

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 67-078351
Exam Date: 10/20/1993

1. Current Owner:
JAE HO KIM 3613 CLIFTON WAY NAMPA ID 83686 And
SANDRA P KIM 3613 CLIFTON WAY NAMPA ID 83686

2. Accompanied by:
Phone No:
Address:
Relationship to Permit Holder:

3. **SOURCE:**
UNNAMED STREAM

TRIBUTARY:
BACON CREEK

B. OVERLAP REVIEW

1. Other water rights with the same place of use: NONE.
2. Other water rights with the same point-of-diversion: NONE.

C. DIVERSION AND DELIVERY SYSTEM**1. LOCATION OF POINT(S) OF DIVERSION:**

UNNAMED STREAM NW¼SE¼ Sec. 15, Twp 15N, Rge 01W, B.M. ADAMS County

Method of Determination: POND VISIBLE IN AERIAL IMAGERY, COMPARED WITH DIGITAL PLSS MAP.

2. PLACE OF USE: STOCKWATER and STOCKWATER STORAGE

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
15N	01W	15														X			

Method of Determination: POND VISIBLE IN AERIAL IMAGERY, COMPARED WITH DIGITAL PLSS MAP. CATTLE PRESENT DURING EXAM.

3.

Delivery System Diagram Attached (required). Indicate all major components and distances between components.

☒ Indicate weir size/pipe as applicable.

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

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

☒ Photo of Diversion and System Attached

4.

Well or Diversion ID No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size

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

D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date

2. Measurements: NONE COLLECTED; RIGHT DOES NOT CONTAIN A FLOW COMPONENT.

E. FLOW

Additional Computation Sheets Attached

CALCULATIONS

Measured Method:

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) =$$

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

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

2. Volume Calculations for Other Uses: SEE ATTACHED POND SPEADSHEET FOR STORAGE USE.

G. NARRATIVE/REMARKS/COMMENTS

THE FIELD EXAM WAS COMPLETED BY STEVE LESTER ON 10/20/1993. A NUMBER OF ASSIGNMENTS WERE RECEIVED TO SPLIT 67-7835 INTO 67-7835B THROUGH 67-7835J. (67-7835A WAS SPLIT TO CREATE 67-7835F THROUGH 67-7835J). ALL 9 PONDS WERE VERIFIED DURING STEVE'S 1993 FIELD VISIT. STOCKWATER FROM STORAGE IS REMOVED FROM RECCOMENDATION SINCE THERE IS NO RECORD THAT WATER IS DIVERTED FROM STORAGE TO TROUGHS.

67-7835I WAS ASSIGNED TO JAE HO AND SANDRA KIM IN 1993.

LEGAL DESCRIPTIONS MATCH POD/POU LOCATIONS. CURRENT COUNTY TAXLOT DATA SUGGESTS THE KIMS STILL OWN THE PROPERTY. THIS IS POND # 3 IN MR LESTER'S FIELD NOTES. HE DESCRIBES A POND BEING 200' x 250' x 3' for 3.4 AF. ARCMAP TOOLS MEASURE A POND SURFACE AREA OF 1.3 ACRES. WITH A 40% SLOPE, THE CAPACITY OF THE POND WITH A SURFACE AREA OF 0.2 ACRE AND MAX DEPTH OF 3', HAS A CAPACITY OF 1.5 AF. ACCORDING TO THE POND ANALYSIS ATTACHED TO THIS REPORT, THE EVAPORATION OF SUCH A POND TOTALS 1.9 AF. THE PERMIT CARRIES ENOUGH VOLUME TO COVER BOTH CAPACITY AND EVAPORATION.

PHOTOS FOUND IN THE FILE ARE NOT LABELED WITH ANY DESCRIPTIONS OF WHERE THEY WERE TAKEN. THEY HAVE BEEN INCLUDED AS EVIDENCE OF BENEFICIAL USE DEVELOPMENT.

Have conditions of permit approval been met? X Yes No

H. RECOMMENDATIONS

1. Recommended Amounts

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
STOCKWATER	01/01 to 12/31	0.01 CFS	
STOCKWATER STORAGE	01/01 to 12/31		3.4 AF
	<u>Totals:</u>	0.01 CFS	3.4 AF

2. Recommended Amendments

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

Change P.U. as reflected above Add P.U. as reflected above X None

I. AUTHENTICATION

Field Examiner's Name Steve Lester Date 10-20-1993

Reviewer Patrick Kelly Date 4-20-2017

State of Idaho
Department of Water Resources
Attachment to Water Right License
67-7835I

This map depicts the STOCKWATER STORAGE place of use boundary for this water right at the time of this approval and is attached to the approval document solely for illustrative purposes.



