



State of Utah

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Department of
Environmental Quality

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Executive Director

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

December 13, 2016

Val Surrage
Taylor West-Weber Water District
2815 West 3300 South
West Haven, Utah 84401

Dear Mr. Surrage:

Subject: Feasibility Evaluation, Drinking Water Service to Taylor Vista Subdivision from Taylor-West Weber Water District, System #29019, File #10649

The Division of Drinking Water (the Division) received your request concerning the capacity of the Taylor-West Weber Water District (the District) to provide drinking water service to the Taylor Vista Subdivision on November 28, 2016. This feasibility evaluation is solely based on the information we received from the District and the existing records available in the Division's database. The Division's estimate is based on:

- The present number of equivalent residential connections (ERC's) the water system is obligated to serve — The District indicated in the attached Project Notification Form (PNF), which we received on November 28, 2016, that the District currently is obligated to serve 2,468 ERC's, and that the proposed Taylor Vista Subdivision will add 47 new residential connections (47 ERC's). Therefore, our estimate is based on 2,515 ERC's (i.e. 2,468 plus 47 new ERC's);
- Irrigable acreage, which was provided by the District in the last sanitary survey; and
- Fire flow required by local fire code officials.

This evaluation is courtesy technical assistance, and is not meant to be a detailed or accurate engineering analysis. The Division does not track or verify the number of obligated connections or the status of the obligated connections. It is the responsibility of the Taylor-West Weber Water District and Weber County to verify all information for planning purposes.

Per Utah Administrative Rule *R309-510* Minimum Sizing Requirements, the number of allowable connections to be served by a public water system is affected by:

- Source water capacity;
- Storage capacity; and
- Available water rights.

Among these three components, the one with the least capacity determines the allowable number of connections for the water system.

The requirements related to indoor water use for these components are:

- A water system must be able to provide **800 gallons per day (gpm) per (ERC) from its water source(s)**;
- A water system must be able to provide **400 gallons per ERC of storage**;
- A water system must have **0.45 acre-feet per ERC of water rights**.

Furthermore:

- If a water system provides water for irrigation use, additional source capacity, storage capacity and water rights are required.
- If a water system provides water for fire suppression, additional storage capacity is required.

Source Capacity

Based on the Division records and the information provided by the Taylor-West Weber Water District, the District has the following approved drinking water sources and safe yields:

Source Number	Water Source Name	Safe Yield (gpm)
WS001	Big Well	900
WS002	Small Well	Inactive
WS003	Weber Basin WCD Wholesale Contract	2,000
WS004	900 South Well	1,000
WS005	Shop Well	Proposed
	Total	3,900

From the table above, the Division estimates the District's water source capacity to be 3,900 gpm.

The attached capacity calculation work sheet estimates the minimum source capacity required for the District is 2,816.9 gpm. This estimate includes:

- 1,397.2 gpm for indoor water use; and
- 1419.7 gpm for irrigation use.

It appears that **the Taylor-West Weber Water District has 1,083.1 gpm excess source capacity and has adequate source capacity to serve the Taylor Vista Subdivision.**

Storage Capacity

Based on the Division records and the information provided by the District, 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
ST004	Proposed	0
	Total	3,250,000

From the table above, the Division estimates the District's water storage capacity to be 3,250,000 gallons.

The attached capacity calculation work sheet estimates the minimum storage capacity required for this water system is 2,147,008 gallons. This estimate includes:

- 1,006,000 gallons for indoor water use; and
- 1,021,008 gpm for irrigation use.

It appears that **the Taylor-West Weber Water District** has 1,102,992 gallons excess storage capacity and **has adequate storage capacity to serve the Taylor Vista Subdivision.**

Water Rights

The attached capacity calculation worksheet estimates that 1,802.15 acre-feet of water rights would be needed for the indoor and outdoor uses in the District.

The Division of Water Rights (not the Division of Drinking Water) is the authority for water rights related regulations. Please **consult with Division of Water Rights directly for verification and interpretation regarding water rights.**

Summary

Based on information made available to the Division, it appears that at the present time Taylor-West Weber Water District has sufficient source and storage capacities to provide drinking water service to the proposed Taylor Vista Subdivision.

Val Surrage
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If you have any questions regarding this letter, you can contact Kelly Casteel at (801) 536-4265 or, Ying-Ying Macauley, Engineering Section Manager, of this office, at (801) 536-4188.

Sincerely,



Kenneth H. Bousfield, P.E.
Director

Enclosure — 1. Taylor-West Weber Water District Capacity Calculation – December 2016
2. Project Notification Form Received on November 28, 2016

KDC/ym/ssh/hb

cc: Louis Cooper, Environmental Health Director, Weber-Morgan Health Dept, lcooper@co.weber.ut.us
Sean Wilkinson, Weber County Planner, swilkinson@co.weber.ut.us
Jared Andersen, P.E., Weber County Engineer, jandersen@co.weber.ut.us
Dan White, Gardner Engineering, dan@gecivil.com
Kelly Casteel, Division of Drinking Water, kcasteel@utah.gov
Ross Hansen, Regional Engineer, Division of Water Rights, rosshansen@utah.gov

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