



## State of Idaho

# DEPARTMENT OF WATER RESOURCES

322 East Front Street • P.O. Box 83720 • Boise, Idaho 83720-0098

Phone: (208) 287-4800 • Fax: (208) 287-6700 • Web Site: [www.idwr.idaho.gov](http://www.idwr.idaho.gov)

March 12, 2008

William A Parsons  
Parsons, Smith & Stone  
PO Box 910  
Burley, ID 83318

C. L. "BUTCH" OTTER  
Governor

DAVID R. TUTHILL, JR.  
Director

Re: Dietrich Main Canal Ground Water Users Mitigation Plan

Dear Bill,

I received the proposed mitigation plan you forwarded to the Idaho Department of Water Resources (IDWR or Department) on behalf of the "Ground Water Users of the Dietrich Main Canal". You asked for both comment and approval of the plan prior to the 2008 irrigation season. I and other Department staff reviewed the plan that was provided by the users' consultant, Brian Higgs. Other Department staff who reviewed the plan includes Gary Spackman, Allen Merritt, and Cindy Yenter, who is also the Water District 130 watermaster. I have also had some contact with the Director regarding this proposal, and discussed the merits of the plan with Dr. Alan Wylie, a Department hydrologist and expert for the Eastern Snake Plain Aquifer Model.

The Department does not currently support or approve the proposed mitigation plan for the following reasons or concerns:

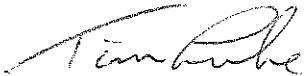
- The proposed plan appears to be based on an agreement with the Big Wood Canal Company (BWCC) to avoid some potential future diversion of shallow ground water by the BWCC resulting from canal leakage. Ground water mitigation plans that essentially seek credit for canal seepage resulting from on-going delivery of historical surface water rights are generally not acceptable. The proposed plan does not propose any new or additional action that would offset depletions to the aquifer from pumping of ground water under the rights referenced in the plan. Examples of actions that may effectively offset ground water pumping include additional aquifer recharge (recharge in addition to normal and historical seepage from canal leakage associated with the diversion of senior priority surface water rights), replacement water, conversion projects, and voluntary curtailment of ground water or similar actions. The Water District 130 watermaster, Cindy Yenter, advised Mr. Higgs via e-mail on February 1, 2008 as to the types of mitigation plans generally acceptable to the Department. The proposed plan does not match the types of mitigation plans or examples outlined by Ms. Yenter.
- There is no information or documentation in the plan that clearly indicates whether the ground water rights for which mitigation is sought are primary or supplemental ground water rights, and if supplemental, whether they are supplemental to lands irrigated with

canal shares from the BWCC. A quick review of the rights by the Department does not conclusively address this issue. It appears from our review that some of the ground water rights are likely supplemental to BWCC shares, and some are likely primary source water rights. Two of the rights listed are applications and not even valid water rights.

- Assuming that BWCC does have the right to recapture canal leakage via ground water wells, the BWCC can only deliver the recaptured water to lands currently served by the BWCC canal shares, not to lands solely irrigated from a ground water source. Similarly, the plan does not clearly establish that the ground water rights points of diversions are located within the boundary of the BWCC.
- The plan suggests that there is some flattening of the ground water gradient attributable to leakage from the Dietrich Main Canal, yet little or no data are presented to support this assertion. In addition, the reported canal seepage rates or percentages are not supported by any data. The report refers only to a single conversation with BWCC manager Lynn Harmon.

Please contact me directly at 208-287-4959 if you wish to further discuss this or any other mitigation issues concerning your clients.

Regards,



Tim Luke  
Water Distribution

Cc: Brian Higgs, Water Well Consultants Inc.  
David R. Tuthill, Director, IDWR  
Gary Spackman, Water Management Administrator, IDWR  
Allen Merritt, IDWR Southern Region Manager  
Cindy Yenter, Watermaster, Water District 130  
Allan Wylie, IDWR  
Big Wood Canal Company  
North Snake Ground Water District

PARSONS, SMITH & STONE, LLP

ATTORNEYS AT LAW  
137 WEST 13TH STREET  
P. O. BOX 910  
BURLEY, IDAHO 83318

WILLIAM A. PARSONS  
RICHARD K. SMITH  
RANDOLPH C. STONE  
LANCE A. LOVELAND  
DAVID F. SHIRLEY

TELEPHONE  
(208) 878-8382  
FAX NO.  
(208) 878-0146  
pss@pmt.org

February 26, 2008

RECEIVED

FEB 27 2008

DEPARTMENT OF  
WATER RESOURCES

Mr. Tim Luke  
Idaho Department of Water Resources  
322 E. Front Street  
Box 83720-0098  
Boise, ID 83720

**RE: Dietrich Main Canal – Big Wood Canal Company  
Our File No.: 23548.080010**

Dear Tim:

I'm enclosing a Mitigation Plan for the Ground Water Users of the Dietrich Main Canal.

This Plan was developed by the named parties in consultation with Brian Higgs, P.G.

They have both consulted this firm relative to the Plan and asked that we forward the same to you for comment and, hopefully, approval especially maybe before the 2008 season really begins.

Very truly yours,

**PARSONS, SMITH & STONE, LLP**



William A. Parsons

WAP/sw

Enc.

cc: Brian Higgs, P.G. wo/enc.

Mitigation Plan  
for the  
Ground Water Users  
of the  
Dietrich Main Canal

Prepared by:  
Brian Higgs, P.G.  
Water Well Consultants, Inc.  
Idaho Falls, Idaho

# Mitigation Plan for the Ground Water Users of the Dietrich Main Canal

## 1.0 INTRODUCTION

The Dietrich Main Canal (DMC) is part of the Big Wood Canal Company (BWCC). The main canal begins at a head gate in the Little Wood River approximately 10 miles northeast of the city of Dietrich, Idaho. The canal flows approximately 12 miles south and west on the east side of the Dietrich Butte before being diverted to irrigable farm land. All the irrigators on the Dietrich Main Canal are unique in that they all own shares in the Big Wood Canal Company and are also ground water users.

