

# PERFORMANCE AUDIT



Office of the  
Washington  
State Auditor  
Pat McCarthy

## Aquatic Land Lease Rates: Assessing process consistency

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# Executive Summary

## State Auditor's Conclusions (page 29)

One of the most important services a performance audit can provide is bringing transparency to areas where different interests are unsure of the facts. Members of the Legislature requested a performance audit to clarify how the Department of Natural Resources (DNR) develops and sets rates for leases of public aquatic lands in two areas: water-dependent activities (such as marinas) and aquaculture (such as oyster farming).

We identified several elements of DNR's process aimed at setting aquatic land leases rates consistently. However, the agency could not easily demonstrate it followed a consistent process for all water-dependent and aquaculture leases. This was true in certain instances regarding the selection of alternative upland parcels when calculating the value of water-dependent leases, and in some aquaculture leases for which staff relied on institutional knowledge and only limited documentation.

Although there was insufficient documentation and data to fully determine whether current rates are set consistently, that itself is an important finding. DNR can enhance its processes to foster and demonstrate consistency in its leases by more completely documenting how it determines lease rates and by improving its data. Our report includes recommendations to do just that.

## Background (page 7)

DNR manages state-owned aquatic lands, which include tidelands, shorelands, harbor areas and beds of navigable waters. Washingtonians rely on these aquatic lands for food, commercial enterprises, recreation and environmental benefits.

State law directs DNR to “strive to provide a balance” of four fundamental public benefits:

- Encouraging public use and access
- Fostering uses for the land that can only take place on the water
- Ensuring environmental protection
- Using renewable resources

Generating revenue is also considered a benefit whenever doing so is consistent with the four core benefits above.

One aspect of DNR's management responsibilities is to administer leases that allow private and public organizations to use state aquatic lands. These leases generated about \$13.6 million in revenue in 2022. Aquatic land leases include those for water-dependent uses, such as marinas, and aquaculture, such as oyster and mussel farming. The method for setting the lease rate differs depending on the use. Rates are one part of a larger leasing process for DNR, which includes other factors such as environmental protection.

This audit examined whether the process for determining lease rates for state-owned aquatic lands contributed to fairness for leaseholders and the state by being consistent across similar lease types. It focused on water-dependent and aquaculture leases because they are favored uses in state law.

### **Water-dependent leases: DNR's process supports consistency in rates, but limited documentation hinders its ability to demonstrate this** (page 14)

Leases for marinas, docks, piers and other water-dependent uses comprise around 80 percent of all DNR-managed leases. A formula set out in statute that relies on the value of neighboring "upland" parcels determines the rates for these leases. The resulting standardized, formula-driven process for setting water-dependent rates has both disadvantages and benefits. The process is more transparent and reduces administrative burdens, but is less flexible than, for example, case-by-case negotiations.

We identified multiple elements of DNR's process targeted at setting rates consistently, including templates, policies and procedures, as well as lease reviews. However, selecting the appropriate upland parcel for use in the rent formula introduced complexity to the process. DNR lacked documentation to reliably demonstrate it followed a consistent process for selecting upland parcels for some leases we reviewed, which can make it difficult for agency staff to understand earlier decisions as they determine future rates.

### **Aquaculture leases: DNR uses a negotiation process which means rates can vary; written guidance could foster long-term consistency**

(page 19)

Leases for oyster, clam and other types of aquaculture make up less than 10 percent of all leases and about 5 percent of lease revenue.

Negotiating aquaculture lease rates, as allowed by law, can offer DNR flexibility but at the price of greater consistency. State law directs DNR to set rates through competitive bidding or negotiation; it does not hold DNR to any specific requirements to ensure lease rates are consistent for similar properties and uses. DNR considers many broad factors when determining an aquaculture lease rate, including the specific industry, location, and other benefits to the state such as protecting native vegetation.

DNR had a standardized process for more than half of aquaculture leases, comprising mussels and Pacific Coast oysters. DNR sets the remainder of aquaculture lease rates individually, which can vary as do the unique circumstances of each lease. DNR relies on institutional knowledge to foster consistency for these leases, but we could not assess its success due to limited documentation. Written guidance would help DNR foster consistency in aquaculture lease rate determinations.

## **Better documentation and data would help DNR reduce the risk of inconsistent lease rates** (page 26)

DNR's lease files sometimes lacked essential or helpful elements describing lease rate determinations, such as alternative parcel selection explanations for water-dependent leases or rent calculation spreadsheets for aquaculture leases. Documenting how lease rates were determined more completely could help DNR employees access information about current and historical leases easily and reliably, to help ensure they determine rates in a manner consistent with other similar leases.

DNR's data system was missing key fields the agency would need to assess consistency, and other information such as lease size was present in the data but unreliable. While some of this information may have been present in individual lease files, having all necessary information in a centralized data management system would help DNR better assess rate consistency. Such centralization would help agency staff draw on historical information as they determine future rates and allow managers to conduct periodic monitoring and analyses of consistency.

## **Recommendations** (page 30)

We made a series of recommendations to the Department of Natural Resources to better foster consistency in the rate-determining process for both water-dependent and aquaculture lease types. These recommendations seek to reduce the risk of future inconsistent lease rates in the long term through implementing standard and consistent documentation, as well as complete and reliable data for both lease types. The recommendations also address improving the aquaculture rate-determination process through implementing policies, procedures or written guidance.

## Next steps

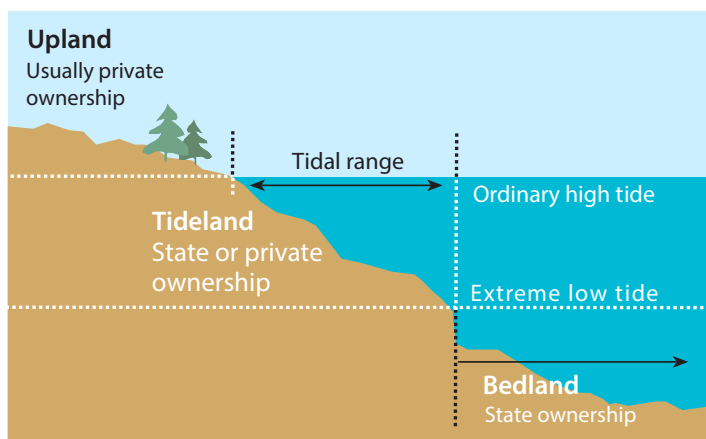
Our performance audits of state programs and services are reviewed by the Joint Legislative Audit and Review Committee (JLARC) and/or by other legislative committees whose members wish to consider findings and recommendations on specific topics. Representatives of the Office of the State Auditor will review this audit with JLARC's Initiative 900 Subcommittee in Olympia. The public will have the opportunity to comment at this hearing. Please check the JLARC website for the exact date, time, and location ([www.leg.wa.gov/JLARC](http://www.leg.wa.gov/JLARC)). The Office conducts periodic follow-up evaluations to assess the status of recommendations and may conduct follow-up audits at its discretion. See **Appendix A**, which addresses the I-900 areas covered in the audit. **Appendix B** contains information about our methodology.

# Background

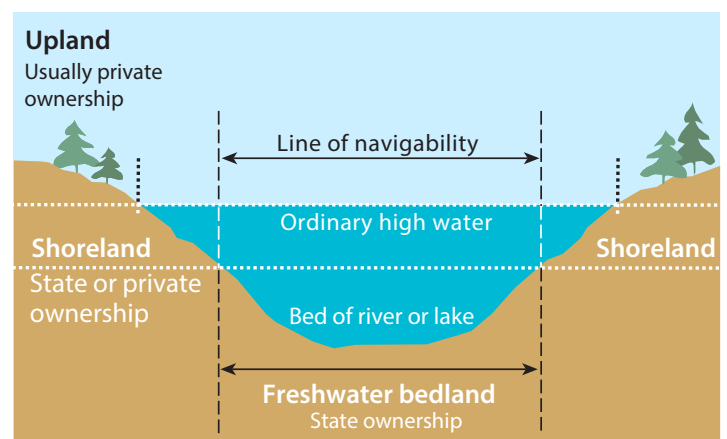
## The Department of Natural Resources manages state-owned aquatic lands, including leases

Aquatic lands include tidelands, shorelands, harbor areas and beds of navigable waters. Tidelands, illustrated in **Exhibit 1A**, are submerged lands and beaches that are exposed with the ebb and flow of the tides. Shorelands, illustrated in **Exhibit 1B**, are on the edge of rivers and lakes, between the line of ordinary high water and the bedlands. Bedlands, which appear in both illustrations, are aquatic lands submerged at all times. Washingtonians rely on these aquatic lands for food, commerce, recreation and environmental benefits.

