

# Economic Impact Analysis

## Proposal to Increase Fees for Large On-site Sewage Systems Anticipated Effective Date – July 1, 2020

---

### **Introduction**

The Department of Health (department) administers the large on-site sewage systems (LOSS) program under chapter 246-272B WAC. The department is responsible for reviewing, approving, and permitting large onsite wastewater sewage systems (LOSS) with design peak flow of 3,500 to 100,000 gallons per day (gpd). Smaller systems (less than 3,500 gpd) are regulated by local health jurisdictions (LHJs) and larger systems (more than 100,000 gpd) are regulated by the Department of Ecology (Ecology).

The department currently issues annual permits and charges fees to approximately 572 LOSS. The department reviews and approves engineering design plans and performs site inspections for new LOSS and for existing LOSS modifications such as expansions and repairs, provides technical assistance to LOSS owners and operators, responds to LOSS failures and citizen complaints, and develops strategies to address emerging concerns such as nutrient impact on surface waters and nitrate contamination of drinking water wells. LOSS are installed in many settings including schools' grounds, federal lands, state parks, commercial, and residential properties.

The LOSS program receives funds from the state legislature through the General Fund State (GFS) account as well as through fees charged to LOSS owners. The program must adjust the fees it charges to LOSS owners to ensure the department has sufficient funds to sustain existing program elements, and expand other elements such as technical assistance and operator training to continue protecting the health and safety of Washington residents, and the environment.

This analysis describes the department's proposal to increase the fees charged to LOSS owners and demonstrates the need for a fee increase.

### **Why a Fee Increase is Necessary**

Historically, the LOSS program received GFS funds from the state legislature that was supplemented by permit fees charged to LOSS owners. The intended approach was to write the rule (WAC) and develop the staffing and infrastructure needed to sustain the program. A minimal permit fee was set to establish the precedent of annual fees for LOSS, with the understanding that once the program was established, staffing needs were identified, and infrastructure was in place, fees would be raised to the level needed to sustain the program. RCW 43.70.250 requires programs for licensing and permitting be self-sufficient, and the LOSS program must adjust the fees it charges to ensure the program has sufficient funds to sustain the current program component and expand technical assistance services for LOSS owners and operators. Currently, LOSS fees pay for approximately 15% of the program's total revenue. The remainder is paid for with GFS funds. Consequently, the program has a large unsustainable revenue shortfall and must increase the fees to LOSS owners to cover the cost of the program so it can administer the program in a manner that protects public health and the environment.

RCW 70.118B.030 (4) states "At the time of initial permit application or at the time of permit renewal the department shall impose those permit conditions, requirements for system

improvements, and compliance schedules as it determines are reasonable and necessary to ensure that the system will be operated and maintained properly. Each application must be accompanied by a fee as established in rules adopted by the department.” There is an assumption that fee programs must be self-sufficient (i.e., generate enough revenue to cover the cost of the regulatory program).

RCW 43.20B.020 states “The department of social and health services and the department of health are authorized to charge fees for services provided unless otherwise prohibited by law.” RCW 70.118B.030 requires LOSS owners to obtain an operating permit and annually renew the permit in order to operate their LOSS. RCW 43.70.110 requires the department “to charge fees to the licensee for obtaining a license.” The fees must “be based on, but shall not exceed, the cost to the department for the licensure of the activity or class of activities and may include the cost of necessary inspections.”

The proposed fee increase is necessary to offset the costs of regulating and permitting LOSS. These costs include approximately seven full time equivalent (FTE) staff. The department last increased fees in 2007. Since that time, the following factors have affected the program’s budget:

1. The Washington State Legislature expanded the scope of the LOSS program in 2007.
  - a. Expanded the number of regulated LOSS
  - b. Expanded scope of program oversight
  - c. Added a mandate to protect environment in addition to public health
  - d. Provided initial seed money to establish program with expanded scope
2. The complexity of regulating LOSS has increased since 2007
  - a. Technology has become more complex
  - b. Environmental pressures have increased and become more complex
  - c. Designs have become more innovative and complex
  - d. Sites for new LOSS have become increasing more challenging
  - e. Existing LOSS have aged
3. Since 2007, the LOSS program has increased staff and program costs have risen due to general inflation.

