

Form 1-222
12-92STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

APPLICATION FOR TRANSFER OF WATER RIGHT

PART 1

1. Name of Applicant William S Graham Revocable Trust Phone (847)-256-3232Mailing Address 241 Melrose Ave, Kenilworth, IL 60043c/o Rocky Mountain Environmental Associates, Inc.482 Constitution, Ste 303(208) 524-2353Idaho Falls, ID 83402Fax (208) 524-1795

A. PURPOSE OF TRANSFER

1. ☐ Change Point of Diversion ☒ Add diversion point(s) ☒ Change Place of use☒ Change Nature of Use ☒ Change Period of Use ☐ Other _____2. Describe the reason for the proposed changes: Change a portion of the existing right to extend existing wetland area for fish and wildlife habitat.

B. DESCRIPTION OF RIGHT(S) OR PORTION THEREOF, AFTER THE REQUESTED CHANGE

1. Right Number Priority Amount Nature of Use Period of Use

22-11960	5/11/1900	1.24 cfs	Irrigation	4/15 to 10/31
		0.16 cfs	Diversion to Storage	4/15 to 10/31
		17.7 AF	Wildlife Storage	1/01 to 12/31

2. Total amount of water being transferred 0.16 cubic feet per second and/or 17.7 acre-feet per annum.3. Source of water Unnamed Stream tributary to Teton Creek

4. Point(s) of Diversion:

Lot	1/4	1/4	1/4	Sec.	Twp.	Rge.	County	Local Name for Diversion
3	SW	NE	NW	4	4N	45E	TETON	
4	SE	NW	NW	4	4N	45E	TETON	

5. Lands irrigated or place of use:

Twp	Rge	Sec	NE 1/4				NW 1/4				SW 1/4				SE 1/4				Totals
			NE 1/4	NW 1/4	SW 1/4	SE 1/4	NE 1/4	NW 1/4	SW 1/4	SE 1/4	NE 1/4	NW 1/4	SW 1/4	SE 1/4	NE 1/4	NW 1/4	SW 1/4	SE 1/4	
4N	45E	4						21,W	W										21
								L4											
		5	28.5,W			12.4,W													40.9
			L1																

Total Acres 61.9

PART 1

8. General Information:

- a. Description of diversion system: Existing ditch will divert water from the unnamed stream into an existing ditch system for irrigation. The new point of diversion will divert water from the stream into a ditch for wildlife storage.
- b. Are the lands from which you propose to transfer the water right subject to any liens, deeds of trust, mortgages, or contracts? ☐ Yes ☒ No If yes, provide a notarized statement from the holder of the lien, deed of trust, mortgage or contract agreeing to the proposed changes.
- c. Describe the affect on the land now irrigated if the place of use is changed pursuant to this transfer: 8.1 ac of irrigated ground will no longer be irrigated.
- d. Remarks: Existing wetland areas will be expanded to include a total of 6.4 ac of wetland that will be hydrated using this water right. Depth of water on the wetland area averages 1 foot. For hydration of the wetland area, a new point of diversion will be added that will divert water directly to the wetlands. This right will be used to fill 6.4 AF of the wetland area and also to compensate for evaporation. Due to the soil profile, minimal seepage is expected. There will be no splits. See attached Mitigation Plan and calculation spreadsheets for more details.

ACTION OF THE DIRECTOR, DEPARTMENT OF WATER RESOURCES

This is to certify that I have examined Application for Transfer of Water Right No. _____

And said application is hereby _____, subject to the following limitations and conditions:

Witness my hand this _____ day of _____, 20__

for the Director

APPLICATION FOR TRANSFER OF WATER RIGHT**PART 2**

WATER RIGHT NO. 22-11960

Owner Type**Name and Address**

Current Owner WILLIAM S GRAHAM REVOCABLE TRUST
 1168 HAMPTONDALE AVE
 WINNETKA, IL 60093
 (847)274-7946

Priority Date: 05/11/1900

Basis: Decreed

Status: Active

Source**Tributary**

UNNAMED STREAM TETON CREEK

Beneficial Use From To Diversion Rate Volume

IRRIGATION 04/15 10/31 1.4 CFS

Total Diversion 1.4 CFS

Location of Point(s) of Diversion:

UNNAMED STREAM SWNENW Lt 3 Sec. 04 Township 04N Range 45E TETON County

Place of Use Legal Description: IRRIGATION TETON County

<u>Township</u>	<u>Range</u>	<u>Section</u>	<u>Lot</u>	<u>Tract</u>	<u>Acres</u>	<u>Lot</u>	<u>Tract</u>	<u>Acres</u>	<u>Lot</u>	<u>Tract</u>	<u>Acres</u>	<u>Lot</u>	<u>Tract</u>	<u>Acres</u>
04N	45E	4	4	NWNW 22										
		5	1	NENE 30			SENE 18							

Total Acres: 70

Conditions of Approval:

This partial decree is subject to such general provisions necessary for the definition of the rights or for the efficient C18 administration of the water rights as may be ultimately determined by the Court at a point in time no later than the entry of a final unified decree. Section 42-1412(6), Idaho Code.

