

Permit No: 67-7189

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

RECEIVED
SEP 20 2005
DEPARTMENT OF WATER RESOURCES

A. GENERAL INFORMATION

Permit No: 67-7189

Exam Date: 8/19/2005

1. Current Owner: DELORIS L WILLIAMSON
1860 CEMETARY RD
WEISER ID 83672
(208)549-1981

W M WILLIAMSON
1860 CEMETARY RD
WEISER ID 83672
(208)549-1981

2. Accompanied by: WAYNE WILLIAMSON

Phone No: SAME AS ABOVE

Address: SAME AS ABOVE

Relationship to Permit Holder: OWNER

3. SOURCE

DEER CREEK
MANN CREEK

TRIBUTARY

WEISER RIVER
WEISER RIVER

B. OVERLAP REVIEW

1. Other water rights with the same place of use: 67-10383, 67-10384, Mann Creek Reservoir water rights
2. Other water rights with the same point of diversion: SEE ATTACHED LIST

C. DIVERSION AND DELIVERY SYSTEM

1. LOCATION OF POINT(S) OF DIVERSION:

DEER CREEK	SE1/4NE1/4	Sec. 1,	Twp 12N,	Rge 05W, B.M.
WASHINGTON County				
MANN CREEK	SE1/4NE1/4	Sec. 11,	Twp 12N,	Rge 05W, B.M.
WASHINGTON County				

Method of Determination: VISUAL INSPECTION AND AERIAL PHOTOGRAPHY

2.

PLACE OF USE: IRRIGATION

Twp Rge Sec	NE				NW				SW				SE				Totals
	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
12N 04W 18													9.4		14.0	4.2	27.6
12N 04W 19	.7	15.0	14.0	27.0				37.0	40.0			35.0	27.0	8.9	13.0	20.0	237.6
12N 04W 20									7.7	13.0							20.7
12N 04W 29									1.2								1.2
12N 04W 30	6.2	37.0	40.0	18.0				5.0	10.0				34.0	37.0			187.2

Total Acres: 474.3

PLACE OF USE: STOCKWATER

Twp Rge Sec	NE				NW				SW				SE				Totals
	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
12N 04W 18													X		X	X	
12N 04W 19	X	X	X	X				X	X			X	X	X	X	X	
12N 04W 20										X	X						
12N 04W 29										X							
12N 04W 30	X	X	X	X				X					X	X			

Method of Determination: VISUAL INSPECTION AND AERIAL PHOTOGRAPHY

3. YES Delivery System Diagram Attached (required). Indicate all major components and distances between components. Indicate weir size/pipe as applicable.

YES Map Attached Showing Location(s) of point(s) of diversion and place(s) of use (required). Scale must be 1:24,000 or greater.

YES Aerial Photo Attached (required for irrigation of 10+ acres).

YES Photo of Diversion and System Attached

4.

Well or Diversion Identification No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
Portable Pump	Various Tractors	Approximately 125 Hp 540 RPM	Various	Cornell	Serial # 3707A Model # 3RLH-F6
Small Stationary Pump	Century	15 Hp	7-360344-0R0J	Cornell	Serial # 15544 Model # 3W15-2 6 7/8" Impeller
Large Stationary Pump	General Electric	75 Hp	5k364XAM	Cornell	Serial # 9658 Model # 3YB75-2 9 1/2" Impeller

*Code to correspond with No. on map and aerial photo

D. FLOW MEASUREMENTS

1.

<u>Measurement Equipment</u>	<u>Type</u>	<u>Make</u>	<u>Model No.</u>	<u>Serial No.</u>	<u>Size</u>	<u>Calib. Date</u>
N/A						

2. Measurements: Measurements were made using an existing Cipoletti Weir at the diversion from Mann Creek, a Mannings theoretical flow measurement at Deer Creek, and a Broad Crested Dam calculation at the Medley Dump. Please see attached calculation for additional measurement information.

E. FLOW CALCULATIONSYES Additional Computation Sheets Attached

Measured Method:

Please See Measurement Calculation sheet for flow rate determination.

Flow Rate Recommendation → 4.60 cfs

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 230 \text{ ac} \times 4.0 = 920 \text{ afa}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 4.60 \times 260 \times 1.9835 = 2,372$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 920 \text{ afa}$$

2. Volume Calculations for Other Uses:

$$400 \text{ head of cattle} \times 12 \text{ gpd} \times 365 \text{ days} / 325850 = 5.376 \text{ afa} \rightarrow \text{rounded to } 5.4 \text{ afa for stockwater}$$

G. NARRATIVE/REMARKS/COMMENTS

The water for this permit is diverted from Mann Creek and Deer Creek through the Joslyn Ditch. The Joslyn Ditch takes water out of Mann Creek Reservoir in the SENE of S11 T12N R5W. The ditch meanders through several farms in a northeasterly direction until it meets with Deer Creek approximately 1 1/3 miles northeast in the SENE of S1 T12N R5W. At Deer Creek the ditch turns and travels in a southeasterly direction for approximately 2 1/2 miles until it crosses under a county road.

Where the ditch crosses over the county road, there is a headbox known as the Medley Dump. This is the last place to measure the water in the ditch before it enters the Williamson property. From the Medley dump, the ditch travels around the base of a small hill and enters the Williamson property. Once on the property a small field to the west of ditch is irrigated with headgates placed every few feet which flood irrigate a small field to the west of the ditch. A place has been widened on the ditch to set a portable 125 Hp PTO drive pump to irrigate a field east of the ditch and a second field up a hill to the south east of this location.

The ditch continues from this point around another small hill and irrigates a small pasture west of the ditch and west of the homestead. The water continues on in a southerly direction to a point approximately 3/8 of a mile south of the homestead. There are two pumps at this location. The water from the ditch generally flows to the west to irrigate several fields downhill from the ditch with handlines and gated pipe. There is enough fall from the ditch that most of this ground can be irrigated without assistance, but a small 15 Hp pump has been installed in the line to help boost pressure if needed.

The water from the ditch can also be diverted into a larger 75 Hp pump that diverts water up and over the hills on the east side of the ditch to irrigate a large rolling hay/pasture field. This ground is only irrigated during floodwater events, so this system is only used when there is excess water in the ditch.

The ditch continues on for approximately another mile to the last head box. There are several points along this mile that water is diverted directly out of the ditch using plastic dams and allowing the water to overflow the banks for wild flooding. At the last head box, the water is diverted through a mainline system that travels due west to a small hill. The mainline goes up to the top of the hill. The pastures below the ditch are irrigated from this mainline by sprinkler lines that either sprinkle or are opened to allow wild flooding of the pasture. The mainline can supply water up the hillside through a siphon affect strictly from gravity water, and this portion of the hillside is irrigated with sprinklers or wild flooding. There is a point below the ditch where the portable pump used on the first field can be connected to the mainline to pressurize the pipeline to allow the ground on the top of the hill to be irrigated.

From the last head box the ditch meanders through the farm for approximately another 1/2 of a mile. The water in the ditch is diverted from the ditch with plastic dams for wild flood irrigation for this portion of the farm.

OVERLAPPING RIGHTS:

There are several water rights that overlap this place of use. First there are two decreed water rights 67-10383 and 67-10384 owned by Williamson. These two rights supply 170 inches of water for 170 acres of ground. Water right 67-10384 is considered a flood water right and can irrigate the 170 acres at a full inch per acre, and 67-10383 is considered a low water right and can irrigate the 170 acres at $\frac{3}{4}$ of an inch per acre. These two rights cannot be used at the same time, so the owner can only use one or the other. There are approximately 474.3 acres of ground that have been irrigated on this farm. This permit was filed to cover the difference between the decreed rights and what was actually being irrigated. This permit by the date of filing should also be considered a flood water right and should only be delivered if there is sufficient water in Mann Creek to deliver all the earlier decreed water rights.

There are several other water rights that use the Joslyn Ditch to transport their decreed flood water rights. This permit needs to be considered junior to those rights and cannot be delivered if they are being reduced or shut off. I attained copies of delivery records for the ditch company, and the records submitted to the Bureau of Reclamation (BOR). The ditch company records show that Mardell Williamson, the current owner's father, gained approval from the company to irrigate an additional 230 acres of ground in 1985. The ditch company regulates their users base on acres, and deliveries are set at an inch per acre. In 1985, the total deliveries totaled 921.3 acres and/or inches worth of deliveries for a total of 18.43 cfs. The 18.43 cfs includes the 4.60 cfs or 230 inches of water Williamson requested from the ditch company for this permit. The BOR show that it is quite common to have deliveries in May and June from 19.00 cfs up to 23.50 cfs. It appears from the ditch company delivery records, that they have had no problem delivering the 4.60 cfs or 230 inches for this permit without harming senior water users on the ditch.

The final overlap issue deals with a statutory claim 67-4489. This right was filed by the irrigation district for all of the floodwater from Mann Creek. This claim used the capacity of all of the ditches diverted from Mann Creek to determine their flow rate. However, this statutory claim does not take into account the existing water rights on each ditch. The claim was filed with an earlier in time priority date than this permit and didn't include all of the lands irrigated under this permit. If 67-4489 were decreed, then there would not be any water available for this permit. I am very concerned about this issue, since the district allowed the Williamsons adequate ditch capacity to deliver this permit, and the district has accepted payments from the Williamsons for the right to divert the 230 inches allocated for this permit since 1985. Therefore, I am hoping that the adjudication staff will take this information into account prior to issuing a recommendation on this statutory claim. If they do decide to decree this statutory claim, they should take the proper measures to ensure that the entire 474.3 acres of Williamson's property is included in the land descriptions and maps.

RECOMMENDATIONS:

I recommend that this permit be limited to the ditch capacity the owners have paid the district for since 1985 or 400 acres of irrigation and 400 inches of water. Therefore, with the existing 170 acres of decreed floodwater rights, this permit can only allow irrigation of an additional 230 acres of ground. The rate of diversion and rate of volume should be adjusted so it doesn't exceed the 230 acres. This license should be limited to 230 acres within the 474.3 acre permissible place of use described in this report.

This water right is currently the lowest priority right on the ditch. The original decrees had a flood water diversion rates and low water diversion rates. These were split in the Snake River Basin Adjudication (SRBA) recommendations. Therefore, the use of this right must cease prior to the restrictions on existing decreed flood water rights.

The use of this right must cease as soon as storage water from the Mann Creek Reservoir is delivered to the Joslyn Ditch.

When natural flow of Mann Creek water being diverted into the Joslyn Ditch falls below 13.83 cfs, diversion of this right must cease.

Williamson runs between 150 to 200 head of breeding range cows on the property, and an additional 150 to 300 head of feeders. The calves are fed to butcher weight and then sold. Therefore, I recommend that they get the full 400 head listed on the permit.

Have conditions of permit approval been met? ☒ Yes ☐ No

There are two measurement points for this right. The first is the main weir on the Joslyn Ditch at the Mann Creek Diversion, and at the Medley Dump before the water comes onto the property. Deer Creek doesn't have a measurement device, but the flash flood nature of this creek makes installing a measurement device that won't wash out very difficult. The existing measurement devices were sufficient for basic monitoring of the water at this time. The Joslyn Ditch is used as the main irrigation system for number of users, and most of them divert directly out of the ditch. Williamson doesn't have the authority to require the ditch company to install proper measurement devices but he has made an attempt at the Medley Dump to provide the department the needed information to monitor his water use. Therefore, I believe he has met this condition to the best of his abilities.

