- 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 and 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

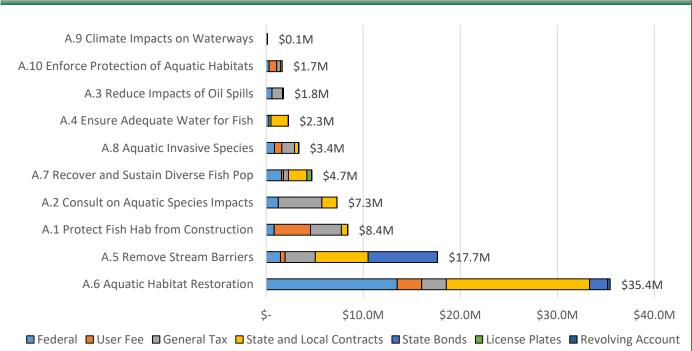
- Gain and utilize information regarding natural resource benefit to local economies in order link landowner and community decisions to preserving those benefits.
- Develop strong partnerships with landowners and communities to gain habitat and conservation value on private lands and to positively influence habitat importance in community planning.
- Increase 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 aquatic habitats and species also 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 (\$82.7M)



Primary cost drivers

- Staffing for studying, planning, assisting and enforcing preservation and restoration Washington's aquatic habitats and species.
- Grants to other entities for restoration, recovery actions.
- Acres of land restored resulting in capital expenditures.
- 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.

- 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.



- 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 infrastructure upkeep and 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.

Opportunities to improve outcome

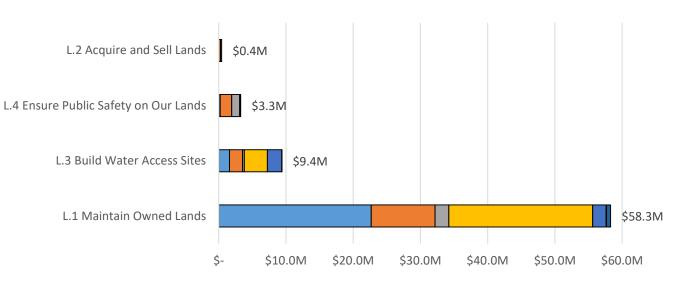
- Improve communication with the public about WDFW lands, where they are, and the value they provide to conservation, recreation, and local communities.
- Implement long-term management and improved stewardship to address poor road and facility conditions.
- Develop and implement a good statewide assessment of habitat restoration needs on WDFW owned and managed lands.
- Develop an effective way to utilize citizen scientists to measure the effectiveness of Department management activities.
- Engage the public in conversation to help solve key management 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 cultural resources into planning in order to swiftly address habitat issues on WDFW lands.
- 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.

Preservation and restoration of aquatic habitats and species 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 (\$71.3M)



■ Federal ■ User Fee ■ General Tax ■ State and Local Contracts ■ State Bonds ■ License Plates ■ Revolving Account

Primary cost drivers

- Staff for on-going habitat preservation work including weed management, habitat restoration and access for people to improve forest health.
- Construction, repairs, and preventative maintenance on infrastructure such as bridges, fences and restrooms.
- Costs to provide public safety and fulfill and enforce legal requirements.
- Developing and implementing biological monitoring, scientific research efforts, and species and habitat survey and monitoring efforts.
- Acquisition costs (capital funds for purchase and related survey and assessment costs, staff funds for project management).

- Sustain Land Management*
 - This proposal preserves capacity for addressing invasive/noxious weeds and capacity for monitoring and evaluating landscapes. Additionally, this package ensures that public involvement in planning and also public use permitting opportunities are maintained.
- Improve Land Management
 - This proposal increases grazing monitoring on our lands, provides additional capacity to improve operations and maintenance of public lands, increases noxious weed control, and adds enforcement presence.



