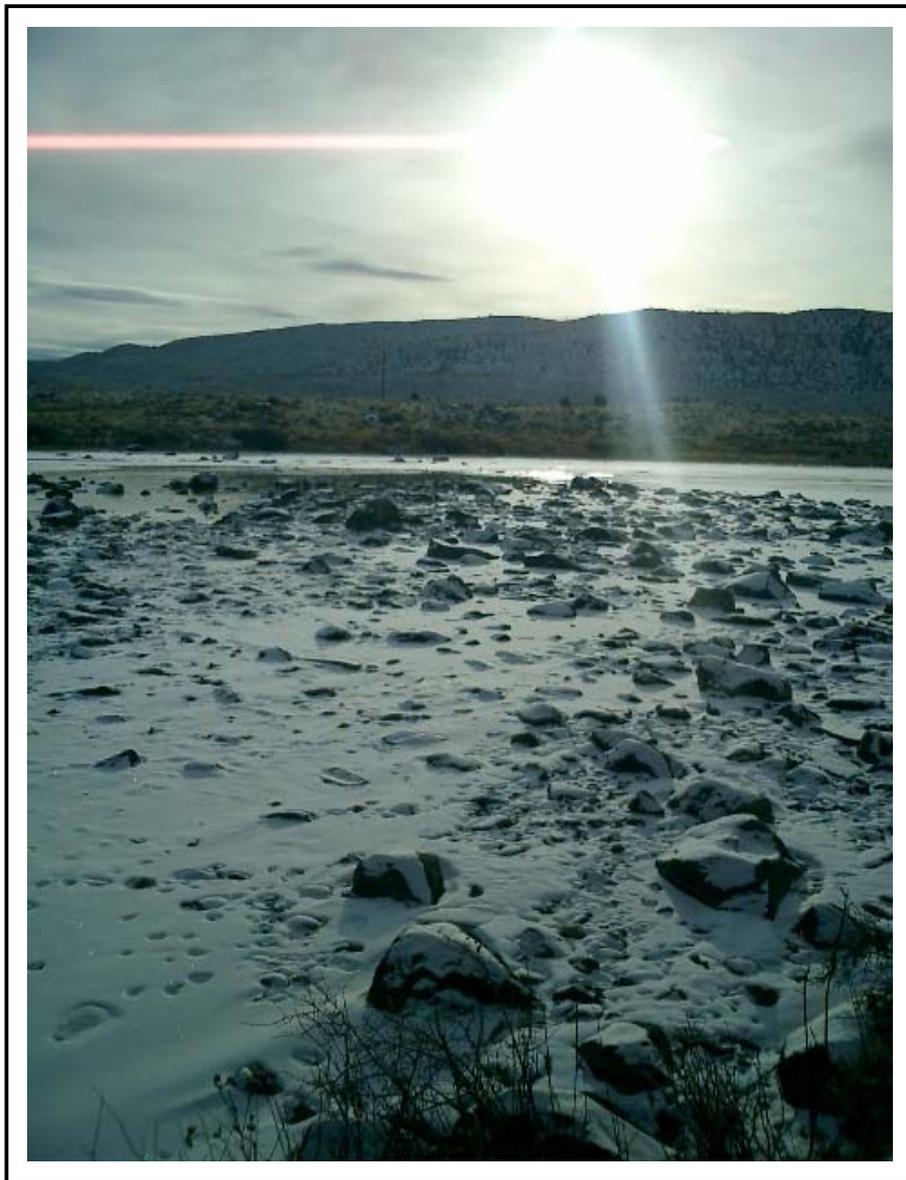


# **Midvale Irrigation District 2005 Annual Report**



# **Midvale Irrigation District** **2005 Annual Report**

**Presented at the**  
**Annual Meeting of Water Users**  
**February 9, 2006**

**Submitted By:**

**Midvale Irrigation District**  
**Board of Commissioners and Manager**

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## **A Message from the President**

Dear Water Users:

The Board of Commissioners and staff of the Midvale Irrigation District respectfully submit the enclosed Midvale Irrigation District 2005 Annual Report for your information and review of the activities of your District for fiscal year 2005.

2005 was a year of ups and downs where water is concerned. About this time last year, the snowpack was near normal and it looked like we might finally have a “normal” water year. Then, we didn’t get late February and early March snow and we had to back off from our expectation. When moisture finally came in April and May, and it stayed cool, we wound up with a near normal allotment of 3.75 acre-feet .....nothing to be sneezed at considering the past four or five years.

Our staff continues to operate and maintain our District as cheaply as practical. Rising costs, such as fuel and fuel dependent products, continue to concern your board members and manager as we go into the 22<sup>nd</sup> year in-a-row of level O&M assessments. I wonder, at times, how much longer we will be able to afford that luxury?

Increases in costs also caused us to delay the start of the Hidden Valley Pipeline project while we seek additional funding from the State of Wyoming. We have asked the legislature for an additional \$1.116 million for project materials only, almost double the amount we originally received. Who would have thought that the effects of hurricanes Katrina and Rita would have affected us all the way up here in Wyoming?

Although we have been talking about it for years, it looks like we might finally see our water right adjudicated this year. All I can say is that it’s about time.

We are about to wrap up work on the 20-year master plan for our District. After seeing the preliminary laundry list of repairs that will be necessary over the next twenty years, it’s obvious that we are going to have to work real hard at finding help to pay for all the projects. Your board and manager will be facing some really tough challenges in that regard in the near future.

I would like to say that it has been my pleasure and an honor to serve the members of Midvale Irrigation District for the past twelve years. From more than average mountain moisture and rainfall to extreme years of drought, it has always been an interesting and educational challenge.

I have every confidence and respect for your present Board of Commissioners and Manager and ask that you support them as well. It never ceases to amaze me how dedicated they are at attending to your interests.

With that, I bid you a fond farewell, with hopes of a successful and prosperous future.

Respectfully and with appreciation,

Gene Jordan, President  
Board of Commissioners

# Contents

	<i>Page</i>
<b>Summary of 2005 Operations and Activities.....</b>	<b>1</b>
<b>Water Management.....</b>	<b>6</b>
Pre-Irrigation Season Water Supply, Snowpack and Runoff Projections .....	6
Irrigation Season and Water Allotments.....	7
End of Season and Yearly Totals .....	9
<b>Crop and Forage-for-Livestock Production.....</b>	<b>10</b>
Alfalfa and Other Hay .....	10
Barley.....	10
Ensilage.....	11
Sugar Beets .....	11
All Other Crops, Acreage Fallowed and Acreage Not Harvested.....	11
<b>Operation and Maintenance Activities .....</b>	<b>12</b>
Canal, Lateral and Open Drain Cleaning.....	12
Canal Bank Stabilization and Erosion Control .....	12
Concrete Work .....	13
Pipe Materials Installed .....	13
Weed Control .....	14
Maintenance Shop Activities .....	15
Other Operation and Maintenance Work Performed.....	16
<b>Construction for Hire .....</b>	<b>16</b>
<b>Other District Projects and Activities.....</b>	<b>17</b>
Midvale Conservation Program .....	17
Wind River Diversion Dam Gear Box Replacement .....	23
Hidden Valley Pipeline Project .....	23
<b>Legal Activities.....</b>	<b>24</b>
Summary .....	24
Adjudication of Permit No. 7300 .....	24
Tripartite Agreement Litigation .....	26
Demand for Gravel Royalties.....	28

	<i>Page</i>
<b>Financial Report</b> .....	<b>29</b>
<b>District Staff</b> .....	<b>30</b>
<b>Appendix</b> .....	<b>31</b>

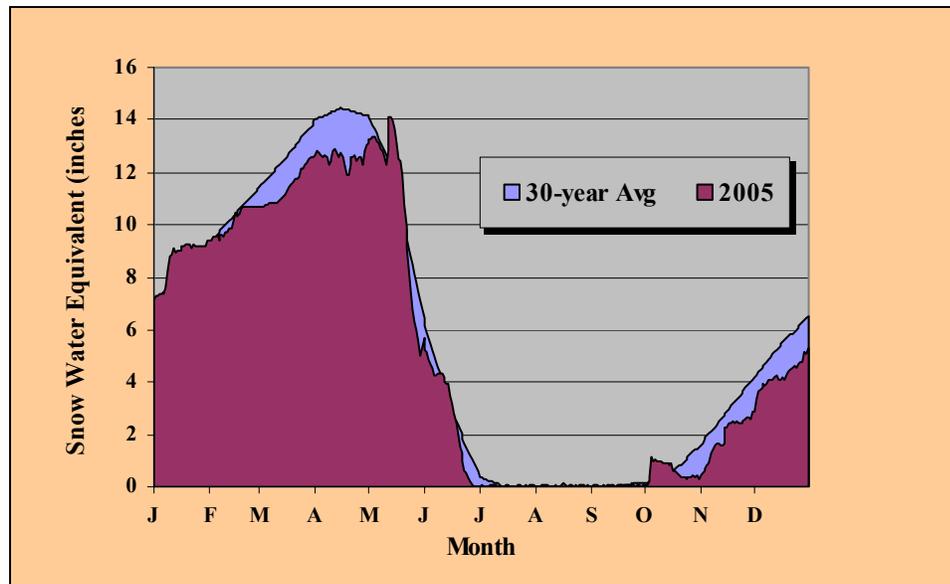
## Figures

<i>Figure</i>	<i>Page</i>
1. 2005 Wind River Basin Snowpack.....	1
2. Bull Lake Reservoir on July 10, 2005 .....	2
3. 2005 Crop Acreage by percent of total.....	3
4. 2005 Gross crop value by crop type .....	4
5. Cleaned and functional open drain .....	4
6. March 10, 2005 snow water equivalent vs. 2001, 2004 and 30-year Average .....	7
7. 2005 April 1 <sup>st</sup> through October 31 <sup>st</sup> natural flow of the Wind River .....	8
8. 2005 allotment changes vs. ability to service allotment .....	9
9. 2005 District barley crop .....	10
10. Sugar beet field east of Pavillion, Wyoming .....	11
11. Realignment of the 2 <sup>nd</sup> Division of the Wyoming Canal.....	12
12. Wyoming Canal floor replacement .....	13
13. Wyo 25.4 pipeline .....	13
14. Locations of 2005 vegetative weed treatment.....	14
15. Locations of noxious weed treatment .....	15
16. Security gate installed on Pilot Butte Dam.....	16

<i>Figure</i>	<i>Page</i>
17. Canal and lateral types within the Midvale Irrigation District.....	19
18. Siphon inlet at Wyoming Canal Mile 4.5 .....	20
19. Pilot Lateral 36.5 map.....	21
20. Typical gate structure suitable for gate control and water level monitoring .....	22
21. Diversion Dam Gear Box Assemblies.....	23

## SUMMARY OF 2005 OPERATIONS AND ACTIVITIES

For the first time in five water seasons, the water users of Midvale Irrigation District (District) could begin to think that the long-term drought might seriously be over, as 2005 began. Weather patterns seemed to have changed, leaving the Wind River Basin Snotel gauges reading 109 percent of average, ten percent greater than the year before (fig. 1). Fueling water user optimism was the fact that the District held almost 111,000 acre-feet of useable stored water in Bull Lake and Pilot Butte Reservoirs.



**Figure 1. 2005 Wind River Basin Snowpack**

receive 108 percent of average inflows (150,000 acre-feet), but the Wind River Range would only yield 79 percent of average (330,000 acre-feet) as measured upstream of the Wind River/Bull Lake Creek confluence. In Mr. Lawson's opinion, the District could probably look forward to a water supply year very similar to 2004.

During the remainder of February and into early March, less than normal snow amounts fell in the Wind River Mountains. By March 14<sup>th</sup>, the Wind River Basin snowpack had fallen to 89 percent of average. In the March 15<sup>th</sup> edition of the *Casper Star-Tribune*, Jan Curtis, Wyoming State Climatologist, was quoted saying, "Things aren't looking too good. We've lost important snowpack [due to abnormally high temperatures and lack of precipitation], and it'll take lots of snow to get us back on track. We're essentially running out of time, if we haven't run out already." Curtis went on to say that he planned to tell Governor Dave Freudenthal "to expect continuing water supply shortages for farmers who irrigate in the state, as...runoff is expected to be short." The District's Board of Commissioners (Commissioners) were still cautiously optimistic, but waited until the last day of March to announce the start-date for irrigation water deliveries and the beginning and projected final allotments.

The Commissioners' caution was well warranted. The March 1<sup>st</sup>, April through July runoff projections had been revised and, mirroring Climatologist Curtis' concerns, had been lowered in

By annual meeting time in early February, water supply forecasts were still looking up..... somewhat. John Lawson, Area Manager, United States Department of the Interior, Bureau of Reclamation (Bureau), reported that his February 1<sup>st</sup>, April through July runoff projections showed Bull Lake Reservoir would

their expectations to 97 percent of normal (135,000 acre-feet) for Bull Lake Reservoir while the upper Wind River Basin had dropped to 70 percent. With preliminary data in-hand for the April 1<sup>st</sup> Bureau projections that showed no change in the expected runoff for either basin, the Commissioners announced an April 20<sup>th</sup> start-date for irrigation water deliveries, a 1.50 acre-feet per acre beginning allotment, and a projected 2.75 – 3.00 acre-feet per acre final allotment.

The warmer-than-usual February and March weather hung on to become cooler than normal April conditions. District canal and lateral flushing operations began on April 4<sup>th</sup> and precipitation patterns began to improve in spite of the concerns expressed by Mr. Curtis. Because of the favorable weather conditions, April irrigation water deliveries only amounted to 40 percent of normal.

May 1<sup>st</sup> Bureau runoff projections improved only slightly, showing Bull Lake Reservoir inflow to be 100 percent of normal (140,000 acre-feet). On Wednesday, May 11<sup>th</sup>, Riverton, Wyoming set a record with 0.92 inches of rainfall being recorded, which surpassed the 1972 record by 0.03 inches. In the same weather event, Dubois, Wyoming reported nearly a foot of snow, and about two feet fell near Union Pass and Togwotee Pass, west of Dubois. On May 15<sup>th</sup>, *The Ranger* reported that, “for the first time in three years, the *U.S. Drought Monitor* [report] does not show exceptional drought – its most severe category – anywhere in the west.”

Still, the scientists were cautious in their statements. Kelly Redmond, regional climatologist for the Western Regional Climate Center at the Desert Research Institute in Reno, Nevada, likened



**Figure 2. Bull Lake Reservoir on July 10, 2005**

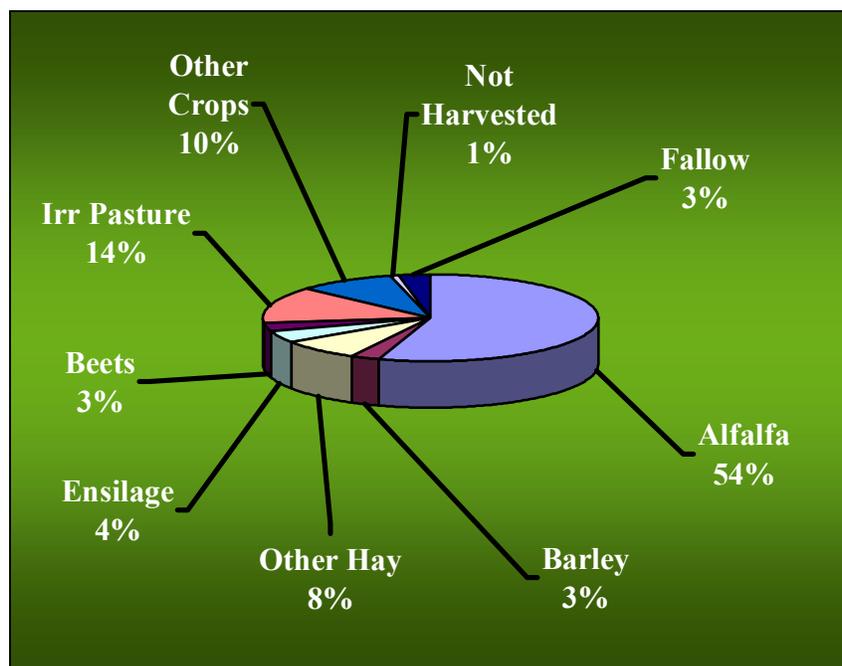
the recent relief to a “quick infusion when your bank account is chronically low. But the deficits have been pretty severe.”

Situations continued to look up in May. Weather conditions continued to improve with Pavillion, Wyoming receiving four inches of precipitation for the month. Temperatures stayed below normal and irrigation water deliveries amounted to only 75 percent of average.

June 1<sup>st</sup> runoff projections reflected the more normal precipitation patterns recently experienced, with Bull Lake Reservoir runoff projected at 115 percent of normal (160,000 acre-feet), but the upper Wind River Basin runoff expectation remained locked in at 70 percent of normal. At their regular meeting on June 9<sup>th</sup>, the Commissioners voted to raise the irrigation water allotment to 2.00 acre-feet per acre.

On June 15<sup>th</sup>, *The Ranger* quoted Mr. Curtis again. Sounding much more optimistic this time, he said, “The continuation of cool, wet weather in June has left Wyoming wetter on the brink of summer than any time since 1999. Things are looking rosy this year.” Curtis did pull in the reins a bit though in that article saying, “My concern is that if we get into a hot, dry summer, things could reverse pretty rapidly. I’m not expecting that to happen and I’m fairly optimistic our drought recovery will continue, but it will probably take another two years for it to be over.” Not long after that article appeared in the *The Ranger*, temperatures rose, precipitation ceased, and hay producers began to lay down their first cutting of the year. With the increased temperatures, river flows from snowmelt runoff began to increase and the natural flow of the Wind River peaked on June 23<sup>rd</sup>.

On July 10<sup>th</sup>, Bull Lake Reservoir reached its maximum capacity for the year, having accumulated 151,390 acre-feet (fig. 2). Water use by District irrigators approached normal levels as July and August turned off drier and cooler than normal. The Commissioners continued



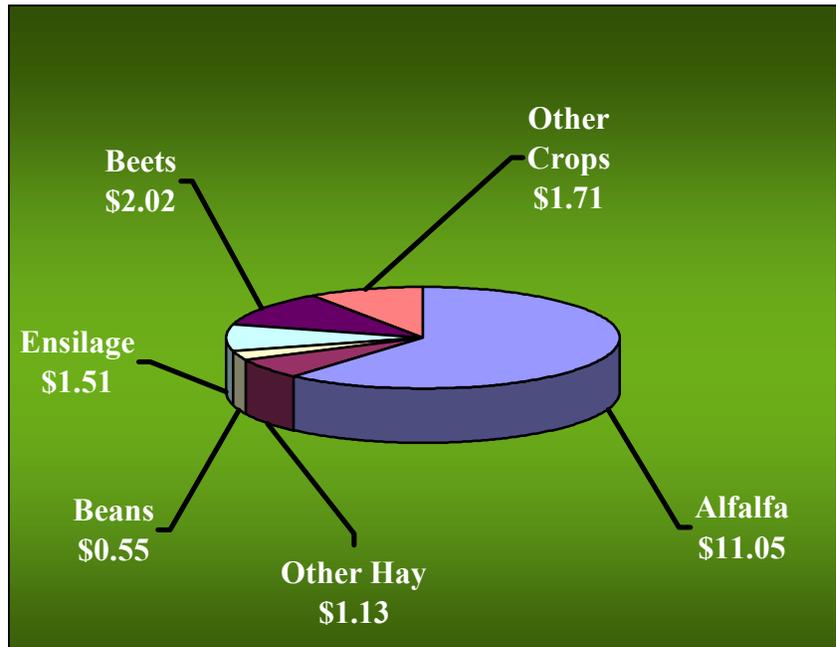
to raise the irrigation water allotment as supplies would allow until they approved a final allotment of 3.75 acre-feet per acre on September 8<sup>th</sup> and set the end-date for irrigation water deliveries for October 7<sup>th</sup>, a week longer than any season in recent memory.

At the conclusion of the 171-day irrigation season, the District had delivered 72 percent of the 3.75 acre-feet per acre final allotment and stored water supplies stood slightly above the 30-year

**Figure 3. 2005 Crop Acreage by percent of total**

average.

Given the fact that more irrigation water was available to District agriculture producers in 2005, one wonders why six out of the eleven major crop types grown in the District reported less yield per acre than last year. However, lack of adequate heat units for some crops, due to cooler than normal temperatures, may be partly to blame. Crops such as alfalfa, barley, beans, ensilage, sugar beets and wheat all were reported with yields lower than 2004. Yield from other types of hay was the same as last year and only hard corn, oats, sunflowers and other seed crops (vetch) yielded above 2004 levels.



