

SPDSS Memorandum Final

To: Ray Alvarado and Ray Bennett
From: LRE, Erin Wilson & Kara Sobieski
Subject: Task 3 – Identify Key Diversion Structures
Notes from Water District 80 Meeting
Date: January 20, 2005

Introduction

This memorandum provides notes from the January 19, 2005 meeting with Water District 80 Water Commissioner. Meetings are being held with Water Commissioners in each Water District in the SPDSS study area. The objectives of these meetings are 1) to develop an initial basin understanding; 2) to determine what irrigation structures should be included as “Key Structures” in future detailed modeling efforts, and 3) to determine which reservoirs and diversions warrant more detailed investigation and technical documentation. These objectives support both Task 3 – Identify Key Diversion Structures and Task 5 – Identify Key Storage Reservoirs and Develop Operating Memorandum. Information in this memorandum is believed to be accurate. However, this information should not be relied upon in any legal proceeding.

Approach

Prior to the meeting, potential Key Structures for Division 80 were identified using the following procedure outlined in the SPDSS Scope of Work:

1. Identify net absolute water rights per structure. Select initial key structure cutoff value based on the 85 percent recommendation (SPDSS Feasibility Study, October 2001) for each water district.
2. Determine average annual diversion data for structures during three average hydrologic years, one year each during the 1950s, the 1970s, and the 1990s. Add additional structures to the key list that diverted an average of 1,000 acre-feet per year on the main stem during any of the representative years. Note that this step will allow the inclusion of larger diversion structures having active water rights during the earlier years of the study that were subsequently transferred to other ditches or other uses.
3. Review readily available straight-line diagrams and include additional structures as appropriate, based on water rights and location.

Table 5, provided in the Results Section of this memorandum, lists the initial list of key diversion structures, the total of their decreed water rights, the period of record of available diversion records, their average annual diversions for the period of record, and the water source. In addition, as noted in the comment line, it includes new structures added during the interviews, or

structures that were removed as key and will be modeled in an aggregated fashion. Table 5 generally lists structures in upstream to downstream order.

The interview with the Water Commissioners and the Division Engineer was intended to determine structures that should be considered key based on seniority, water administration, or basin operations. Because most of the water rights in South Park have been transferred to municipalities, the interview also served to determine structure combinations for modeling purposes. Prior to the meeting, a brief description of the purpose and goals of the interview was provided to the Water Commissioner, Roger Mlodzik. The following is a summary of the meeting agenda:

1. Review straight-line diagrams for accuracy
2. Develop a list of major projects, reservoirs, and ditches in the water district, including names of knowledgeable contact people
3. Gather information on dry-up points in the river, calling rights, augmentation plans, and administration specific to the water district
4. Gather general information on the preliminary list of irrigation diversions selected to included in future detailed modeling efforts (key structures), and solicit input on their final inclusion
5. Develop information on reservoirs, such as owner entities, ditches that get reservoir deliveries, assigned delivery losses, etc.

LRE developed maps displaying reservoirs, diversion headgate locations, and canal layouts on a quad-sheet background of the Water District to facilitate the discussions.

Meeting Attendance

The meeting was held at the LRE office in Denver. The following people attended the meeting:

Jim Hall, Division 1 Engineer
Roger Mlodzik, District 80 & 9 Water Commissioner
Patrick Alexander, Deputy District 80 & 9 Water Commissioner
Ray Bennett, Division of Water Resources
Dave Ellington, Division of Water Resources
Claudia Engelmann, Division of Water Resources
Erin Wilson, Leonard Rice Engineers
Kara Sobieski, Leonard Rice Engineers

Transbasin Diversions

Harold D. Roberts Tunnel (Roberts Tunnel) - delivers Blue River water stored in Dillon Reservoir under the Continental Divide into the North Fork of the South Platte River for use in the Denver Metropolitan Area. Roberts Tunnel is owned and operated by Denver Water. The concrete-lined tunnel was completed in 1964, becoming the world's longest water delivery tunnel in the world.

On the Blue River, the Roberts Tunnel water right is junior to the storage rights of Green Mountain Reservoir and the direct flow rights of the senior portion (1929 priority) of the Continental-Hoosier diversion project. Diversions through the tunnel are influenced by the downstream water rights for Green Mountain Reservoir, downstream calls from either the Shoshone Power Plant or the Cameo area water rights, and the availability of water in other parts of Denver's system.

The tunnel has the capacity to pass 1,020 cfs, however the tunnel is limited by a stream capacity of about 900 cfs in the North Fork of the South Platte River at the Town of Bailey. Transbasin deliveries to Water District 80 are continuously monitored at the USGS Roberts Tunnel at East Portal near Grant streamflow station (ID 09050590). Transbasin water can either be stored in one of several Denver Water reservoirs including Cheesman Reservoir (8003550) or used directly.

