

Proposed Final Report:

Measuring Outcomes of Land Acquisitions and Regulations

Legislative Auditor's Conclusion:

Regulations and acquisitions protect habitat in different ways. Outcome information can be improved through statutory direction, along with agency planning and investment for monitoring.

Executive Summary

The 2016 Legislature directed staff of the Joint Legislative Audit and Review Committee (JLARC) to review outcome measures for specific acquisition and regulatory programs in six counties (ESHB 2380, Sec. 6005). The programs are:

- Puget Sound Acquisition and Restoration program
- Puget Sound Estuary and Restoration program
- Salmon Recovery Funding Board
- State Parks and Recreation Commission
- Trust Land Transfer program
- Washington Wildlife and Recreation Program
- Other state acquisition programs identified by JLARC staff
- Clean Water Act
- Flood plain management
- Forest practices rules
- Growth management regulations regarding critical areas
- Hydraulic Project Approval program
- Shoreline management rules
- Wetland restrictions



Regulations and acquisitions protect and conserve habitat in different ways

Either regulation or acquisition can be an appropriate tool, depending on the habitat protection and conservation goal.

- For the programs reviewed, regulations often created narrow bands of land protection, while acquisitions were more likely to create blocks of protected land.
- Some terrestrial species need buffers along the edges of their habitat, which acquisition is more likely to provide.
- Species have different ranges (areas where they live and move). To be effective, habitat protection and conservation efforts must cover the range for the species in question. Depending on the range involved, acquisitions, regulations, or a combination could be appropriate.

JLARC staff worked with scientists from the University of Washington to map the spatial extent of regulations and acquisitions in the six counties. Mapping would inform future decisions about which conservation tools best address goals.

Information about outcomes for both approaches is limited

- **Acquisitions:** Statute requires outcome-focused performance measures for the acquisition programs in the study mandate. Agencies have developed measures only for salmon recovery programs. These programs have a federal mandate, monitoring plan, funding, and clear responsibility for data collection and reporting.
- **Regulations:** Statute does not require outcome measures for regulatory programs unless the measures are required for federal reporting. Absent statutory direction, there is no systematic approach to tracking outcomes statewide. State and local governments vary in their capacity to monitor outcomes.

Land stewardship plans do not include measurable outcomes

JLARC reviewed agency stewardship plans and found that plans vary in detail and do not include measurable outcomes.

Legislative Auditor Recommendations

1. The Office of Financial Management and the Recreation and Conservation Office should develop and submit a joint plan to the Legislature detailing the actions, costs, and timelines needed to comply with statutes that direct them to measure performance of land acquisitions and related grant programs.
2. If the Legislature wants reliable information about the outcomes of regulatory programs implemented at the local level, it should consider requiring state agencies to work with local governments to develop outcome-focused performance measures.
3. Department of Fish and Wildlife, the State Parks and Recreation Commission, and the Department of Natural Resources should provide the Legislature with a plan detailing the resources necessary to report stewardship needs.

The Department of Fish and Wildlife, the State Parks and Recreation Commission, and the Department of Natural Resources concur with these recommendations. You can find additional information on the Recommendations tab

REPORT DETAILS

1. Programs in six counties reviewed

Study reviews efforts to protect habitat and expand outdoor recreation in six counties

Legislature specified programs for review

The 2016 Legislature directed JLARC staff to review the outcome measures used to evaluate the success of specific acquisition and regulatory programs that are intended to protect and conserve habitat and expand outdoor recreation (ESHB 2380, Sec. 6005).

Appendix 1 includes details about each program's goals, existing outcome measures, and other benefits.

Exhibit 1.1: Acquisition and regulatory programs reviewed

Acquisition Programs	Regulatory Programs
<ol style="list-style-type: none">1. Puget Sound Acquisition and Restoration program2. Puget Sound Estuary and Restoration Program3. Salmon Recovery Funding Board4. State Parks and Recreation Commission5. Trust Land Transfer program6. Washington Wildlife and Recreation Program7. Other state acquisition programs that expand recreation	<ol style="list-style-type: none">1. Clean Water Act2. Flood plain management3. Forest practices rules4. Growth management regulations regarding critical areas5. Hydraulic Project Approval program6. Shoreline management rules7. Wetland restrictions

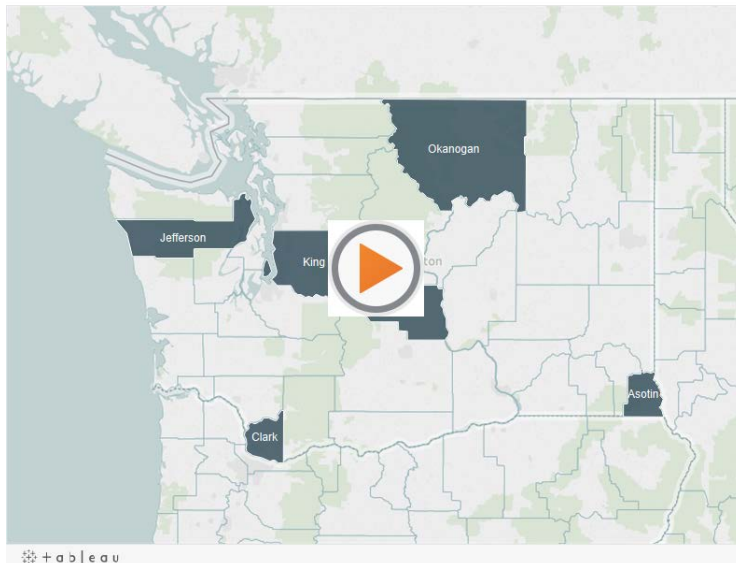
Source: Programs mandated in (ESHB 2380, Sec. 6005). JLARC was also directed to look at other DNR expenditures and other state expenditures that expand recreational lands and facilities. These include the Natural Areas Program, Aquatic Lands Enhancement Account, Nonhighway and Off-road Vehicle Activities program, and others. See Appendix 1 for full list.

JLARC staff selected counties based on geographic distribution and program representation

The mandate specified that the study compare the amount of habitat land protected by regulations and acquisitions in six counties — three west of the Cascades and three east of the Cascades. JLARC staff selected the counties based on geographic distribution, acres acquired, and the inclusion of all programs specified by the Legislature.

Exhibit 1.2: Study includes Asotin, Clark, Jefferson, King, Kittitas, and Okanogan Counties

Hover your cursor over the counties in the map below for more information about regulations and acquisitions.



Source: "Agency reported acres acquired" is based on JLARC staff analysis of acquisition data provided by state agencies. "Acres regulated" is based on UW scientists' analysis of best available spatial data about regulated resources.

2. Different tools, different protection

Regulations and acquisitions protect habitat in different ways

There are many tools for protecting habitat, such as landowner agreements, leases, regulations, and acquisitions. The Legislature directed JLARC to compare the amount of habitat lands protected by regulations and acquisitions, including easements.

Scientists and conservation specialists identify general differences between regulations and acquisitions

Scientists and conservation specialists agree that while there are exceptions, regulations and acquisitions generally differ in a few key ways.

- Regulations provide general protection to large areas. They may slow damage to habitat quality, while allowing development or land conversion (*Land conversion means changing the land from one use to another. For example, forest may be converted from harvestable timber land to residential development use.*).
- Acquisitions provide targeted protection to a defined area. They may offer opportunities to improve habitat, and likely preclude development or land conversion.

Depending on an agency's habitat, recreation, and other goals, different tools or a combination of tools may be needed. This section highlights the difference in habitat protection between regulations and acquisitions.

JLARC's consultants estimate that regulations cover four times as many acres as acquisitions in six counties studied

JLARC staff worked with a team of scientists from the University of Washington (UW) to map the extent of regulations and acquisitions in six counties (*Asotin, Clark, Jefferson, King, Kittitas, and Okanogan*) using ArcGIS. This analysis is the first effort to compare the footprint of regulations and acquisitions and relied upon the best available spatial data. Not all regulations and acquisitions could be mapped. For additional details about data limitations, methodology, and links to the UW report and maps, see Appendix 2.

The UW scientists estimate that land use is regulated on at least 762,000 acres, and acquisitions protected at least 186,000 acres between fiscal years 1990 and 2015. This estimate is lower than the number of acres acquired as reported by agencies because not all acquisitions could be mapped.

Regulations and acquisitions created different patterns of protected area

- Regulations in the six counties covered narrow bands of land clustered around particular environmental resources (e.g., water, riparian areas, wetlands). These regulations were intended to reduce the impact of development and human activity to these resources.
- Acquisitions in the six counties often covered blocks of uplands ("*uplands*" are areas elevated above the lowlands along rivers or between hills), creating large areas of contiguous protection. These acquisitions are intended to protect good quality habitat, often provide recreational opportunities, and may allow restoration projects to occur.

Exhibit 2.1: Regulations covered narrow bands with large gaps. Acquisitions covered contiguous blocks.