**Figure 4. 2005 Gross crop value by crop type**

As is expected, alfalfa still occupies the most acreage of all crops (54 percent), followed by irrigated pasture (14 percent), other hay (8 percent), ensilage (4 percent), and sugar beets (3 percent). Other crops, fallowed acres, and acreage planted but not harvested round out the remaining acreage distribution for the 2005 irrigation season (fig. 3).

Reduction in yield had a corresponding affect on gross revenues generated within the District. As estimated from crop reports, District ag producers generated \$17.975 million in gross returns, down from over \$20 million the year before. Alfalfa accounted for 62 percent of gross returns, generating \$11.05 million. Sugar beets contributed \$2.02 million while ensilage produced an estimated \$1.5 million (fig. 4).



**Figure 5. Cleaned and functional open drain**

The District continued normal operation and maintenance activities throughout the year. Cleaning operations occurred on 44 canals, laterals and open drains, to improve functionality (fig. 5); 12 canals, laterals and open drains received attention to correct erosion issues; 224 cubic yards of concrete were utilized for the construction and/or rehabilitation

of District managed facilities or for construction-for-hire projects; 7,018 feet of pipe materials were installed for various types of applications; weed control efforts continued, under contract with the Fremont County Weed and Pest District, on 255.45 acres for noxious weed control and 912.7 acres for vegetative management; and, a number of other projects and activities were completed by District crews.

The District remains in a strong financial position as of December 31, 2005. The District will face significant financial challenges over the next twenty years as it seeks to rehabilitate and improve the water conveyance infrastructure that it manages. Sources of revenue other than assessments from District patrons will be necessary to accomplish the needed improvements.

Anderson Consulting Engineers continued their work on the Midvale Conservation Program (Program), coming up with some interesting projections of the rehabilitation and improvement needs that will face the District over the next twenty years. In 2006, the Program will be completed with an economic analysis that will shed light on how the District can finance the needed rehabilitation and improvements.

One of the projects that emerged from the Program studies was the potential for the automation of several features of the District's water conveyance infrastructure. The potential water savings of automating structures such as Bull Lake Dam, Wind River Diversion Dam, Pilot Butte Dam, and several of the gated structures along both the Wyoming and Pilot Canals is enormous when compared to the cost. So enormous in fact that the Commissioners requested funding from the State of Wyoming in the amount of \$405,000 to proceed with the project as soon as possible. The Wyoming Legislature will consider the funding request in the 2006 session.

Work on the Hidden Valley Pipeline Project, slated to begin in the fall of 2005, became sidetracked due to delays in completion of the final design and increased prices for materials; specifically PVC pipe. The District originally received approval for the funding of the pipeline materials in 2004 from the State of Wyoming in the amount of \$1.474 million. Final design work on the project was not completed by the Natural Resources Conservation Service engineers and reviewed and approved by the State until August 2005. By that time, increases in crude oil and natural gas prices, from which the raw materials for PVC pipe is derived, forced the District to seek additional funding. The 2006 Wyoming Legislature will consider the District's request for an additional \$1.116 million to cover the expected materials price increase. Once approved, construction on the pipeline is slated to start in the summer of 2006.

It seems that we are coming ever closer to seeing the District's water right adjudicated as a part of the *Big Horn General Stream Adjudication*. Early in 2005, State officials hinted that the process might be over late that year. However, a few protested acreage reductions have slowed the process. Indications are that 2006 may be the year in which we finish this long and drawn out chapter in the history of Midvale Irrigation District. Additional legal issues still face the District in the form of the unresolved issues of the "Tripartite Agreements" and their interpretation and the Bureau of Indian Affairs demand that the District begin paying royalties for the use of sand and gravel from pits developed by the Bureau of Reclamation, during the construction of the water conveyance infrastructure, and the District in its operation and maintenance of the infrastructure.

Looking back over 2005, District water users enjoyed greater water availability than in any of the previous five water seasons although snowpack levels remained below average through most of the year. Delivery efficiencies increased due to better management of available supplies and there were no major expenditures for unexpected repairs to the water delivery system. The crop year could have been better, yield wise and price wise, but so goes the annual gamble related to production agriculture. By the end of the year, usable stored water supplies were above average, though not as great as the previous year, and once again we look prayerfully to the mountains and a snowpack that is, once again, below normal.

## **WATER MANAGEMENT**

### ***Pre-Irrigation Season Water Supply, Snowpack and Runoff Projections***

As the New Year rang in, stored water supplies totaled 131 percent of the 30-year average. Bull Lake and Pilot Butte Reservoirs contained a combined total of 130,320 acre-feet compared to 91,560 acre-feet the year before. Discounting 4,000 acre-feet of non-useable water held in Pilot Butte Reservoir and 15,464 acre-feet of Boysen Reservoir water stored in Bull Lake (accumulated by exchange during 2004 for wintertime releases into Lower Bull Lake Creek), there existed 110,856 acre-feet of water available for use by the District on January 1<sup>st</sup>. By the time that flushing activities began in early April, useable stored supplies had grown slightly to 115,572 acre-feet with only 12,192 acre-feet of Boysen Reservoir water remaining in Bull Lake.

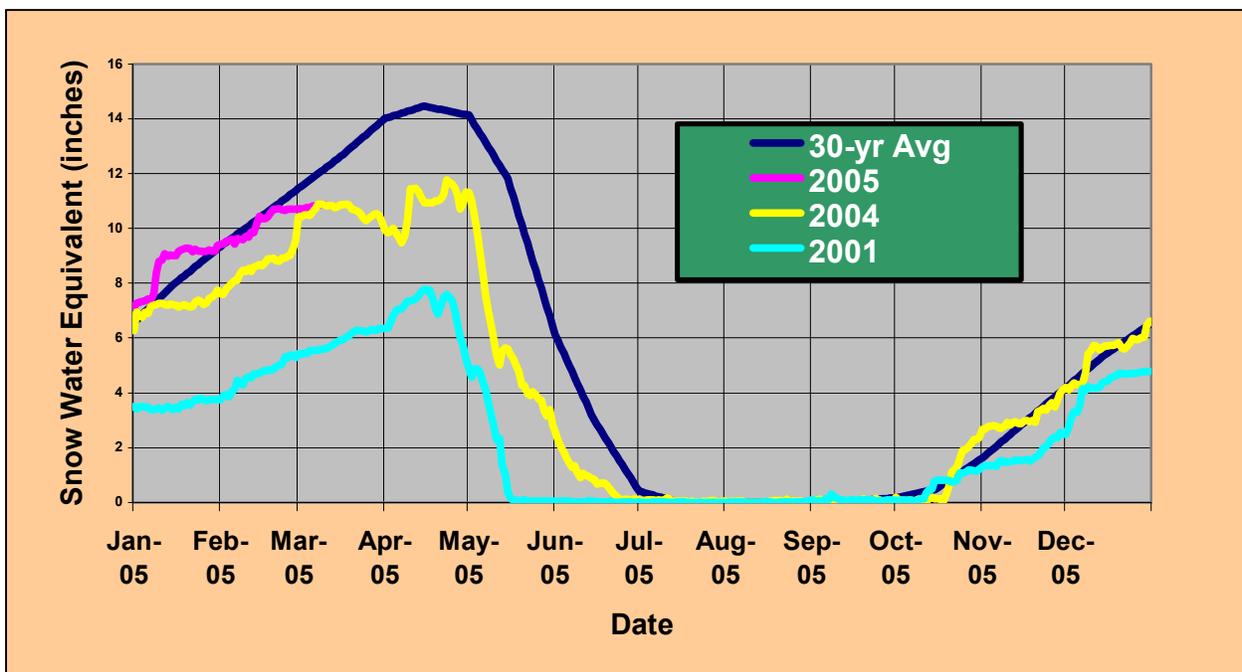
At the start of the year, the Wind River and Bull Lake Creek Basin snowpack estimates stood at 109 and 102 percent-of-average respectively. District water users were cautiously optimistic about the coming irrigation season even though the *U.S. Drought Monitor* still listed Fremont County in the “Moderate” drought category. Snowpack figures remained at or above average until early February when normal snowfall did not materialize and the average fell below 100 percent on February 4<sup>th</sup>. Thanks to the cooler than normal conditions in early May, and again in early June, that slowed snowmelt runoff, snowpack amounts again reached the 100 percent mark for brief periods in the middle of both months.

Snowmelt runoff projections in February were encouraging compared to previous years. The Bureau of Reclamation predicted on February 1<sup>st</sup> that April through July runoff into Bull Lake would total 150,000 acre-feet or 108 percent of average. At the same time, and for the same period, runoff into the Wind River above the Bull Lake Creek confluence was projected to be 330,000 acre-feet or only 79 percent of average. By March 1<sup>st</sup>, normal snowfall events had not occurred and runoff projections dropped accordingly. On that date, the Bureau’s adjusted figures showed runoff into Bull Lake at 135,000 acre-feet (97 percent of average) and runoff into the Wind River above the Bull Lake Creek confluence at 290,000 acre-feet (70 percent of average). Runoff projections did not change with the April 1<sup>st</sup> forecast and District water users once again started the irrigation season with below normal water supply expectations.

## *Irrigation Season and Water Allotments*

Ordinarily, the District's Board of Commissioners set the initial water allotment and start-date for delivery of irrigation water at their regular meeting in March. However, snowpack levels in the Wind River Range began to decline in late February and early March to 2004 levels (fig. 6), causing the Commission to delay its decision until the end of March in order to get a better feel for how close to normal snowpack levels might be before committing themselves.

The Commission met in special session on March 31<sup>st</sup> to evaluate updated water supply information. At that meeting, current snowpack information, long range weather predictions and projections from both the Bureau and District computer models showed that slightly lower than average runoff totals could be expected. Given that input, the Commissioners set an initial allotment of 1.50 acre-feet per acre and a start-date for irrigation water deliveries of April 20<sup>th</sup> (See Appendix A. 2005 Summary of Commissioner Actions Regarding Irrigation Water Allotments, Delivery Rate Restrictions, and Shutoff Date). The Commission also authorized the publication of the expected final allotment of 2.75 – 3.00 acre-feet per acre in the *2005 Water Year Information Letter* mailed to District patrons on April 1<sup>st</sup> (See Appendix B. 2005 Water Year Information Letter).

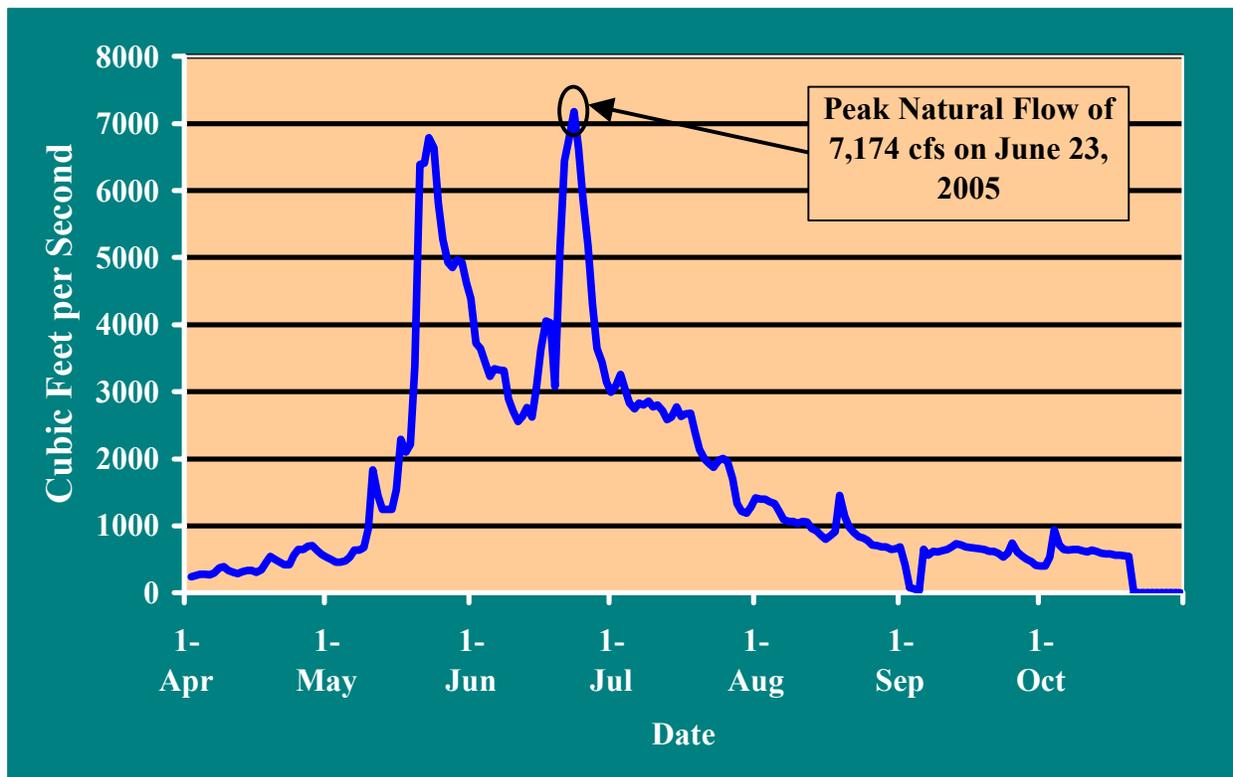


**Figure 6. March 10, 2005 snow water equivalent vs. 2001, 2004 and 30-year Average**

April and May precipitation events (See Appendix C. 2005 Precipitation and Average Temperature, Pavillion, Wyoming) coupled with cooler than normal temperatures during most of that period made for nearly ideal hay growing conditions. The District recorded water deliveries of only 40 and 75 percent of normal for April and May respectively. River flows remained below average except for a brief period between May 21<sup>st</sup> and 24<sup>th</sup> when temperatures rose to near 80 degrees Fahrenheit, causing the natural flow of the Wind River to peak for the month at 6,783 cubic feet per second on the 23<sup>rd</sup> (fig. 7). The average high temperature for the month of

May in Pavillion, Wyoming was only 65.3 degrees Fahrenheit and a total of 4.00 inches of precipitation was recorded in four separate climatic events.

The first half of the month of June remained cool with high temperatures ranging from 65 to 70 degrees Fahrenheit most days. At their June 9<sup>th</sup> regular meeting, the District's Commissioners studied water delivery and supply data and determined to increase the irrigation water allotment when water deliveries and stored water supplies would allow the District to meet the then current 1.50 acre-feet per acre allocation (fig. 8). A 0.50 acre-feet per acre allotment increase took effect on June 14<sup>th</sup>, bringing the total allotment up to 2.00 acre-feet per acre.



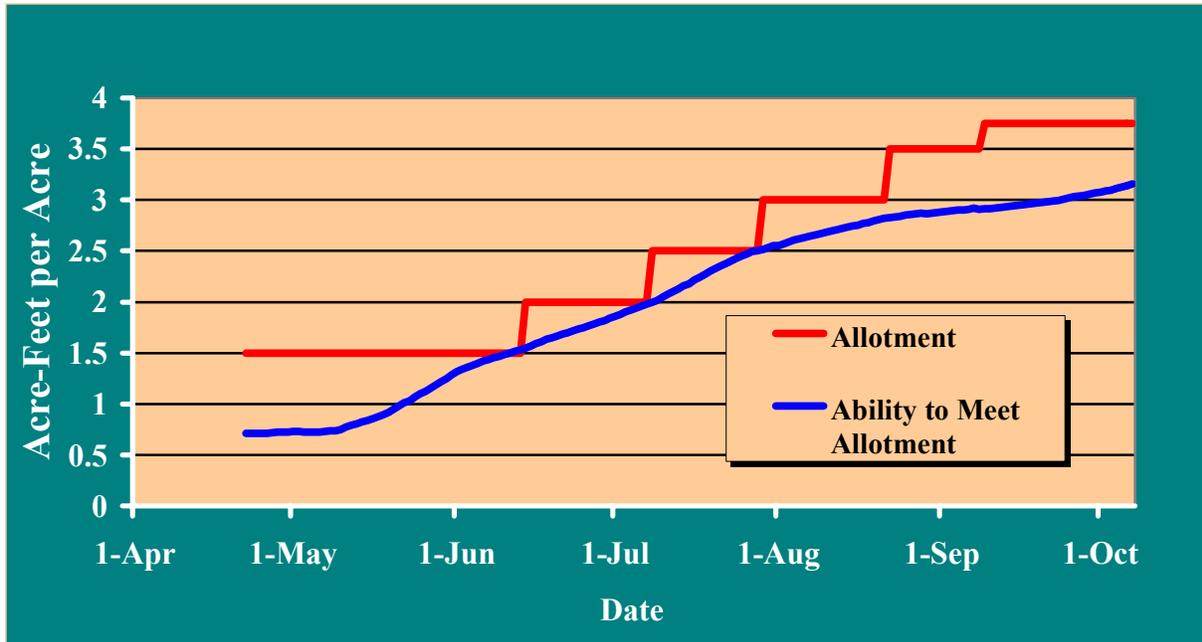
**Figure 7. 2005 April 1<sup>st</sup> through October 31<sup>st</sup> natural flow of the Wind River**

Oddly corresponding with the first cutting of hay, temperatures in the last half of June climbed into the eighties, reaching 90 degrees Fahrenheit on June 22<sup>nd</sup>, and little precipitation fell during that period. On the 23<sup>rd</sup>, the natural flow of the Wind River peaked for the year at 7,174 cubic feet per second in response to the temperature peak one day earlier. By the end of June, the Wind River Basin snowpack had been depleted effectively to zero.

Early July 2005 was reminiscent of 2001, with temperatures in the 80's and 90's and little if any measurable precipitation being recorded. However, temperatures remained slightly below normal for the month, averaging 88.9 degrees Fahrenheit, with the temperature peaking for the year at 97 degrees on July 15, 16, 20, and 21. Precipitation recorded for the month totaled 0.85 inches. The District reached its ability to deliver the 2.00 acre-feet per acre allotment on July 9<sup>th</sup> and the Commissioners authorized an allotment increase of 0.50 acre-feet per acre on that day, bringing the total allotment for the season to 2.50 acre-feet per acre. As the end of the month

approached, water deliveries coupled with increased stored water supplies made it possible for the District to deliver the 2.50 acre-feet per acre allotment, and the Commissioners authorized an allotment increase to 3.00 acre-feet per acre on July 29<sup>th</sup>.

The month of August once again was cooler than normal. The high temperature recorded for the month was 90 degrees and occurred on the 7<sup>th</sup>. Measurable precipitation fell on 5 days in August, but only totaled 0.12 inches. The Commissioners raised the irrigation water allotment to 3.50 acre-feet per acre on August 22<sup>nd</sup> even though the District had not reached its ability to meet the previously set allocation.



**Figure 8. 2005 allotment changes vs. ability to service allotment**

### *End of Season and Yearly Totals*

At the beginning of September, temperatures were still in the 80's and no significant rainfall had occurred. The Commissioners met in regular session on the 8<sup>th</sup> and decided to set the end-date for irrigation water deliveries for October 7<sup>th</sup>, one week longer than usual. At that meeting, the Commission also increased the allotment to a final allocation of 3.75 acre-feet per acre, the greatest amount since the 1999 irrigation season (4.00 acre-feet per acre).

Overall delivery efficiencies improved in 2005 as compared to 2004, despite the District being required to move its Wyoming Canal gauging station 3.5 miles upstream and above 13 turnouts that had traditionally not been counted in the District's total diversion amount by the State Engineer's Office. At least partly, the increased efficiency was due to the diligence of the District's Water Delivery Team. The Team changed the traditional operation of the Pilot Canal, resulting in less waste of carriage water in that part of the system, while reducing the percentage of water that is "booked" as unaccounted-for-loss through more accurate monitoring of District water delivery records. As one would expect, efficiencies suffered early in the year due to low irrigation water demand caused by the cooler temperatures and rainfall experienced in April,

May and early June. Overall efficiency totaled 55.59 percent (as compared to 50 percent in 2004), operational waste accounted for 18 percent of water lost (the same as in 2004), and water unaccounted for amounted to 26.41 percent of the total (as compared to 32.0 percent in 2004) (See Appendix D. 1999-2005 Water Use Data, Midvale Irrigation District).

At the conclusion of the irrigation season on October 7<sup>th</sup>, the District had delivered a total of 200,430 acre-feet, averaging 2.71 acre-feet per acre. Stored water supplies in Bull Lake and Pilot Butte Reservoirs totaled 82,629 acre-feet of which 67,450 acre-feet was available for use by the District.