Where to find more information:

- Physical information, operational information, and water rights specific to Roberts Tunnel are presented in the Harold D. Roberts Tunnel Operating Memorandum prepared for SPDSS Task 4 – Key Transmountain Diversion Structures.

Beaver Creek Ditch— delivers water from Beaver Creek in Park County to the upper tributaries of Tarryall Creek in Water District 23. Water rights for 2.0 cfs in North Beaver Creek Ditch are conveyed to the Beaver Creek Ditch. An additional 4.0 cfs is collected from Beaver Creek Ditch and the combined 6.0 cfs is conveyed to Water District 23 via Beaver Creek Ditch, typically during the irrigation season. Annual average diversions for Beaver Creek Ditch (WDID 8000706) and North Beaver Creek Ditch (WDID 8000708) are 570 acre-feet and 130 acre-feet, respectively. Diversion records for the ditches are available in HydroBase for the period of 1973 to 2004.

Compacts and Agreements Affecting District 80 Administration

No compacts or agreements affect the administration of Water District 80.

Stream Gages

There are currently six active streamflow gages in Water District 80, operated by either USGS or DWR. Table 1 summarizes the streamflow gages, station ID, and comments regarding the use or quality of the gage:

Table 1
Active Streamflow Gages Available in Hydrobase

Station Name	Station ID	Comments
South Platte River above Cheesman Lake	06700000	Good records only in summer months
South Platte River below Cheesman Reservoir	06701500	Good records - Main gage used for administration of the District
N.F. South Platte River above Elk Creek at Pine, CO	06706400	Good records - Gage used to verify streamflow conditions
Buffalo Creek at Mouth at Buffalo Creek	06706800	Not used for administration – Gage may be no longer active
Roberts Tunnel at East Portal near Grant, CO	09050590	Good records – requires maintenance for moss problems – Gage used for Roberts Tunnel diversions
North Fork South Platte River at Grant, CO	PLAGRACO	Good records – Gage located below Roberts Tunnel outlet and used to verify transmountain diversions and streamflow conditions

General Administration

- The current Water Commissioner, Roger Mlodzik, has managed Water District's 9 & 80 since 1989. The Water Commissioner is assisted by the Deputy Water Commissioner, Patrick Alexander.
- Prior to early 1970s, the North Fork of the South Platte River and its' tributaries were administered with Water District 23.
- A majority of the basin is administered by phone, whereby the Water Commissioner will notify ditches when they are in and out of priority to divert.
- All ditches are observed by the Water Commissioner at least once a year, and generally observed once a month in more easily accessible areas.
- In general, irrigated acreage is served by only one ditch. Exchanges take place between ditches, but generally only one ditch can physically serve each parcel of land.
- Multiple CWCB Instream Flow Program water rights are located on the tributaries throughout the District. In general, the instream flow rights have a priority in the mid-1980's and therefore only affect the priorities of some recent augmentation plans.
- Mountain Mutual provides augmentation water for approximately three-quarters of the augmentation plans in the District. There are several small augmentation plans to administer, however Mountain Mutual provides the accounting for their augmentation plans to the Water Commissioner. Mountain Mutual provides augmentation water from a 50 acre-foot reservoir located on the North Fork, which is also used to make releases for augmentation plans located in Water Districts 8, 9 and 23.

- FRICO owns two reservoirs in Water District 80; Wellington Reservoir and Altura Lake (a.k.a. Duck Lake). FRICO requests the Water Commissioner to make a release from these reservoirs 24-hours in advance. A caretaker located at each of the reservoirs actually makes the releases. The Water Commissioner is responsible for the conveyance of these releases through the District. Generally, a live stream on the North Fork eases the task of conveyance through the District. It takes approximately 36 hours for the releases to reach the Burlington Ditch headgate, and incurs a 12 percent loss, which the Water Commissioner accounts for at the point of release.
- Denver Water is responsible for the accounting and conveyance of Roberts Tunnel deliveries. The Water Commissioner will check streamflow gages for reasonable flows, which would include the deliveries, but is not responsible for conveying the water through the District. Denver Water is also responsible for the accounting and reporting of Cheesman Reservoir storage activity.
- In the past, John Lochhead coordinated with Denver Water to administer Cheesman Reservoir and Roberts Tunnel. The administration responsibilities for Roberts Tunnel are now transferring to the Water District 23 Commissioner.
- The reservoirs in Water District 80 typically fill with tributary runoff in the early summer months, relying little on river diversions into storage.
- There are no active water rights on Goose Creek.
- There are no irrigation wells or major mining wells in the District. Most smaller wells are exempt.

