

W A T E R D I S T R I C T #31

1 9 9 5 R E P O R T

CHAIRMAN
WATERMASTER
DEPUTY
SECRETARY

GARTH SODERQUIST
DON SHENTON
GREG SHENTON
KEITH BRAMWELL

1995 IRRIGATION SEASON

The 1995 water season ranked with some of the best as to water flows from Camas Creek, Beaver Creek and the tributaries. After such a serious string of drought years this 95 year was very much needed and long over due. A very heavy late winter snow pack with a lot of early spring rains and snow storms and a very cold late spring made for a long hard run off of water into the Mud Lake system.

There was a total of 67,995 A.F. of water that flowed into Mud Lake and was allotted by decree to the rightful owners of Mud Lake waters. This gave all the owners of Mud Lake water a good irrigation balance. The above amount does not include the amounts of waters that were diverted as "excess" upstream from Mud Lake.

EARLY PUMPING OF WELLS

Early pumping into Mud Lake commenced on April 17th. It had been decided to pump some waters in the almost dry lake by May 1 so irrigation could take place by those who needed and wanted water. Those pumping were the Independent Water Users, Owsley Canal Co., Jackett Canal Co., and Andy Dobson. A total of 8,122 A.F. was pumped by April 28th.

It was known that water would be available after May 10 to 15 but most users worried about being behind if the water was not available when needed. Knowing that most water users allotments would fill at later dates it was decided in an official meeting to pump without individual credit thereby raising the lake level for allottable waters to fill earlier in which all users benefited. All rights did fill eventually but some of the later rights had to have temporary transfers from other users until they had filled their allotments. Pumping into Mud Lake is a tough call when the snow pack exceeds 120 percent, however a low lake level and the fact the flow could have been less than anticipated and users could have been without water were the primary factors for making the pumping call. As it turned out flows far exceeded any forecasts and estimations by some 40 percent which was a blessing to all area users, both upstream and the Mud Lake users.

EMERGENCY OPERATIONS PLAN

The Mud Lake operations flood plan was put into full effect at a time we were aware that the Mud Lake level would exceed 9.0 G.H. on the U.S.G.S. stage recorder. All evacuation methods were put in place at this time which included pumping to I.N.E.L., spilling at the Lone Tree diversion, diverting large amounts into the refuge, Warm Creek, Mallard Slew, Gravel Pits and into the I.D.F.G. Slews. Many of these methods were in place for sometime prior to the I.N.E.L. diversion. 24 hour a day levee patrol was in place during this time and as directed by the E.O.P.

The plan takes the guess work out of decision making because as problem develop it is spelled out precisely what is to be done regardless of pressures from the side line. Some people don't want to waste a drop of water and are not concerned about flooding while others would not like to see the lake level exceed 7.0 G.H. both these theories are wrong and we have reached a safe medium. The right to safely store maximum amounts of decreed water should never be denied

but not at a reckless irrigation ambition. With all the developed safety diversions, along with the E.O.P. and common sense there should hopefully be no serious flooding in the future. The flows of water from Camas creek far exceeded anyone's expectations this 95 season.

EXCESS WATERS PUMPED TO I.N.E.L.

A 9.44 G.H. level was reached on June 20, 1995 the highest level since 1984. A total of 4,752 A.F. of water was pumped to the desert on the I.N.E.L. through the overflow ditch located at the pumping station of the Owsley Canal Co. This pumping of the Owsley Canal Co. started on June 11 and continued until July 2nd at a 9.36 G.H. when demand for water was high and the lake level was dropping fast. The pumps were off for three days while some dozers did some work to the overflow ditch bottom. With exception of some dikes on the North side, the Mud Lake levee had a good free board and there were no real problems encountered as was the case in 83, 84, and 85.

LONE TREE DIVERSION AND OTHERS

High flows of water though the U.S.F.W.S. properties prompted the Deputy to divert water into the Warm Creek Channel, by-passing the Wildlife headquarters and diverting directly into Rays Lake. Some flooding was occurring along Camas Creek prompting this action. This channel took the flows that Camas wouldn't take.

After three days of hard rain on the snow pack we experienced some unusually high flows on Camas Creek at the Red Road Staff Gauge, and on May 12th partly opened the Lone Tree Diversion to take some pressure off the bridges on Camas down stream. We also called Jim Hagenbarth and opened the flood gates on Dry Creek and diverted into the Snake River Drainage. 1400 c.f.s. of water was measured at the Red Road this day.

Greg pulled all boards from the Lone tree structure the 22nd of May as flows were extremely high, it kept raining, and Mud Lake was fast approaching 8.0 G.H. and water diversion from the lake was low.

