



Statewide Septage Capacity

Introduction

In 2024, the Washington State Legislature directed Ecology to contract with a statewide association of local public health officials to assess the current state and possible future needs for managing septage within Washington.

Septage is the waste removed from septic tanks, cesspools, portable toilets, RV holding tanks, and similar systems used to store domestic sewage. Proper septage management is vital to prevent system failures, sewage spills, and pollution emissions that can harm people and the environment.

In June 2024, Ecology contracted with the Washington State Association of Local Public Health Officials (WSALPHO) and its consultant, SCJ Alliance (SCJ). SCJ submitted the final document to Ecology in spring 2025. SCJ's Septage Capacity Assessment evaluates Washington's septage infrastructure, identifies present and future gaps in septage management, and offers recommendations and next steps to close those gaps.

Background

At different points in the handling process – from generation to beneficial use to disposal – septage management in Washington is regulated by the Department of Health (DOH) and Ecology. DOH has regulatory oversight of on-site sewage systems (OSS) and septage pumpers and haulers that remove and transport sewage or septage (WAC 246-272A). Ecology regulates and oversees facilities that receive septage for treatment, beneficial use, and disposal.

Ecology regulates septage through the Biosolids Management Rule (WAC 173-308), which is implemented through a statewide general permit. When the Legislature charged Ecology with developing and implementing this program, it identified biosolids and septage as beneficial commodities. The statute required Ecology to maximize the beneficial use (land application) of biosolids and septage to minimize risk to public health and the environment (RCW 70A.226.005).

Methodology

The SCJ assessment used a layered approach involving data collection, stakeholder engagement, and in-depth analysis. Guided by a set of research questions provided by Ecology and WSALPHO, SCJ conducted a review of all 39 county comprehensive plans in Washington. Reviews focused on references to wastewater, septage, biosolids, and on-site sewage disposal systems. Ecology provided data from annual biosolids reports from 2018 to 2023. Biosolids facilities are required to submit these reports each March for the preceding calendar year. The annual reports include the amount of septage managed and the methods used for its handling.

Three stakeholder groups were surveyed:

- **WSALPHO** members were asked about the number of residential OSS and related demographics.
- **Large On-site Septic System (LOSS)** operators were surveyed to determine the number and capacity of LOSS systems.
- **Wastewater treatment facility (WWTF)** operators were asked whether they accept septage, how much they accept, and what factors limit their ability to accept more.

Key findings

SCJ's analysis highlighted the following issues facing septage management in Washington:

Capacity limitations: WWTFs are generally equipped to manage municipal sewage but often lack the infrastructure or resources to treat septage. High nutrient concentrations in septage make treatment more difficult and costly.

Logistical and economic challenges: Long transport distances and the disposal of fats, oils, and grease (FOG) add further complexity and expense.

Data gaps: Significant gaps exist between the known amount of septage generated and the capacity of existing treatment facilities, impeding accurate statewide assessments.

Regulatory constraints: Discharge permits and other restrictions limit the acceptance of septage at many facilities.

Inspections and oversight: Insufficient staffing and funding reduce the ability to inspect OSS during home sales, resulting in undetected or unaddressed system issues.

Comprehensive planning: While the Growth Management Act (GMA) aims to ensure adequate infrastructure to support development, most comprehensive plans do not account for septage treatment and disposal facilities associated with OSS. Notably, some counties do not have septage receiving facilities.

SCJ recommendations

SCJ developed recommendations and identified opportunities based on their research, stakeholder consultations, and data analysis.

Primary recommendations that require legislative action

1. Fund a fiscal analysis of potential infrastructure solutions for wastewater treatment facility capacity challenges across the state.
2. Amend the Growth Management Act for all counties to account for local OSS and treatment facilities serving their jurisdiction.

Staffing, data, and capacity building opportunities

3. Explore possible solutions with self-funding mechanisms to address staffing capacity challenges for collecting and reporting septage data collection at the state and local levels.
4. Fund ongoing statewide septage data collection and create avenues for digitizing records for efficient data management and analysis.
5. Enhance interagency coordination for efficient data utilization and planning.
6. Support local financial assistance programs for septic system inspection and maintenance, especially as they relate to operational costs or environmentally sensitive areas.

Additional collaborative partnership opportunities

7. Continue building relationships and coordinating planning efforts with each Tribal Nation in Washington state on septage waste management, respecting each Tribe's inherent sovereignty and self-determination.
8. Explore opportunities for Public-Private Partnerships to improve septage waste management.
9. Improve public education of OSS maintenance requirements and accessibility through partnerships, regional coordination, and training program opportunities.

Ecology's next steps

Ecology will implement the applicable SCJ recommendations that do not require legislative action, as resources allow. To improve the effectiveness of septage data collection, as suggested in recommendations 3, 4, and 5, Ecology will focus on several key areas. Ecology will make the annual reports more intuitive and comprehensive, ensuring they are user-friendly to biosolids permittees. Targeted questions related to septage handling capacity will be included. Additionally, Ecology will create templates to streamline permitting processes for facilities, subject to the Biosolids Management Rule, helping to ensure consistent and efficient data collection.

Ecology will also emphasize outreach and education efforts by providing reporting and compliance technical assistance for septage management facilities as suggested in recommendation 9.

By improving data collection and analysis, Ecology can better understand the issues at hand and make informed, effective decisions moving forward.

Conclusion

The SCJ assessment highlights the evolving challenges facing Washington's septage management system. Existing infrastructure for septage treatment and disposal is under increasing pressure due to rising demand. The SCJ assessment identifies key constraints, including in wastewater treatment infrastructure, regulatory complexities, and inconsistent statewide data collection. SCJ's recommendations include addressing infrastructure and funding, data and planning, and equity and engagement. Building on these priorities, Ecology will strengthen data systems, refine permitting processes and increase transparency.

Publication information

This report is available on the Department of Ecology's website at
<https://apps.ecology.wa.gov/ecy/publications/SummaryPages/2507044.html>

Contact information

Solid Waste Management Program

P.O. Box 47600

Olympia, WA 98504-7600

Phone: 360-407-6900

Website1: [Washington State Department of Ecology](https://www.ecology.wa.gov/)

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