-  Point of Diversion
-  Place Of Use Boundary
-  Townships
-  PLS Sections

0 0.035 0.07 0.14 Miles



Seepage Loss Calculations

This spreadsheet has been designed by Idaho Department of Water Resources to estimate the total annual seepage losses from a pond.

FILE NUMBER	67-78351
REVIEWER	Patrick Kelly
DATE	4/20/2017

User Input
Calculated value
Formula Explanations

INPUTS

Pond Surface Area (AC.)	1.3	AC.
-------------------------	-----	-----

Pond Surface Area (SQ. FT.)	56628	SQ. FT.
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My Soil Classification is	On Stream	
Suggested Seepage Rate (FT./DAY)	0.0000	FT./DAY

Formula: (Surface Area X Seepage Rate) X 7.48 = Gallons Per Day Loss
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Convert to GPD	0	GPD
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Total Seepage Loss (AFA)	0.0	AFA
--------------------------	-----	-----

Though sand and gravel seepage rates may actually be higher, the maximum allowable rate is 0.2 ft/day, pursuant to Administrative Memo "Seepage Loss Standards for Ponds and Reservoirs."

Suggested Seepage Rates for Different Soil Types:

GW, GP, GM, GC, SW, SP and SM (silty sand, sand silt mixtures and gravel mixtures) = 0.2 ft per day

OL and ML (inorganic silts - very fine sands, silty, or clayey fine sands) = 0.02 ft per day

SC (clayey sands, sand clay mixtures) = 0.007 ft per day

CL (Low to medium plasticity clays) = 0.003 ft per day

MH, OH, PT and CH (high plasticity clays) = 0.0003 ft per day

LINED PONDS (liners can be chemical, fabric, or bentonite) = 0 ft per day

Ponds Intercepting Groundwater (excavated ponds filled by ground water) = 0 ft per day

PLEASE NOTE: The initial basis for the Suggested Seepage Rates in the table above is found on Page 16 of Seepage from Fish Ponds, Bulletin 599, August 1989 Alabama Agricultural experiment Station, Auburn University, Auburn University Alabama. If you don't know the soil type, please refer to the map provided at <X:\Spatial\Soils\USCS\PondSoils.lyr>. Use "0" if the pond fill relies on the water table.

Evaporation Loss Calculations

This spreadsheet has been designed by Idaho Department of Water Resources to estimate the annual evaporation losses from a pond.

FILE NUMBER	67-78351
REVIEWER	Patrick Kelly
DATE	4/20/2017

User Input
Calculated value
Formula Explanations

The acronyms used on the Kimberly Research Center website are defined below:
P = Precipitation
ET= Evapotranspiration
P _d = Precipitation deficit
P _d =ET-P

USING THIS SPREADSHEET

Use the link below to access the Kimberly Research Center website. This website provides the Precipitation Deficit for a station most representative of the pond under examination. The Precipitation Deficit is the total amount of free water surface evaporation minus the precipitation for a given area, which gives the total amount of evaporative losses incurred by the pond. There are several weather sites that are used throughout the state. IDWR staff can find the nearest site using Arc Map. The shape file containing the sites can be found at <X:/Spatial/Climate/ETIdahostations.shp>.

Instructions:

1. Use the link below to navigate to ET Idaho 2012.
2. Select the station which is most representative to your pond location.
3. Click Submit Query.
4. Under "Land Covers with Evapotranspiration Estimates," select "Open Water - Shallow Systems (ponds, streams)" or "Open Water - small stock ponds" depending on the pond size.
5. Click the link to "Precipitation Deficit."
6. Reference and copy (ctrl + C) the first subheading "Mean" values.
7. Click the "Paste Values from ET Idaho" button. The table will automatically enter a zero (0) for any negative precipitation deficit values.