By the end of the year, usable stored water supplies and snowpack levels were not as encouraging as the year before. On December 31<sup>st</sup>, stored supplies had increased to 100,403 acre-feet, resulting in an 11,449 acre-feet increase in useable supplies that totaled 78,899 acre-feet. On that same date, Wind River and Bull Lake Creek Basin snowpack levels measured only 82.3 and 62.89 percent of respectively.

## **CROP AND FORAGE-FOR-LIVESTOCK PRODUCTION**

### ***Alfalfa and Other Hay***

Acreage dedicated to the production of hay continues to be the predominate form of irrigated land usage within the area served by the District. Total acres utilized for hay production increased in 2005 to 46,234 acres (63 percent) as compared to 42,709 acres (57.8 percent) in 2004, and brought in an estimated \$12.18 million in gross returns to District patrons in 2005, as compared to \$13.29 million one year ago.



**Figure 9. 2005 District barley crop**

Alfalfa yield reported by District producers was down considerably compared to a year ago. This year saw only 3.9 tons per acre harvested as compared to last years record 4.77 tons per acre. Alfalfa prices stayed level with last year at \$70.00 per ton, resulting in gross returns of \$11.0 million in 2005. Some producers reportedly lost longtime customers in distant states due to extremely high shipping costs associated with record high diesel fuel prices.

### ***Barley***

Barley grown in the District (fig. 9) did not fair as well, price wise or yield

wise, in 2005 as compared to one year ago. Producers reported planting and harvesting barley (feed and malting types) on 2,179 acres with a 89.8 bushels per acre yield average.

Prices for barley were down slightly as compared to 2004. Malting barley and feed barley brought \$3.00 per bushel and \$1.63 per bushel respectively. Gross revenues reported for the District barley crop was \$536,138 in 2005, down from \$925,490 one year ago.

### ***Ensilage***

Acreage planted for ensilage production remained relatively stable in 2005, although yield per acre varied dramatically from the previous growing season. Water users reported that a total of 3,219 acres of cropland were utilized to raise ensilage, as compared to 3,155 acres one year ago. Yields reported for this year's ensilage crop were down almost 40 percent compared to last year, producing only 20.9 tons per acre.

Prices for the 2005 ensilage crop were reported to be up by \$2.50 to \$22.50 per ton, although producers remained concerned that the dumping of wet sugar beet pulp on the market might drive prices down in the winter. The District's ensilage crop contributed \$1.5 million in gross revenues to the overall economic picture.



**Figure 10. Sugar beet field east of Pavillion, Wyoming**

### ***Sugar Beets***

Sugar beet producing acres (fig. 10) were down and estimated 13 percent to 2,178 acres in 2005, but continue to be the second highest gross revenue generator of all crops grown in the District. A delay in harvest this year reportedly increased sugar content and therefore increased crop value. Producers reported an average yield of 22.1 tons per acre, down slightly from 2004, and a price of \$42.00 per ton. Sugar beets totaled \$2.02 million in gross revenues (11 percent of total District crop value) in 2005.

### ***All Other Crops, Acreage Fallowed, and Acreage Not Harvested***

An additional 17,091 acres were utilized to raise other crops in the District, in the 2005 irrigation season. These crops, including beans, hard corn, irrigated pasture, sunflowers, oats, wheat, and potatoes, returned \$1.73 million in gross revenues to District patrons.

A total of 2,212 acres were reported fallowed in 2005, down by almost one half as compared to 2004 (3,970 acres). Acreage planted but not harvested totaled 638 acres (See Appendix E. 2005 Midvale Irrigation District Crop Production and Estimated Value).

## **OPERATION AND MAINTENANCE ACTIVITIES**

### ***Canal, Lateral and Open Drain Cleaning***

The job of keeping canals, laterals, and open drains clean is an important and ever-present task associated with the maintenance of the District's water conveyance system. Prior to every irrigation season, the District attempts to burn weeds on as many canals and laterals as the weather and time will allow. In 2005, warmer than normal temperatures and a lack of moisture allowed more burning days than the District had seen in a number of years. Throughout the remainder of the year, District crews were able to spot clean 24 canals and laterals and 20 open drains (See Appendix F. 2005 Cleaning performed on Canals, Laterals and Open Drains).

### ***Canal Bank Stabilization and Erosion Control***

Stabilization of canal banks is usually performed for one of two reasons: 1) "armoring" freshly cleaned banks, or 2) cases where unexpected erosion events have occurred (most often associated with overtopping of canals caused by weeds plugging waterways). In 2005, District crews utilized cobble rock, yellow gravel and pit run gravel in sixteen locations to prevent and/or control erosion of water conveyance facilities.



**Figure 11. Realignment of the 2<sup>nd</sup> Division of the Wyoming Canal, West of Pavillion.**

The District continued the realignment work of the 2<sup>nd</sup> Division of the Wyoming Canal, immediately upstream from the old Pavillion Main check structure (fig. 11). Many years of over excavation by draglines during the cleaning process created a situation where water flows in the canal were reduced below designed rates because of the over-widening of the canal. This resulted in increased silt deposition along extended reaches of the canal and increased annual cleaning costs for its removal. The District's Assistant Manger, Dick Johnson, utilized original design specifications of the canal, to reestablish the correct width of the canal and thereby reduce the cleaning effort.

A list of canals, laterals and open drains where bank stabilization and erosion

control efforts were directed can be found in Appendix G of this report.

### ***Concrete Work***



**Figure 12. Wyoming Canal floor replacement**

In 2005, the District placed 224 cubic yards of concrete in the construction of twenty various types of projects. The largest placement of concrete involved the replacement of a portion of the Wyoming Canal floor lining immediately downstream of the canal gates at Wind River Diversion Dam (fig. 12). Years of deterioration and frost heave of the lining forced the District to remove a significant area of the lining and replace it with 80 cubic yards of new concrete.

contractual terms for repayment of materials and/or services. A complete list of the concrete work performed by the District can be found in Appendix H of this report.

### ***Pipe Materials Installed***

All but one of the pipelining jobs undertaken by District crews in 2005 was performed under contract for individuals or companies at their expense. The exception was the piping of the waste way at the end of the Wyoming 18.0 Lateral where 30 feet of 15-inch Corrugated Metal Pipe was installed.

The largest pipeline project involved the piping of the downstream-most 1,300 feet of the Wyoming 25.4 Lateral (fig. 13). Water users Vince Dolbow and Dan Pince and the EnCana Oil and Gas company negotiated a deal to pipe the lower part of the lateral, at EnCana's expense. The job involved the construction of a dual 12-inch PVC pipeline (each serving the two



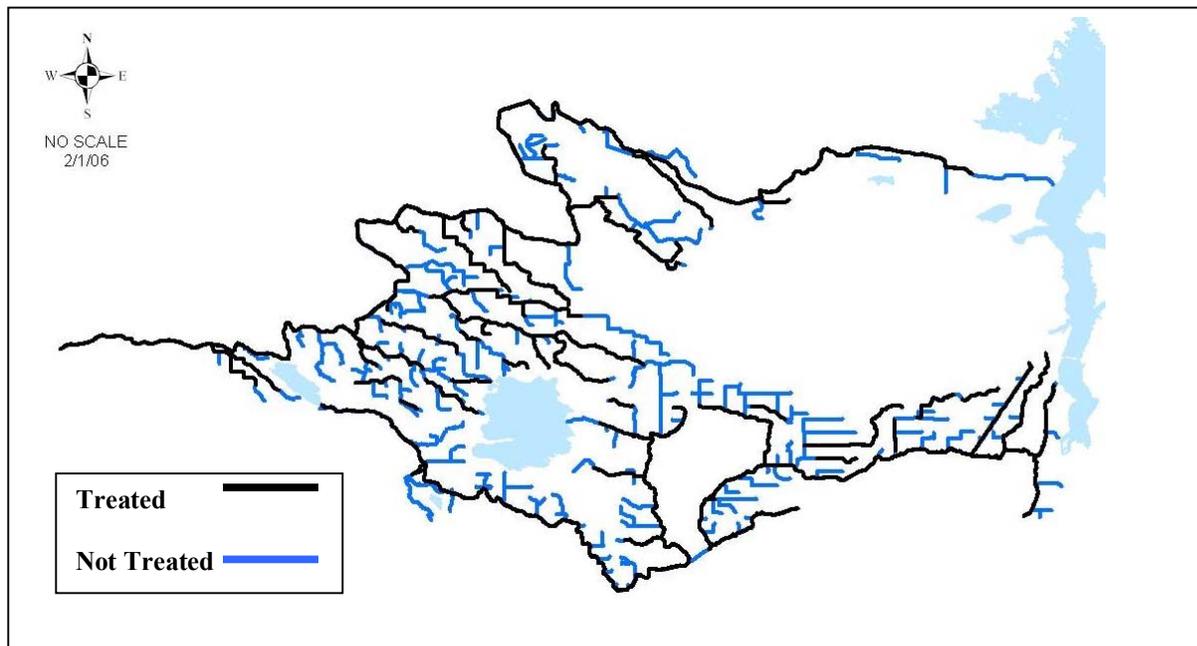
**Figure 13. Wyo 25.4 pipeline**

water user's irrigated lands individually), and the piping of a waste way for the lateral. The project included the construction of a "triple barrel" concrete division box that incorporated measuring devices.

The District's installed 7,018 feet of pipeline materials in 2005 (See Appendix I. 2005 Pipe Materials Installed).

### **Weed Control**

*(The following Weed Control report was submitted by Mr. John L. (Lars) Baker, Supervisor, Fremont County Weed and Pest Control District (edited by Midvale Irrigation District), with whom Midvale Irrigation District contracts for the majority of weed control services.)*



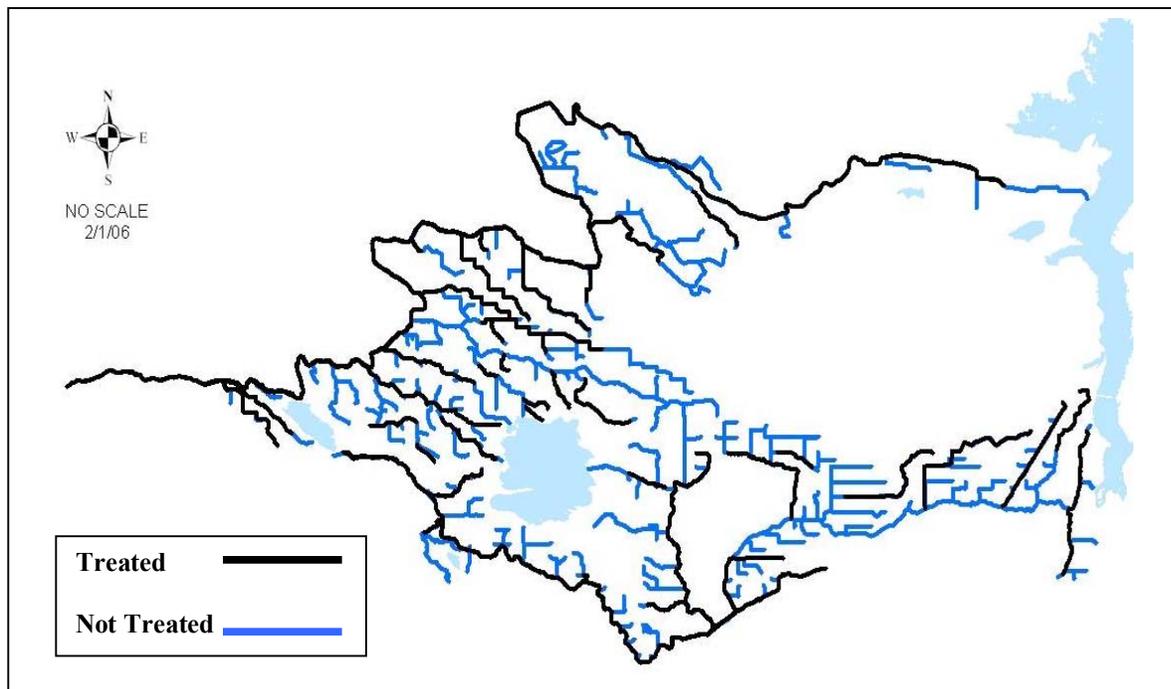
**Figure 14. Locations of 2005 vegetative weed treatment**

Weed control work went well this last year with Paul Bush as ramrod. The main target species of the vegetative management effort are kochia, Russian thistle, and sweetclover. The goal is to stop weed growth early to improve line of sight from the road to the water and reduce dead weeds that accumulate in the canal during the winter. We also try to keep all structures clear of weeds with residual herbicides. I hope that it pays in reduced operating costs during the summer.

Vegetation management is often problematic due to weather. When it is dry, the weeds mature early and become resistant to the herbicides. When it is wet we have trouble negotiating the canal roads. The last four years we have tried to concentrate on the canal system with several trucks to get the work done in the shortened window of opportunity. We try to get to all the ditches where there is a good road on both sides first, then the ditches with one road (fig.14). We treat from the tire track to the water everywhere and use a center boom to get the roadbed where it is weedy. We started work on May 16th and ended control work on annual weeds on the 16<sup>th</sup>

of June, with some touchup work from September 7<sup>th</sup> to the 14<sup>th</sup>. There was a total cost to Midvale of \$12,008.28. This winter we are constructing an articulating boom that will allow us to reach across the canal to treat the far bank with reduced labor costs.

The noxious weed program began June 9<sup>th</sup>, treating Russian knapweed on the Wyoming and Pilot Canals. Russian knapweed is very hard to control, especially at that time of year. There are some very stubborn patches north of Pavillion that we treat twice a year. During 2004, our focus was to do a complete job of noxious weed control on the entire Midvale right of way starting



**Figure 15. Locations of noxious weed treatment**

with the Wyoming Canal. Little noxious weed work was done on the laterals, but in 2005 we returned to the laterals treating most of the major ones (fig. 15). Noxious weed control for 2005 cost Midvale \$22,943.34. Fremont County Weed and Pest cost shared an additional \$8,654.50 on herbicides applied. That increases the weed control effort to \$43,606.12 for the year.

During 2005, Lateral [P] 4.2 was treated with a mixture of Karmex and Roundup to provide bare ground along the lateral and associated roads for \$3,156.52. This project is in addition to our regular contract. The total weed control effort on the Midvale Canal system for 2005 amounted to \$46,762.64. A listing of vegetative and noxious weed treatment locations and expense can be found in Appendix J of this report.

### ***Maintenance Shop Activities***

As the District's equipment fleet continues to age, more and more pressure is placed on the crew of the Maintenance Shop to keep us going. Although the shop crew is never lacking for repair work (See Appendix K. Maintenance Shop Activities), there were three repairs of significant nature performed in 2005. First, the District's 1989 John Deere 690D Excavator underwent a

complete rebuild of its undercarriage. Next, our 1997 CAT Rubber Tired Excavator began leaking oil from the front drive wheel hubs, requiring the hubs and associated parts to be replaced. Last, the transmission finally wore out in the District's 1985 CAT 130G Motorgrader, requiring it to be removed, be rebuilt by Wyoming Machinery, and be reinstalled by our shop crew.

### ***Other Operation and Maintenance Work Performed***

Other work performed by the District in 2005 can be found in Appendix L of this report. Such activities include, but are not limited to: reassembly of a metal building traded to the District by Lloyd Dechert, sewer jetting of underground drains (31 locations), grading of canal bank roads (75 man-days), flushing activities, and installation of Bureau supplied security gates at Pilot Butte Dam (fig 16).



**Figure 16. Security gate installed on Pilot Butte Dam**

### **CONSTRUCTION-FOR-HIRE**

The District is blessed to have a number of individuals in its employ that have the experience and knowledge to handle a number of types of construction jobs as well as a significant fleet of vehicles and equipment with which to perform such work. Construction performed for the public, at the individual's expense, assists the District in reducing overhead costs as well as generating profit and therefore helps in keeping annual assessments as low as possible. District staff and equipment were utilized to perform construction work for others on a total of 32 different projects throughout the year (See Appendix M. Construction-for-Hire). Invoices for construction-for-hire projects totaled over \$115,000 in gross revenue.

## **OTHER DISTRICT PROJECTS AND ACTIVITIES**

*(The following reports on the Midvale Conservation Program, the Hidden Valley Pipeline, and the Wind River Diversion Dam Gearbox Replacement were submitted by Brad Anderson, Anderson Consulting Engineers (ACE)).*

### ***Midvale Conservation Program***

The Midvale Conservation Program is intended to provide the Midvale Irrigation District with a “master plan” of improvements to its existing facilities and infrastructure. This master plan is intended to provide the District with a schedule of projects that will:

- (a) provide for the systematic rehabilitation/replacement of its existing structures;
- (b) increase the water supply through conservation;
- (c) improve the management and delivery of irrigation water to its water users; and
- (d) reduce operation and maintenance costs.

In addition, the Plan will include the prioritization of projects with an implementation period of 20 years. Development of a plan of this nature will promote identification of District personnel required to support construction, identification of District vehicle and equipment requirements, as well as submittal of timely and comprehensive permitting requirements to support construction. In addition, potential sources of funding and partnering of projects (with BOR or other interested entities) would also be facilitated by preparation of a master plan of potential improvements.

It is anticipated that the “District Master Plan” of improvements will consist of several components. These components will include, but not be limited to:

- rehabilitation/replacement of existing structures;
- lining of canal/laterals to reduce seepage;
- conversion of laterals to pipelines (both gravity and pressurized) to reduce seepage and operational waste;
- incorporation of hydropower benefits, where applicable;
- installation of measurements structures, where necessary to facilitate operation and management of water deliveries;
- installation of re-regulation storage reservoirs to reduce operational waste;
- automation of headgates, regulation storage reservoirs, diversions, etc. to facilitate improved operation and management of water deliveries;
- rerouting/reconfiguration of existing facilities to promote conservation, water management and potential hydropower;
- implementation of measures to provide consistency and quality control in water delivery measurements and recording; and

Notice to proceed with the project was received from the Wyoming Water Development Commission (WWDC) June 15, 2003. The project is scheduled for completion in two phases. The initial work effort focused on those structures and improvements associated with that portion of the Midvale Irrigation District that is served by the Pilot Canal delivery system, Pilot Butte Reservoir, and Ocean Lake. The second phase is directed to the structures and improvements associated with the service area associated with the Wyoming Canal delivery system and Bull Lake. The project was initially scheduled for completion by June 30, 2005. The contract was extended to December 31, 2006 to provide for more detailed assessment of the opportunities for system automation and to identify additional opportunities to utilize discretionary funding.

### ***Project Status***

To accomplish the goals and objectives stated in the Project Summary, the following work has been completed to date.

**Existing Data Collection:** Collection and review of pertinent information associated with the operation, management and maintenance of the District water supplies and facilities has been initiated. This information includes documents published by the BOR, NRCS, USGS, SEO, WWDC or other agencies; unpublished information and records maintained at various federal, state and local agencies; data and records available at the Midvale Irrigation District; existing reports on the potential for hydropower generation within irrigation districts; and available spatial data. Some of the information gathered and incorporated into the project during this effort includes:

- Land classification mapping was obtained from the BOR in Autocad format;
- Recent inspection reports the Wyoming and Pilot canal systems were obtained from the BOR; and
- Digital mapping of the District delivery system was obtained from the Fremont County Weed and Pest department.

In addition, ACE is compiling and reviewing engineering drawings in District files in an effort to add additional information to the study and to verify some of the field data that has been collected.

