



# Groundwater Protection in Southern Deschutes County, Oregon

## FACT SHEET: Groundwater Protection Project

### Why Protect Groundwater Quality?

Scientific studies conducted by the Oregon Department of Environmental Quality (Oregon DEQ) and the U.S. Geological Survey show that nitrate levels in the groundwater will eventually exceed safe drinking water standards if nothing is done to address the problem. The Oregon DEQ has issued a statement that a health hazard exists in southern Deschutes County based on these scientific studies.

The health hazard is being created by discharges from conventional septic systems like standard, pressure distribution and sand filter systems – even new and/or properly functioning septic systems – discharge nitrates into the groundwater and, ultimately, the rivers of southern Deschutes County.



Clean water, in the form of safe drinking water, is the primary goal of the Groundwater Protection Project

*The Groundwater Protection Project for Southern Deschutes County was supported by a grant from the US Environmental Protection Agency, Region 10.*



### What is the Groundwater Protection Project?

Deschutes County started a groundwater protection program because of pollution created by existing and potential future growth in southern Deschutes County. Conventional wastewater management practices pollute groundwater resources in the region and create negative effects on surface water quality. Currently, the region produces high quality drinking water but groundwater investigations have shown water quality declining. The groundwater protection program recognizes four main goals:

- Prevent groundwater pollution levels from triggering a moratorium on future development;

- Protect the aquifer that provides the only source of drinking water to the residents in south Deschutes County by complying with State groundwater quality standards (7 mg/L) for nitrate-nitrogen concentrations;
- Use results from an existing model to create a watershed-scale management system for existing and future wastewater treatment systems; and
- Document decision-making processes, tools and lessons learned as resources for other communities starting similar resource protection programs.

### Deschutes County Community Development Department

117 NW Lafayette Ave.  
Bend OR 97701

Phone: 541-388-6575

Fax: 541-385-1764

Web:

[www.deschutes.org/cdd/](http://www.deschutes.org/cdd/)

*The Community Development Department mission is to facilitate orderly growth and development in the Deschutes County community through coordinated programs of Land Use Planning, Environmental Health, Building Safety, Code Enforcement, education, and service to the public.*

# Tasks and Products of the Groundwater Protection Project

*Summaries of project achievements.*

## **Creation of the Pollution Reduction Credit Program**

The Pollution Reduction Credit Program (PRC) is a financial incentive program that benefits property owners responsible for upgrading their existing onsite systems. This program directs financial resources generated by development of specific county-owned property to owners with existing onsite systems with the goal of reducing the total quantity of nitrate discharged to groundwater serving as drinking water supply for the region.

## **Local rule adopted to require groundwater protection action**

Deschutes County Code Chapter 13.14, adopted July 23, 2008 and effective October 23, 2008, requires all property owners in unsewered areas of southern Deschutes County to take action to protect groundwater quality by November 2022. The county's permitting jurisdiction is limited to onsite systems, which is the reason the county code focuses primarily on upgrades. However, the code also specifies that other approaches may be used to meet groundwater protection goals, including connection to sewer and innovative techniques that are either not onsite or sewer systems or that have not yet been invented.

## **Recommendations developed for a Financial Assistance Program**

The Deschutes County Board of Commissioners convened an advisory committee to provide feedback on community values related to how financial assistance should be provided to homeowners. The Board provided a specific charter for the advisory committee to focus discussions and gain specific feedback on community values. County staff, in the document entitled "Financial Assistance Overview," provided background on basic demographics, county financial assets, projected costs of meeting groundwater protection goals, and proposed financial assistance programs (including loans and grants).

## **Operation and Maintenance Program**

The Deschutes County Community Development Department upgraded the permit tracking database to help the county comply with state rule. The new features allow the Environmental Health Division to track systems with required maintenance activities, generate automatic reminders to homeowners and maintenance service providers and maintain records for long term public use.

## **Implementation Plans**

An important component of any work program is how products are put to use. In this project, the adoption of a significant piece of local legislation requires a series of short-term administrative actions. In addition, many long-term plans, programs or actions need to be started or established to ensure groundwater protection goals are addressed into the future in a coordinated manner. Deschutes County developed a short-term implementation plan for actions needed following adoption of the county code for onsite system upgrades. The county also developed a long-range implementation plan for regional groundwater protection actions that include the financial assistance program, environmental monitoring, interagency/public coordination, pursuit of grant opportunities, and public information and involvement.

*All materials developed during the Groundwater Protection Project for Southern Deschutes County are available on-line at the project website:*

[www.deschutes.org/cdd/gpp/](http://www.deschutes.org/cdd/gpp/)



Groundwater feeds the region's rivers, which makes protecting groundwater quality all the more important.