The law allows surface water irrigation companies to recapture their “shrink” or leakage. With surface water flows down some canal companies have drilled wells to recapture their “shrink”. Drilling new wells and pumping additional water from the aquifer greatly concerns the irrigators of the Dietrich Main Canal.

The irrigators on the Dietrich Main Canal have negotiated a deal with the Big Wood Canal Company. In exchange for the canal company not drilling wells and lowering the water table in the Dietrich area, the ground water pumpers will pay the canal company on an acre foot basis for the leakage from the canal. In return, the canal company will not drill additional wells to recapture their “shrink”. The members of the Dietrich Main Canal desire to use their recaptured shrink as their mitigation, thereby, maintaining aquifer levels and providing the Big Wood Canal Company the resources it loses from the leaked surface water.

## 2.0 SURFACE WATER

The Big Wood Canal Company has 2 main parts. The larger part is the Big Wood River and Magic Reservoir. The smaller part is the Little Wood River. The Dietrich Main Canal has a head gate in the Little Wood River and is the focus of this mitigation plan.

### 2.1 Little Wood River

The Little Wood River begins as springs high in the Sawtooth Mountains. It flows through the Little Wood Reservoir and onto the Snake River Plain near Carey, Idaho. It flows along the edge of the Snake River Plain to a confluence with the Jim Burns Slough approximately 1 mile northeast of Richfield, Idaho. The Little Wood River is fully righted.

The hydrograph of the Little Wood River is typical of most mountain streams. It flows highest during the spring run-off and dwindles to a small stream in late summer. The Little Wood River has record high flows of almost 2,000 cfs for short periods of time. The base flow of Little Wood River is approximately 10 cfs. It rarely goes dry due to the Little Wood Reservoir and Silver Creek. During the summer months the Dietrich Main Canal is fed through the Jim Burns Slough from Magic Reservoir. The Little Wood River freezes completely over during the winter months.

The figure below is the hydrograph for the Little Wood River nr Carey, Idaho. The river is gauged by the United States Geological Survey (USGS). The river has been gauged since 1958. Only the period from 1970 to present is illustrated because all but one (1) of the ground water rights in the area of the Dietrich Main Canal is pre-1970.

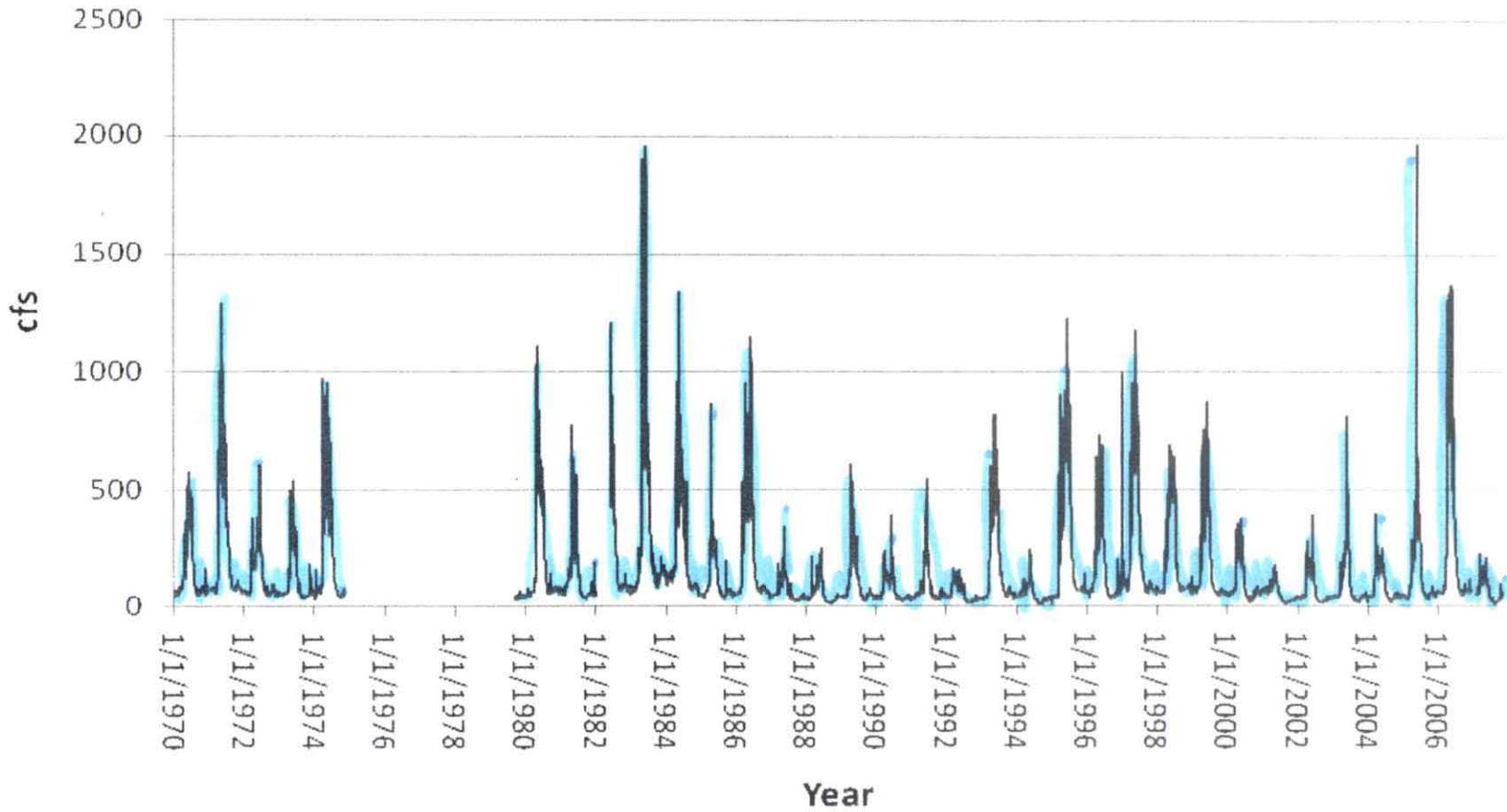
### 2.2 Silver Creek

Silver Creek originates from springs on the eastern slope of the Wood River Valley. Silver Creek is a perennial stream. Silver Creek hydrograph (below) is also typical of mountain streams and peaks from run-off in the spring. However, due to the location of the springs, Silver Creek runs strong throughout the year. Silver Creek rarely drops below 50 cfs. The average flow for Spring Creek for the period of record considered for this mitigation plan is 150 cfs.