**Midvale Irrigation District Geographic Information System (GIS):** An extensive Geographic Information System (GIS) is one of the deliverable products being generated by this project. The GIS is a computer-based mapping system that incorporates all of the spatial data (ditch maps, structure locations, etc), base mapping (topographic maps, aerial photographs, etc), and associated databases (structure condition, ditch types and capacities, etc.). Figure 17 shows an example of information included within the GIS. This figure displays the various types of canals and laterals utilized throughout the District. Upon completion, the GIS will enable the District to evaluate its current condition, track progress of future improvements, and generate maps for a wide variety of needs. The final GIS product will include a wide range of mapping data including: land ownership, land classification, ditch locations, roads, political boundaries, public land survey system, irrigation system inventory (headgates, diversions, measurement structures,

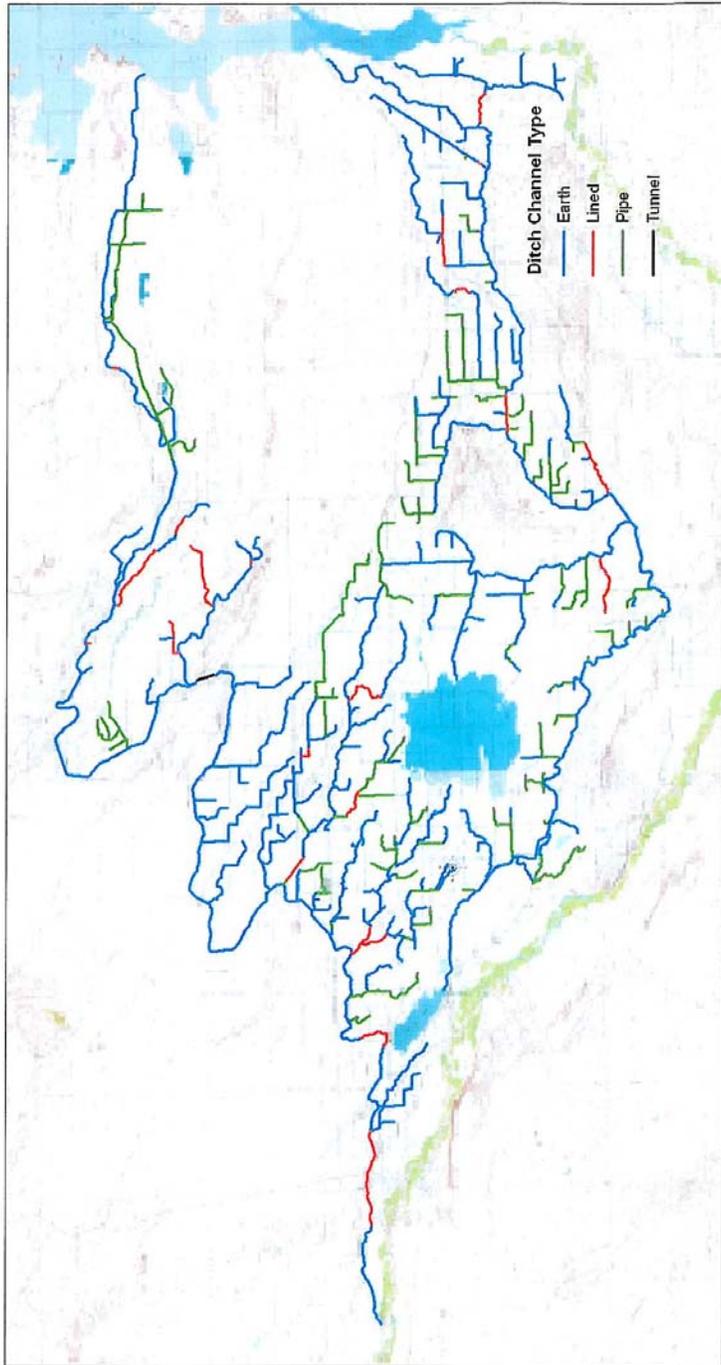


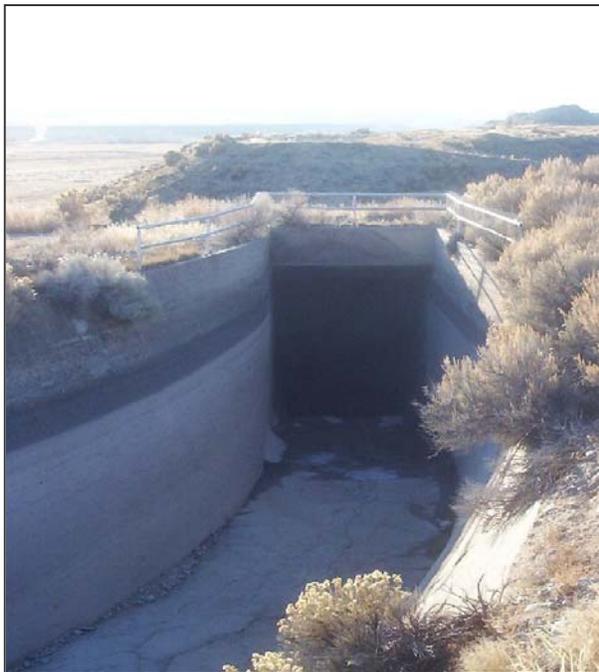
Figure 17. Canal and lateral types within the Midvale Irrigation District.

siphons, tunnels, chutes, drop structures, etc), general soils, structural geology, vegetation, slope, digital orthophotographs, color infrared photography, topographic mapping, and more.

**Irrigation System Inventory:** As reported in the 2004 Annual Report, an inventory of the structures on the Wyoming Canal and Pilot Canal was completed including all structures associated with the laterals. The inventory included an assessment of the existing condition, photographic documentation, and determination of remaining design life. The results of this work effort have been incorporated into the project GIS.

This effort resulted in the mapping and evaluation of nearly 6,000 structures including: diversions, farm turnouts, measurement devices, bridges, culverts, siphons, lined reaches, pipelines, siphons, drop structures, check structures, splitter boxes, and other canal/ditch-related structures. For each structure, a Global Positioning System (GPS) location was acquired, its condition and life expectancy assessed, and photographs taken. This information is currently being incorporated into a District-wide GIS which will enable management to determine which structures are in need of rehabilitation or replacement (and those NOT in need of work), what time frame with which the work should be completed, and where system improvements may be the most beneficial.

On the whole, the inventory found that the majority of the structures within the District are generally in good condition and should serve us for the next 20 years or more. However, as would be expected with a system as extensive as that operated by the District, there are problems



**Figure 18. Siphon inlet at Wyoming Canal Mile 4.5**

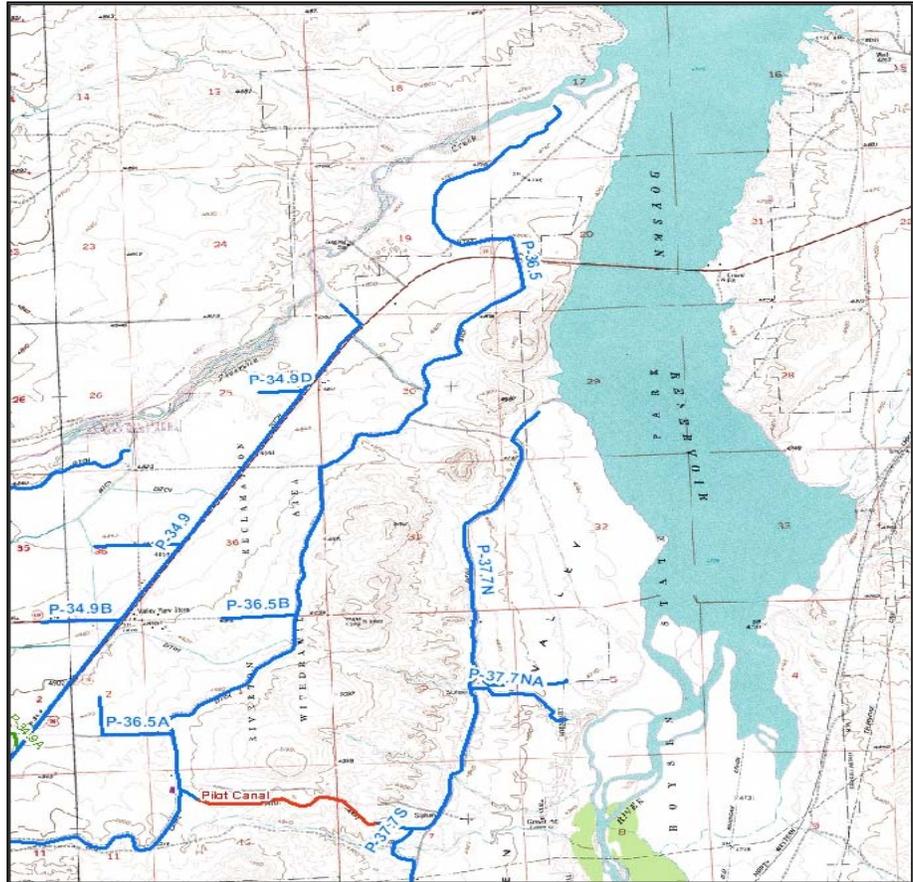
in need of immediate attention. Initial review of the databases indicates that approximately 45 structures on the Wyoming Canal and Pilot Canal are rated as either “failing” or “poor” condition. With respect to the laterals, 208 structures were identified with a condition rating of either “failing” or “poor”.

Rehabilitation planning efforts for these structures have included development of a procedure to prioritize the improvements. The scheme to identify those structures having the highest priority for rehabilitation involved an asset priority (number of acres lost to irrigation if the structure failed) coupled with the relative cost of rehabilitation. As expected, those structures in need of rehabilitation that are located on the Wyoming Canal above Pilot Butte Reservoir have been identified as the highest priority. The structures identified for rehabilitation in this reach of the Wyoming Canal typically include siphons or concrete

canal lining. Figure 18 presents an illustration of the siphon at Mile 4.5 that was determined to be in ‘poor’ condition.

**Seepage Investigations:** Seepage investigations and water budget evaluations have been completed on the main canal and laterals associated with the Pilot and Wyoming Canals. The results have provided an indication of locations where potential seepage mitigation measures may be beneficial. Each lateral off each canal was evaluated individually using a water budget approach. Many of the open ditches showed no losses while others exceeded as much as 42 percent.

The main canals were evaluated as well. The Pilot Canal was evaluated using standard gauging techniques and the results were somewhat inconclusive. Variations in canal flow may have masked or exaggerated measurements. However, the data indicate that losses in the Pilot Canal may approach 11 percent in some locations. On the Wyoming Canal, lessons learned during the Pilot Canal studied were applied and a water budget approach was utilized. The District participated in the study by holding flows constant during the study period that greatly improved the quality of data. Results of this study show that



**Figure 19. Pilot Lateral 36.5 location map.**

the canal losses approximately 11 percent within Division 1, 12 percent within Division 2, and approximately 8 percent for the remainder. Downstream of the Badger Wasteway, losses are approximately 20 percent. These results must be viewed in relation to the relative discharge carried within these reaches but they do indicate that significant conservation savings could be achieved through ditch/lateral improvements.

With the seepage information, the rehabilitation planning efforts focused on the potential for conversion of the open ditches to pipelines. The factors/consideration utilized to screen each lateral included length of open ditch, capacity, potential seepage as a percentage of capacity, elevation drop as a means to assess pressurized flow potential, and cost factor as a measure of capacity and length. In general, those laterals that convey in excess of 40 cfs were not initially considered given the potential cost to convert these laterals into pipelines. The results of the

initial screening effort identified those laterals below as the highest potential for pipeline conversion:

- Wyoming Canal Lateral WY-18.0
- Wyoming Canal Lateral WY-6.3
- Wyoming Canal Lateral SB.2
- Wyoming Canal Lateral WY-15.1
- Pilot Canal Lateral P21.1

Another example of a potential pipeline conversion project is the Pilot Canal P36.5 Lateral illustrated in Figure 19.

**System Automation:** During the summer of 2005, a radio-telemetry feasibility study was completed in support of the on-going conservation project sponsored by the WWDC. The results of the study confirmed that a land-based, two-way radio system provides for reliable communications to support the District's proposed automation system. The location of the automation sites was confirmed during the completion of the feasibility study. In addition to the computer hardware and software associated with the base station that will be located in the District office, the automation sites presented in Appendix N have been identified.

As indicated in Appendix N, the automation sites include Bull Lake, Wind River Diversion Dam, and Pilot Butte Reservoir as well as automation of specific check structures, wasteways, canal gages, and the Sand Mesa Pipeline. Figure 20 provides an illustration of a typical check structure identified for automation. Conceptual plans and cost estimates were prepared in support of the automation of the sites listed in Appendix N. The total project cost for the system automation was estimated to be \$810,000. An application for funding the system automation



**Figure 20. Typical gate structure suitable for gate control and water level monitoring**

was submitted to the WWDC in November 2005. The application requested funding for the materials in the amount of \$405,000 and should be authorized by the 2006 Wyoming Legislature as part of the Omnibus Water Bill-Construction.

**Sand Gulch Re-Regulation Reservoir:**

The Hidden Valley Pipeline Project recommended the construction of the Sand Gulch Re-regulation Reservoir with an estimated construction cost of \$2.245 million. Midvale subsequently requested Level II funding through the WWDC to further investigate:

geotechnical issues, permitting, dam safety, land acquisition, conceptual design and cost estimates. Funding of

this effort was approved by State 2004 legislative action and the project initiated. To date, the following tasks have been completed: investigative drilling of the foundation, investigation of borrow sources, and sample testing. A report of the geotechnical investigation was completed in

February 2005. Wetlands were identified at the project site and a permitting document (draft) was prepared in the summer of 2005. Dam safety issues were identified and evaluated through the completion of a hazard classification study completed by Anderson Consulting Engineers. Conceptual design and cost estimates are presently being revised and will be incorporated into the project report for the Midvale Conservation Program.

### **WIND RIVER DIVERSION DAM GEAR BOX REPLACEMENT**

Replacement of the gear box assemblies at the Wind River Diversion Dam was authorized by the 2005 Wyoming Legislature as part of the Omnibus Water Bill-Construction. The authorization identified funding of \$138,000 for the replacement of ten gear box assemblies (fig. 21).

Anderson Consulting Engineers has recently developed material procurement documents for the gear box replacement project. The procurement documents have been reviewed by the District and the WWDC and are presently being revised. Solicitation of bids will be



**Figure 21. Diversion Dam Gear Box Assemblies**

forthcoming in February 2006 and construction associated with the project initiated in the Spring of 2006.

### **HIDDEN VALLEY PIPELINE PROJECT**

Following the completion of the Hidden Valley Pipeline Project, the District applied for funding of pipeline materials for the Hidden Valley Pipeline in the amount of \$1.474 million. In 2004, funding of the materials was approved and the District was notified to proceed with final design and construction.

Final design drawings for the pipeline were completed by the NRCS in the summer of 2005. The final design package was reviewed by the WWDC and Anderson Consulting Engineers was requested to develop material procurement documents. The material procurement documents were completed in September 2005 and submitted for review by the District and the WWDC.

During the review of the procurement documents, it was noted that the cost of the pipeline materials had substantially increased since completion of the Level II Hidden Valley Pipeline Project report in November 2003. Anderson Consulting Engineers was asked to determine the magnitude of the increase in materials cost and found that the pipeline costs had increased by 100%, largely a result of an increase in petroleum prices. The increase in pipe materials necessitated an application for additional funding (\$1.116 million) for the project that was

submitted to the WWDC in November 2005. Approval for the additional funding has been obtained from the WWDC and is expected to be authorized by the 2006 Wyoming Legislature as part of the Omnibus Water Bill-Construction.

With the increased funding authorization, the procurement contracts will be finalized and the materials obtained for the initial phases of the pipeline in the Spring of 2006. Construction of the initial phases of the project will commence thereafter.

## **LEGAL ACTIVITIES**

*(The following Legal Activities report was submitted by Mr. Jay Vincent, esq., with whom Midvale Irrigation District contracts for the District's legal services.)*

### ***Summary:***

In addition to the day-to-day legal activities, the commissioners, staff and attorney have devoted significant amounts of attention to three matters of importance to Midvale. The most important developments involve the adjudication of the primary direct flow water right for your land from the Wind River (Permit No. 7300). The second important issue facing Midvale concerns the cases involving the "Tripartite Agreements". You will recall that Midvale filed two lawsuits to correct misinterpretation of the Tripartite Agreements which impacts Midvale's right to divert direct flow water from the Wind River. The third issue that has arisen since the last annual meeting involves a demand by the Bureau of Indian Affairs, on the behalf of the Eastern Shoshone and Northern Arapaho Tribes, that Midvale commence paying royalties for use of sand and gravel taken from pits developed by the Bureau of Reclamation and Midvale. The following is a more detailed review of these legal activities.

### ***Adjudication of Permit No. 7300:***

The end of the legal process of adjudication of the direct flow water rights for Midvale from the Wind River is now in sight. The personnel of the Wyoming State Engineer, the Bureau of Reclamation and Midvale, have been working on this process for nearly fifteen years. The process involved the review and inspection of the irrigated land on substantially each tract of land in Midvale (approximately 74,000 acres). The following is a brief summary of the process, the status of the process and what the Commissioners and staff believe will be the result of the process.

As we noted in last year's report, the District Court of Washakie County, in the *Big Horn General Stream Adjudication*, will perform the adjudication of the water right<sup>1</sup>. Some of you are probably aware; the staff of the Wyoming State Engineer and Board of Control normally handles the award of water rights in Wyoming. In order to obtain jurisdiction to adjudicate ("quantify") federal water rights, including the water rights of the Tribes of the Wind River Indian Reservation, the State of Wyoming had to file the *Big Horn General Stream Adjudication* in court, rather than by filing with the state agencies. A consequence of the filing of the general

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<sup>1</sup> Midvale's primary source of water supply is from the Wind River that is a tributary of the Big Horn River System.

adjudication was the law then required the adjudication of all rights in the Big Horn River system, including Midvale's portion of Permit No. 7300. Midvale's portion of Permit No. 7300 is one of several thousand water rights that the Court will "adjudicate" in the *Big Horn General Stream Adjudication*. The Court has completed the quantification of most of the water rights except some of the larger projects such as Midvale, Riverton Valley Irrigation District and LeClair Irrigation District.

The State of Wyoming issued Permit No. 7300 in 1906 to a private ditch company. Around 1912 the private company failed after developing portions of Riverton Valley Irrigation District and LeClair Irrigation District. Later that decade the Bureau of Reclamation obtained the rights for the Midvale portion of Permit No. 7300. The Bureau of Reclamation then began the huge task of development of Midvale (the Riverton Reclamation Project). The gradual development of Midvale spanned nearly sixty years.

The adjudication process will perfect Midvale's right to divert water and "attach" the water rights to the land. Perfection of the water right will relate back to the issuance of the permit in 1906. The adjudication process will involve closing Permit No. 7300 from development of additional acreage and elevating the permit to a permanent "certificated" water right. Once the Court completes the adjudication process, a certificate will be issued and recorded in the real property records of Fremont County.

Midvale and the Bureau of Reclamation carefully reviewed the irrigated acreage served by Permit No. 7300 on several occasions over the past ten years. You will recall that the Midvale staff asked many of you to come to the office to discuss your land. This review also involved reclassification of land under Reclamation law. It is important to understand that it was necessary for each tract of land to qualify under both federal Reclamation law and Wyoming law concerning the water rights. The Bureau of Reclamation, who holds Permit No. 7300 until it is adjudicated, would only allow the Midvale staff to submit acreage for adjudication in the *Big Horn* case which also qualified as pay-class land under Reclamation law. In most instances, federal law is much stricter than state law in terms of the qualification of land for a water right.

In 2003, the Bureau of Reclamation and Midvale submitted the irrigated acreage under Permit No. 7300 for adjudication to the State Engineer's office. The Bureau and Midvale asked the Court to adjudicate and award water rights for 72,211.7 acres of land within Midvale. The Court appointed the staff of the State Engineer's office to help the Court investigate claims for water rights such as Midvale's claim. As many of you will recall, representatives of the State Engineer's office then investigated and inspected Midvale land to verify irrigation over approximately the past nine years. Tom Flack, a consultant hired by the State Engineer to finish the investigation process, performed most of this investigation in 2004 and 2005.

The State Engineer's investigation is now complete and the general adjudication staff submitted a report and recommendation to the Court late last summer. The filing of the report and recommendation of the staff started the adjudication process. You will remember that the Midvale attorney, Jay Vincent, sent a notice explaining your right to object to the State's report and recommendation last fall. This notice from the attorney was dated July 15, 2005, but was not mailed by the State until sometime in September. The State then began publication of notice

in The Ranger and the Casper Star-Tribune that the State Engineer's report and recommendation had been filed with the Court and a deadline for filing objections against the report and recommendation.

You will recall that we were aware of the results of the State Engineer's report and recommendation at the annual meeting last year and that the Midvale Board of Commissioners were pleased with the results. Of the 72,211.7 acres submitted for adjudication by the Bureau and Midvale, the State Engineer recommended that 71,671.2 acres receive a permanent water right and that 540.5 acres be eliminated as they were not irrigated or did not qualify for a permanent water right for some other reason.

On January 24, 2006, the Special Master appointed by the Court, Ramsey Kropf, held a scheduling conference by telephone concerning the eight objections. Representatives of the State Engineer's office, the Bureau of Reclamation, U.S. Department of Justice, the Eastern Shoshone and Northern Arapaho Tribes, attorneys for objecting parties, some of the objecting parties and Midvale, participated in the scheduling conference. The Special Master set dates for filing pretrial memoranda and the pretrial hearings for the eight objections. The pretrial hearings will occur over the next four months. Trial of the objections, if any, will be scheduled at the pretrial hearings.