**Exhibit 1A – Tidal range denotes tidelands**



**Exhibit 1B – Range of navigability affects shorelands**



Source for both illustrations: Auditor created using DNR publication "Boundaries of State-Owned Aquatic Lands."

In 1889, Washington's Constitution declared state ownership of aquatic lands, but the balance of ownership has shifted since then. Much of the state's aquatic lands were sold to encourage economic development and help fund state government. For example, the 1895 Bush Act and Callow Act permitted the sale of aquatic lands to encourage and facilitate the establishment of oyster farming. The Legislature has since eliminated the sale of aquatic lands except to public organizations and certain types of shorelands to those who own upland parcels when the aquatic lands have minimal public value. The state has never sold its bedlands, but by the 21st century, about two-thirds of tidelands and a third of shorelands were in other hands.

Recognizing that state-owned aquatic lands are a finite natural resource of great value and irreplaceable public heritage, the Legislature has designated the Department of Natural Resources (DNR) as the agency responsible for managing these lands for the benefit of the public. DNR is the steward of the approximately 2.6 million acres of aquatic lands still under state ownership. In addition, the agency

is tasked by the Commissioner of Public Lands with ensuring state-owned lands are managed in collaboration with the 29 federally recognized tribes of Washington. Tribes are stewards of their own lands and are key partners in stewardship of state-owned lands.

DNR manages numerous programs on state-owned aquatic lands. For example, the agency manages the process allowing private businesses to obtain licenses to harvest wildstock shellfish like razor clams and geoduck. It maintains some areas as aquatic reserves, with the intent of conserving and enhancing important native ecosystems. Other DNR aquatic lands programs include removing derelict vessels that pose a threat to public safety and aquatic health, controlling invasive plant species, and restoring aquatic lands by, for example, removing toxic debris.

DNR is also responsible for leasing out an estimated 40,000 acres of state-owned aquatic lands to businesses, government agencies and the public. These leases allow historically important industries, such as marinas, boating and shellfish aquaculture, to use these lands.

## **In managing aquatic lands, DNR must strive to balance several fundamental public benefits**

State law has articulated a philosophy to guide the management of state-owned aquatic lands for public benefit. Referred to as the “Four Plus” benefits, it directs DNR to strive to balance four core factors when managing aquatic lands, including leased lands:

- **Encourage public use and access**
- **Foster water-dependent uses** – meaning, activities which cannot logically exist in any location but on the water
- **Ensure environmental protection**
- **Use renewable resources**

The “Plus” is generating revenue, whenever doing so is consistent with the four core benefits. Revenue is considered a public benefit as it helps pay for the improvement of aquatic lands for the public overall. After fixed deductions for DNR’s administrative costs, revenues from leasing and other programs are applied to a fund dedicated to enhancing public aquatic lands: the Aquatic Lands Enhancement Account. Uses for this money include developing public parks and restoring salmon habitat.

More information about the Aquatic Lands Enhancement Account, including projects it funds, can be found at [www.dnr.wa.gov/ALEA](http://www.dnr.wa.gov/ALEA)



## Aquatic land leases include those for water-dependent uses and aquaculture

DNR administers three main types of leases for state-owned aquatic lands, categorized in state law by the way the property is used.

- **Water-dependent:** A use that cannot logically exist in any location but on the water, such as marinas, docks and piers. State law directs DNR to foster water-dependent uses, recognizing the important role these industries and activities played in the state's history and that they should continue to do so in the future. See **Photograph 1**.
- **Aquaculture:** Farming plants and animals in water, including oysters, clams and seaweed. Although aquaculture is considered a water-dependent use, it is categorized separately to distinguish its lease rates from other water-dependent uses. See **Photograph 2**.
- **Nonwater-dependent:** A use that can operate in a location other than on a waterfront, such as hotels, condominiums and restaurants. Nonwater-dependent uses are accorded low priority because they provide minimal public benefits. For example, a private waterfront condominium does not encourage public use and access, while a public park and pier would; the latter provides more public benefit to the state.

State law also identifies other categories of leases, such as mixed-use leases that contain both water-dependent and nonwater-dependent uses, or free leases for public parks and recreation purposes.

### The method for setting the lease rate differs depending on the use

State law authorizes and directs DNR to set lease rates differently for each of the three main types of leases. As noted earlier, the law prioritizes public benefit and promotes water-dependent activities above non-water dependent uses. Water-dependent uses are “favored uses” and must receive lower lease rates than non-water dependent leases. **Exhibit 2** (on the following page) summarizes the three use-types and the method for determining their lease rate.

**Photograph 1 – A marina**



Source: DNR.

**Photograph 2 – Aquaculture**



Source: DNR.

**Exhibit 2 – State law specifies different methods for setting lease rates, depending on the use**

Use type	Relevant RCW	Method to determine lease rate
Water-dependent Example: marina	RCW 79.105.240	Rent is determined using a formula, which calculates annual rent as 30% of the value of neighboring land multiplied by the leased area and a rate of return
Aquaculture Example: oyster farming	RCW 79.135.100	Rents established through competitive bidding or negotiation
Nonwater-dependent Example: waterfront hotel	RCW 79.105.270	Leases charged the full market value of the land, determined by appraisal with methods outlined in rule

Source: Auditor created based on state law.

**Leases generated about \$13.6 million in revenue in fiscal year 2022**

In fiscal year 2022, DNR managed approximately 1,230 aquatic land leases, generating \$13.6 million in revenue (see Exhibit 3). Water-dependent leases comprise the majority of leases and the majority of revenue, while aquaculture leases make up less than 10 percent of leases and bring in less than \$1 million in lease revenue.

**Exhibit 3 – Prevalence and revenue for three main types of aquatic land leases**

*Fiscal year 2022; numbers and dollars rounded*

Lease type	Number of leases	Lease revenue
Water-dependent*	1,010	\$6.9 million
Aquaculture	90	\$730,000
Nonwater-dependent*	130	\$5.9 million
<b>Total</b>	<b>1,230</b>	<b>\$13.6 million</b>

\* Note: Mixed-use leases may not be accurately identified as water- or nonwater-dependent uses.  
Data source: DNR.

**Rates are one part of a larger leasing process, which includes other factors such as environmental protection**

DNR must also consider other important aspects of lease agreements beyond lease rates. Among these are the duration of leases, insurance, and maintenance and repair to structures on the leased area. To minimize the harm to aquatic habitat and land, the agency may include environmental stewardship measures in its agreements with leaseholders. As an example, the lease may require a marina to remove tires buffering its pilings because they can leach pollutants into the water. If the prospective marina agrees to accelerate the removal of polluting tires – a benefit to the state’s waterways – DNR might respond by agreeing to a longer lease term, a beneficial concession to the leaseholder.

## Perceptions that some lease rates are unfair have prompted calls to change Washington’s methods

Some stakeholders are unclear on exactly how lease rates have been determined. Some have expressed concern that state law or DNR processes may result in unfair rates for certain industries or, conversely, for the state.

Concerns about unfair water-dependent lease rates, particularly for marinas, have been especially prominent over the years. One specific issue is related to how the formula uses the value of neighboring land, known as upland parcels. Different parcels can result in significant rent variability between marinas in close proximity to each other. Some stakeholders said that a low upland-parcel value for one property can give that business an unfair advantage over nearby marinas with higher calculated values – and rents – as they compete for the same tenants.

Over the years, these concerns have spurred a number of studies and attempts to change the rent formula in state law. Broadly, these proposed alternative methods for determining water-dependent rent follow one of three approaches, listed in **Exhibit 4**. Remember, however, that changing to a market-based structure, applying “fair market value,” contradicts the current philosophy in state law, which discounts all water-dependent leases through its encouraged use element as part of the Four Plus benefits.

