



Lewis County Department of Public Works

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Packwood Sewer System Project Overview

Updated January 25, 2024

PROJECT PURPOSE AND NEED

The purpose of the Packwood Sewer Project is to provide a centralized sewer system to the downtown business corridor and surrounding area to reduce the risk of aging septic systems to the drinking water aquifer and to support future development.

All existing development in Packwood is currently served by private onsite septic systems. Most of the systems are conventional gravity flow septic tanks and drain fields. Many inadequate septic systems in the Packwood community pose a health threat to the aquifer that provides domestic water for the area. Bacteria, virus, and nitrate contaminants from these systems can cause serious health problems. Most of the soils in the area are classified as "Type 1, gravelly, very gravelly, coarse sands, and extremely gravelly soil," which result in high levels of permeability. Since this type of soil is so permeable it provides a minimal amount of soil treatment to downtown Packwood, thus a large amount of wastewater is discharged to the ground over a small area. Many of the existing onsite systems in the downtown core were installed before 1991, when Lewis County Public Health & Social Services, Environmental Health Division, began to specify that these highly permeable soils fail to provide adequate treatment of sewage effluent prior to discharge to the groundwater.

In addition, the lack of adequate space or resources for onsite sewage disposal systems has resulted in businesses being unable to expand or open. Also, current health regulations make it difficult for many of the residential units to replace failing septic systems on existing small lot configurations. For those situations, a homeowner would have to purchase additional land to expand their current lot size to meet health regulations, which is unrealistic or cost prohibitive in most circumstances.

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HISTORY

In the early 1990's, the Packwood Wastewater Working Group was formed to address the issue of risk to the drinking water aquifer from onsite septic systems in the downtown core of Packwood. In November 2000, Lewis County received a State Community Development Block Grant (CDBG) Planning-Only Grant in the amount of \$24,000 from the Department of Commerce and a \$46,000 grant from US Department of Agriculture to conduct a planning and feasibility study for a sewer system in Packwood.

In January 2001, the Board of County Commissioners approve a subrecipient agreement with the Destination Packwood Association for the total funding of \$70,000. In 2002, Destination Packwood hired Gray & Osborne, an engineering firm, to complete a Wastewater Facilities Plan. This effort was focused on the business community, in part because the business district was perceived to have the most immediate short-term needs, and in part because the costs for serving the residential area was significant without substantial financial assistance in the form of grants. At that time, Lewis County Water District #3 was not interested in operating a sewer system and the County did not have the capacity to do so.

The Wastewater Facilities Plan was paused in January 2002 because the County's Comprehensive Plan was found to be invalid under the Growth Management Act. Until Lewis County addressed the issues of invalidity, the County would not be eligible for most potential grant funds related to infrastructure development.

In January 2006, a survey was conducted of the businesses in Packwood to determine the potential hook-ups to a wastewater system. The County prepared an amendment to the 2002 Wastewater Facility Plan resulting in a planning-level project cost estimate for providing sewer service to the downtown core business district. This proposal included some funding from the County and technical assistance in reducing high water use by several businesses, thus reducing their costs while creating additional system capacity. Lewis County Water District #3 indicated a willingness to own and operate the wastewater system. Also in 2006, the County received a petition from Packwood residents in opposition of a public sewer system and they proposed a vote from Water District users.

In 2008, the Board of County Commissioners held a public hearing to review eligible uses of the CDBG Program. Following the hearing, an application was submitted for \$24,000 funding from a CDBG Planning-Only Grant to update the 2002 Wastewater Facility Plan, which is a feasibility study.

In 2009, the Packwood Wastewater Working Group included Lewis County, Lewis County Water District #3, Destination Packwood, business owners and citizens. The Working Group volunteers coordinated a household income survey, in accordance with the CDBG Community Survey Guide, focused on 87 households in the proposed wastewater improvement service area to determine eligibility for CDBG assistance.

On April 10, 2009, the Lewis County Comprehensive Plan was found to be in compliance with the Growth Management Act. Following compliance, the County applied for .09 Distressed County Funds in the amount of \$35,000 to procure professional engineering services. In early 2010, the County hired Skillings and Connolly to complete the Packwood Wastewater Plan update to explore alternatives, determine the feasibility, and analyze pre-design and construction requirements of a public sewer system for Packwood. The findings of the study were presented at a public meeting in August 2010.

In 2011, another CDBG Planning-Only Grant in the amount of \$24,000 was awarded to Lewis County to complete a Large On-site Sewage System (LOSS) pre-design plan. In 2012, Territorial Landworks was hired to complete the LOSS Pre-Design. Between 2012-2013 Territorial Landworks analyzed previous reports and provided an update to the data previously examined in the 2002 Wastewater Facility Plan and the 2010 Packwood Sewer Facility Summary Report. They recommended a Sequencing Batch Reactor (SBR) and a traditional drain field as the best treatment and dispersal method for the system. The recommended collection method was a traditional gravity sewer system that would be supplemented with lift stations.