H. RECOMMENDATIONS**1. Recommended Amounts**

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
IRRIGATION	03/01 to 11/15	4.600 CFS	920.00 AF
STOCKWATER	01/01 to 12/31	0.090 CFS	5.40 AF
<u>Totals:</u>		4.600 CFS	920.00 AF

2. Recommended Amendments

☐ Change P.D. as reflected above ☐ Add P.D. as reflected above ☐ None

☐ Change P.U. as reflected above ☐ Add P.U. as reflected above ☐ Other

I. AUTHENTICATION

DANIEL A. NELSON – SENIOR AGENT

Field Examiner's Name Daniel A. Nelson Date 9-19-05

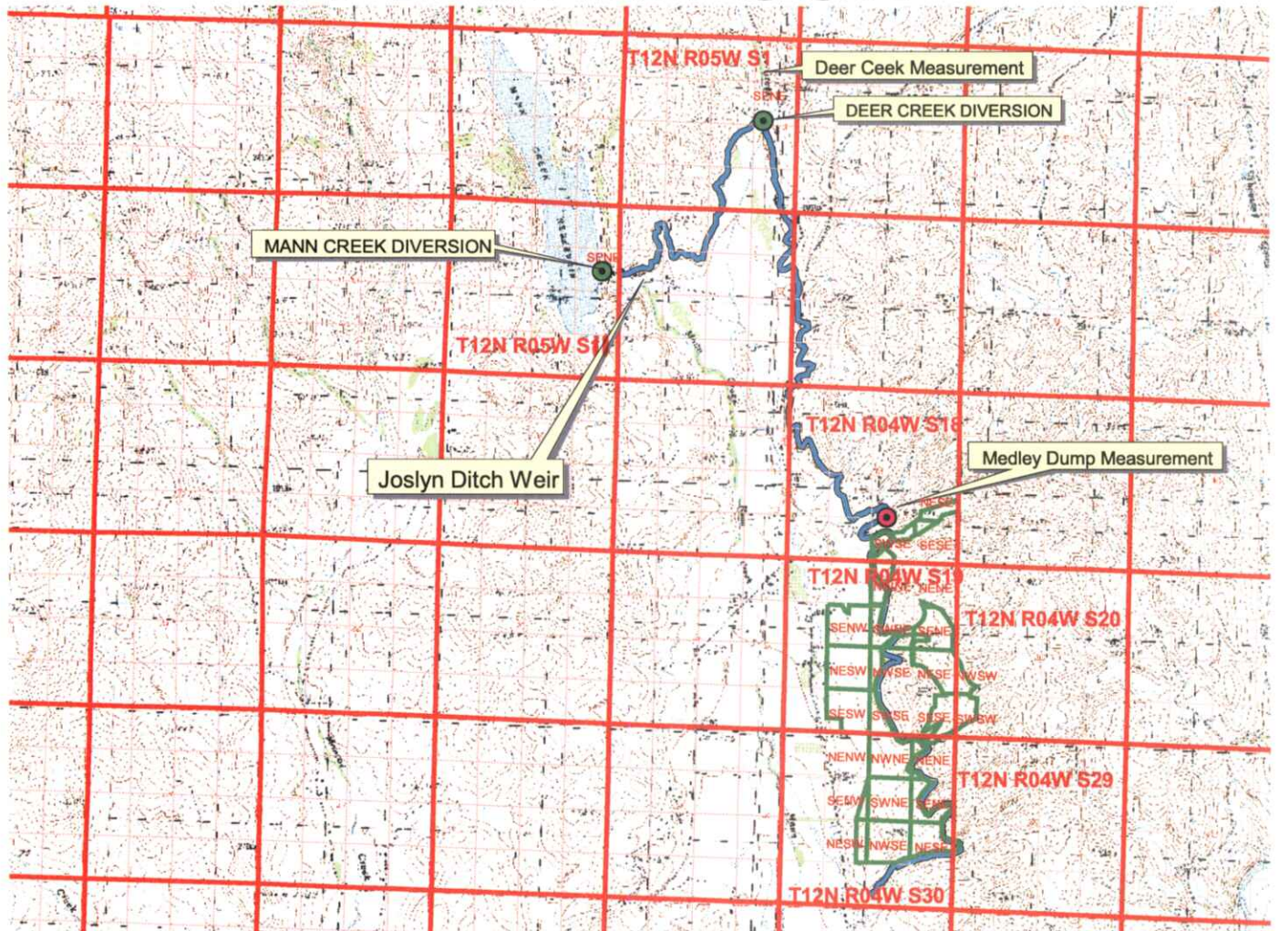
Reviewer _____ Date _____

SEAL

FIELD EXAM 67-7189

QUADRANGLE MAP

BY DAN NELSON



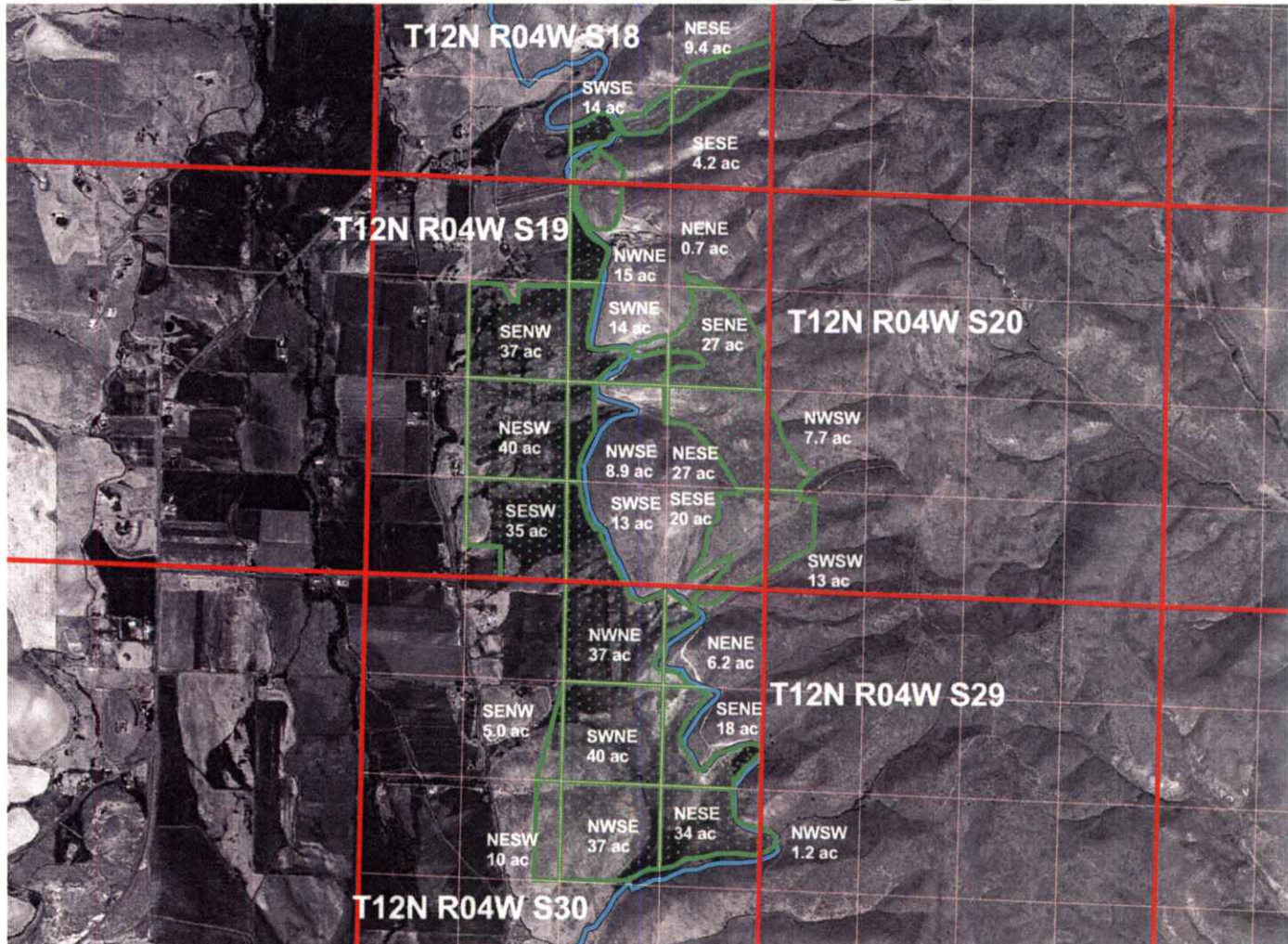
- PLSS Section Lines
- T12n04w.shp
- Place of use 7189.shp
- Irrigation pods.shp
- ~ Joslyn ditch.shp



FIELD EXAM 67-7189

PLACE OF USE

BY DAN NELSON



- SECTION LINES
- 1/4 1/4 LINES
- ~ JOSLYN DITCH
- POINTS OF DIVERSION
- IRRIGATION PLACE OF USE

PLEASE NOTE:

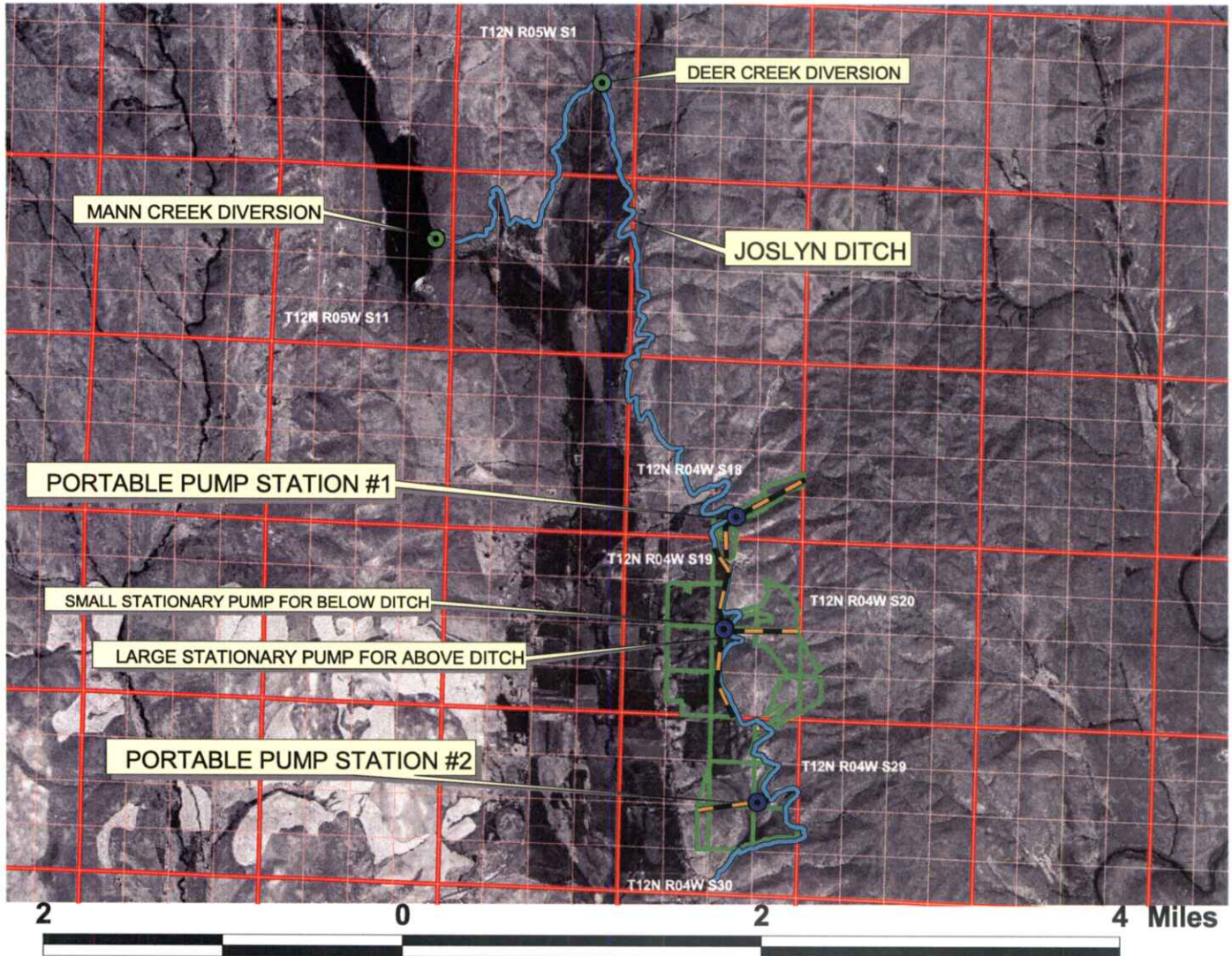
The entire place of use is 474.3 acres. However, 170 of these acres are already covered under decreed rights from the same source. Therefore, I can only consider licensing the remaining 304.3 acres. The owner only pays for 400 acres worth of ditch maintenance fees, so this permit should be limited to the ditch maintenance limitation minus the 170 acres of decreed rights. The ditch limitation allows 230 acres to be irrigated within the 474.3 acre permissible place of use.



FIELD EXAM 67-7189

SYSTEM DIAGRAM

BY DAN NELSON



- POINTS OF DIVERSION
- RE-LIFT PUMPS
- PORTABLE MAINLINES
- JOSLYN DITCH
- PLACE OF USE OUTLINE
- 1/4 1/4 LINES
- SECTION LINES

PLEASE NOTE:

The water for this permit is diverted from Mann Creek Reservoir and Deer Creek into the Joslyn Ditch and delivered to the property. The water from this point can down hill or to the east by way of wild flooding directly from the ditch or mainlines that move the water to gravity fed sprinklers or wild flooding stations.

The water above the ditch or to the west of the ditch is pumped by a portable pump in the northern field and a permanent pump on the southern field. There are two permanent pumps at the same location. One sends water up the hill over the ditch and the other pressurizes the mainlines below the ditch. There is a hill at the southern portion of the property that is irrigated. The water from the ditch can only travel so far up the hill, but the portable pump is connected to the mainline to boost it to the top of the hill. There is enough fall from the ditch to the west side of the property that most of the lands below the ditch can be irrigated with sprinklers.



