

Division 1 Annual Report



Chambers Lake (photo by Lee Cunning)

Irrigation Water Year 2014

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WATER SUPPLY AND ADMINISTRATION

Water Supply Conditions

Thankfully, Irrigation Year 2014 in Division One was much less eventful than Irrigation Year 2013 since there were no catastrophic floods in 2014. Irrigation Year 2014 did, however, have its fair share of anomalies and unusual happenings.

Much time and effort was spent in Irrigation Year 2014 repairing or replacing structures damaged in the flood of September 2013. Approximately 223 private structures and 23 stream gages were damaged or destroyed in the flood. By May 1, 2014 approximately 160 of the private structures were operational along with 20 stream gages. By the end of Irrigation Year 2014 approximately 203 private structures were operational.

The first quarter of Irrigation Year 2014 (November 2013 through January 2014) was fairly “normal” compared to September and October of 2013. Overall temperatures were near average. Precipitation over the lower elevations was, thankfully, actually a bit below average in November and December, but moved to above average in January and snowpack by the end of January was at about 124% of normal. Stream flow at the Kersey gage was above average for the entire period while flow at the Julesburg gage was below average in November (probably because of heavy storage and recharge demand in this section of river), but moved to above normal in December and January (probably because less demand due to cold temperatures). This period is the traditional first half of the reservoir fill season and reservoir storage remained at about 105% of average throughout the period. Water right calls in November and December for storage and recharge were generally more junior than normal and the entire South Platte basin went to free river conditions on January 8, 2014 and remained there through the end of January.

The second quarter of Irrigation Year 2014 (February through April) was a period of both more of the same and change in the South Platte basin. Temperatures were well below normal in February, but grew progressively warmer to the point April temperatures were slightly above normal. Precipitation was highly variable with the mountains generally near or above average; the Front Range generally below to well below average; and the eastern plains sliding from above average in February to below average in March and April. Snow pack continued the above average trend that started in January and peaked at 131% of average. This was good news for water supply, but (after September 2013) raised concerns about potential flooding in late May and early June due to snowmelt runoff. Stream flow at the Kersey gage moved from well above average in February and March to almost exactly average in April, while stream flow at Julesburg was above average in February but slid down to the point April flows were only 39% of average. Reservoir storage remained good through the period at about 103% of average. There were minimal calls throughout this period and the calls that were placed were generally more junior than normal.

The third quarter of Irrigation Year 2014 (May through July) was fairly typical of a wet early summer in the South Platte basin. For the most part, temperatures were slightly cooler than normal and precipitation, though highly variable, was generally above too well above normal. There was some minor flooding along the lower end of the Cache la Poudre River the end of May and early June because of local rain plus snowmelt flows and some damage in Lincoln County in July due to flash floods, but the feared major flooding never materialized. Stream flows at the Kersey gage moved back to well above average for the entire period while the Julesburg gage stream flow remained below average in May, but jumped to well above average for June and July. Water right calls during this period were typical of a “good” water year with fairly junior calls in early May as well as

almost all of July and free river or very junior calls most of late May and June. As a result of the generally wet conditions, demand for reservoir releases was lower than normal and storage remained above average throughout the period. This was very good from a water storage perspective, but from a dam safety perspective required extra vigilance to assure the integrity of the dams themselves with continued storage amounts significantly above “normal” water levels.

The fourth quarter of Irrigation Year 2014 (August through October) revealed two distinct personalities. August and September were wetter than normal, while October was drier than normal. On the other hand, temperatures moved from cooler than normal in August to much warmer than normal in October. Stream flow at both the Kersey and Julesburg gages was near average for most of the month of August, but moved to well above average for September and October. South Platte mainstem water rights calls were generally fewer and more junior than normal during most of August and, in a very unusual happening, the mainstem went to free river on August 26 and remained free through the end of October. The major tributaries were not as good as there were generally junior calls on them through September, but many major tributaries also went to free river in October. Storage water was used in August and September, but generally remained above normal. October saw increases in storage to the point that many reservoirs were already at their preferred winter fill levels by the end of October.