### Exhibit 4 – Proposed alternatives to the water-dependent rent formula

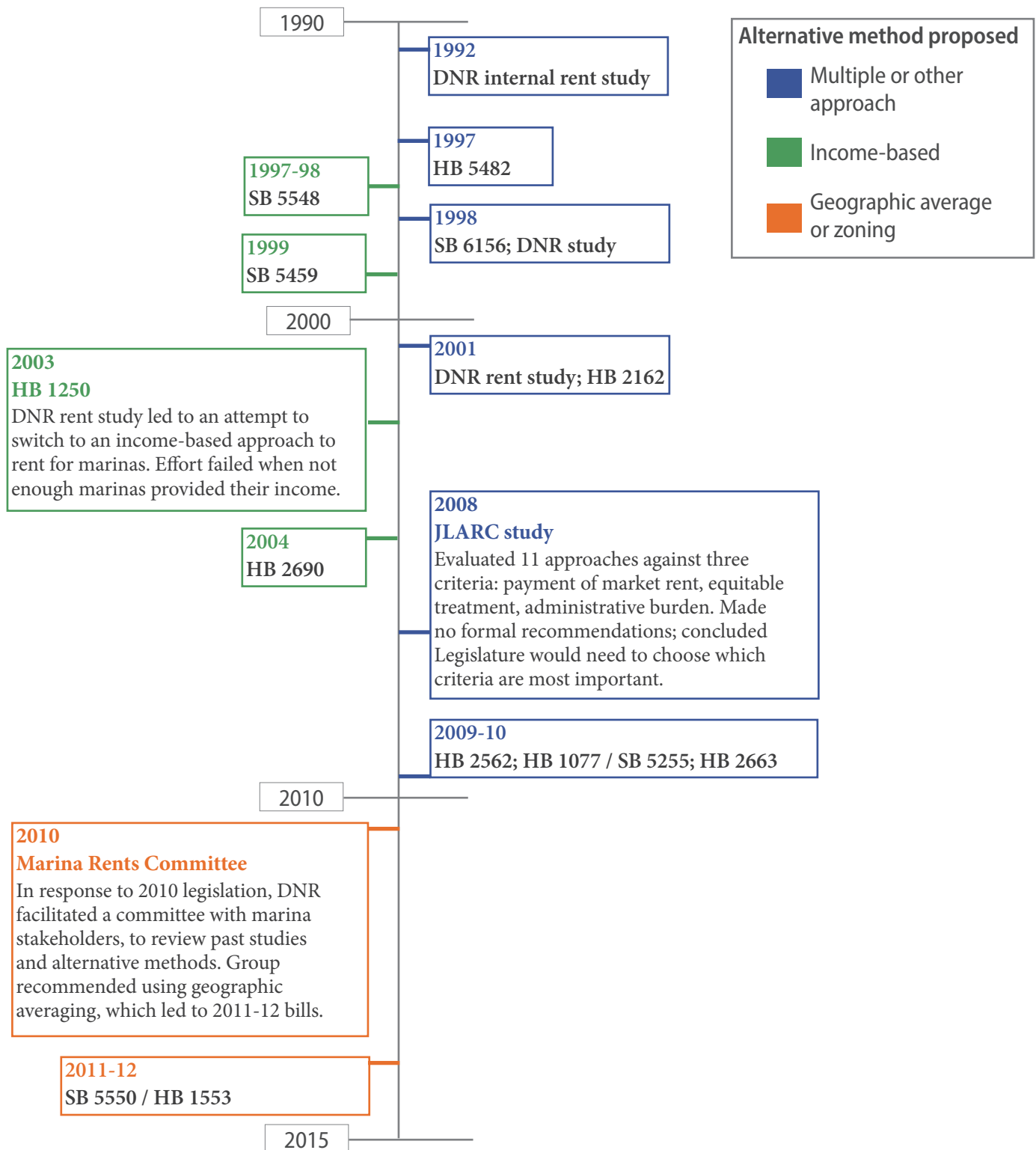
Alternative method	Description	Intended benefits
Income-based approach	Rent is a percentage of the operation’s income or revenue	Reduce the effect on marinas whose rent had been increasing more quickly than their income
Market-based approach	Rent based on fair market value of the land, typically using negotiations or appraisals	Rent would be aligned with the market
Geographic averaging or zoning methods	Rent based on the averaged value of numerous upland parcels in a geographic area or zone, instead of just one parcel	Reduce variation in rates and competitive disadvantages between marinas

Source: Auditor created based on review of past studies and efforts to change the water-dependent rent formula.

**Exhibit 5** (on the following page) shows a timeline of previous reports and bills. They include studies conducted by the Joint Legislative Audit and Review Committee, other committees and DNR, as well as various bills brought forward to change the water-dependent rent formula. Many of these efforts involved changing to an income-based approach or geographic averaging approach to determine rent; several involved studying or pursuing other options.

**Exhibit 5 – Timeline of past studies and legislation involving changes to the water-dependent rent formula**

1992-2012, time spacing not to scale



Source: Auditor developed based on review of past reports and draft legislation.

However, we did not find any evidence that the Legislature changed the formula for determining water-dependent rent as a result of these many studies and bills. Proposed legislation failed for a variety of reasons. As might be expected, changes to the calculation method reduces the lease rate for some tenants while increasing it for others, resulting in mixed support for the bills. Public testimony for some proposals criticized the possible reductions in revenue because the state uses that money to improve aquatic lands for the public.

## This audit examined the process for determining rates for water-dependent and aquaculture leases

Despite the many efforts to revise Washington's method for determining water-dependent lease rates for state-owned aquatic lands, none have yet succeeded, and the resulting impasse has proved nearly impossible to resolve. For that reason, this audit instead focused on DNR's process. Note also that we only assessed the lease rate process of aquatic lands managed by DNR, and not those lands managed by tribes. The audit was designed to answer the following questions:

- How are lease rates set for state-owned aquatic lands in Washington?
- Does the process for determining lease rates lead to fair rates for leaseholders and the state?
- Are there opportunities to improve state law or DNR processes to foster fairer aquatic land lease rates?

### Limited data and documentation in turn limited our analyses of lease rates

The audit assessed whether DNR's process for determining lease rates contributed to fairness by being consistent across similar lease types. We define fairness as a consistent process by which DNR determines lease rates. We focused on water-dependent and aquaculture leases because they are favored uses in state law. As part of our review, we reviewed lease documentation for a selection of water-dependent and aquaculture leases, and then interviewed DNR staff and managers.

However, we were unable to evaluate whether lease rates themselves were fair because of the limited data and documentation DNR was able to supply during audit fieldwork. The possible causes and consequences for these issues are discussed in this report.

This report is organized in three chapters, describing and evaluating three topics:

- DNR's process to determine water-dependent lease rates
- DNR's process to determine aquaculture lease rates
- Audit results concerning data and documentation that are relevant to both water-dependent and aquaculture lease rates

# Audit Results

## **Water-dependent leases: DNR’s process supports consistency in rates, but limited documentation hinders its ability to demonstrate this**

### **Results in brief**

Leases for marinas, docks, piers and other water-dependent uses comprise around 80 percent of all DNR-managed leases. A formula set out in statute that relies on the value of neighboring “upland” parcels determines water-dependent lease rates. The resulting standardized, formula-driven process for setting water-dependent rates has both disadvantages and benefits. The process is more transparent and reduces administrative burdens, but is less flexible than, for example, case-by-case negotiations.

We identified multiple elements of DNR’s process targeted at setting rates consistently, including templates, policies and procedures, as well as lease reviews. However, selecting the appropriate upland parcel for use in the rent formula introduced complexity to the process. DNR lacked documentation to reliably demonstrate it followed a consistent process for selecting upland parcels for some leases we reviewed, which can make it difficult for agency staff to understand earlier decisions as they determine future rates.

## **Leases for marinas, docks, piers and other water-dependent uses comprise around 80 percent of all DNR-managed leases**

DNR issues water-dependent leases for uses that cannot logically exist in any location but on the water, including marinas, docks and piers. For example, DNR manages leases for marinas from Tacoma’s Foss Waterway, Seattle’s South Lake Union and Friday Harbor in the San Juan Islands, as well as many more across the state. The agency managed around 1,000 water-dependent leases in fiscal year 2022, representing 80 percent of all leases and generating \$6.9 million in annual revenue.

## A formula set out in statute determines water-dependent lease rates

State law outlines the rent formula for water-dependent leases. The equation is shown in Exhibit 6; the terms used are explained below the exhibit.

### Exhibit 6 – Formula for calculating water-dependent lease rates

*Formula set out in RCW 79.105.240*

$$\text{Upland parcel value} \times \text{Lease area} \times \text{30\% rent adjustment} \times \text{Rate of return} = \text{Water-dependent rent}$$

Source: Auditor created using DNR document explaining water-dependent leasing process for aquatic lands.