FIELD EXAM 67-7189
SYSTEM DIAGRAM - NORTHERN FIELDS
BY DAN NELSON

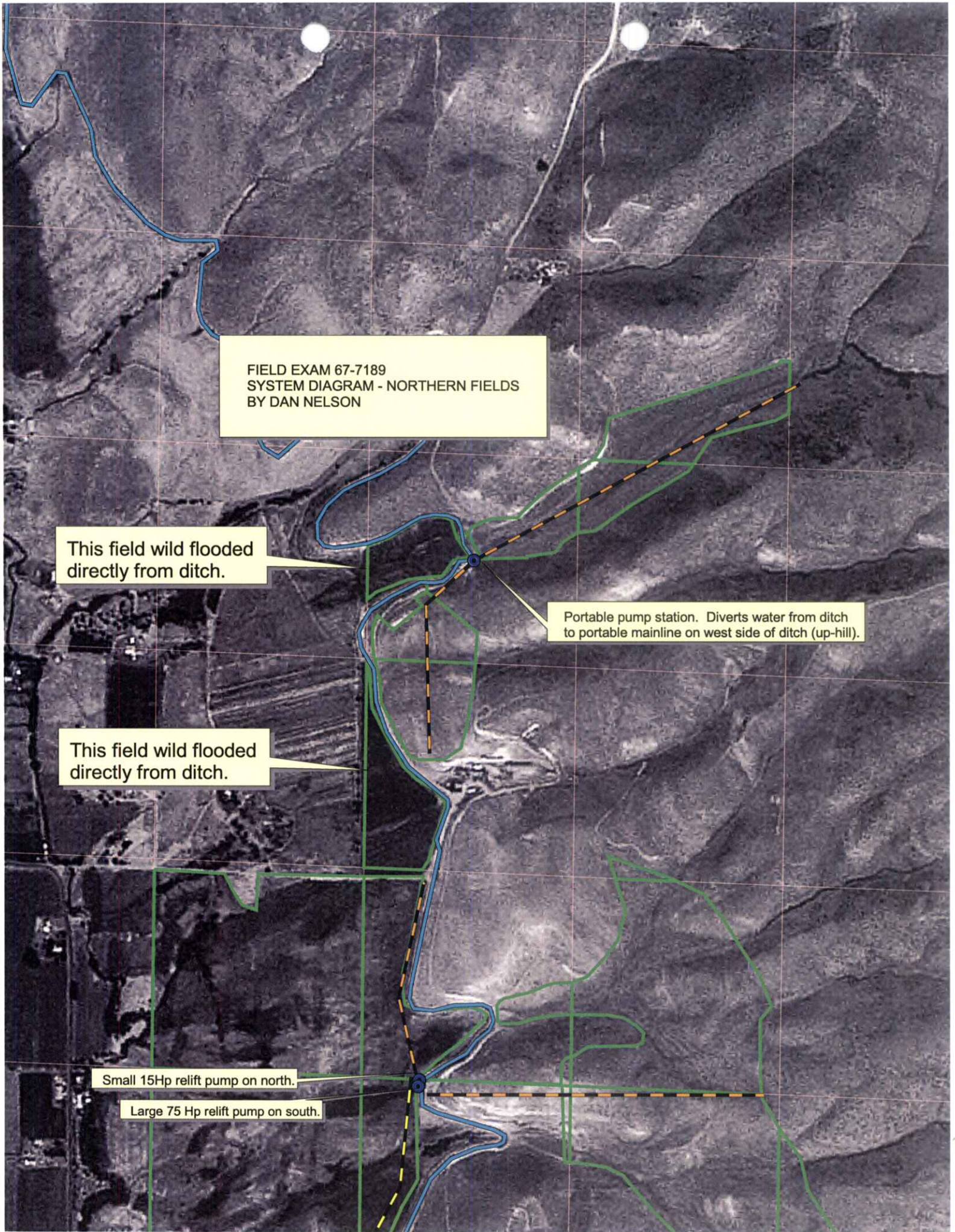
This field wild flooded
directly from ditch.

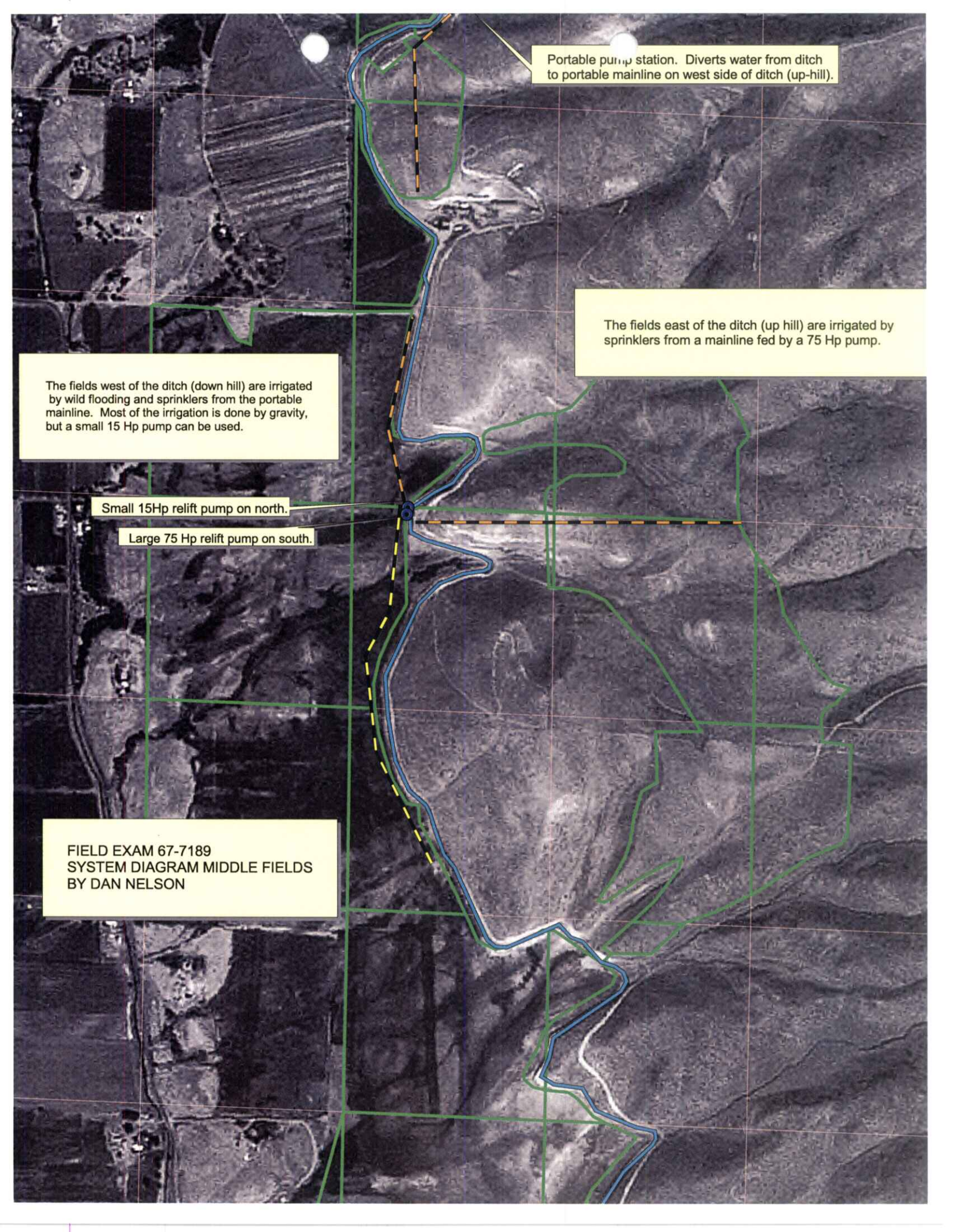
Portable pump station. Diverts water from ditch
to portable mainline on west side of ditch (up-hill).

This field wild flooded
directly from ditch.

Small 15Hp relift pump on north.

Large 75 Hp relift pump on south.





Portable pump station. Diverts water from ditch to portable mainline on west side of ditch (up-hill).

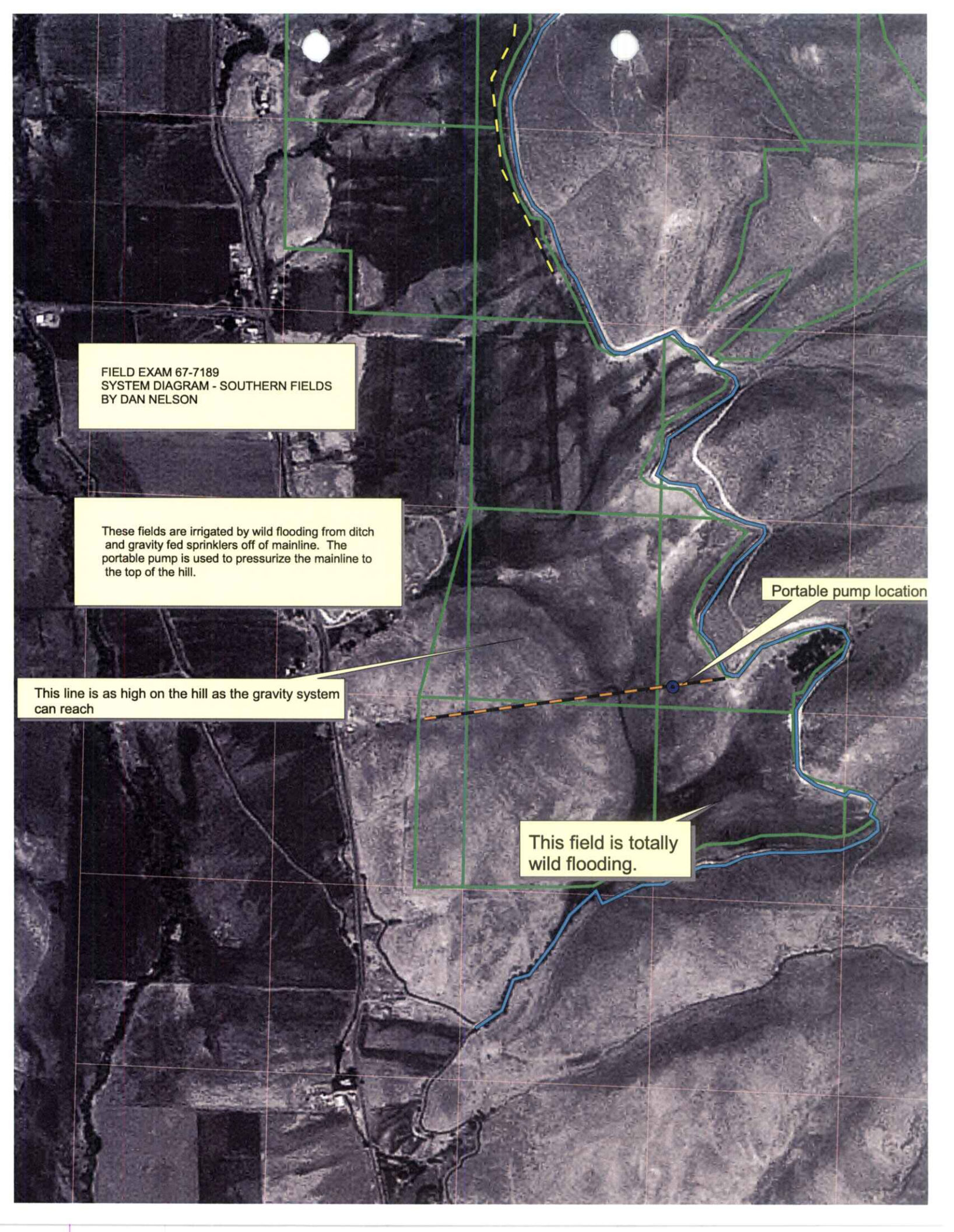
The fields east of the ditch (up hill) are irrigated by sprinklers from a mainline fed by a 75 Hp pump.

The fields west of the ditch (down hill) are irrigated by wild flooding and sprinklers from the portable mainline. Most of the irrigation is done by gravity, but a small 15 Hp pump can be used.

Small 15Hp relift pump on north.

Large 75 Hp relift pump on south.