Acquisition
Acquisition can create more contiguous protection.

Regulation
Regulation creates narrow bands of protection.
There can be large gaps in the areas protected.

Source: JLARC staff depiction of University of Washington analysis. The analysis was based on best available spatial data for land acquisitions and included the creation of new maps for the areas regulated under the Shoreline Management Act, Forest Practices rules, wetlands restrictions, and the Growth Management Act's critical areas regulations.

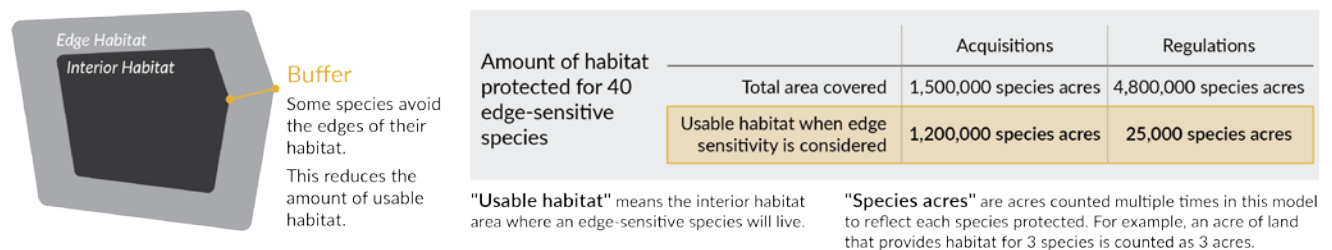
The shape and distribution of protected land may be a better indicator of protection than the total acreage

When a species avoids habitat edges, total acres can overstate the amount of usable habitat, particularly for terrestrial species. Scientists note certain species need a buffer between the

edge of their habitat and where they live. This is called "edge sensitivity." Examples include species such as the Bald Eagle and Tiger Salamander, and other species of concern (*Species of Concern in Washington include those species listed as State Endangered, State Threatened, State Sensitive, or State Candidate, as well as species listed or proposed for listing by the U.S. Fish and Wildlife Service or the National Marine Fisheries Service.*) identified by the Department of Fish and Wildlife.

The UW scientists assessed the impact of edge sensitivity for 40 species of concern that are moderately to highly edge sensitive. When edge sensitivity was considered, acquisition covered more acres of habitat than regulation in the six counties during the study period.

Exhibit 2.2: Acquisitions in six counties provide more habitat than regulations when edge sensitivity is considered



Source: UW analysis of data, fiscal years 1990-2015 in six counties. Analysis used median "edge" of 82 meters based on scientific literature. Species included in the analysis are endangered, threatened or sensitive, and have moderate to high edge sensitivity.

To be effective, regulations and acquisitions must cover the range of the species in question

Scientists note that individual members of a species live and move in a specific area. This is called its "home range." To be effective, land protected by either regulation or acquisition should cover the species' home range. Generally:

- Regulations protect areas suitable for species that have smaller home ranges, regardless of edge sensitivity.
- Acquisitions protect areas suitable for species that have large home ranges or that are very edge sensitive.

3. Regulation or acquisition? Depends on goals

Whether the state should buy land depends on the conservation goals

Regulations and acquisitions may be used together or separately to protect habitat. The Legislature asked JLARC staff to identify situations when acquiring land that is already regulated may or may not provide adequate habitat protection. JLARC staff worked with UW scientists to map the extent of regulations and acquisitions in six counties.

Case studies show that regulations may provide adequate area protection for some species, but not others

The UW scientists' approach focused on habitat protection for terrestrial species. Such an analysis could be expanded to include plant species, biodiversity, and other factors that affect land use decisions. The UW scientists compared maps of acquisitions and regulations

to the needs of four species, including their edge sensitivity (*Some species, including many species in need of conservation, need a buffer between the edge of their habitat and where they live.*) and home range (*Every species lives and moves in a specific area. This is called its home range.*) requirements.

The case studies indicate that regulations may offer adequate habitat protection for some species, and acquisition may provide adequate protection for other species. The UW scientists' analysis does not assert whether existing regulations or acquisitions have been successful through measurable outcomes. In fact, as noted in the next sections, data to measure such outcomes is largely unavailable.

Exhibit 3.1: Two examples from the case studies demonstrate how acquisitions and regulations differ in habitat protection



Great Gray Owl

Acquisition offers appropriate protection

- Require specific forest cover
- Large home range – likely benefit from acquisitions due to need for large tracts of land



Photo: Carla Isabel Ribeiro

Tiger Salamander

Regulations may offer adequate protection

- Require terrestrial and aquatic habitat
- Small home range – narrow buffers protected by regulations may provide appropriate protection

Source: JLARC staff depiction of UW analysis.

The detailed maps for these case studies are available for download in Appendix 2.

State agencies have processes to review potential acquisitions. These processes do not include spatial maps of areas covered by regulations and existing acquisitions.

The Department of Fish and Wildlife, the State Parks and Recreation Commission, and the Department of Natural Resources each have internal processes to review potential acquisitions. These reviews do not currently include updated spatial information about areas protected through regulations.

Agencies' approaches vary, but they report that they typically consider existing protection, proximity to other protected lands, ecosystem needs, threats to habitat, and recreational opportunities. All three agencies participate in the Habitat and Recreation Lands Coordinating Group, which publishes reports of planned acquisitions. These reports include descriptions, acreage, current and future costs, and funding sources.

Mapping where regulations apply and asking key questions would inform decisions about future land acquisitions

Maps of the spatial extent of regulations, like the ones created by the UW scientists, would complement existing conservation tools, such as the Washington Biodiversity Council's Conservation Opportunity Framework (*An approach using biodiversity and population trends to develop regional priorities that focus conservation investments in areas that will yield the greatest benefits.*), to help make decisions about habitat protection and conservation. This could be done by state and local governments.

The UW scientists suggest two approaches for conservation planning tools that can incorporate the spatial extent of regulations:

1. **Prioritization Map.** This approach would generate a map that ranks parcels based on factors such as number of species of concern, threat of land conversion, connection to other protected habitat, and ability to withstand climate change.
2. **Dashboard.** This approach would allow evaluation of a parcel by its characteristics, such as information on species of concern, the protection status of a species, and the level of threat of land conversion. Data may be represented by a dashboard, with visual status indicators for different criteria to display information about a single parcel or to compare parcels.

Scientists also recommend key questions for legislators to effectively focus acquisitions

State agencies have internal processes to review potential acquisitions. These processes vary by agency. Information about land acquisition decisions may not be readily available or linked to final funding requests.

JLARC's consulting scientists identified general questions that legislators could ask agencies about proposed land acquisitions intended to protect and conserve habitat.

1. Does the acquisition have a clearly stated goal?
2. What species will the acquisition protect and what are its habitat requirements?
3. To what degree are these species and habitat types already protected?
4. What is the level of threat to the species/habitat and to what degree will acquisition offset those threats?
5. How likely is the acquisition to provide continued protection for the species/habitat in the future?
6. Does the proposed acquisition have a plan that includes monitoring and a mechanism to adjust management if goals are not being met?

4. Mandates, plans, and resources drive measurement

Outcomes are measured for only salmon acquisition programs and two regulatory programs

The Legislature directed JLARC to review outcome measures of acquisition and regulatory programs. Outcomes indicate how effective the program or project is in meeting its goals.

Exhibit 4.1: Outcomes indicate how effective the program or project is in meeting its goals



Source: JLARC staff adaptation of Office of Financial Management logic model (2016 *Performance Measure Guide*).

Programs that succeed in measuring outcomes have mandates, monitoring plans, and funding

JLARC's consultants from the Institute for Natural Resources (INR) found that programs that successfully measure outcomes share three characteristics. This was consistent with JLARC staff's analysis of acquisition and regulatory programs with outcome information:

1. **Legal requirement** for monitoring outcome measures, including designation of responsible agency.
2. **Clear monitoring plan** including goals, specific desired outcomes, and quantifiable metrics.
3. **Dedicated resources** for monitoring, through federal and/or state sources.

Outcome information is available for acquisition programs related to salmon recovery

Outcome information for salmon recovery is available and publicly reported.

Washington receives funds for salmon recovery through a Pacific Coastal Salmon Recovery Fund grant from the National Oceanic and Atmospheric Administration (NOAA). The grant requires the state to spend ten percent of funds on monitoring efforts. The state provides its monitoring plan in the grant application. Washington funds three types of monitoring: effectiveness, population trends, and species level data. The work is done by multiple agencies and provides the basis for information on the state's progress toward salmon recovery.

Outcome information is available for regulatory programs related to the federal Endangered Species and Clean Water Acts

State regulatory programs that have federal reporting requirements collect and report performance information.

- DNR's forest practices rules have reporting requirements under the federal Endangered Species and Clean Water Acts. DNR submits annual compliance and

monitoring reports to the federal services. An adaptive management program ensures effective implementation and informs adjustments to the forest practices rules.