- The **upland parcel value** is county-assessed, per-acre value, exclusive of improvements, of the tax parcel located “upland,” meaning directly inland, from the leased aquatic land. It is usually the adjacent parcel used in conjunction with the lease. If the adjacent parcel does not meet certain criteria, DNR uses the process outlined in WAC 332-30-123 to choose the appropriate alternative parcel.
- The **total leased area** of aquatic land, expressed in acres or feet. DNR excludes portions of the leased property from the total leased area used to calculate rent if they remain open to public use and meet related rules found in WAC 332-30-131, such as a public dock attached to a private boatyard.
- **Rent adjustment:** The water-dependent rent is adjusted by multiplying the two preceding values by 30 percent. This is the equivalent of discounting 70 percent from the assessed value of the upland parcel. The formula does this to encourage water-dependent uses over nonwater-dependent uses.
- The **rate of return** is based on the 10-year average rate of return on conventional real estate mortgages. DNR updates rates annually in late May.

## The standardized process for setting water-dependent rates has both disadvantages and benefits

DNR is required to use this formula-driven process for setting water-dependent lease rates — a far more structured method than, for example, negotiating lease rates on a case-by-case basis. This standardized process allows more transparency for leaseholders, who can see what components are used to calculate their lease rates. Considering DNR manages more than 1,000 of these types of leases, having a standard formula to help determine rates also significantly reduces the agency’s administrative burden, compared to negotiating each rate individually.

However, the same structured process that affords transparency and a lower administrative burden for DNR has its own inherent limitations. For one thing, it reduces DNR’s ability to leverage changes in the lease rate to obtain other lease

terms such as stipulating environmental improvements. Also, the strict formula may prevent DNR from setting rates that maximize revenue it can use to fund programs to improve aquatic lands for all.

## DNR’s process for setting water-dependent lease rates supports consistency

We identified multiple elements of DNR’s process targeted at setting rates consistently, including templates, policies and procedures, as well as lease reviews.

- A **template** is available to help employees calculate rent and document decisions related to upland parcels. An Excel spreadsheet calculates lease rates based on employee inputs and has a dedicated tab intended to document the upland parcel selection process. It also helps simplify technically worded criteria. However, its use is optional.
- **Internal policies and procedures** guide employees on how to follow the formula. They serve as a high-level resource to explain the general process for calculating rent and connect overarching themes to give employees context.
- Employees said they ultimately rely on **state law and detailed administrative rules** to find specific requirements and answers to nuanced questions.
- Employees also said staff depend on **supervisors and managers to answer questions and review lease rates**. Supervisors answer, or escalate to management, lease rate questions. They also review rate calculations during the initial step in a multilevel review process.

### Selecting an upland parcel introduces complexity to the water-dependent formula

The first step in calculating rental value for most water-dependent leases is identifying the appropriate upland parcel. DNR staff said that qualifying parcels are frequently directly adjacent to the leased aquatic land. If a parcel qualifies, they must select it for the rent calculation. **Exhibit 7** shows a parcel’s critical position as the foundational step in calculating rent.

#### Exhibit 7 – The formula for calculating water-dependent lease rates includes using the upland parcel value

*Formula set out in RCW 79.105.240*

$$\boxed{\text{Upland parcel value}} \times \text{Lease area} \times \text{30\% rent adjustment} \times \text{Rate of return} = \boxed{\text{Water-dependent rent}}$$

Source: Auditor created using DNR document explaining water-dependent leasing process for aquatic lands.

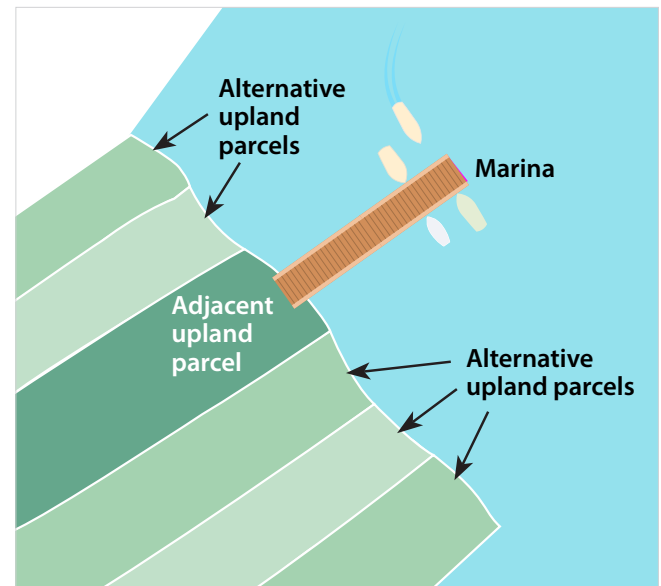


Under some circumstances, the upland parcel directly adjacent to the leased aquatic land does not meet the qualifications to be used in the rent calculation. There are many reasons, as listed in statute and administrative rules, why the adjacent parcel might be disqualified from use in the rent calculation. For example, it might be unbuildable, contaminated or not otherwise assessed by the county. Shopping centers, hotels and similar commercial developments affect the assessments, making those parcels inconsistent with the aquatic land use. If the adjacent parcel is disqualified, employees must then select the appropriate alternative parcel. Exhibit 8 illustrates the difference between adjacent and potential alternative parcels.

Although the procedure is outlined in administrative rules, selecting alternative upland parcels introduces multiple complexities. Employees must research various aspects of possible alternatives, such as their current use and distance from the leased area. The parcels can be within the same general area, as illustrated in Exhibit 8, but also in a nearby county or any location within the state that meets the criteria. The rule states DNR must select the nearest possible comparable parcel.

To add to the complexities of selecting an appropriate alternative upland parcel, county assessors across the state assess properties using different methods, increasing the possibility that similar parcels will be valued differently between counties. DNR employees said they attempt to mitigate the differences when they make rent calculations, but they have no control over how independent county assessors decide to set local property values.

**Exhibit 8 – Adjacent upland parcel and locations of alternative upland parcels**



Source: Auditor created using DNR documents concerning aquatic lands.

## However, DNR lacked documentation to reliably demonstrate it followed a consistent process for selecting upland parcels for some leases

To assess DNR's process for determining these lease rates, we interviewed DNR employees and reviewed lease files for a random selection of 21 currently active water-dependent leases. DNR employees answered lease-specific questions that allowed us to assess the consistency of agency processes to set rates. We found lease rates were consistently set using the formula prescribed in state law for most leases.

However, we encountered two instances where the lease file had limited documentation to support the agency's decisions.

- **Lease 1:** The most recent rent calculation (2009) was based on an alternative upland parcel selected in 1996. The upland parcel was in a different county from the leased area. The only available documentation indicated it was selected based on prior management decisions.
- **Lease 2:** The most recent rent calculation was performed in 2021, using an alternative upland parcel a short distance from the aquatic land being leased. However, the previous rent calculation (2017) used a parcel a "significant" (10 miles) distance away, and the lease file lacked any explanation for how that parcel met the rule requirements. A DNR staff member could not explain how the earlier decision was reached.

Incomplete documentation that does not explain how alternative parcels were selected diminishes DNR's ability to demonstrate it follows a consistent process. While the optional template was included in all the applicable lease files we reviewed, the section pertaining to upland parcel selection was not always filled out completely. One employee said that when someone has not completed all relevant template fields thoroughly, staff revising the lease in later years find it difficult to understand earlier decisions. By requiring employees to follow a uniform process for documenting upland parcel selections, DNR may be able to limit instances of incomplete documentation and allow all employees to quickly understand why previous upland parcels were selected.

## Aquaculture leases: DNR uses a negotiation process which means rates can vary; written guidance could foster long-term consistency

### Results in brief

Leases for oyster, clam and other types of aquaculture make up less than 10 percent of all leases and about 5 percent of lease revenue.

Negotiating aquaculture lease rates, as allowed by law, can offer DNR flexibility but at the price of greater consistency. State law directs DNR to set rates through competitive bidding or negotiation; it does not hold DNR to any specific requirements to ensure lease rates are consistent for similar properties and uses. DNR considers many broad factors when determining an aquaculture lease rate, including the specific industry, location, and other benefits to the state such as protecting native vegetation.