We had a meeting with the Mud Lake users on May 23rd deciding to try to hold Mud Lake at 8.0 to 8.5 by using all upstream diversions. At this time we cleaned upstream of the Lone Tree Diversion structure with a large track hoe to increase flows, increased flows at Dry Creek and all irrigation diversion from the refugee upstream. On May 24th Warm Creek boards were put in the Flood Control Structure on Warm Creek holding and storing waters in Mallard Slew. We diverted water into gravel pits upstream.

AT this time there was a lot of work taking place on the Mud Lake Levees mostly on the North Side along Rady's, Lundholm's, and Marty's.

A lot of irrigation diversion was occurring now for most users, and the lake had stabilized at 7.8 G.H. On June 2nd it started raining hard and continued through June 7th raising flows remarkably and stopping irrigation use again.

On June 11th Mud Lake level had risen to 8.7 at which time pumping to the I.N.E.L. was started. After some more rain we cut the North Lake ditch to increase flows to the North Lake side and opened the flood gate into I.D.F.G. NW slews. The Independent ditch west bank was cut onto Joe Marty pasture lands on the 23rd of June. Mud Lake was nearing 9.5 G.H. at this time and by July 7th

most of these diversions were shut off, as flows were rapidly receding on all streams and ponds and lakes north of Mud Lake.

PURPOSE OF LONE TREE DIVERSION

One of the most difficult problems with operation of the Lone Tree Diversion is the pressure from the public, downstream users, irrigators, and developers along the Camas Creek stream bed.

People who have developed along the stream where water always flowed in high water prior to 1980, get excited because water is getting onto farmed lands or was threatening to do so. Farmers along the Warm Creek overflow channel indeed feel water should not be allowed to flow there anymore.

Existing bridges won't hold the flows anymore because side channels and natural high water channels have been clogged off and filled in causing large amounts of water to flow in the main channel. Most of these overflow channels had bridges and culverts across roads and railroads which now aren't used.

These conflicts with the watermaster are pretty much daily and get some what ugly on some occasions.

The bottom line is that the Lone Tree Diversion was put in place to save the Mud Lake levee and in 1969 the Corps of Engineers turned the operation of said structures and ditch over to Flood District #5 to be maintained by Flood District and regulation of this structure was to be controlled by the watermaster. Normally the Corps, after a flood fight, fills in said emergency diversions.

This diversion was not put in place to take any Mud Lake Water Rights away nor to be used at anytime for someone's wishes, not to be bothered by high water flows for whatever reason but to be used only to keep the Mud Lake Levee from failing or reaching excess lake levels. Anytime this diversion is used someone's valid water rights are being diverted.

ANNUAL FALL MUD LAKE WATER USER MEETING

This meeting was held in early November. Due to the large amounts of handouts I will not attach to this report. If you need some of this data you can get it from the directors of the various canal companies as most of them were in attendance.

An early meeting of Mud Lake and Montevue area users was held at 1 p.m. Subjects that were of interest to all area users such as well monitoring contracts with U.S.G.S., cloud seeding, bed losses studies, hydrographs and etc. were discussed at this meeting. The second meeting was held at 3 p.m. with Mud Lake Users and included yearly watermaster reports on inflows, drafts, uses, losses, channel work, and other problems, concerns, and resolutions needed passing to have a smooth pre-planned water distribution system.

CLOUD SEEDING FOR 1996

At the above fall meeting it was unanimously voted to assess five cents per acre for all the canal companies in the Montevue, Hamer, and Mud Lake areas. There will be no help or grants from the I.D.W.R. this year. Both counties of Clark and Jefferson pledged financial support again. There is a program being put together now by six counties including Jefferson, Clark, Bonneville, Fremont,

Madison, and Teton with each county meeting assessment pledges to build our own cloud seeding generators. All parts for these generators are at Charles Wilson's with exception of some special valves. Mr. Wilson is building these at a cost of \$300-\$350 per generator, which are retailed at \$1400 if purchased from other sources. We will have these in each county from now on and they will be ready for use each year immediately when needed. These counties are in the process of getting the remaining program together and hopefully will get some seeding done yet this year. Finding enough money is very difficult but progress is being made. With our own program in place it will be much cheaper than our present contracts with North American weather.

OF SERIOUS CONCERN

In 1993 nearly \$23,00 was spent cleaning large amounts of sand bars and even a partially filled Camas Creek Channel from I-15 to 2 miles south of the Camas Wildlife Refuge headquarters. This clogged channel was caused from Camas Creek being re-channeled upstream to allow distribution of irrigation circles for some 5 miles upstream from Camas Town. This turned out to be a disaster as to erosion of tens of thousands of cubic yards of sand being moved downstream and deposited into the channel downstream.