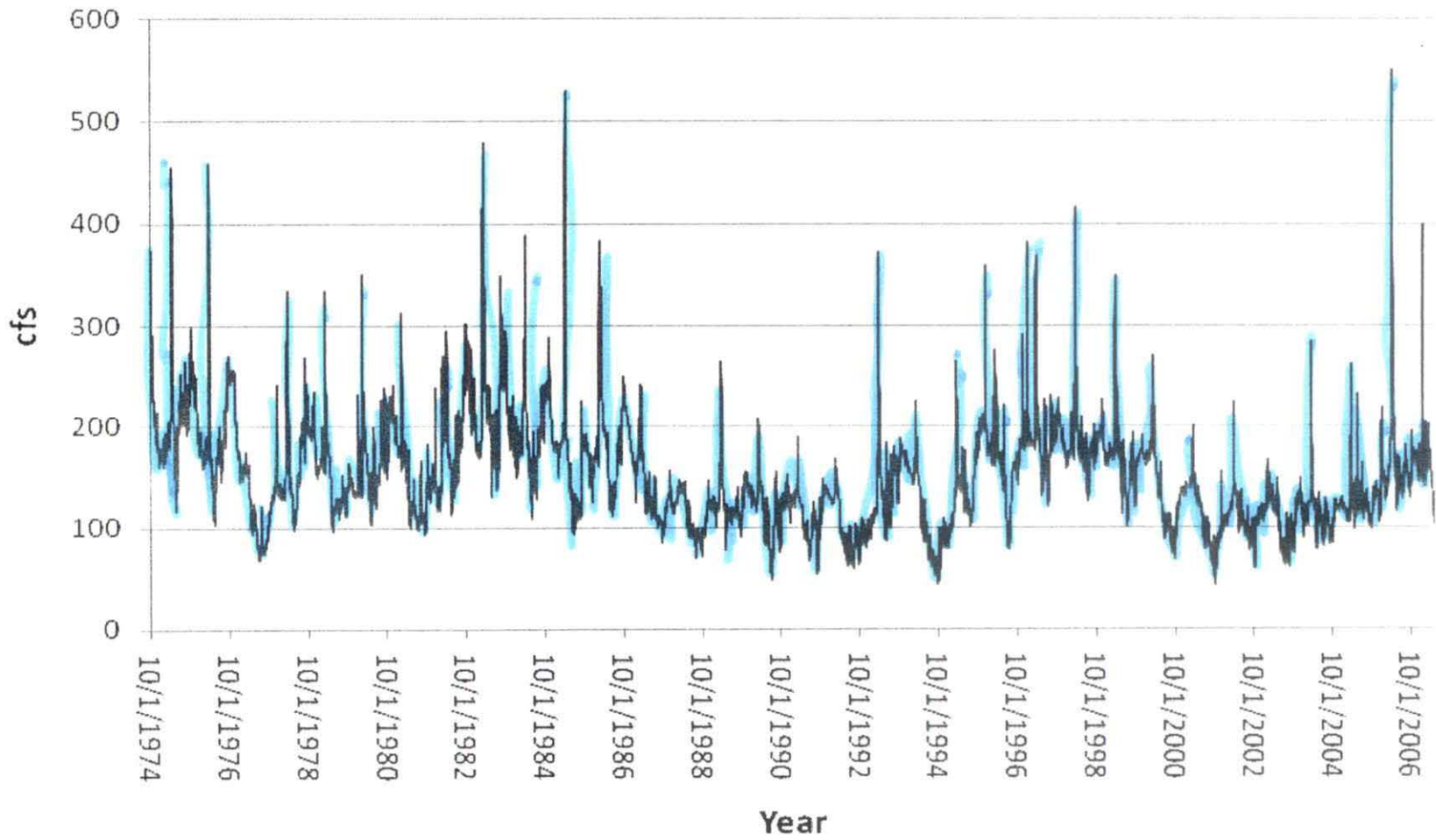
Silver Creek forms a confluence with the Little Wood River near Carey, Idaho, above the Dietrich Main Canal head gate. Silver Creek is fully righted. There are no reservoirs on Silver Creek.

The second figure below is a hydrograph of Silver Creek for the period of record under consideration. The third figure below is a hydrograph for the last three (3) years, i.e. 2005, 2006, 2007. The 3 years depicted is a period of low precipitation due to the tail end of the current draught. However, note how strong Silver Creek ran throughout this period.