DNR had a standardized process for more than half of aquaculture leases, comprising mussels and Pacific Coast oysters. DNR sets the remainder of aquaculture lease rates individually, which can vary as do the unique circumstances of each lease. DNR relies on institutional knowledge to foster consistency for these leases, but we could not assess its success due to limited documentation. Written guidance would help DNR foster consistency in aquaculture lease rate determinations.

## Leases for oyster, clam and other types of aquaculture make up less than 10 percent of all leases

Aquaculture, as a water-dependent use, is considered a favored use in state law. In fiscal year 2022, DNR data showed it held about 90 aquaculture leases. This represents less than 10 percent of all leases, and accounts for only about 5 percent of all lease revenue. It held roughly the same number as of May 2023, as shown in Exhibit 9.

### Exhibit 9 – Breakdown of aquaculture leases on state-owned aquatic lands

Data as of May 2023

Oysters on the coast (49) comprise more than half of all aquaculture leases	Mixed shellfish (9)	Mussels (7)	Oysters in Puget Sound (7)	Clams (5)	Other (17) <i>includes 11 fish net pen, geoduck and other unspecified leases</i>
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Note: All numbers should be considered estimates, due to potential data inaccuracies.

Source: DNR lease data.

Of the approximately 90 aquaculture leases shown in Exhibit 9, more than half are for farming oysters on the Pacific Coast, where there are also a few clam farming leases. The remainder are in Puget Sound, and include leases to cultivate oysters, mussels, clams and “mixed shellfish” (meaning more than one species may be grown). DNR employees noted that as the aquaculture industry evolves, they may develop new lease types for other uses, such as cultivating seaweed. Conversely, some lease types phase out over time.

Aside from what they cultivate, aquaculture operations also vary by size, location, business structure and method of production. They range from small, multi-generational family farms in a single location to larger operations, such as Taylor Shellfish, that farm multiple types of shellfish in locations across the state. Some farm directly on tidelands; depending on land quality, this might require leaseholders to enhance the land by removing debris or adding gravel to improve growing conditions. Others farm shellfish by suspending it in bags or lines from floating rafts some distance from the shoreline.

Aquaculture makes up only a small percentage of DNR’s lease portfolio. Furthermore, it may not be a significant portion of businesses’ portfolios. For example, the 2015 Washington Sea Grant report presented to the Legislature said that less than 10 percent of shellfish aquaculture production takes place on tidelands that are leased from DNR. This indicates the majority of shellfish aquaculture in Washington takes place on private tidelands. That said, even though leaseholders may not be solely reliant on state-owned aquatic land, some prefer their existing DNR leases because their family has been farming that land for generations.

## Negotiating lease rates, as allowed by law, can offer DNR flexibility but at the price of greater consistency

State law directs DNR to set aquaculture lease rates through competitive bidding or negotiation. It imposes few other prescriptive requirements and does not hold DNR to any specific requirements to ensure lease rates are consistent for similar properties and uses.

DNR sets most aquaculture lease rates by negotiation. Negotiations allow both the state and the leaseholder to agree on a lease rate and other terms that balance both their interests. DNR employees said they consider a successful negotiation one in which both parties are satisfied with the outcome.

The other method approved in state law is competitive bidding, which DNR rarely uses. For example, DNR used bidding during its process to negotiate new geoduck leases several years ago. However, DNR employees and some leaseholders we

spoke to agreed that competitive bidding is less appropriate for many leases, especially those that have been in place for a long time. They mentioned that competitive bidding could be disadvantageous to smallholders and long-time lessees because large companies, with greater financial resources, could readily outbid them.

## DNR considers many broad factors when determining an aquaculture lease rate

When determining rates for aquaculture leases, DNR has many areas to consider as they negotiate with leaseholders. Some specific cultivations may have more or different issues to assess.

- **Specific industry.** Rate structures and rents differ by industry because their costs and profits can vary considerably. For example, rates for oyster enterprises differ from clams because the products sell as two separate markets. Furthermore, rates between oyster operations can differ, as farms growing oysters destined to be served on the half shell at an oyster bar can achieve higher prices – and thus higher rents – than those farming shucked oyster meat sold by the pint.
- **Location.** Aquaculture in Puget Sound is much more naturally productive – and therefore profitable – than aquaculture on the coast.
- **Land quality and productivity.** Even within one geographic area, some leases may have more naturally productive aquatic land than others. Such land may yield a much higher quantity or quality of shellfish compared to neighboring farms just a few miles away.
- **Method of production.** Some aquaculture operations farm shellfish directly on tidelands. Others use mechanical strategies to increase production and keep predators away, for example by suspending shellfish in bags from floating rafts. Thus, the different methods can yield more or less valuable products than others.
- **Other benefits to the state overall.** DNR must strive to balance other important public benefits in addition to lease income. As a result, DNR may discount lease rates on a case-by-case basis if the leases provide some other benefit to the state, such as protecting native vegetation or restoring a species that was nearly harvested to extinction.

Negotiation is inherently less consistent than applying a formula, as statute requires for water-dependent leases. Negotiation may also take more time and effort than other more structured methods for determining rent. However, DNR employees consider that negotiation allows the agency to better leverage lease rates to obtain other favorable terms in alignment with the Four Plus benefits.

## DNR had a standardized process for more than half of aquaculture leases, comprising mussels and Pacific Coast oysters

As Exhibit 9 (on page 19) illustrated, leases for oysters on the Pacific Coast and mussels in Puget Sound comprise more than half of all current aquaculture leases: roughly 50 coastal oyster leases and seven mussel leases. In this section, we examine DNR's standardized methods for these two lease types.

### ***1. Oysters on the coast: Standardized per-acre rates by land quality***

The Commissioner of Public Lands negotiated collectively with leaseholders in 2020 to determine a lease rate structure for oyster leases on the coast. This structure bases rent on historical land classifications conducted by the Department of Fish and Wildlife, which ranked lands based on how productive they were for oyster cultivation. DNR negotiated per-acre rates for each land class, adjusted for inflation.

DNR managers said that coastal oyster farming practices are very similar, making a standardized method appropriate for these leases. They explained that this approach makes use of Fish and Wildlife's well-established land classification system, which has a long historical basis and is accepted by growers as a fair way to evaluate the land. In contrast, other types of aquaculture may have greater variation and may not be as well-established.

For the most part, DNR appeared to follow this structured process for the selection of five recent coastal oyster leases we reviewed. DNR staff said they use a spreadsheet template to calculate these lease rates, which promotes consistency. However, we did find instances where rates were set using land quality classifications but not properly adjusted for inflation, resulting in small differences in rates (less than \$81/year). In one case, an employee said that the rate was incorrectly transcribed, and they would address the discrepancy. In another case, they said the rate spreadsheet was not adjusted for inflation but has since been corrected.

### ***2. Mussels: Standardized negotiated rent structure***

In 2017, DNR negotiated with the Pacific Coast Shellfish Grower's Association to determine a rent structure for mussel farming. This rent structure uses a flat rate for annual rent depending on the lease size as well as royalty rents based on the quantity of mussels produced.

Managers said this standardized approach to mussels makes sense because the method and species are similar across operations. All current leases are in Puget Sound and DNR employees said growers all use rafts to cultivate mussels. Generally speaking, characteristics in farming practices, methods and geographic locations, when similar, lend themselves to standard rates, as is the case for these mussel leases.

DNR appeared to use this structured process for one of the two mussel leases we reviewed, as well as a mixed-use lease that included mussels. DNR employees said the third mussel lease rate was set before the 2017 negotiations, and that this agreement was still active.

DNR updates lease rate determinations for individual agreements as they expire, which means that some older lease agreements may not reflect more recent changes in practices.

## **The remainder of aquaculture leases relied on institutional knowledge, with only limited documentation to demonstrate DNR's processes**

The remaining aquaculture leases (less than half) include clams both on the coast and in Puget Sound, as well as Puget Sound oyster, geoduck and mixed shellfish leases. To understand and assess DNR's process for determining these rates, we interviewed DNR employees and reviewed a selection of two to five recent leases from each of these categories (14 in total).