A discussion of the impact of these factors is provided below.

1. Washington State Legislature expanded the scope of the LOSS program

In 2007, the Washington State Legislature passed Engrossed Substitute Senate Bill 5894 (codified in chapter 70.118B RCW), Large on-site sewage disposal systems. This law established new and expanded duties for the department. These duties are listed in RCW 70.118B.020. The department established an associated comprehensive suite of LOSS regulations through a rulemaking in 2011 under chapter 246-272B WAC to set the statutory requirements into regulation.

As directed by statute, the 2011 LOSS rule:

- a) Expanded the number of regulated LOSS
  - I. Added LOSS previously regulated by Ecology:
    - a. “Large capacity” LOSS -- 14,500 to 100,000 gpd capacity;
    - b. LOSS that use mechanical treatment.

- II. Required LOSS built before 1978 to obtain an annual LOSS permit (previously grandfathered).
- III. Required LOSS previously permitted by Local Health Jurisdictions (LHJs) and Ecology to obtain an annual permit from the department.
- IV. Required systems not previously identified as LOSS, or permitted by any agency, to obtain an annual permit.

Collectively, the changes almost doubled the number of LOSS regulated by the department (from 290 regulated LOSS in 2007 to 572 in 2018) and increased the complexity of the LOSS systems included in the program. The department created and implemented a process to identify and evaluate facilities and operations in these expanded categories. For those determined to be LOSS, the department worked to educate and inform owners, identify missing information, and bring the systems under department regulatory review.

b) Scope of program oversight

RCW 70.11B.005(1) states “Protection of the environment and public health requires properly designed, operated, and maintained on-site sewage systems. Failure of those systems can pose certain health and environmental hazards if sewage leaks above ground or if untreated sewage reaches surface or groundwater.”

RCW 70.118B.030 (1) requires that “A person may not install or operate a large on-site sewage system without an operating permit as provided in this chapter after July 1, 2009. The owner of the system is responsible for obtaining a permit.” RCW 70.118B.030 (5) states “Operating permits shall be issued for a term of one year, and shall be renewed annually, unless the operator fails to apply for a new permit or the department finds good cause to deny the application for renewal.”

These changes have led to a significant expansion of the scope of the program and the requirements associated with operating permits. The program’s previous scope was limited to design and construction approval, providing technical assistance, and response to LOSS failures. Operating permits were previously a single page certificate without any conditions. Non-conforming systems were outside of the department’s authority.

The LOSS program’s duties now include annual review of operation, maintenance, and performance of each LOSS, and revising permit conditions, as needed. This includes hydrogeology and engineering review of annual reports, flows, analytical results, and any other required data and documents for compliance purposes, and an assessment of whether each LOSS is having, or is likely to have, performance problems or exceedances of design capacity. Each permit contains 16 standard conditions. In addition, about 40% have between one and nine specific conditions for monitoring, reporting, engineering evaluations, or evaluating their systems. Non-conforming systems are now subject to enforcement action.

The department requires timely renewal applications from owners in order to provide appropriate and timely oversight of LOSS. From 2012 (the first year with complete records) to 2018, late applications ranged from 109 to 414 per year. Because late submittals require review and processing outside of the department’s established permit-processing structure, these late submittals do not benefit from the efficiencies of the program structure, and require additional work for the department.

The department's approach to compliance is risk-based and is focused on long term functional sustainability and compliance that protects public health. Failures that threaten public health are addressed immediately with a high commitment of resources.