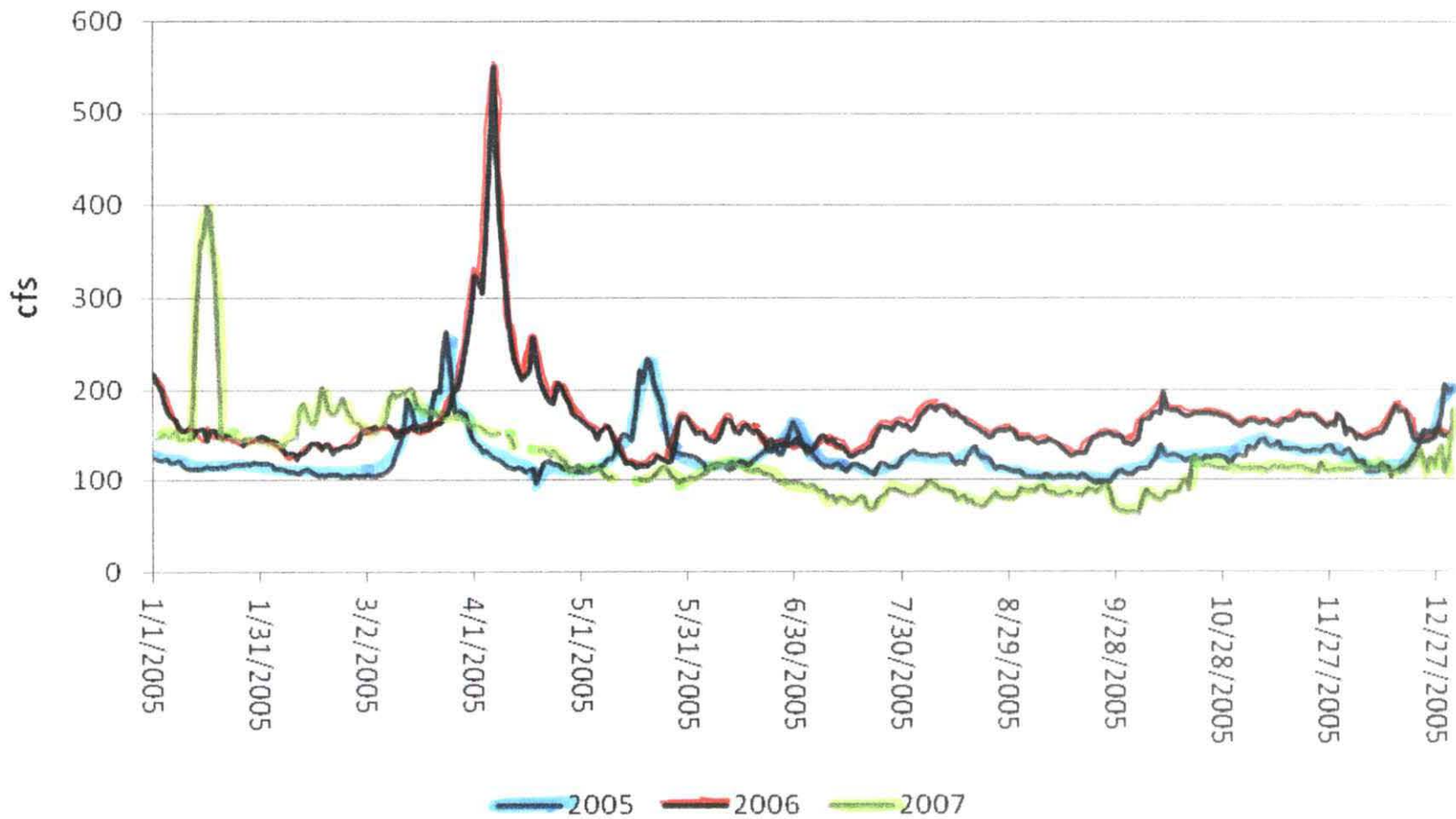
# Little Wood River ab High Five Creek nr Carey, Idaho



# Silver Creek nr Picabo, Idaho



## Silver Creek at Sportsmans Access near Picabo, Idaho



## 2.3 Magic Reservoir

Magic Reservoir is mostly located in the southeast sections of Township 1S, Range 17E. It impounds the Big Wood River for storage of irrigation water. The reservoir is owned by the Big Wood Canal Company. It holds approximately 192,000 AF. During the driest years the reservoir will empty.

## 3.0 DIETRICH MAIN CANAL

The following sections discuss the Dietrich Main Canal and its implications to this mitigation plan.

### 3.1 Characteristics of the Canal

The Dietrich Main Canal begins approximately  $\frac{3}{4}$  of a mile southeast of the city of Richfield, Idaho, on the Little Wood River. The canal flows south along the east side of the Dietrich Butte and turns west on the southern end of the butte. The distance from the head gate to the first irrigation head gate is approximately 12 miles.

Upon reaching the Dietrich Valley the canal is broken into several laterals and ditches. In fact, 16 laterals and ditches come off the canal. The total miles of canals, ditches, and laterals exceeds 50 miles. The main canal delivers water to approximately 8,500 acres of farmland. The canal can flow 300 cfs but averages around 220 cfs during the irrigation season. The canal runs all year long to supply water to stock and winter rights. The flow in the winter is a constant 20 cfs. The canal is managed to spill back no more than 5 cfs all year long.