Decennial Abandonment List

At the end of Irrigation Year 2014 only 1 water right on the 2010 Abandonment List (Case No. 11CW263) remained unresolved. Initially 33 protests covering 49 water rights were received by the Water Court prior to the June 30, 2012 statutory deadline. The remaining unresolved right, along with two other rights, was the subject of a trial before the Water Court (Case No. 12CW111) in April 2013 with a decision

entered in December 2013. An appeal on one of the three rights was filed with the Colorado Supreme Court in February, 2014. The Colorado Supreme Court heard oral arguments related to the appeal on November 6, 2014 and entered a decision on March 16, 2015. The case was remanded to the Division 1 Water Court for further findings as the Supreme Court ruled the State and Division Engineers had met their burden of proof for a rebuttable presumption of abandonment, thus shifting the burden of proof for non-abandonment back to the water right owner.

Well Administration - South Platte River Basin

The South Platte Well Measurement Rules (Case No. 11CW292) were finalized in water court, with an effective date of December 31, 2013 and required compliance date of 12/31/2015. Compliance initially requires wells within the scope of the South Platte Measurement Rules be equipped with a measurement device, primarily a totalizing flow meter, or declared as inactive in accordance with the Rules. Great effort by the Division One Ground Water Team and other key Division One staff has been focused on notifying water users subject to the Rules of the requirements and compliance deadlines. Efforts continue into 2015 in preparation for the administration of the South Platte Measurement Rule compliance date of December 31, 2015. Part of these efforts include approximately 100 Well Team flow meter verification tests on installed flow meters and the inventory of more than 500 wells. The well team also conducted a new Well Tester certification class and an existing Well Tester recertification class in Irrigation Year 2014. This supports the requirements of the South Platte Well Measurement Rules, and the Ground Water Measurement Rules in other river basins, that measurement devices be verified by a person qualified by the State Engineer.

The well enforcement program had a busy year, sending out approximately 150 install

flow meter and cease and desist orders. The Well Team also continued efforts in support of both well owners and the 2020 Abandonment List by: (A) working with owners of non-exempt from administration (large capacity) wells who were seeking to downgrade their wells to exempt from administration (small capacity) status by voluntarily abandoning their water rights and; (B) initiating a process of investigating unused non-exempt wells for potential listing on the 2020 Abandonment List.

Well Administration - Republican River Basin

The Republican River Basin Groundwater Measurement Rules (Rules) administration program continues making progress towards the completion of an inventory of all wells within the scope of the Rules. Enforcement efforts continued with the Greeley office and Republican field crew distributing approximately 285 Notice of Violation and Orders to Cease & Desist. Additionally, 320 Notices including approximately 850 wells for Expiring Meters and 530 Annual Usage Reporting Forms were mailed to well users in the basin.

The Republican River well team continues work related to the Republican River Compact. This work includes: monitoring and verifying the accuracy of the measuring devices on the currently operating Republican River Compact Compliance Pipeline; verification and coordination of measurements of the official delivery measurement flume for the Compact Compliance Pipeline; and publishing official diversion records of all high capacity wells within the Republican River Ground Water Measurement Rules boundaries.

A Notice of Amendment of the current Republican River Ground Water Measurement Rules (originally adopted in 2009) was filed with the Colorado Secretary of State on October 31, 2014 and the Notice was published on November 10, 2014. The primary focus of the amendments to these Rules are to: 1) Modify the inclusion

boundary to incorporate wells that are included in Colorado's Republican River Compact Accounting, primarily extending the southern portion to include additional wells; 2) Include additional definitions and language to help clarify the Rules; and 3) Provide standards regarding the minimum accuracy and application of the Power Conversion Coefficient (PCC) as an alternate method of measurement. Several public meetings and stakeholder notifications took place during 2014 and continue in 2015, with an anticipated Public Hearing on the amendments to be held in mid to late 2015.

In addition, the Republican River well team has been busy assisting the Designated Basins Team in the administration of well permit volume limits by investigating more than 25 wells and posting and documenting Orders on approximately 6 wells that exceeded their annual pumping limit in the 2014 Irrigation Year. These Orders are being administered by the Designated Basins Team in Denver, and require the reduction of the annual pumping limits for the 2015 Irrigation Year by the amount over-pumped in 2014.

Compact Administration

Division One is responsible for administration of the State of Colorado's obligations under the South Platte River Compact, the Republican River Compact, the Laramie River Decree, and the Sand Creek Agreement (1997 Addendum) to meet the requirements of those respective documents.

