

Southern Willamette Valley Groundwater Management Area Agricultural Goals, Objectives, Strategies, and Actions

These goals and the associated strategies focus on integrating GWMA efforts with the three existing Agricultural Water Quality Management Area Plans in the Southern Willamette Valley. Education and outreach is the primary mode for helping producers understand the best and most economical means for making any necessary changes to reduce nitrate loading to groundwater. Monitoring and research goals are vital to accurately measure how well the Action Plan is performing and to continually improve management options for producers. Finally, financial resources are necessary to undertake actions for the protection and improvement of the groundwater resource. The funding strategies suggest ways for producers, agribusiness, and government partners to collaborate in the development of successful initiatives.

Goal 1: Coordinate groundwater pollution control efforts among the various agriculture- related organizations and plans in the GWMA

Goal 2: Organize outreach and education efforts to increase the agricultural community's awareness of groundwater vulnerability and best management practices

Goal 3: Monitor groundwater quality in agricultural areas to evaluate the impacts of agricultural actions

Goal 4: Research best management practice effectiveness and best management practice adoption

Objectives:

- Document the adoption of groundwater protection BMPs by at least 25 percent of the agricultural producers in the region by 2011.
- Within five years at least 50 percent of all agricultural producers in the GWMA time irrigation and apply fertilizer at agronomic rates to reduce nitrate leaching.

Strategy 4.1 Research and document BMP effectiveness with an emphasis on coordinating state, federal, and university efforts.

Actions

- Bring representatives of DEQ, ODA, OSU, OSU Extension, Natural Resource Conservation Service, US Department of Agriculture, Agricultural Research Service in Corvallis, producers, and agribusiness together to discuss and prioritize methods of researching and documenting BMP and systems effectiveness in the Southern Willamette Valley GWMA.
- Design a follow-up program to OSU's nitrate leaching studies at a scale that provides a general characterization of Southern Willamette Valley GWMA agriculture.
- Develop a prioritized research plan, with identified sources of funding. Focus should be placed on identifying the greatest factors in agricultural contributions to groundwater nitrate (supposed to be completed 2006-2007 fiscal year).
- Implement new research to measure BMP and systems effectiveness and to identify the priority factors affecting groundwater nitrate levels from agricultural practices.

Strategy 4.2 Measure the success of BMP Implementation efforts.

Actions

- Measure producer awareness of groundwater quality issues and the level of BMP implementation to create a baseline of BMP use.
- Measure the ease of implementing BMPs and barriers to BMP implementation.

Goal 5: Obtain adequate financial resources to fund research and provide assistance for best management practice adoption

Objectives:

- Submit at least two proposals annually to fund agriculture-related groundwater protection activities.

Strategy 5.1 Obtain sufficient funding to support priority research needs.

Actions

- After research needs are identified and prioritized (see Goal 4), submit research grant applications to support high priority research needs. Potential grant sources include the DEQ 319 Program, ODA, EPA, US Department of Agriculture, and other agencies and private organizations.