

CHAPTER FOUR WATER RIGHT INVESTIGATION

A. Introduction

A water right investigation was performed during the preparation of the Water System Master Plan Revision. The investigation included several meetings with the local office of the Division of Water Rights and a computer search of the water right files in the State Engineer's Office available through the Internet at website nrwt1.nr.state.ut.us.

B. Providence City's Water Rights

Providence City has a sufficient number of sources to supply the current needs through the year 2020 but does not have sufficient rights to use the water. The City is currently using four sources of water for municipal purposes: Broad Hollow Spring, Alder Well, 1st East Well and 4th South Well.

The City holds one approved water right (25-9341) of 1.5 cfs (673 gpm) in Broad Hollow Spring from April 1st to September 30th based upon an exchange (E844) with the Blacksmith Fork Irrigation Company. In addition the City has a right based upon accumulation of 19.55% of the Spring Creek Water Co. water shares. The Spring Creek Water Co. has one approved water right (25-3507) of 16 cfs from April 1st to October 31st. This means that during a wet year the City is entitled to 19.54% of 16 cfs or 3.13 cfs (1404 gpm) and only 0.78 cfs (351 gpm) during a dry year (4 cfs). The City also has one approved water right (25-3426) of 3.0 cfs (1346 gpm) in Broad Hollow Spring during the winter months from November 1st to April 1st.

The City holds one approved water right (25-8859) of 1.225 cfs (550 gpm) in the Alder Well. This right is for year round use.

The City holds three approved water rights (25-8706, 25-4153, and 25-5055) of 1.33 cfs, 1.5 cfs and 1.63 cfs respectively for a total of 4.46 cfs (2002 gpm) in the 100 East Well. These rights are for year round use.

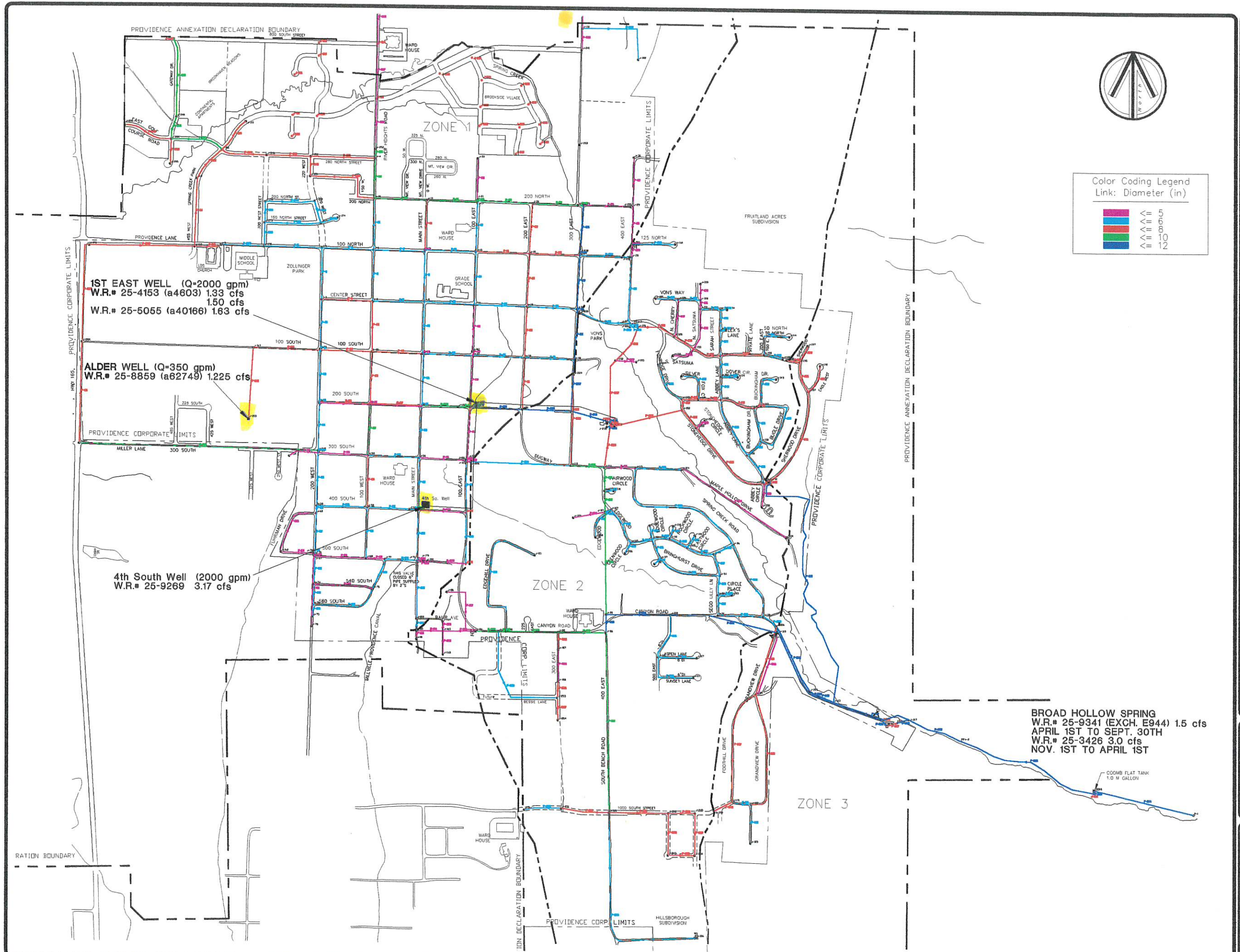
The City holds one approved water right (25-9269) of 3.17 cfs (1423 gpm) in the 4th South Well. This right was originally part of water right 25-8706. This right is for year round use.