Under the terms of the South Platte River Compact, if there is not 120 cfs in the South Platte at the state line between Colorado and Nebraska between April 1 and October 15, Colorado will curtail all diversions in the Lower Section of the river with priority dates junior to June 14, 1897. There were 2 days (August 19 and 20) of South Platte Compact call during the 2014 Irrigation Year. This was an unusually low number of Compact call days.

During Irrigation Year 2014 the Republican River Compact was once again administered by staff in both Division One and the Denver Office in conjunction with the Republican River Water Conservation District. The Republican River Compact Compliance Pipeline was successfully operated in Irrigation Year 2014 with the provisional approval of Kansas and Nebraska. Based on this successful operation, it is expected Compact Compliance Pipeline will also be operated with provisional approval in Irrigation Year 2015. Finally, to assist with Compact compliance, diversions by surface water rights junior to the signing date of the Compact (December 31, 1942) in the Republican River basin within Colorado continue to be curtailed.

short and long term solutions to the high groundwater issues in the Sterling and LaSalle/Gilcrest areas.

During Irrigation Year 2014 Division One personnel regulated all diversions in the Laramie River basin in compliance with the terms of the U.S. Supreme Court decree in *Wyoming v. Colorado*. Division One personnel also regulated Sand Creek in compliance with the terms of the Sand Creek Agreement.

COMMUNITY INVOLVEMENT

Division One personnel continue their active involvement in many issues important to the water community. When requested or needed, Division One personnel attend, participate in, and do presentations at Ditch Company and Conservancy District meetings. Also, Division One personnel participate in/present at one time meetings of water user, realtor, and homeowner groups to educate and inform those present. Meetings of both the South Platte Basin Round Table and Metro Basin Round Table are also attended by Division One personnel.

Water District 2 Water Commissioner Bill Schneider has also been participating in meetings of the South Platte Basin Round Table Groundwater Technical Subcommittee formed in September, 2014. The Technical Subcommittee was formed to examine both

TABLES

Table 1 - Transmountain Diversion Summary

2014 TRANSMOUNTAIN DIVERSION SUMMARY - INFLOWS (November 2013 - October 2014)

RECIPIENT								SOURCE		
WD	ID	NAME	STREAM	10 YEAR AVG		CURRENT YEAR		WD	ID	STREAM
				AF	DAYS	AF	DAYS			
3	4604	WILSON SUPPLY DITCH	CACHE LA POUFRE RIVER	1,255	76	1,243	105	48	4604	SAND & DEADMAN CR.
3	4608	DEADMAN DITCH	CACHE LA POUFRE RIVER	509	70	795	90	48	4608	DEADMAN CREEK
3	4606	BOB CREEK DITCH	CACHE LA POUFRE RIVER	116	36	215	42	48	4606	NUNN CREEK
3	4607	COLUMBINE DITCH	CACHE LA POUFRE RIVER	0	0	0	0	48	4607	DEADMAN CREEK
3	4600	LARAMIE-POUDRE TUNNEL	CACHE LA POUFRE RIVER	8,243	95	6,309	60	48	4600	LARAMIE RIVER
3	4605	SKYLINE DITCH	CACHE LA POUFRE RIVER	32	6	0	0	48	4605	LARAMIE RIVER
3	4602	CAMERON PASS DITCH	CACHE LA POUFRE RIVER	57	32	36	29	47	4602	MICHIGAN RIVER
3	4603	MICHIGAN DITCH	CACHE LA POUFRE RIVER	2,069	349	1,864	338	47	4603	MICHIGAN RIVER
3	4601	GRAND RIVER DITCH	CACHE LA POUFRE RIVER	8,899	160	7,938	153	51	4601	COLORADO RIVER
4	4634	ADAMS TUNNEL	BIG THOMPSON RIVER	121,654	330	104,970	310	51	4634	COLORADO RIVER
6	4655	MOFFAT TUNNEL	SOUTH PLATTE RIVER	25,282	360	11,199	365	51	4655	FRASER RIVER
7	4625	BERTHOUD PASS DITCH	CLEAR CREEK	339	104	308	119	51	4625	FRASER RIVER
7	4626	VIDLER TUNNEL	CLEAR CREEK	358	64	338	43	36	4626	MONTEZUMA CREEK
7	4682	STRAIGHT CREEK TUNNEL	CLEAR CREEK	140	365	160	365	36	4682	STRAIGHT CREEK
8	653	ROBERTS TUNNEL	SOUTH PLATTE RIVER	34,763	230	6,866	49	36	4684	BLUE RIVER
23	4611	BOREAS PASS DITCH	SOUTH PLATTE RIVER	76	57	91	67	36	4685	INDIANA CREEK
23	4612	HOOSIER PASS DITCH	ARKANSAS RIVER	4,373	186	4,945	226	36	4683	BLUE RIVER
23	4490	AURORA HOMESTAKE	SOUTH PLATTE RIVER	15,060	242	3,618	90	37	4644	HOMESTAKE CREEK

