State of Idaho
Department of Water Resources

Water Right License

Water Right No. 63-34686

Priority: March 01, 2019

Maximum Diversion Rate: 0.10 CFS
Maximum Diversion Volume: 26.8 AF

It is hereby certified that:

KELLY SIMPER
4597 W DEER FLAT RD
KUNA ID 83634-1547

has complied with the terms and conditions of the permit, issued pursuant to Application for Permit dated March 01, 2019, and has submitted Proof of Beneficial Use on August 09, 2022. An examination confirms water is diverted from:

Source : WASTE WATER **Tributary:** WEST FORK GOLDEN GULCH DRAIN

Beneficial Use	Period of Use	Rate of Diversion	Annual Volume
IRRIGATION	03/01 to 11/15	0.10 CFS	21.6 AF
IRRIGATION STORAGE	01/01 to 12/31		5.2 AF
IRRIGATION FROM STORAGE	03/01 to 11/15		4.0 AF

Location of Point(s) of Diversion
WASTE WATER NE¼ NW¼, Sec. 20, Twp 02N, Rge 01W, B.M. CANYON County

Place of Use: IRRIGATION

Twp	Rng	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
02N	01W	20					4.8												4.8

Total Acres: 4.8

Place of Use: IRRIGATION STORAGE

Twp	Rng	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
02N	01W	20					X												

Place of Use: IRRIGATION FROM STORAGE

Twp	Rng	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
02N	01W	20					4.8												4.8

Total Acres: 4.8

Conditions of Approval

1. Right 63-34686 authorizes the storage of an annual total of 5.2 acre-feet, comprised of 1.0 acre-feet to be used for the initial filling of the pond, 1.2 acre-feet for the replacement of losses due to seepage and evaporation, and up to 3.0 acre-feet for additional refills for irrigation from storage use.

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2. The pond established by the storage of water under this right shall not exceed a total capacity of 1.0 acre-feet or a total surface area of 0.3 acre(s).
3. This right when combined with all other rights shall provide no more than 0.03 cfs per acre nor more than 4.5 afa per acre at the field headgate for irrigation of the place of use.
4. This right when combined with all other rights shall provide no more than 5.0 afa per acre for irrigation storage and irrigation from storage for the place of use.
5. The waste water diverted under this right is subject to the right of the original appropriator, in good faith and in compliance with state laws governing changes in use and/or expansion of water rights, to cease wasting water, to change the place of use or manner of wasting it, or to recapture it.
6. Use of water under this right may be regulated by a watermaster with responsibility for the distribution of water among appropriators within a water district. At the time of this approval, this water right is within State Water District No. 63.
7. A lockable device subject to the approval of the Department shall be maintained on the diverting works in a manner that will provide the watermaster suitable control of the diversion.
8. When ordered by the Director, the right holder shall provide mitigation acceptable to the Director to offset depletion of lower Snake River flows needed for migrating anadromous fish. The amount of water required for mitigation, which is to be released into the Snake River or a tributary for this purpose, will be determined by the Director based upon the reduction in flow caused by the use of water pursuant to this right. Any order of the Director issued in accordance with this paragraph shall be in conformance with applicable rules allowing the right holder due process as the need for mitigation and the amount of mitigation are determined.

This license is issued pursuant to the provisions of Idaho Code § 42-219. The water right confirmed by this license is subject to all prior water rights and shall be used in accordance with Idaho law and applicable rules of the Department of Water Resources.

Signed this 17th day of April, 2023.

COREY SKINNER
Southern Regional Manager

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Attachment to Water Right

63-34686

This map depicts the IRRIGATION 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.



0 0.035 0.07 0.14 Miles

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

N

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Attachment to Water Right

63-34686

This map depicts the IRRIGATION & IRRIGATION FROM 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.



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STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 63-34686
Exam Date: 03/31/2023

1. Current Owner:
KELLY SIMPER 4597 W DEER FLAT RD KUNA ID 83634-1547

2. Accompanied by: Mr. Simper gave permission to visit property while he was out of town
Phone No:
Address:
Relationship to permit Holder:

3. **SOURCE:** WASTE WATER

Tributary WEST FORK GOLDEN GULCH DRAIN

Method of Determination: On-site inspection

B. OVERLAP REVIEW

1. Other water rights with the same place of use: YES Overlap

Water Right No.	Source	Purpose of Use	Basis
No privately held water rights			

Comments: Place of Use is within the Boise Kuna Irrigation District service area and property owner has canal shares from the irrigation district.