This year was no different and after a tour with refuge personnel and downstream water users it was found the channel is fast becoming filled in again.

Mr. Larsen has wanted to rebuild this channel by straightening and making it wide enough to easily accommodate large flows, but he has run into resistance from various agencies as to how they want it done. The Mud Lake Users have endorsed getting it done now by whatever means to save the lower reaches of the channel. In the meantime the channel is losing carrying capacity rapidly.

MARCH 1 --- WINTER FLOW (computed in c.f.s)

	1992	1993	1994	1995	1996
Independent Ditch	-0-	-0-	-0-	-0-	7.48
Bybee Wells	-0-	-0-	-0-	-0-	15.31
Totals	-0-	-0-	-0-	-0-	22.79

MUD LAKE CONTENT

March 1	Gauge Height	Content
1992	2.16	8,660
1993	1.78	7,490
1994	1.74	7,370
1995	2.21	8,820
1996	2.37	9,350
May 1		
1991	8.05	38,300
1992	7.30	33,400
1993	6.60	29,200
1994	7.70	36,000
1995	4.84	19,700
November 1		
1991	3.15	12,200
1992	2.67	10,400
1993	2.95	11,500
1994	3.15	12,200
1995	2.48	9,730

CAMAS CREEK INFLOW TO MUD LAKE

(Allottable Flow After May 1)

1989	10,600 A.F.
1990	-0- A.F.
1991	-0- A.F.
1992	-0- A.F.
1993	26,184 A.F.
1994	-0- A.F.
1995	50,195 A.F.

1995 WATER USE OF MAJOR CANAL COMPANIES

Name	Acres	Acre Ft. Used	Acre Ft Per Acre
Owsley Canal Co	17,888	46,890	2.62
Level Canal Co	1,695	3,736	2.20
Jackett Canal Co	2,841	4,982	1.75

1995 Average Use In Mud Lake Area	- 2.33 A.F. Per Acre
1994 Average Use In Mud Lake Area	- 3.10 A.F. Per Acre
1993 Average Use In Mud Lake Area	- 2.27 A.F. Per Acre
1992 Average Use In Mud Lake Area	- 3.31 A.F. Per Acre
1991 Average Use In Mud Lake Area	- 3.06 A.F. Per Acre
1990 Average Use In Mud Lake Area	- 3.57 A.F. Per Acre

SNOW REPORT

MARCH 1, 1996

Camp Creek - Beaver

Kilgore - Camas

Year	Snow Depth	Water Content	Snow Depth	Water Content
1992	32.0	7.8	33.0	7.5
1993	42.1	11.4	44.8	12.8
1994	24.0	6.0	31.0	7.6
1995	40.0	11.5	40.0	14.4
1996	29.0	6.4	26.0	6.8

Camp Creek - 30 year average = 8.7 water content (S.C.S.)
 Kilgore - 30 year average = 10.4 water content (S.C.S.)
 Blue Ledge - 30 year average = 13.7 water content (S.C.S.)
 Camp Creek Course is 74% of normal
 Kilgore Course is 65% of normal
 Blue Ledge Course is 67% of normal (9.4 in. water)

Average percent of the total courses 69%

ORIGINAL

**Department of the Interior
Geological Survey
Joint Funding Agreement
FOR**

Agreement No. ID9602100
Customer No. ID022

WATER RESOURCES INVESTIGATIONS

THIS AGREEMENT is entered into as of the 24th day of November 1995 by the GEOLOGICAL SURVEY, UNITED STATES DEPARTMENT OF THE INTERIOR, party of the first part, and the WATER DISTRICT 31, party of the second part.

1. The parties hereto agree that subject to the availability of appropriations and in accordance with their respective authorities there shall be maintained in cooperation a program to measure seepage runs on Camas Creek, hereinafter called the program.
2. The following amounts shall be contributed to cover all of the cost of the necessary field and office work directly related to this program, but excluding any bureau level general administrative or accounting work in the office of either party.
 - (a) \$465.00 by the party of the first part during the period May 1, 1996 to September 30, 1996
 - (b) \$465.00 by the party of the second part during the period May 1, 1996 to September 30, 1996
 - (c) Additional amounts by each party during the above period or succeeding periods as may be determined by mutual agreement and set forth in an exchange of letters between the parties.

3. Expenses incurred in the performance of this program may be paid by either party in conformity with the laws and regulations respectively governing each party, provided that so far as may be mutually agreeable all expenses shall be paid in the first instance by the party of the first part with appropriate reimbursement thereafter by the party of the second part. Each party shall furnish to the other party such statements or reports of expenditures as may be needed to satisfy fiscal requirements.