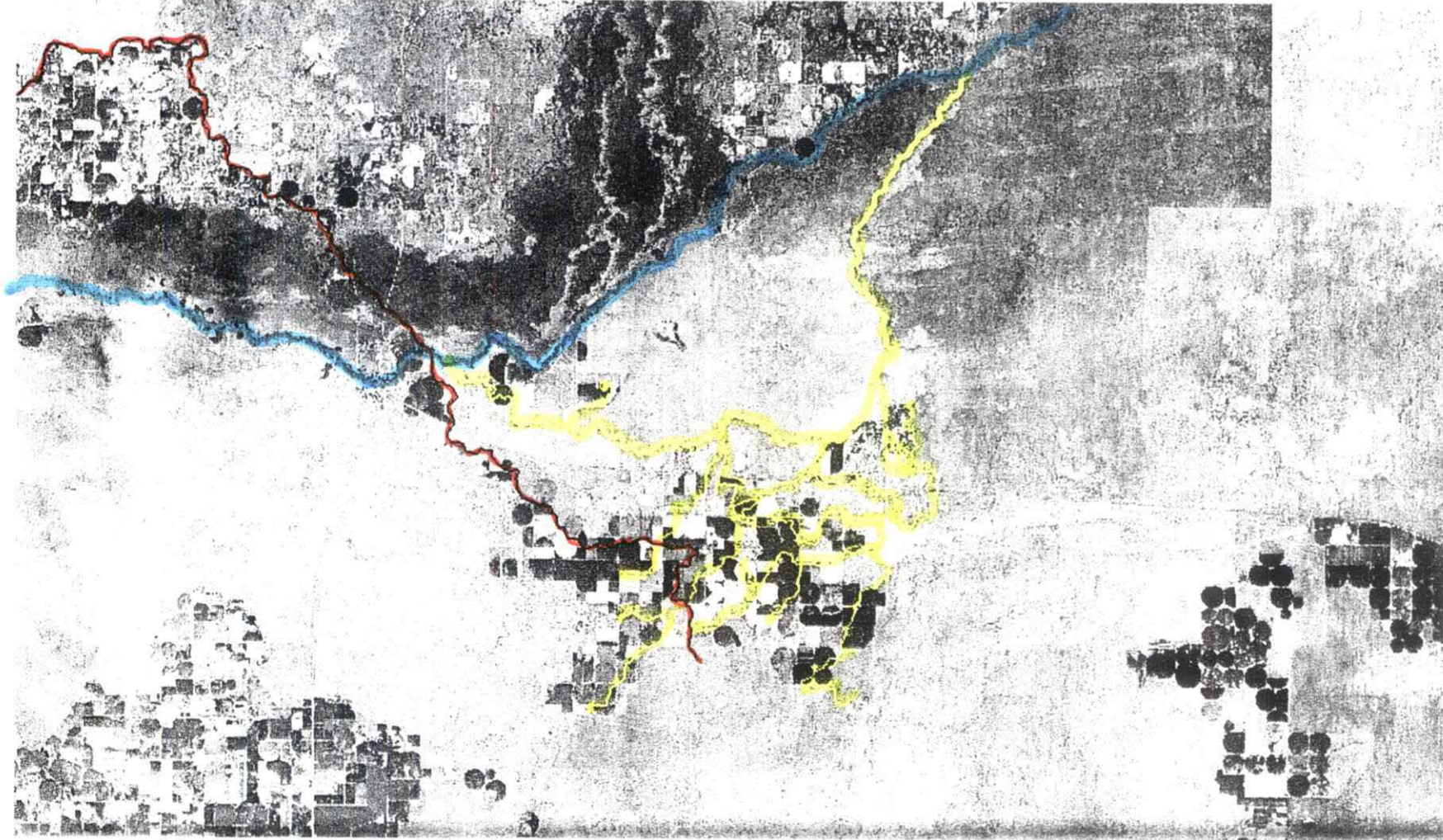
The geology of the canal includes basalt and eolian silts. Miles of basalt were blasted and removed to construct the canal through the area. None of the canal bottom was sealed with sealing agents and none of the canal or laterals are piped.

The canal and laterals leak but some worse than others. Between 40% and 45% of the flow is leaked through the sides and bottom of the Main Canal between the head gate in the Little Wood River and the first irrigation diversion. Downstream of that headgate some of the laterals leak as much as 60% (oral communication, Lynn Harmon, BWCC Manager). No extensive seepage runs have been performed on the DMC. However, the BWCC recently purchased a Doppler flow meter to help determine the leakage more closely.