- The State Department of Ecology (Ecology) has a water quality program that fulfills the state's responsibilities under the federal Clean Water Act. Consistent with EPA requirements, Ecology has a long-term strategy for monitoring and analyzing data about water quality. It provides an annual report with 12 standard parameters and requires local jurisdictions to collect and analyze stormwater discharge data.

5. Acquisition outcomes inconsistently measured

Outcome measures for acquisition programs are required by statute, but agencies have not developed them

The Legislature directed JLARC to review existing and potential outcome measures of acquisition and regulatory programs intended to protect and conserve habitat and expand outdoor recreation. Outcomes indicate how effective the program or project is in meeting its goals. See Appendix 1 for details of each program, existing outcome measures, and other objective benefits that these programs provide.

Statute requires outcome measurement

Statute requires the Office of Financial Management (OFM), the Recreation and Conservation Office (RCO), its governing board, and the Habitat and Recreation Lands Coordinating Group (Lands Group) to develop and use outcome measures for land acquisitions and related grant programs (see Appendix 1 for agencies involved in acquisition programs). Agencies track outputs, but have not developed implementation plans for monitoring outcomes that include agreed-upon indicators and metrics, timeframes, and how to define the success of an acquisition.

Exhibit 5.1: OFM, RCO, and the Lands Group do not consistently measure outcomes as required by statute

Statute	Agencies	Requirement	What Is Done	What is Missing
RCW 43.41.270 — RCW 79A.15.065	Office of Financial Management (OFM) — Recreation and Conservation Office (RCO) and its governing board	Develop outcome-focused performance measures for grant programs	+ Actions and outputs are measured + Measured outputs include number of projects, acres acquired, dollars spent, grant compliance + Outcomes are measured for salmon recovery grant programs only	Except for salmon recovery: - Outcome measures are not collected - Outcome measures are not part of grant programs
RCW 79A.25.260	Habitat and Recreation Lands Coordinating Group*	Monitor the success of habitat and recreation land acquisitions	+ Published reports state whether property was acquired as planned (output) + Participating agencies may independently collect outcome information	- Outcome measures are not collected or reported by the Lands Group

* The Lands Group is an interagency work group established by the Legislature to improve coordination of state land acquisitions. The Lands Group had a monitoring subcommittee that was disbanded when the Legislature reauthorized the Lands Group in 2012 to operate within existing resources.

Source: JLARC staff analysis.

Other states

JLARC's consultants from the Institute for Natural Resources (INR) found that other states generally track outputs, rather than outcomes, to measure success of habitat acquisition programs. Habitat outputs may include the number of acres acquired or projects completed. INR found that recreation acquisition programs generally keep track of visitation, economic effects, and health benefits. INR suggests tracking visitation, combining spatial data about visitation with information about natural resources and using US Forest Service (USFS) tools for assessing economic values. The INR review identifies outcome measurement approaches used for programs with similar goals, including recreation, as required by the study mandate. See Appendix 2 to download INR's report.

Legislative Auditor Recommendation

OFM and RCO should develop and submit a joint plan to the Legislature detailing the actions, costs, and timelines needed to comply with statutes that direct them to measure performance of land acquisitions and related grant programs.

RCO concurs with this recommendation.

6. Regulatory outcomes inconsistently measured

Local approaches and capacity to implement and monitor regulations vary

The Legislature directed JLARC to review existing and potential outcome measures of acquisition and regulatory programs. Outcomes indicate how effective the program or project is in meeting its goals.

No systematic approach for measuring outcomes of state regulatory programs

The Department of Fish and Wildlife (WDFW) implements the Hydraulic Project Approval program and collects data about compliance. While there is no statutory requirement to do so, the agency has conducted some effectiveness studies.

Statute does not require state agencies or local governments to monitor the effectiveness of state regulations implemented at the local level (local regulations). This includes the Shoreline Management Act and the Growth Management Act's Critical Area Ordinances, which may include wetland and floodplains regulations.

Local capacity for implementing, enforcing, and monitoring state regulations varies widely among the local governments in the Asotin, Clark, Jefferson, King, Kittitas, and Okanogansix counties studied. For example, King County has a specialized department that is able to draw on the expertise of county ecologists, geologists, hydrologists, and biologists for permit reviews. In contrast, Asotin County has a small planning staff that work with the Department of Ecology and WDFW when Asotin County determines technical expertise is required.

City, town, and county officials reported to JLARC staff that they presume local regulations are effective because they are based on best available science and approved by the state. Many jurisdictions also reported that their resources are limited for monitoring outcomes.

Conversely, state agencies reported that they do not have the authority or resources to monitor the outcomes of local regulations.

Outcome measurement for state regulations implemented at the local level would be improved with monitoring

Determining whether local regulations meet goals requires two types of monitoring:

1. **Implementation and compliance monitoring** (an output measure) examines if the local regulation is implemented as intended and if permit holders are following the rules. For example, did a permittee leave a prescribed buffer between their home and a stream?

2. **Effectiveness monitoring** (an outcome measure) examines the regulation's effect on the environment. For example, did the function and value of the resource change or were fish and wildlife affected?

In 2017, the Department of Commerce (Commerce), with Ecology and WDFW, developed guidance for local governments to establish monitoring programs for local regulations. The guidance states *"A local government need[s] a feedback loop to help determine whether goals are being met, and if the goals are not being met, how to improve the process."* However, in a 2016 survey conducted by Commerce of local jurisdictions, 18 of 29 cities that responded reported that they do not monitor the effectiveness of Critical Area Ordinances. In another question, 19 jurisdictions reported that they would monitor effectiveness if data and tools were available.

Targeted effectiveness studies have been done

State agencies and local governments have conducted studies to evaluate the effectiveness of regulations in specific situations. Examples include:

1. Clark County conducted a study in 2009 of permit compliance and success of wetlands and habitat mitigation projects. It found that the county could modify permitting and performance standards to improve outcomes.
2. Ecology conducted a study in 2000 to assess the effectiveness of compensatory wetlands mitigation statewide and found that the state experienced loss of wetlands and mitigation could be improved.
3. King County conducted a study in 2014 of shoreline conditions and found that both permitted and unpermitted changes to the shoreline may have physical and ecological effects.

While these studies address the effectiveness of regulations in specific situations, there is no systematic approach to statewide outcome measurement. This means that the state has no way to know whether state regulations implemented at the local level are achieving state goals.

Legislative Auditor Recommendation

If the Legislature wants reliable information about the outcomes of regulatory programs implemented at the local level, it should consider requiring state agencies to work with local governments to develop outcome-focused performance measures.

7. Land stewardship plans do not include measurable outcomes

Agencies should improve information about land stewardship and communicate it to the Legislature

The study mandate directed JLARC staff to review whether state agencies have stewardship plans and if the agencies are in compliance with those plans. "Stewardship" refers to activities that maintain or improve the quality of habitat and recreation resources. This includes maintenance and operations (e.g., suppressing weeds, repairing fences, thinning forests, maintaining infrastructure) and restoring or developing the land to meet the objectives of the acquisition.

Agency plans vary in detail and lack outcome measures

JLARC staff found that the Departments of Fish and Wildlife (WDFW), Natural Resources (DNR), and the State Parks and Recreation Commission (State Parks) have plans for management activities including those listed as "stewardship" in the study mandate. JLARC's review of state agency management plans found that plans vary in the level of detail, how well information is communicated, and how often they are updated. None of the plans include outcome measures related to stewardship activities. DNR has a statutory requirement to develop management plans for one of the two types of natural areas, and funding for planning was eliminated in 2009.

Exhibit 7.1: Agency management plans do not include measurable outcomes

Agency	Planning mechanism	Plans completed	What is being done	What is missing
DNR	Management plans describe the site's protected features, management concerns, and directions. A 1992 Natural Resource Conservation Area statewide management plan provides guidance in absence of site-specific plans.	Site-specific management plans for: <ul style="list-style-type: none">• 8 of 36 Natural Resource Conservation Areas• 10 of 55 Natural Area Preserves	No updates since 2009 Agency reports funding for planning was eliminated in 2009	<ul style="list-style-type: none">• Measurable outcomes• Completed plans for all areas• Updates to original plans

State Parks	Classification and Management Plans (CAMPs) describe intended uses, long-term boundaries, and specific management steps for park operation.	CAMPs for 97 of 124 parks	<ul style="list-style-type: none"> • Description of intended uses and planned long-term boundaries • Statement of planned future tasks • In process of developing CAMPs for all parks 	<ul style="list-style-type: none"> • Measurable outcomes • Completed plans for all areas • Updates to original plans
WDFW	Wildlife area management plans provide guidance related to habitat restoration, research, land management, and recreation.	Management plans for all 33 Wildlife Areas	<ul style="list-style-type: none"> • Description of work completed for two-year periods (outputs) • Statement of planned future tasks • Plan updates every two years • Three plans have been rewritten since 2016 and WDFW plans to update remaining 30 	<ul style="list-style-type: none"> • Measurable outcomes

Source: JLARC staff analysis of WDFW, DNR, and State Parks plans and OFM Strategic Planning Guidelines.