The existing water right for Providence City are shown in Table 4-1.

**PROVIDENCE CITY
WATER SYSTEM MASTER PLAN
WATER RIGHTS SUMMARY**

SERVICE AREA: ENTIRE CITY						
NO.	EXISTING WATER RIGHTS	W.R.#	PEAK DIVERSION RATE (CFS)	PEAK DIVERSION RATE (GPM)	QUANTITY (ACRE-FEET)	COMMENTS
1.	BROAD HOLLOW SPRING	25-9341 (EXCHANGE E844)	1.500	673.2	542.9	Exchange water must be pumped from BSF canal @ 100 S & 200 E to SCWC canal at Center Street & 350 E to allow City to divert 1.5 cfs from Broad Hollow Spring during irrigation season.
2.	BROAD HOLLOW SPRING	Spring Creek Water Company shares @ 19.54%	0.782	350.8	282.9	(Irrigation Season Only) Diversion rate based on 14.65% of 4.0 cfs available @ Broad Hollow Spring. Flow varies as shown on Table 4.1.
	BROAD HOLLOW SPRING	25-3426	3.000	1346.4	1266.9	(Winter Season Only)
3.	ALDER WELL	25-8859	1.225	549.8	886.8	
4.	1st EAST WELL	25-8706 25-4153 25-5055	1.330 1.500 1.630 4.460	596.9 673.2 731.5 2001.6	3228.7	
5.	NEW WELL	25-9269	3.170	1422.7	2294.8	
6.	Weston Well (Community)			120		
TOTAL EXISTING WATER RIGHTS			14.137	6344.5	8503.0	

Table 4-1



Color Coding Legend
Link: Diameter (in)

Blue	5
Green	6
Red	8
Yellow	10
Purple	12

BROAD HOLLOW SPRING
W.R.# 25-9341 (EXCH. E944) 1.5 cfs
APRIL 1ST TO SEPT. 30TH
W.R.# 25-3426 3.0 cfs
NOV. 1ST TO APRIL 1ST

NO.	REVISION	DATE

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