4. The field and office work pertaining to this program shall be under the direction of or subject to periodic review by an authorized representative of the party of the first part.

5. The areas to be included in the program shall be determined by mutual agreement between the parties hereto or their authorized representatives. The methods employed in the field and office shall be those adopted by the party of the first part to insure the required standards of accuracy subject to modification by mutual agreement.

6. During the progress of the work all operations of either party pertaining to this program shall be open to the inspection of the other party, and if the work is not being carried on in a mutually satisfactory manner, either party may terminate this agreement upon 60 days written notice to the other party.

7. The original records resulting from this program will be deposited in the office of origin of those records. Upon request, copies of the original records will be provided to the office of the other party.

8. The maps, records or reports resulting from this program shall be made available to the public as promptly as possible. The maps, records or reports normally will be published by the party of the first part. However, the party of the second part reserves the right to publish the results of this program and, if already published by the party of the first part shall, upon request, be furnished by the party of the first part, at cost, impressions suitable for purposes of reproduction similar to that for which the original copy was prepared. The maps, records or reports published by either party shall contain a statement of the cooperative relations between the parties.

9. Billing for this agreement will be rendered annually. Payments of bills are due within 60 days after the billing date. If not paid by the due date, interest will be charged at the current Treasury rate for each 30-day period, or portion thereof, that the payment is delayed beyond the due date. (31 USC 3717; Comptroller General File B-212222, August 23, 1983.)

GEOLOGICAL SURVEY
UNITED STATES
DEPARTMENT OF THE INTERIOR

WATER DISTRICT 31

By _____

By _____

By _____

By Jerry L. Hughes, District Chief
(SIGNATURE & TITLE)

31_BUGET.XLS

1995 BUDGET BREAKDOWN DIST. 31											
	Water master	Deputy	Mileage	Phone	F.I.C.I.A Retire	Office Misc	U.S.G.S Channel	Insurance	Secretary	Field Equement	TOTALS
DON&GREG	2575.00	1713.00									4288.00
GREG SHENTON			650.00								650.00
KEITH BRAMWELL									300.00		300.00
DON & GREG	2575.00	1717.00									4292.00
GREG SHENTON			650.00								650.00
DON & GREG	2575.00	1717.00									4292.00
GREG SHENTON			650.00								650.00
DON & GREG	2575.00	1717.00									4292.00
GREG SHENTON			650.00								650.00
DON & GREG	2575.00	1717.00									4292.00
GREG SHENTON			650.00								650.00
DON & GREG	2575.00	1717.00									4292.00
GREG SHENTON			650.00								650.00
DON SHENTON				202.38		231.47				95.75	529.60
DON & GREG	2575.00	1717.00									4292.00
GREG SHENTON			650.00								650.00
DON & GREG	2575.00	1717.00									4292.00
GREG SHENTON			650.00								650.00
I.D.W.R.							2400.00				2400.00
DON & GREG	2575.00	1717.00									4292.00
GREG SHENTON			650.00								650.00
DON & GREG	2575.00	1717.00									4292.00
GREG SHENTON			650.00								650.00
GREG SHENTON						1200.00					1200.00
U.S.G.S.							450.00				450.00
DON SHENTON				118.76		224.07			60.00		402.83
DON & GREG	2575.00	1717.00									4292.00
GREG SHENTON			650.00								650.00
DON & GREG	2575.00	1717.00									4292.00
GREG SHENTON			650.00								650.00
DON SHENTON				94.99		385.59				44.42	525.00
Workman&Retire&					5979.14			4024.31			10003.45
F.I.C.I.A.& INSUR.					3550.11			2679.80			6229.91
TOTALS	30900.00	20600.00	7800.00	416.13	9529.25	2041.13	2850.00	6704.11	360.00	140.17	81340.79

1996 ADOPTED BUDGET FOR WATER DISTRICT #31

	1995	1996
Misc. Expense	19,000.00	20,000.00
Channel & Legal	1,800.00	1,800.00
Secretary Salary	300.00	300.00
Office Rent	<u>1,200.00</u>	<u>1,200.00</u>
	22,300.00	23,300.00
Watermaster Salary	30,900.00	31,200.00
Deputy Salary	<u>20,600.00</u>	<u>21,400.00</u>
	51500.00	52,600.00
Deputy Mileage	<u>7,800.00</u>	<u>8,000.00</u>
Ass.Deputy Salary	0.00	6,000.00
Ass.Deputy Mileage	0.00	3,500.00
Secretary	0.00	1,000.00
Misc. Expense	<u>0.00</u>	<u>1,250.00</u>
	0.00	11,750.00
Total Budget	81,600.00	95,650.00
1995 Budget	81,600.00	
1996 Budget	<u>95,650.00</u>	
Increase	14,050.00	