Table 2 - Water Court Activities and Staffing

Water Court Activities

Calendar Year 2014

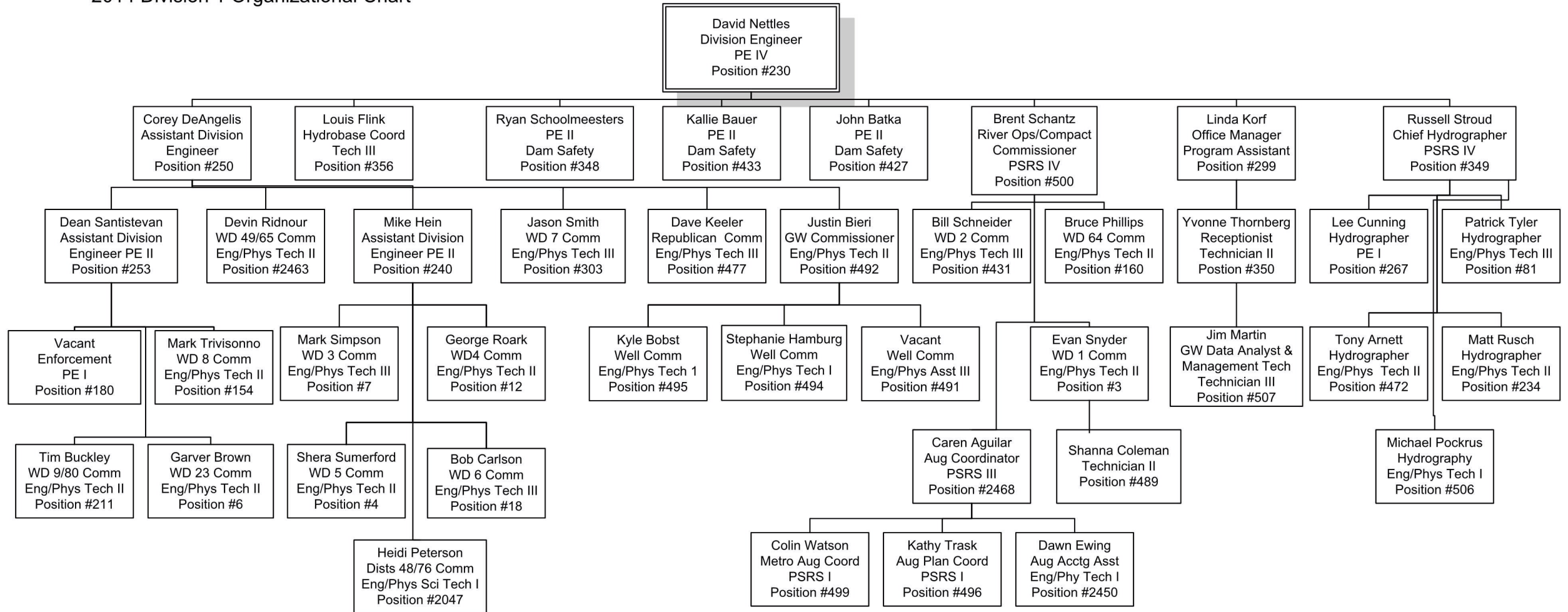
New Applications made to water court this year.....	262
Referee Rulings Reviewed.....	342
Decrees Issued by Court this year.....	293

Staffing

Dam Safety Engineers	3
Water Resource Engineers	6
IT Professional	1
Engineering/Physical Science Techs/Assistants	9
Program Asst 1, Technician II, Tech III	4
Physical Science Researcher/Scientist	5
Full-Time Water Commissioners	26
Permanent Part-Time Water Commissioners	<u>3</u>
TOTAL STAFF	57

Table 3 - Organizational Chart

2014 Division 1 Organizational Chart



2014 Division 1 Organizational Chart for Water Commissioners