This right is based upon old right 22-649.

C03 Right includes accomplished change in point of diversion pursuant to Section 42-1425, Idaho Code.

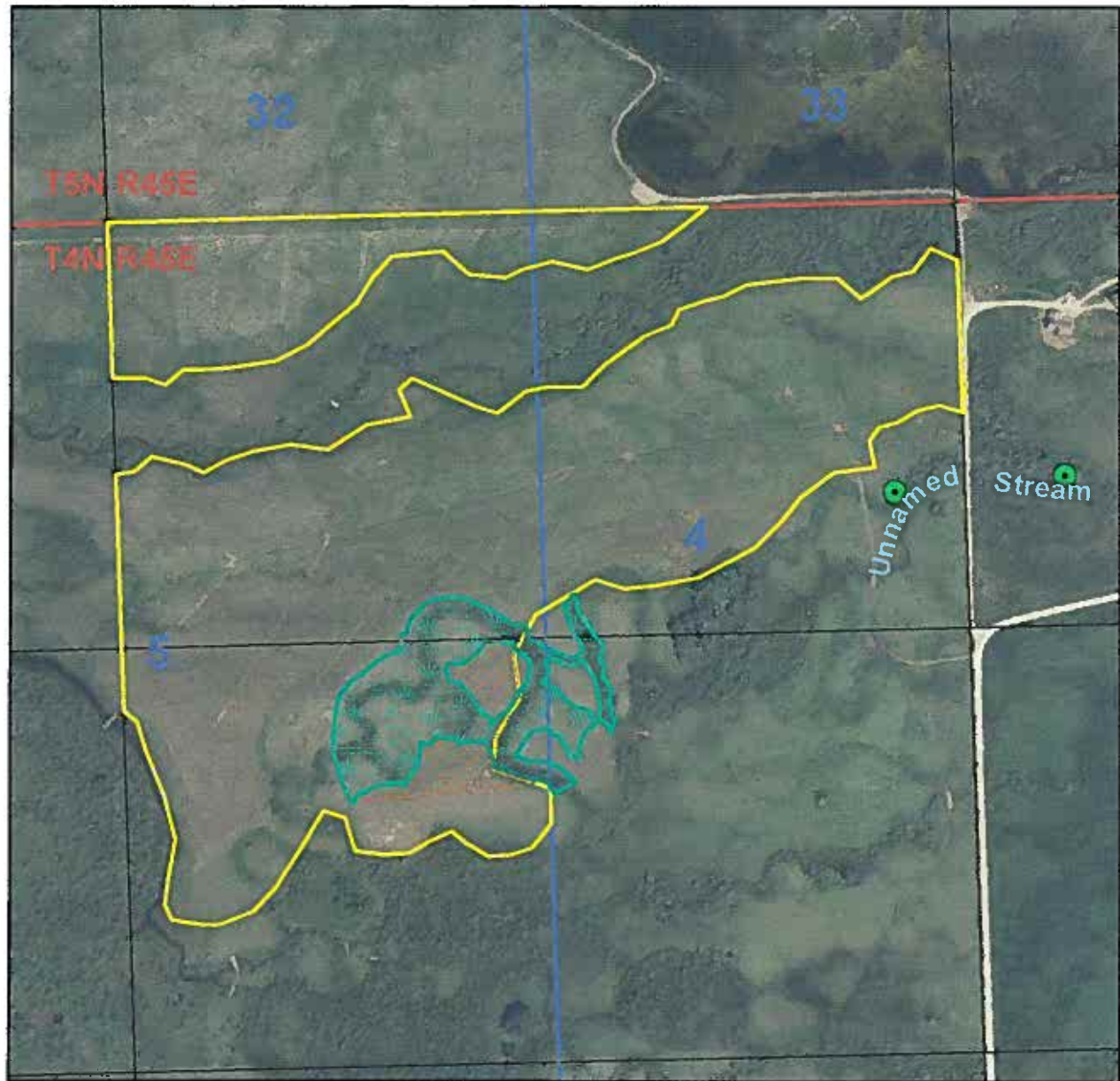
C02 Right includes accomplished change in source pursuant to Section 42-1425, Idaho Code.

