

STATE COORDINATING COMMITTEE ON GROUND WATER

To promote and guide the implementation of a coordinated, comprehensive and effective ground water protection and management program for the state of Ohio

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Ohio Department of
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8895 East Main Street
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Ohio Public Utilities
Commission
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Ohio Department of
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77 South High Street
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Ohio Department of
Transportation
1980 West Broad Street
Columbus, Ohio 43215

**February 17, 2011
USGS Ohio Water Center
6480 Doubletree Ave., Columbus**

The February 2011 SCCGW meeting consisted of Agency announcements and discussion of salt issues, revamping the meta-database, and updating SCCGW's guidance documents on well construction and well abandonment.

ATTENDANCE

Ohio EPA: Michael Eggert, Mike Gallaway, Dan Kopec, Barb Lubberger, Jeff Patzke, Aaron Shear
ODNR: Mike Angle, Mike Hallfrisch, Rick Pavey
ODH: Rebecca Fugitt
ODOT: Tim Killeen
USGS: Ralph Haefner
OSU Ext.: Cindy Folck

AGENCY UPDATES AND ANNOUNCEMENTS

OEPA, Division of Surface Water:

General Permit for Salt Piles. A meeting of stakeholders in salt storage facilities was planned for mid-February but so far no date has been set.

Ohio Environmental Protection Agency, Division of Solid and Infectious Waste Management:

Draft Rule Revisions. The draft revisions for municipal solid waste rules are posted on the division's website.

C&DD Monitoring. A ground water monitoring fund (Ohio Revised Code 3714.071) has been established for expenditures associated with conducting ground water monitoring at selected Construction and Demolition Debris landfills. DSIWM and DDAGW staff have established a draft numerical evaluation system to prioritize and determine which C&DD landfills warrant the greatest need for ground water monitoring using these funds. In January, program staff held regional meetings and consulted with approved health districts to incorporate their input and comments into this priority criteria.

Ohio Department of Natural Resources, Division of Geological Survey: Mine Subsidence. The division staffed a booth on mine subsidence at the recent Township Trustees and Associates Meeting. However, the main topic of interest at the meeting was drilling in the Marcellus and Utica Shales and how to fund restoration of township roads that will be impacted by increased traffic from heavy machinery and trucks.

Economic Impact Analysis. The division has asked a consultant to provide an economic impact analysis to estimate the value of its products and services in terms of how much it would cost for the private sector to provide the same products and services. Similar studies done for the geologic surveys of Kentucky and Illinois have resulted in benefit-to-cost ratios ranging from 30:1 to 50:1.

Ohio Department of Transportation:

New Management. ODOT's new director is Jerry Wray. In late January he appointed the new deputy directors for ODOT's 12 districts.

Ohio Department of Natural Resources, Division of Soil and Water Resources:

Staff Changes. Ted Lozier is currently acting chief of the division; the chief's position has been posted. Curtis Coe, who has been hired to replace Bill Haiker, is the first geologist hired by the division in 15 years.

Observation Well Network. \$500,000 has been approved for the final phase of upgrading the state's observation well network. It will be used to replace 24 of the data loggers and well shelters.

Water Monitoring Council. This spring the Ohio Water Resources Council will facilitate a workgroup meeting to coordinate state water monitoring efforts.

Ohio Environmental Protection Agency, Division of Drinking and Ground Waters:

Personal Changes.

- Scott Nally, Director Ohio EPA
- Brian Cook, Chief Legal Counsel and heads the Office of Legal Services
- Chris Abbruzzese, Deputy Director of Communications
- Michael Eggert was promoted to Assistant Chief of the Ground Water Program, formerly filled by Tom Allen who retired in July.

Jeff Patzke will take over management of the Water Quality Characterization and Protection Section. Jeff previously managed Central Office DDAGW's staff dedicated to providing technical ground water assistance to DERR and DHWM.

Oil and Gas Well Permits. The division has offered recommendations for protecting sources of drinking water and sensitive aquifer settings to the ODNR, Division of Mineral Resources Management.