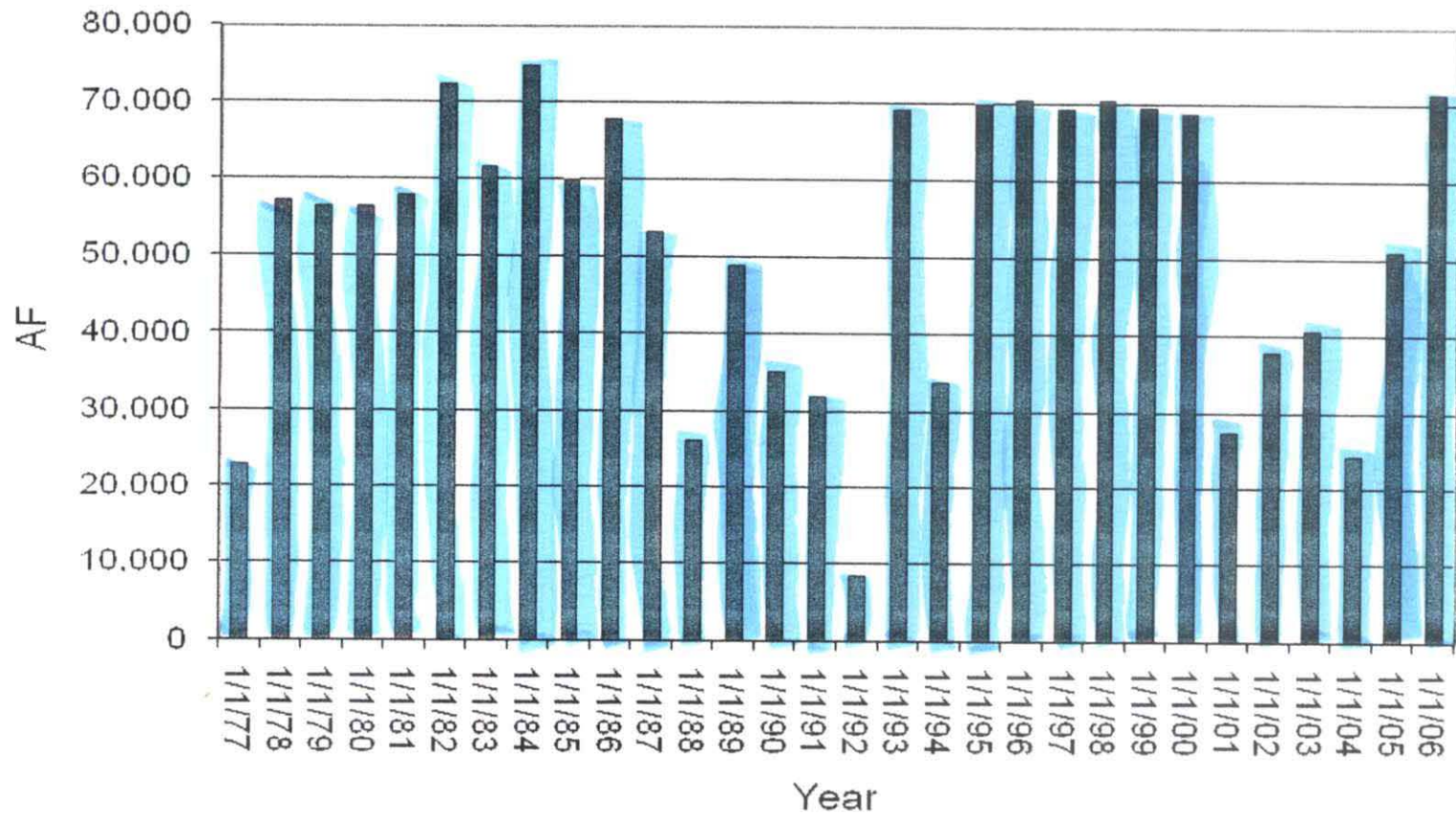
### 3.2 Flow

Flow through the DMC for the past 30 years is described in the hydrograph below. The maximum flow for the period was in 1984 at 74,697 AF. The minimum flow through the canal for an entire irrigation season was in 1992 at 8,645. The average for the 30 year period is 52,263 AF. Since Magic Reservoir holds about 192,000 AF the DMC

Blue trace is the Little Wood River. Red trace is the Milner Gooding Canal. The Yellow trace is the Dietrich Main and laterals.



# Dietrich Main Canal



flows more when the annual precipitation is high and low when the precipitation is minimal. For precipitation records, 1984 is the high precipitation year for the period of record. Consequently, the DMC has a maximum flow year in 1984. Conversely 1992 was a very dry year for precipitation and the DMC flowed its minimum.

During the summer the canal is run as efficient as possible. The spillback at the end of the canal into the Little Wood River is maintained at 5 cfs. During the winter the canal flows a constant 20 cfs for livestock.

Leakage from the canal system is huge. The canal manager calculates “shrink” at 40% to 45%. Therefore, the average leakage from the canal for the past 30 years is 20, 905 AF per year. In addition, the canal leaks 4,227 AF during the non-irrigation months. Therefore, the total water lost from the canal and added to the aquifer is 25,132 AF. That is enough water to cover all 5,777.5 acres of ground water irrigated farmland within the boundaries of the Dietrich Main Canal with 52.2 inches of water.

### 3.3 Importance

The Dietrich Main Canal is part of the Big Wood Canal Company. Twelve members holding shares of the BWCC irrigate with water delivered through the DMC. In addition to the surface water irrigated farmland, these same members irrigate a total of 5,777.5 acres with groundwater. Crops grown are grains (large and small), potatoes, hay (alfalfa, grass, and pasture) and sugar beets. The members on the DMC invest over \$6,000,000 every year into the local area economy growing the crops irrigated with ground water. The revenue from the harvest is well over four times, near \$30,000,000. In addition to farmland, there are several dairies in the area which add voluminous income above and beyond the \$30,000,000 stated previously.

## 4.0 GROUNDWATER

Groundwater is the purpose of this mitigation plan. This section explores and explains the ramifications of the areal groundwater.

### 4.1 Geology and Stratigraphy

Understanding the geology of the area is absolutely necessary in understanding the ground water. The geology is complex as part of the Snake River Plain volcanic series. The Snake River Plain Aquifer (SRPA) is basalt. It is composed of millions of separate flows of basalt.

Interspersed throughout the plain are buttes. These buttes are composed of rhyolite. Rhyolite is a highly felsic extrusive volcanic rock. The buttes generally formed after the basalt flows. The water bearing characteristics of rhyolite are different than basalt. Like basalt, water flows through cooling cracks and crevasses in the rhyolite. However, the number of fractures and size of the fractures in rhyolite are very small compared to

basalt. Therefore, the rhyolite is not a good aquifer material. In the Dietrich area the volume of water flowing through the rhyolites is negligible compared to the basalt.

The ground water in the Dietrich area flows around the Dietrich Butte. The rhyolites forming the butte may be saturated at the same piezometric pressure as the basalts but the permeability of the rhyolite is miniscule compared to the basalt.

#### 4.2 Ground Water

Groundwater in the Dietrich area flows through the basalts. Driller's reports throughout the area record a few feet of topsoil with the rest of the borehole basalts and cinders, typical of the SRPA.

The water table elevation is directly related to the areal surface water canals. Wells that reach their peak in the fall are being recharged with surface water leaking from the bottom of canals and injection wells or sinkholes. Two wells in the area illustrate the slope of the water table caused by leakage. They are located at 7S 18E 11 NWNE (3794' 10/18/07) and 6S 19E 34 NENWSW (3805' 10/18/07). The wells are more than 6 miles apart on an almost straight east west line. The general slope of the SRPA upgradient and downgradient of the area is 8'/mi until approximately the City of Shoshone. Near Shoshone the gradient in the water table increases to more than 22 ft/mi.

The water level difference in the 2 wells in the Dietrich area is 11 feet. In the Dietrich area the slope of the water table changes from 8 ft/mi above and below to less than 1.5 ft/mi. This is due to the recharge caused by the leakage from the Dietrich Main Canal. This break in slope causes the contour lines to form a large bulge facing down gradient indicating recharge. Therefore, the wells in the Dietrich area are pumping leaked water from the DMC.