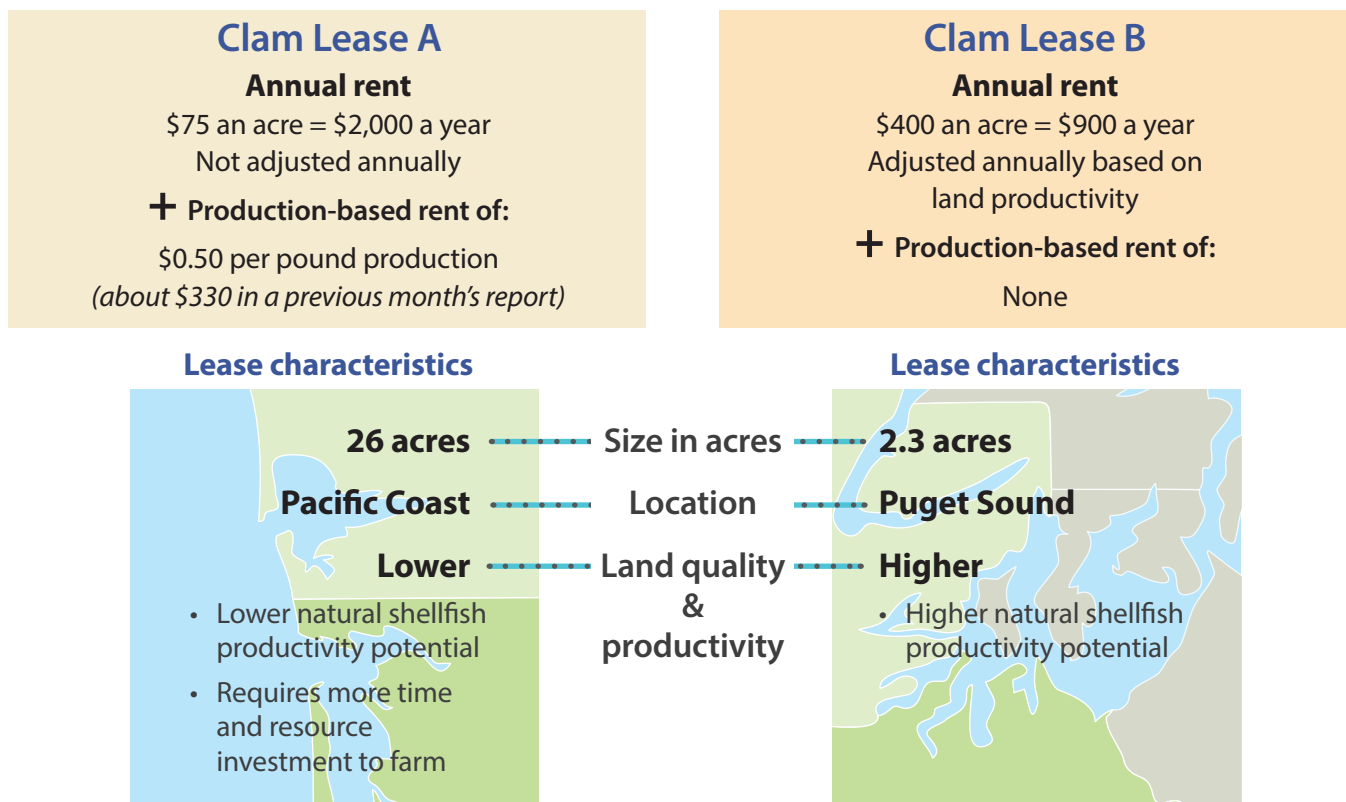
### **DNR sets these rates individually, which can vary as do the unique circumstances of each lease**

Unlike the process for mussels and coastal oysters, the agency has not developed a set structure, method or criteria to determine the rates for these individual leases. DNR employees said such a standardized structure is not well suited to the Puget Sound leases because individual farm properties and practices are more diverse. While we did find leases for similar products that varied in some way or another, there was insufficient documentation for us to evaluate whether the diverse rates were justified in many cases.

Lease rates vary as do the unique circumstances of each lease that are negotiated with individual leaseholders. **Exhibit 10** shows two clam leases that have different rent structures and rates, and the differences in important characteristics, including size, location, and land quality and productivity. DNR may have considered other factors when determining these lease rates that are not reflected in this example.

**Exhibit 10 – Example comparison of rent structure and characteristics in two DNR clam leases**

*All numbers and calculations are rounded and approximated for this example*



Note: All numbers should be considered estimates, due to potential data inaccuracies.

Source: DNR lease data and files.

**DNR relies on institutional knowledge to foster consistency, but we could not assess its success due to limited documentation**

When determining aquaculture lease rates on a case-by-case basis, DNR employees said they rely on institutional knowledge to help ensure the negotiated rate is appropriate and aligned with similar leases. For example, the one employee currently negotiating most of these leases said they set initial proposed rents by drawing from existing or previous leases that are comparable in use, species or area. The employee relies on supervisors with historical knowledge to identify comparable leases. During negotiations with leaseholders, the employee also relies on frequent communication with supervisors and consultation with management for any complex lease rate issues that may arise.



However, we could not assess whether DNR followed a consistent lease rate determination process because of limited documentation. DNR employees said that staff do not always document lease rate negotiations and decisions consistently, if at all. Some files were missing the rent calculation spreadsheets that showed the factors staff used, as well as documentation for consultations with supervisors and management. Employees were unable to explain how a certain rate was determined or why it differed from similar leases for some older leases, because the person who negotiated that agreement had left the agency and documentation was not readily accessible.

## Written guidance would help DNR foster consistency in aquaculture lease rate determinations

DNR employees said they strive to treat leaseholders fairly and have policies and procedures for the broader leasing process. However, as of mid-2023, DNR lacked written policies, procedures and guidance specific to determining aquaculture lease rates. Such guidance would reduce the risk of inconsistent rates when experienced employees knowledgeable about aquaculture leave the agency. It would also help ensure employees consistently consider important factors as part of the process for determining rent.

At the end of this audit's fieldwork period, DNR managers said they would consider developing a new written procedure specific to aquaculture lease rates. For example, they said the procedure might include steps that foster consistency and fairness in rents, such as ensuring staff develop a general understanding of market conditions and trends.

## Better documentation and data would help DNR reduce the risk of inconsistent lease rates

### Results in brief

DNR's lease files sometimes lacked essential or helpful elements describing lease rate determinations, such as alternative parcel selection explanations for water-dependent leases or rent calculation spreadsheets for aquaculture leases. Documenting how lease rates were determined more completely could help DNR employees access information about current and historical leases easily and reliably, to help ensure they determine rates in a manner consistent with other similar leases.

DNR's data system was missing key fields the agency would need to assess consistency, and other information such as lease size was present in the data but unreliable. While some of this information may have been present in individual lease files, having all necessary information in a centralized data management system would help DNR better assess rate consistency. Such centralization would help agency staff draw on historical information as they determine future rates and allow managers to conduct periodic monitoring and analyses of consistency.

## Documenting how lease rates were determined more completely could help DNR foster consistency across leases

Good recordkeeping provides fundamental support for a government agency's decisions and actions. Careful, clear and complete records sustain organizational knowledge by allowing wider staff and management access to decision-making goals and strategies, reducing the risk that such knowledge will be lost or forgotten over time. When an agency's operations are complex or highly customized, information around particular decisions is at higher risk of loss: thorough documentation can play an important role in reducing that risk.

But as previous chapters have described, we found that DNR's lease files sometimes lacked essential or helpful elements describing lease rate determinations. DNR employees acknowledged that individual staff record

information about lease rates differently. This inconsistency affected different areas of their work, such as:

- **Alternative parcel selection in water-dependent leases.** We observed, and staff also said, that the optional spreadsheet tool sometimes lacked specific explanations about how staff selected these parcels.
- **Rent calculation spreadsheets in aquaculture leases.** We observed, and staff also said, that some lease files lacked such documents.
- **Management consultations for either lease type.** Neither staff nor managers consistently documented these consultations, even though staff said they rely on these conversations to resolve complex issues related to lease rates.

Better documentation in such areas would help DNR employees access information about current and historical leases easily and reliably, helping promote consistency when setting rates. For example, a new employee about to renegotiate a lease could more readily understand the nuances of a particular lease's previous rate determination – including how and why someone selected an alternative parcel. Staff could also quickly identify similar leases and review information about their rate determinations to help ensure they determine rates in a manner consistent with other similar leases.

## Complete and reliable data would help DNR better assess rate consistency

Relevant, reliable data is essential to assessing whether an agency is achieving its objectives. Management experts consider compiling and monitoring such useful data a best practice, as it provides the agency with specific feedback leading to more targeted and strategically informed decisions.

However, DNR's main data system did not have all information necessary to easily and effectively assess lease rate consistency. While some of this information may have been present in the individual lease files, it was either missing in the data system or it was present but unreliable. Examples include the elements listed below.

