



Southern Willamette Valley Groundwater Management Area

Commercial and Industrial
Working Group
Draft Action Plan

January 26, 2006



Goals, Strategies and Actions Recommendations

The following Goals and Strategy Recommendations are all voluntary, and outline how SWV Commercial and Industrial Facilities will continue to help decrease ground water nitrate levels and protect the water that our communities rely on for drinking and production uses.



Goal 1: Integrate the GWMA Action Level into DEQ Permitted Groundwater Pollution Control Efforts

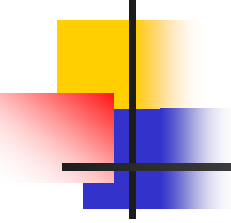
Integration Strategies

- Within the Southern Willamette Valley, DEQ-permitted point sources (lagoons, large on-site systems, land applications, etc.) should not be exceeding the GWMA *Action Level* for nitrate (7.0 milligrams/Liter) at their respective point of groundwater compliance.



Action Examples

- DEQ should review all permitted facilities inside the GWMA that have the potential to discharge nitrate to the groundwater, and determine if these facilities are having an adverse impact on groundwater quality.
- When writing a permit renewal or a new permit for a facility in the GWMA, DEQ should evaluate implementing groundwater pollution control efforts that are in concert with the GWMA Action Level (7.0 mg/L Nitrate-N).
- DEQ is encouraged to promote the education of wastewater treatment operators regarding the appropriate application of wastewater and biosolids at agronomic rates that will also be protective of the groundwater resource.



Goal 2: Integrate the Protection of Groundwater in the GWMA by using County and City Planning Actions

- Jurisdictions within the SWV GWMA should evaluate effective mechanisms for reducing future groundwater impacts originating from new Commercial or Industrial developments with large on-site systems planned to be built in "*high-risk*" areas.



Action Examples

- Cities and Counties are encouraged to establish an overlay zone that will require new Commercial and Industrial development with wastewater treatment (large on-site systems, lagoons or other similar treatment technologies) and a potential for an adverse impact to groundwater from nitrate discharges to meet a GWMA water quality standard.
- Counties and Cities in the GWMA should review all other options available to them when permitting new development in areas where there is a potential for an adverse nitrate impact to groundwater from such development.



Goal 3: Education and Outreach Strategies

- ☐ Write and publish articles and brochures to promote/improve the awareness of the commercial and industrial community with regard to the Groundwater Management Area and relevant water quality issues.
- ☐ Share information and coordinate with commercial and industrial facilities to promote ground water quality.
- ☐ Recognize those Commercial and Industrial entities that set a good precedent by protecting the groundwater resources.



Action Examples

- The Lead Agency should develop or make available outreach materials on how to prevent over-fertilizing and over-watering and other successful resource management practices. These materials should be useful for both the C-I facilities and for contractors.
- The Lead Agency and Commercial and Industrial representatives and organizations active in the SWV GWMA should meet to review the ground water nitrate issue and share appropriate outreach materials from DEQ, LCOG, OSU Extension, and other appropriate sources. This should occur once every two years.



Action Examples

- The Agencies working with the GWMA Committee and the Commercial-Industrial Working Group should develop a recognition program for Commercial and Industrial landowners who manage their lawns, landscaping and/or reclaimed wastewater/biosolids treatment in a manner that protects the groundwater resource.



Goal 4 Monitor and Evaluate Ground Water Quality in Commercial and Industrial Areas

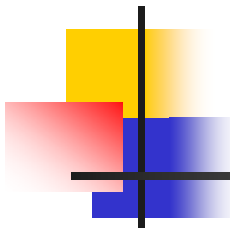
Strategies

- Gather accurate baseline ground water data in commercial and industrial areas
- Monitor and evaluate ground water improvements in areas impacted by commercial and industrial treatment facilities.



Action Examples

- The GWMA Committee should establish a plan for accurately monitoring ground water trends and more clearly identifying sources of contamination. This should be accomplished in the first two years.
- The Lead Agency should implement a plan for long term monitoring of ground water trends. This should be done before or during year three.



Goal 5: Evaluate Treatment Alternatives to Understand Effectiveness

Strategies

- Research and document treatment technologies based on their effectiveness in minimizing nitrate discharges to groundwater. Emphasis should be placed on coordinating state, federal, and business efforts.



Action Examples

- In coordination with the Residential Working Group, the Lead Agency and the Commercial and Industrial Working Group should produce a scientific literature review of the impact of wastewater treatment technologies on groundwater quality, with a focus on reducing nitrate impacts to groundwater.
- Representatives of DEQ, EPA, AOI, OW2A and/or ACWA and other interested businesses should meet to discuss treatment technologies and create a list of ideas to evaluate alternative treatment effectiveness. This should occur in the first year



Goal 6: Research Financial Resources to Fund the Installation and Implementation of Alternate Treatment Technologies

Strategies

- Evaluate funding options to support priority needs.
- Incorporate the scientific literature review in the process to prioritize research needs.



Action Examples

- The Lead Agency and the Commercial-Industrial Working Group should research and evaluate potential funding mechanisms available to Commercial and Industrial facilities. Potential funding sources include:
 - The DEQ 319 Program;
 - The Pollution Abatement Tax Credit;
 - CWRF;
 - US EPA and other agencies and private organizations.

Efforts should continue each year as necessary.



How did we do?

Are there certain strategies that you feel may be more effective than others?

Are there other goals, strategies or actions that you think should be included?

Are there proposed goals, strategies or actions that you feel should be excluded?