Charges from regular district delivery.	61,900.00
Charges from Mud Lake Users.	<u>33,750.00</u>
Total Budget	95,650.00

1995 MUD LAKE WATER USERS ASSESSMENT BREAKDOWN
WATER DISTRICT #31

Name	Acres			
Owsley	17,888	.6904 X	33,750.00 =	23,301.00
Jackett	2,841	.1096 X	33,750.00 =	3,699.00
Level	1,695	.0654 X	33,750.00 =	2,207.25
Dobson	1,594	.0615 X	33,750.00 =	2,075.62
Burtenshaw	880	.0340 X	33,750.00 =	1,147.50
Holley	600	.0232 X	33,750.00 =	783.00
Shuldberg	252	.0097 X	33,750.00 =	327.38
Potter	<u>160</u>	.0062 X	33,750.00 =	<u>209.25</u>
Total	25,910	1.0000	33,750.00 =	33,750.00



DEPARTMENT OF THE ARMY
WALLA WALLA DISTRICT, CORPS OF ENGINEERS
201 NORTH THIRD AVENUE
WALLA WALLA, WASHINGTON 99362-1876

Reply To
Attention Of:

July 10, 1995

Operations Division

SUBJECT: NPW No. 950500020

Mr. Donald W. Shenton
Water District No. 31
P.O. Box 33
Dubois, Idaho 83423

Dear Mr. Shenton:

This confirms our policy on the removal of beaver dams, as you requested in your letter of June 20, 1995. Under Section 404 of the Clean Water Act (33 U.S.C. 1344), a Department of the Army permit is required for the discharge of dredged or fill material into waters of the United States, including wetlands. This includes excavation activities which result in the discharge of dredged material and destroy or degrade waters of the United States.

The removal of beaver dams is an excavation activity that requires a Department of the Army permit. However, we find the removal of recently established beaver dams may not result in a discharge of dredged material or destroy or degrade waters of the United States, therefore you may remove beaver dams which are less than 1 year old, without contacting us and without obtaining a Department of the Army permit.

You should contact us if you will be removing a beaver dam which is older than 1 year. We will inspect the beaver dam and review your proposed excavation method. If we determine your work will result in the discharge of dredged material and destroy or degrade a water of the United States, a Department of the Army permit will be required. I am enclosing our permit application pamphlet containing an application form and a drawing sheet, for use in preparing your application.

You said you were disappointed it took so long for us to respond to your letter of last August. Our regulations governing the excavation of fill material were new at the time we received your letter and the issue of beaver dams had not yet been addressed by our office. Our Office of Counsel needed to review the Federal Court Decree which directs you to remove obstructions from the streambed. We felt our determination would be precedent setting. We are sorry for the long wait and apologize for any inconvenience it caused you.

You asked what would happen if we do not approve a permit. In such cases, an application would be denied and the work, as proposed, would not be authorized. This denial would not preclude you from reapplying with a different project design which would have less than minimal impact.

You also asked in what situations we would deny a permit. In processing your application, we must evaluate the social, economic, and environmental benefits and detriments of your proposed work in relation to the public interest. The benefits of the work you propose must outweigh its reasonably foreseeable detriments and be in the public interest. If required Federal, state, or local authorization has been denied for your project or your work does not receive water quality certification or waiver of certification from the State of Idaho, Division of Environmental Quality we are required to deny your permit without prejudice.

We must also determine if your project complies with the Environmental Protection Agency's 404 (b) (1) Guidelines for review of permit applications. These guidelines require that any project that is approved must be shown to be the least damaging practicable alternative. The guidelines state that for non-water dependent activities, there is a presumption that there are alternative sites for the work that are less damaging to aquatic resources. An applicant must demonstrate that practicable alternatives do not exist before a permit can be issued. No discharge shall be permitted if it violates State water quality standards or jeopardizes the continued existence of species listed as endangered or threatened. The guidelines state that no discharge of dredged or fill material shall be permitted which will cause or contribute to significant degradation of the waters of the United States. Finally, you must design your project to minimize adverse impacts to the aquatic ecosystem to the maximum extent possible and then show how you will mitigate for any remaining unavoidable impacts.

We look forward to working with you. If you have any questions, please contact Mr. Ray Kagel of my Idaho Falls Regulatory Office, telephone 208-522-1645.

Sincerely,

Barbara C. Benge

Barbara C. Benge
Acting Chief, Regulatory Branch

Enclosure