Found at: <http://data.kimberly.uidaho.edu/ETIdaho/>

Precipitation Deficit

Station: Council (NWS - 102187)

Month	mm/day ¹	Days per month	mm/Month
Jan	-2.61	31	0.00
Feb	-2.02	28	0.00
March	-0.42	31	0.00
April	1.13	30	33.90
May	1.94	31	60.14
June	2.47	30	74.10
July	4.02	31	124.62
August	3.21	31	99.51
September	1.71	30	51.30
October	-0.10	31	0.00
November	-2.46	30	0.00
December	-2.98	31	0.00

PLEASE NOTE: The seasonal average for precipitation deficit should not be used for calculations because precipitation often exceeds evaporation during wetter months of the year. If the pond is kept full, excess precipitation during wetter months does not serve to refill the pond during drier months.

For example, see Sandpoint KSPT (NWS -- 108137), the annual precipitation deficit is -106 mm. However, April through September have positive precipitation deficit values. To properly estimate the annual volume of water necessary to refill a pond due to evaporation losses, the table will automatically enter a zero (0) for each month that the precipitation value is reported as a negative value.

As described above, precipitation offsets evaporation in winter months, so the net effect is that wintertime precipitation deficit is usually zero.

Total mm/year = 443.57

$$\left(\frac{443.57}{304.8} \right) \times 1.30 = 1.9 \text{ AFA}$$

Total Storage Calculations

FILE NUMBER	57-78351
REVIEWER	Patrick Kelly
DATE	4/20/2017

This spreadsheet has been designed by Idaho Department of Water Resources to estimate the total seepage, evaporation and fill capacity required for a pond.

User Input
Calculated value
Formula Explanations

Surface Area (AC.)	1.3	"Surface Area" is automatically carried over from the "Seepage Loss" sheet.
Average Pond Depth (FT.)	1.2	"Average Pond Depth" depicts the actual depth of the pond either measured or estimated. Note: If you know the maximum depth and not the average depth, the Field Examiner's Handbook suggests multiplying the maximum depth by 0.4 to get the average depth, or you can use any method that seems reasonable to attain average depth.
Pond Capacity (AF)	1.5	Pond Capacity is calculated by multiplying the Pond Surface Area by the Average Pond Depth. If you know the capacity, divide the capacity by surface area and enter the average pond depth in the space above. Note: If pond capacity is determined using a method shown on the "Pond Capacity" sheet, the user may need to modify the value of "Pond Capacity" (cell B9) manually. Note that if the value is modified manually, the formula will be altered for future use.
Multiple Fill Volume Above Initial Fill to Fulfill From Storage Needs- "Multiple Fills" (AF)	0	The "Multiple Fill Volume Above Initial Fill" is the acre-feet of water required to meet a <i>from storage</i> component if the <i>from storage</i> component exceeds a one time fill. This section should not include the amount of water needed to fill the pond initially or the amount of water needed to maintain the pond level due to evaporation or seepage. For example: if a pond has a capacity of 5 acre feet and 2.5 acre feet of seepage and evaporation, but the pond is used for irrigation that requires 10 acre feet of from storage for the irrigation use, then you would insert 5 acre feet into this location (10 acre feet needed - 5 acre feet from the initial fill = 5 acre feet of additional storage needed). Note: You must have a "From Storage" component exceeding the initial fill on the permit to include a volume in this space.
Estimated Seepage Loss (AF)	0.0	The "Estimated Seepage Loss" is automatically carried over from the "Seepage Loss" sheet.
Estimated Evaporation Loss (AF)	1.9	The "Estimated Evaporation Loss" is automatically carried over from the "Evaporation Loss" sheet.
Total Volume Required (AF)	3.4	The "Total Volume Required" is calculated by adding the Pond Capacity, Multiple Fills, Seepage Loss, and Evaporation Loss amounts to determine the total amount of storage required.

MEMORANDUM

TO: FILE 67-07835

FROM: STEVE LESTER *SL*

DATE: MAY 6, 1993

SUBJECT: ASSIGNMENTS OF PERMIT, FIELD EXAM, LICENSE RECOMMENDATIONS

ASSIGNMENTS

This office has received several inquiries concerning possible sales of parcels of land related to Permit 67-07835, a multiple pond stockwater right in the name of the Estate of Emma Ball. The permit incorporates nine ponds supplied by several sources. Attachment B in the permit file lists each pond by number, pond location and dimensions, and estimated pond volumes in acre feet (af). This information was supplied by the current owner.

