

State of Utah

GARY K. HERBERT

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Lieutenant Governor

# Department of Environmental Quality

Amanda Smith

Executive Director

DIVISION OF DRINKING WATER Kenneth H. Bousfield, P.E. Director

March 11, 2015

Val Surrage Taylor-West Weber WID 2815 W 3300 S West Haven, UT 84401-9791

Dear Mr. Surrage:

Subject: Feasibility, Drinking Water Service from Taylor-West Weber WID for the Winslow Farr Jr. Farm Subdivision, System #29019, File#9877

The Division of Drinking Water (the Division) received your request concerning the capacity of the Taylor-West Weber WID (District) to provide drinking water service to the Winslow Farr Jr. Farm Subdivision in the District. Per the Division's database, the District presently has 1860 residential connections, 7 commercial connections, and 12 agricultural connections. The Winslow Farr Jr. Farm Subdivision will add 74 new residential connections, in addition to the 9 new residential connections with the Blue Acres Subdivision Phase 4. The number of connections that may be served is based on (1) source water capacity, (2) storage capacity, and (3) available water rights. The Drinking Water Rule, R-109-510 Minimum Sizing Requirements, requires a water system to be able to provide 800 gallons per day per equivalent residential connection (ERC) from its sources to meet peak day indoor demand, to be able to provide 400 gallons per ERC of storage for indoor use, and to be able to provide average yearly indoor demand which is 0.45 acre-feet per ERC based on water rights. Additional source capacity, storage, and water rights are required if the system provides water for outdoor use. The water system component with the least capacity determines the allowable number of connections.

### SOURCE CAPACITY

The District has the following approved drinking water sources and approved safe yields:

Source Number	Source Name	Safe Yield gpm
WS001	Big Well	900
WS002	Small Well	500
WS003	Weber Basin WCD Consecutive Connection	2000
	Total	3400

Val Surrage Page 2 March 11, 2015

In addition, the District provides outside irrigation water for some of their connections. The attached capacity calculation worksheet estimates the required source capacity is 1095.0 gpm for indoor used and 1419.7 gpm for outdoor use. Based on source capacity, the District has 885 gpm excess source capacity which is adequate to serve the Winslow Farr Jr. Farm Subdivision.

## STORAGE CAPACITY

The District has the following approved storage tanks in service:

Storage Tank Number	Source Name	Volume gallons
ST001	Million Gallon Tank	1,000,000
ST002	2 Million Gallon Tank	2,000,000
ST003	250 K Gallon Tank	250,000
	Total	3,250,000

The attached capacity calculation worksheet estimates the required storage capacity is 1,929,408 gallons. This is based on a reserve of 120,000 gallons of water storage for fire suppression, and the balance of the storage being used for indoor and outdoor use storage. Based on storage capacity, the District has over 1.3 million gallons of excess storage capacity which is adequate to serve the Winslow Farr Jr. Farm Subdivision.

# **WATER RIGHTS**

The District has the following water rights for their sources:

Water Right Number	Amount (acre-feet)
35-1613	788.45
35-11723	930.77
Weber Basin WCD	465.3
Total	2184.52

The attached capacity calculation worksheet estimates the required water rights of 1,557.35 acrefeet for indoor and outdoor use. Based on water rights, the District has over 627 acre-feet of excess water rights which are adequate to serve the Winslow Farr Jr. Farm Subdivision.

### SUMMARY

There is no limiting component at present, which would prevent the District from providing adequate drinking water service to the Winslow Farr Jr. Farm Subdivision.

Val Surrage Page 3 March 11, 2015

The District has submitted a project notification form and was granted a plan review waiver by the Division, which allows the construction of this subdivision to proceed once approval is granted by Weber County.

If you have any questions regarding this letter, you can contact me either by phone at (801) 536-0054 or e-mail bhart@utah.gov.

Sincerely,

Bob Hart, P.E.

Environmental Engineer III

Enclosure - Taylor-West Weber WID Capacity Calculation - March 11, 2015

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