2. Other water rights with the same point-of-diversion: NO Overlap

Water Right No.	Source	Purpose of Use	Basis
N/A			

Comments:

C. DIVERSION AND DELIVERY SYSTEM

1. **LOCATION OF POINT(S) OF DIVERSION:**
WASTE WATER NE¼ NW¼, Sec. 20, Twp 02N, Rge 01W, B.M. CANYON County

Method of Determination: On-site inspection

PLACE OF USE: IRRIGATION

Twp	Rng	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
02N	01W	20					4.8												4.8

Total Acres: 4.8

PLACE OF USE: IRRIGATION STORAGE

Twp	Rng	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
02N	01W	20					X												

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PLACE OF USE: IRRIGATION FROM STORAGE

Twp	Rng	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
02N	01W	20					4.8												4.8

Total Acres: 4.8

Method of Determination: On-site inspection and aerial imagery

3.

Delivery System Diagram Attached (required). Indicate all major components and distances between components.
X 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
X 1:24,000 or greater.

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

X Photo of Diversion and System Attached

4.

POD ID	Motor/Pump Make	Hp	Serial No.	Catalog	Part No.
931057	Leeson	3	01121J2	1110031.00	U6K34DC35A

D. FLOW MEASUREMENTS

1.

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

2. Measurements: No measurement required per IDAPA 37.03.02 Beneficial Use Examination Rules as the flow rate for the total diversion (0.1 CFS) falls below the 0.24 cfs or greater flow rate requiring measurement.

E. FLOW CALCULATIONS

_____ Additional Computation Sheets Attached

Measured Method:

F. VOLUME CALCULATIONS

1. Volume Calculations for irrigation:

$V_{I.R.}$ = (Acres Irrigated) x (Irrigation Requirement) = 4.8 acres irrigated x 4.5 irr. requirement = **21.6 afa**

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2. Volume Calculations for Other Uses:

Irrigation Storage: 0.3 acre surface area x 3.3' average depth = 0.99 af , rounded to 1.0 af

Pond is relatively shallow at upstream end at 2.0' and gradually deepens to 4.6' at downstream end with an average depth of 3.3 feet.

Per Mr. Simper, the pond has an initial first fill and will empty and fill up to an additional 3 times during the irrigation season and is emptied at the end of the irrigation season: 4 fills = 4.0 af

Evaporative loss and seepage: calculated using precipitation deficit for open water – small stock ponds utilizing data for the Kuna weather station from the U of I ETIdaho website (see attached) and then using that data in the Department's pond loss calculation spreadsheet and the soils layer in ArcMap (see attached).

Evaporative loss: 0.9 afa

Seepage: 0.3 afa

Total volume required for irrigation storage: **5.2 afa**

Irrigation from storage: this is the amount of water that is diverted from storage for irrigation. That would also mean that it is the number of times the pond is emptied and filled during the irrigation season. Which, according to Mr. Simper, is up to four times, making it **4.0 afa**.

The majority of the irrigation volume is the result of pumping from the water that is flowing through the system.

Total Volume: 21.6 af irrigation requirement + 5.2 af irrigation storage = **26.8 af**

G. NARRATIVE/REMARKS/COMMENTS

On 3/31/2023, I went to Mr. Simper's place to conduct a field exam. Mr. Simper was out of town, but he had given me permission to come by and do the exam. I found an empty waste water irrigation pond that was approximately 415' long and approximately 40' wide at the widest spot. The pond was around 2' deep on the upstream end of the pond (east end) and gradually deepened to 4.6' at the downstream end. Later back at the office, using ArcMap, and an average depth of 3.3', I calculated the surface area of the pond at 0.3 acres with a storage capacity of approximately 1.0 acre foot.