FIELD EXAM 67-7189
SYSTEM DIAGRAM MIDDLE FIELDS
BY DAN NELSON



FIELD EXAM 67-7189
SYSTEM DIAGRAM - SOUTHERN FIELDS
BY DAN NELSON

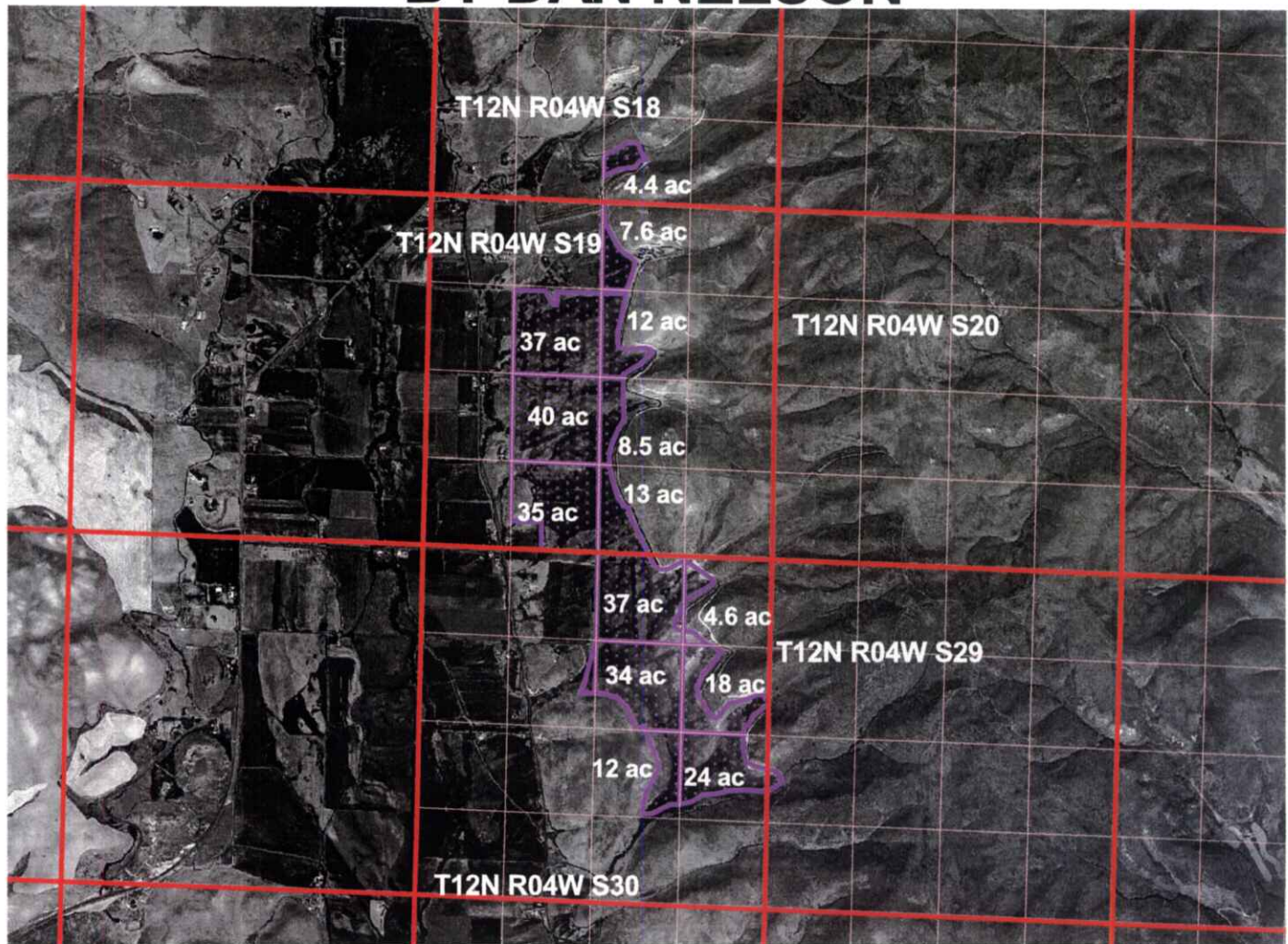
These fields are irrigated by wild flooding from ditch and gravity fed sprinklers off of mainline. The portable pump is used to pressurize the mainline to the top of the hill.

This line is as high on the hill as the gravity system can reach

Portable pump location

This field is totally wild flooding.

FIELD EXAM 67-7189 OVERLAP FROM DECREED WATER RIGHTS 67-10383 AND 67-10384 BY DAN NELSON



0.9 0 0.9 1.8 Miles

- SECTION LINES
- 1/4 1/4 LINES
- APPROXIMATE PLACE OF USE FOR 67-10383 AND 67-10384



Historically, water right decrees 67-10383 and 67-10384 have been delivered to the 287.1 acres shown above. These lands can all be irrigated by flood irrigation without the assistance of a pump. These decreed rights only allow 70 acres of irrigation, so permit 67-7189 is needed to cover the lands that have been historically irrigated. Irrigation District records show that 268 acres have been irrigated here as early as 1974. The irrigation district increase the irrigation of land to 400 acres in 1985 when permit 67-7189 was filed.

FIELD EXAM 67-7189
FLOW RATE CALCULATIONS NARRATIVE
BY DAN NELSON

The main reason that this permit has not been licensed to this point is because it has not been possible to determine if there is adequate capacity in the Joslyn Ditch to deliver the water for this permit. In reviewing previous field examiner's notes, they were asked to measure all of the points where water is removed from the ditch. This is an impossible task, since this ditch is used as the main irrigation ditch for the Williamson Farm. There are fields, where a tarp is thrown in the ditch and water flows over the ditch banks for wild flooding. There is another field with headgates every few feet that are opened to irrigate one field. Therefore, to measure every diversion is simply not possible.

In order to complete the field exam, I needed to find alternative ways to determine the amount of water available to the Williamson farm. I began this process by attaining records of the deliveries in the Joslyn Ditch. These records show that in 1985, 921.3 acres were irrigated out of the Joslyn Ditch at an inch per acre for a total of 18.43 cfs. These records also show that Mardell Williamson's acre amount changed from 268.6 acres (inches) of ditch capacity in 1974 to 400 acres (inches) of ditch capacity in 1985. The proof for this permit was filed in 1987, so this seems to be the time when this permit was initially put to beneficial use.

After reviewing the ditch delivery records, I then contacted the Bureau of Reclamation to determine if they had any records of the maximum capacity of the Joslyn Ditch diversion from Mann Creek Reservoir. They showed me records back to 1990 and several of those records showed diversion in excess of 20.00 cfs in the months of May and June. The largest diversion I could find was 23.50 cfs diverted from May 17, 2002 to May 20, 2002. This record clearly shows that there was more water diverted into the ditch then the 18.43 cfs listed as deliveries into the ditch.

Deer Creek also diverts water directly into the Joslyn Ditch. Therefore, any water rights held on the Joslyn Ditch would need to include Deer Creek as a source. At the time of my exam Deer Creek was not flowing at all. This is a flash flood creek, and I am guessing that it only carries runoff water during short periods in the early spring. There is no measurement device on this creek, so I used a Mannings equation to determine the flow. My calculations show that at full flow Deer Creek has a capacity of approximately 25.8 cfs. I doubt that this rate of flow would last more than a few hours and at the most a few days. However, the creek is capable of delivering that amount of water.

The last true place to measure the Joslyn Ditch before it enters the Williamson property is where it crosses the county road in the NWSE S18 T12N R4W. This place is called the Medley Dump. A weir box with a broad crested dam (two by fours in a cement head box) was located at this point. Using the calculations for Broadcrested Dams, I compiled a flow chart for this diversion. The high water mark in this structure suggests that 15.67 cfs or 783.5 inches of water has flown through this structure in the past. Whereas, this is the end of the ditch, I am not surprised that this amount of water is available at times. I visited the site twice, and I saw a variance of flow from 2.66 cfs to 6.51 cfs within a week's time. According to the overlapping decreed rights, it appears that there are only two water rights downstream of the Medley Dump that is not owned by Williamson. These rights come to a total of 1.40 cfs, so there should be plenty of water available to supply water needed for this permit.

CONCLUSION:

There is no doubt that there is sufficient water over and above the existing decreed water rights being diverted into the Joslyn Ditch to supply this permit with it's full allocation of water. When this permit and Williamson's existing decreed rights are combined he has the capability to divert 8.40 cfs or 420 inches. There is 474.3 acres on the Williamson farm that can be irrigated, so it would appear that this permit could be recommended for the full allocation of 5.00 cfs and when combined with his decreed rights he would be limited to 8.40 cfs. However, Williamson only pays for 400 acres or 400 inches of water in the ditch company, and has since proof of beneficial use was filed in 1987. Therefore, I am assuming that he would be legally bound not to irrigate more than the 400 acres of ground each year. **Therefore, I recommend that this permit be limited to 4.60 cfs, 230 acres, and an annual volume of 920 afa. The 230 acres are within the 474.3 acres permissible place of use. When this permit is combined with his existing decreed rights be limited to 400 acres of irrigation, 8.00 cfs, and 1600 afa.**

I spoke with Williamson on this issue, and he said he would accept this, since he rarely irrigates more than 400 acres during floodwater flows anyway. When he is irrigating the fields above the ditch, he generally will not irrigate the lower fields until they start delivering storage water. At that time, he stops irrigating the upper fields and concentrates only on the bottom portion of the farm. From what I understand, he cannot put storage water above the ditch, so he starts grass/alfalfa hay with the floodwater in the fields above the ditch, and then dry farms it once the floodwater is shut off.

Mann Creek.

1

Mar. 11. 1912.

The name of the company shall be the first extension of Gaslin & Michael Ditch, beginning at the termination of Gaslin & Michael ditch and ending at South line of the N.W. qtr. of the S.E. qtr ^{Sec. 14}.

The officers of company shall consist of a ditch boss & secretary, and duty of ditch boss shall to be take charge of all works on ditch, keep time and preside at meetings.

Duty of sec. shall be to keep minutes of all meetings, collect and take charge of all funds levied for ditch purposes.

The annual meeting shall be held on first Monday in March of each year.

The ditch boss shall have authority to call special meetings through company Sec. at any time.

A. F. Lolley elected ditch boss.

Earl Adams Secretary.

Amount of work done by each to date.

Earl Adams ³⁰ ~~28~~ acres. 224 hrs.

Cy Newman 1 " "

Cooley 250 " 225 hrs.

4/4/74

Meeting was called to order by Gerald Hagan's
the minutes were read and approved

Paul Striker made a motion that we assess \$1.00 per
acre to meet the 1974 expenses. seconded by Elt Larter
and carried.

no. election of officers were held in 1973 so George
Larter nominated Ray Hust to serve for 9 yrs to get
him back in his right order of term. Elt Larter
moved that we cast a unanimous ballot for Ray
Hust. carried.

Mardell nominated Gerald Hagan to succeed
himself as director. Elt Made a motion that we
cast a unanimous ballot for Gerald as director (3 yr)
and carried

Mardell Williamson mentioned that he had
fited on ^{some} flood water. There was some questions as
to whether this would effect any of the former
flood rights. no action was taken at that time
meeting adjourned

Mardell Williamson sec.

Raymond Hust

In regard to the flood water mentioned on 4/4/74
I went and talked to Et Carter who had mentioned
that he wanted to see if it affected his flood water
rights. He said that he thought that a person could
hold more than 1 in. per acer during flood water

I went to Boise Idaho and checked this out
and found him to be right. That a person
could hold more than an inch per acer if
they could show ~~proof~~ of use several years back

In checking with Clell Williamson and Bob
Hamilton (water masters) I found that the Foster
ditch had never filled on ^{all} the flood water ^{we} they
were using. It was suggested by them that we
should file a proof of use in order to hold it.

A meeting was called on July 8th 74 so that
those interested could hear Bob Hamilton and
Clell on this matter.

Mardell Williamson Sec.

Raymond Hurt

July 8-74

Gerold Hagens called the meeting to order

He turned the meeting over to Ellet Wilkman who in turn turned it over to Bob Hamilton (State Dept. water master) ~~Many~~ Many questions were asked and he explained them. He suggested that we file proof of use on the flood water that we had been using. A new filing would not be as good as proof of use because a new filling would be subject to all former rights. He said that any proof of use would be kept in the files to be used later in case of court action etc.

The director, and most of the people present seemed to think this should be done. The papers were given to Mandell by Gerold to be filled out. I went to Boise to see what could be done on it. Bob Hamilton said we would have a hard ^{time} showing proof of use on more inches than our ditch would ~~carry~~ carry. They had a report that the ^{siphon} ~~siphon~~ under the county road would only carry about 900 inches. I came back and reported this to the other director. Ray West suggested that a pipe be put in ^{north of} ~~above~~ the other siphon and to leave the siphon as it was. This was agreed to be a good suggestion. I also mentioned this to Ellet and he said that there had been a mistake ~~made~~ made in the

man of inches to be delivered to the Goslin ditch where the Reservoir was designed. The valve at the dam was redesigned to carry about 1600 inches (if I remember right). According to the information I can gather we at times had over 1000 inches of water at the head and it was used on about 500 actual acres before the dam was put in. If so we could show proof of use on at 2 inches per acre during flood water on the old rights. Of course more acres were taken in after the dam was put in. (If I am not mistaken) these new acres can only hold 1 in per acre.

Also due to many protests by Arthur Butts ^{including three times this year} We contacted the District also the Bureau to find out if anything could be done about the waste water going across his place. Clarence Blum said he thought it was up to our ditch to take ^{care} of it. I then asked him if the district claimed the right of flow if they were involved in getting it there. I then checked with Bob Komiton who came and looked at the situation. He suggested I contact the district again and see if they would let me have the waste water for taking care of it. Also the fellow at the Bureau said that the District should either take care of it or allow me to use it. ~~The District~~ Clarence Blumer said there were other who were wanting to get in on

Reservoir water and this would give them a chance also. I agreed that we should try to protect the old rights, but what are ^{we} supposed to do in this case.

On the first Tuesday in August Gerald Nagano and I met with the District Board.

We asked if there was a chance to get the Bureau to come and look over the situation. We were told that there was a possibility of ^{getting} more money to take care of such problems as this. I can't think of the fellow's name at the Bureau, but he suggested we ^{write} ~~wrote~~ in to them about our problems so they would have a written record to go by. He said we could probably say we had a dam put in with ^{inadequate} ~~no~~ means to ~~disturb~~ take care of ^{the water} ~~it~~ (or something like that). The district ~~the~~ agreed to contact the Bureau to check into this.

Raymond Hurst

elt:

George

Ray K

Jim

Glenn

Geo

Ed

P.