During the scheduling conference, one of the attorneys for the State Engineer said that some of the objections could be settled favorably for some of the water users. Midvale's attorney advised the objecting parties that Midvale was not resisting their claims and offered to review the objections with the water users. It was noted that the Midvale Board of Commissioners want each landowner to receive as much qualifying acreage as possible because it would serve to increase or preserve Midvale's assessable land base. Midvale is a non-profit irrigation district whose operations are funded almost exclusively by collection of assessments to its landowners for their irrigable acreage.

In summary, the end of the adjudication process is finally in sight. Except for a few relatively minor problems that may be settled without trials, it appears that the adjudication will reach a favorable conclusion for Midvale and nearly all of the Midvale landowners.

#### ***Tripartite Agreement Litigation:***

Two years ago we informed you that the Commissioners were forced to take legal action to protect the water rights for Midvale. The Commissioners have continued to try to settle the dispute with the Commissioners of LeClair Irrigation District and Riverton Valley Irrigation District. The Midvale Commissioners are still hopeful that they will be able to reach an agreement with the other districts that protects the water rights for Midvale. The following is brief summary of developments in the litigation.

As you will recall, during the 2003 irrigation season, Riverton Valley Irrigation District ("RVID") and LeClair Irrigation District ("LeClair") disagreed with the new Superintendent's views concerning the diversions of water between Midvale, RVID and LeClair. As you probably know, all three irrigation districts were developed primarily under Permit No. 7300. RVID and

LeClair filed an appeal of the Superintendent's determination concerning the water diversions of the three irrigation districts to the State Engineer. The State Engineer issued an opinion on March 4, 2004, which misinterprets and violates Midvale's rights under Permit No. 7300, the 1945 Wyoming Surplus Water Act and the so-called "Tripartite Agreements".

The apparent point of contention is how water is divided among the irrigation districts under Permit #7300 and the Wyoming Surplus Water Act. The Surplus Water Act allows up to 1 cfs per 70 acres for water rights with a priority of March 1, 1945, or earlier, in addition to the basic appropriation of 1 cfs per 70 acres for irrigation. Midvale believes that the other two districts should be allowed their first cfs per 70 acres in priority ahead of Midvale [in accordance with the Bureau's and Midvale's interpretation of the "Tripartite Agreements"] and that the 2<sup>nd</sup> cfs per 70 acres should be divided proportionally between all three districts in accordance with Wyoming Surplus Water Act. In contrast, one or both of the other districts feel that the Tripartite Agreements grant them as much water as they demand in priority ahead of Midvale, unless there has been a "call" on the river.

The subject matter of the State Engineer's opinion and the controversy between the irrigation districts concerns the interplay between the relative rights of the districts pursuant to the law concerning Permit No. 7300, the 1945 Wyoming Surplus Water Act and certain agreements which are commonly referred to as the "Tripartite Agreements".

In late 2003, Midvale filed a petition to bring the issues raised by this dispute before the Court in the *Big Horn General Stream Adjudication* rather than the State Engineer. The Court dismissed Midvale's petition finding that Midvale had failed to exhaust its administrative remedies by failing to wait for the decision of the State Engineer before seeking relief from the Court. Shortly thereafter, the State Engineer issued his opinion of March 4, 2004, which involves several erroneous determinations concerning questions of law and fact.

Midvale then filed a petition for review (an appeal) of the actions of the State Engineer in the District Court for Fremont County, Wyoming, Ninth Judicial District in Civil No. 33597, on March 31, 2004. Midvale had thirty days after the State Engineer's opinion to file this case to obtain judicial review of the actions of the State Engineer. The parties to the petition for review (appeal) are the three irrigation districts and the United States Bureau of Reclamation. The United States moved to dismiss itself from the case in 2004 and the Court granted the United States' motion on January 27, 2005. The Court found that the case could continue on after dismissal of the United States from the case. Even though the United States has been dismissed from the case, the disposition of the case will be binding upon the three irrigation districts and the State Engineer.

On April 8, 2004, Midvale also filed a declaratory judgment action against the United States Department of Interior, Bureau of Reclamation, Riverton Valley Irrigation District and LeClair Irrigation District, asking the Court to interpret and declare the relative rights of these three irrigation districts according to the Tripartite Agreements. The case is filed in the District Court for Fremont County, Wyoming, Ninth Judicial District, Civil No. 33613. This case was also filed to establish the relative rights of the three irrigation districts according to law and the so-called Tripartite Agreements. Midvale filed this action seeking interpretation of the Tripartite

Agreements because the Court may limit the scope of the proceedings in petition for review in Civil No. 33597 to the administrative action taken by the State Engineer in his opinion of March 4, 2004. If the Court limits the scope of the petition for review, the petition for review may not settle the rights of the three irrigation districts under the Tripartite Agreements.

On October 19, 2004, Riverton Valley Irrigation District filed a motion in the *Big Horn General Stream Adjudication* that is substantially the same action Midvale filed in the same court in 2003. As we noted above, the Court in the *Big Horn Adjudication* dismissed Midvale's petition. Midvale, the State of Wyoming and the United States have moved to dismiss Riverton Valley Irrigation District's motion. Neither Riverton Valley Irrigation District nor the Court took any action with regard to this motion, so it was automatically deemed to be denied according to the Wyoming Rules of Civil Procedure.

By agreement between the parties in May 2005, both cases in the District Court for Fremont County were stayed to allow for settlement negotiations between the irrigation districts. The Commissioners from the three irrigation districts were not able to settle the dispute concerning the Tripartite Agreements. Midvale will now have to continue prosecution of the two cases but will still try to reach settlement with the other irrigation districts, if possible. As noted in the last annual report, the Commissioners intend to vigorously prosecute the cases in order to protect the water rights for Midvale Irrigation District.

#### ***Demand for gravel royalties:***

In February of 2005, shortly after Midvale's last annual meeting, the Bureau of Indian Affairs, Wind River Agency, made written demands to the Bureau of Reclamation and Midvale, that Midvale obtain a permit to quarry gravel from the Eastern Shoshone and Northern Arapaho Tribes and commence paying royalties for use of the gravel. On March 15, 2005, [Midvale's] attorney, Jay Vincent, asked for the legal basis of the BIA's claim and for title information concerning the pits used by Midvale. There has been no response to Mr. Vincent's letter, nor has there been any further correspondence concerning the demand. The law indicates that Midvale is not required to obtain a permit or pay royalties for gravel used by Midvale.

Given the relatively small amount of gravel used by Midvale in a normal year, the amount of the royalty would be relatively small. Midvale will however, continue to record the amount of gravel used from the pits in the Riverton Reclamation Project, in case Midvale later determines that it must pay royalties for use of the gravel.

## **FINANCIAL REPORT**

This discussion of the District's financial performance provides an overview of the District's financial activities for the January 1 – December 31, 2005 fiscal year. This discussion was prepared by management and should be considered when reading the audited financial statements due to be completed shortly after this report is published.

### ***Budget***

On May 13, 2004, the Board of Commissioners approved the budget for FY2005. Revenues and expenditures were estimated to increase by \$20,673 and \$130,646 respectively when compared to the FY2004 budget. The bulk of the projected increase in revenues was predicted to come from increased interest income earned on District investments and work performed for others (construction-for-hire). The increase in expenditures were predicted to come from a more than two-fold increase in legal expenses (due to expected litigation issues), Hidden Valley Pipeline project expenses, and material purchases including parts for aging transportation and heavy equipment.

### ***Financial Highlights***

Operating Revenues increased \$43,513, as expected, when compared to the FY2004 budgeted amounts.

Operating Expenditures increased \$8,662, less than expected, when compared to the FY2004 budgeted amounts.

### ***Discussion***

As expected, revenues from interest income and work performed for others increased significantly. Interest rates received on District investments in 2005 almost doubled the as compared to the rates received in 2004. Revenues generated from work performed for others totaled more than \$115,000, an increase of \$32,000 more than was budgeted.

Expenditures were not as high as was expected primarily due to less expense for legal services, materials and the delay on starting construction of the Hidden Valley Pipeline project.

### ***Financial Position***

The District's financial position is presented in the form of un-audited financial statements in Appendices O and P of this report.

### ***Summary***

Midvale Irrigation District remains in a strong but potentially perilous financial condition. The District continues to operate, maintain and improve the water delivery facilities that it manages, while having kept operation and maintenance and construction assessments received from water users unchanged for 21 years. However, as is evidenced in the engineering reconnaissance and evaluation performed on the District managed water conveyance infrastructure, as a part of the

Midvale Conservation Program, significant expenditures of funds may need to occur over the next 20 years in order to maintain the viability and function of water conveyance facilities. Funding from sources independent of assessments levied on District patrons must be procured in order to keep assessments as minimal as possible.

Expenses for repairs or replacement of the District's aging transportation and heavy equipment will continue to be a concern as will the potential for increased legal expenses in today's litigious society.

The District will continue to seek construction-for-hire opportunities in order to augment revenues and reduce overhead costs. However, when engaged in work such as the Hidden Valley Pipeline project, opportunity to "hire-out" will be affected due to staff and equipment availability and limitations.

## **DISTRICT STAFF**

Although the District has not experienced much turnover of personnel in the recent past, we said goodbye to three staff members in the fall of 2005.

Lourie Dunlavy served as the Dam Tender for Bull Lake, Pilot Butte and Wind River Diversion Dams, ditchrider for Ride #3, and wintertime heavy equipment operator from May 1992 until November 2005. Lourie's dedication to the District will be missed as will his laidback personality and dry sense of humor. Lourie chose to begin a new profession in the oil field service industry.

Lynda Solan served as an Office Clerk for the District from June 1999 until October 2005. Lynda's skills in greeting the public and service as the District's computer troubleshooter will be greatly missed (as will the occasional culinary treats that she shared with us!). Lynda recently moved to Riverton, Wyoming and began a new career as an insurance sales associate.

Jim Yoder served as the Ditchrider for Ride #8 from 2003 until the end of the 2005 water season. Jim's drive to achieve perfection on his ride each summer was a significant asset in the recent water-short years as was his concern that the water users on his ride were served fairly. Jim's love for livestock production took him and his family to Montana where he enjoys the responsibility of managing a ranch.

The District will advertise for individuals to fill the Dam Tender and Ditchrider positions in the late winter/early spring of 2006. The District is currently evaluating the need to fill the vacant Office Clerk position and may or may not fill that position at a later date.

A list of the 2005 staff can be found in Appendix Q of this report.

## **Appendix**

## **Table of Appendices**

A. 2005 Summary of Commissioner Actions Regarding Irrigation Water Allotments, Delivery Rates, and Shutoff Date.....	32
B. 2005 Water Year Information Letter.....	33
C. 2005 Precipitation and Average Temperature, Pavillion, Wyoming.....	35
D. 1999 – 2005 Water Use Data, Midvale Irrigation District.....	36
E. 2005 Midvale Irrigation District Crop Production and Estimated Value.....	37
F. 2005 Cleaning Performed on Canals, Laterals, and Open Drains.....	38
G. 2005 Canal Bank Stabilization and Erosion Control.....	40
H. 2005 Concrete Work Performed.....	41
I. 2005 Pipe Materials Installed.....	42
J. 2005 Vegetative and Noxious Weed Treatment Locations and Expense.....	43
K. 2005 Maintenance Shop Activities.....	49
L. 2005 Other Operation and Maintenance Work Performed.....	55
M. 2005 Construction-for-Hire.....	57
N. Sites Identified for Potential Automation.....	58
O. Midvale Irrigation District Balance Sheet*, 12/31/05.....	59
P. Midvale Irrigation District Statement of Revenues and Expenditures*, 1/1/05 – 12/31/05.....	61
Q. 2005 Midvale Irrigation District Staff.....	62

**Appendix A. Summary of Commissioner Actions Regarding Irrigation Water Allotments, Delivery Rates and Shutoff Date**

<b>Meeting Date</b>	<b>Action</b>	<b>Allotment</b>	<b>Delivery Rate Restriction</b>
March 31	Reviewed Projections Set Initial Allotment and Starting Date of Irrigation Deliveries for April 20	1.50 AF	None
April 21	Review Water Supply Projections No Change	1.50 AF	None
May 12	Review Water Supply and Use No Change	1.50 AF	None
June 9	Review Water Supply and Use Increased Allotment Effective June 14 <sup>th</sup>	2.00 AF	None
<sup>1</sup> July 8	Review Water Supply and Use Increased Allotment Effective July 8 <sup>th</sup>	2.50 AF	None
<sup>2</sup> July 29	Review Water Supply and Use Increased Allotment Effective July 29 <sup>th</sup>	3.00 AF	None
August 17	Review Water Supply and Use Increased Allotment Effective August 22 <sup>nd</sup>	3.50 AF	None
September 8	Review Water Supply and Use Set Final Allotment Effective September 9 <sup>th</sup> Set Shutoff Date of October 7	3.75 AF	None

1. Ratified at the July 21, 2005 Regular Board Meeting
2. Ratified at the August 17, 2005 Regular Board Meeting

## Appendix B. 2005 Water Year Information Letter



# Midvale Irrigation District

P.O. Box 128 Pavillion Wyoming 82523  
307-856-6359 midvale@wyoming.com

**Date:** April 1, 2005  
**To:** Water Users, Midvale Irrigation District  
**From:** Lee Arrington, Manager  
**Subj:** 2005 Water Year Information

*The Board of Commissioners has authorized the release of the following information to be used by District Patrons to make more effective plans for their farming/ranching operations.*

### *Water Supply/Current Conditions/Forecast*

Snowpack percentages continued to stay the same during the month of March 2005. The April 1<sup>st</sup> snowpack in the Wind River Mountains measured 91% overall, but only 69% in the Western (Upper) Wind River Mountains (from which we receive our water). As you can see in the table below, the District is predicting that the **2005 final allotment** will be between **2.75 and 3.00** acre-feet per irrigated acre, based on a delivery efficiency of 50%. This estimate will be revised on May 1<sup>st</sup>, after taking into account mountain precipitation received in the month of April. **It must be emphasized that the final allotment prediction is an educated guess based on data from previous water years, a return to normal precipitation patterns, etc. and is not a guarantee.** Please review the following information when making your initial water management plans:

Data for April 1 <sup>st</sup> (where applicable)	2002	2003	2004	2005
Bull Lake Storage (AF)	28,570	44,515	58,105	<b>104,823</b>
Pilot Butte Storage (AF)	28,862	28,068	27,630	<b>26,958</b>
Ending Water Allotment (AF/AC)	1.95	2.75	2.65	??
Delivered Water (AF/AC)	1.90	2.30	2.18	??
Apr 1 <sup>st</sup> Projected Water Allotment (AF/AC)	2.21	2.75 – 3.25	1.75 - 2.00	<b>2.75 – 3.00</b>
April 1 <sup>st</sup> Overall Snowpack (% of ave)	75	99	73	<b>91</b>
April 1 <sup>st</sup> Upper Wind Snowpack (% of ave)	88	98	63	<b>69</b>
Mar-Oct Rainfall (Pavillion, WY)	6.51 in	5.96 in	9.18 in	??

### First Day to Deliver Water/Initial Water Allotment/Delivery Rate Restriction

The District began flushing canals and laterals on April 4<sup>th</sup>. Water deliveries will commence on April 20<sup>th</sup>. The initial water allotment is set at 1.5 acre-feet per irrigable acre. There will be no delivery rate restrictions (1 per 50, 1 per 70, etc) at the start of the season. Allotment and/or delivery rate restrictions will be modified as the availability/need arises. If you know in advance that you will want to begin irrigation diversions on April 20<sup>th</sup>, please call the office with that information so that we can properly prioritize our flushing schedule to do our best to meet your water needs. Ditchriders will not be checking all ticket boxes daily until Monday, May 2<sup>nd</sup>. If you wish to place a water order before May 2<sup>nd</sup>, please call the office to be sure that your order is received and processed. Water being used for flushing of the canals and laterals is not available for delivery to water users.

### Final Allotment Increase and Shutoff Date

To ensure that every water user has an equitable opportunity to utilize their allotment, the Commissioners will make the final allotment increase and set the shutoff date as early as possible to facilitate your water management decisions.

### Certification Forms

**If any person and/or entity owns and/or leases 240 or more irrigable acres, that person and/or entity is required under federal law to report the acreage.** Midvale is prohibited by Federal Law from delivering irrigation water to that person and/or entity if the acreage has not been reported by submitting said certification to the District office.

**Also, if a person and/or entity owns and/or leases irrigable acreage in another irrigation district, the required certification must include such acreage. The District will mail the necessary certification forms for your use in complying with this law later this week.** If you have any questions, call the District office. **Remember, that this form must be received in the District office by 5 pm May 2<sup>nd</sup> if you are planning to transfer any of your water allotment (see “Transfer of All or Part of a Water Allotment” below).**

### Web Site access to Water Use Information

**Individual water use information is updated and posted on the District’s Web Page on a daily basis during the water season. In order to access the information, you must set up an account through the District office. Contact the District office at 307-856-6359 or by email at [midvale@wyoming.com](mailto:midvale@wyoming.com).**

### District Policies

**District policies are enumerated in the Handbook of Water User Rules, Policies and Procedures And District By-Laws (available at the District office or on the District’s web page: [www.midvaleirrigation.net](http://www.midvaleirrigation.net)). The following is a reminder of select policies:**

- 1) Ordering Water
  - a. **You, or a representative authorized (in writing) to act on your behalf, must fill out tickets requesting water delivery. If you anticipate that someone other than yourself will be ordering water for you, please complete the enclosed “Authorization & Agreement” form and return it to the District office. If you have an “Authorization & Agreement” form already on file at the District office, and there are no changes for 2005, you do not need to complete a new form for this year. The “Authorization & Agreement” form is available online on the District’s webpage.**
  - b. **Requests for water to be delivered (turned on) must be in the ticket boxes provided for such purpose by 7:00am, or left at the District office by 9:00am, 48 hours prior to the day of delivery.**
  - c. **Request for water delivery to cease (be turned off) must be in the ticket boxes provided for such purpose by 7:00am, or delivered to the District office by 9:00am, 24 hours prior to the day you desire for water to be turned off.**
  - d. **Request tickets will only be picked up once each day.**
  - e. **Please make sure that your account number is written on your water order ticket. If you do not know your account number, please call the District office and the number will be provided to you.**
  - f. **Ditchriders are not being asked to deliver water on Sundays except in the case of an extreme emergency (they need rest too!). Please communicate with your ditchrider to coordinate your water deliveries that may need to occur on weekends.**
- 2) Gates on Canal and Lateral O&M Roads

**All gates across canal and lateral Operation & Maintenance roads are to be left open during the irrigation season (approximately April 1 through October 15).**
- 3) Permits Required for use of Easements

**Any proposed use of District operated and maintained easements (i.e. O&M roads, open and closed drains, etc.), must be permitted through the District office. In most cases, the permit will describe any special terms and/or conditions for the proposed use. Permits are nontransferable.**
- 4) Transfer of All or Part of a Water Allotment

**You may transfer all or part of a water allotment between farms within your farming operation as listed on either a Certification form (for operations totaling 240 irrigable acres or more) or a Farm Operation Summary form (for operations totaling less than 240 irrigable acres). The applicable form must be received in the District office by 5:00pm, May 2, 2005 in order for you to be eligible for transfers. Call the District office if you have questions about allotment transfers. The Farm Operation Summary form is available online on the District’s webpage.**
- 5) Delivery of Irrigation Water to Class 6 Lands

**Midvale Irrigation District is prohibited by federal law from delivering irrigation water to lands that have been classified as Class 6-permanently unproductive. Please contact the District office if you have questions concerning this issue.**

**Appendix C. 2005 Precipitation and Average Temperature, Pavillion, Wyoming**

<b>Month</b>	<b>Precipitation</b>	<b>Ave. High Temp</b>	<b>Ave. Low Temp</b>
January	1.50	34.2	11.8
February	0.00	41.9	16.6
March	0.23	50.0	21.5
April	1.59	60.0	30.2
May	4.00	65.3	38.6
June	0.65	75.0	44.9
July	0.85	88.9	51.4
August	0.12	82.1	51.5
September	0.84	74.7	44.2
October	1.80	58.6	40.5
November	0.14	47.5	22.5
December	0.33	31.7	9.9
<b>Total</b>	<b>12.05</b>	<b>59.2</b>	<b>32.0</b>

**Appendix D. 1999-2005 Water Use Data, Midvale Irrigation District**

	2005	99-04 Ave	2004	2003	2002	2001	2000	1999
<b>Diverted (AF)</b>	360,555	<b>313,656</b>	325,536	315,226	256,483	248,710	358,070	377,908
<b>Delivered (AF)</b>	200,430	<b>161,787</b>	161,333	170,463	139,131	130,750	199,791	169,256
<b>Operational Waste (AF)</b>	64,918	<b>50,172</b>	59,746	52,645	25,981	30,740	55,332	76,586
<b>Loss (AF)</b>	95,207	<b>101,697</b>	104,457	92,117	91,373	87,220	102,947	132,065
<b>% Delivered</b>	55.59	<b>51.58</b>	50	54	54	53	56	45
<b>% Operational Waste</b>	18.00	<b>16.00</b>	18	17	10	12	15	20
<b>% Loss</b>	26.41	<b>32.42</b>	32	29	36	35	29	35
<b>AF/Acre Delivered</b>	2.71	<b>2.19</b>	2.18	2.30	1.88	1.74	2.70	2.29
<b>Allotment (AF)</b>	3.75	<b>2.725</b>	2.65	2.75	1.95	1.75	3.25	4.00
<b>% of Allotment Delivered</b>	72.3	<b>80.3</b>	82.3	83.8	96.4	99.4	83.1	57.2

## Appendix E. 2005 Midvale Irrigation District Crop Production and Estimated Value

				Unit	Value	Total
Crop	Acres*	Yield/Acre	Units	Value	Per Acre	Value
Alfalfa	40,462.5	3.9	Tons	\$70.00	\$273.00	\$11,046,254
Barley	313.5	118.3	Bushels	\$1.63	\$192.83	\$60,455
Malt Barley	1,865.4	85.0	Bushels	\$3.00	\$255.00	\$475,682
Beans	1,751.1	19.6	100# Bags	\$16.00	\$313.60	\$549,130
Hard Corn	481.5	76.8	Bushels	\$2.80	\$215.04	\$103,536
Oats	671.0	88.1	Bushels	\$1.60	\$140.96	\$94,587
Sunflowers	392.8	2,304.8	Lbs.	\$0.20	\$460.96	\$181,059
Other Hay	5,771.7	2.8	Tons	\$70.00	\$196.00	\$1,131,261
Other Seed	332.7	444.7	Lbs.	\$2.50	\$1,111.75	\$369,892
Silage, Ensilage	3,218.8	20.9	Tons	\$22.50	\$470.25	\$1,513,650
Sugar Beets	2,178.1	22.1	Tons	\$42.00	\$928.20	\$2,021,712
Wheat	1,410.8	55.3	Bushels	\$3.20	\$176.96	\$249,659
Potatoes	0.1	200.0	100 # Bags	\$3.00	\$600.00	\$60
Irrigated Pasture	10,050.8	1.0	AUM	\$15.00	\$15.00	\$150,761
Corn Pastured	65.6	2.1	AUM	\$12.50	\$26.25	\$1,722
Grain Pastured	123.2	2.2	AUM	\$12.50	\$27.50	\$3,387
Other Pastured	1,811.8	1.0	AUM	\$12.50	\$12.50	\$22,648
Planted-Not Harvested	638.4					
Fallow	2,211.7					
<b>Totals</b>	<b>73,751.5</b>					<b>\$17,975,455</b>

\* Expanded to represent 100% of District acres; 63.77% of acres were reported with the exception of sugar beets (100%), potatoes (100%), and sunflowers (89%).