Hazardous Algal Blooms. Three workgroups have been formed to address the challenges of hazardous algal blooms (HABs). One group is developing sampling protocols; another group is devising water quality standards for drinking and recreational use and when to post various types of advisories; the third group is researching the causes of HABs at last summer's documented outbreak sites.

United States Geological Survey, Ohio Water Division

Budget. The Survey is operating on a third continuing resolution, under which it may spend only 80% of the previously permitted funds. The President's 2012 budget provides the Survey with a \$6,000 overall increase from last year's budget, but decreases funding to several water programs. There is concern that the final budget may incorporate a 20% funding cut for all programs.

Marcellus Shale Issues. The division is hoping to conduct an evaluation of water quality related to Marcellus Shale oil and gas drilling, including analysis of field parameters and fingerprinting of brines and ‘frack water’ in surface waters.

Ground Water Observatory. The National Science Foundation may fund a park in Hamilton County that would provide a ground water field laboratory for public use on the Great Miami River.

Michindoh Sole Source Aquifer. People in affected portions of Michigan and Indiana generally do not support the petition for a sole source aquifer, which was submitted to U.S. EPA by citizens of Williams County, Ohio. Resistance resulted from widespread misinformation suggesting that farmers would not be able to sell their homes or receive federal aid if the area was designated a sole-source aquifer. The Ohio residents may try resubmitting the petition to cover Williams County only.

“Green BMPs”. The division has some concern over the increasing popularity of “green BMPs” that reduce storm water runoff by channeling it into the subsurface (for example, rain gardens, bioswales, recharge wells, etc.). These practices may result in chloride and thermal contamination of the ground water and changes in oxidation-reduction state.

MCD’s Monitoring Network. The Miami Conservancy District (MCD) hopes to upgrade its observation well network by adding two new wells per year.

Ravenna Investigation. The division is helping the U.S. Army Corps. of Engineers establish baseline ground water concentrations at Ravenna and Wardstown.

Arsenic in Domestic Wells. In northeast Ohio many domestic wells contain high levels of arsenic. The division is looking for funding to mount a public education campaign and assist homeowners with sampling their wells. Currently USGS is conducting a nation-wide soil study to identify arsenic and other constituents in soil.

Publications. Recently USGS released the following publications:

- “Water Regionally Abundant in Great Lakes Basin, but Not Always When and Where It’s Needed, USGS Professional Paper 1778
- “Contributions of Phosphorus From Ground Water to Streams in the Piedmont, Blue Ridge and Valley and Ridge Physiographic Provinces, Eastern United States, Soil Investigation Report 2010-15176

GW-SW Interaction. The University of Texas has completed resistivity studies of dissolved solids to gauge the interaction of surface water and ground water. This study was published in the *Journal of Environmental Science & Technology*, with the title “Goelectrical Imaging of Hyporheic Exchange and Mixing of River Water and Ground Water in a Large Regulated River” (2011, vol. 45, pages 1407-1411).

The Ohio State University Agricultural Extension:

Pesticides Training Season. The Extension is currently in the middle of its annual pesticide training season, with 6,000 individuals signed up.

Budget. Because Extension is funded by federal, state and local county funds, it is difficult to know how their budget will look, but they are anticipating large cuts in agricultural research.

Bedbugs. Ohio is one of the states with a major bedbug resurgence. Concerned officials have been requesting permission from U.S. EPA to use a new pesticide that is believed to be effective but has not been approved for use. There is concern that, in their desperation, people will turn to older, banned pesticides and overapply all chemicals.

Ohio Department of Health:

Staff Changes. Dr. Theodore Wymyslo is the new director. Steve Wermouth is Chief Executive Officer.

Household Sewage Treatment Systems. The General Permit, which expires in December of 2011, requires households to submit samples from their systems. To date, about 500 of 5,000 households have complied (10%). About 25 to 30 percent of these 500 systems are operating outside permissible limits.

Regional Meetings. ODH, with Ohio EPA's Division of Surface Water, is organizing regional meetings throughout Ohio to solicit comments on the general permit for a household sewage treatment system, and the related memorandum of understanding as part of the permit renewal process.

New Water Well Rules. The Public Health Commission final adopted the new water well rules. ODH is holding regional meetings around the state to provide information on the key changes to the rules. In addition, ODH will be recording presentations on each rule, which will be available from their website.