10. To your knowledge, has any portion of this water right undergone a period of five or more consecutive years of non-use? NO If yes, describe



Application for Transfer of Water Right 22-11960

William S Graham Revocable Trust



Legend

2004 NAIP Photography

- Points of Diversion
- Additional Dried Acres
- Wetlands
- WR 22_11960
- Township and Range
- Section
- QQ

0 500 1,000 2,000 Feet



PART 3

B. CHANGES IN NATURE OF USE

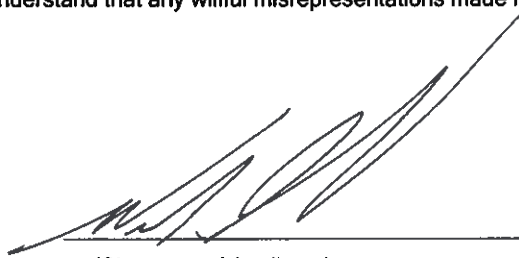
1. New Nature of Use	Amount (cfs/af-ac)	Hours/days/year	Period of use
<u>Diversion to Storage</u>	<u>0.16 cfs</u>	<u>24h/200d/yr</u>	<u>4/15 to 10/31</u>
<u>Wildlife Storage</u>	<u>17.7 ac-ft</u>	<u>24h/365d/yr</u>	<u>1/01 to 12/31</u>

2. Quantity and quality of return flows and location of discharge: No change in water quality is anticipated. Once wetlands are full, return flow is anticipated to be equal to the diverted quantity less the evaporation losses. Discharge into the stream occurs just after exiting the property.

3. Describe effects on other water uses resulting from the proposed change: There are no effects on other water users. No other diversions are downstream of this right on this source. Nor are there any diversions between the existing point of diversion and the new point of diversion.

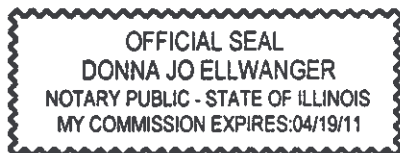
I hereby assert that no one will be injured by such change and that the change does not constitute an enlargement in use of the original right. The information in this application is true to the best of my knowledge.

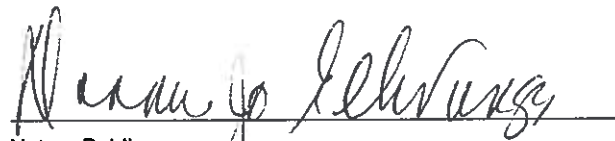
I understand that any willful misrepresentations made in this application may result in voiding its approval.


(Signature of Applicant) (Office or Position of Authority)

William S. G. 2/15/11
(Printed Name) William S. G. 2/15/11 Rev. Test

Subscribed and sworn to before me this 15 day of March, 2008




Notary Public
My Commission expires:

FOR DEPARTMENT USE ONLY

Transfer contains 6 pages and 4 attachments
Received by _____ Date _____ Protest filed by _____
Prelim check by _____ Fee \$100 E033890
Receipted by _____ Date _____
Published in Teton Valley News Copies of protest forwarded by _____
Pub. Dates _____ Hearing held by _____ Date _____
Watermaster recommendation requested on _____ Recommended for ☐ approval ☐ denial
_____ rec'd _____ By _____
Copy of transfer sent to lien holder _____



Mitigation Plan

Application for Transfer of Water Right 22-11960

This transfer will change a portion of the surface water right 22-11960 for fill and maintenance of a wetland area for the purpose of enhancing habitat for wildlife. According to the project plan, the wetland area will partially be outside of the irrigated place of use recommended under the water right; so the transfer will also change the place of use. A point of diversion will also be added downstream of the existing diversion on the same stream.

The wetland area is an extension of existing wetlands previously designated. The existing wetlands in addition to the new wetland area will all be hydrated for a total surface area of 6.4 acres and volume of 6.4 AF with an average depth of 1 foot. Using a historical consumptive use volume of 2.19 AF/ac according to the Driggs, Idaho 102676 climate station for alfalfa hay-less frequent cuttings, 2.9 acres of irrigated ground must be dried up to provide 6.4 AF for storage fill ($6.4 \text{ AF} / 2.19 \text{ AF/ac} = 2.9 \text{ ac}$).