- DNR's data system lacks **important details concerning water-dependent lease rates**. Missing data points include whether staff used an alternative parcel and how many acres within the lease are eligible for the public-use discount. For leases with both water-dependent and nonwater-dependent elements, it is difficult for DNR to identify the portion of rent specific to the water-dependent use.
- While employees said **land quality and productivity** are important considerations for aquaculture lease rates, the data system does not contain a field to capture this information.

- While the database has a **lease-size field**, for both aquaculture and water-dependent leases, we found this information was not sufficiently complete or accurate. DNR staff explained that the field may not be reliable because it is not required, so staff may not enter data consistently or at all. Without reliable data for this field, DNR cannot easily calculate a per-acre annual rent for comparison purposes.

Having all necessary information in a centralized data management system would help DNR more easily and effectively assess rate consistency. Such centralization would allow DNR staff to query the data system for comparable leases when determining a new lease rate, to ensure it aligns with other similar leases. It would also allow DNR managers to periodically monitor lease rates for consistency. Should the state undertake studies of aquatic land lease rates in the future, improved data could also be used to compare rates under the current method to those possible using alternative methods.

DNR employees acknowledged that the current system is antiquated and an inadequate tool for land management. They also said the agency may be transitioning to new data systems for managing leases and billing soon. If the agency does so, it presents an opportunity to add and improve key fields relevant to consistency in those systems. Until such time as a new system is operational, DNR can still compile and monitor key data fields to ensure consistency.

# State Auditor's Conclusions

One of the most important services a performance audit can provide is bringing transparency to areas where different interests are unsure of the facts. Members of the Legislature requested a performance audit to clarify how the Department of Natural Resources (DNR) develops and sets rates for leases of public aquatic lands in two areas: water-dependent activities (such as marinas) and aquaculture (such as oyster farming).

We identified several elements of DNR's process aimed at setting aquatic land leases rates consistently. However, the agency could not easily demonstrate it followed a consistent process for all water-dependent and aquaculture leases. This was true in certain instances regarding the selection of alternative upland parcels when calculating the value of water-dependent leases, and in some aquaculture leases for which staff relied on institutional knowledge and only limited documentation.

Although there was insufficient documentation and data to fully determine whether current rates are set consistently, that itself is an important finding. DNR can enhance its processes to foster and demonstrate consistency in its leases by more completely documenting how it determines lease rates and by improving its data. Our report includes recommendations to do just that.

# Recommendations

## For the Department of Natural Resources (DNR)

To help reduce the risk of inconsistent water-dependent and aquaculture lease rates in the long-term, as described on pages 26-28, we recommend DNR:

1. Develop and implement improved standards for consistent documentation of lease rate determinations
2. Improve the completeness and reliability of data needed to assess consistency of lease rates by:
  - a. Determining which key data fields are necessary. These fields should be reliable, and could include those examples listed on page 27-28.
  - b. Ensuring that all key fields are included when transitioning to the new lease management data system
  - c. Capturing and monitoring the key data fields in a temporary system if a new system will not be functional soon

To better foster consistency in the process to determine aquaculture lease rates in the long-term, as described on page 25, we recommend DNR:

3. Develop, document and implement policies, procedures or guidance for determining aquaculture lease rates

# Agency Response



**DEPARTMENT OF  
NATURAL RESOURCES**

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March 5, 2024

Honorable Pat McCarthy  
Washington State Auditor  
P.O. Box 40021  
Olympia, WA 98504-0021

Dear Auditor McCarthy:

Thank you for the opportunity to review and respond to the State Auditor's Office (SAO) performance audit of lease rates for water-dependent (RCW 79.105.240) and aquaculture (RCW 79.135.040) activities on state-owned aquatic lands, administered by the Department of Natural Resources (DNR) Aquatic Resources Division. DNR believes the recommendations in the report are appropriate and welcome their implementation.

Although the rate determination criteria for both water-dependent and aquaculture activities on state-owned aquatic lands are established in statute and administrative code, we recognize that some users of state-owned aquatic lands feel that current regulations may advantage certain users or activities over others, while some members of the public and the legislature feel that these regulations may advantage certain users over the state. As noted in the report, this perception has led to several legislative proposals to reform the statutory requirements governing how DNR calculates lease rates, none of which have ultimately been successful. We appreciate that this audit acknowledges that DNR's leasing program must operate within the statutory guidelines established by the legislature and that we have developed numerous guidance documents that provide a consistent framework for all our Land Managers to work with current and prospective tenants to maintain equity and transparency in our leasing program.

That is why we were heartened by the reports finding that our process for setting water-dependent lease rates supports consistency. The elements of our process identified as promoting consistency – contract templates, internal policies and procedures, reliance on laws and rules, and the review process by supervisors and managers – are the core elements of our leasing program and we are constantly assessing and adapting them to meet the ever-changing landscape of proposed activities on state-owned aquatic lands. In the review of 21 water-dependent leases by the auditors, it was found that only two did not contain enough documentation to show the lease rate was consistently determined. As the report noted, one of these leases originated in 2009 (before many of the elements in our current process were implemented) and the other is a very unique lease type where there is no adjacent upland parcel (there are only two leases like

this in the entire state). Although these two examples are clear outliers, DNR strongly agrees with the SAO's recommendation that strengthening our process for documenting the selection of the upland parcel used to calculate the lease rate can further improve the performance of our leasing program.

In the review of aquaculture leases, the report noted that DNR sets most aquaculture lease rates by negotiation, allowing both the state and the leaseholder to agree on a lease rate and other terms that balance both their interests. Because DNR considers several factors when setting aquaculture leases rates – including species raised, location, land quality and productivity, methods of production, and balancing public benefits – negotiating the rate can provide greater flexibility, but at the possible expense of transparency and consistency. That being said, the report found that DNR followed a standardized process for more than half of the 21 aquaculture leases reviewed that contributed to consistency and transparency in the final rate determinations. We agree with the SAO's recommendation that some additional written guidance could help DNR strengthen consistency and transparency in aquaculture lease rate determinations. DNR has already started the development of this guidance.

Finally, we appreciate that this report recognizes that our current data management software, known as NaturE, is outdated and no longer meets the needs of our modern aquatic leasing program. In fact, this system was never intended to serve as a lease data management system, rather it was intended to be used as a financial system to track lease payments. Prior to the audit, DNR had already initiated the process of replacing NaturE with a modernized data management system called the Land Agreement Management System (LAMS), which will fully address the data management recommendations included in the report. We thank the auditors for recognizing this need and supporting the replacement of the antiquated NaturE system.

We appreciate the thoroughness of the audit staff and their willingness to learn about our leasing program and rate setting processes for water-dependent and aquaculture leases. Please thank your team for their collaborative approach throughout the audit process.

Sincerely,



Alex Smith, Deputy Supervisor  
Forest Resilience, Regulation and  
Aquatic Resources



# Appendix A: Initiative 900 and Auditing Standards

## Initiative 900 requirements

Initiative 900, approved by Washington voters in 2005 and enacted into state law in 2006, authorized the State Auditor’s Office to conduct independent, comprehensive performance audits of state and local governments.

Specifically, the law directs the Auditor’s Office to “review and analyze the economy, efficiency, and effectiveness of the policies, management, fiscal affairs, and operations of state and local governments, agencies, programs, and accounts.” Performance audits are to be conducted according to U.S. Government Accountability Office government auditing standards.

In addition, the law identifies nine elements that are to be considered within the scope of each performance audit. The State Auditor’s Office evaluates the relevance of all nine elements to each audit. The table below indicates which elements are addressed in the audit. Specific issues are discussed in the Results and Recommendations sections of this report.

I-900 element	Addressed in the audit
1. Identify cost savings	<b>No.</b>
2. Identify services that can be reduced or eliminated	<b>No.</b>
3. Identify programs or services that can be transferred to the private sector	<b>No.</b>
4. Analyze gaps or overlaps in programs or services and provide recommendations to correct them	<b>No.</b>
5. Assess feasibility of pooling information technology systems within the department	<b>No.</b>

I-900 element	Addressed in the audit
6. Analyze departmental roles and functions, and provide recommendations to change or eliminate them	<b>No.</b>
7. Provide recommendations for statutory or regulatory changes that may be necessary for the department to properly carry out its functions	<b>No.</b>
8. Analyze departmental performance data, performance measures and self-assessment systems	<b>No.</b>
9. Identify relevant best practices	<b>Yes.</b> The audit made recommendations related to improving data, guidance and documentation related to lease rate determinations.

