



MEMORANDUM

TO: Deschutes County Board of Commissioners

FROM: Peter Gutowsky, AICP, Director
Todd Cleveland, Onsite Wastewater Manager

DATE: February 3, 2025

SUBJECT: Southern Deschutes County Groundwater Protection Program / Annual Report

I. INTRODUCTION

The La Pine subbasin serves as the primary drinking water source for thousands of residents south of Sunriver. However, groundwater investigations by the U.S. Geological Survey (USGS) and Oregon Department of Environmental Quality (DEQ) indicate that this sole source aquifer is vulnerable to nitrate loading from onsite wastewater systems, posing a long-term threat to public health and the environment. The *Southern Deschutes County Groundwater Protection Program Annual Report* provides an update on the status, progress, and challenges related to protecting the groundwater in this subbasin.¹ The Community Development Department (CDD) will update the report annually to identify changes in environmental conditions, development patterns, emerging opportunities, and/or the outcomes of ongoing initiatives. By documenting these efforts, Deschutes County is showcasing its commitment to mitigating the impacts from nitrate pollution.

From 1996 to 2009, stemming from a Regional Problem Solving Project, Deschutes County actively pursued innovative approaches to protect the aquifer. Unexpectedly, in 2009, Deschutes County voters overturned a Local Rule, regulations that would have required upgrading all existing septic systems in Southern Deschutes County to nitrogen-reducing onsite systems by 2022. Immediately afterwards, the Board of County Commissioners (Board) acknowledged that Deschutes County as an agent of the state, had exhausted its efforts on a local level to protect the groundwater and requested that DEQ take the lead. DEQ agreed and this arrangement remains in effect today.

CDD currently implements regulatory programs that help mitigate the impacts of groundwater pollution from conventional onsite wastewater treatment systems. It requires the use of onsite wastewater systems because:

- Deschutes County’s permitting authority is limited to onsite systems;
- Public opinion and Oregon land use law direct the County to avoid using new sewer systems;
- Dispersed, rural patterns of development are prevalent in the region;

¹ [Groundwater Protection Program Annual Report | Deschutes County Oregon](#)

- Models developed by USGS show groundwater quality can be protected by using alternative nitrogen-reducing onsite systems that provide higher levels of wastewater treatment; and
- Oregon Administrative Rules (OARs) allow Deschutes County to issue permits for nitrogen-reducing onsite systems.

II. REPORT FORMAT & WEBLINKS

The annual report consists of five sections:

- Section 1: Background
- Section 2: DEQ Responsibilities
- Section 3: Deschutes County Financial Assistance
- Section 4: Emerging Opportunities
- Section 5: Groundwater Protection Strategies

Certain footnotes in the report provide links to USGS, DEQ, and Deschutes County documents. A detailed timeline is provided in Appendix A. It summarizes collective efforts by these three agencies over several decades to protect the groundwater. Appendices B and C contain maps depicting the general locations of DEQ septic system variances and onsite alternative treatment technologies (ATTs).

III. EMERGING OPPORTUNITIES

The annual report lists three emerging opportunities: U.S. Environmental Protection Agency (EPA) Community Change Grant, Newberry Neighborhood Land Sales, and a Financial Advisory Committee. EPA notified Deschutes County in October that our initial application was rejected. After receiving a debrief in November, Deschutes County and its partners revised the application, and under the terms of the Notice of Funding Opportunity, resubmitted it for consideration. In December, EPA notified Deschutes County that there is limited funding remaining for Community Change Grant awards. They will nonetheless continue reviewing applications into spring of 2025. If awarded, two of the deliverables would upgrade 275 conventional septic systems to ATTs and deepen 24 domestic wells in a subarea of Southern Deschutes County.

CDD's Groundwater Partnership fund, Fund 296, protects groundwater quality in Southern Deschutes County and provides financial assistance to property owners not eligible to connect to a sewer system. Deschutes County owns large sections of the Newberry Neighborhood in La Pine; specifically, Quadrants 2a and 2d, and Neighborhoods 3 and 4. Funding comes from Newberry Neighborhood land sales and Pollution Reduction Credits collected on properties owned by Sagebrush Development LLC, located within The Reserve in the Pines (Quadrants 1a, 1b and 1d). In November 2024, Deschutes County's Property Manager listed Quadrants 2a and 2d with NAI Cascades for sale. When Quadrants 2a or 2d sell, CDD will coordinate with the Board to convene a financial advisory committee consisting of a diverse group of stakeholders. The committee's charter will be to provide direction to the Board for strategically investing resources into groundwater protection.

IV. GROUNDWATER PROTECTION STRATEGIES

Looking ahead, there are several short and long term strategies that the Board in partnership with DEQ may want to consider. CDD will continue administering OAR 340-071-130(1), Nitrogen-Reducing Systems by requiring advanced onsite wastewater treatment systems for:

- New residential dwellings;
- Major septic repairs (repairs to drainfields, not including tank replacements);
- Major residential alterations (changes that would cause increases in flows or proposing to connect to a system that doesn't meet minimum sizing requirements for the use); and
- Authorization notices for changes in use, additions, new connections or replacement dwellings.

Two strategies are listed below:

1. DEQ Rules Advisory Committee

CDD's Onsite Wastewater Manager will participate in DEQ's RAC in 2025 and if necessary, 2026.

2. Goal 11 Exception

The Board and DEQ could consider lobbying the Oregon Legislature to amend Goal 11 and OARs to allow sewer systems in Southern Deschutes County without having to justify an imminent public health hazard.

Attachment:

Southern Deschutes County Groundwater Protection Program Annual Report