Donnelsville. ODH is assisting Ohio EPA-DERR with its investigation of perchloroethylene (PCE) contamination at Donnelsville. ODH has assisted with water sampling and development of health exposure assessments at the site.

Geothermal Industry. The geothermal workgroup has prepared a draft set of regulatory and technical recommendations for geothermal heating and cooling systems. The recommendations will be presented as separate documents. One key recommendation is to provide regulatory authority for residential systems to ODH and may be included in the budget bill or as a stand-alone bill. Regulation of commercial geothermal systems is also recommended, however, it is unclear which state agency may be the best fit for systems of this size and scope. The workgroup is working on finalizing the recommendations to prepare a draft to distribute to interested parties and stakeholders for comment. Currently the federal and state governments are promoting green technology, and the growth of the geothermal heating/cooling system industry has been phenomenal. In 2010 there were 71,000 shipments of these systems nationally. In Ohio, 5,000 to 6,000 domestic systems are installed each year, and approximately as many commercial systems are installed.

DISCUSSION

Salt Piles. Mark Stump, with Ohio EPA's Division of Surface Water, was heading up an effort to require permits for salt facilities through the Storm Water Program. A meeting with managers of large salt storage facilities was planned for mid-February, 2011, but has been postponed. It appears that the storm water permit would only apply to new facilities; existing ones would not be subject to the requirements of this permit. The group agreed to follow up with Mark and possibly reconsider taking action as an SCCGW workgroup.

Meanwhile a Division of Drinking and Ground Waters workgroup has been meeting to ensure a consistent response to the ground water/drinking water contamination incidents that have arisen

in three Ohio districts within the last year. For facilities already conducting remediation of affected soils, this group did research to come up with a clean-up standard for chloride in soils. Ultimately they followed the State of Kansas in proposing a cleanup standard of 1,000 mg/kg.

Ground Water Meta-database. Ralph Haefner reviewed the history of this project. The ground water meta-database was initiated in the early 2000s, and was a 3-year inter-agency project funded by a 319 grant. Its goal was to provide a search engine for various water quality-related databases, and point the user to those databases, along with information about the quality of the databases. By 2005 the shortcomings of the project were listed as:

- It needed a metric to describe the size of each database
- It required consistent quality assurance
- Gaps in water quality, water quantity, or geographic coverage were not identified
- It was unable to access older documents available only as hard copies
- It contained little water usage data
- It required someone to take responsibility for maintaining it

Ralph summarized the questions to be answered at this point as:

- 1) Is there a benefit to maintaining the portal?
- 2) If so, what changes are required in its functionality?
- 3) Can we get a commitment from the Ohio Water Resources Council to fund maintenance?

To address (1), the group suggested creating a survey through Survey Monkey that would be targeted to consultants (who are most likely to use it) and members of the Water Management Association of Ohio (WMAO). With regard to (2), it was suggested that it should perhaps include a lot more surface water databases searchable by HUCs. With regard to (3) there was a general feeling that OWRC would be willing to fund the effort if it was deemed beneficial.

The group agreed to set aside as much as an hour at the April SCCGW meeting to discuss these issues. Meanwhile, Ralph will e-mail passwords to access the portal; SCCGW members are asked to browse through it in preparation for the discussion.

Well Construction/Abandonment Guidance Updates. The group briefly discussed whether SCCGW should update these guidance documents, which have provided the basis for many subsequent rules concerning well construction and abandonment. Consensus was that they should be revised due to some inconsistencies with existing rules and changes in technology. In the meantime, it was suggested that wherever these documents are available on the internet, they should be preceded by a disclaimer explaining that they are under revision.

NEXT SCCGW MEETING

... will be held April 21st, 2011 – location to be announced (either at ODNR or USGS).

Agenda will include updates, a presentation by Dr. David Nash (professor at University of Cincinnati) on the proposed Groundwater Observatory in southwest Ohio, and discussion of the ground water metadatabase.

REMINDER:

Meeting agendas and final meeting summaries are posted on the SCCGW Web site:

<http://wwwapp.epa.ohio.gov/ddagw/SCCGW/>