

BACKGROUND: TIME LIMITED WATER HAUL PERMITS FROM THE FORT UNION FORMATION IN CAMPBELL COUNTY

State Engineer's Office, April 9, 2008

Issue:

Considering the time-limited nature of these permits, the decline in water levels observed in the State Engineer's Office monitoring wells in the vicinity of Gillette, the explosive growth in and around the Gillette area, the continued effects of an 8-year drought on local recharge, the City of Gillette's current conservation activities (i.e., not allowing load-out activities), and the water supply issues faced by the City of Gillette, the State Engineer's Office is not approving time-limited permit applications for water haul use in Campbell County, proximal to the City of Gillette, or extension requests for time-limited permits. This limitation applies only to wells completed in the Fort Union Formation – a drinking water resource for both the City of Gillette and numerous subdivisions in the Gillette area. The City of Gillette and all other water users in the vicinity of Gillette depend solely on ground water for their water needs. Use of a quality, declining ground water resource for use in construction, oil and gas activities, etc. is not in the public's water interest. Use of water in formations deeper than the Fort Union Formation (i.e., the Lance Formation which is currently used mainly for industrial purposes) is encouraged for water hauling activities.

Cancellation per Limitation:

Permits where the water will not be used on a permanent basis, such as the drilling of oil or gas wells, are given an automatic cancellation date. This automatic cancellation is a time limit within which they are allowed to use the water for the purpose indicated on the permit. Unless the applicant writes our office prior to the automatic cancellation date and requests an extension of time, the permit will be automatically cancelled without prior notification to the applicant. The applicant is advised of the automatic cancellation date at the time the permit is approved. The date is always December 31st of any given year.

When a permit is cancelled per limitations, a letter is written notifying the permittee of record of the cancellation. A copy of this letter should be filed with the permit.

Temp, Use

Certain types of water use are time limited, such as mine dewatering, highway construction, gravel pits, etc. For those types of uses, adjudication is not required and an automatic cancellation date is established.

Gillette Planning District Boundary

The Gillette Planning District Boundary encompasses approximately 42-square miles, centered on the City of Gillette. The planning district was developed by

the City of Gillette, Campbell County, the Wyoming Water Development Commission, and the State Engineers Office in approximately 1995 to help protect the City of Gillette's Fort Union Formation municipal wells. There is a half-mile horizontal spacing requirement for wells producing >25 gallons per minute from the Fort Union Formation (and a recommended ¾-mile horizontal well spacing). Additionally, vertical completion spacing may be required regardless of production rate. Potential permit conditions include metering and reporting and cementing requirements (cement from top of formation to land surface to eliminate the commingling of ground water from different aquifers).

Municipal Water Supply Information

- City of Gillette population in July 2006 27,145
- City of Gillette projected population in 2037 50,018
- As of August 1, 2007 the Gillette Planning Office had 43 new residential subdivision developments in the review process
- Current water system capacity
 - Ultimate capacity 14.4 MGD
 - Firm capacity 2.1 MGD
- Anticipated Peak daily water demand (2037) 30.7 MGD
- Peak daily water usage
 - June 29, 2005 15.8 MGD
 - July 18, 2006 14.3 MGD
 - July 16 and 22, 2007 12.4 MGD
- Gillette implemented a water conservation program in 2006 and 2007 to reduce the peak daily demands that exceeded system capacity in 2005
- Short term water supply options being contemplated by the City
 - Expand Fort Union Source
 - 25 new wells
 - Cost Estimate \$78 million
 - Treat Fox Hills Source
 - Use RO/Ion exchange
 - Cost Estimate \$20 million
- Long term water supply option
 - Expand the Madison well field
 - New Madison wells and parallel 42" pipeline
 - Cost Estimate \$150 million

(Source: City of Gillette, August 2007)