The permit allows 28.9 af of stockwater storage and .09 cfs as a diversion rate for stockwater. The rate of diversion is based on the number of animals to be served, which is the department standard in such cases. The rate is not based on the estimated flow available per source.

If a sale or sales of part of the property listed in the permit occur prior to licensing of the permit, how should portions of the permit be assigned to new owners? This is the question we have been asked by at least three prospective buyers and one realtor. Purchase of land including any of the nine ponds should result in an assignment of part of the permit to the new owner. Attachment B defines the amount of storage water associated with each pond. Also, because the permit rate of flow is based on number of head instead of respective pond sizes and amount of water contributed by source, each pond should receive an equal share of the rate of flow: .09 cfs/9 ponds or .01 cfs per pond.

Here is a table summarizing Attachment B and amounts of water per pond site for purposes of assignments.

<u>Pond No.</u>	<u>Location</u>	<u>Source - Tributary</u>	<u>Acre-Feet</u>	<u>Cfs</u>
1	NENE S.22	unn. stream - Bacon Cr.	18.37	.01
2	SWSE S.15	" " " "	.17	.01
3	NWSE S.15	" " " "	3.44	.01
4	SESW S.15	Bacon Cr. - Weiser R.	.34	.01
5	SWSW S.15	" " " "	.69	.01
6	NWNW S.22	unn. stream - Bacon Cr.	3.10	.01
7	NESW S.09	" " " "	2.07	.01
8	SESW S.17	" " " "	.34	.01
9	SENWNW S.	spring - Bacon Cr.	.34	.01
21				
		Total	28.86	.09