Conversely, failure to apply for a renewal permit, failure to monitor/report, and other violations that are not an immediate threat to public health are addressed through compliance processes that are intended to educate and encourage compliance over the long term. This begins with notifying the owner (and operator) that they are out of compliance and advising them on specific actions to regain compliance. Continued noncompliance is addressed with technical assistance commensurate with the need. This includes written correspondence, phone conversations, and site visits and often encompasses weeks or months. This progresses to formal notices of violation and finally enforcement with the help of the State Attorney General.

c) Added mandate to protect the environment

This includes protecting waters of the state and marine waters through general and system-specific conditions on the annual permit for LOSS in sensitive areas<sup>1</sup>. This requirement has resulted in enhanced monitoring requirements and drives many of the permit conditions mentioned above.

d) Provided initial seed money to establish program with expanded scope

The legislature provided dedicated funding to offset the cost of the expanded LOSS Program established in SHB 1128 in 2007. The legislature provided \$770,000 over two years in fiscal year 2008 and 2009 (SHB 1129 Chapter 522, Laws of 2007). The department has exhausted these funds.

## 2. Complexity

The complexity of the work of the LOSS program continues to increase as the industry evolves, environmental impacts emerge and become better understood, LOSS designs have become more innovative, remaining sites for new LOSS are increasingly more challenging, and the infrastructure associated with existing LOSS has continued to age. The LOSS program includes systems constructed prior to 1978 as well as state-of-the-art systems currently under construction. Both ends of the spectrum bring increased challenges to managing the LOSS program.

- a) New and emerging technology allows better treatment, more robust operational redundancies, and greater automation. It also requires more sophisticated and involved reviews, new and evolving skillsets of designers and operators, and often greater risks associated with component failure. The LOSS program has identified a real and present need to train operators for LOSS systems. While the LOSS program can rely on those counties with robust operator training and certification requirements, it is clear that resources are needed to develop state-wide training material and certification programs for LOSS operators to ensure ongoing sustainable LOSS operation.

---

<sup>1</sup> LOSS in sensitive areas include those treating high-strength wastewater, and those with new technology/advanced treatment must monitor groundwater and effluent quality.

- b) As development densities and sources of pollution have increased, siting and operating LOSS has become increasingly complex. Many groundwater sources in Washington are currently and will continue to be impacted by nitrogen<sup>2</sup>. Several shellfish beds have been contaminated by onsite systems in Washington, at times resulting in dangerous and costly disease outbreaks<sup>3</sup>. Harmful algal blooms are emergent environmental and public health threat that can cause illness and significant ecological and economic impact<sup>4</sup>. LOSS have significant potential to contaminate groundwater sources with nitrogen, contaminate shellfish beds, and contribute to harmful algal blooms if improperly sited or operated. Ensuring LOSS do not impact sensitive resources requires enhanced monitoring and oversight.
- c) LOSS designers and operators are increasingly incorporating water use reduction, treatment of high-strength waste, and other innovative aspects into LOSS. Some designers are beginning to explore water reuse options with LOSS. These new practices add risk to the users and complexity to the department's work.
- d) Many newer LOSS are constructed in the peri-urban areas (areas adjacent to cities), Outside of the Urban Growth Area where centralized treatment is not available. Many of the sites are available for developing a LOSS due to otherwise being undesirable and challenging building sites. The proximity of these systems to sensitive environmental areas, higher density proposed by developers, and the need for siting institutions (such as schools and churches) in these areas require more highly engineered LOSS treatment and dispersal systems. These new projects require additional engineering review and construction oversight, and require additional review by our staff hydrogeologist.
- e) LOSS that were originally constructed under older rules have aged infrastructure, leading to increased operational needs, and may not have sufficient reserve area available to replace failing drainfields. The number of drainfield failures has increased as systems age, and staff time required to visit the site, assess the potential public health risk, and develop realistic strategies to restore the functionality of the drainfields has increased over the last ten years. The department has identified a need to increase the technical assistance and oversight of these systems to ensure they are operated and maintained in a way to increase their service life. Examples of increased efforts include requiring formal Operation and Maintenance (O&M) manuals for older systems along with system component drawings or sketches and site visits to work with owners and operators of these systems. Working with owners of older LOSS often requires additional time to identify key concerns and develop strategies to ensure continued successful treatment.