In July 2013, the Packwood (LOSS) Pre-Design was submitted to the Department of Health (DOH) for review and DOH determined that the conceptual design for the LOSS appears to be viable and notified Lewis County of approval to proceed to environmental review (site inspection). Soil testing at the proposed site was conducted in 2014.

In 2015, Lewis County and Lewis County Water District #3 submitted a Certificate of Necessity to DOH and Department of Ecology (DOE). Following submittal of the Certificate of Necessity, the County in cooperation with DOH and DOE modified the sewer coverage area to encapsulate the Lewis County Water District 3 service area. Note, the Certificate of Necessity was valid for two years and expired in 2017. In a letter from Lewis County Community Development to DOH and DOE on May 11, 2017, the County clarified that sewer systems, which are typically considered an urban service, are found in rural areas, Onalaska and Mayfield Lake, and have not contributed to sprawl in those areas.

In 2021, Lewis County began working with the Washington State Legislature to secure funding to complete engineering and construction of the sewer system based on the 2013 Packwood (LOSS) Pre-Design. On September 26, 2021, the Department of Commerce informed the County that Governor Inslee signed the 2021-2023 State Capital Budget which included Infrastructure Projects appropriations for the Packwood Sewer System (Packwood) in the amount of \$8,050,000 of which \$200,000 would be retained by the Department of Commerce for administering the funds through December 31, 2026, for a net grant award of \$7,850,000 for the project.

In January 2022, Lewis County began the Packwood Subarea Plan, which is a comprehensive plan for the next 20-years that addresses issues including housing, economic development, land use and infrastructure. A Community Advisory Committee (CAC) was formed to propose goals and policies. The CAC conducted their work assuming a sewer system that served at least the downtown core of Packwood would be constructed.

HDR was hired on October 25, 2022, using the state appropriated funding, to complete engineering design. The scope of work is described below. A community meeting was held on November 8, 2023 to present the 30% design concept and answer questions.

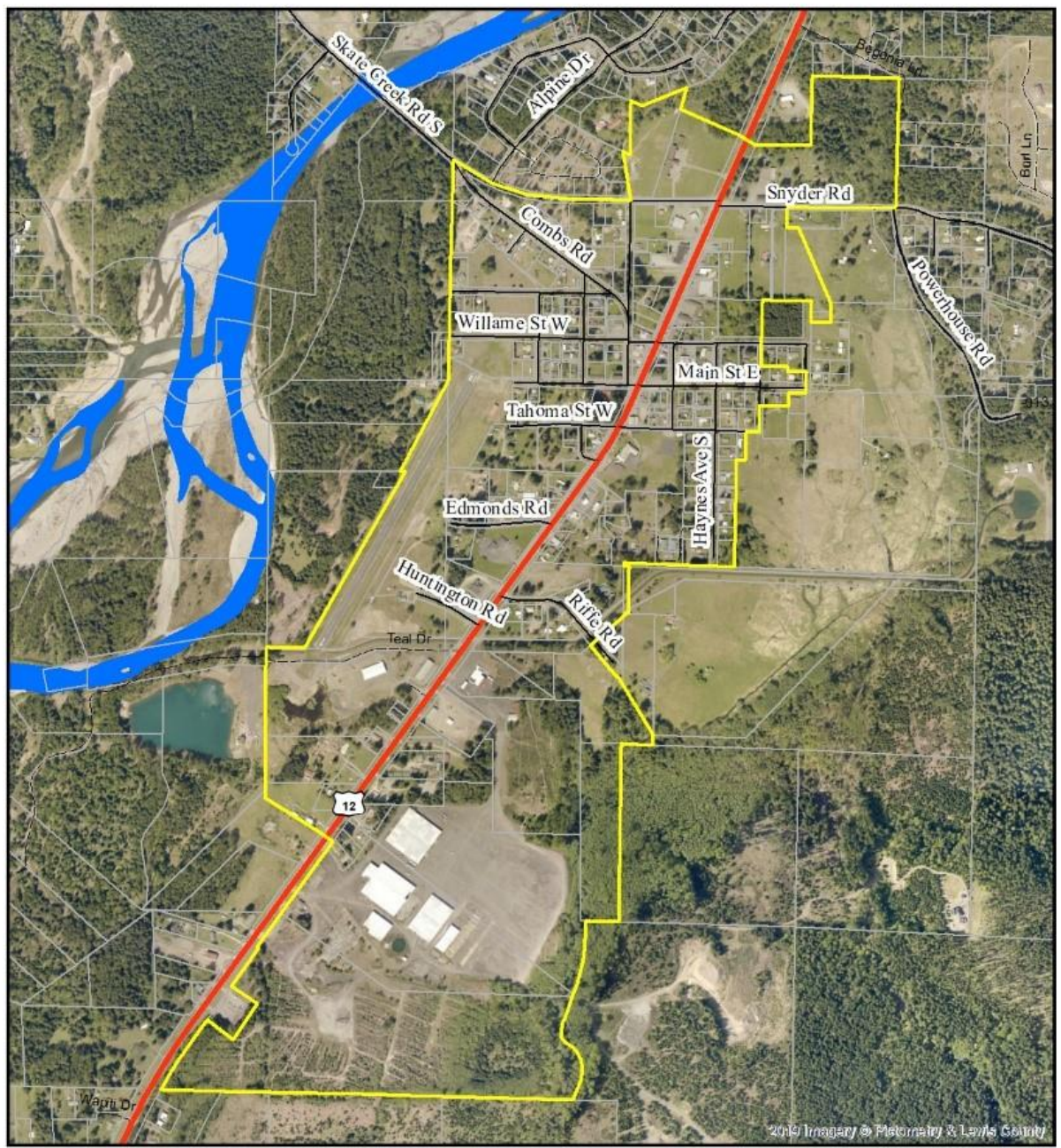
On January 2, 2024, the Packwood Subarea Plan was adopted and set goals and policies for land use, housing and economic development that required a centralized sewer system. It is important to note that the majority of planning for sewer in Packwood was completed well before the subarea plan adoption. While it is important to now consider the subarea plan, which is officially a part of the Lewis County Comprehensive Plan, the most recent funding was received in September 2021, prior to the subarea plan, and included a scope of work based on the 2013 Packwood (LOSS) Pre-Design.