<b>Appendix F. Cleaning Performed on Canals, Laterals, and Open Drains</b>			
<b>Month</b>	<b>Location</b>	<b>Type</b>	<b>Notes</b>
<b>January</b>	Wyo 2nd Div	Backhoe	grassy “berm” removal; reshape canal profile
<b>February</b>	Wyo 2nd Div	Backhoe	grassy “berm” removal; reshape canal profile
	Dolbow	Backhoe	Clean open drain
<b>March</b>	Wyo 31.7 A	Backhoe	
	Wyo 1st Div	Backhoe	
	Wyo 2nd Div	Backhoe	
<b>April</b>	Wyo 31.7 A	Backhoe	
<b>May</b>	Lost Wells A	Backhoe	
	Open Drains	Backhoe	D. Christensen, D. Pattison, ANK
	District	Backhoe	Weir basins
	Pav Main M 1.6	Backhoe	
	Sand Mesa Drain	Backhoe	
<b>June</b>	Pres Red Sta	Backhoe	Clean cattle guard on road
	Open Drains	Backhoe	Pince, Dolbow, Misc
	5 Mile Lat	Backhoe	
	Sand Gulch 2.7	Backhoe	Pull weed plug from siphon
	Open Dr Overgaard	Backhoe	Remove beaver dam
	Wyo 16.1	Backhoe	
<b>July</b>	Cottonwood Drain	Backhoe	
	Bass Lake	Backhoe	Beaver dam removal
	Cottonwood Drain	Backhoe	Beaver dam removal
	Pav Main 1.6	Backhoe	
	Robinson Open Dr	Backhoe	
	Pilot Butte Dam	Backhoe	Cleaned sand pile out of spillway channel
<b>August</b>	Pince	Backhoe	clean open drain
	Wyo 15.1	Backhoe	Clean weir basin
	Ride 9	Backhoe	Clean weir basins
<b>September</b>	Garland	Backhoe	Remove beaver dam
<b>October</b>	Open drains	Backhoe	Pingetzer, Kilebrew, Denke, Fox, Gaudern, Yoder
	Overgard	Backhoe	Remove beaver dam
	Rainwater	Backhoe	Remove silt pile from fence
	P34.9	Backhoe	
	P37.7S	Backhoe	
	Ride 7	Backhoe	Spot clean
	Wyo 1st Div	Dragline	Remove silt
	Pilot Canal	Backhoe	
<b>November</b>	P34.9	Backhoe	
	Wyo 1st Div	Dragline	6 man-days
	P 36.5	Backhoe	2 man-days
	Wyo 15.1	Backhoe	2 man-days

**Appendix F. Cleaning Performed on Canals, Laterals and Open Drains  
(cont.)**

<b>Month</b>	<b>Location</b>	<b>Type</b>	<b>Notes</b>
<b>November (cont)</b>	Lost Wells G	Backhoe	5 man-days
	Sand Gulch 2.7	Backhoe	
	Lost Wells D	Backhoe	
	Lost Wells E	Backhoe	2 man-days
	P 15.7	Backhoe	Weir basin
	Sand Butte II	Backhoe	4 man-days
	Lost Wells F	Backhoe	
	Wyo 2nd Div	Dragline	4 man-days
	Lost Wells B	Backhoe	
	Sand Butte	Backhoe	
	Wyo 6.3	Dragline	
	Wyo 24.6	Backhoe	3 man-days
<b>December</b>	Wyo 24.6	Backhoe	2 man-days
	Wyo 2nd Div	Dragline	10 man-days
	Lost Wells G	Backhoe	2 man-days
	Wyo 18.0	Backhoe	
	Wyo 22.4	Backhoe	

**Appendix G. Canal Bank Stabilization and Erosion Control**

<b>Month</b>	<b>Location</b>	<b>Type</b>	<b>Notes</b>
<b>January</b>	Wyo 2nd Div	Pit run (3,300 yds)	armor after "berm" removal
<b>February</b>	Wyo 2nd Div	Yellow gravel/Cobble	armor after "berm" removal
<b>March</b>	Wyo 2nd Div	Cobble	armor after "berm" removal
<b>April</b>	None		
<b>May</b>	None		
<b>June</b>	Sand Butte II	Yellow gravel	Repair leak
<b>July</b>	Cottonwood Drain	Cobble	Stabilize open drain
	Sand Butte II -C	Cobble	Repair drop washout
	Sand Butte II	Yellow gravel	Repair drop washout
	Lost Wells D	Yellow gravel	Repair washout
<b>August</b>	P4.2-3.8	yellow gravel	repair washed out drop
	L Shuttlesworth	cobble rock	stabilize open drain bank
	Lost Wells EB	cobble rock	
	Lost Wells A	yellow gravel	
	Wyo 31.7	cobble rock	
<b>September</b>	Lost Wells A	yellow gravel	
<b>October</b>	None		
<b>November</b>	5 Mile A	Cobble	
	1046 Waste Way	Yellow gravel	
<b>December</b>	None		

<b>Appendix H. Concrete Work Performed</b>				
<b>Month</b>	<b>Location</b>	<b>Type</b>	<b>Yards</b>	<b>Notes</b>
<b>January</b>	Carney Ranch*	Division Box	5.75	
	Gordon Meadow*	Division Box	4.75	
<b>February</b>	Wyo 25.4*	Div. Box Base	3.50	
<b>March</b>	Wyo 25.4*	Division Box	10.50	
	Wyo 25.4*	Pipeline	8.00	
	Wyo Canal Gauge	Base	3.25	
	Pingetzer*	Bubbler	6.00	
<b>April</b>	Berthod*	Div. Box & Bubbler	12.00	
	Shuttlesworth*		1.00	
	Ocean Lake Drain	Repair leak	1.75	Repair separated pipe at 5 Mile Creek
	Pingetzer*		1.00	
	Wyo Canal Gauge	Base	3.00	
	Pince*		1.50	
	Nash*	Division Box	4.50	
	Lost Wells A	Lining	2.00	
	Pav. Main E	Lining	7.00	
<b>May</b>	None			
<b>June</b>	P 36.5		3.00	Repair leak in lined section (chute)
<b>July</b>	Pilot Butte Dam		5.00	Install posts for security gates
	Pilot Butte Forebay		4.00	Install post for log boom
<b>August</b>	Lower Yard		40.00	Slab for metal building
<b>September</b>	Lower Yard		5.25	Approach pad for metal building
<b>October</b>	None			
<b>November</b>	Wyo 1st Div	Canal floor	80.00	Replace lining (49 man-days)
	P 17.6	Division Box	7.75	
<b>December</b>	Wyo 1st Div	Canal Lining		Grout selected spots near Diversion Dam
	5 Mile	Turnout and Div Box	3.50	Bases for both (Weliever)
<b>Total</b>			<b>224.00</b>	

\* Construction for hire

<b>Appendix I. Pipe Materials Installed</b>			
<b>Month</b>	<b>Location</b>	<b>Type</b>	<b>Notes</b>
<b>January</b>	None		
<b>February</b>	Shuttlesworth	Install pipeline	640' x 12" PVC
<b>March</b>	None		
<b>April</b>	Fike	Install pipeline	140' x 15" PVC
	B. Pingetzer	Install pipeline	40' x 15" PVC, 70' x 4" PVC, 70' x 12" PVC
	Shuttlesworth	Install pipeline	40' x 12" PVC
	Weliever	Install pipeline	40' x 12" PVC
	EnCana	Install pipeline	2600' x 12" PVC
	House	Install pipeline	10' x 36" CMP
	Westlake	Install pipeline	80' x 12" PVC
	Berthod	Install pipeline	630' x 12" PVC
<b>May</b>	R. Nash	Install pipeline	1070' x 12" PVC
	Ty Nichols	Install pipeline	1500' x 12" PVC
<b>June</b>	Wyo 18.0 WW	Install pipeline	30' x 15" CMP
<b>July</b>	None		
<b>August</b>	None		
<b>September</b>	J. Kimmel	Install pipeline	18" x 20' CMP
<b>October</b>	None		
<b>November</b>	None		
<b>December</b>	5 Mile	Install pipeline	40' x 18" PVC (Weliever)

## Appendix J. 2005 Noxious and Vegetative Weed Treatment Locations and Expense

Date	Location	Acres Sprayed	Miles Sprayed	Labor	Chemical	Cost Share	Net
<b>Noxious Weed Treatment</b>							
06/09/2005	Wyo Canal	-	7.00	405.00	113.38	(110.00)	408.38
06/13/2005	Wyo Canal	-	3.00	135.00	23.13	(22.00)	136.13
06/14/2005	Wyo Canal	-	3.00	52.50	33.13	(26.00)	59.63
06/20/2005	Wyo Canal	-	10.00	360.00	385.88	(336.00)	409.88
06/21/2005	Wyo Canal	-	25.00	450.00	260.50	(208.00)	502.50
06/22/2005	Wyo Canal	-	12.00	270.00	195.38	(156.00)	309.38
06/28/2005	Wyo Canal	2.00	10.00	225.00	97.75	(88.00)	234.75
06/29/2005	Wyo Canal	3.00	18.00	405.00	135.38	(132.00)	408.38
07/05/2005	Wyo Canal Spoil Piles	4.00	-	270.00	259.50	(96.00)	433.50
07/06/2005	Wyo Canal	5.00	-	297.50	324.38	(120.00)	501.88
07/07/2005	Wyo Canal Spoil Piles	6.00	-	382.50	389.25	(144.00)	627.75
07/11/2005	Wyo Canal	7.00	-	405.00	349.13	(126.00)	628.13
07/12/2005	Wyo Canal	10.25	-	360.00	648.75	(244.50)	764.25
07/19/2005	Wyo Canal (Diversion Dam)	2.00	-	112.50	160.25	(88.00)	184.75
07/20/2005	Wyo Canal Spoil Piles	6.00	-	360.00	391.50	(144.00)	607.50
07/21/2005	Wyo Canal Spoil Piles	7.00	-	405.00	454.13	(168.00)	691.13
07/25/2005	Wyo Canal Spoil Piles	5.00	-	292.50	324.38	(120.00)	496.88
07/26/2005	Wyo Canal	8.00	-	405.00	519.00	(192.00)	732.00
07/28/2005	Wyo Canal Spoil Piles	3.00	-	405.00	183.38	(72.00)	516.38
08/25/2005	Wyo Canal	7.00	-	140.00	454.13	(168.00)	426.13
08/29/2005	Wyo Canal-Spoil Piles	21.00	-	280.00	1,362.38	(504.00)	1,138.38
08/30/2005	Wyo Canal-Spoil Piles	7.00	-	280.00	447.75	(168.00)	559.75
09/01/2005	Wyo Canal Spoil Piles	8.00	-	245.00	489.00	(192.00)	542.00
09/06/2005	Wyo Canal Spoil Piles	5.00	-	105.00	305.63	(120.00)	290.63
06/15/2005	Wyo Lat 5 Mi. E	3.00	1.35	17.50	18.38	-	35.88
08/03/2005	Wyo Lat W29.8	1.00	-	87.50	45.13	(44.00)	88.63
08/03/2005	Wyo Canal Lat W27.3	3.00	-	262.50	135.38	-132.00	265.88
08/08/2005	Wyo Lat W15.1	3.10	-	247.50	140.88	(137.50)	250.88
08/08/2005	Wyo Lat PME	2.00	-	157.50	90.25	(88.00)	159.75
08/09/2005	Wyo Lat PMK	2.00	-	180.00	90.25	(88.00)	182.25
08/09/2005	Wyo Lat PMF	1.00	-	67.50	45.13	(44.00)	68.63
08/09/2005	Wyo Lat PMH	1.00	-	45.00	45.13	(44.00)	46.13
08/10/2005	Wyo Lat PMH	2.00	-	135.00	90.25	(88.00)	137.25
08/10/2005	Wyo Lat 5 Mi A	2.00	-	67.50	95.25	(90.00)	72.75
08/10/2005	Wyo Lat 18.0	3.00	-	247.50	135.38	(132.00)	250.88
08/11/2005	Wyo Lat 7.0	3.00	-	175.00	135.38	(132.00)	178.38
08/11/2005	Wyo Lat 6.3	2.00	-	157.50	90.25	(88.00)	159.75
08/15/2005	Wyo Canal Lat 6.3	1.10	-	105.00	55.63	(51.50)	109.13
08/18/2005	Wyo Lat SB2	2.00	-	245.00	90.25	(88.00)	247.25
08/18/2005	Wyo Lat SB	1.00	-	35.00	45.13	(44.00)	36.13

## Appendix J. 2005 Noxious and Vegetative Weed Treatment Locations and Expense (cont.)

Date	Location	Acres Sprayed	Miles Sprayed	Labor	Chemical	Cost Share	Net
<b>Noxious Weed Treatment</b>							
08/22/2005	Wyo Lat SB SBG	1.75	-	245.00	80.38	(77.00)	248.38
08/22/2005	Wyo Lat SBH	1.00	-	105.00	45.13	(44.00)	106.13
08/23/2005	Wyo Lat SB	-	-	87.50	-	-	87.50
08/23/2005	Wyo Lat 24.6	2.00	-	140.00	66.25	(64.00)	142.25
08/24/2005	Wyo Lat 24.6	2.00	-	157.50	71.25	(66.00)	162.75
08/24/2005	Wyo Lat 25.4	1.00	-	70.00	33.13	(32.00)	71.13
08/24/2005	Wyo Lat 31.7	1.00	-	87.50	33.13	(32.00)	88.63
08/25/2005	Wyo Lat 31.7	7.00	-	140.00	427.88	(168.00)	399.88
08/31/2005	Wyo Lat 5 Mi.	2.00	-	227.50	66.25	(64.00)	229.75
08/31/2005	Wyo Lat 5 Mi Sub Lat E Both Sides	1.00	-	70.00	33.13	(32.00)	71.13
08/31/2005	Wyo Lat 24.6 Spoil Piles	1.00	-	35.00	33.13	(32.00)	36.13
09/01/2005	Wyo Lat 24.6 Right of Way	2.00	-	70.00	122.25	(48.00)	144.25
09/06/2005	Wyo Canal 5 Mi. Lat	2.50	-	175.00	113.38	(110.00)	178.38
09/14/2005	Wyo Lat 44.1	2.00	-	70.00	132.25	(52.00)	150.25
08/23/2005	Wyo Lat 22.4	2.00	-	87.50	78.25	-76.00	89.75
	<b>Wyo. Canal Total</b>	<b>176.70</b>	<b>89.35</b>	<b>11,047.50</b>	<b>10,990.91</b>	<b>(5,932.50)</b>	<b>16,105.91</b>
06/08/2005	Pilot Canal	-	2.00	67.50	-	-	67.50
07/05/2005	Pilot Canal	3.00	-	180.00	158.50	(154.00)	184.50
07/12/2005	Pilot Canal	4.00	-	90.00	259.50	(96.00)	253.50
07/14/2005	Pilot Canal	7.00	-	427.50	459.63	(173.50)	713.63
07/19/2005	Pilot Dam	6.00	-	315.00	340.75	(264.00)	391.75
07/25/2005	Pilot Canal Spoil Piles	1.00	-	90.00	64.88	(24.00)	130.88
07/27/2005	Pilot Canal Spoil Piles	6.00	-	472.50	394.75	(149.50)	717.75
07/28/2005	Buckhorn Flats Backslope Pilot	2.00	-	43.75	138.25	(52.00)	130.00
06/30/2005	Pilot Canal Lat P34.9	2.00	-	202.50	90.25	-88.00	204.75
06/30/2005	Pilot Canal Lat P36.5	4.75	-	202.50	213.50	(209.00)	207.00
07/13/2005	Pilot Canal	7.00	-	427.50	454.13	(168.00)	713.63
07/20/2005	Pilot Canal Spoil Piles	1.00	-	90.00	64.88	(24.00)	130.88
08/01/2005	Pilot Lat LWB	8.00	-	450.00	361.00	(352.00)	459.00
08/02/2005	Pilot Lat LWA	-	-	45.00	-	-	45.00
08/02/2005	Pilot Lat LWE	1.00	-	112.50	46.25	(44.00)	114.75
08/02/2005	Pilot Lat LW	3.00	-	135.00	136.50	(132.00)	139.50
08/04/2005	Pilot Lat SG2.7	2.00	-	140.00	90.25	(88.00)	142.25
08/04/2005	Pilot Lat SG	2.00	-	175.00	90.25	(88.00)	177.25
08/09/2005	Pilot Lat P21.1	3.00	-	180.00	135.38	(132.00)	183.38
08/15/2005	Pilot Lat P5.2	1.00	-	70.00	45.13	(44.00)	71.13
08/15/2005	Pilot Lat P12.4	1.00	-	105.00	45.13	(44.00)	106.13
08/15/2005	Pilot Lat 23.2	-	-	17.50	-	-	17.50

**Appendix J. 2005 Noxious and Vegetative Weed Treatment Locations and Expense (cont.)**

<b>Date</b>	<b>Location</b>	<b>Acres Sprayed</b>	<b>Miles Sprayed</b>	<b>Labor</b>	<b>Chemical</b>	<b>Cost Share</b>	<b>Net</b>
<b>Noxious Weed Treatment</b>							
08/15/2005	Pilot Lat P27.0B	1.00	-	52.50	45.13	(44.00)	53.63
08/16/2005	Pilot Lat 27.0B	3.00	-	227.50	135.38	(132.00)	230.88
08/16/2005	Pilot Lat 31.7	1.00	-	87.50	45.13	(44.00)	88.63
08/17/2005	Pilot Lat 31.7	4.00	-	350.00	180.50	(176.00)	354.50
	<b>Pilot Canal Total</b>	<b>73.75</b>	<b>2.00</b>	<b>4,756.25</b>	<b>3,995.05</b>	<b>(2,722.00)</b>	<b>6,029.30</b>
07/18/2005	Bull Lake Dam	5.00	-	450.00	313.13	-	763.13
09/19/2005			-	45.00	-	-	45.00
	<b>Noxious Weed Total</b>	<b>255.45</b>	<b>91.35</b>	<b>16,298.75</b>	<b>15,299.09</b>	<b>-8,654.50</b>	<b>22,943.34</b>