### 3. Staff costs and general inflation

The department first started charging review and inspection fees to regulate LOSS in 1991. There was a long gap before the department raised its existing rates and added an operating

---

<sup>2</sup> Nitrogen reference (Morgan, L., [Washington Nitrate Prioritization Project](#), May 2016)

<sup>3</sup> Reference for shellfish bed contamination (1. <https://www.epa.gov/salish-sea/shellfish-harvesting>  
2. <https://www.co.mason.wa.us/health/environmental/water-quality/reports/hammersley/community-111617.pdf>)

<sup>4</sup> Reference for algal blooms (HABs, [Harmful Algal Bloom \(HAB\)- Associated Illness](#) webpage)

permit fee in 2007<sup>5</sup>. Since 2007, the impact of the expanded scope of the program coupled with general inflation has resulted in the department not generating enough revenue to cover the program's costs.

Since the last increase to the base operating permit fees and volume fee, effective January 2007, the program has experienced inflationary pressure on its expenditures. The program's FTE costs have increased due to adding FTE to meet the responsibility to protect public health and the environment as mandated by statute, permitting many more systems, recent cost of living adjustments, and annual pay step increases.

Over the past several years, 35% - 67% of LOSS owners have submitted their permit renewal applications after the required deadline. These late applications cause the department to spend additional staff time to review reporting data, develop and print permits manually, and initiate compliance/enforcement procedures. The additional time required to send reminders, respond to inquiries, and process late permit applications places a sustained burden on staff time that is currently borne by the entire permitted LOSS community.

Appendix A provides a summary on the recent historical and projected revenue and expenses from Fiscal Year (FY) 2018 to FY 2025. The number of permitted systems has increased only slightly since the initial identification of regulated LOSS, so revenue has not shown a significant increase. Insufficient funding in department fees and GFS, along with expanding the scope of the program, has led to revenue shortfalls. Consequently, the department is no longer generating sufficient revenue to cover its costs. There was a shortfall of \$128,396 in FY 2018, which resulted in the agency having to use a one-time transfer from another fund to cover the program's shortfall.

This shortfall trend is likely to continue and expand. The budget forecasts that the program will have a \$201,523 shortfall in FY 2019. This includes funding a reserve account with a target value of 6% of annual expenditures (with a value of approximately \$65,000). The department is creating this LOSS reserve account to assure it has sufficient revenue to cover program costs.

In addition, the program anticipates an increase in expenditures in future years based on historical trends and staffing needs. The program is not sustainable without increasing revenue.

### **Proposed Fee Increases**

Based on the extent of the revenue shortfall, the department evaluated the program's revenue and expenditures to determine an equitable approach in how to charge LOSS owners to generate additional revenue.

The department considered using alternative fee structures. For example, the department considered redesigning the fees based on the system's "level of treatment" or "complexity" and its "number of permit conditions." After consideration, the department determined that these variables did not necessarily correlate with the cost of regulation. Ultimately, for the sake of simplicity and consistency, the department elected to use its existing rate structure, and propose to increase existing fees and add new fees for selected activities.

#### Increase to Existing Fees:

---

<sup>5</sup> See Appendix B for more details on history of program fees

- Increase operating permit base fee and operating permit volume fee to cover operational program costs, including issuing permits, providing technical assistance, and reviewing new construction, modifications, and repairs. The department is proposing to raise existing fees 305% over two years (200% in 2020 and 105% in 2021). (See table below)
- Increase site inspection flat fees from \$500 to \$1000. Site inspections include engineer and hydrogeologist time, and the fee needs to cover the cost of both staff. The new process allows consulting engineers to review the site with both staff and address questions, which ultimately makes the process more efficient. In the past, the program absorbed the cost of the second staff on the visit, and the increased fee will cover the cost of site visits for both staff.
- Increase all fees based on hourly rate including reviewing all types of LOSS documents (new applications, modification projects, other document reviews) from \$100 to \$106 per hour (to address increase in labor costs).