Table 2 provides a normal year river call sequence:

Table 2
Normal Year River Call Sequence

November - May	Denver Water places either the Denver Intake 1899 or 1910 water right call on the river. Either of these priorities will call out everyone in the District.
Runoff May – Mid June	Runoff will generally satisfy the Denver Intake call, allowing for a couple of weeks of free river.
Mid June - October	A downstream mainstem senior irrigation call will typically be placed after the runoff period. All of the water rights in the District will again be called out of priority. Typically, the monsoons will provide for a couple of free river days in the late summer.

Municipal Use

There are no major municipal water systems in Water District 80.

Tributary Specific Information

There are seven key ranches and two smaller ranches that that are still actively diverting in the District and receive water from multiple ditches. **Table 3** and **Figure 1** summarize the key

ranches and **Table 4** summarizes the smaller ranches. The tables are organized by ranch name, and include location, the ditches that serve the ranch and the WDIDs of the ditches.

Table 3
Key Ranches in Water District 80

Ranch Name	Location	Conveyance Ditch	WDID
Swan Herford Ranch	North Fork South Platte River	Bond Ditch 2 J. Higginson Ditch	8000673 8000674
State Parks	Elk Creek	Hurlbutt Ditch Hurlbutt Ditch 1 Hurlbutt Ditch 2 Davis Ditch 1 Davis Ditch 2 Davis Ditch 3	8000858 8000849 8000847 8000831 8000848 8000854
Magnus Ranch	Elk Creek	Swan Ditch 1 Swan Ditch 2 Rocky Mtn Fuel Ditch 1 Williams Ditch 1 Williams Ditch 2 Williams Ditch 3 Willowmere South Ditch	8000843 8000842 8000829 8000826 8000827 8000825 8000828
Deer Creek Ranch– Woodward Family	Deer Creek	Flume Ditch Alt. Point Alkire Ditch Johnson Ditch Campbell Ditch	8000845 8000799 8000800 8000801
Berger Ranch	North Fork South Platte River and Craig Creek	Kountze Ditch Meadow Ditch Upper Craig Creek Ditch Berger Ditch	8000777 8000776 8000773 8000774
Fitzsimmons Ranch	North Fork South Platte River	Mack Ditch 1 Mack Ditch 2 Mack Ditch 3 Slaght Ditch Alkata Ditch Snaking Road Spring	8000662 8000661 8000659 8000660 8000893 8000889
Butterfield Ranch	Resort Creek	Sand Gulch Ditch Spring Ditch Kenney Gulch Ditch West Resort Creek Ditch East Resort Creek Ditch	8000875 8000871 8000869 8000874 8000870

