

MEETING MINUTES  
GROUND WATER ADVISORY COMMITTEE (GWAC)  
November 16, 2007  
Teleconference hosted at  
North Mall Office Building, 725 Summer St. N.E., Ste. A  
Salem, Oregon 97301

GWAC Members Present		Staff Present	Others
Paul Christensen	Merilyn Reeves	Doug Woodcock	None
Lynne Paretchan	Bob Jones	Donn Miller	
Nitin Joshi	John Stadel	Kris Byrd	
Jim Mack Sr	Tim Smith		

I. **Call to Order** – Paul Christensen, Chair

II. **Approval of Minutes for the 9/28/07 Meeting**

The Committee voted to approve the draft minutes with two corrections.

III. **Update on Consideration of a Special Water Management Problem Area (SWAMPA) Designation for Eola Hills Ground Water Limited Area, Polk County**

Doug Woodcock, Manager of the Ground Water Hydrology Section, explained the background of this item. Local citizens requested that ground water development in the Eola Hills be restricted. Since the needed substantial evidence was lacking, the Commission directed staff to hold a hearing to determine if a SWAMPA exists in the Eola Hills GWLA. In addition, the Commission directed staff to augment the record with additional field information.

The Department held a hearing on August 1<sup>st</sup> and the public comment period ended on August 30<sup>th</sup>. Doug said that the hearing went well and that most of the testimony was anecdotal. Many people commented that they were concerned with their wells, that they had no well problems personally, that they had heard of others who had water supply problems, and that surface water flows had diminished. People were relieved when they heard that their water wasn't being cut off. A review of 26 written comments revealed very little support for administrative action but much opposition to it.

Department staff did several things to augment the record. There was field locating of many wells. New water level data was collected. GPS well locations were determined. Spring and well records from USGS archives were gleaned for appropriate information. There were also new spring surveys. Finally, staff merged GIS data for geology (published and unpublished), wells, springs, and water rights.

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The Eola Hills were uplifted and contain lower marine sedimentary rocks that are overlain by layers of Columbia River Basalt (CRB) that dip to the east. The hills are dissected, truncating aquifers. The marine sedimentary rocks provide modest water supplies. Aquifers primarily occur between the marine sedimentary rocks and the overlying Ortley member of the CRB and between the Ortley and Winter Water member of the CRB. There is a clear falling head with depth relationship since the upper aquifer has higher water level elevations than the lower. The gap is about 150 feet. Springs coincide with the water-bearing zones.

Department analysis does not identify water level declines, over-appropriation, or ground water/surface water interference. There is clearly the potential of spring interference by well development. Doug spent considerable time explaining the technical considerations involved with the Department's analysis.

The Department recommendation to the Commission is that there does not appear to be a serious water management problem area in the Eola Hills Ground Water Limited Area. On that basis, the Department will not require water measurement and reporting from ground water users. However, staff proposes four action items for the area.

**Action Item A:** Special area well construction standards for new basalt wells, requiring them to be cased and sealed to within 100 feet of the bottom of the well. This will prevent commingling and the disruption of natural flow to springs.

Merilyn asked how these standards would differ from the current ones. Doug said that, currently, commingling is often not reported by some constructors. These more specific standards will create a level playing field.

**Action Item B:** Special area well construction standards to require water level measuring tubes in all new wells at time of pump installation or in existing wells at time of pump replacement. This will improve water level measurability at wells using standard water level measuring devices. There is currently a lack of water level data that is made difficult by access problems.

**Action Item C:** Develop a voluntary water use/water level reporting program for Eola Hills wells. This would require funding to educate local people to collect valuable water level data. This could be a pilot project for implementation elsewhere.

Doug explained that the Department has done some of this in the past and that the results have been positive. Merilyn suggested that this effort be characterized as one of increasing awareness of ground water information. Doug agreed.

**Action Item D:** Continued Department water level monitoring in the area. This could include testing of wells to display well pumping impacts on springs.

Doug is nervous about taking on too much since there are staffing limits.

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**Reflections on various items**

Paul is concerned that there may be grout losses from deep seals that impact nearby wells. John said that his experience with deep seals has been favorable in this kind of environment.

Merilyn observed that staff has done considerable work on Eola Hills in a short timeframe. She suggested that Doug calculate the cost of the effort so that it can be considered the next time that budgets or similar projects come along. Doug had not done the accounting but was confident that more work of this kind will come along.

Merilyn thought that some guidance for Doug as he speaks to the Commission is appropriate. The Commission should know that GWAC was briefed and that the committee is ready to help with any rule activity. Further, GWAC did not express objection to rulemaking, thought that a voluntary measurement program would be good, but is concerned that resources for such a program are scarce. GWAC needs more information on the voluntary program and thinks that it is important not to over-promise results. This was all a committee consensus. Doug shared the resource concerns and thought that funding for a special projects person might be possible.

John suggested that poly-pipe (continuous rolled pipe) would be ideal for measuring tubes in this setting and would be better than schedule 40, sectioned pipe. Further, he thought that rules should be based more on performance and tube diameter sought rather than the specific product used.

John estimated that the proposed well standard would increase the cost of a well by about \$9000. This is based on an average 400 feet deep well needing an additional 200 feet of casing and sealing.

**IV. Public Comment**

No public comment was offered.

**Audio-files of the meeting are available.**