Permit 67-07835

May 6, 1993

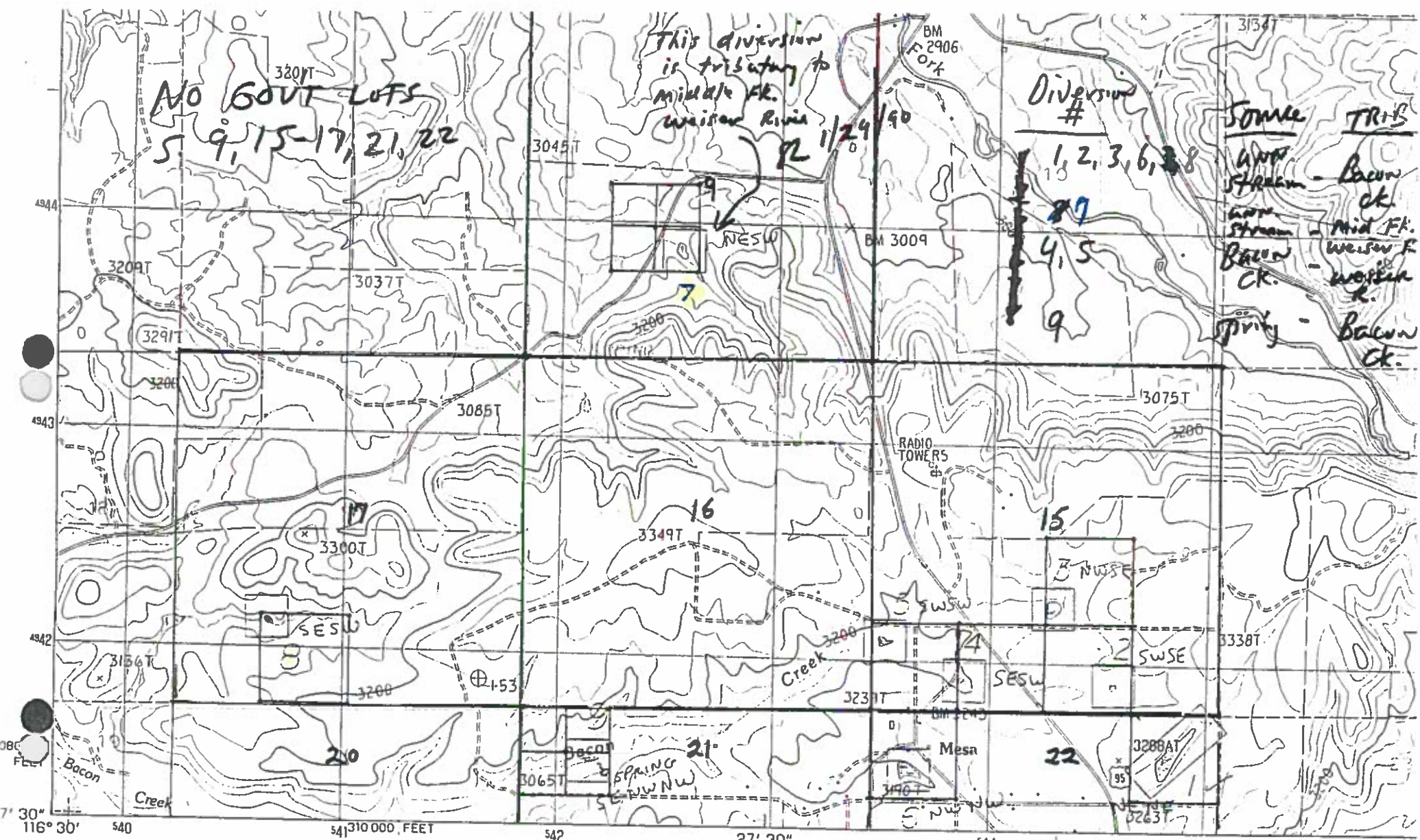
Page 2

FIELD EXAM & LICENSE RECOMMENDATIONS

Caution is advised when the field exam is conducted and license recommendations are made. It is possible that assignments could occur and that more than one owner could be involved in the field exam(s). If so, be sure that total license recommendations for all portions of the permit fit within limits of the permit. The best course of action is to examine the entire permit system as soon as possible to avoid complications if multiple assignments occur. The regional office will try to conduct the field exam in the near future.

Also, before making the license recommendations for any portion of this permit, be sure to work with the current owner of any assigned part to see if any licensing amendments are needed. An assignment was received on 5/6/93 for pond 1 for Don and Charlotte Stevenson. Mr. Stevenson indicated in an earlier office visit that he is interested in changing the nature of use for pond 1.

5/6/93 portion
Assigned to
Don Stevenson
866-4217 (Box #)



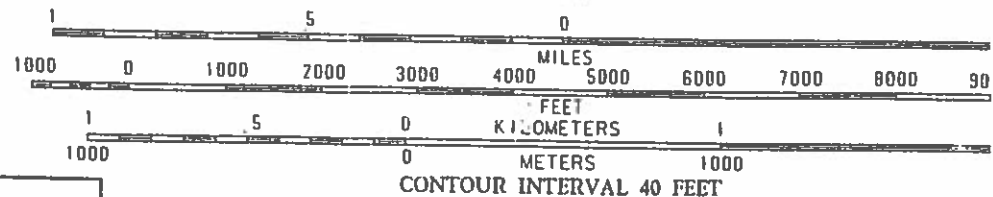
PRODUCED BY THE UNITED STATES GEOLOGICAL SURVEY
 CONTROL BY USGS, NOS/NOAA
 COMPILED FROM AERIAL PHOTOGRAPHS TAKEN 1980
 FIELD CHECKED 1982 MAP EDITED 1986
 PROJECTION TRANSVERSE MERCATOR
 GRID: 1000-METER UNIVERSAL TRANSVERSE MERCATOR ZONE II
 10,000-FOOT STATE GRID TICKS IDAHO, WEST ZONE
 UTM GRID DECLINATION 0°24' EAST
 1986 MAGNETIC NORTH DECLINATION 17°30' EAST
 VERTICAL DATUM NATIONAL GEODETIC VERTICAL DATUM OF 1929
 HORIZONTAL DATUM 1927 NORTH AMERICAN DATUM
 To place on the predicted North American Datum of 1983,
 move the projection lines as shown by dashed corner ticks
 (16 meters north and 77 meters east)
 There may be private inholdings within the boundaries of any
 Federal and State Reservations shown on this map.