## Appendix J. 2005 Noxious and Vegetative Weed Treatment Locations and Expense (cont.)

Date	Location	Acres Sprayed	Miles Sprayed	Labor	Chemical	Cost Share	Net
<b>Vegetative Weed Treatment</b>							
05/16/2005	Wyo Canal	78.00	45.00	297.50	466.50	-	764.00
05/16/2005	Wyo Canal	-	-	175.00	-	-	175.00
05/18/2005	Wyo Canal	34.00	19.00	262.50	210.50	-	473.00
05/23/2005	Wyo Canal	28.00	16.00	210.00	171.50	-	381.50
05/24/2005	Wyo Canal	47.00	21.00	280.00	275.50	-	555.50
05/25/2005	Wyo Canal	21.00	14.00	210.00	123.00	-	333.00
09/07/2005	Wyo Canal Spoil Piles	7.00	-	280.00	427.88	-	707.88
09/12/2005	Wyo Canal Spoil Piles	2.00	-	122.50	122.25	-	244.75
05/26/2005	Wyo Canal-Pav. Main Lat	24.00	15.00	262.50	138.00	-	400.50
06/06/2005	Wyo Canal Lat 31.7	21.00	11.00	270.00	118.50	-	388.50
06/07/2005	Wyo Lat 6.3	5.50	3.00	112.50	32.00	-	144.50
06/07/2005	Wyo Lat 44.1	11.50	5.00	105.00	66.50	-	171.50
06/07/2005	Wyo Lat 31.7 & 31.7A	8.00	3.50	87.50	46.75	-	134.25
06/08/2005	Wyo Lat PM-H	2.00	1.30	22.50	12.25	-	34.75
06/08/2005	Wyo SBG	2.50	1.20	67.50	12.25	-	79.75
06/13/2005	W.15.1	4.00	3.90	90.00	22.25	-	112.25
06/13/2005	Wyo Lat S. B	9.00	6.00	105.00	56.25	-	161.25
06/13/2005	Wyo Lat 5 Mi	15.00	9.00	112.50	88.50	-	201.00
06/13/2005	Wyo Lat 18.0	8.00	4.00	90.00	46.75	-	136.75
06/14/2005	Wyo Lat 7.0	5.00	2.50	67.50	29.50	-	97.00
06/14/2005	Wyo Lat SB	11.00	5.00	105.00	62.88	-	167.88
06/14/2005	Wyo Lat PM EB	4.00	2.43	90.00	23.38	-	113.38
06/14/2005	Wyo Lat SB2 & SB2G	8.00	4.00	90.00	45.63	-	135.63
06/15/2005	Wyo Lat 9M-K	9.00	4.50	87.50	55.13	-	142.63
06/15/2005	Wyo Lat 24.6	9.50	5.00	87.50	57.63	-	145.13
06/15/2005	Wyo Lat 27.3	9.00	4.30	70.00	54.00	-	124.00
06/15/2005	Wyo Lat PM-F	1.20	1.00	17.50	8.63	-	26.13
06/16/2005	Wyo Lat 27.3	10.00	4.60	87.50	55.63	-	143.13
06/16/2005	Wyo Canal Lat 22.4	2.50	1.30	35.00	13.63	-	48.63
06/16/2005	Wyo Lat 16.1-16.1B	2.00	1.00	17.50	11.13	-	28.63
06/16/2005	Wyo Lat 25.4	2.00	1.00	17.50	11.13	-	28.63
06/16/2005	Wyo Lat 34.8	3.00	0.50	35.00	17.25	-	52.25
06/16/2005	Wyo Lat 33.0	3.50	2.00	35.00	22.00	-	57.00
09/08/2005	Wyo Lat PM-E	2.00	-	122.50	90.25	-	212.75
09/14/2005	Wyo Lat 44.1	5.00	-	227.50	170.13	-	397.63
	<b>Wyo. Canal Total</b>	<b>414.20</b>	<b>217.03</b>	<b>4,355.00</b>	<b>3,165.06</b>	<b>-</b>	<b>7,520.06</b>
05/23/2005	Back side of Irrigation Ditches	16.00	16.20	202.50	89.00	0.00	291.50
05/24/2005	South Side of Canal	18.00	22.10	292.50	139.19	0.00	431.69

## Appendix J. 2005 Noxious and Vegetative Weed Treatment Locations and Expense (cont.)

Date	Location	Acres Sprayed	Miles Sprayed	Labor	Chemical	Cost Share	Net
<b>Vegetative Weed Treatment</b>							
05/25/2005	Pilot Canal	14.00	8.70	135.00	74.50	0.00	209.50
09/12/2005	Pilot Canal Spoil Piles	5.00	-	122.50	305.63	0.00	428.13
05/19/2005	Pilot Canal	44.00	27.00	262.50	256.00	-	518.50
05/25/2005	Lost Wells Lateral	11.00	11.60	135.00	59.50	-	194.50
05/26/2005	Lost Wells Lateral	5.00	4.50	135.00	27.81	-	162.81
05/26/2005	Sand Gulch	10.00	8.10	135.00	55.63	-	190.63
05/26/2005	P23.2 Lateral	-	0.30	22.50	-	-	22.50
05/26/2005	P21.1 Lateral	1.00	1.00	22.50	5.56	-	28.06
06/02/2005	Pilot Canal Lat P36.5	12.50	7.00	87.50	78.25	-	165.75
06/06/2005	Pilot Canal Lat P36.5	6.00	3.00	90.00	39.25	-	129.25
06/06/2005	Lateral P37.7.S	5.00	6.00	67.50	28.38	-	95.88
06/06/2005	Lateral 21.1	300.00	5.50	67.50	17.25	-	84.75
06/07/2005	Pilot Canal Lat SG2.7	5.00	2.50	112.50	29.50	-	142.00
06/07/2005	P27.0A	1.00	1.60	22.50	6.13	-	28.63
06/07/2005	P31.7	5.00	5.80	90.00	29.50	-	119.50
06/07/2005	P37.7N	5.00	6.00	90.00	28.38	-	118.38
06/07/2005	P37.7S	2.00	2.00	45.00	11.13	-	56.13
06/08/2005	LWEB	1.00	0.90	45.00	-	-	45.00
06/09/2005	LW EB	1.00	0.90	22.50	5.56	-	28.06
06/09/2005	LWE	3.00	2.90	22.50	16.69	-	39.19
06/09/2005	LWA	2.00	1.90	22.50	11.13	-	33.63
06/09/2005	P.27.0B	5.00	4.50	112.50	32.31	-	144.81
06/09/2005	P.31.7	1.00	1.10	45.00	5.56	-	50.56
06/13/2005	P.5.2	1.00	1.20	67.50	5.56	-	73.06
06/13/2005	LW.D	3.00	2.70	67.50	16.69	-	84.19
06/16/2005	Pilot Lat 34.9	7.00	3.00	70.00	39.50	-	109.50
09/08/2005	Pilot Lat. 37.7 N & 37.7 S	3.00	-	157.50	135.38	-	292.88
	<b>Pilot Canal Total</b>	<b>492.50</b>	<b>158.00</b>	<b>2,770.00</b>	<b>1,548.97</b>	<b>-</b>	<b>4,318.97</b>
06/02/2005	Wyo Canal Badger Drain	6.00	2.60	87.50	36.75	-	124.25
07/19/2005		-	-	45.00	-	-	45.00
	<b>Vegetative Treatment Total</b>	<b>912.70</b>	<b>377.63</b>	<b>7,212.50</b>	<b>4,750.78</b>	<b>-</b>	<b>11,963.28</b>

**Appendix J. 2005 Noxious and Vegetative Weed Treatment Locations and Expense (cont.)**

<b>Date</b>	<b>Location</b>	<b>Acres Sprayed</b>	<b>Miles Sprayed</b>	<b>Labor</b>	<b>Chemical</b>	<b>Cost Share</b>	<b>Net</b>
<b>Vegetative Weed Treatment</b>							
04/07/2005	Special Contract	12.00	-	210.00	210.00	0.00	420.00
04/11/2005	Special Contract	1.00	-	87.50	17.50	0.00	105.00
04/14/2005	Special Contract	0.40	-	35.00	7.00	0.00	42.00
06/23/2005	Special Contract	3.00	-	360.00	342.13	-	702.13
06/27/2005	Bareground Agreement 4.2	9.00	-	450.00	434.26	-	884.26
06/28/2005	Bareground Agreement 4.2	3.00	-	180.00	146.63	-	326.63
10/12/2005	Bareground Agreement 4.2	6.00	-	292.50	210.00	-	502.50
10/13/2005	Bareground Agreement 4.2	1.20	-	90.00	84.00	-	174.00
	<b>Special Contract Total</b>	<b>35.60</b>	<b>-</b>	<b>1,705.00</b>	<b>1,451.52</b>	<b>0.00</b>	<b>3,156.52</b>
	<b>2005 Weed Treatment Total</b>	<b>1,203.75</b>	<b>468.98</b>	<b>25,261.25</b>	<b>21,501.39</b>	<b>(8,654.50)</b>	<b>38,108.14</b>

## Appendix K. Maintenance Shop Activities

Unit/Object by Month	Maintenance/Repair Performed
<b>January</b>	
H43 1975 Cat D8	Repair shifter linkage
H47 1989 JD 690D Excavator	Repair wrist-o-twist
H60 1982 Linkbelt dragline	Replace batteries, prepare for shipment
H85 1990 JD 690D Excavator	Rebuild bucket and ripper
H90 1985 Cat Motorgrader	Install new air dryer and air lines; repair heater fan
T3 1980 Autocar Dump Truck	Replace battery, repair seat
T42 1982 Freightliner	Repair heater wiring; rework headlight electrical
P12 1998 Chev 1/2 ton	Replace brake pads
P20 1999 Chev 1/2 ton	Repair frontend, replace u-joints
Shop	Fabricate box top for 5 Mile-C
Town	Replace water heater in rental unit
<b>February</b>	
H5 1967 Peterbilt Water Truck	Replace kingpins, rework entire frontend, get ready for weed burning
H24 1989 JD Loader	Repair radiator leak
H49 1977 Cat 245 Excavator	Repair oil leak
T3 1980 Autocar Dump Truck	Replace alternator and fuel pump
T5 1982 Autocar Dump Truck	Replace r. rear brake shoes, seal, bearings pinion seal, u-joint
T38 1987 Freightliner	Repair spring shackle to take grease
P16 1977 Chev 1 ton	Replace starter
G. Medow headgates	Refit for length
5 Mile EA	Repair valve
G. Medow	Fabricate box tops
Wyoming Canal	Fabricate gage house
Carney Ranch	Fabricate box top
<b>March</b>	
H5 1967 Peterbilt Water Truck	Adjust wheel bearings and toe-in
H38 1998 Case 580 Backhoe	Repair fuel line
H49 1977 Cat 245 Excavator	Inspect reported problem with boom cylinder
H47 1989 JD 690D Excavator	Repair wrist-o-twist, pins, and wiring
H86 1990 JD Excavator	Rewire wrist-o-twist
H90 1985 Cat Motorgrader	Replace cutting edges
P17 1994 Ford 1 Ton	Tuneup
P21 1999 GMC 1/2 ton 4x4	Replace outside LH door latch
P25 1990 Chev 3/4 ton	Replace thermostat
P33 1991 Chev 1/2 ton	Replace spark plugs
T3 1980 Autocar Dump Truck	Service air dump system, repair hoist air lines
T5 1982 Autocar Dump Truck	Repair brake canister bracket
T30 1983 Belly dump	Replace brake drums, brake shoes, bearings, and tires
T38 1987 Freightliner	Repair lights and air leak
F71 Gorman Rupp water pump	Service

<b>Appendix K. Maintenance Shop Activities (cont.)</b>	
<b>Unit/Object by Month</b>	<b>Maintenance/Repair Performed</b>
<b>March (cont)</b>	
F30 3" Monarch pump	Service
F88 2000 2" Pacer pump	Service
F89 2000 2" Pacer pump	Service
F90 2000 2" Pacer pump	Service
<b>April</b>	
H46 1997 JD Skidloader	Repair oil leaks, hydraulic hose leaks, service
H49 1977 Cat 245 Excavator	Rock guard, stick cylinder, boom pins
H85 1990 JD 690 Excavator	Repair oil leaks
H86 1990 JD Rubber tired Excavator	Remove starter and air assembly, repair hydraulic hoses
H87 1989 JD Rubber tired Excavator	Investigate boom problem, tear down boom to replace rollers
H88 1997 JD Rubber tired Excavator	Hydraulic travel
H90 1985 Cat Motorgrader	Air brake valve
P1 2003 GMC 3/4 ton 4x4	Install telephone booster
P2 2003 GMC 1/2 ton 4x4	Install telephone booster
P3 2003 GMC 1/2 ton 4x4	Install telephone booster
P6 2003 GMC 3/4 ton 4x4	Repair diesel fuel switch
P9 2003 GMC 1/2 ton 4x4	Balance four tires
P12 1998 Chev 1/2 ton	Install new transfer pump
P20 1999 Chev 1/2 ton	Install new starter
P24 1990 Chev 1/2 ton	Service, tuneup, retime
P25 1990 Chev 3/4 ton	Pull radio
P31 1975 Ford 1 ton	ground stake and wire generator
P36 2002 Ford F450	Repair air compressor valve
T4 1980 Autocar Dump Truck	Repair power steering, air leak and hydraulics
T20 2002 Shopbuilt utility trailer	Repair lights
T21 1997 H&W Flatbed trailer	Repair lights
T27 1989 16' tandem axle flatbed trailer	Repair brakes, adjust wheel bearings
F3 1975 6" Koehring water pump	Replace starter, service
F7 4" Gorman Rupp/Ford diesel water pump	Change battery, service
F21 Ingersol Rand air compressor	Repair fuel line, service
F69 Miller shop welder	Repair
F87 2000 Onan generator	Repair fuse holder
F70 Hobart welder (on P36)	Service
<b>May</b>	
H40 1996 Cat Loader	Replace bucket teeth
H85 1990 JD 690 Excavator	Repair hydraulic cylinder
H86 1990 JD Rubber tired Excavator	Replace starter, air control valve, compressor
H87 1989 JD Rubber tired Excavator	Repair hydraulic cylinder, replace cam followers
H88 1997 JD Rubber tired Excavator	Rebuild bucket
H89 1991 JD Motorgrader	Remove sloper unit
H90 1985 Cat Motorgrader	Replace cutting edges; Repair adj pedestal, lights, front end pins, evaluate trans problem

## Appendix K. Maintenance Shop Activities (cont.)

Unit/Object by Month	Maintenance/Repair Performed
<b>May (cont)</b>	
P7 2003 GMC 1/2 ton 4x4	Install 4 new tires
P19 1998 Chev 1/2 ton 4x4	Replace front brake discs
P20 1999 Chev 1/2 ton	Replace R.H. door latch, and R.H. front hub assembly
T4 1980 Autocar Dump Truck	Repair steps
T5 1982 Autocar Dump Truck	Repair gate lock, replace rear wheel seal and adjust
T38 1987 Freightliner	Repair rear fenders
T42 1982 Freightliner	Repair fender
F21 Ingersol Rand air compressor	Repair ignition switch
F80 Weed Sprayer	Replace solenoid control valve
<b>June</b>	
H5 1967 Peterbilt Tank truck	Repair driver's door and air valve
H49 1977 Cat 245 Trackhoe	Remove stick cylinder for rebuild
H84 2002 Cat 320 Trackhoe	Repair wrist-o-twist, rebuild hydraulic cylinder
H85 1990 JD 690 Excavator	Repair hydraulic cylinder
H86 1990 JD Rubber tired Excavator	Replace wrist-o-twist hoses
H88 1997 JD Rubber tired Excavator	Replace front wheel seals, repair boom
H89 1991 JD Motorgrader	Replace cutting edges (x 2)
H90 1985 Cat Motorgrader	Remove transmission for rebuild
P4 2003 GMC 4x4 3/4 ton	Replace A/C belt
P9 2003 GMC 1/2 ton 4x4	Repair rear brakes
P13 1998 Chev 1/2 ton	Replace water pump and thermostat
P17 1994 Ford 1 ton	Replace rear bearings and seals, brakes front and rear, shocks
P18 1998 Chev 1/2 ton 4x4	Replace door handle and linkage
P19 1998 Chev 1/2 ton 4x4	Replace rear shocks
P20 1999 Chev 1/2 ton	Replace brake line
P22 1999 GMC 1/2 ton 4x4	Replace u-joints
P36 2002 Ford F450 Service Truck	Service
Shop	Fabricate steel concrete form, hoist frame, install office A/C, install motor on table saw, repair camp irrigation pump
<b>July</b>	
H4 1979 Sewer Jet truck	Repair Pump with new discharge valves
H47 1989 JD 690D	Evaluate undercarriage, weld pin in track
H86 1990 JD Rubber tired Excavator	Repair cooling and electrical system
H87 1989 JD 595 rubber tired excavator	Evaluate starter problem
H88 1997 JD Rubber tired Excavator	Repair wrist-o-twist, weld crack in boom, install rebuilt hydraulic cylinder
H90 1985 Cat Motorgrader	Install rebuilt transmission
P3 2003 BMC 1/2 ton	Repair brakes
P4 2003 GMC 4x4 3/4 ton	Replace A/C and main belts
P10 2005 Dodge 3/4 ton	Prepare for service, fabricate headache rack and grill guard
P11 2005 Ford 1/2 ton	Prepare for service

## Appendix K. Maintenance Shop Activities (cont.)

Unit/Object by Month	Maintenance/Repair Performed
<b>July (cont)</b>	
P13 1998 Chev 1/2 ton	Replace front brake shoes and rotor
T4 1980 Autocar dumptruck	Repair fuel shutoff problem
T5 1982 Autocar dumptruck	Repair dipstick guide, replace oil pan gasket
T38 1987 Freightliner	Repair step on fuel tank
F66 Lincoln welder on P35	Repair carburetor
<b>August</b>	
H4 1979 Sewer Jet truck	Repair water valve
H5 1967 Peterbilt water truck	Repair carburetor and fuel system on pump
H47 1989 JD 690D	Installed some of undercarriage parts
H89 1991 JD Motorgrader	Repair rear main seal
H90 1985 Cat Motorgrader	Install rebuilt transmission
P1 2003 GMC 3/4 ton	Service
P10 2005 Dodge 3/4 ton	Prepare for service, fabricate headache rack and grill guard
P11 2005 Ford 1/2 ton	Prepare for service, fabricate headache rack and grill guard
P13 1998 Chev 1/2 ton	Install fuel pump, replace headlamp
P19 1998 Chev 1/2 ton	Install 4 new tires, clean radiator, repair coolant leak
P20 1999 Chev 1/2 ton	Replace LH rear brake line
P33 1991 Chev 1/2 ton	Change thermostat, repair lights
T31 1995 Ranco belly dump trailer	repair lights
F18 Kelly Sreed	Service
F25 High pressure washer in shop	Install reel and hoses
F69 Miller welder in shop	Install new hot lead
F80 Weed sprayer	Adjust sprayer valves
<b>September</b>	
H5 1967 Peterbilt water truck	Repair fuel solenoid
H47 1989 JD 690D	Install pads, adjust tracks, repair bolts on wrist-o-twist
H49 1977 CAT 245 Excavator	Pull boom pins and clean, prepare for boom cylinder replacement
H87 1989 JD 595 rubber tired excavator	Repair fuel line and replace batteries
H88 1997 CAT rubber tired excavator	Repair extend-a-boom cylinder line, weld fittings
P6 2003 GMC 3/4 ton	Replace 4 tires
P18 1998 Chev 1/2 ton	Replace brakes and front rotor
P21 1999 GMC 1/2 ton	Replace fuel pump, service, change transmission filter
P25 1990 Chev 3/4 ton	Repair exhaust, replace pinion seal
T4 1980 AutoCar dump truck	Repair air leak, adjust clutch, adjust governor, adjust throttle cable
T30 1983 Loadking belly dump	Replace air hose
T31 1995 Ranco belly dump trailer	Repair air leaks
T38 1987 Freightliner	Service brake and wheel, repair frame brackets, repair hub, replace bearing, new air hoses and lights
T39 1975 IH winch truck	Service 5th wheel, repair PTO repair fuel tank, setup and install winch