Figure 1
Key Ranch Modeling Schematic

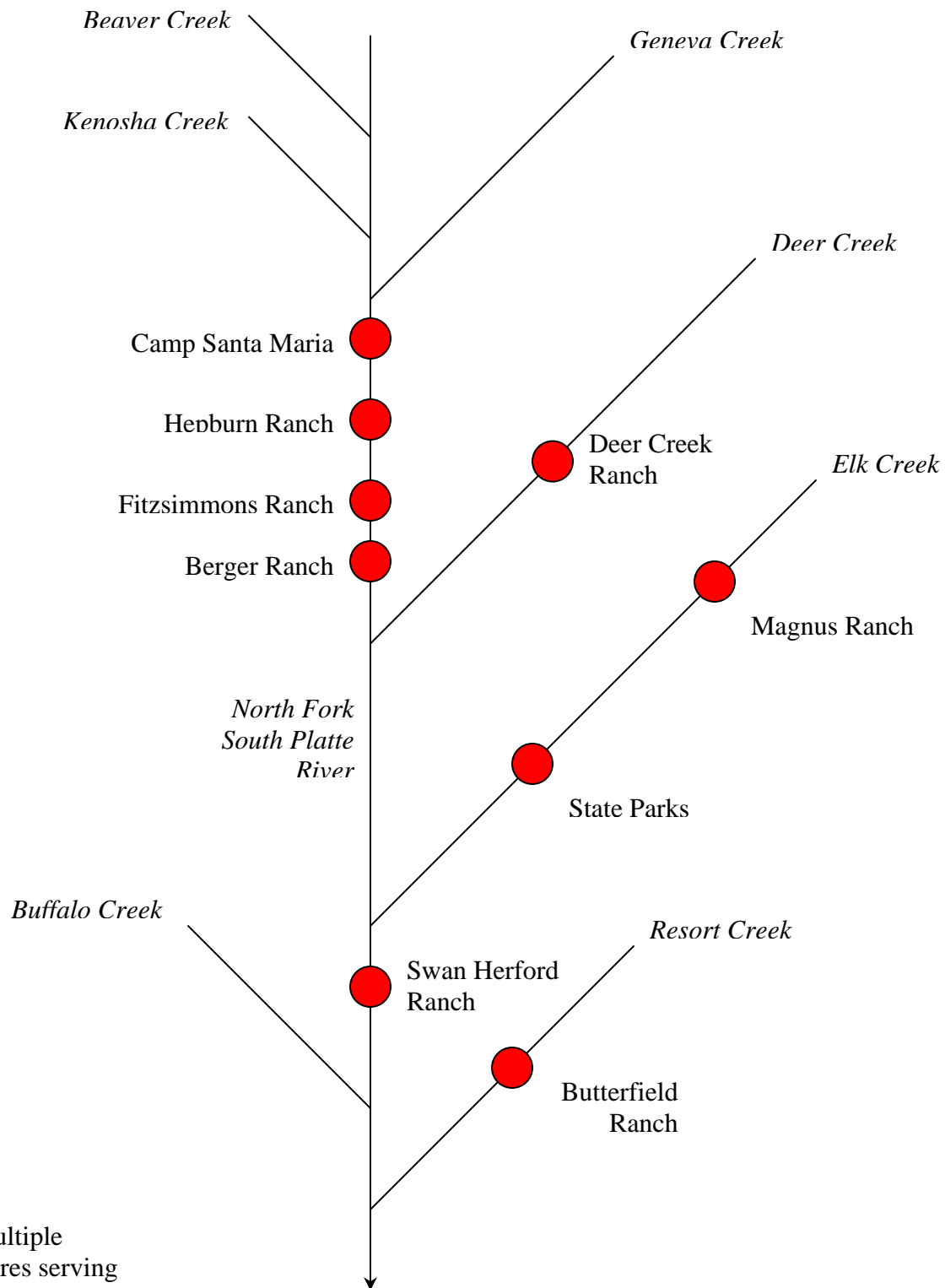


Table 4
Smaller Ranches in Water District 80

Ranch Name	Location	Conveyance Ditch	WDID
Hepburn Ranch	North Fork South Platte River	Hepburn Ditch 1	8000739
		Hepburn Ditch 2	8000657
		Hepburn Ditch 4	8000740
Camp Santa Maria	North Fork South Platte River	Cassel Creek Ditch	8000728
		Cassel Ditch 1	8000729
		Cassel Ditch 2	8000730
		Craig Park Gulch Ditch	8000732

Comments regarding ditches associated with ranches:

- Bond Ditch 2 (8000673) used to serve Swan Herford Ranch is located below the Elk Creek confluence and irrigates the south side of the North Fork of the South Platte River.
- Berger Ranch typically irrigates hay meadow with diversions from Berger Ditch (8000774).
- Hepburn Ditch 4 (8000740) irrigates lowlands, runs back to river.
- Alkata Ditch (8000893) and Snaking Road Spring (8000889) carry junior water rights to Fitzsimmons Ranch and are used infrequently.
- Fitzsimmons Ranch is currently in the process of selling water and drying up lands under Mack Ditch 2 (8000661).
- The Hurlbutt Ditch (8000858) and Hurlbutt Ditch 1 (8000849) are not located in their decreed locations. Per their decrees Hurlbutt Ditch should be located on Mason Creek and Hurlbutt Ditch 1 is decreed to an unnamed creek. Both of these ditches are physically located on and diverting from Black Mountain Creek.
- Camp Santa Maria is primarily irrigating meadows with the Cassel Ditches (8000729, 8000730) and Craig Park Gulch Ditches (8000732).

It is recommended that the diversion structures listed in Table 3 and 4 be modeled as multi-diversion systems. Ditches with recent diversion records not associated with ranches are listed below in upstream to downstream order on the North Fork of the South Platte River. It is recommended that these diversion structures primarily be modeled in aggregate fashion due to the minor amount of associated diversions and incomplete records.

Beaver Creek

- Lininger Ditch (8000707): Used to fill Lininger Lake, which is owned by the Kenosha Trout Club

Kenosha Creek

- Kenosha South Ditch (8000711) and Lower Kenosha Ditch (8000712): Inactive and currently not in existence, possibly transferred by Aurora or Thornton.
- Kenosha Ditch (8000713): used to irrigate meadows

Geneva Creek

- Royl Lake Feeder Ditch (8000857): Inactive, no diversion records

- Brainerd Gulch Ditch (8000714): Currently inactive
- Lodge Ditch (8000722): Feeder to small pond on a small dude ranch, not active in recent years and not administered
- Grant Ditch Pipeline (8000718): Miscellaneous uses, however not used for irrigation