Proposed New Fees:

- A processing fee when owners submit late applications. Currently, the cost for manually processing permit renewals for those LOSS owners who do not submit a complete application on time is absorbed by the LOSS program. In order to equitably assign these costs to those who cause the expense, a \$94 fee for late applications has been added.
- Re-inspection fee for compliance and enforcement actions (\$1000 fee covers travel and on-site time for re-inspections).
- Engineering review time required for submittals in response to permit conditions and other document review. The engineering time required to review documents (including, but not limited to O&M manuals, Monitoring and Reporting plans, and Management plans) will be invoiced based on \$106 per hour.

Fee Reduction:

- If a LOSS owner requests and the department approves a reduced modification project application, the LOSS owner will pay a reduced fee (50% of a standard project fee), which covers four hours of review. The hourly rate still applies if the project review takes more than four hours. <sup>[7]</sup>

## Existing and Proposed LOSS Fees

Rule Sub-section	Description of Fee	Existing Fee	Proposed Fee Starting on July 1, 2020	Proposed Fee Starting on July 1, 2021
(1)(a)	Base Project Review Fee for Modification to an Existing LOSS (up to four hours review time)	\$800	\$848	
(1)(b)	Base Project Review Fee for Modification to an Existing LOSS may be reduced if appropriate and covers up to four hours of review time	\$800 <sup>6</sup>	\$424	
1(c)	LOSS review not included in (a) and (b) of this subsection (adds lists types of projects where the hourly fee applies)	\$100	\$106	
(1)(d)	The owner shall pay a flat rate for each pre-site inspection and re-inspection related to a compliance event.	\$500	\$1000	
	The owner shall pay a flat rate for each final inspection	\$500	\$500	
(3)	Operating permit fees consist of a base fee and a volume fee.			
(3)	LOSS Operating Permit- Base Fee	\$150	\$450	\$608
(3)	LOSS Operating Permit- Volume Fee	\$.01 per gallon	\$.03 per gallon	\$.0405 per gallon
(6)	Operating Permit- Processing fee for late applications	NA	\$115	

## Conclusion

The LOSS Program currently receives most of its funding from GFS dollars and is supported to a much lesser extent by fees paid by LOSS owners. The legislature has mandated that the fees charged to LOSS owners be sufficient to adequately protect the environment and the health and safety of Washington residents. The program has had an increase in program costs. The department last raised LOSS fees in 2007.

Currently, LOSS fees pay for approximately 15% of the program's total revenue. The remainder is paid for with GFS funds. Consequently, the program has a large unsustainable revenue shortfall and must increase the fees to LOSS owners to cover the cost of the program so it can administer the program in a manner that protects public health and the environment, and develop needed programs for LOSS owner outreach and operator training and certification. With the proposed 305% increase in existing fees and the newly proposed fees, regulated LOSS are projected to pay approximately 41% of the total program revenue. It is anticipated that the program will continue to receive GFS dollars, but it is not guaranteed.

This fee increase is necessary for the program to carry out its legislative mandate to protect public health and the environment, and to provide technical assistance to encourage voluntary compliance. The fee increase will enable the program to conduct activities including reviewing

<sup>6</sup> The department currently charges LOSS owners \$800, covering up to eight hours of review time for modification projects.



and permitting LOSS systems, conducting site inspections, ensuring proper maintenance and operation, and conducting enforcement activities when LOSS owners are unwilling or unable to achieve compliance and have permit violations.