## Appendix K. Maintenance Shop Activities (cont.)

Unit/Object by Month	Maintenance/Repair Performed
<b>October</b>	
H4 1979 Sewer Jet	Repair rt frt turn signal, repair pump
H5 1967 Peterbilt water truck	Replace batteries, cables, starter solenoid
H47 1989 JD 690D	Replace alternator
H49 1977 CAT 245 Excavator	Install hydraulic cylinder
H87 1989 JD 595 rubber tired excavator	Replace fuel line, repair wrist-o-twist
H88 1997 CAT rubber tired excavator	Repair front-end vent
H90 1985 CAT Motorgrader	Repair air leak
P2 2003 GMC 3/4 ton	Rotate tires, repair brakes, service
P18 1998 Chev 1/2 ton	Repair tail lights
P22 1999 GMC 1/2 ton	Replace tires
T35 1995 Interstate lowboy	Replace hydraulic cylinders (2)
T38 1987 Freightliner	Replace fuel filter, install inner-cooler and charge system, adjust brakes
T39 1975 IH winch truck	Repair winch, repair air valve
F12 1991 Homelite water pump	Repair pump
F27 1995 Generac generator	Service
F90 2000 Pacer water pump	Replace impeller
Shop Maintenance and Repairs Performed	Calibrate/repair gas pump meter
<b>November</b>	
H4 1979 Sewer Jet	Rebuild pump, valves, repair hydraulic leak
H5 1967 Peterbilt water truck	Install water hose adapter
H24 1989 John Deere 544E Loader	Check backup alarm, replace starter
H38 1998 Case 580 Backhoe	Repair Tire
H46 1997 John Deere Skid Loader	Haul oil to machine at Diversion Dam
H47 1989 JD 690D	Repair shut off switch and cables, repair heater, check alternator
H50 1979 Bucyrus Dragline	Repair oil leak, install new dump cables, adjust clutches, replace filters and o-rings
H85 1990 JD 690 Trackhoe	Repair fuel leak, repair ether injector
H87 1989 JD 595 rubber tired excavator	Replace fueling line o-ring, service, change final drive oil and grease
H88 1997 CAT rubber tired excavator	Replace bearings, races, and hubs on front drive wheels
H89 1991 JD Motorgrader	Replace cutting edges
H90 1985 CAT Motorgrader	Replace cutting edges
P1 2003 GMC 4x4	Service
P18 1998 Chev 1/2 ton	Check door and 4 wheel drive
P20 1999 Chev 1/2 ton 4x4	Replace tires
T5 1982 Autocar Dump Truck	Replace front tires
T22 1997 H&W Flatbed trailer	Replace light wiring, and deck planks
T35 1995 Interstate lowboy	Repair hydraulic coupler leads
T42 1982 Freightliner	Repair clutch
F88 2000 2" Pacer Pump w/ Honda engine	Clean pump and service engine

**Appendix K. Maintenance Shop Activities (cont.)**

<b>Unit/Object by Month</b>	<b>Maintenance/Repair Performed</b>
<b>November (cont)</b>	
Shop	Fabricate sheet steel racks, pipe racks for diversion dam concrete job, pin for H50 bucket
<b>December</b>	
H47 1989 JD 690D	Repair heater, replace alternator and belts
H85 1990 JD 690 Trackhoe	Replace teeth on bucket, replace fuel pump
H88 1997 CAT rubber tired excavator	Reseal windows, straighten hydraulic pipes on boom
H90 1985 CAT Motorgrader	Replace console cylinder
P1 2003 GMC 4x4	Replace four tires and balance
P5 2003 GMC 3/4 ton 4x4	Repair fuel hose
P18 1998 Chev 1/2 ton	Replace window regulator, fuel pump, u-joints, rear differential bushing and gasket
T35 1995 Interstate lowboy	Repair hydraulic coupler leads, replace o-rings
F14 Makita Circular Saw	Repair

## Appendix L. Other District Work Performed

Month	Location	Work Performed
<b>January</b>	Wyo 2nd Div	Push spoil piles
	Carpenter Shop	Install insulation and propanel on interior; fabricate storage shelves
	Wyo 2nd Div	Road maintenance
	Forebay	Replace radial gate seals on two gates
	District	Blade roads (6 man-days)
<b>February</b>	District	Haul rip rap material from Shuttlesworth to Diversion Dam
	Pilot Camp	Removed trees
	Wyo 2nd Div	Moved silt piles back to make room for future cleaning
	Gardner	Removed beaver dams
	District	Blade roads (2 man-days)
<b>March</b>	District	Burn weeds on system (48 man-days)
	Wyo 2nd Div	Inspect and grout void areas on 2nd Div check
	District	Sewer jetting (Clementson, Weliever)
	Wyoming Canal	Installed new gaging station
	Steinhoff	Repair drain
	S. Mesa Pipeline	Inspect valves
	District	Blade roads (13 man-days)
<b>April</b>	District	Burn weeds on system (5 man-days)
	District	Flushing (28 man-days)
	Midwest Siphon	Grout holes in bottom of canal lining that contribute to leak
	P4.2 Lateral	Reestablish sides of canal with sloper
	Wyo Canal	Reestablish sides of canal with sloper
	Diversion Dam	Repair electrical problem with automation
	District	Blade roads (5 man-days)
<b>May</b>	Sd Mesa Pipeline	Fill and check for leaks
	District	Flushing (Lost Wells A, Wyo 6.3, Wyo 7.0)
	Wyoming Canal	Move silt piles
	Sewer Jetting	McQue, Killebrew
	Remv beaver dam	Dolbow, L. David
	Pav Main EA	Replace valve
	District	Blade roads (19 man-days)
	District Camp	Spray weeds
<b>June</b>	Morton/Kinnear FD	Site preparation
	District	Spray weeds ( Shop yard, 4 Bay, S.M. Pipeline)
	Wyo 2nd Div	Road work
	Sewer Jetting	Garland, Bolte, Pingetzer, Tarango, Jarrard
	Lost Wells 8.0	Repair leak
	Dechert Farm	Disassemble Barn and move to camp
	S.M. Pres Re Station	Repair leak
	District	Blade roads (16 man-days)
		District Camp
<b>July</b>	Pilot Canal	Road rehab with yellow gravel downstream of Paradise Valley Rd
	S. Mesa Pipeline	Inspect valves

## Appendix L. Other District Work Performed (cont)

Month	Location	Work Performed
<b>July (cont)</b>	Pilot Butte Dam	Install security gates
	Sewer Jetting	Weliever, Sataki, Lost Wells - C, Office
	Pilot Butte Inlet	Install anchor for logboom
	B. Warner	Repair waste ditch
	District	Blade roads (2 man-days)
<b>August</b>	Bull Lake Dam	Removed out-of-service piezometer tubes
	District	Blade roads (3 man-days)
	Office	Cleanup from tree removal; sewer line replacement
	Sewer Jet	Underground drains on Clementson, Johnson, Trees, Mendenhall, Office
	Lost Wells C	sewer jet and install 4" butterfly valve
	Shop	Install pressure washer reel, rebuild oil bay hoist, install oil drum craddles
	Shop	Fabricate manhole lid, headache rack, grill guard
<b>September</b>	District	Haul cobble from airport pit to camp
	District	Blade roads (4 man-days)
	W22.4	Build up road
	Sewer Jet	Richardson, Jordan, Mendenhall, Pingetzer, Chapman, Von Kosig, Briddle, Gardner, Pince Carlson Maxson, Hartbank
	Wyo 2 <sup>nd</sup> Div	Push spoil piles
	Pilot Camp	Repair roof on garage
	Pilot Canal	Build up road downstream of Paradise Valley Road
	Camp	Assemble metal building
<b>October</b>	SM Pipeline	Winterize pipeline (9 man-days)
	District	Blade roads (3 man-days)
	P36.5	Repair concrete chute (19 man-days)
	Sewer Jet	Briddle, Dry Creek Siphon, Pingetzer, Denke
	Wyo 2 <sup>nd</sup> Div	Push spoil piles
	Pilot Butte Dam	Seal outlet works (gates)
	Wyo1st/2 <sup>nd</sup> Div	Seal canal behind radial gates between divisions
<b>November</b>	Bull Lake Dam	Apply epoxy coating to horizontal surfaces of spillway gate peirs; repair bridge concrete; 6 man-days
	District	Blade roads (1 man-day)
	P36.5	Seal cracks in concrete chute
	Sewer Jet	Johnson, Davis, Frank
	Wyo 2 <sup>nd</sup> Div	Push spoil piles
	Pilot Butte Dam	Re-Seal outlet works (left gate)
<b>December</b>	Stoll	Haul yellow gravel for caved in portion of underground drain
	District	Blade roads (1 man-day)
	Shop	Clean heater reflectors for greater efficiency (3 man-days)
	Wyo 2 <sup>nd</sup> Div	Road maintenance - fill in low spots with spoil material
	Wyo 2 <sup>nd</sup> Div	Push spoil piles (8 man-days)

## Appendix M. Construction for Hire

Month	Location	Work Performed
<b>January</b>	Carney Ranch	Water division box (5 yds concrete)
	Dechert	Remove house basement (trade for barn)
	G. Meadow	Raise water division box (4.5 yds concrete)
<b>February</b>	Shuttlesworth	Install 640' x 12" PVC pipeline
	Currier	Sewerjetting
	EnCana	Begin Wyo 25.4 pipeline job
<b>March</b>	EnCana	Wyo 25.4 pipeline job, division box, fabricate box top
	Winchester	Concrete ditch removal
	Fike	Pipeline, close old irrigation ditches
	B. Pingetzer	Concrete bubbler, pipelines, concrete ditch removal
	Shuttlesworth	Pipeline
	J. Weliever	Pipeline
	G. Meadow	Raise concrete box height
	<b>April</b>	Westlake, B
	House	Install 10' x 36" CMP
	Fike	Finish installation of alfalfa valves
	Nash	Install concrete box and beginning of pipeline (35' x 15" PVC)
	Winchester	Install 15" CMP
	Berthod	Install concrete box and bubbler, install 630'x 12" PVC overflow
	G. Meadow	Raise concrete box height
<b>May</b>	J Locker	Blade work
	Ty Nichols	Install 1500' x 12" PVC pipeline
	EnCana	Repair Wyo 25.4 pipeline damaged by Nat. Gas pipeline contractor
	Nash	Install 1070' x 12" PVC pipeline
	Quest	Repair P3.5 pipeline damaged by telephone contractor
	Berthod	Install concrete box and bubbler, install 630'x 12" PVC overflow
<b>June</b>	G. Pingetzer	Blade in open ditch
<b>July</b>	Mike Effle	Blade work
	Gary Jennings	Sewer jet
<b>August</b>	J. Weliever	build silage pit
	Pince	clean waste ditch
<b>September</b>	J. Kimmel	Install 18" x 20' CMP
	Crouch	Remove and haul concrete ditch
	Delventhal	Fill old basement
	Pince	Fill old potato cellar
<b>October</b>	Fox	Construct water gap
<b>November</b>	Weliever	Remove concrete ditch, blade work
<b>December</b>	Griffith	Construct pond for pivot supply
	Weliever	Begin installation of turnout and division box

<b>Appendix N. Sites Identified for Potential Automation</b>		
<b>Location</b>	<b>Water Course</b>	<b>Requirements</b>
Wind River Upstream of Confluence	Wind River	Monitoring only
Bull Lake	Bull Lake Creek	Unique automation
Bull Lake Creek Gage –BLCK	Bull Lake Creek	Monitoring only
Diversion Dam-WDDY	Wind River	Unique automation
Wyoming Canal-WYCY	Wyoming Canal	Monitoring only
Wind River Downstream of Diversion Dam-WRWD	Wind River	Monitoring only
Pilot Butte Reservoir	Pilot Canal	Unique automation
Pilot Canal Gage	Pilot Canal	Monitoring only
Kinnear Check	Pilot Canal	Monitoring and gate automation
Check 8.5	Pilot Canal	Monitoring and gate automation
Check 12.4	Pilot Canal	Monitoring and gate automation
Check 16.4	Pilot Canal	Monitoring and gate automation
Check 23.2	Pilot Canal	Monitoring and gate automation
Check 24.7	Pilot Canal	Monitoring and gate automation
Lost Wells Check	Pilot Canal	Monitoring and gate automation
Camp Five Canal Gage	Pilot Canal	Monitoring only
Camp Five Wasteway	Pilot Canal	Monitoring and gate automation
Ulcer Hill Gage	Pilot Canal	Monitoring only
P36.8 Wasteway	Pilot Canal	Monitoring and gate automation
Wyoming Canal Gage	Wyoming Canal	Monitoring only
Fivemile Creek Wasteway	Wyoming Canal	Monitoring and gate automation
Muddy Creek Wasteway	Wyoming Canal	Monitoring and gate automation
Badger Wasteway	Wyoming Canal	Monitoring and gate automation
Sand Mesa Intake	Wyoming Canal	Monitoring only
Sand Mesa PRV	Wyoming Canal	Monitoring only

<b>Appendix O. Midvale Irrigation District Balance Sheet*, 12/31/05</b>			
<b>ASSETS</b>	<b>O&amp;M</b>	<b>CONSTRUCTION</b>	<b>TOTAL</b>
<b>CURRENT ASSETS:</b>	<b>FUNDS</b>	<b>FUNDS</b>	
Cash	\$145,862	\$29,547	\$175,409
Cash-certificates of deposit	\$1,286,927		\$1,286,927
Accrued interest-certificates			
Accounts Receivable:			
Assessments	\$773,348	\$65,114	\$838,462
Other accounts receivable	\$12,164		\$12,164
Inventory	\$181,152		\$181,152
Prepaid and deferred charges	\$524		\$524
<b>Total Current Assets</b>	<b>\$2,460,015</b>	<b>e\$94,661</b>	<b>\$2,554,676</b>
<b>FIXED ASSETS</b>			
Property, buildings and equipment:			
Cost	\$3,608,190		\$3,608,190
Accumulated depreciation	(\$3,117,738)		(\$3,117,738)
<b>Total Fixed Assets</b>	<b>\$490,452</b>		<b>\$490,452</b>
<b>OTHER ASSETS</b>			
Bureau of Reclamation Emergency Fund	\$805,400		\$805,400
Sand Mesa Pipeline Reserve	\$202,700		\$202,700
Equipment Replacement Reserve	\$200,000		\$200,000
Maximum cost of Amendatory Contract		\$6,500,000	\$6,500,000
Expended contract value		(\$2,968,285)	(\$2,968,285)
<b>Total Other Assets</b>	<b>\$1,208,100</b>	<b>\$3,531,715</b>	<b>\$4,739,815</b>
<b>TOTAL ASSETS</b>	<b>\$4,158,567</b>	<b>\$3,626,376</b>	<b>\$7,784,943</b>

\* Audit Report not complete as of 2/7/06

**Appendix O. Midvale Irrigation District Balance Sheet\*, 12/31/05 (cont.)**

<b>LIABILITIES</b>	<b>O&amp;M</b>	<b>CONSTRUCTION</b>	<b>TOTAL</b>
<b>CURRENT LIABILITIES</b>	<b>FUNDS</b>	<b>FUNDS</b>	
Accounts payable	\$30,482		\$30,482
Payroll, vacation and payroll taxes	\$58,538		\$58,538
Current portion of Amendatory Repayment Contract		\$83,555	\$83,555
<b>Total Current Liabilities</b>	<b>\$89,020</b>	<b>\$83,555</b>	<b>\$172,575</b>
<b>LONG-TERM DEBT</b>			
Maximum amount due on Amendatory Contract	\$0	\$3,448,160	\$3,448,160
<b>DEFERRED REVENUE</b>			
Water charges assessed in 2005:			
Operation and maintenance assessment for 2006	\$1,012,207	\$82,892	\$1,095,099
Prepaid grazing lease revenues	\$4,326		\$4,326
Water service contract assessments		\$1,051	\$1,051
<b>Total Deferred Revenue</b>	<b>\$1,016,533</b>	<b>\$83,943</b>	<b>\$1,100,476</b>
<b>NET ASSETS</b>			
Contributed capital	\$62,977		\$62,977
Restricted:			
Bureau of Reclamation Reserve for emergency	\$800,000		\$800,000
Equipment replacement	\$200,000		\$200,000
Sand Mesa Reserve	\$200,000		\$200,000
Invested in fixed assets	\$490,452		\$490,452
Unrestricted	\$1,299,585	\$10,718	\$1,310,303
<b>Total Net Assets</b>	<b>\$3,053,014</b>	<b>\$10,718</b>	<b>\$3,063,732</b>
<b>TOTAL LIABILITIES AND NET ASSETS</b>	<b>\$4,158,567</b>	<b>\$3,626,376</b>	<b>\$7,784,943</b>
<b>* Audit Report not complete as of 2/7/06</b>			

**Appendix P. Midvale Irrigation District Statement of Revenues and Expenditures\*, 1/1/05 – 12/31/05**

	<b>O&amp;M</b>	<b>Construction</b>	<b>Combined</b>
	<b>Fund</b>	<b>Fund</b>	<b>Totals</b>
<b>REVENUE</b>			
Assessments, O&M	\$1,018,381	\$83,288	\$1,101,669
Assessments, construction USBR		\$1,051	\$1,051
Special water contracts	\$32,525		\$32,525
Interest and penalties	\$93,450		\$93,450
Other Income			
Rents and Leases	\$33,906		\$33,906
Work and Sales to Others (Net)	\$16,444		\$16,444
Contribution of Land	\$32,923		\$32,923
Equipment Sales	\$26,717		\$26,717
Miscellaneous	\$13,399		\$13,399
<b>Total Revenue</b>	<b>\$1,267,745</b>	<b>\$84,339</b>	<b>\$1,352,084</b>
<b>EXPENSES</b>			
Commissioners per diem, travel	\$6,913		\$6,913
Depreciation	\$166,092		\$166,092
Fuel	\$90,734		\$90,734
Insurance, bonds	\$29,781		\$29,781
Legal and Accounting	\$53,407		\$53,407
Materials and Parts	\$122,619		\$122,619
Payroll Taxes	66,830		\$66,830
USBR-Construction Payment		\$83,555	\$83,555
USBR-Grazing Lease Payments	14,635		\$14,635
Employee Insurance and Pension	62,154		\$62,154
Wages	651,695		\$651,695
Water Service	4,250		\$4,250
<b>Total Expenses</b>	<b>1,269,110</b>	<b>\$83,555</b>	<b>\$1,352,665</b>
<b>(EXPENSES) IN EXCESS OF REVENUES</b>	<b>(\$1,365)</b>	<b>\$784</b>	<b>(\$581)</b>
Net Assets, January 1	\$1,310,344	\$9,934	\$1,320,278
Net Increased in Investments & Fixed	(\$9,394)		(\$9,394)
Net Assets, December 31	\$1,299,585	\$10,718	\$1,310,303
* Audit Report not complete as of 2/7/06			

<b>Appendix Q. 2005 Midvale Irrigation District Staff</b>		
<b>Name</b>	<b>Title/Position</b>	<b>Date Hired</b>
<b><i>Fulltime Employees</i></b>		
Affinito, Dominic	Heavy Equipment Operator/Ditchrider	11/17/97
Arrington, A. Lee	Manager	05/01/00
Baker, Larry H.	Mechanic	05/01/01
Dunlavy, Lourie	Dam Tender/Wyoming Canal Supervisor	05/18/92
Duthie, David	Heavy Equipment Operator	06/09/78
Eggers, Harold	Welder	05/03/88
Hicks, Becky	Assistant Bookkeeper	01/01/94
Inman, Steve	Concrete/Carpentry Foreman	07/01/88
Johnson, Richard	Assistant Manager/Construction Foreman	05/30/89
Kisling, Allen	Heavy Equipment Operator	10/17/77
Henry Lopez	Ditchrider/Construction Laborer	
Raymond, Eugene	Heavy Equipment Operator/Mechanic	09/24/81
Rorabaugh, Pat	Office Manager/Bookkeeper	03/04/86
Sauer, Sonny	Heavy Equipment Operator	01/02/90
Solan, Lynda	Office Clerk	06/22/99
Walters, Dave	Assistant Construction Foreman	03/20/89
Ward, Jene	Shop Foreman	09/24/73
Wilson, Ray	Pilot Canal Supervisor	04/30/84
<b><i>Part-time Employees</i></b>		
Stagner-Justice, Christi	Ditchrider/Construction Laborer	
Jordan, Lance	Intake Screen Maint - Sand Mesa Pipeline	
Yoder, Jim	Ditchrider	
Knight, Harold	Ditchrider/Construction Laborer	
Rorabaugh, Chris	Yard/Office Maintenance	
Martin, Josh	Ditchrider	