In the absence of statutory guidance regarding stewardship, JLARC staff looked to the Office of Financial Management's (OFM) guidance to state agencies for developing management plans. OFM's guidance suggests that agencies answer questions about current and desired condition, actions needed, and indicators of progress.

Reporting approaches that use ratings to explain resource condition would answer OFM's planning questions

The existing land management plans vary in the level of detail provided. While some plans identify specific planned activities, they are not linked to measurable outcomes that would allow for an assessment of progress. The plans do not use a clear metric to show current

status, desired condition, and whether agencies are making progress. This makes it difficult to communicate the current and future needs of state land.

JLARC staff identified five approaches that use a rating, grade, or other indicator to characterize the condition of an asset. The rating represents the current (baseline) condition. Agencies can express the desired condition as another rating, and communicate the actions and resources needed to achieve that condition.

Exhibit 7.2: Five approaches use ratings that communicate actions and resources needed to achieve desired condition





Approach	Agency(ies)	Description
Ecological Integrity Assessment and Monitoring (EIA/EIM)	WDFW, DNR	EIA identifies ecosystem attributes and metrics to characterize the ecological condition of a site. Using a standardized tool, the approach assigns letter grades for current status and the actions. The approach links stewardship and management activities to habitat outcomes. Pilots have been completed by WDFW and DNR, but the agencies report that they lack resources to fully implement the approach.
Natural Heritage Initiative	State Parks	State Parks is developing the Natural Heritage Initiative to rate the condition of State Parks' natural resources and to identify priority habitats for restoration and protection. State Parks began using this approach in 2014.
Maintenance Accountability Program (MAP)	Department of Transportation (WSDOT)	MAP includes activities similar to those carried out by the natural resource agencies, including noxious weed control, culvert maintenance, and wetland mitigation. WSDOT uses letter grades to report current level of service, planned level of service based on funding, and the actual level of service. This process informs WSDOT's budget requests and reporting to the Legislature.
Facilities Condition Index	Washington State agencies, National Park Service	The Facilities Condition Index develops a condition indicator for buildings that is used to prioritize maintenance and capital budget requests. State Parks used this approach to analyze infrastructure condition, and estimated a \$500 million backlog of deferred maintenance for capital assets in 2017.

Approach	Agency(ies)	Description
Natural Resource Condition Assessment	National Park Service	The assessment assigns letter grades to the condition of park natural resource assets such as air quality, native vegetation, and wildlife. Changes in the grades over time can be used to determine progress toward the desired condition.

Source: JLARC staff analysis of WDFW, DNR, State Parks, WSDOT, National Park Service models.

JLARC staff developed hypothetical examples of how a ratings approach could be used in reporting current condition, desired condition and actions needed.

Exhibit 7.3: How could this approach be used?

Hypothetical Examples	Forest Thinning	 <p>Condition rating: C</p> <ul style="list-style-type: none"> ✗ High fire hazard ✗ High tree density ✗ Poor forest health <p>Actions required</p> <ul style="list-style-type: none"> Small trees thinned Brush cleared Prescribed burning <p>Estimated cost: ?</p>	 <p>Condition rating: A</p> <ul style="list-style-type: none"> ✓ Lower fire hazard ✓ Lower tree density ✓ Healthy forest
	Stream Restoration	 <p>Condition rating: D</p> <ul style="list-style-type: none"> ✗ Nonnative vegetation ✗ Stream bank erosion ✗ High flood risk <p>Actions required</p> <ul style="list-style-type: none"> Installed large woody debris Removed noxious weeds Replanted native vegetation <p>Estimated cost: ?</p>	 <p>Condition rating: A</p> <ul style="list-style-type: none"> ✓ Stable stream bank ✓ Channel migration regulated ✓ Native vegetation

Legislative Auditor Recommendation

DNR, WDFW, and State Parks should provide the Legislature with a plan detailing the resources necessary to report stewardship needs.

DNR, WDFW, and State Parks concur with this recommendation.

Appendix 1. Program Details

The tables in this appendix provide brief descriptions of the programs listed in the study proviso and other programs identified by JLARC staff that expand recreational lands and facilities. This appendix also provides links to one-page summaries of each program.

- Program goals and descriptions are adapted from discussions with program staff and review of agency documents.
- JLARC staff identified existing outcome measures based on agency documents and interviews with agency program staff, county offices, and a survey of local governments.
- Other benefits associated with each program were identified by agencies and organized into four broad categories: community, economy, environment, and safety. The benefits identified for specific programs are consistent with benefits generally

associated with environmental programs documented in academic literature. JLARC staff did not review whether programs produced these benefits.

Acquisition programs in the study mandate

Salmon Recovery Funding Board (SRFB)

[Print Friendly One-Page Summary](#)

Agencies Involved	Program Goal	Program Description
Statutory citizen board with staff support from Recreation and Conservation Office (RCO)	Improve habitat conditions or watershed processes to benefit salmon and bull trout.	SRFB provides grant funding to achieve salmon recovery, including habitat projects and other activities. Funded projects may include land acquisition. Projects are prioritized at local level.

Puget Sound Acquisition and Restoration (PSAR)

[Print Friendly One-Page Summary](#)

Agencies Involved	Program Goal	Program Description
Puget Sound Partnership and RCO	To recover self-sustaining, harvestable salmon runs in a manner that contributes to the overall health of Puget Sound and its watersheds and allows us to enjoy and use this precious resource in concert with our region's economic vitality and prosperity levels.	PSAR provides grant funding for salmon habitat protection and restoration projects. Projects follow priorities set in federally-approved plans and the Puget Sound Action Agenda (e.g., estuary restoration, nearshore protection).

Puget Sound Estuary and Salmon Restoration Program (ESRP)

[Print Friendly One-Page Summary](#)

Agencies Involved	Program Goal	Program Description
Puget Sound Partnership, Washington Department of Fish and Wildlife (WDFW), and RCO	Protect and restore the natural processes that create and sustain the Puget Sound nearshore ecosystem.	ESRP provides state and federal funding and technical assistance to organizations working to restore shoreline and nearshore habitat. The program prioritizes projects that use management measures for implementation.

Washington Wildlife and Recreation Program (WWRP)

[Print Friendly One-Page Summary](#)

Agencies Involved	Program Goal	Program Description
Statutory citizen board with staff support from Recreation and Conservation Office (RCO)	Acquire recreation and habitat lands before they are developed and develop recreation areas for a growing population.	WWRP provides funding for habitat, recreation, and farmland preservation project. Funded projects may include land acquisition.

State Parks and Recreation Commission (State Parks)

[Print Friendly One-Page Summary](#)

Agencies Involved	Program Goal	Program Description
State Parks, RCO	Caring for Washington's most treasured lands, waters, and historic places, connecting all Washingtonians to their diverse natural and cultural heritage, and providing memorable recreational and educational experiences that enhance their lives.	State Parks stewards and maintains the state park system, acquires lands to infill and enhance existing parks, develops recreational and support facilities in existing parks, and acquires lands for future parks. Acquisitions are primarily funded through grants and donations, and sometimes through the sale of surplus park lands or other state funding.

Trust Land Transfer (TLT)

[Print Friendly One-Page Summary](#)

Agencies Involved	Program Goal	Program Description
Department of Natural Resources (DNR)	To address several management needs of the Common School Trust lands, DNR may transfer economically under-performing state trust land; acquire replacement lands with higher long-term income producing potential; increase funds to the K-12 Common School Construction Account; and	The legislature funds the transfer of state trust lands with special ecological or social values that are difficult to manage for income production, or that have low-income potential, out of state trust ownership to a local or state public agency that can manage the property for its ecological or social

Agencies Involved	Program Goal	Program Description
	conserve lands that have high ecological or social values.	values. Money from the transfer funds the Common School Construction Account, providing revenue for the trust beneficiaries, and to acquire productive replacement properties.

Regulatory programs in the study mandate

Growth Management Act (GMA) critical areas regulations

[Print Friendly One-Page Summary](#)

Agencies Involved	Program Goal	Program Description
Local governments, Department of Commerce (Commerce), Department of Ecology (Ecology), and WDFW	Ensure protection of the functions and values of critical areas from the impacts of land use and development.	Local governments designate and protect critical environmental areas and conserve natural resource lands. Critical areas include wetlands, areas with a critical recharging effect on aquifers used for potable water, frequently flooded areas, geologically hazardous areas, and fish and wildlife habitat conservation areas.

