Art. VI, Sect. 2. Accordingly, treaties are the supreme law of the land. *Worcester v. Georgia*, 31 U.S. 515, 531 (1832).

Under *U.S. v. Washington*, the federal court confirmed these treaty fishing rights and recognized that the plaintiff tribes have a co-management relationship with the state relative to off-reservation fisheries resources and are entitled to harvest up to half of the harvestable number of fish passing through their respective usual and accustomed fishing areas. *United States v. Washington*, 384 F. Supp. 312 (W.D. Wash. 1974).

Under *U.S. v. Washington*, the “Boldt decision” addressed the tribes’ treaty right to take salmon and the subsequent “Rafeedie decision” in 1994 clarified that the treaty right extends to all other marine fish and shellfish as well. The 9th Circuit further clarified in 1998 that species to which tribes did not have access to at the time the treaties were executed are also included.

The Court originally issued its judgment for *U.S. v. Oregon* in 1969; however, seven weeks after the “Boldt decision,” the Court amended its judgment concluding that equal shares of harvestable salmon were “fair” for Columbia River fisheries as well. Additionally, the geographic scope of the 1969 decision included the mainstem Columbia River between its mouth and McNary dam. The Court’s subsequent order in 1975 extended the area downstream to include non-Indian catches in the ocean off Oregon and Washington as well.

Numerous appeals and sub-proceedings have been filed since the “Boldt decision,” which have provided further guidance and clarity relative to implementation. In 1985, the 9th Circuit Court of Appeals determined that hatchery fish are included in the allocation of “fair shares.” This was based on the understanding the intent of hatchery fish is to replace natural fish that have been impacted by habitat loss and degradation due to dams and development.

Consistent with *U.S. v. Washington* and *U.S. v. Oregon*, WDFW staff negotiate, develop, and enter into state/tribal harvest and management agreements with treaty tribes for fish and shellfish, as well as agreements regarding salmon hatchery production, where applicable. As part of those responsibilities, staff also work with stakeholders and fishery participants to review state and tribal harvest information, develop non-tribal harvest recommendations, seasons, and proposed regulations, and communicate policy and management decisions.

Additionally, WDFW staff participate in discussions with tribal policy and management staff on broader issues that may indirectly affect fisheries or marine resources in the spirit of “co-management.” These discussions

include global ecosystem concerns associated with climate and changing environment, local habitat protection and restoration efforts, and community sustainability and resiliency.

Overhead (Indirect) at WDFW

This addendum answers questions detailed in the budget proviso SSB 5883, Sec. 307 (13) (d) (vi) & (vii) which request an analysis estimating each program’s administrative and other overhead costs as well as analysis estimating funds that reach the intended recipients. WDFW has no easy way to measure this, but we do have a good proxy by using our indirect model.

Over forty percent of the Department budget is funded through federal and local contracts. When this contract work is negotiated, the Department applies a federally approved indirect rate to support the administration of the agency.

This indirect rate is a way for agencies to recover the fair share of administrative and overhead support costs, work that cannot be billed directly without creating inordinate waste and paperwork. The federal government created the indirect process, which is codified in federal law, to guarantee that they would not be over-charged administrative costs. The Department submits its indirect approach to the Department of Interior, who must approve the methodology and rate annually.

Some examples of indirect costs at WDFW includes many administrative and agency-level staff, facilities leases, technology leases, human resources, director’s office, public outreach, executive management, budget and contracts staff, finance, public records, and more.

Estimated administrative and other overhead costs by program:

WDFW Organizational Program	Admin %	Service Delivery %
Business Services	62%	38%
Enforcement	16%	84%
Habitat	15%	85%
Wildlife	13%	87%
Fish	10%	90%
Capital Asset Management ¹	3%	9%

¹ Indirect does not apply to capital expenditure, therefore work that relies more on construction or large equipment will show a lower rate as a function of expenditures.

Estimated funds that reach the intended recipients by Outcome:

8 WDFW mission-driven outcomes	Admin %	Service Delivery %
Acquire and Manage Lands	13.24%	86.76%
Business Management & Obligations	55.78%	44.22%
Manage Fishing Opportunities	15.53%	84.47%
Manage Hunting Opportunities	19.18%	80.82%
Preserve & Restore Aquatic Habitat & Species	11.51%	88.49%
Preserve & Restore Terrestrial Habitat & Species	13.49%	86.51%
Non-Consumptive Recreational Opportunities	13.31%	86.69%
Produce Hatchery Fish	8.12%	91.88%