D.

Ma

Don

Je
Be

Ge

Je

				accs	110 per acc	past due	1974	paid	balance due
in a chance test the old this case, old Nagans to the Bureau We were told to take think of the I we ~~write~~ would have ed probably means to like that) Bureau	Elmer Carter	phone 9707	77		84 70 93 10			paid 84 70	23 10
	George Carter	0086	76.7		84 37 93 01			4/17/74 paid	93 01
	Roy Rust	0949	67.7		74 47 80 31			paid 74 47 4/17/74 paid 80 31	
	Jim Brown	1455	74.4		81 84 92 32			5/5/74 4/8/74 paid	
	Shadys Gray		46.9		50 88 13 86			paid 50 88	13 86
	George Gomes	1972	9.1		10 01 9 73	10 00 + 1 20			23.85 + inf
	Ed Fitzmoris	1868	3.1		3 30 1 90				
	Pedron	1637	18.1		19 80 5 40	19 80 + 2 28		4/1/74 39 62 paid 39 62 5/1/74 74 00	due 74 00
	Darold Hester	1875	87.5		96 95 86 25	95 00 + 1 95		paid 93 75 paid 88 50	own 92 25
	Mardell Williamson	1481	968.6		995 46 80 58			paid 995 46 8/3/74	
		new accs	100.1		140.1			paid 90.58 12/1/74	
	Donel Parker		9.0		9 90 9 70	9 90 + 1 99		12/1/74 19 80 8/2/74 37 00	open due 115 79
	Jim Parks		5.1		5 50 1 50	5 50		paid 6 05 4/7/74	150
	Bill Cunningham		1.1		1 91 30			paid 1 91 4/3/74	304
	Gerald Nagans	8150	31.5		34 65 4 45			35 20 34 65 paid 8 50	open paid 654
	Jeanne Bruce		3.5		3 85 1 05	3 85		8.1	1 05
				778.3	856.33				

Meeting called 8/26/74

Meeting called ~~by~~ order by Gerald Hagans
The minutes were read and approved

Gerald Hagans presented a Demossing bill of \$375.
This was much larger than we had expected.

Elton Farter made a motion we assess another 30¢
per acre to cover this bill.

Seconded by George Farter carried.

several other things were discussed, but no action
taken at the meeting.

Later I talked to the other two directors about
how much I should pay for the ^{flood} water I was using
on the new ground. Gerald Hagans said that
since I was only getting part season water I should
only have to pay about $\frac{1}{2}$ as much as the other full
season water. I said this was probably right, but
since the ditch was already headed new people com-
ing in should pay equal even for part season water.
In talking to Ray Rust, I told him I was willing
to pay equal. He said he really didn't want to be
the one to say, but this sounded reasonable enough
to him. Being a director myself and having agreed
with the other two, I paid \$1.40 per acre on 100
acres which equals the total of \$1.10 + 30¢ for the
year 1974.

Mardell Williamson secretary

Gerald H. Hagans

9/5/74

A meeting with Bob Brown (Bureau of Reclamation)
 Clarence Pleumer, Dan Dymally, District Directors
 Marshall Williamson, Gerald Magano, Ray Hunt. (John Little
 directors) John Selley, Darwin Adams, In regard to
 getting funds from the Bureau to put in waste
 ways, drainage etc. Bob Brown said at present
 they had no funds, that we could get, it would
 take an appropriation by Congress to get any funds.

Marshall Williamson sec.

Ray Hunt Dir.

paid in 1974

Balance on hand Jan 1st 74	\$908.31	
6/3/74 Gordon Avery		\$864.00
7/8/74 Busy Bee		10.00
11/8/74 Washington County Weed Control		375.00
		<u>1249.00</u>

balance on hand Jan 1st 75 1479.66

5/9/75

The meeting was called to order by Gerald Hagan
the minutes were read by and approved

a motion was made by Paul Striker we assess \$1.40
per acre for the 1975 expenses, seconded by George
Harter carried

I made a motion that we buy a new secretary
book and some statements. seconded by Paul Striker
motion carried.

We failed to elect a director

Mardell Williamson sec.

Balance on Jan 1st
1975

147.96

1975 expenses
Weed Control

Gordonberg \$860.-
300.-

not paid in 1975
\$1170.-

Busby Bee
Stationary statements
Sec. book.
postage etc.

10.-
18.30
10.10
2.00

I paid in cash.
\$30.40

1200.40

Total assessment 878 acres at 1.40 = 1229.32

We did not have enough ~~as of~~ Jan 1st to pay
our 1975 bills balance in the bank

553.35

El

Geo

Ray

Jim

Gla

M

Geo

Ed

Co

Di

Da

Ma

Do

Jo

Bi

Li

\$

1,175

91

	phone	addr	#. Hopenac	part due	total	amount paid	balance due Dec. 31, 75
Hagans	Elton Larten	2707	77. 107 80	93 10			inc. 39.99
2440	George Larten	0082	76.7 107 38	93 01	132 69		
George	Ray Hunt	2749	67.7 94 78		94 78		
crataeg	Jim Brown	2785	74.4 104 16		104 16		
Stricker	Glady's Young		46.2 64.68	13 86			83.99
	Wesley Higgins	1973			19 74		
	George Jones	1976	9.1 19 74	93 85	98 85		
	Ed Fitzmoris	1828	3.0 4 90	4 90	8.87		
6	Coyote Mt. Ranch Inc	Box 134			25 90		
	Deedrow	1639	18. 25 90				
75	Carroll Bulsee	1875	87.5 192 50	29 50			196. —
ish.	Mordei Williamson	1981	368.6 516 04		30.40		509.88
	Donel Parker		9. 19 60		19.60		
	Marlin ~~James~~ ^{Andrews}		5. 7. 5		7. —		
	Bill Cunningham		1.1 1 54	35	1.90		
	Gerald Hagans	2150	31.5 44 10	65 40			45.63
553.25	Jeanna Bruce		3.5 4.90	1.05	6.05		
	Total		878.3				

1984

Joshin Ditch Co held the second meeting of the year on June 11, 1984 at the home of Arlene Hunt.

The meeting was opened by director Jim Brown at 8:30 p.m.

Minutes of last meeting were read and approved.

The meeting was called to appropriate more money to pay the maintenance bill

Tom Hunt made motion to assess \$1.00 per acre

Jim Brown second the motion
motion carried

Mardell Williamson ask to add 31.4 acres more on his place

Tom Hunt made motion to accept Mardelle 31.4 Acres the motion was second by Jeanne Bruce. motion carried

Jim made motion to skip demossing
George Taster second the motion
motion carried.

Mardell made motion we adjourn at 9:30 P.M. Buster second the motion

Submitted by
Arlene Hunt

Banked 596.90 June 12, 1984

\$9.00 was paid in cash so I spent it for phone calls & stamps

~~Pl. Bank Book #4749.14 May 12/1985~~

1985

29

		Acres	Loan Payment	Assessment	Totals
	pd. Tarter Livestock	77	396.55	103.95	500.50
	pd. George Tarter	76.7	395.00	103.55	498.55
	pd. Jim Brown	74.4	383.16	144.00	527.16
Per name 18.00	pd. Wes. Higgins	9.1	46.86	12.28	59.14
	pd. Don Barstad	18	92.70	24.30	117.00
Per name 3.00	pd. Jim Obenchain	3.	15.45	4.05	19.50
Box 116A RT 2	pd. Nancy Hulser	2	10.30	2.70	13.00
	pd. Steve Gomez ^{400.00 3rd}	85.1	438.26	114.88	553.14
Box 113 RT 2	pd. Marda Williamson	400	2060.00	590.00	2650.00
Box 108B RT 2	pd. Lonel Parker	9	46.35	12.15	58.50
Box 108 RT 2	pd. Bill Cunningham	1.1	5.66	1.49	7.15
	pd. Gerald Hagans	31.5	162.22	42.53	204.75
Box 105 RT 2	pd. Jeanne Bruce	15.5	79.82	20.93	100.75
	pd. Arlene Hust	34.1	175.61	46.04	221.65
	pd. Floyd Hust	16.9	87.03	22.82	109.85
	pd. Tom Hust	16.7	86.00	22.55	108.55
549-1231	pd. Rodger Wright	5	25.75	6.95	32.70
	pd. Gladys Gray	46.2	237.93	62.37	300.30
	6523 NE Oregon St. Portland, Oregon 97213 ph 1-503-232-0689				

WATER SUPPLY REPORT
Mann Creek Project, Idaho
Mann Creek Reservoir
May-02

JUN -5 02

			OUTFLOW			
DATE	WATER SURFACE ELEVATION	ACTIVE STORAGE (AC.-FT.)	MANN CREEK (CFS)	MANN CREEK DITCH (CFS)	JOSLYN DITCH (CFS)	
1	2889.6	11088.0	151.00	10.80	7.89	
2	2889.7	11116.0	151.00	10.80	7.89	
3	2889.7	11116.0	151.00	16.10	7.89	
4	2889.6	11088.0	125.00	19.00	13.50	
5	2889.6	11088.0	113.00	19.00	13.50	
6	2889.6	11088.0	97.50	19.00	13.50	
7	2889.5	11059.0	90.30	19.00	13.50	
8	2889.5	11059.0	79.50	19.00	13.50	
9	2889.4	11031.0	72.90	19.00	13.50	
10	2889.4	11031.0	63.00	19.00	13.50	
11	2889.3	11002.0	57.40	19.00	13.50	
12	2889.3	11002.0	57.40	19.00	15.50	
13	2889.4	11031.0	60.20	19.00	15.50	
14	2889.4	11031.0	63.00	12.90	15.50	
15	2889.4	11031.0	72.90	12.90	15.50	
16	2889.4	11031.0	63.00	12.90	18.60	
17	2889.4	11031.0	63.00	8.69	23.50	
18	2889.4	11031.0	69.60	8.69	23.50	
19	2889.5	11059.0	69.60	8.69	23.50	
20	2889.5	11059.0	69.60	8.69	22.30	
21	2889.4	11031.0	69.00	8.69	19.70	
22	2889.4	11031.0	60.00	8.69	19.70	
23	2889.3	11002.0	60.20	8.69	19.70	
24	2889.3	11002.0	51.80	8.69	19.70	
25	2889.3	11002.0	49.00	8.69	19.70	
26	2889.3	11002.0	46.70	8.69	19.70	
27	2889.3	11002.0	46.70	8.69	19.70	
28	2889.3	11002.0	37.50	17.00	19.70	
29	2889.3	11002.0	35.60	17.00	19.70	
30	2889.2	10975.0	31.80	17.00	19.70	
31	2889.2	10975.0	31.80	17.00	19.70	
		TOTAL	2260.0	429.99	521.77	
		AC.-FT.	4474.8	851.3802	1033.1046	

4482.642 852.872 1034.915 = 6370.429

FIELD EXAM 67-7189

DEER CREEK FLOW CALCULATIONS

BY DAN NELSON

Deer Creek diverts into the Joslyn Ditch, but there are no measurement devices on this creek. Therefore, I needed to find a way to determine the flow of the creek. Upstream for the diversion approximately 260 feet upstream of the confluence of Deer Creek and the Joslyn Ditch, there was a culvert going under a road. This was the only point where I could get into the creek channel. The culvert appeared to be undersized for the high water marks in the channel, and it was evident that the creek has overflowed the culvert in the past. However, this is a flash flood creek, and probably only flows at this level for a few hours or at most a few days. Once the flooding has subsided, the flow in the creek is minimal to none.

In order to measure the maximum capacity of Deer Creek, I needed to take into account the maximum flow of the creek. In order to do this I used the Mannings Equation through the culvert. It is obvious that the culvert would flow at a full pipe during the highest flood event. The following are my calculations:

Mannings equation $\rightarrow Q = [(1.49/n) (R)^{2/3} (S)^{1/2}] \times A$

$n = 0.025$ Corrugated metal pipe in Open Channel Hydraulics, Ven Te Chow 1959, McGraw-Hill

$R = 1.525$ (I measured the diameter of the pipe at 3.05 D/2= R or 3.05 / 2 = 1.525)

$S = 0.002$ (I measured the length of the pipe at 20 feet long with a 0.04 difference in elevation using an automatic level. I measured 4.78 feet downstream and 4.74 feet upstream. Slope is determined by Rise/Run, therefore, 0.04ft /20ft = 0.002 slope.)

$A = 7.31 \text{ ft}^2$ (Area = $\pi R^2 \rightarrow A = \pi (1.525)^2 = 7.31 \text{ ft}^2$.)

Mannings Calculation $\rightarrow$

$Q = [(1.49/0.025) (1.525)^{2/3} (0.002)^{1/2}] \times 7.31$

$Q = 25.8 \text{ cfs}$

This seems reasonable for this creek during high flows. However, the Joslyn Ditch can't handle this amount of water all at once. The ditch is designed to release any water above the capacity of the ditch down the Deer Creek Channel. Therefore, I believe the best is at the Medley Dump measurement.

