

MEMO

TO: File 65-13485

FROM: CPadilla

DATE: July 29, 2011

RE: Licensing Review Memo

Timeline:

Application Received: October 6, 1993

Permit Issued: December 13, 1993

Request for Extension: December 21, 1995

Proof of Beneficial Use: November 20, 1998

Field Examination: March 3, 1999

Point of Diversion: There are three wells that are associated with the city of Cascade. The city has added all three wells to this right through an amendment.

Overlap Analysis of PD: The other rights that are diverted from all three wells are 65-12726 and 65-13311. Other rights for the city are from surface water and are rented to the department's water supply bank.

POU: The place of use is within the impact area for the city of Cascade. There is no boundary associated with the overlapping rights for the city so I contacted the mayor of Cascade and obtained an up-to-date boundary.

Overlap Analysis of POU: Other rights that serve the city's municipal needs are 65-12726 and 65-13311.

Diversion Rate: There are 3 storage tanks on the system that provide 680,000 gallons of storage. There are three PDs that fill the tanks.

<u>PDs Summary</u>		<u>Rights</u>	
Well #1	1.73 cfs	65-12726	0.44 cfs
Well #2	3.2 cfs	65-13311	0.66 cfs
Well #3	1.21 cfs	65-13485	1.0 cfs
Total Capacity	6.14 cfs	Total Authorized Rate	2.10 cfs

Generally the fill rate of the storage tanks should be at least equal to the peak system demand; if the fill rate is way out of proportion compared to the demand further questions may need to be investigated, especially if the fill rate is inflated.

1. Is 2.10 cfs $\geq$ to the demand on the system? Note that the connections are assumed to be domestic in nature just to get a rough idea of the city's demand.
 - ~605 connections (from DEQ's assessment-2001) during development period
 - peaking factor of ~1.0 cfs¹ for 605 connections
 - irrigation requirements for 605 connections @ ~1/4 acre each = ~150 acres x 0.02 cfs = 3 cfs (possible total demand = 4.0 cfs)
 - No, the city's instant demand exceeds the total authorized rate

¹ IDWR Application Processing Memo No. 2, guidance for quantifying the rate of flow necessary for the in-house use

It appears that the diversion rate, or fill rate, is justified with using the check above even though it is much smaller than the contemplated demand. But, as long as the diversion rate is not inflated, no further analysis is required.

Amendment?: Yes, the new PD, well #3, was developed within the NWSW not the NESW as permitted. I checked to make sure that the location wasn't within a margin of error that can be a problem of being within 30-50 ft of a PLSS line. In this case, that is not the issue. The POU is adjustable and will be based on the most current impact area for the city of Cascade.

City of Cascade Water Right Portfolio

2/14/11

Basin	Sequence	Process	Basis	Priority Date	Diversion Rate	Source List	Water Use List	Current Owner	Leased Volume	Water District
65	3138	Water Right	Decreed	6/1/1899	2.34	CAMPBELL CREEK	MUNICIPAL	CITY OF CASCADE	Yes	65 - Payette River and Tributaries
65	10353	Water Right	Decreed	3/1/1919	0.80	SKEIN CREEK	MUNICIPAL	CITY OF CASCADE	Yes	60.0 65 - Payette River and Tributaries
65	10354	Water Right	Decreed	7/16/1888	2.34	HAZARD CREEK	MUNICIPAL	CITY OF CASCADE	Yes	65 - Payette River and Tributaries
65	12726	Water Right	License	12/13/1984	0.44	GROUND WATER	MUNICIPAL	CITY OF CASCADE	No	65 - Payette River and Tributaries
65	13311	Water Right	License	3/11/1991	0.66	GROUND WATER	MUNICIPAL	CITY OF CASCADE	No	
65	13485	Water Permit		10/26/1993	1.00	GROUND WATER	MUNICIPAL	CITY OF CASCADE	No	65 - Payette River and Tributaries

IMPACT AREA & ZONING – 2010 – Planimetric Base Map