PROVISIONAL MAP
 Produced from original
 manuscript drawings. Infor-
 mation shown on this map is

ATTACHMENT 'A'

**T15N RIW
 MAP T-7**

SCALE 1:24 000



ATTACHMENT "B"

POND #	TRSLY	APPROX SIZE	AF
#1	15N 1W 22 NWSE	200' x 800' x 5' = 800,000 / 43560 =	18.72 AF
#2	15 SWSE	50' x 50' x 3' = 7500 / 43560 =	0.17 AF
#3	15 NWSE	200' x 250' x 3' = 150,000 / 43560 =	3.44 AF
#4	15 SESEW	50' x 100' x 3' = 15,000 / 43560 =	0.34 AF
#5	15 SWSW	50' x 200' x 3' = 30,000 / 43560 =	0.69 AF
#6	22 NWNW	150' x 300' x 3' = 135,000 / 43560 =	3.10 AF
#7	9 NSEW	100' x 700' x 3' = 90,000 / 43560 =	2.07 AF
#8	17 SESEW	50' x 100' x 3' = 15,000 / 43560 =	0.34 AF
#9	* 21 SENWNW	50' x 100' x 3' = 15,000 / 43560 =	0.34 AF
* SPRING FED POND			Total AF = 28.86

FIELD CHECKED..... 1962..... MAP ENTRY.....
PROJECTION..... UNIVERSAL TRANSVERSE MERCATOR.....
WGS-84 STATE GRID TIEED..... NORTH ZONE 18
UTM GRID SPECS..... 18N..... 62E EAST
WGS 84 NORTH DECLINATION..... 1754 EAST
NAD 83 NORTH DECLINATION..... 1754 EAST
NAD 83 NORTH AMERICAN DATUM.....
NORTH AMERICAN DATUM.....
To place on the projected North American Datum of 1983,
move the projection lines as shown by dashed corner ticks
16 meters north and 77 meters east)
There may be private inholdings within the landward of any
Federal and State Reservations shown on this map
All marginal data and lettering generated and redlined for

Stock WATER up to 375 HD = 0.09 cfs
 Stock WATER STORAGE = 28.86 AF
 Note: Ponds 1 thru 7 were built in 1977,
 8 & 9 in 1989.

Ponds with * Source and trib.
 #1, #2, #3, #6, #7, #8 UNNAMED STREAM - BACON CR.
 #4, #5. BACON CR - WEISER R.
 #9. SPRING - BACON CR

* #7 is trib. to Middle Fork Weber Riv.



PROVISIONAL MAP
Produced from original
manuscript drawings. Infor-
mation shown as of date of
publication unless otherwise
noted.

ATTACHMENT 'A'

T15N Rim

MAF T-7

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS

10/20/93

67-07835

Assigned parts

? ① Proj filed date - no fee for stock?

? ② What is assigned F - is there one → S-v. file?

#1

△ Stock to
wildlife
use per
excess info.
from area

(# from Permit map)

Demerits from permit OK.

earth dam on new stream (Runoff)

P, map top correct.

Photo ① Look NE at pond, new stream drains to left;
most of pond area dry now - can see veget area
that's underwater when pond full.



#2

Demerits OK from permit.

Earth dam, new stream (Runoff)

dry now.

Photo ① Look SW from dirt rd, pond in center background
before front trees.

#3

✓ NEW Roll of film

Demerits OK from permit.

mostly dry now.

Earth dam, new stream (Runoff)

Photo ① Look NW at dam, pond behind it. 1/4 mi
dirt access rd.

#4

Dimensions OK From Point
Earth Dam on Bacon Cr.

Dry now

Photo ① Look NW at back of earth dam from E.
End of pond.

#5

Dimension OK From Point

Dry now.

Just E. of S. line (or fence, presumed to be on line).
Here

Photo ① Look S. at site from across rd (Apple Ln).
Fence on R. appears to be S. line