At the pond, there were concrete structures with 24" metal contracted weir blades on either end of the pond. Water staining on the blades indicated a high water mark of 4" inches above the blade on the upstream end and 3" above the blade on the downstream end. This indicates that at times, there is as much as 1.28 cfs flowing in to the pond and up to 0.84 cfs flowing out of the pond. Talking with Mr. Simper over the phone after the exam, he indicated that the flow rate was highly variable, but tended to increase over the duration of the irrigation season. He told me that it could take up to 48 hours to fill the pond at the beginning of the irrigation season (approximately 0.25 cfs) or 24 hours to fill the pond after the first fill (approximately 0.5 cfs). He said he typically would need to fill the pond up to three times after irrigating early in the season and that as the flow rate increased through the irrigation season, he would be pumping from the water flowing through the pond and not the stored water. He told me that after a 12 hour irrigation set later in the season, the pond level would drop only a few inches. He has a 3 Hp pump with quick couplers that he uses to connect and send water to fixed irrigation lines on the southwest and southeast part of the farm and/or to moveable lines that he uses on the rest of the 4.8 acres he irrigates with the waste water. He also indicated that he pumps the pond dry at the end of the irrigation season.

After conducting the field exam and talking with Mr. Simper, it was clear to me that he developed the system as it was permitted in regard to irrigated acreage and the storage capacity of the waste water irrigation pond.
The permit gave him 20 acre feet for the first fill and 19 subsequent fills. After developing the system though, there was enough flow to allow for a first fill and only three more fills after that. I have decreased the irrigation storage and irrigation

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storage from a volume of 20 acre feet to 4.0 acre feet to match how the system operates and is utilized.

Recommend licensing a diversion rate of 0.1 cfs; 21.6 acre feet for irrigation; 5.2 acre feet for irrigation storage; 4.0 for irrigation from storage and a total diversion of 0.1 cfs and 26.8 af.

I have updated condition 259 to reflect the recommended volume for irrigation storage (was 20 acre feet with a first fill and 19 additional refills, will now be 5.2 acre feet with a first fill, 3 additional refills and 1.2 acre feet for evaporation and seepage losses) and condition 220 to reflect the actual surface area of the pond (was 0.4 acres on permit, will be 0.3 acres on water right).

Have conditions of permit approval been met? _X_ Yes ____ No

H. RECOMMENDATIONS

1. Recommended Amounts

Beneficial Use	Period of Use	Rate of Diversion	Annual Volume
IRRIGATION	03/01 to 11/15	0.10 CFS	21.6 AF
IRRIGATION STORAGE	01/01 to 12/31		5.2 AF
IRRIGATION FROM STORAGE	03/01 to 11/15		4.0 AF
	Totals:	0.10 CFS	26.8 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 Bill Mills - Bill Mills Date 4-13-2023

Reviewer Ray Sumner Date 4/17/2023

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Figure 1: The Waste Water Irrigation Storage Pond



Figure 2: The 3 Hp pump, power panel, part of the irrigation distribution system and permanent sprinkler sets

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Figure 3: Irrigated pasture and livestock on west end of property



Figure 4: Grass pasture and fixed irrigation lines on southeast end of property

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Figure 5: 24" contracted weir at inlet to pond