Wetlands restrictions

[Print Friendly One-Page Summary](#)

Agencies Involved	Program Goal	Program Description
Local governments and Ecology	Improve, or at least achieve no net loss, in quantity and quality of state's wetlands.	Ecology implements the Clean Water Act (CWA) for wetland permits. Local governments identify and designate wetlands and develop regulations. Both Ecology and local governments require review of development permits.

Shoreline Management Act (SMA)

[Print Friendly One-Page Summary](#)

Agencies Involved	Program Goal	Program Description
Local governments and Ecology	Achieve no net loss of shoreline ecological functions and prevent harm to the state's shorelines while protecting private property.	The SMA requires that development within marine, lake, and stream shorelines complies with the local government's Shoreline Master Program approved by Ecology.

Forest Practices regulation

[Print Friendly One-Page Summary](#)

Agencies Involved	Program Goal	Program Description
Forest Practices Board with staff support from DNR	Regulate the management of public and private commercial forestlands consistent with sound policies of natural resource protection; maintain a viable forest products industry; protect other forest resources.	The Forest Practices rules govern forest practices such as timber harvest, thinning, and road construction to ensure compliance with state and federal law, including the Endangered Species and Clean Water Acts.

Hydraulic Project Approval (HPA)

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Agencies Involved	Program Goal	Program Description
WDFW	Ensure that construction or work is done in a manner that protects fish life.	A Hydraulic Project Approval (HPA) is required from WDFW for construction or work that affects the bed or flow of state waters. WDFW habitat biologists provide technical assistance and issue HPAs with requirements to ensure the work sequentially avoids, minimizes, or compensates for remaining unavoidable harm to fish life including their habitat.

Clean Water Act

[Print Friendly One-Page Summary](#)

Agencies Involved	Program Goal	Program Description
Local governments and Ecology	To protect and restore state waters to sustain healthy watersheds and communities and to ensure that state waters support beneficial uses including recreational and business activities, supplies for clean drinking water, and the protection of fish, shellfish, wildlife, and public health.	The Department of Ecology protects and restores water quality through permits, financial and technical assistance, water quality standards, and monitoring. The Clean Water Act requires monitoring and reporting on water quality.

Floodplain management

[Print Friendly One-Page Summary](#)

Agencies Involved	Program Goal	Program Description
Local governments and Ecology	Reduce losses to life and property and protect the environmental functions of floodplains.	Local governments and Ecology implement the National Flood Insurance Program (NFIP) through standards for flood plain management, regulations and permits, flood risk reduction, and community programs.

Other programs identified by JLARC staff

Natural Areas Program

[Print Friendly One-Page Summary](#)

Agencies Involved	Program Goal	Program Description
DNR	Protect rare plant and animal habitat, native ecosystems, scenic landscapes, as determined by the Washington Natural Heritage Plan criteria.	Natural Areas Preserves and Natural Resource Conservation Areas protect ecological communities, native ecosystems, habitat for endangered or threatened species, and scenic landscapes.

Forestry Riparian Easement Program (FREP)

[Print Friendly One-Page Summary](#)

Agencies Involved	Program Goal	Program Description
DNR	Compensate landowners for the loss of the value of timber caused by expansion of Forest Practices rules.	DNR acquires 50-year conservation easements along riparian areas from small forest landowners. The program reimburses eligible landowners for 50%-89% of the value of the trees they are required to leave to protect fish habitat.

Riparian and Habitat Open Space Program (RHOSP)

[Print Friendly One-Page Summary](#)

Agencies Involved	Program Goal	Program Description
DNR	Maintain a fully functional riparian management zone on rivers where the channel may migrate.	DNR acquires permanent conservation easements from landowners, compensating them for 100% of the value of the timber they must leave to protect fish habitat.

Other WDFW acquisitions

[Print Friendly One-Page Summary](#)

Agencies Involved	Program Goal	Program Description
WDFW	Preserve habitat for fish and wildlife and compatible recreation by acquiring key areas for public ownership.	WDFW pursues funding to acquire land reviewed through an internal process called Lands 20/20.

Aquatic Lands Enhancement Account (ALEA)

[Print Friendly One-Page Summary](#)

Agencies Involved	Program Goal	Program Description
RCO	Reestablish the natural, self-sustaining ecological functions of the waterfront, providing or restoring public access to the water, and increasing public awareness of aquatic lands as a finite natural resource and irreplaceable public heritage.	The program funds projects associated with navigable waters of the state.

Nonhighway and Off-Road Vehicle Activities (NOVA)

[Print Friendly One-Page Summary](#)

Agencies Involved	Program Goal	Program Description
RCO	Acquire, plan, develop, maintain, and manage off-road vehicle trails and areas.	The program funds projects associated with off-road vehicle trails and areas.

Boating Facilities Program (BFP)

[Print Friendly One-Page Summary](#)

Agencies Involved	Program Goal	Program Description
RCO	Acquire, develop, plan, and renovate public boating facilities for motorized boats.	The program funds projects associated with public boating facilities.

Firearms and Archery Range Recreation Program (FARR)

[Print Friendly One-Page Summary](#)

Agencies Involved	Program Goal	Program Description
RCO	Acquire, develop, or improve range facilities.	The program funds projects associated with firearms and archery range recreation.

Youth Athletic Facilities (YAF)

[Print Friendly One-Page Summary](#)

Agencies Involved	Program Goal	Program Description
RCO	Acquire, develop, equip, maintain, and improve youth or community athletic facilities.	The program funds projects associated with youth or community athletic facilities.

Appendix 2. Methodology

JLARC staff worked with scientists and conservation specialists to answer the Legislature's questions

JLARC staff (1) interviewed conservation organizations, scientists, and other stakeholders to understand the outcomes of conservation tools and (2) contracted with scientists from the University of Washington to model the habitat outcomes provided by acquisitions and regulations in the six counties, and (3) contracted with Oregon's Institute for Natural Resources (INR) to review other potential outcome measures for similar programs.

This review focused on efforts to protect habitat for the programs identified in the mandate. JLARC staff was not able to assess the efficacy of many of the state's land protection efforts. This report does not assert that the land acquired or regulated by the state is successful in protecting or conserving habitat.

University of Washington

JLARC staff worked with a team of scientists from the University of Washington's College of the Environment led by Dr. Joshua Lawler. The UW scientists modeled regulations and acquisitions in the six counties.

Downloads

[Link to full report](#)

[Map of regulated areas](#)

[Map of acquisitions](#)

[Great Gray Owl Case Study Map](#)

[Greater Sage Grouse Case Study Map](#)

[Tiger Salamander Case Study Map](#)

[Columbian Sharp-Tailed Grouse Case Study Map](#)

Methodologies

To compare the protection of habitat from regulations and acquisitions, the UW scientists:

1. Mapped the spatial footprints of a subset of the regulations.

2. Mapped land acquisitions made between fiscal years 1990 and 2015 for which spatial data was available.
3. Calculated the amount of habitat overlapped by the regulations and acquisitions and compared them.
4. Computed the length of stream network protected by regulations and compared that to the length of the stream network that is protected by adjacent land acquisitions.

To assess the impact of edge sensitivity on the suitability of habitat land protected by regulations and acquisitions in the six counties, the UW scientists:

1. Identified edge-sensitive species
 - 66 of the 83 species of concern (endangered, threatened or sensitive) identified by WDFW had habitat in the six counties.
 - 21 of the 66 species are considered highly edge sensitive, while 19 are moderately sensitive to edges.
2. Calculated the potential habitat—areas with documented species presence, and possible presence based on the proximity to occupied areas—for these species.
3. Modeled habitat requirements at 82 meters, the median distance from habitat edges documented in scientific literature for edge effects.
4. Calculated the amount of interior forest habitat protected when edge sensitivity is considered.

UW scientists' constraints

It was not possible to assess the impacts of regulations and acquisitions on aquatic habitat. For example, the state issues permits for the Clean Water Act and Hydraulic Project Approval Program for activities, structures, and facilities. The permitting process is designed to reduce the impacts that such activities and facilities have on water quality and aquatic habitat. Assessing the benefit to aquatic habitat would require information about the effects of the permitted activities on water quality and aquatic habitat and the effects of activities or facilities that would have occurred or been built without the regulation. The consulting scientists could not identify a reliable source of this information across the study areas.

Incomplete or unavailable data limited the analysis. There is no single source of information about habitat and recreation land acquisitions. Different entities collect and report different data; acquisitions may be parts of larger projects that are funded through multiple sources over multiple years, and data systems have evolved since 1990. In particular, data was not available for older and smaller acquisitions in the six counties.

Spatial data for regulations does not exist or is out of date. There is no requirement for local governments to map resources they regulate and state agencies report that mapping is an impractical, expensive, and time-consuming effort. Maps of environmental resources also have short shelf lives and require updating.

