



# Oregon

Theodore R. Kulongoski, Governor

## Water Resources Department

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### MEMORANDUM

TO: Water Resources Commission

FROM: Barry Norris, Administrator  
Technical Services Division

SUBJECT: Agenda Item K, April 15, 2005  
Water Resources Commission

#### **Ground Water Concerns in Marks Prairie, Clackamas County**

#### **I. Issue Statement**

Domestic well users in the Marks Prairie area of Clackamas County requested that the Commission delay issuing new ground water permits from the gravel aquifer that underlies the area. Staff referred the issue to the Commission's Ground Water Advisory Committee for discussion. This report provides background on the status of the Marks Prairie ground water resource and the Department's plan for future action in the area.

#### **II. Background**

In February 2004, a group of domestic well users submitted a letter informally requesting a delay on the issuance of new ground water permits in the Marks Prairie area of Clackamas County. The letter outlined concerns regarding the extent of irrigation development and the associated interference problems with domestic wells. The letter to the Commission is Attachment 1. The Department's letter in response to the request is Attachment 2. A map of the Marks Prairie area is Attachment 3.

Former Director Paul Cleary referred the Marks Prairie group to the Commission's Ground Water Advisory Committee (GWAC) prior to having them formally petition the Commission. The discussion before GWAC was postponed until resolution of a related contested case hearing.

At the January 2005 GWAC meeting two Marks Prairie landowners made a presentation on declining water levels and seasonal domestic water supply problems. A representative of a nearby nursery presented testimony opposing ground water administrative restrictions. Staff presented an overview of Willamette Basin hydrogeology and an analysis of wells and water level trends in the gravel aquifer. Data support the landowner's case that increasing

development in the area has resulted in deeper summertime water levels, and the decline has led to problems with some local domestic wells. Further, peak winter/spring water levels have declined in recent years. Analysis also shows that domestic wells experiencing problems are shallow relative to other wells in the area and do not take advantage of deeper ground water.

Staff provided an overview of the available management tools such as classifications, withdrawals, critical areas and regulation for well interference. Included was a discussion about the Commission's administrative rules on substantial interference as it relates to well-to-well interference (OAR Chapter 690, Division 8). When regulating for well interference it is necessary that a senior user fully develop the resource prior to regulation of a junior user. In the Marks Prairie area the domestic wells are the senior users, but they have not fully developed the resource. In this circumstance regulation will not occur until the ground water resource is fully developed.

### **III. Discussion**

The gravel aquifer in the vicinity of Marks Prairie is beginning to show signs of stress. However, the immediate concern for the Marks Prairie residents is well interference, which can be remedied by deepening wells and fully developing the ground water resource. Staff believe the Department should continue working with Marks Prairie residents by monitoring water levels and providing technical assistance. GWAC concurs with this approach, and had additional discussion about the possibility that some wells might be suffering a loss of production because they have become inefficient over the years. In some cases, well efficiency might be improved with corrective action.

Staff believe no administrative action should be taken to restrict ground water development in the Marks Prairie at this time. After considerable discussion GWAC concurred with the staff position. GWAC also recommended that staff: 1) prioritize the list of ground water areas in need of field investigation and consider where the Marks Prairie concern fits into that list; 2) define a trigger level of ground water decline upon which the Department will act; and 3) write a letter to the local Soil and Water Conservation District in support of the residents requesting financial assistance for additional monitoring and well deepenings.

Regarding GWAC's recommendations, the Department has prioritized Columbia River Basalt aquifer investigations in the Umatilla Basin and the Willamette Basin over the Marks Prairie area. The trigger level for action in Marks Prairie would likely be the point at which ground water permits in the area have triggered water level decline conditions on the permit. A letter on behalf of Marks Prairie residents to the SWCD will be drafted for signature at GWAC's April meeting.

### **IV. Conclusion**

Domestic well owners in the Marks Prairie area requested a delay in the issuance of new ground water permits. GWAC and Department Ground Water staff agree that deepening the domestic

wells can mitigate the seasonal water supply problems. Additionally, well owners might want to work with well constructors to improve the efficiency of their wells. Ground water staff will work with well users to develop additional data on ground water levels. GWAC concurred with the staff recommendation to not restrict ground water development at this time. However, staff will continue to evaluate data and ground water conditions in the area when considering new applications for ground water use.

**V. Recommendation**

This report is informational only. No Commission action is required.

Attachments:

1. Letter from Marks Prairie Residents
2. Letter from Department to Marks Prairie Residents
3. Location Map of Marks Prairie Area