Referencing the same Calculations page, the wetlands will lose 11.3 AF of water to evaporation annually, which equates to 5.2 acres of irrigated ground. To maintain the water levels of the wetland area, water will constantly flow from the new point of diversion through the wetland area and back into the stream just outside the place of use.

The sum of acres required to dry up is 8.1 acres, 2.9 ac for fill and 5.2 ac for evaporation. Alterations to the place of use will account for the 8.1 ac needed (1.3 ac for roads and dikes, 4.3 ac for wetlands, 0.5 ac for spoils pile, and 2 ac in and around the wetlands that will no longer be irrigated). All of these are designated on the map attached or on the Plan View from Intermountain Aquatics, Inc that is also attached. The following table specifies the acres per QQ that are to be dried up:

T4N R45E		Recommended for Irrigation	Roads and Dikes	Hydrated Wetlands	Spoils Pile	Additional Lands	Total Dried Up	Remaining under Irrigation
Sec 4	NWNW	22	0.5		0.5		1	21
Sec 5	NENE	30	0.8	0.7			1.5	28.5
	SENE	18		3.6		2	5.6	12.4
Total		70	1.3	4.3	0.5	2	8.1	61.9

Summary of Transfer Requirements						
William S Graham Revocable Trust						
Original Water Right to be Transferred 22-11960		Diversion Rate (cfs)	Place of Use (acres)	cfs per acre	AF per acre*	
		1.4	70	0.02	2.19	
Amount of Water Needed For Evaporation		Pond Surface Area (acres)	Acres Equivalent to Evaporative Loss	cfs required	Total Pond Loss (AF)**	
			Ac=Total Pond Loss / AF per ac			
		6.4	5.2	0.10	11.3	
Amount of Water Needed for Pond Fill	Pond Depth	Pond Volume (AF)	Acres Equivalent to Pond Fill	cfs required	AF required	
			Ac= AF per ac / Pond Volume			
	0.94	6.4	2.9	0.06	6.4	
Total Water Needed for Transfer						
		cfs	0.16			
		AF	17.7			
		acres	8.1			

*Values calculated using the mean irrigation requirement of alfalfa hay taken from Allen, Richard G. and Clarence W. Robison, 2006 (Revised 2007). Evapotranspiration and Consumptive Irrigation Water Requirements for Idaho, Research Technical Completion Report, Kimberly Research and Extension Center, University of Idaho, Moscow, ID.

**Value calculated using precipitation and evaporation values from Driggs, Idaho 102676. See attached Pond Calculation spreadsheet.



**Pond Consumptive Use Calculations
Climate Station: Driggs, Idaho 102676
William S Graham Revocable Trust**

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Annual FWW Evaporation (inches)*	35	35	35	35	35	35	35	35	35	35	35	35	35
Monthly Distribution (%)	1	2	4	7	12	15	19	16	11	6	4	3	100
Monthly FWS Evaporation (in/mo)	0.35	0.7	1.4	2.45	4.2	5.25	6.65	5.6	3.85	2.1	1.4	1.05	35
Avg. Total Precipitation (in/mo)**	1.34	1.11	1.1	1.25	1.83	1.83	1.04	1.17	1.25	1.22	1.07	1.38	15.58
Pond Loss (Evap. - Precip., in)	0	0	0.3	1.2	2.37	3.42	5.61	4.43	2.6	0.88	0.33	0	21.14
Pond Surface Area (acres)	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
Total Pond Loss (ac-in)	0.0	0.0	1.9	7.7	15.2	21.9	35.9	28.4	16.6	5.6	2.1	0.0	135.3
Total Pond Loss (ac-ft)	0.0	0.0	0.2	0.6	1.3	1.8	3.0	2.4	1.4	0.5	0.2	0.0	11.3

Note: for months where precipitation exceeds evaporation, the resultant pond loss is set to zero

Irrigation Consumption		Crop
Mean Irrig. Requirement (in/seas.)***	26.3	Alfalfa-less frequent cuttings
Mean Irrig. Requirement (ft/seas.)***	2.19	
Acres to dry up for pond use	5.15	