Oregon's Institute for Natural Resources (INR)

JLARC staff contracted with Oregon's Institute for Natural Resources to complete a literature and program review of outcome measures used in habitat conservation programs. The review was conducted through a combination of systematic review techniques, traditional literature review practices, and input from subject matter experts and key staff at similar programs around the U.S. Efforts focused specifically on programs that would help provide information about 'best practices' for outcome measures that were not found in peer-reviewed or agency publications.

Download

[Link to Part 3 of INR report](#)

RECOMMENDATIONS & AGENCY RESPONSE

Legislative Auditor Recommendation

The Legislative Auditor makes 3 recommendations to improve outcome information

Recommendation #1: OFM and RCO should develop and submit a joint plan to the Legislature detailing the actions, costs, and timelines needed to comply with statutes that direct them to measure performance of land acquisitions and related grant programs.

- RCW 43.41.270 directs OFM to assist natural resource agencies in developing outcome-focused performance measures for administering natural resource-related and environmentally based grant and loan programs.
- RCW 79A.15.065 directs RCO to develop outcome-focused performance measures to be used for management and performance assessment of grant programs.
- Neither requirement has been implemented.

Legislation Required: No

Fiscal Impact: Developing a plan should be within existing resources

Implementation Date: December 31, 2018

Agency Response: RCO concurs

Recommendation #2: If the Legislature wants reliable information about the outcomes of regulatory programs implemented at the local level, it should consider requiring state agencies to work with local governments to develop outcome-focused performance measures.

Agencies should work with local governments to develop an approach to monitoring and work with the Legislature to identify funding needs and sources. The effective practices identified in Commerce's guidance for local governments and the consultants' analysis in Appendix 2 would inform the development of performance measures and a monitoring approach.

Legislation Required: Yes

Fiscal Impact: None

Implementation Date: 2018 and 2019 Legislative Sessions

Recommendation #3: DNR, WDFW, and State Parks should provide the Legislature with a plan detailing the resources necessary to report stewardship needs.

Consistent with OFM's planning guidance, this reporting should include: the current state of agency-managed lands, the desired state, and actions needed to achieve the desired state.

OFM's guidance suggests agencies answer four key questions:

1. Where are we today?
2. Where do we want to be in the future?
3. How do we close the gap?
4. How will we know if we are succeeding?

Legislation Required: No

Fiscal Impact: Developing a plan should be within existing resources

Implementation Date: December 31, 2018

Agency Response: DNR, WDFW, and State Parks concur

Recreation and Conservation Office Response

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December 8, 2017

Keenan Konopaski, Legislative Auditor
Joint Legislative Audit and Review Committee
P.O. Box 40910
Olympia, WA 98504-0910

Dear Auditor Konopaski:

Thank you for the opportunity to review and respond to the Joint Legislative Audit and Review Committee's (JLARC) preliminary performance audit report on "*Measuring Outcomes of Land Acquisitions and Regulations*." The Recreation and Conservation Office (RCO) offers this response to the first auditor recommendation included in the report:

Recommendation	Agency Position	Comments
The Office of Financial Management and the Recreation and Conservation Office should develop and submit a joint plan to the Legislature detailing actions, costs, and timelines needed to comply with statutes that direct them to measure performance of land acquisitions and related grant programs.	Concur	The Recreation and Conservation Office will work with the Office of Financial Management (OFM) to develop a plan to identify measureable outcomes for land acquisition projects funded with RCO-administered grant funds.

The Joint Legislative Audit and Review Committee (JLARC) recommends that the two agencies submit to the Legislature a plan to identify performance based outcome measures for land acquisition and related grant programs. RCO will work with OFM to specify options for doing so. It is our hope that the JLARC, as well as the full Legislature, recognizes that the development and collection of measureable outcomes for land acquisition programs is entirely dependent on the other natural resource agencies – their monitoring efforts, abilities and available funding to do this work.

It is worth noting that we have attempted to develop outcome based performance measures as set forth in RCW 79A.15.065 in the past and found that numerous barriers prevented its execution. These barriers included the lack of resources to monitor the results of land acquisition investments, understanding and agreeing to the time frame of the outcomes (i.e., is the acquired land still functioning habitat in 5, 10, or 100 years), and setting outcome measures for species that move from

Recreation and Conservation Funding Board • Salmon Recovery Funding Board • Washington Invasive Species Council
Governor's Salmon Recovery Office • Habitat and Recreation Lands Coordinating Group 

one location to the next (i.e., if we buy the habitat for a certain species and most individuals move to a new location in 2 years, has the acquisition been a failure?). These same barriers and questions are still relevant today. The JLARC consultants' acknowledge that Washington is similar to the other states, in that we tend to measure outputs instead of outcomes.

Additionally in the JLARC report is a list of general questions that legislators could ask agencies about proposed land acquisitions intended to protect and conserve habitat:

1. Does the acquisition have a clearly stated goal?
2. What species will the acquisition protect and what are its habitat requirements?
3. To what degree are these species and habitat types already protected?
4. What is the level of threat to the species/habitat and to what degree will acquisition offset those threats?
5. How likely is the acquisition to provide continued protection for the species/habitat in the future?
6. Does the proposed acquisition have a plan that includes monitoring and a mechanism to adjust management if goals are not being met?

Most of these questions are already asked and answered in the Washington Wildlife and Recreation Program grant application and then used by RCO's grant evaluation committees when individual projects are evaluated and ranked. We recognize that this information tends to be buried in the application text and is difficult to pull out as answers to these individual questions. To that end, RCO will recommend that the Habitat and Recreation Lands Coordinating Group (RCW 79A.25.260) modify its biennial forecast report, required by RCW 79A.25.260(3)(b)), to explicitly address these questions. In the forecast report, which details agencies' proposed land acquisition projects, information relating to each of the questions could be included for each of the proposed projects. We believe that this would enhance the information provided to the Legislature in the forecast report.

Thank you for the opportunity to respond to the JLARC recommendations. If you have any questions, please do not hesitate to contact me.

Sincerely,



Kaleen Cottingham, Director
Recreation and Conservation Office

State Parks and Recreation Commission Response

Don Hoch
Director



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December 8, 2017

Keenan Konopaski, Legislative Auditor
Joint Legislative Audit and Review Committee
Eastside Plaza Building #4, 2nd Floor
1300 Quince Street SE
PO Box 40910
Olympia, WA 98504-0910

Dear Mr. Konopaski:

Thank you for providing your preliminary report: *Measuring Outcomes of Habitat and Recreation Acquisitions and Regulations* with State Parks for our review. Our formal response to the report's third recommendation follows:

Recommendation	Agency Position	Comments
DNR, WDFW, and State Parks should provide the Legislature with a plan detailing the resources necessary to report stewardship needs.	Concur	<p>State Parks has made progress in assessing its facilities, natural resources, and cultural resources; establishing stewardship goals, and developing the cost of reaching those goals. Developing the recommended plan will help inform the legislature about the costs of continuing to pursue, complete and maintain these efforts.</p> <p>State parks land acquisitions are intended to serve recreation activities more than habitat purposes. In creating a plan for the three agencies, the process should be flexible enough to consider both.</p>

While we do not have a formal response to the first recommendation for the Office of Financial Management and the Recreation and Conservation Office, State Parks requests that affected agencies are included in developing the joint plan.

If you have any questions, please contact Peter Herzog, Assistant Director at (360) 902-8652.

Thank you.

A handwritten signature in black ink that reads "Don Hoch".
Don Hoch
Director

Department of Fish and Wildlife Response



State of Washington
DEPARTMENT OF FISH AND WILDLIFE

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December 8, 2017

Keenan Konopaski
Legislative Auditor
Joint Legislative Audit and Review Committee
P.O. Box 40910
Olympia, WA 98504-0910

Dear Auditor Konopaski:

Thank you for the opportunity to review and respond to the Joint Legislative Audit and Review Committee's preliminary performance audit report on "*Measuring Outcomes of Land Acquisitions and Regulations*." The Washington Department of Fish and Wildlife (WDFW) respectfully offers this response to the three auditor recommendations included in the report:

Recommendation	Agency Position	Comments
The Office of Financial Management and the Recreation and Conservation Office should develop and submit a joint plan to the Legislature detailing actions, costs, and timelines needed to comply with statutes that direct them to measure performance of land acquisitions and related grant programs.	Concur	We request that the plan be developed in collaboration with the agencies (including WDFW) that utilize RCO and legislative funds to acquire lands.
If the Legislature wants reliable information about the outcomes of regulatory programs implemented at the local level, it should consider requiring state agencies to work with local governments to develop outcome-focused performance measures.	Concur	Development of statewide performance measures and a monitoring approach would require a large-scale and coordinated effort. We are concerned with the assumption that there would be no fiscal impact to agencies to complete this work, as stated on page 30 of the preliminary report, and have concerns regarding the level of effort needed for implementation.