North Fork of the South Platte River

- Cumberland Ditch (8000709) and Cumberland Ditch 1 (8000710): Both ditches located on Gomer Creek, used for irrigation and stock watering, located incorrectly on the State GIS coverage
- Wanita Ditch (8000650): Used to irrigate meadows
- Hall Valley Ditch (8000651): Used to irrigate meadows
- Webster Ditch (8000652): Abandoned
- Stearns Stream Ditch (8000733): Used to fill ponds, not used for irrigation
- Elder Ditch (8000735): Actively diverts
- Rosalie Ditch (800736): Actively diverts
- Bobby Creek Ditch (8000738): Changed to augmentation plan
- Lake Ditch (8000656): No diversions records but it is still active
- Entrinkin Ditch (8000665): 0.10 cfs left in the ditch, the rest has been changed to augmentation plan
- Crow Creek Ditch 1 (8000905): Currently inactive but not abandoned
- South Side Ditch (8000667) and North Side Ditch (8000668): Actively irrigating meadows
- Uncle Fred's Ditch (8000925): Not used, alternate point to individual resident's pumps in the North Fork
- Mountain Meadow Ditch (8000670) and Mountain Meadow Ditch 2 (8000671): Changed to an augmentation plan

Deer Creek

- Tree Ditch (8000807): Active junior water rights
- Carmichael Spring (8000808): Active junior water rights
- Royal Ditch (8000781): Currently inactive, part of the ditch changed to augmentation plan
- Jeffries Crawford Ditch (8000784): Active diversions
- Clifford Gulch Ditch (8000812): Active diversions
- Rea Ditch 1 (8000815): Currently inactive
- McDonald North Ditch (8000786) and McDonald South Ditch (8000787): Currently inactive, transferred to augmentation plan
- Carruthers Ditch 2 (8000789): Transferred
- Parmalee Ditch 2 & 3 (8000792): Currently in the process of being transferred, Parmalee Ditch 1 has already been transferred
- Flume Ditch (8000794): Currently in the process of being transferred
- Humphrey Ditch (8000795): Transferred
- Nickerson Ditch 1 (8000796) and Nickerson Ditch 2 (8000797): Both ditches have been dried up and transferred

Elk Creek

- Glasman Ditch (8000830): Currently inactive, decreed to fill an augmentation pond that is not yet constructed
- Berrien Ditch 1 (8000895), Berrien Ditch 2 (8000896), Berrien Ditch 3 (8000897): Active junior water rights
- East Ditch (8000833) and West Ditch (8000832): Both ditches have been transferred to ponds and 1 cfs moved to Standerling Ditch
- Standerling Ditch (8000834): Active on an infrequent basis.
- Wright Ditch (8000835): Active diversions, although infrequent

Buffalo Creek

- Hicks Creek Feeder Well Ditch (8000862): Feeder to FRICO's Wellington Lake
- South Mendenhall Ditch (8000867): Feeder to FRICO's Wellington Lake, minor diversions
 - Mendenhall Feeder Ditch (8000864): Not constructed, confusion over diversion records stored under this ditch
- Maxwell Ditch (8000865): Junior water rights used infrequently for irrigation of the Windy Peaks Outdoor Lab which is operated by Jefferson County Schools

Resort Creek

- Last Resort Creek Ditch (8000908): Active diversions
- Corbin Ditch 1 (8000872) and Corbin Ditch 2 (8000873): Active diversions

Recommended Detailed Documentation

More detailed information should be developed and included in the Basin Information Report for the following canals, reservoirs, or entities. Note that reservoirs are generally recommended to be included with the entity system operating memoranda, and not as stand-alone memoranda.

- Cheesman Reservoir (Denver Water System Memorandum)

Table 5
Key Structure List

Structure ID	Name	Total Decree (CFS)	Diversion Period of Record	Average Annual Div. (ac-ft)	Source	Comment	Key Structure
8000706	BEAVER CREEK DITCH	4	1972 - 2003	532.2	BEAVER CR TR NF S PL	Significant Diversions	Yes
8000707	LININGER DITCH	11.4	1972 - 2003	399.9	BEAVER CR TR NF S PL	Reservoir Feeder	No
8000831	DAVIS DITCH 1	2.5	1974 - 2003	160.8	ELK CREEK	Primary ID for DivSys	DivSys - State Parks Ranch
8000848	DAVIS DITCH 2	1.5	1973 - 1998	85.1	BLACK MOUNTAIN CREEK		
8000854	DAVIS DITCH 3	1	1973 - 1998	57.3	JONES GULCH		
8000858	HURLBUTT DITCH	1	1973 - 1999	78.7	MASON CREEK	Decreed to Mason Creek and unnamed creek, physically diverting from Black Mountain Creek	
8000849	HURLBUTT DITCH 1	1	1974 - 2003	38.6	UNNAMED CREEK		
8000847	HURLBUTT DITCH 2	1	1974 - 2003	105.5	BLACK MOUNTAIN CREEK		
8000738	BOBBY CREEK DITCH	1	1976 - 1980	21.7	BOBBY CREEK	Rights Changed to Aug. Plan	No
8000728	CASSEL CREEK DITCH	1	1986 - 2003	117.5	CASSEL CREEK		DivSys - Camp Santa Maria
8000729	CASSEL DITCH 1	1	1972 - 2003	96.8	CASSEL CREEK		
8000730	CASSEL DITCH 2	1	1972 - 2003	118	BRANDY CREEK		
8000732	CRAIG PARK GULCH DITCH	1	1972 - 2003	78.3	CRAIG PARK CREEK	Primary ID for DivSys	
8000812	CLIFFORD GULCH DITCH	1	1973 - 2003	91.3	CLIFFORD GULCH (Deer Crk)	Minor Diversions	Yes
8000774	BERGER DITCH	1	1975 - 2003	50.1	CRAIG CREEK	Primary ID for DivSys	DivSys - Berger Ranch
8000777	KOUNTZE DITCH	1	1974 - 2003	68.6	CRAIG CREEK	Minor Diversions	
8000776	MEADOW DITCH	1	1974 - 2003	69.4	CRAIG CREEK	Minor Diversions	
8000773	UPPER CRAIG CREEK DITCH	2	1974 - 2003	25.6	CRAIG CREEK	Minor Diversions	