Type of channel and description	n	Normal	Maximum
CONDUITS FLOWING PARTLY FULL			
A-1. Metal			
a. Brass, smooth	0.009	0.010	0.013
b. Steel			
1. Lockbar and welded	0.010	0.012	0.014
2. Riveted and spiral	0.013	0.016	0.017
c. Cast iron			
1. Coated	0.010	0.013	0.014
2. Uncoated	0.011	0.014	0.016
d. Wrought iron			
1. Black	0.012	0.014	0.015
2. Galvanized	0.013	0.016	0.017
e. Corrugated metal			
1. Subdrain	0.017	0.019	0.021
2. Storm drain	0.021	0.024	0.030
A-2. Nonmetal			
a. Lucite	0.008	0.009	0.010
b. Glass	0.009	0.010	0.013
c. Cement			
1. Neat, surface	0.010	0.011	0.013
2. Mortar	0.011	0.013	0.015
d. Concrete			
1. Culvert, straight and free of debris	0.010	0.011	0.013
2. Culvert with bends, connections, and some debris	0.011	0.013	0.014
3. Finished	0.011	0.012	0.014
4. Sewer with manholes, inlet, etc., straight	0.013	0.015	0.017
5. Unfinished, steel form	0.012	0.013	0.014
6. Unfinished, smooth wood form	0.012	0.014	0.016
7. Unfinished, rough wood form	0.015	0.017	0.020
e. Wood			
1. Stave	0.010	0.012	0.014
2. Laminated, treated	0.015	0.017	0.020
f. Clay			
1. Common drainage tile	0.011	0.013	0.017
2. Vitrified sewer	0.011	0.014	0.017
3. Vitrified sewer with manholes, inlet, etc.	0.013	0.015	0.017
4. Vitrified subdrain with open joint	0.014	0.016	0.018
g. Brickwork			
1. Glazed	0.011	0.013	0.015
2. Lined with cement mortar	0.012	0.015	0.017
h. Sanitary sewers coated with sewage slimes, with bends and connections	0.012	0.013	0.016
i. Paved invert, sewer, smooth bottom	0.016	0.019	0.020
j. Rubble masonry, cemented	0.018	0.025	0.030
B. LINED OR BUILT-UP CHANNELS			
B-1. Metal			
a. Smooth steel surface			
1. Unpainted	0.011	0.012	0.014
2. Painted	0.012	0.013	0.017
b. Corrugated	0.021	0.025	0.030
B-2. Nonmetal			
a. Cement			
1. Neat, surface	0.010	0.011	0.013
2. Mortar	0.011	0.013	0.015
b. Wood			
1. Planed, untreated	0.010	0.012	0.014
2. Planed, creosoted	0.011	0.012	0.015
3. Unplaned	0.011	0.013	0.015
4. Plank with battens	0.012	0.015	0.018
5. Lined with roofing paper	0.010	0.014	0.017
c. Concrete			
1. Trowel finish	0.011	0.013	0.015
2. Float finish	0.013	0.015	0.016
3. Finished, with gravel on bottom	0.015	0.017	0.020
4. Unfinished	0.014	0.017	0.020
5. Gunita, good section	0.016	0.019	0.023
6. Gunita, wavy section	0.018	0.022	0.025
7. On good excavated rock	0.017	0.020	0.022
8. On irregular excavated rock	0.022	0.027	
d. Concrete bottom float finished with sides of			
1. Dressed stone in mortar	0.015	0.017	0.020
2. Random stone in mortar	0.017	0.020	0.024
3. Cement rubble masonry, plastered	0.016	0.020	0.024
4. Cement rubble masonry	0.020	0.025	0.030
5. Dry rubble or riprap	0.020	0.030	0.035
e. Gravel bottom with sides of			
1. Formed concrete	0.017	0.020	0.025
2. Random stone in mortar	0.020	0.023	0.026
3. Dry rubble or riprap	0.023	0.033	0.036
f. Brick			
1. Glazed	0.011	0.013	0.015
2. In cement mortar	0.012	0.015	0.018
g. Masonry			
1. Cemented rubble	0.017	0.025	0.030
2. Dry rubble	0.023	0.032	0.035
h. Dressed ashlar	0.013	0.015	0.017
i. Asphalt			
1. Smooth	0.013	0.013	
2. Rough	0.016	0.016	
j. Vegetal lining	0.030		0.500
C. EXCAVATED OR DREDGED			
a. Earth, straight and uniform			
1. Clean, recently completed	0.016	0.018	0.020
2. Clean, after weathering	0.018	0.022	0.025
3. Gravel, uniform section, clean	0.022	0.025	0.030
4. With short grass, few weeds	0.022	0.027	0.033
b. Earth, winding and sluggish			
1. No vegetation	0.023	0.025	0.030
2. Grass, some weeds	0.025	0.030	0.033
3. Dense weeds or aquatic plants in deep channels	0.030	0.035	0.040
4. Earth bottom and rubble sides	0.028	0.030	0.035
5. Stony bottom and weedy banks	0.025	0.035	0.040
6. Cobble bottom and clean sides	0.030	0.040	0.050
c. Dragline-excavated or dredged			
1. No vegetation	0.025	0.028	0.033
2. Light brush on banks	0.035	0.050	0.060
d. Rock cuts			
1. Smooth and uniform	0.025	0.035	0.040
2. Jagged and irregular	0.035	0.040	0.050
e. Channels not maintained, weeds and brush uncut			
1. Dense weeds, high as flow depth	0.050	0.080	0.120
2. Clean bottom, brush on sides	0.040	0.050	0.080
3. Same, highest stage of flow	0.045	0.070	0.110
4. Dense brush, high stage	0.080	0.100	0.140
D. NATURAL STREAMS			
D-1. Minor streams (top width at flood stage <100 ft)			
a. Streams on plain			
1. Clean, straight, full stage, no rifts or deep pools	0.025	0.030	0.033
2. Same as above, but more stones and weeds	0.030	0.035	0.040
3. Clean, winding, some pools and shoals	0.033	0.040	0.045
4. Same as above, but some weeds and stones	0.035	0.045	0.050
5. Same as above, lower stages, more ineffective slopes and sections	0.040	0.048	0.055
6. Same as 4, but more stones	0.045	0.050	0.060
7. Sluggish reaches, weedy, deep pools	0.050	0.070	0.080
8. Very weedy reaches, deep pools, or floodways with heavy stand of timber and underbrush	0.075	0.100	0.150
b. Mountain streams, no vegetation in channel, banks usually steep, trees and brush along banks submerged at high stages			
1. Bottom: gravels, cobbles, and few boulders	0.030	0.040	0.050
2. Bottom: cobbles with large boulders	0.040	0.050	0.070
D-2. Flood plains			
a. Pasture, no brush			
1. Short grass	0.025	0.030	0.035
2. High grass	0.030	0.035	0.050
b. Cultivated areas			
1. No crop	0.020	0.030	0.040
2. Mature row crops	0.025	0.035	0.045
3. Mature field crops	0.030	0.040	0.050
c. Brush			
1. Scattered brush, heavy weeds	0.035	0.050	0.070
2. Light brush and trees, in winter	0.035	0.050	0.060
3. Light brush and trees, in summer	0.040	0.060	0.080
4. Medium to dense brush, in winter	0.045	0.070	0.110
5. Medium to dense brush, in summer	0.070	0.100	0.160
d. Trees			
1. Dense willows, summer, straight	0.110	0.150	0.200
2. Cleared land with tree stumps, no sprouts	0.030	0.040	0.050
3. Same as above, but with heavy growth of sprouts	0.050	0.060	0.080
4. Heavy stand of timber, a few down trees, little undergrowth, flood stage below branches	0.080	0.100	0.120
5. Same as above, but with flood stage reaching branches	0.100	0.120	0.160
D-3. Major streams (top width at flood stage >100 ft). The n value is less than that for minor streams of similar description, because banks offer less effective resistance.			
a. Regular section with no boulders or brush	0.025		0.060
b. Irregular and rough section	0.035		0.100

FROM: OPEN CHANNEL HYDRAULICS,
 VEN TE CHOW, 1959,
 MCGRAW-HILL

ESTIMATED FLOW RATES FOR BROADCRESTED DAM USING CALCULATION $[(h) ^ 1.5]$ (DAM WIDTH) 3.33 (please note used 2.64 under 0.2 feet.)

HEAD IN FEET	FLOW RATE IN CFS	FLOW RATE IN INCHES	HEAD IN FEET	FLOW RATE IN CFS	FLOW RATE IN INCHES	HEAD IN FEET	FLOW RATE IN CFS	FLOW RATE IN INCHES
0.10	0.48	23.79	0.65	7.89	394.29	1.12	17.84	891.82
0.15	0.87	43.71	0.66	8.07	403.43	1.13	18.08	903.79
0.20	1.70	84.89	0.67	10.41	520.48	1.14	23.10	1155.17
0.21	1.83	91.33	0.68	10.64	532.17	1.15	23.41	1170.40
0.22	1.96	97.93	0.69	10.88	543.95	1.16	23.71	1185.70
0.23	2.09	104.68	0.70	11.12	555.82	1.17	24.02	1201.07
0.24	2.23	111.59	0.71	11.36	567.78	1.18	24.33	1216.50
0.25	2.37	118.63	0.72	11.60	579.81	1.19	24.64	1232.00
0.26	2.52	125.82	0.73	11.84	591.93	1.20	24.95	1247.56
0.27	2.66	133.15	0.74	12.08	604.14	1.21	25.26	1263.19
0.28	2.81	140.61	0.75	12.33	616.43	1.22	25.58	1278.88
0.29	2.96	148.21	0.76	12.58	628.80	1.23	25.89	1294.63
0.30	3.12	155.94	0.77	12.82	641.25	1.24	26.21	1310.45
0.31	3.28	163.81	0.78	13.08	653.78	1.25	26.53	1326.34
0.32	3.44	171.80	0.79	13.33	666.39	1.26	26.85	1342.29
0.33	3.60	179.91	0.80	13.58	679.08	1.27	27.17	1358.30
0.34	3.76	188.15	0.81	13.84	691.86	1.28	27.49	1374.37
0.35	3.93	196.51	0.82	14.09	704.71	1.29	27.81	1390.51
0.36	4.10	204.99	0.83	14.35	717.64	1.30	28.13	1406.71
0.37	4.27	213.60	0.84	14.61	730.65	1.31	28.46	1422.97
0.38	4.45	222.31	0.85	14.87	743.73	1.32	28.79	1439.30
0.39	4.62	231.15	0.86	15.14	756.90	1.34	29.44	1472.13
0.40	4.80	240.09	0.87	15.40	770.14	1.35	29.77	1488.64
0.41	4.98	249.15	0.88	15.67	783.45	1.36	30.10	1505.21
0.42	5.17	258.32	0.89	15.94	796.85	1.37	30.44	1521.84
0.43	5.35	267.60	0.90	16.21	810.31	1.38	30.77	1538.54
0.44	5.54	276.99	0.91	16.48	823.86	1.39	31.11	1555.29
0.45	5.73	286.49	0.92	16.75	837.47	1.4	31.44	1572.10
0.46	5.92	296.09	0.93	17.02	851.16	1.41	31.78	1588.98
0.47	6.12	305.80	0.94	17.30	864.93	1.42	32.12	1605.91
0.48	6.31	315.61	0.95	17.58	878.77	1.43	32.46	1622.91
0.49	6.51	325.52	0.96	17.85	892.68	1.44	32.80	1639.96
0.50	6.71	335.54	0.97	18.13	906.66	1.45	33.14	1657.07
0.51	6.91	345.66	0.98	18.41	920.72	1.46	33.48	1674.24
0.52	7.12	355.87	0.99	18.70	934.85	1.47	33.83	1691.47
0.53	7.32	366.19	1.00	18.98	949.05	1.48	34.18	1708.76
0.54	7.53	376.60	1.01	19.27	963.32	1.49	34.52	1726.11
0.55	7.74	387.11	1.02	19.55	977.66	1.50	34.87	1743.52
0.56	7.95	397.71	1.03	19.84	992.08	1.51	35.22	1760.98
0.57	8.17	408.41	1.04	20.13	1006.56	1.52	35.57	1778.50
0.58	8.38	419.21	1.05	20.42	1021.11	1.53	35.92	1796.08
0.59	8.60	430.10	1.06	20.71	1035.73	1.54	36.27	1813.72
0.60	8.82	441.08	1.07	21.01	1050.42	1.55	36.63	1831.41
0.61	9.04	452.15	1.08	21.30	1065.18	1.56	36.98	1849.17
0.62	9.27	463.32	1.09	21.60	1080.01	1.57	37.34	1866.98
0.63	9.49	474.57	1.10	21.90	1094.91	1.58	37.70	1884.84
0.64	9.72	485.91	1.11	22.20	1109.87	1.59	38.06	1902.76

The only way to measure the water entering the Williamson farms was over a broadcrested dam located where Th Joslyn Ditch crosses the county road in the NWSE S18 T12N R4W called the Medeley Dump. I created the above table to determine the flows over the broadcrested dam entering the Williamson Farm. According to the old decree records, there are only two other users beyond this point of diversion with flood water rights. These rights are 67-626 and 67-632. These rights supply 70 inches of water or 1.40 cfs. The first day I was at the site I measured 0.27 ft or 2.66 cfs (133.15 inches). The second day I was at the site, I measured 0.49 ft or 6.51 cfs (325.52 inches). The high water mark on the weir was 0.88 ft which would allow 15.67 cfs or 783.45 inches. The highwater mark shows that there is sufficient water at times at the Medeley dump to supply all of the 8.00 cfs of Williamson's combined rights, and the 1.40 cfs of the other users who floodwater rights that are run through the Medeley Dump.