- 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 and 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) \$0.2M T.3 Climate Impacts on Land T.2 Partner with Private Landowners for Conservation \$1.4M T.4 Wildlife Permitting and Enforcement \$1.6M \$3.1M T.7 Terrestrial Habitat Restoration T.6 Response and Mitigation of Wolf Conflict \$5.0M T.1 Consult on Terrestrial Species Impacts \$7.4M T.5 Recover and Sustain Diverse Wildlife Pop \$9.4M \$5.0M \$10.0M \$-Federal User Fee General Tax State and Local Contracts State Bonds License Plates

Primary cost drivers

- Staffing for studying, planning, assisting and enforcing preservation and restoration Washington's aquatic habitats and species.
- Grants to other entities for restoration, wildlife rehabilitation, and recovery actions.
- Acres of land restored.
- Geographical 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 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.

5% of agency investment in 2015-17

- 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 fisherydependent local communities.

Risks and threats impacting outcome

- Conservation needs, in order to provide sustainable commercial and recreational fisheries, and work to meet those needs is growing.
- It is increasingly expensive to secure and implement federal ESA permits which often come with a list of costly requirements the Department must implement.
- The Department is awaiting NOAA's biological opinion for Puget Sound management which will have requirements , currently unknown, the Department must fulfill.
- Changing physical environmental variables such as temperature and dissolved oxygen impedes healthy fish lifecycles and reproduction.
- Stream barriers to fish passage throughout the state stop historic fish runs from making it out to the ocean and back to spawning grounds.
- Disease risks from introduction and transfer of shellfish.
- Illegal activity interferes with fisheries management plans risking successful recovery of listed species.
- The state is always at risk for introduction of aquatic invasive species.

Opportunities to improve outcome

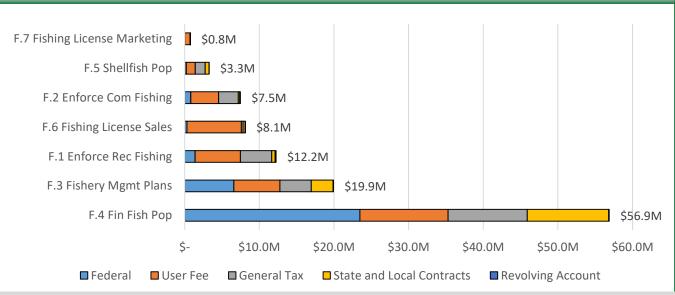
- Improve fish health and stock assessment more information on population health and stock assessments for fish and shellfish to track recovery efforts for imperiled species and maximize opportunities for them.
- Maximize opportunity while meeting conservation goals by monitoring harvest and effort of 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

- Staffing primarily to monitor fish health, conduct field investigations for monitoring and testing fisheries and populations, planning and negotiating fishing days, obtaining ESA permits, and enforcing fishing season and regulations.
- Equipment such as vehicles, boats, waders, durable tablets, fuel, survey flights.
- Laboratory costs.

Relevant 2019 session legislative proposals

- <u>Sustain Public Health and Safety, Shellfish*</u> This proposal will ensure that the state does not lose enforcement patrols ensuring sanitary shellfish harvest.
- <u>Sustain Fishing and Hatchery Production</u>* This proposal aims to preserve six hatcheries, warm-water game-fish opportunities, recreational shellfish opportunities, salmon species monitoring for ESA permitting needs and more.
- <u>Sustain Conservation*</u> This proposal will preserve work to maintain long-term health of habitats including: Invasive weed control, habitat restoration capacity, derelict fishing gear retrieval capacity and more.
- <u>Sustain CRSSE*</u> This proposal makes the Columbia River Salmon & Steelhead Endorsement permanent.
- <u>Improve Conservation</u> This investment allows WDFW to help guide local salmon recovery priorities to areas and habitats that can maximize benefits.
- <u>Improve Fishing</u> 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.



<u>RFEGs</u> - This proposal maintains funding for 14 non-WDFW regional fisheries enhancement groups.