Additionally, the DMC flows from the Little Wood River down the east side of the Dietrich Butte. The butte is composed of rhyolite which has a transmissivity near zero compared to the Snake River Plain basalt. Therefore, the water leaking from the main canal is channeled around the east side of the butte and empties into main SRPA northeast of Dietrich. This anomaly adds water to the already bulging water table contours below the Dietrich Valley.

#### 5.0 MITIGATION

In other groundwater districts and surface water companies throughout the SRPA some members irrigate with surface water only. Other members irrigate with ground water only. Yet others irrigate with surface water and ground water. The farmers that hold shares on the DMC are also members of the North Snake Ground Water District. This is unique within the Snake River Plain in that all twelve members of the DMC irrigate with both surface water and ground water. In the recent legal battles and water distribution calls this area is uniquely fighting themselves.

The irrigators farming in the Dietrich Main canal are seriously concerned about the possibility of the canal company recapturing leakage from the canals. Constructing additional wells to recapture leaked surface water would be devastating to the local aquifer. The irrigators approached the canal company board with a proposal to lease the leaked ground water to ensure that no more development of the ground water will occur. In response to the leasing of the recapture water the irrigators desire to use the leased recaptured water as mitigation for the ground water calls by senior ground water right holders.

For the past 30 years the DMC has leaked more than 25,000 AF per year. Ground water pumpers throughout the ESPA apply approximately 24"/ac. All the irrigators on the DMC irrigate 5,777.5 acres. Therefore, the irrigators pump an average of 11,555 AF per year. The 12 members of the DMC have been recapturing their leaked water since the wells were constructed. A table at the end of this plan lists the members and their water rights.

## 6.0 SUMMARY

The DMC leaks more than 25,000 AF per year. Due to the geology the leaked water is channeled along the east side of the Dietrich Butte to come in line with the SRPA. The ground water irrigators are also members of the DMC. Therefore, they have the right of law to recapture the leaked water since it is their righted water that is leaking. They pump less than 1/2 of the leaked water each year.

The members of the DMC have agreed with the BWCC to pay an excess \$5.00 per AF for each acre irrigated with recaptured surface water. In the agreement the BWCC will not attempt to construct wells to recapture the leaked water from the Dietrich Tract for irrigation. The members desire to receive mitigation credit from the IDWR for the money spent on their recaptured water.

This Mitigation Plan allows for all participants, including the general public in the State of Idaho, to achieve maximum benefit from the resources of the state. The canal company receives monies from the leaked water for maintenance and payroll; the irrigators are allowed to maintain the \$30,000,000 influence of agriculture; and the state of Idaho continues to receive the tax benefit from producing citizens.

### Dietrich Main Canal Groundwater Irrigators Water Rights

Name	WR #	Priority Date	CFS	AF/Yr	acres	POD	Twp	Rng	Sec	POU						
										QQ	ac	QQ	ac	QQ		
Gary Hibbard	37-7199	1/30/1973	3.02	604	151	5S 18E 32 NWSWSW	05S	18E	32	SWNW	18	SENW	26			
										NESW	18	NWSW	40	SWSW		
Ladru Sorenson	37-7189	12/29/1972	2.45	600	150	6S 18E 24 SENWNW	06S	18E	23	SENE	39					
										NESE	18					
									24	NWNE	13					
										NENW	40	NWNW	40			
LDS Church	37-7157	8/21/1972	1.94	388.8	97.2	6S 18E 24 SWSWNW	06S	18E	24	SWNW	37.5					
										NESW	29.4	NWSW	30.3			
Rick Astle	37-7264	8/21/1973	3.42	768	192	6S 18E 25 NWSESE	06S	18E	25	NESW	20	SWSW	1	SESW		
										NESE	34	NWSE	40	SWSE		
Hubert Shaw	37-7314	11/5/1973	2.8	560	140	6S 19E 19 SWNWNW	06S	18E	24	NENE	39					
	37-7716	5/22/1978	0.78	156	39					19E	19	NENW	39	NWNW	40	NWNW
	37-7726	8/10/1978	0.82	164	41							SWNW	25	SENW	39	
	37-7394	12/1/1974	5.94	1820	461.8	6S 19E 20 NWSESW	06S	19E	20	NENE	37	NWNE	29	SWNE		
	37-7814	12/12/1979	0.14	27.2						NENW	8.8	SWNW	21	SENW		
										NESW	39	NWSW	28	SWSW		
										NESE	30	NWSE	33	SWSE		
	37-7149	6/26/1972	4.46	1148	287	6S 19E 29 NESWSW	06S	19E	29	SWNW	37	SENW	39			
										NESW	38	NWSW	35	SWSW		
										NWSE	33	SWSE	33			
	37-8705	2/21/1991	7	1680	420	6S 19E 29 NWNENE 6S 19E 29 NENWNE	06S	19E	21	SWSW	38	SESW	39			
										SWSE	39	SESE	35			
28										NENE	36	NWNE	39	SWNE		
										SWSW	38					
										29	NWNE	39	SWNE	40		
37-21264	2/27/1979	0.63	126	31.5	6S 18E 13 NENWSE	06S	18E	13	NESW	4	NWSW	27.5				
37-8719	3/14/1991	3		154	6S 19E 29 NWNENE 6S 19E 29 NENWNE	06S	19E	29	NENE	38	SENE	39				
									NESE	39	SESE	38				
37-21425	1/7/1974	2.65	532	133	6S 18E 13 NENWSE	06S	18E	13	NENE	14	NWNE	25	SWNE			
									NESW	28						