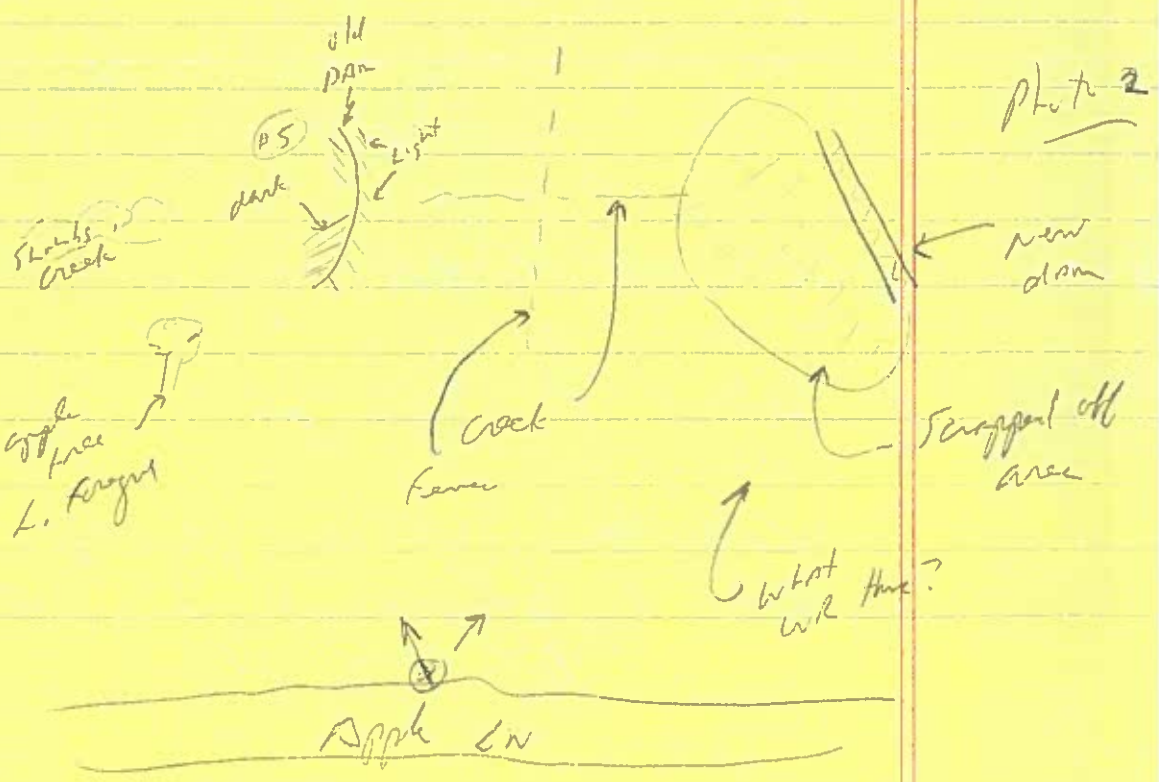
② just W. of fence line is small c 2w'
is new construction - earth dam 40' tall on
creek.

Whose? What WR. in S. 16 - see topo, placed
mark on creek of ? reference

Dind Cummings also by this site? Built this?

check into this

Photo 1



#6

Dimensions OK from permit.

Earth dam on lower stream (Renofer)

My note.

Photo ① Look SE at dam (R) & pond (L.)

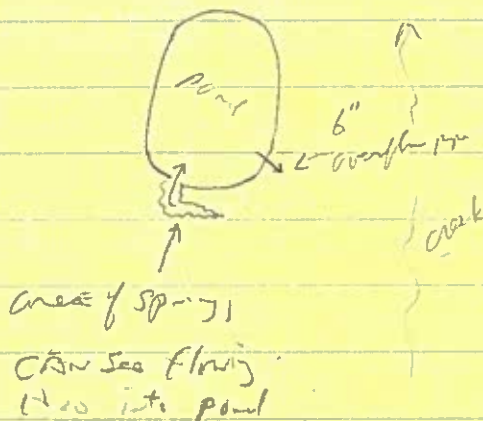
#9

Dimensions OK from Permit.

Spring enters into excavated area to form pond. Can

see spring flow on E end of pond.

Pond has 6" overflow pipe on NE side.



Located on N bank of S.

Bacon Cr.

photo ② Look W at pond; spring flow is

foreground. old pipes ± appear to do nothing now. water flows into pond. overflow goes to creek.

[Several tree reflection photos taken here]

#7

Dimensions OK from Permit.

Earth dam across stream (permit).

Photo ① Look N at dam (L) & pond (R)

Some water left now.

NOT EXPOSED → ② Look W at controlled Burns, P.W. on Goodrich Cr Rd.

#8

Dimensions OK from permit.

Earth dam across stream (permit).

W.D. County Landfill now but still intact & capable of use.

Photo ① Look South from just below saddle 2 1/2 miles N. of site. Dam on R. just L. of "new rd". Pond holds flow to L. of dam. Dry now.

[END OF THIS ROLL]



October 20, 1993

Field Exam 67-7835

Steve Lester



October 20, 1993

Field Exam 67-7835

Steve Lester