POINT OF DIVERSION OVERLAP ON MANN CREEK AND DEER CREEK

Basin	Sequence	Suffix	Basis	Priority Date	Rate(cfs)	Volume(af)	Source	Water Use(s)	Source Table	Source Table
67	515	A	Decreed	1874-06-01	1.17		MANNS CREEK	IRRIGATION	MANTOOTH, HERMAN (Current); MANTOOTH, LORENE (Current)	wrAdjudicationClaim
67	515	B	Decreed	1874-06-01	0.26		MANNS CREEK	IRRIGATION	TARTER, JACKIE (Current); TARTER, ROSS (Current)	wrAdjudicationClaim
67	515	C	Decreed	1874-06-01	0.11		MANNS CREEK	IRRIGATION	TARTER, LOUISE (Current)	wrAdjudicationClaim
67	516	A	Decreed	1874-06-01	0.63		MANNS CREEK	IRRIGATION	MANTOOTH, HERMAN (Current); MANTOOTH, LORENE (Current)	wrAdjudicationClaim
67	519		Decreed	1874-06-01	0.29		MANNS CREEK	IRRIGATION	CLARK III, HARVEY D (Current); CLARK, SYBIL M (Current)	wrAdjudicationClaim
67	520		Decreed	1874-06-01	0.61		MANN CREEK	IRRIGATION	HAGANS FARMS INC (Current)	wrAdjudicationClaim
67	522	A	Decreed	1874-06-01	0.6		MANNS CREEK	IRRIGATION	STIRM, FRANKLIN D (Current); STIRM, JUNE Y (Current)	wrAdjudicationClaim
67	523		Decreed	1874-06-01	0.85		MANNS CREEK	IRRIGATION	JOHNSON BRYANT EQUIPMENT CO (Current)	wrAdjudicationClaim
67	525	B	Decreed	1874-04-01	0.32		MANNS CREEK	IRRIGATION	SEMERAD, CATHY (Current); SEMERAD, CHARLES (Current)	wrAdjudicationClaim
67	526	A	Decreed	1874-06-01	0.1		MANNS CREEK	IRRIGATION	CASNER, GARY D (Current); CASNER, NANCY (Current)	wrAdjudicationClaim
67	543		Decreed	1884-06-01	1.15		MANNS CREEK	IRRIGATION	DAVIES, JAMES M (Current)	wrAdjudicationClaim
67	544	A	Decreed	1884-06-01	0.68		MANN CREEK	IRRIGATION	HUST, PAULINA ARLENE (Current)	wrAdjudicationClaim
67	544	B	Decreed	1884-06-01	0.34		MANN CREEK	IRRIGATION	HUST, FLOYD D (Current); HUST, SHIRLEY (Current)	wrAdjudicationClaim
67	544	C	Decreed	1884-06-01	0.33		MANN CREEK	IRRIGATION	HUST, LYNN (Current); HUST, THOMAS L (Current)	wrAdjudicationClaim
67	544	D	Decreed	1884-03-15	1.46		MANN CREEK	IRRIGATION	BROWN, JAMES A (Current)	wrAdjudicationClaim
67	545	A	Decreed	1884-06-01	0.68		MANNS CREEK	IRRIGATION	BARSTAD, DONALD F (Current)	wrAdjudicationClaim
67	580	B	Decreed	1886-04-01	0.12		MANN CREEK	IRRIGATION	CUNNINGHAM, B C (Current); CUNNINGHAM, BARBARA J (Current)	wrAdjudicationClaim
67	583		Decreed	1886-04-01	0.26		MANNS CREEK	IRRIGATION	BARSTAD, DONALD F (Current)	wrAdjudicationClaim

Basin	Sequence	Suffix	Basis	Priority Date	Rate(cfs)	Volume(af)	Source	Water Use(s)	Source Table	Source Table
67	585	A	Decreed	1886-04-01	0.48		MANNS CREEK	IRRIGATION	MANTOOTH, HERMAN (Current); MANTOOTH, LORENE (Current)	wrAdjudicationClaim
67	585	B	Decreed	1886-04-01	0.1		MANN CREEK	IRRIGATION	TUTTLE, DAN RAY (Current); TUTTLE, KATHLEEN (Current)	wrAdjudicationClaim
67	593	B	Decreed	1888-04-01	0.71		MANNS CREEK	IRRIGATION	QUEEN, MARION K (Current); QUEEN, PATRICK K (Current)	wrAdjudicationClaim
67	619	A	Decreed	4/1/1908	0.3		MANNS CREEK	IRRIGATION	QUEEN, MARION K (Current); QUEEN, PATRICK K (Current)	wrAdjudicationClaim
67	624	A	Decreed	3/29/1913	0.14		MANNS CREEK	IRRIGATION	HIGGINS, LAVINA J (Current); HIGGINS, WESLEY C (Current)	wrAdjudicationClaim
67	624	B	Decreed	3/29/1913	0.64		MANNS CREEK	IRRIGATION	BARSTAD, DONALD F (Current)	wrAdjudicationClaim
67	625	A	Decreed	3/29/1913	0.16		MANNS CREEK	IRRIGATION	BARSTAD, DONALD F (Current)	wrAdjudicationClaim
67	632	B	Decreed	4/1/1914	0.2		MANNS CREEK	IRRIGATION	BARSTAD, DONALD F (Current)	wrAdjudicationClaim
67	2078	A	License	3/3/1913	3.3		MANN CREEK	IRRIGATION	WILLIAMSON, ANITA A (Current); WILLIAMSON, WAYNE W (Current)	wrAdjudicationClaim
67	2078	B	License	3/3/1913	0.19		MANN CREEK	IRRIGATION	PARKER, DONEL (Current)	wrAdjudicationClaim
67	2078	C	License	3/3/1913	0.8		MANN CREEK	IRRIGATION	BARSTAD, DONALD F (Current)	wrAdjudicationClaim
67	2386		License	12/14/1940		10000	MANN CREEK	IRRIGATION FROM STORAGE, IRRIGATION STORAGE	UNITED STATES OF AMERICA ACTING THROUGH (Current)	wrAdjudicationClaim
67	2389		License	1/30/1964		2950	MANN CREEK	IRRIGATION FROM STORAGE, IRRIGATION STORAGE	UNITED STATES OF AMERICA ACTING THROUGH (Current)	wrAdjudicationClaim
67	4489		Statutory Claim	3/29/1913	136.96		MANN CREEK	IRRIGATION	MANN CREEK IRRIGATION DIST (Current)	wrAdjudicationClaim
67	4553		Statutory Claim	12/14/1940		1000	MANN CREEK	IRRIGATION FROM STORAGE, IRRIGATION STORAGE	UNITED STATES OF AMERICA ACTING THROUGH (Current)	wrAdjudicationClaim

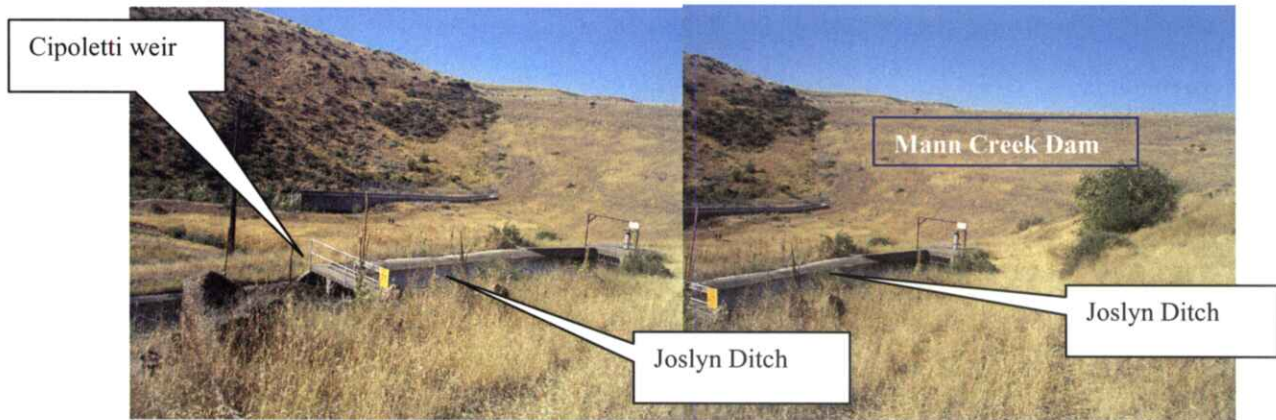
Basin	Sequence	Suffix	Basis	Priority Date	Rate(cfs)	Volume(af)	Source	Water Use(s)	Source Table	Source Table
67	7189		Permit	12/3/1973	5		DEER CREEK , MANN CREEK	IRRIGATION, STOCKWATER	WILLIAMSON, ANITA A (Current); WILLIAMSON, WAYNE W (Current)	wrAdjudicationClaim
67	10383		Decreed	3/29/1913	2.38		MANN CREEK	IRRIGATION	WILLIAMSON, ANITA A (Current); WILLIAMSON, WAYNE W (Current)	wrAdjudicationClaim
67	10384		Decreed	3/29/1913	3.4		MANN CREEK	IRRIGATION	WILLIAMSON, ANITA A (Current); WILLIAMSON, WAYNE W (Current)	wrAdjudicationClaim
67	10406		Decreed	1874-06-01	1.91		MANNS CREEK	IRRIGATION	QUEEN, MARION K (Current); QUEEN, PATRICK K (Current)	wrAdjudicationClaim
67	10590		Benefici al Use	5/12/1902	0.06		MANN CREEK	IRRIGATION	MANN CREEK CEMETERY (Current)	wrAdjudicationClaim
67	10740		Decreed	1874-06-01	0.06		MANNS CREEK	IRRIGATION	LANGLEY, CLIFF (Current); LANGLEY, GAIL (Current)	wrAdjudicationClaim
67	10770		Decreed	1886-04-01	0.18		MANNS CREEK	IRRIGATION	ROMNEY, HELEN M (Current); ROMNEY, RICHARD D (Current)	wrAdjudicationClaim
67	10929		Decreed	1874-06-01	0.96		MANN CREEK	IRRIGATION	CUNNINGHAM, B C (Current); CUNNINGHAM, BARBARA J (Current)	wrAdjudicationClaim
67	11519		Decreed	1874-06-01	2.92		MANN CREEK	IRRIGATION	BARSTAD, DONALD F (Current)	wrAdjudicationClaim
67	12331		Benefici al Use	1884-03-15	0.3		DEER CREEK , MANN CREEK	STOCKWATER	BROWN, JAMES A (Current)	wrAdjudicationClaim
67	14067		Decreed	12/31/1921	2.74		MANN CREEK	IRRIGATION, STOCKWATER	TARTER LIVESTOCK CO (Current)	wrAdjudicationClaim
67	14258		Decreed	3/29/1913	0.7		MANNS CREEK	IRRIGATION	GOMEZ, LINDA J (Current); GOMEZ, STEVE (Current)	wrAdjudicationClaim
67	14259		Decreed	3/29/1913	0.8		MANNS CREEK	IRRIGATION	PHILLIPS, CHARLES A (Current); PHILLIPS, JUDY A (Current)	wrAdjudicationClaim
67	14260		Decreed	4/1/1914	0.09		MANNS CREEK	IRRIGATION	GOMEZ, LINDA J (Current); GOMEZ, STEVE (Current)	wrAdjudicationClaim