Figure 6: 24" contracted weir at downstream end of pond

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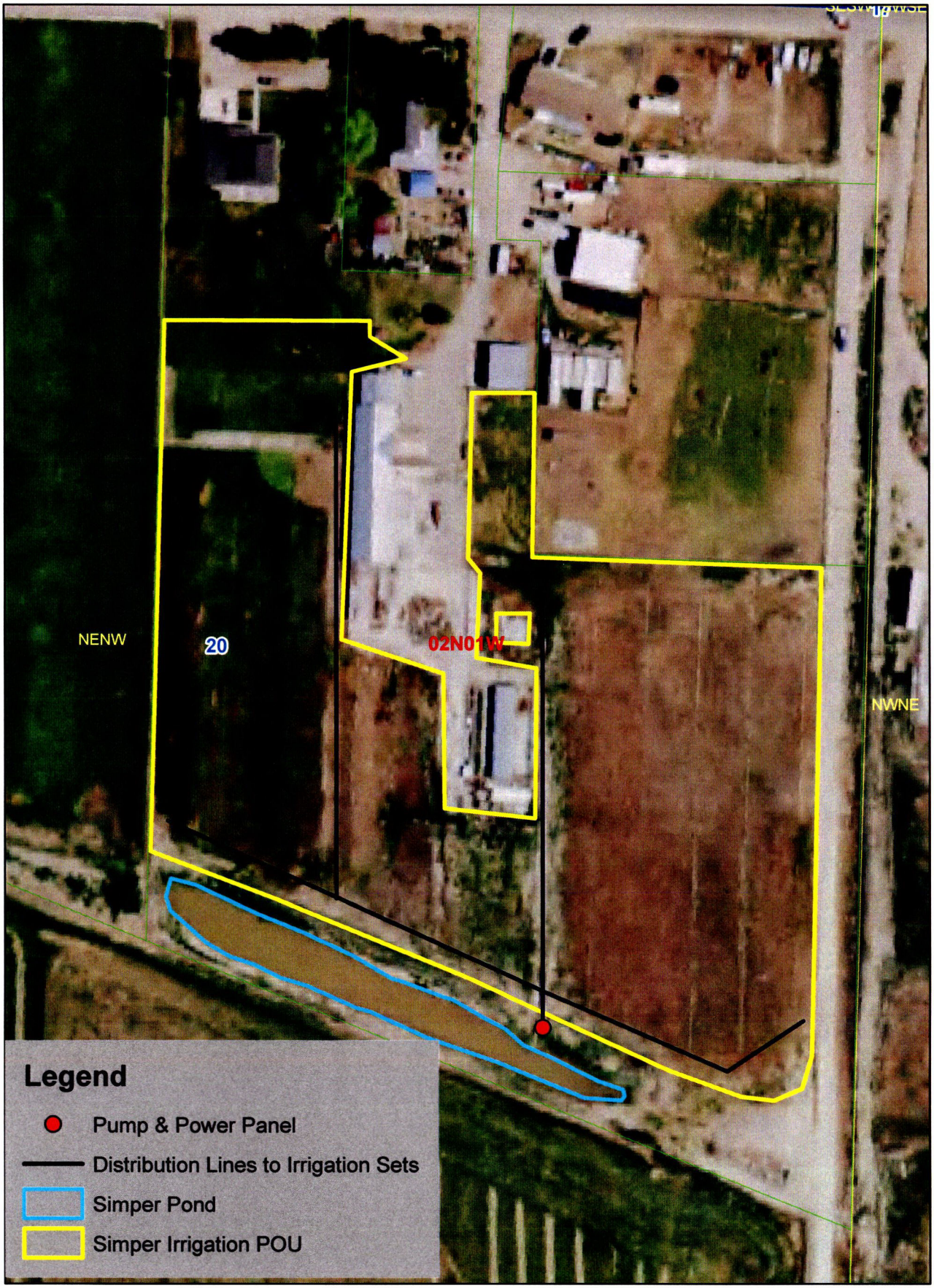


Figure 7: Looking east (upstream) across storage pond

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System Diagram



Field Exam 63-34686

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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	63-34686
REVIEWER	Joe Agent
DATE	4/12/2023

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: Kuna (NWS -- USC00105038)

Month	mm/day[1]	*Days per month*	mm/Month
Jan	-0.41	31	0.00
Feb	0.55	28	15.40
March	1.83	31	56.73
April	3.18	30	95.40
May	4.04	31	125.24
June	4.97	30	149.10
July	5.54	31	171.74
August	4.58	31	141.98
September	3.25	30	97.50
October	2.19	31	67.89
November	0.14	30	4.20
December	-0.21	31	0.00

Total mm/year =	925.18

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.

[(mm/yr) ÷ (convert to feet)] X (Surface area of pond, in acres) = Evaporation Loss in Acre Feet

(925.18 ÷ 304.8) X 0.30 = 0.9 AFA

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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	63-34686
REVIEWER	Joe Agent
DATE	4/12/2023

User Input
Calculated value
Formula Explanations

INPUTS

Pond Surface Area (AC.)	0.3	AC.
Pond Surface Area (SQ. FT.)	13068	SQ. FT.
I used the following method to obtain my Soil Classification information:	NRCS Web Soil Survey	
My Soil Classification is	CL	
Suggested Seepage Rate (FT./DAY)	0.0030	FT./DAY

Formula: (Surface Area X Seepage Rate) X 7.48 = Gallons Per Day Loss

Convert to GPD	293	GPD
Total Seepage Loss (AFA)	0.3	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 the NRCS Web Soil Survey (Tab #1) , an ArcMap Soil Classification Map (Tab #1.1), or published NRCS Soil Survey (Tab #1.2) . Use "0" if the pond fill relies on the water table.