## Compliance with generally accepted government auditing standards

We conducted this performance audit under the authority of state law (RCW 43.09.470), approved as Initiative 900 by Washington voters in 2005, and in accordance with generally accepted government auditing standards as published in *Government Auditing Standards* (July 2018 revision) issued by the U.S. Government Accountability Office. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

## The mission of the Office of the Washington State Auditor

To provide citizens with independent and transparent examinations of how state and local governments use public funds, and develop strategies that make government more efficient and effective. The results of our work are widely distributed through a variety of reports, which are available on our website and through our free, electronic [subscription service](#). We take our role as partners in accountability seriously. We provide training and technical assistance to governments and have an extensive quality assurance program. For more information about the State Auditor's Office, visit [www.sao.wa.gov](http://www.sao.wa.gov).

# Appendix B: Objectives, Scope and Methodology

## Objectives

The purpose of this performance audit was to examine the processes used by the Department of Natural Resources (DNR) for setting rates when leasing state-owned aquatic lands. The audit addressed the following objectives:

1. How are lease rates set for state-owned aquatic lands in Washington?
2. Does the process for determining lease rates lead to fair rates for leaseholders and the state?
3. Are there opportunities to improve state law or DNR processes to foster fairer aquatic land lease rates?

For reporting purposes, the audit results have been organized into key findings. The messages relate to the original objectives as follows:

- Water-dependent leases: DNR's process supports consistency in rates, but limited documentation can hinder its ability to demonstrate this (pages 14-18) – this finding addresses Objectives 1 and 2.
- Aquaculture leases: DNR uses a negotiation process which means rates can vary; written guidance could foster long-term consistency (pages 19-25) – this finding addresses Objectives 1 and 2.
- Better documentation and data would help DNR reduce the risk of inconsistent lease rates (pages 26-28) – this finding addresses Objective 3.

## Scope

This audit examined the general methods DNR used to set lease rates based on how the aquatic land is used. We focused on assessing whether DNR's rate-setting process contributed to fairness through consistency for two lease types: water-dependent and aquacultural uses. We chose these two lease types because they are “favored uses” in state law. We excluded nonwater-dependent leases from our testing.

We did not assess whether lease rates were in themselves fair due to limitations in DNR's data. We also did not evaluate aspects of the leasing process other than how the lease rates were set, including whether the lease application should have been approved, nor confirm whether tenants complied with environmental stewardship requirements during the lease. Finally, we did not recalculate lease rates for accuracy or determine compliance with statutes and rules.

## Methodology

We obtained the evidence used to support the findings, conclusions and recommendations in this audit report during our fieldwork period (May to September 2023), with some additional follow-up work afterward. Here, we summarize the work performed to address each of the audit objectives.

### **Objective 1: How are lease rates set for state-owned aquatic lands in Washington?**

#### *Review of laws and rules governing the aquatic lease rates*

We analyzed statutes and administrative rules to understand how they dictate lease rates should be set depending on the type of lease.

#### *Review of policies and procedures*

We reviewed all agency internal policies and procedures regarding aquatic land lease rates to learn what formalized processes DNR used to set lease rates. From this, we developed a baseline understanding from which to evaluate the consistency of DNR's process in Objective 2.

#### *Interviews with DNR managers and staff*

We interviewed managers and staff to confirm and clarify our understanding of DNR's process for setting lease rates.

### **Objective 2: Does the process for determining lease rates lead to fair rates for leaseholders and the state?**

#### *Data analysis*

DNR did not have reliable data for key characteristics of leases needed to identify similar leases, such as the size of the leased area and the amount public use discounts affected lease rates. For this reason, we did not compare rates across similar leases, as originally intended. Instead, we examined whether the current process for setting these rates contributed to fairness by being consistent across lease types.

#### *Review of lease records*

- We reviewed selections of water-dependent and aquaculture leases. For water-dependent leases, we randomly selected 21 currently active leases from the full population, because DNR confirmed that all leases should be comparable and use the same formula to calculate lease rates. For aquaculture we judgmentally selected a total of 21 leases from six categories of aquaculture leases: oysters on the Pacific Coast, oysters in Puget Sound, clams, mussels, mixed shellfish and geoduck. We chose two to five currently active leases from each category to obtain a diverse selection of leaseholders and geographic areas.

The start dates for the leases we selected ranged from 1981 to 2022. Due to limitations in the data, our conclusions and recommendations are not based on specific results of any data analysis conducted during this audit. In addition, any statements in our report drawn from our review cannot be projected to the entire population of leases. The intent of reviewing the selected leases was not to obtain statistically representative results, but rather to identify potential areas of inconsistency in DNR's process for setting lease rates and areas of improvement.

- For the leases selected for testing, we reviewed DNR's physical and digital lease records to determine how lease rates were calculated. We sought to understand the factors that went into decisions affecting lease rate calculations, to determine whether DNR's process for setting lease rates was consistent for similar lease types we selected.
- We interviewed DNR staff and managers to confirm our understanding and answer questions related to how lease rates were calculated for leases we tested. Through interviews with multiple staff responsible for setting lease rates, we sought to determine if the rate-setting process differed between staff members.

### *Interviews with DNR managers and staff*

We interviewed managers and staff to understand and assess whether DNR followed a consistent process for setting lease rates.

## **Objective 3: Are there opportunities to improve state law or DNR processes to foster fairer aquatic land lease rates?**

### *Review of practices for quality data and documentation*

Through our fieldwork, we identified issues with the quality of DNR's data and the consistency of their documentation. As part of Objective 3, we researched practices and internal controls around these areas to identify opportunities to improve DNR processes. We used the internal control standards published by the United States Government Accountability Office (Standards for Internal Control in the Federal Government, September 2014) to evaluate DNR's data and documentation and inform related recommendations. These standards advise management to use "quality information," defined as information that is appropriate, current, complete, accurate, accessible and timely, to achieve its objectives. Standards also recommend accurate documentation of decisions as a means to retain organizational knowledge, mitigating the risks that such knowledge might be limited to only a few people, as well as to communicate that information as needed to external parties.

### *Review of past efforts to reform state law*

We researched past efforts around changing the statutes governing lease rates to identify if any proposals or studies were successful at fostering fairer rates. For water-dependent uses, which make up nearly 80 percent of all leases, we identified over ten past studies or attempted legislative efforts around changing the water-dependent rent formula. However, we did not find any evidence that these efforts resulted in changes.

### *Interviews with DNR managers*

We interviewed DNR managers to determine if they had internally identified any opportunities to foster fairer rates. We also asked questions to clarify why past legislative efforts and studies had not resulted in any changes to DNR statutes or processes.

### Research into practices in other states

We researched how lease rates are set in other coastal states and Canadian provinces (listed in Figure 1) to see if any of their practices could be implemented by DNR to improve consistency. We specifically sought those where resource agencies are legally required to prioritize factors similar to Washington’s “Four Plus” benefits when setting lease rates.

During this review, we found that generating revenue is either the top priority or equally prioritized with other factors when setting lease rates in other places.

In Washington, generating revenue is considered only when it is consistent with the Four Plus public benefits. For these reasons, we do not consider the lease-rate setting processes in the other coastal locations we reviewed as clear criteria for evaluating DNR’s process.

### Work on internal controls

As part of Objectives 2 and 3, we assessed internal controls concerning DNR’s process for setting lease rates and how the agency ensured the process was consistent for similar lease types. Based on concerns noted during fieldwork, we evaluated the design of DNR’s policies and procedures, documentation standards, and data systems to see if they supported DNR in fostering consistent lease rates. We found opportunities for DNR to improve the consistency of lease rates through strengthening the design of internal controls in these areas and communicated these through our recommendations. We did not evaluate the implementation of controls or assess their effectiveness.

**Figure 1 – Is revenue prioritized when setting lease rates?**

State/Province	Revenue a top priority?
British Columbia	Yes
California	Yes
Florida	Yes
Louisiana	Yes
Maine	Yes
Oregon	Yes
<b>Washington</b>	<b>No:</b> Revenue is considered when consistent with the four main public benefits.

Auditor developed based on document reviews.



“Our vision is to increase **trust** in government. We are the public’s window into how tax money is spent.”

– Pat McCarthy, State Auditor

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