Department of Fish and Wildlife, the State Parks and Recreation Commission, and the Department of Natural Resources should provide the Legislature with a plan detailing the resources necessary to report stewardship needs.	Concur	Development of this plan will require a significant amount of staff capacity and financial resources. We agree that it is a priority, but we may or may not be able to integrate into our existing workload and budget depending on the scale of the project. We look forward to this opportunity to describe our resource needs for identifying, managing, monitoring, and reporting stewardship needs for our lands. We request the Legislature dedicate some staff capacity to work with all three agencies to ensure that we use a similar template and approach in developing our plans. In particular, we request a clear definition of "stewardship" and that the stewardship goals we use to guide the analysis match the needs and expectations of the Legislature.
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We also would like to go on record agreeing wholeheartedly with the report conclusion that "Programs that succeed in measuring outcomes have mandates, monitoring plans, and funding. (p. 9)." This applies equally to our work with acquisition, land management, and regulation. Specific to WDFW lands, we manage these lands as per our legislative mandates, but are aware that we have not had the full resources to fund the clear and consistent monitoring plans (with the goals, specific desired outcomes, and quantifiable metrics needed) that is necessary to measure and manage adaptively to achieve those mandates. We have made significant strides towards this effort with the revamping of our Wildlife Area plans to include measure goals and objectives, and in our initial efforts to adapt a graded Ecological Integrity Monitoring approach to some management actions and pilot ecological systems. These issues are referenced in the report on pages 15 and 16, and welcome the inclusion of additional context. These efforts are critical to overall success of both acquisition and regulatory programs, and we look forward to the opportunity to evaluate options and their costs that meet the policy and fiscal needs of the public and the Legislature.

We are concerned with the level of effort associated with the development and implementation of outcome-focused performance measures, as well as a stewardship plan. Increased staff capacity and funding would be needed to coordinate efforts not only within the agency, but also across other state agencies and local governments.

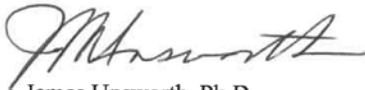
Keenan Koponaski
December 8, 2017
Page 3

Specific to our comments on recommendation #3, we recognize that the term “stewardship” is not defined and can be defined very differently. Does this mean the management actions required for each and every Wildlife Area unit? We have 33 units and 215 subunits; specific stewardship needs for each unit would look much different than an overall assessment of the needs for our entire portfolio versus something broken out by ecoregion (as 3 different potential constructs). We need clarity and agreement from the Legislature about what approach to take so that the work involved will create a product that is on target. The nature of the work will also dictate the staff resources require to produce it. We currently know we need to develop an assessment of our needs for operations and maintenance across our lands portfolio and have thoughts on how to approach that within our existing staff resources. However, if the assignment varies significantly, we will need to reassess how to accomplish it.

We look forward to working with the Legislature and our partner agencies in fulfilling these recommendations and believe that a strong partnership will increase the delivery of services that are expected by the people of Washington state.

Thank you for the opportunity to respond to the JLARC recommendations. If you have any questions, please do not hesitate to contact me.

Sincerely,

A handwritten signature in dark ink, appearing to read 'J. Unsworth', written in a cursive style.

James Unsworth, Ph.D.
Director

Department of Natural Resources Response



December 8, 2017

DEPARTMENT OF
NATURAL RESOURCES

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Keenan Konopaski
Legislative Auditor
Joint Legislative Audit and Review Committee
PO Box 40910
Olympia, WA 98504-0919

Dear Mr. Konopaski,

Thank you for the opportunity to provide the Department of Natural Resources' (Department) formal response to the State of Washington Joint Legislative Audit and Review Committee's (JLARC) *Measuring Outcomes of Land Acquisitions and Regulations – Preliminary Report*. On behalf of the Department, I want to express our appreciation for the high quality of the report.

The report recommended that the Department, Department of Fish and Wildlife (WDFW) and State Parks provide the Legislature with a plan detailing the resources necessary to report stewardship needs (Recommendation #3).

The Department concurs with the JLARC recommendation. Our concurrence is based on the understanding that this plan will provide a means by which we can communicate the stewardship needs for the system of natural areas managed by DNR, including both Natural Area Preserves (NAPS) and Natural Resources Conservation Areas (NRCAs). The plan will provide us with the opportunity to summarize for the Legislature our progress toward meeting the goals of the NAP and NRCA Acts (RCW 79.70 and RCW 79.71, respectively), the current status of the portfolio of natural areas that we manage, and what can be done to improve the outcomes of our acquisition efforts, including meeting conservation, education, research and outdoor recreation objectives.

The report confirms the importance of much of the work that is already being done by DNR staff during the development and evaluation of potential acquisition projects. Our internal Department processes and the Recreation and Conservation Office (RCO)-led Washington Wildlife and Recreation Program project evaluations are designed to identify the highest priority projects in terms of conservation need and likelihood of success. Both processes identify and evaluate existing protections, on-going threats, and to what extent a proposed acquisition will contribute to the conservation and/or recreation objectives of the project.

The report also points out the need to monitor acquisitions and land management efforts so that we have the ability to adjust our management if goals are not being met. We believe that this is

Keenan Konopaski
December 8, 2017
Page Two

critical to achieving lasting success with our acquisitions. One potential approach to measuring the condition of lands that we have acquired for conservation and recreation purposes, referred to as Ecological Integrity Assessments, is highlighted in the report. The Department's natural heritage scientists have played a key role in the development of this approach and its application to both aquatic and terrestrial systems. We believe that this approach, or a modification to it, can contribute to measuring outcomes of land acquisitions, identifying where there have been successes as well as where additional work may be needed.

Finally, the report points out that there is room for improvement regarding how the Department (as well as State Parks and WDFW) measures, characterizes and communicates the outcomes of our acquisitions. We agree and look forward to assisting, in whatever way possible, in the work to be carried by the Office of Financial Management and RCO regarding measuring performance of land acquisitions and related grant programs (Recommendation #1 of the JLARC report).

The collaboration and support that the Department has received from JLARC during the course of this audit has been exemplary. Your efforts are truly appreciated. It has been a pleasure to work with you.

Thank you for the opportunity to comment.

Sincerely,

A handwritten signature in dark ink, appearing to read "Hilary S. Franz", written over a horizontal line.

Hilary S. Franz
Commissioner of Public Lands

Department of Commerce Response



STATE OF WASHINGTON
DEPARTMENT OF COMMERCE

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December 8, 2017

Keenan Konopaski
Legislative Auditor
Joint Legislative Audit and Review Committee
PO Box 40910
Olympia, WA 98504-0910

Dear Mr. Konopaski:

The Washington State Department of Commerce has reviewed the *Joint Legislative Audit and Review Committee preliminary report "Measuring Outcomes of Land Acquisitions and Regulations"*, December 2017. We appreciate the tremendous amount of work that Committee staff put into this preliminary report. Commerce had the opportunity to meet with Committee staff and comment on early drafts.

Commerce offers our support for Legislative Auditor Recommendation 2, which states: "If the Legislature wants reliable information about the outcomes of regulatory programs implemented at the local level, it should consider requiring state agencies to work with local governments to develop outcome-focused performance measures." It is consistent with recently published draft guidance by Commerce and the Departments of Ecology, and Fish and Wildlife, encouraging local governments to create permit implementation and compliance monitoring "feedback loops" for protection of critical areas under the Growth Management and Shoreline Management Acts.

Based on the Commerce survey of local governments referenced in the report, we agree with the report's finding that outcomes for some regulatory programs, particularly critical areas regulations and shoreline master programs, are inconsistently measured. We also agree the best way to improve information about outcomes of these regulations is through partnerships between state and local governments.

Commerce, Ecology, and Fish and Wildlife have presented the draft guidance at forums across the state. The consistent response has been agreement with the goal, but concern that local resources and capacity are inadequate to the task. As the report notes, programs that succeed in measuring outcomes have mandates, clear monitoring plans, and dedicated resources for monitoring.

Mr. Kennan Konopaski
December 8, 2017
Page 2

We believe a joint local/state effort to develop meaningful feedback loops could be developed that would be cost effective. Given the complexity of the task, the Legislature may consider an incremental approach starting with pilot projects to test different approaches. We look forward to further discussions on this important topic.

Sincerely,

A handwritten signature in black ink, appearing to read "Brian Bonlender", with a long horizontal flourish extending to the right.

Brian Bonlender
Director

Department of Ecology Response



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

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December 8, 2017

Keenan Konopaski, Legislative Auditor
Joint Legislative Audit and Review Committee
1300 Quince ST SE
Olympia, WA 98504

Re: Joint Legislative Audit and Review Committee Preliminary Report "Measuring Outcomes of Land Acquisitions and Regulations, December 2017"

Dear Mr. Konopaski:

The Department of Ecology (Ecology) has reviewed the Joint Legislative Audit and Review Committee (JLARC) preliminary report "Measuring Outcomes of Land Acquisitions and Regulations, December 2017." We commend the JLARC staff for their thoughtful work on the draft report. The JLARC staff consulted Ecology on early drafts and were responsive to our suggestions.