- 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

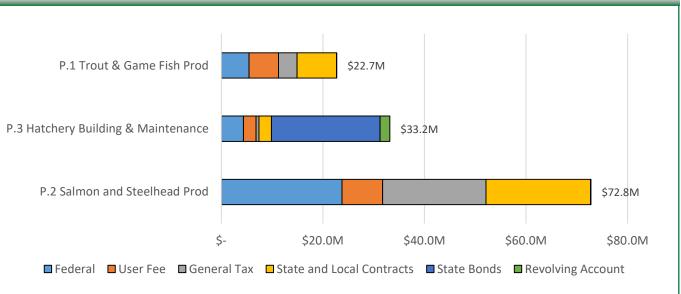
- Improve habitat which will increase natural origin fish abundance this allows increased hatchery fish to be produced.
- Produce more trout and warm water fish for stocking more lakes.
- Produce more salmon and steelhead within conservation limits to provide additional forage fish for Southern Residence Killer Whales and additional harvest opportunity when and where appropriate.
- Aging infrastructure

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,, marking and tagging fish and collecting and spawning fish. managing health of hatchery 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.

- <u>Sustain Fishing and Hatchery Production</u> 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.
- <u>Sustain Conservation</u> This proposal preserves capacity for species ecology assessments, species recovery efforts, restoration project capacity, climate change planning capacity, and derelict fishing gear retrieval capacity.
- <u>Improve Conservation</u> This proposal 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
- <u>Improve Fishing</u> 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.



- 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 quality educational programs such as hunter education 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

- There is a trend upward requiring hunters to purchase expensive access passes from industrial forest landowners in Western Washington. More must be done to work with private forest land owners to allow hunting access on their land.
- 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.
- Emerging diseases impacting the health and populations of game species such as elk hoof disease, currently present in Washington, and chronic wasting disease which has not been seen in Washington yet but exists in many other states.
- 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 and reducing funding for game species conservation efforts.

Opportunities to improve outcome

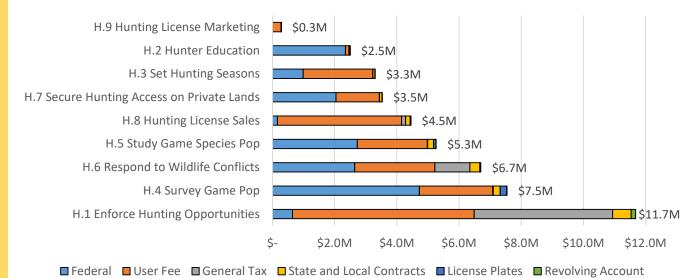
- Acquire and provide more hunting access to private forest lands.
- Protect, improve and increase game wildlife habitat on public and private land.
- Improve public tolerance of wildlife where conflicts with people and wildlife occur.
- Ensure adequate enforcement presence protecting public and private 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 by the license transaction fee).

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



- 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 and deliver 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 restore, conserve, and sustain wild, healthy, 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 needs to be balanced with impacts to fish, wildlife and ecosystems.
- There are inadequate interpretation and guide resources at facilities and online resources are difficult to access.

Opportunities to improve outcome

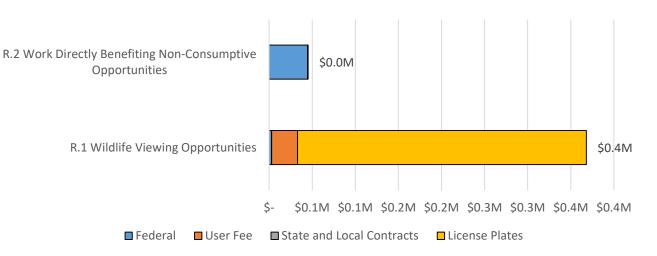
- Finalize watchable wildlife and recreation vision, strategy, and prioritize for WDFW owned and managed lands. implementation of place-based opportunities consistent with our recreation vision.
- Need a good mechanism to quantify and communicate the benefits associated with recreation activities to the local economies.
- Provide updated and consistent recreation information to the public website redesign, facility inventory, visitor map development.

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.
- Land acquisition, easement, contracts, and agreements.

- 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.



- 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)



■ Federal ■ User Fee ■ General Tax ■ State and Local Contracts ■ State Bonds ■ License Plates ■ Revolving Account

Primary cost drivers

- Staff to provide the 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 here.