Basin	Sequence	Suffix	Basis	Priority Date	Rate(cfs)	Volume(af)	Source	Water Use(s)	Source Table	Source Table
67	14261		Decreed	4/1/1914	0.11		MANNS CREEK	IRRIGATION	GRAHAM, JUDY L (Current); GRAHAM, RALPH L (Current)	wrAdjudicationClaim
67	14300		Decreed	1874-06-01	0.23		MANN CREEK	IRRIGATION	NELSON, APRIL (Current); NELSON, WILLIAM (Current)	wrAdjudicationClaim
67	14301		Decreed	1874-06-01	0.69		MANN CREEK	IRRIGATION	CAPURRO FAMILY TRUST (Current)	wrAdjudicationClaim
67	14327		Decreed	1881-06-01	0.1		MANNS CREEK	IRRIGATION	JOHNSON BRYANT EQUIPMENT CO (Current)	wrAdjudicationClaim
67	14328		Decreed	1881-06-01	0.2		MANNS CREEK	IRRIGATION	CAPURRO, ALLEN (Current); CAPURRO, TONYA (Current)	wrAdjudicationClaim
67	544 A		Decreed	1884-06-01	0.68		MANN CREEK	IRRIGATION	HUST, PAULINA ARLENE (Current)	wrAdjudicationRecommendation
67	544 B		Decreed	1884-06-01	0.34		MANN CREEK	IRRIGATION	HUST, FLOYD D (Current); HUST, SHIRLEY (Current)	wrAdjudicationRecommendation
67	544 C		Decreed	1884-06-01	0.33		MANN CREEK	IRRIGATION	HUST, LYNN (Current); HUST, THOMAS L (Current)	wrAdjudicationRecommendation
67	544 D		Decreed	1884-03-15	1.46		MANN CREEK	IRRIGATION	BROWN, JAMES A (Current)	wrAdjudicationRecommendation
67	10590		Beneficial Use	6/4/1921	0.06		MANN CREEK	IRRIGATION	MANN CREEK CEMETERY (Current)	wrAdjudicationRecommendation
67	11519		Decreed	1874-06-01	2.92		MANN CREEK	IRRIGATION	BARSTAD, DONALD F (Current)	wrAdjudicationRecommendation
67	12331		Beneficial Use	1884-03-15	0.3		DEER CREEK , MANN CREEK	STOCKWATER	BROWN, JAMES A (Current)	wrAdjudicationRecommendation
67	14258			3/29/1913	0.7		MANNS CREEK	IRRIGATION	GOMEZ, LINDA J (Current); GOMEZ, STEVE (Current)	wrAdjudicationRecommendation
67	14259			3/29/1913	0.8		MANNS CREEK	IRRIGATION	PHILLIPS, CHARLES A (Current); PHILLIPS, JUDY A (Current)	wrAdjudicationRecommendation
67	2386		License	12/14/1940		10000	MANN CREEK	IRRIGATION FROM STORAGE, IRRIGATION STORAGE	US DEPT OF INTERIOR (Current)	wrWaterRight
67	2389		License	1/30/1964		5000	MANN CREEK	IRRIGATION FROM STORAGE, IRRIGATION STORAGE	UNITED STATES OF AMERICA ACTING THROUGH (Current)	wrWaterRight
67	4489		Statutory Claim	3/29/1913	136.96		MANNS CREEK	IRRIGATION	MANN CREEK IRRIGATION DIST (Current)	wrWaterRight

Basin	Sequence	Suffix	Basis	Priority Date	Rate(cfs)	Volume(af)	Source	Water Use(s)	Source Table	Source Table
67	4534		Decreed	1868-01-01	0.02		MANN CREEK	STOCKWATER	MANTOOTH, HERMAN (Current); MANTOOTH, LORENE (Current)	wrWaterRight
67	4553		Statutory Claim	12/14/1940		1000	MANNS CREEK	IRRIGATION FROM STORAGE, IRRIGATION STORAGE	US DEPT OF INTERIOR (Current)	wrWaterRight
67	7189		License	12/3/1973	4.6	920	DEER CREEK , MANN CREEK	IRRIGATION, STOCKWATER	WILLIAMSON, DELORIS L (Current); WILLIAMSON, W M (Current)	wrWaterRight
67	7189			12/3/1973	5		DEER CREEK , MANN CREEK	IRRIGATION, STOCKWATER	WILLIAMSON, DELORIS L (Current); WILLIAMSON, W M (Current)	wrWaterPermit

PHOTOGRAPHER AND DATE OF PHOTOS DANIEL A NELSON 8/19/2005

FILE NUMBER 67-7189



The photos above are of the Mann Creek Dam and the headgate for the Joslyn Reservoir. The Joslyn Ditch comes out of the northeast side of the dam.

The pictures below are of the cipoletti weir on the Joslyn Ditch. The approach pool was very good and the weir construction was also good. At the time of my measurements there was a significant amount of moss, but I relied on the measurements supplied by the Bureau of Reclamation for maximum diversion to the ditch.



PHOTOGRAPHER AND DATE OF PHOTOS DANIEL A NELSON 8/19/2005

FILE NUMBER 67-7189



The pictures above shows where Deer Creek enters the Joslyn Ditch. The ditch is set up so that during a flash flood event water can be diverted away from the ditch and back down the original Deer Creek Channel.

The photos below shows where I performed the Mannings calculation. I used this culvert to determine the flow of the creek. At the time of the measurement the creek was dry. The high water mark on the ditch was level with the pipe if not a bit higher. During flash flood events



PHOTOGRAPHER AND DATE OF PHOTOS DANIEL A NELSON 8/19/2005

FILE NUMBER 67-7189

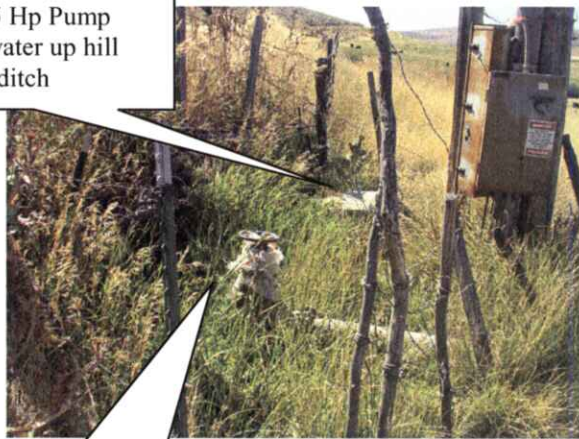


The picture above is of the Medley Dump measurement point.



The picture above is of the portable PTO drive pump.

This is the 75 Hp Pump
that diverts water up hill
and over the ditch

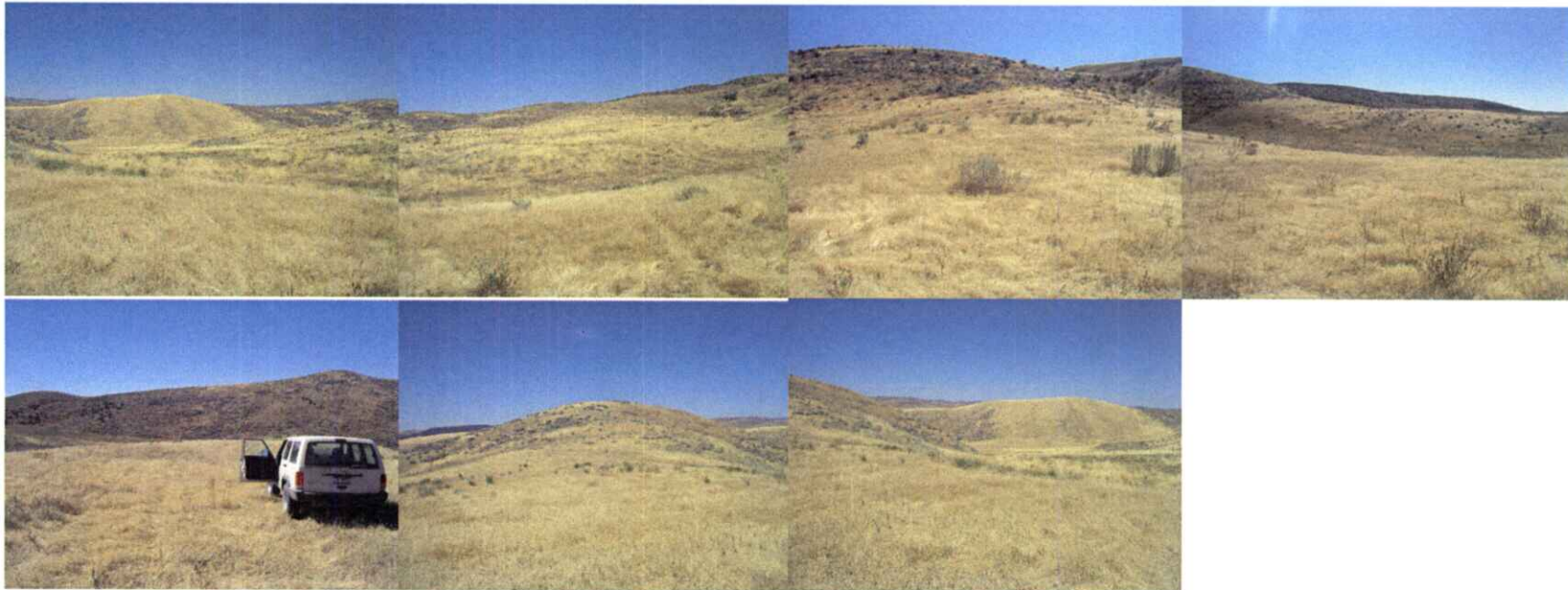


This is the 15 Hp Pump
that diverts water up down
below the ditch

The pictures to the left are of the two
stationary pumps.

PHOTOGRAPHER AND DATE OF PHOTOS DANIEL A NELSON 8/19/2005

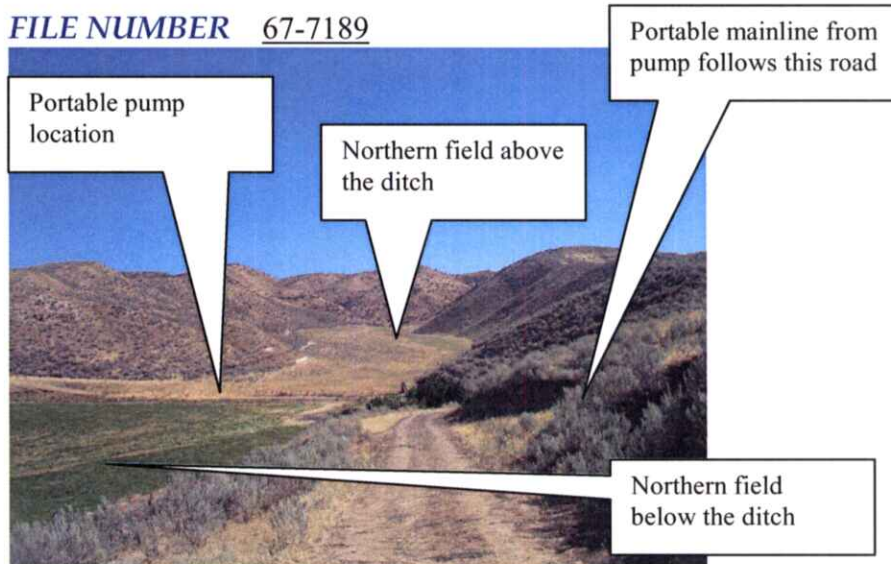
FILE NUMBER 67-7189



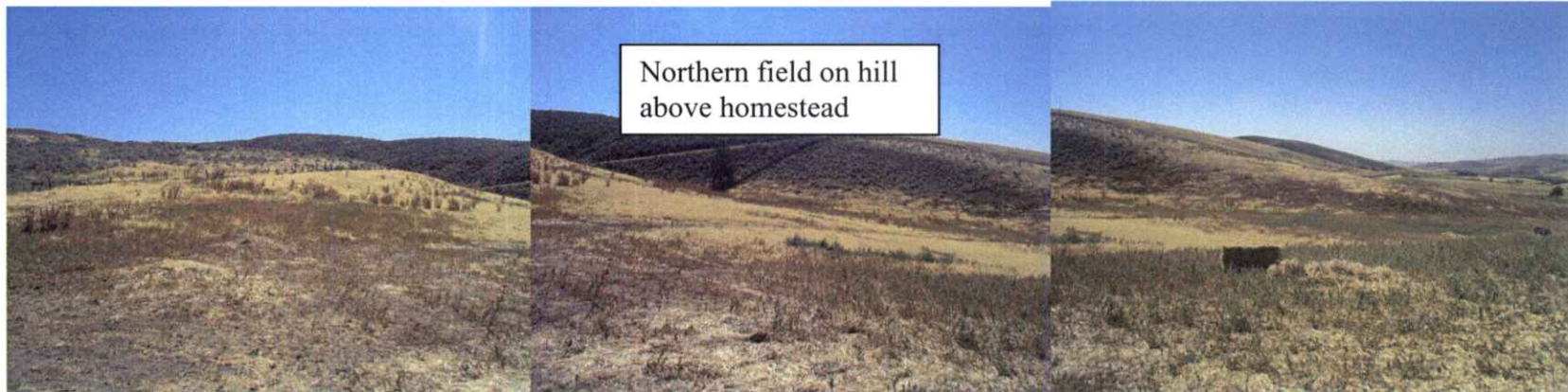
These photos are of the large field east (uphill) from the ditch. The portable mainline runs through approximately where the Jeep is located, and hand lines run off to either side of the mainline. A close inspection shows the line of the mainline and the lines on the hills show where the sage brush has been cleared to plant grass for hay and pasture.

PHOTOGRAPHER AND DATE OF PHOTOS DANIEL A NELSON 8/19/2005

FILE NUMBER 67-7189



These photos are of the northern most fields of the Williamson farm. The top picture is of the northern field below the ditch and the northern field above the ditch. The field above the ditch is irrigated with the portable pump. The field shown in the pictures below is of the field on top of the hill behind the house. This field is also irrigated with the portable pump.



PHOTOGRAPHER AND DATE OF PHOTOS DANIEL A NELSON 8/19/2005

FILE NUMBER 67-7189



The pictures above are of the place of use below the ditch from the stationary pump station south. The pictures below are of the fields below the ditch a little bit further south.



PHOTOGRAPHER AND DATE OF PHOTOS DANIEL A NELSON 8/19/2005

FILE NUMBER 67-7189



The above pictures are of the southern most fields.