8000905	CROW CREEK DITCH 1	0.225	1974 - 1976	67	CROW CREEK		No
8000742	BEN TYLER DITCH	2	1973 - 2003	355.3	DAVID MANS GULCH	No Acreage Assigned	No
8000743	BEN TYLER DITCH PL	1	1977 - 2003	136	DAVID MANS GULCH	No Acreage Assigned	No
8000741	UPPER TYLER DITCH	1	1974 - 2003	106.2	DAVID MANS GULCH	No Acreage Assigned	No
8000799	ALKIRE DITCH	0.27	1988 - 2003	21.1	DEER CR TR N FK S PL	Primary ID for DivSys	DivSys - Deer Creek Ranch (Woodward)
8000801	CAMPBELL DITCH	0.1	1977 - 2003	25	DEER CR TR N FK S PL		
8000845	FLUME DITCH ALT PT		1993 - 2003	137.6	DEER CR TR N FK S PL		
8000800	JOHNSON DITCH	0.27	1977 - 2003	39.2	DEER CR TR N FK S PL		
8000794	FLUME DITCH	3.4	1972 - 2003	134.5	DEER CR TR N FK S PL	Minor Diversions	Yes
8000784	JEFFRIES CRAWFORD DITCH	3	1972 - 2003	318.8	DEER CR TR N FK S PL	Significant Diversions	Yes
8000786	MCDONALD NORTH DITCH		1973 - 1989	364.2	DEER CR TR N FK S PL	Rights Changed to Aug. Plan	No
8000787	MCDONALD SOUTH DITCH		1973 - 1989	193.1	DEER CR TR N FK S PL		No
8000796	NICKERSON DITCH 1		1972 - 1992	140.5	DEER CR TR N FK S PL	Rights Transferred	No
8000797	NICKERSON DITCH 2	1.45	1972 - 1999	179.7	DEER CR TR N FK S PL		No
8000792	PARMALEE DITCH 2 & 3	1.81	1972 - 2003	199.2	DEER CR TR N FK S PL	Minor Diversions	Yes
8000781	ROYAL DITCH	2.5	1977 - 1986	27.8	DEER CR TR N FK S PL		No
8000785	WONDER DITCH	0.5	1973 - 2003	63	DEER CR TR N FK S PL	Minor Diversions	Yes
8000815	REA DITCH 1	3			DRAINAGE		No
8000763	ASHRAMA D PL HGT 1	0.5	1972 - 1999	49.2	EAST CLAY CREEK	On Straight Line Diagram	No
8000762	CLAY CREEK DITCH	1	1973 - 2003	109	EAST CLAY CREEK	On Straight Line Diagram	No
8000759	MCARTHUR DITCH	1.41	1972 - 2003	322.1	EAST FORK COOK CREEK	Significant Diversions	Yes
8000758	WINKLER DITCH	1	1972 - 2003	158	EAST FORK COOK CREEK	Minor Diversions	No
8000833	EAST DITCH		1972 - 1991	107.5	ELK CREEK	Rights Transferred	No
8000830	GLASMAN DITCH		1974 - 1980	56.2	ELK CREEK		No
8000834	STANDERING DITCH	2	1974 - 1999	73.7	ELK CREEK		No
8000835	WRIGHT DITCH	2	1988 - 2003	47.9	ELK CREEK		No