**Appendix A – Annual Expenditures and Revenue FY 2018-FY2025**

<b>LOSS Program</b>	<b>Fiscal Year 2018</b>	<b>Fiscal Year 2019</b>	<b>Fiscal Year 2020</b>	<b>Fiscal Year 2021</b>	<b>Fiscal Year 2022</b>	<b>Fiscal Year 2023</b>	<b>Fiscal Year 2024</b>	<b>Fiscal Year 2025</b>
# of LOSS	572	572	572	572	572	572	572	572
# of gallons –Max Daily Capacity	5,059,400	5,059,400	5,059,400	5,059,400	5,059,400	5,059,400	5,059,400	5,059,400
Revenue								
Revenue- GFS Funds <sup>7</sup>	804,808	795,029	849,330	849,330	849,330	849,330	849,330	849,330
Operating Permit (base fee)	85,800	85,800	85,800	257,400	347,490	347,490	347,490	347,490
Operating Permit (volume fee)	50,594	50,594	50,594	151,782	204,906	204,906	204,906	204,906
Project review revenue <sup>8</sup>	32,000	32,000	32,000	33,920	33,920	33,920	33,920	33,920
Agency balance fund transfer	121,534							
<b>Total Revenue</b>	<b>1,094,736</b>	<b>963,423</b>	<b>1,017,724</b>	<b>1,292,432</b>	<b>1,435,932</b>	<b>1,435,932</b>	<b>1,435,932</b>	<b>1,435,932</b>
% of total revenue from fees	15%	17%	17%	34%	41%	41%	41%	41%
Expenses								
Operations	274,114	269,395	301,817	306,604	316,235	320,979	325,794	330,681
Licensing	827,444	808,184	704,239	839,810	948,705	962,936	977,380	992,041
Disciplinary		14,991	15,904	16,065	16,226	16,469	16,716	16,967
Software update				40,000	72,962	90,238	91,592	92,966
<b>Total Expenses</b>	<b>1,101,558</b>	<b>1,092,570</b>	<b>1,021,960</b>	<b>1,202,479</b>	<b>1,354,127</b>	<b>1,390,621</b>	<b>1,411,481</b>	<b>1,432,654</b>
Balance (Shortfall)	6,822	129,147	4,236	89,953	81,805	45,311	24,451	3,278
Fund Balance (Shortfall)	6,822	135,969	140,205	50,252	31,552	76,863	101,314	104,591
Target reserve fund - 6% of total expenses		65,554	61,318	72,149	81,248	83,437	84,689	85,959
Variance from target reserve		201,523	201,523	122,401	49,696	6,574	16,625	18,636

<sup>7</sup> Estimated based on past allotments

<sup>8</sup> Operating permit fee revenue and revenue from project submittals. FY 2018 assumes static revenue, as revenue changes from year to year based on project flow.

## Appendix B – LOSS Fee History

LOSS Task	1/31/1991	12/6/2003	1/1/2007	9/2/2010	2019
<b>WAC 246-272 – 3000, LOSS Fees</b> (current rule)	First fees	Moved to 246-272B-990	First fee increase	Moved to fee WAC 246-272-3000; \$0.01 penalty removed	Proposed fee increase
Preliminary site evaluation	\$100	\$100	\$500	\$500	\$1000
Engineering report ≤ 8 hrs of review time	\$400	\$400	\$800	\$800	\$800
Final inspection	\$100	\$100	\$500	\$500	\$500
Other LOSS review hourly fee	NA	NA	NA	\$100	\$106
Re-inspection fee under compliance event	NA	NA	NA	NA	\$1000
Processing late application fee	NA	NA	NA	NA	\$94
Hourly review fee (after 8 hr)	\$50	\$50	\$100	\$100	\$106
Annual operating permit			\$150 + 0.01/gal design flow \$150 + 0.02/gal design flow if not fully compliant	\$150 + 0.01/gal design flow	\$450 + 0.03/gal design flow \$608 + 0.0405/gal design flow
Number of permitted LOSS (3,500-1000,000 gpd)			290	320	572

### LOSS Program and Fee History

- 1991 First LOSS review and inspection fees
- 2003 Fee WAC moved from WAC 246-272B-990 to WAC 246-272-3000
- 2007 First fee increase for review fees
- 2007 First operating permit fees
- 2010 Removed noncompliant volume charge on operating permit
- 2018 Proposed Fee Increase (two stages for operating permit fees)