Community meetings about the sewer project were held in Packwood throughout this process. Dates of the community meetings are 06/28/2009, 07/18/2009, 03/18/2010, 05/14/2012, 07/11/2013, 08/13/2014, 11/04/2014, 12/07/2015, 11/08/2023. Additional meetings are anticipated at the 60% design and 90% design stages of the project.

SCOPE OF WORK

HDR has been hired to completed engineering design, environmental permitting, cultural and archaeological assessment, right-of-way acquisitions, and plans, specifications, and engineer's estimate of probable construction cost (PS&E) and bid support for the ultimate construction of the project starting with the 2013 Packwood (LOSS) Pre-Design. The scope of work is based on the state funding provided for the project in 2021 and does not incorporate the results of the Packwood Subarea Plan, which were adopted in January 2024.

To incorporate the Packwood Subarea Plan, the 20-year sewer service area has been updated (Map 1). However, funding that is currently appropriated was not based on that full 20-year service area; it was based on previous studies. Therefore, Phase 1 of the Packwood Sewer Project will serve only a portion of the full 20-year service area. Additional funding will need to be secured to conduct engineering and construction of future phases of the project. This could also require additional treatment facilities and disposal points.



Packwood Sewer Project

Draft Sewer Service Area

Updated 12/28/23
Planning Division, Community Development

Subarea	Highway 12	20-Year Service Area
Roads	Parcels	
River Channel		

Phase 1 will not provide sewer to the entire Service Area. The Phase 1 boundary will be shared at 60% design completion.

0 0.1 0.2 0.4 Miles

N

This map was created by Lewis County Geographic Information System. The accuracy of the map has not been verified and should be used for informational purposes only. Any possible discrepancies should be brought to the attention of Lewis County GIS.
Slate Plane Washington South FIPS 4602
North American Datum 1983
North American Vertical Datum 1988 (Topography)

Map 1: Packwood Sewer *Draft* 20-Year Service Area

TIMELINE

2023

- Winter Evaluate existing conditions / Commence with Design
 Spring Commence with project survey, property analysis, initiate Cultural / Archeological Investigations
 Summer Submit DOH Application for MBR - LOSS facility.
 Fall 1st Community Meeting, 30% Preliminary Design; Facilitated MBR/LOSS facility Site Visit per Packwood Resident request.

2024

- Winter 60% Design/Plan Development; Confirm MBR / LOSS Site Selection
 Spring 2nd Community Meeting, 60% Design Plans, Specifications, and Engineer's Estimate of Probable Construction Cost (PS&E) development; MBR / LOSS and Pump Station property acquisitions.
 Fall 3rd Community Meeting, 90% Design - Plans, Specifications, and Engineer's Estimate of Probable Construction Cost (PS&E); Finalize Design.

2025 - 2026

- 2025 Contract Advertisement, Contractor Selection
 2025-2026 Construction

FOR MORE INFORMATION

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Project Webpage QR Code