8000829	ROCKY MTN FUEL DITCH 1	2.5	1973 - 2003	218.7	ELK CREEK	Primary ID for DivSys	DivSys - Magnus Ranch
8000843	SWAN DITCH 1	0.5	1975 - 2003	56.8	WET GULCH CREEK		
8000842	SWAN DITCH 2	0.25	1976 - 2003	24.4	TURKEY GULCH CR		
8000826	WILLIAMS DITCH 1	0.5	1974 - 2003	49.2	ELK CREEK		
8000827	WILLIAMS DITCH 2	1	1974 - 2003	77	ELK CREEK		
8000825	WILLIAMS DITCH 3	1	1975 - 1998	24	ELK CREEK		
8000828	WILLOWMERE SOUTH DITCH	1	1974 - 2003	77.4	ELK CREEK		
8000722	LODGE DITCH	2.25	1975 - 1982	36.2	FRENCHMAN CREEK	Reservoir Feeder	No
8000714	BRAINERD GULCH DITCH	5.4	1973 - 1975	64.5	GENEVA CREEK		No
8000718	GRANT DITCH PL	1	1978 - 1986	29.1	GENEVA CREEK		No
8000709	CUMBERLAND DITCH	1.36	1974 - 1998	231	GOMER CREEK	Water often available but not taken. Records sparse	No
8000862	HICKS CRK FDR WELL D	25	1972 - 2003	181.6	HICKS CREEK	Feeder to Wellington Lake	Yes
8000927	HOLMES DITCH		1980 - 1986	61.5	HOLMES GULCH	Minor Diversions	No
8000926	SUNNYSIDE D 1 + 2		1979 - 1991	16.9	HOLMES GULCH	Minor Diversions	No
8000755	KENNEDY GULCH PL	0.5	1997 - 2000	51	KENNEDY GULCH	On Straight Line Diagram	No
8000713	KENOSHA DITCH	1	1977 - 2003	163.1	KENOSHA CREEK	On Straight Line Diagram	Yes
8000711	KENOSHA SOUTH DITCH		1972 - 1979	63.7	KENOSHA CREEK		No
8000712	LOWER KENOSHA DITCH	2.4	1972 - 1976	39.7	KENOSHA CREEK		No
8000807	TREE DITCH	1.7	1975 - 1999	49.6	LITTLE DEER CREEK	Minor Diversions, sparse records	No
8000866	CLASS CRK FDR		1974 - 1981	161.7	LITTLE ROWLAND CREEK		No

8000865	MAXWELL DITCH	1.5	1972 - 1992	96.7	LITTLE ROWLAND CREEK		No
8000867	SOUTH MENDENHALL D	1	1974 - 2003	34.9	LITTLE ROWLAND CREEK		No
8000864	MENDENHALL FEEDER DITCH	25	1972 - 2003	769.4	MENDENHALL CREEK	Not constructed, confusion on diversion records	No
8000895	BERRIEN DITCH 1	3	1974 - 1999	110	N ELK CR		No
8000896	BERRIEN DITCH 2	1.5	1978 - 1998	51.7	N ELK CR		No
8000897	BERRIEN DITCH 3	1.5	1978 - 1997	29.1	N ELK CR		No
8000708	NORTH BEAVER CREEK DITCH	2	1973 - 1997	138.7	NORTH FK BEAVER CR	Minor Diversions	No
						Primary ID for DivSys	
8000673	BOND DITCH 2	1	1973 - 2003	94.7	NORTH FORK SO PLATTE		DivSys-Swan Herford Ranch
8000674	J HIGGINSON DITCH	3.91	1972 - 2003	269	NORTH FORK SO PLATTE		
8000893	ALKATA DITCH	1	1974 - 1999	63.6	SLAUGHTER HOUSE GUL.		DivSys - Fitzsimmons Ranch
8000662	MACK DITCH 1	1	1972 - 2003	163.4	NORTH FORK SO PLATTE	Primary ID for DivSys	
8000661	MACK DITCH 2	0.89	1972 - 2003	169.9	NORTH FORK SO PLATTE		
8000659	MACK DITCH 3	1	1975 - 2003	129.7	NORTH FORK SO PLATTE		
8000660	SLAGHT DITCH	1.872	1972 - 2003	325	NORTH FORK SO PLATTE		
8000889	SNAKING ROAD SPRING		1975 - 1999	48.2	LOY CREEK		
8000665	ENTRIKIN DITCH	1	1977 - 1979	3.2	NORTH FORK SO PLATTE	Rights Changed to Aug. Plan	No
8000651	HALL VALLEY DITCH	1	1977 - 2003	94.4	NORTH FORK SO PLATTE		Yes
8000656	LAKE DITCH	10.25	1972 - 1973	NC	NORTH FORK SO PLATTE	Actively diverts, no diversion records	No
8000671	MOUNTAIN MEADOW D 2	3	1972 - 1986	94.6	NORTH FORK SO PLATTE	Rights Changed to Aug. Plan	No
8000670	MOUNTAIN MEADOW DITCH	2	1972 - 1979	149	NORTH FORK SO PLATTE		No
8000668	NORTH SIDE DITCH	1	1974 - 2003	118.9	NORTH FORK SO PLATTE		Yes
8000658	PRICE DITCH 2		1972 - 2000	155.8	NORTH FORK SO PLATTE	On Straight Line Diagram	No