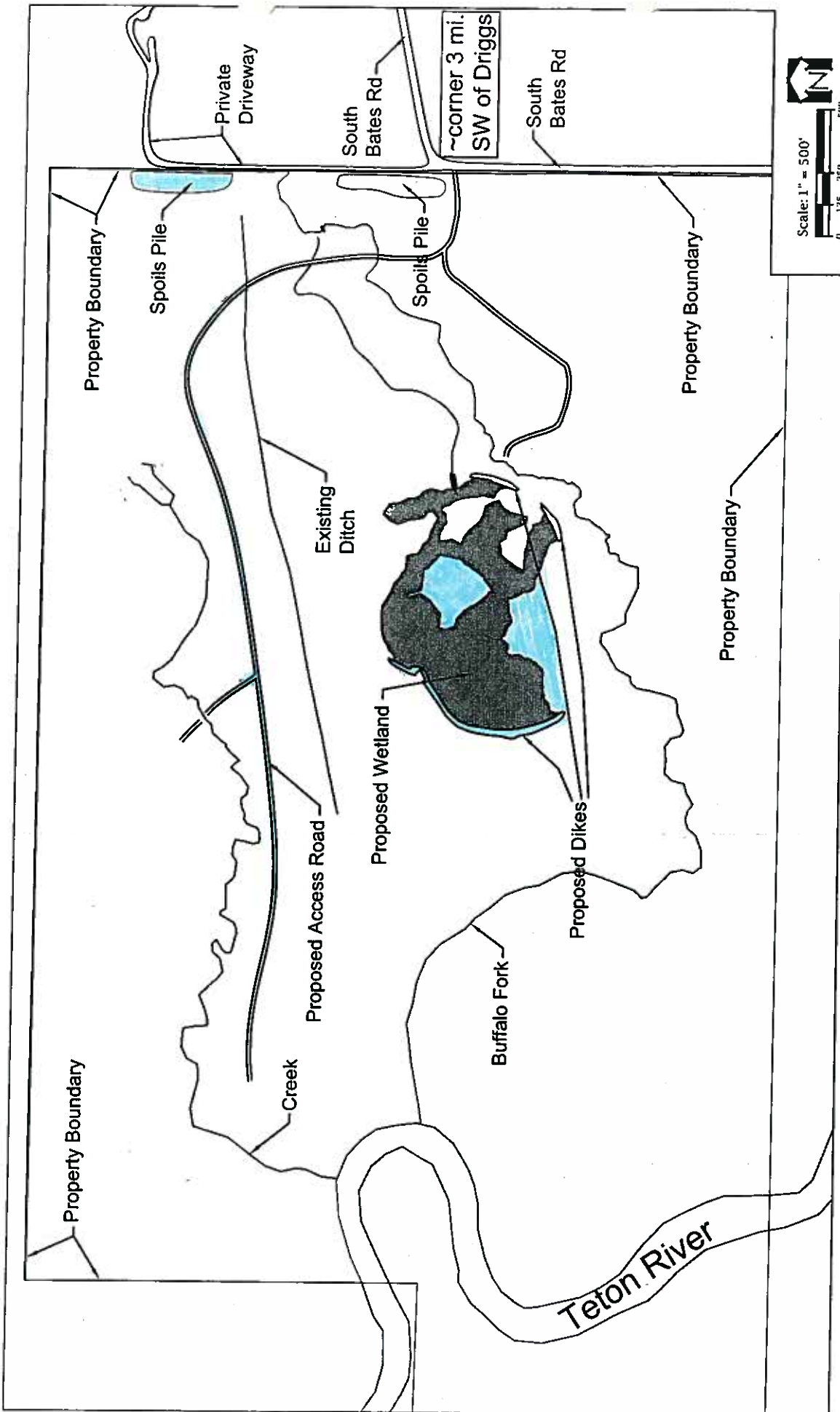
*Molnau, Myron, Kpordze, Kojo C.S., and Craine, Katherine L., 1992. Monthly shallow pond evaporation in Idaho. ASAE paper PNW 92-111.

**Data obtained from the Western Regional Climate Center, Monthly Climate Summary, Period of Record 9/1/1905 to 5/31/1974. See attached.

***Precipitation Deficit values used synonymously with mean irrigation requirement. Values taken from Allen, Richard G. and Clarence W. Robison, 2006 (Revised 2007).

Evapotranspiration and Consumptive Irrigation Water Requirements for Idaho, Research Technical Completion Report, Kimberly Research and Extension Center, University of Idaho, Used 667 mm from the Driggs Station





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Graham Property - Overview of Project

Plan View

Figure 2

*Additional areas to be dried up
(Roads, Dikes, Spoils Pile)*

January 18, 2008