

ENGINEERING



Sean E. O'Malley, PE
Teton County Engineer
Director of Engineering
Services
somalley@tetonwyo.org

Brian Schilling
Jackson Hole Community
Pathways Coordinator
bschilling@ci.jackson.wy.us

Gordon Gray
Sr. Engineering
Technician
Pathways Project
Manager
ggray@tetonwyo.org

Gabe Klamer
Sanitarian, Project
Coordinator
gklamer@tetonwyo.org

Kurt Stout, PE
Interim Floodplain
Administrator
kstout@tetonwyo.org

Tracy Gridley
Office Manager
tgridley@tetonwyo.org

PO Box 3594
320 S. King Street
Jackson, WY 83001

Office: 307-733-3317
Fax: 307-734-3864
www.tetonwyo.org

To: Mr. David Quinn
Melody Ranch Development Corporation
4750 South Park Loop road
Jackson, Wyoming 83001

Melody Ranch Homeowner's Association
P.O. Box 4337
Jackson, Wyoming 83001

From: Sean O'Malley, Teton County Engineer

Date: March 4, 2013

Subject: Melody Ranch Subdivision Third Well Requirement

Based on my review of data and system analysis provided by Jorgensen Associates on behalf of the Melody Ranch Development Corporation, analysis provided by Nelson Engineering on behalf of the Melody Ranch Homeowners Association, and an opinion of the adequacy of the Melody Ranch water system prepared by Hannes Stuekler, P.E., of the Wyoming Department of Environmental Quality (DEQ), I have concluded that the Melody Ranch Development Corporation (or MRDN Corporation) has met its obligation to provide adequate water supply and storage for Melody Ranch.

A third well is not required.

At buildout, the current system of two – 375gpm wells and one 300,000 gallon storage tank will meet the average daily demand with one well out of service (DEQ Water Quality Rules and Regulations, Chapter 12, Section 9(b)(i) and Section 12(l)). The system will also meet the maximum daily demand with both wells in operation. There is no DEQ requirement to meet maximum daily demand with one well out of service.

Additional comments:

1. It is reasonable to expect this water system to provide more than the minimum requirements for health, safety, and welfare. In particular, it should be able to meet typical demands for lawn watering, car washing, and other summertime activities. Based on water use data from 2007-2011, the water system does (and will continue to) accommodate these additional demands.
2. It is not reasonable to expect the water system to meet any and all demands – particularly with respect to wasteful use and system leakage. It is the responsibility of the Homeowners Association to insure their residents are using the water system responsibly. A pricing structure that penalizes excessive use is one option. A leak detection investigation performed by Utility Technical Services, Inc., indicates that repairs to the individual service lines and irrigations systems could save between 115,000-172,000 gallons per day. Repairs to these service lines would seem prudent.

3. Wyoming DEQ, in the absence of water use data, calculate average daily and maximum daily demand using 125 and 340 gallons per day per person, respectively. Based on current water use records, Melody Ranch homeowners are projected to use approximately 2.6 times this design rate at buildout. While this use appears excessive, the water system, assuming no increase in this rate, will accommodate this demand.

4. In the event of high summer demand and one well out of service, the Melody Ranch HOA may wish to institute water rationing until the second supply well is back in service.

In conclusion, as the Teton County Engineer, I believe Melody Ranch Development Corporation (or successor) has met its obligation to provide an adequate water system for this development. I am not requiring them to install an additional well at Melody Ranch.

Sincerely,



Sean E. O'Malley, PE
Teton County Engineer
PO Box 3594
320 South King Street
Jackson, Wyoming 83001
307.733.3317
307.732-8580 - direct

- Copy: David Larson, Mullikin, Larson & Swift, LLC
Paul D'Amours, Hess Carlman & D'Amours, LLC
Thomas Kirsten P.E., Jorgensen Associates
David Dufault P.E., Nelson Engineering
Hannes Stuekler, P.E., Wyoming Department of Environmental Quality
Paul Vogelheim, Chairman, Teton County Commissioners
Keith Gingery, Deputy County Attorney
Jeff Daugherty, Teton County Planning Director