8000857	ROYL LAKE FEEDER DITCH	0.3			NORTH FORK SO PLATTE		No
8000667	SOUTH SIDE DITCH	1.5	1972 - 2003	158.2	NORTH FORK SO PLATTE		Yes
8000925	UNCLE FRED'S DITCH	1	1974 - 1993	33.1	NORTH FORK SO PLATTE		No
8000650	WANITA DITCH	1	1974 - 2000	76.2	NORTH FORK SO PLATTE		Yes
8000652	WEBSTER DITCH		1974 - 1977	89.3	NORTH FORK SO PLATTE		No
8000710	CUMBERLAND DITCH 1	1.86	1974 - 1998	73.4	NORTH GOMER CREEK	Headgate on Gomer Creek-records sparse	No
8000870	EAST RESORT CR DITCH	1.5	1972 - 2003	187.2	EAST RESORT CREEK	Structures irrigating Butterfield Ranch – No acreage assigned	No
8000869	KENNEY GULCH DITCH	1	1972 - 2003	131.2	RESORT CREEK		
8000875	SAND GULCH DITCH	1	1972 - 2003	153.1	WEST RESORT CREEK		
8000871	SPRING DITCH	1	1972 - 2003	118	EAST RESORT CREEK		
8000874	WEST RESORT CR DITCH	1.5	1972 - 2003	159.6	WEST RESORT CREEK		
8000735	ELDER DITCH	0.5	1983 - 2003	70.2	ROSALIE RIVER	Small Trib, little water	No
8000736	ROSALIE DITCH	0.5	1972 - 2003	72.3	ROSALIE RIVER	Small Trib, little water	No
8000734	UPPER ROSALIE DITCH	1	1978 - 1998	38.1	ROSALIE RIVER	On Straight Line Diagram	No
8000739	HEPBURN DITCH 1	1	1972 - 2003	94.4	SMITH CREEK		DivSys - Hepburn Ranch
8000657	HEPBURN DITCH 2	1	1972 - 2003	123.8	NORTH FORK SO PLATTE	Primary ID for DivSys	
8000740	HEPBURN DITCH 4	1	1972 - 2003	117.4	SMITH CREEK		
8000808	CARMICHAEL SPRING	Alt. pt.	1974 - 1999	24.1	SPRING	Minor Diversions	No
8000751	CALAHAN DITCH	1.5	1972 - 2000	45.5	STARVATION GULCH	On Straight Line Diagram	No
8000748	PRICE DITCH	2.5	1972 - 2003	55.9	STARVATION GULCH	On Straight Line Diagram	No
8000749	SHAWNEE WATER SUPPLY D	1	1998 - 1999	NC	STARVATION GULCH	Reservoir Feeder	No
8000753	SHORT LATERAL DITCH	0.5	1972 - 1983	15.4	STARVATION GULCH	On Straight Line Diagram	No
8000754	STARK WATERLINE PL	0.35	1996 - 2000	45.5	STARVATION GULCH	On Straight Line Diagram	No
8000750	UPPER CALAHAN DITCH	0.5	1972 - 1997	44.7	STARVATION GULCH	On Straight Line	No

						Diagram	
8000733	STEARNS STREAM DITCH	1	1974 - 1982	29.8	STEARNS CREEK		No
8000746	WM TYLER DITCH	1	1972 - 1999	95.4	TYLER CREEK		No
8000747	WM TYLER PL	0.52	1996 - 1997	NC	TYLER CREEK		No
8000764	ASHRAMA D PL HGT 2	0.5	1974 - 1997	NC	WEST CLAY CREEK		No
8000919	MORAN DITCH		1974 - 1976	47.6	WEST COOK CREEK		No
8000921	WINKLER DITCH		1974 - 2003	63.2	WEST COOK CREEK		Yes
8000760	WINKLER DITCH 1	1	1972 - 2003	149.4	WEST COOK CREEK		Yes
8000761	WINKLER DITCH 3	1	1972 - 2003	132.8	WEST COOK CREEK		Yes
8000872	CORBIN DITCH 1	1.5	1972 - 2003	172.6	WEST RESORT CREEK	No acreage assigned	No
8000873	CORBIN DITCH 2	1.5	1973 - 2003	130.1	WEST RESORT CREEK	No acreage assigned	No
8000908	LAST RESORT CREEK DITCH	0.22	1992 - 1994	17.9	WEST RESORT CREEK	No acreage assigned	No