Ecology is not asked to submit a formal response to the preliminary report, as the recommendations are not directed specifically to our agency. However, we offer our support for Recommendation 2, which recommends that "if the Legislature wants reliable information about the outcomes of regulatory programs implemented at the local level, it should consider requiring state agencies to work with local governments to develop outcome-focused performance measures."

We agree with the report's finding that outcomes for some regulatory programs, particularly critical areas regulations and shoreline master programs, are inconsistently measured. We also agree the best way to improve information about outcomes of these regulations is through partnerships between state and local governments.

The report notes that the Department of Commerce, Ecology, and the Department Fish and Wildlife have recently published draft guidance for local governments on how to build permit implementation and compliance monitoring "feedback loops" for critical area and shoreline regulations. As our agencies have presented the draft guidance at local forums across the state, the consistent response has been agreement with the goal, but concern that local resources and capacity are inadequate to the task. As the report notes, programs that are successful have dedicated resources for monitoring. We believe a joint local/state effort could develop meaningful and cost effective feedback loops. Given the complexity of the task, the Legislature may consider an incremental approach starting with pilot projects to test different approaches. We look forward to further discussions on this important topic.

Sincerely,

A handwritten signature in black ink, appearing to read "Maia D. Bellon".

Maia D. Bellon
Director



Office of Financial Management Response



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December 20, 2017

Keenan Konopaski, Legislative Auditor
Joint Legislative Audit and Review Committee
P.O. Box 40910
Olympia, WA 98504-0910

Dear Auditor Konopaski:

Thank you for the opportunity to review and respond to the Joint Legislative Audit and Review Committee's preliminary performance audit report on "*Measuring Outcomes of Land Acquisitions and Regulations*." The Office of Financial Management (OFM) offers the following response.

Recommendation	Agency Position	Comments
The Office of Financial Management and the Recreation and Conservation Office should develop and submit a joint plan to the Legislature detailing actions, costs, and timelines needed to comply with statutes that direct them to measure performance of land acquisitions and related grant programs.	Concur	The Office of Financial Management will work with the Recreation and Conservation Office to develop a plan to identify measurable outcomes for land acquisition projects required by RCW 43.41.270(5).
If the Legislature wants reliable information about the outcomes of regulatory programs implemented at the local level, it should consider requiring state agencies to work with local governments to develop outcome-focused performance measures.	Concur	
The Department of Fish and Wildlife, the State Parks and Recreation Commission and the Department of Natural Resources should provide the Legislature with a plan detailing the resources necessary to report stewardship needs.	Concur	



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In concurring with these recommendations, OFM provides these additional comments.

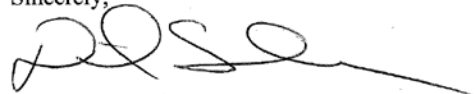
OFM's role under RCW 43.41.270 is to *assist* natural resource-related agencies develop outcome-based performance measures and related monitoring program for administering a specifically defined set of natural resource-related and environmentally-based grant and loan programs. The agencies that administer the specified grant and loan programs have the responsibility to develop the most appropriate measures for their programs.

OFM will need to work extensively with the departments of Natural Resources, Fish and Wildlife, and Commerce; the Public Works Board; the State Conservation Commission; and the Recreation and Conservation Office and its Salmon Recovery Funding Board to develop a plan to measure the performance of land acquisitions and related grant programs. It is also important to recognize that the agency administering a grant or loan program may not be the lead agency monitoring the outcome-based result. For example, the State Conservation Commission awards grants to improve water quality but the Department of Ecology is the lead state agency for monitoring water quality.

In the absence of statutory guidance regarding stewardship of state lands, JLARC staff looked to OFM's guidance to state agencies for developing management plans. It should be clarified that OFM does not provide guidance for developing generic management plans but rather provides guidance for developing agency strategic plans as required under RCW 43.88.090(3). Although this strategic planning guidance is informative in this discussion, it is not necessarily the proper guidance for developing stewardship plans for natural resource agencies.

Thank you again for the opportunity to comment on this report.

Sincerely,



David Schumacher
Director

cc: Jim Cahill, Senior Budget Assistant, OFM
Scott Merriman, Legislative Liaison, OFM
Tammy Firkins, Audit Liaison, Results Washington, Office of the Governor

MORE ABOUT THIS REVIEW

Audit Authority

The Joint Legislative Audit and Review Committee (JLARC) works to make state government operations more efficient and effective. The Committee is comprised of an equal number of House members and Senators, Democrats and Republicans.

JLARC's non-partisan staff auditors, under the direction of the Legislative Auditor, conduct performance audits, program evaluations, sunset reviews, and other analyses assigned by the Legislature and the Committee.

The statutory authority for JLARC, established in [Chapter 44.28 RCW](#), requires the Legislative Auditor to ensure that JLARC studies are conducted in accordance with Generally Accepted Government Auditing Standards, as applicable to the scope of the audit. This study was conducted in accordance with those applicable standards. Those standards require auditors to plan and perform audits to obtain sufficient, appropriate evidence to provide a reasonable basis for findings and conclusions based on the audit objectives. The evidence obtained for this JLARC report provides a reasonable basis for the enclosed findings and conclusions, and any exceptions to the application of audit standards have been explicitly disclosed in the body of this report.

Study Questions

Why a JLARC Study of Habitat and Recreation Lands?

In the 2016 Supplemental Capital Budget (ESHB 2380), the Legislature directed the Joint Legislative Audit and Review Committee (JLARC) to review outcomes for programs that protect and conserve habitat and expand outdoor recreation.

The Legislature stated specific interest in identifying how habitat outcomes of land acquisition programs compare with outcomes of land use regulatory programs. The Legislature's assignment focuses on specific state agencies and acquisition or regulatory programs (see back).

Study Questions

This study will address the following questions:

1. What habitat or recreation outcome measures do specific acquisition and regulatory programs currently use? Does research suggest additional measures?
2. For three counties west of the Cascades and three counties east of the Cascades:
 - a. How much land has been acquired by the programs for habitat purposes since 1990? Were the desired habitat outcomes of the purchases stated and monitored?
 - b. How much land is subject to major regulatory programs? Do those regulatory programs have stated and monitored habitat outcomes?
 - c. How do the outcomes for habitat land acquisition and regulation compare? To what extent do they overlap?

3. Do state agencies have land stewardship programs for land they acquire? To what extent have agencies complied with these programs?

More about the Study

Focus on specific agencies

The Legislature's assignment focuses on lands acquired or regulated by 5 agencies: the Departments of Ecology, Fish and Wildlife, Commerce, and Natural Resources, and the State Parks and Recreation Commission. Lands acquired by these agencies, local governments, or other entities using grants from the Recreation and Conservation Office also are included.

Focus on specific programs

JLARC staff will review the existing or potential outcome measures that can be used to evaluate the success of (1) state-funded acquisitions of habitat and recreation lands since 1990 and (2) major regulatory programs. The review will focus on the following six habitat or recreation acquisition programs and seven major regulatory programs:

Acquisition Programs	Regulatory Programs
<ol style="list-style-type: none">1. Puget Sound Acquisition and Restoration program2. Puget Sound Estuary and Restoration Program3. Salmon Recovery Funding Board4. State Parks and Recreation Commission5. Trust Land Transfer program6. Washington Wildlife and Recreation Program7. Other state acquisition programs identified by JLARC staff	<ol style="list-style-type: none">1. Clean Water Act2. Flood plain management3. Forest practices rules4. Growth management regulations regarding critical areas5. Hydraulic Project Approval program6. Shoreline management rules7. Wetland restrictions

This will include a review of the programs' other objective benefits, such as public health and safety. JLARC staff also will review state expenditures and matching local and federal expenditures (since 1990) for the acquisition programs.

Study Informed by Multiple Information Sources

JLARC staff will use multiple sources of information, including scientific and economic literature, data provided by state agencies, and information from stakeholders who use science based data to quantify benefits of natural lands.

Study Timeframe

Staff will present the preliminary report in December 2017 and the final report in January 2018.

Methodology

The methodology JLARC staff use when conducting analyses is tailored to the scope of each study, but generally includes the following:

- **Interviews** with stakeholders, agency representatives, and other relevant organizations or individuals.
- **Site visits** to entities that are under review.
- **Document reviews**, including applicable laws and regulations, agency policies and procedures pertaining to study objectives, and published reports, audits or studies on relevant topics.
- **Data analysis**, which may include data collected by agencies and/or data compiled by JLARC staff. Data collection sometimes involves surveys or focus groups.
- **Consultation with experts** when warranted. JLARC staff consult with technical experts when necessary to plan our work, to obtain specialized analysis from experts in the field, and to verify results.

The methods used in this study were conducted in accordance with Generally Accepted Government Auditing Standards.

More details about specific methods related to individual study objectives are described in the body of the report under the report details tab or in technical appendices.

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