**Dietrich Main Canal Groundwater Irrigators Water Rights**

Name	WR #	Priority Date	CFS	AF/Yr	acres	POD	Twp	Rng	Sec	QQ	POU			
											ac	QQ	ac	QQ
Alton Huyser	37-7475	9/8/1975	3.94	788	197	6S 19E 30 SENWNE	06S	19E	19	NESW	33	SWSW	32	SESW
	37-7268	8/23/1973	3.06	612	153				30	NENE	35	NWNE	34	SWNE
	37-8679	8/23/1990	1.92		8					NENW	40	NWNW	35	SWNW
	37-7602	5/4/1977	0.7		131					NESW	40	SESW	34	
									NWSE	40	SWSE	37		
Doug Astle	37-8296	5/11/1987	5		491	6S 19E 31 NWSW	06S	18E	36	NESE	40	NWSE	16	SWSE
									31	NESE	28	NWSE	28	NESW
										SWSW	40	SESW	40	
										NESE	40	NWSE	40	SWSE
Stan Ward	37-7695	2/7/1977	2.59	792	198	6S 19E 32 SENENW	06S	19E	32	NESW	20	SESW	20	
										NESE	39	NWSE	40	SWSE
Jeff Weber	37-7089	3/22/1971	4.4	1092	273	6S 19E 33 SWNWNE	06S	19E	33	NENE	33	NWNE	39	SWNE
										NENW	39	NWNW	30	SWNW
										NESW	1			
	37-20848	10/6/1977	8.28	2242.4	560.6	7S 19E 3 SESENE 7S 19E 3 NENESE	06S 07S	19E	33	SWSW	11			
										NENW	12	NWNW	12	SWNW
										NESW	20	NWSW	35	SWSW
											3	NENE	20	NWNE
									NENW	16	NWNW	10	SWNW	
									NESW	40	NWSW	5	SESW	
									NESE	36	NWSE	40	SWSE	
Sem Astle	37-7538	11/2/1976	4.18	1140	285	6S 19E 34 SWNWSW	06S	19E	34	NWNW	40	SWNW	39	
										NESW	40	NWSW	37	SWSW
										NWSE	35	SWSE	16	
37-8786	3/13/1992	4.98		249	6S 19E 34 NWNW 6S 19E 34 SWNW	06S	19E	27	NESW	31	NWSW	35	SWSW	
										NESE	9	NWSE	21	SWSE
37-8789	5/7/1992	3		160	6S 19E 34 SWNWSW	06S	19E	34	NENE	40	SENE	40		
										NENW	40	SENE	40	

**Dietrich Main Canal Groundwater Irrigators Water Rights**

Name	WR #	Priority Date	CFS	AF/Yr	acres	POD	Twp	Rng	Sec	QQ	POU			
											ac	QQ	ac	QQ
Don Taber	37-7617A	6/2/1977	3.64	744	186	6S 18E 3 NWSWNW	06S	18E	3	SWNE NENW	19.5 39.8	NWNW	47.2	SWNW
	37-8401	9/20/1988	6.68		334	5S 18E 33 NENWNE	05S	18E	28 32 33 34	SWSE SENE NESE NENE NENW NESW NWNW	1 6 33 38 8 18 40	SESE NWNE SWNW NWSW SWNW	6 16 4 23 33	SWNE SENW
Jerry Nance	37-7504	7/22/1976	3.3	712	178	6S 19E 18 SWNW	06S	19E	18	NWNE NENW NESW	11 22 33	SWNE NWNW	39 12	SWNW

ac QQ ac

37 SESW 12

24

36 SESE 37

26 W 12

35 SENE 35

35

30 SESW 36

33 SESE 32

39 SESW 33

40 SENE 37

37 SENE 29

Review of Water Rights for Mitigation Purpose see Parson Smith and Stone February 26, 2008 letter.

NAME	WRS	SHARES IF KNOWN	CANAL BORDERS PROPERTY LIES WITHIN	COMMENTS
Hibbard	7199	140	big wood	shares were supposed to be removed but they are still within the borders..
Sorenson	7189	25	big wood	shares were supposed to be removed but they are still within the borders..
LDS Church	7157	3	big wood	within canal company borders
Astle	7264	111	big wood	within canal company borders
Shaw	7314	none	big wood	no shares shown on rights
	7716			
	7726			
Shaw	7394	unknown	big wood	big wood water has been applied to this land
Shaw	7814			
Shaw	7149	unknown	big wood	has used canal water before, application for permit says canal shares curtailed. I believe these are supplemental.
Shaw	8705	unknown	big wood	canal shares on all of the lands and within the borders of the canal company.
Shaw	21264			transfer 69125 check
Shaw	8719	unknown	big wood	154 acres irrigated under big wood canal shares and within border
Shaw	21425			transfer 69269 check
Huyser	7375	unknown	big wood	supplemental to canal shares
	7268			
	8679			
	7602			
Doug Astle	8296	179 BW 110 Amer	American Falls Reservoir District #3 and Big Wood	supplemental to canal shares
Ward	7695	unknown	big wood	supplemental to canal shares
Weber	7089	none	big wood	This one appears to be a primary right within the border of the canal company
Weber	20848		big wood	This one appears to be a primary right within the border of the canal company
Sem Astle	7538		big wood	This one appears to be a primary right within the border of the canal company
Sem Astle	8786			APPLICATION FOR PERMIT NOT A VALID WATER RIGHT
Sem Astle	8789			APPLICATION FOR PERMIT NOT A VALID WATER RIGHT
Taber	7617A	154	big wood	Appears to be a supplemental right, but a transfer was done in 2003 that removed the supplemental language. Could be considered primary at this time.
Taber	8401		big wood	This right is supplemental to Little Wood River water rights. It doesn't appear as though they have Big Wood shares.
Nance	7504	120	big wood	This right appears to be supplemental to Big Wood Canal Shares.

Rights in red are still in application form

Rights in yellow appear to be primary rights within a canal company borders

These rights were involved in a transfer and weren't checked throughly.

These rights appear to be supplemental water rights

Review by DAN Nelson, IDWR 3/7/08