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Flow Rate into Pond (CFS)	**0.84**	The "Flow Rate into Pond" depicts the actual flow, either measured or estimated, into the pond. For offstream facilities, this will be equivalent to "diversion to storage" rate.
Highest Daily Evaporation Rate From Evaporation Tab. (mm/Day)	**5.54**	This number is carried over from the "Evaporation Loss" sheet. It is the highest recorded number in the "Precipitation Deficit Table".
Required Daily Maintenance Volume (AF/Day)	**0.01**	"Required Daily Maintenance Volume" is the maximum volume of water needed on any given day during the year to maintain pond volume. It is calculated by adding the highest daily evaporation loss to the average daily seepage loss in acre feet. The average daily seepage loss is calculated by dividing the "Estimated Seepage Loss" by 365 days. This is acceptable, since the seepage rate shouldn't vary throughout the season unless the pond completely freezes over during the winter months. The highest daily evaporation loss is calculated by dividing the Highest Daily Evaporation Rate by the 304.8 conversion factor and multiplying this number by the pond surface area to attain a combined daily acre feet requirement.
Minimum Maintenance Flow (CFS)	**0.00**	The "Minimum Maintenance Flow" is the minimum amount of flow required to maintain the level of the pond. This number is determined by dividing the "Maximum Required Daily Maintenance Volume" by 1.9835. This flow can be used to determine if the flow rate into the pond is adequate to maintain the pond level.
Days Required to Fill the Pond	**1**	The "Days Required to Fill the Pond" is calculated by dividing the "Pond Capacity" by the "Flow Rate" minus "Minimum Maintenance Flow" multiplied by 1.9835. This section will assist you in determining if the flow rate being diverted to the pond is adequate to fill the pond while maintaining the pond level. The length of time to fill the pond will help determine if the flow rate is adequate for the size of pond being proposed. If this number is *approximately* 6 months (180 days) or more, the reviewer should have a discussion with the applicant to make sure he/she understands that it will take a significant length of time to fill the pond.
Days Required to Fill the Pond at 13,000 Gallons per Day	**31**	Some water users may want to fill a pond under the 13,000 gallons per day domestic exemption. The "Days Required to Fill the Pond at 13,000 Gallons per Day" is calculated by converting the "Pond Capacity" and the "Required Daily Maintenance Volume" to gallons. The "Pond Capacity" is then divided by 13,000 gallons minus the "Required Daily Maintenance Volume" in gallons to determine the number of days to fill pond. If this number is *approximately* 6 months (180 days) or more, the reviewer should have a discussion with the applicant to make sure he/she understands that it will take a significant length of time to fill the pond. Negative values indicate that the supply of 13,000 gallons per day is not enough volume to overcome the required daily maintenance volume; the pond will never fill.

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Total Storage Calculations

FILE NUMBER	63-34686
REVIEWER	Joe Agent
DATE	4/12/2023

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.)	0.3	"Surface Area" is automatically carried over from the "Seepage Loss" sheet.
Average Pond Depth (FT.)	3.5	"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)	1.05	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)	3	The "Multiple Fill Volume Above Initial Fill" is the acre-feet of water required to meet a *from storage* component if the *from storage* 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)	0.3	The "Estimated Seepage Loss" is automatically carried over from the "Seepage Loss" sheet.
Estimated Evaporation Loss (AF)	0.9	The "Estimated Evaporation Loss" is automatically carried over from the "Evaporation Loss" sheet.
Total Volume Required (AF)	5.3	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.

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Flow Rate into Pond (CFS)	**0.84**	The "Flow Rate into Pond" depicts the actual flow, either measured or estimated, into the pond. For offstream facilities, this will be equivalent to "diversion to storage" rate.
Highest Daily Evaporation Rate From Evaporation Tab. (mm/Day)	**5.54**	This number is carried over from the "Evaporation Loss" sheet. It is the highest recorded number in the "Precipitation Deficit Table".
Required Daily Maintenance Volume (AF/Day)	**0.01**	"Required Daily Maintenance Volume" is the maximum volume of water needed on any given day during the year to maintain pond volume. It is calculated by adding the highest daily evaporation loss to the average daily seepage loss in acre feet. The average daily seepage loss is calculated by dividing the "Estimated Seepage Loss" by 365 days. This is acceptable, since the seepage rate shouldn't vary throughout the season unless the pond completely freezes over during the winter months. The highest daily evaporation loss is calculated by dividing the Highest Daily Evaporation Rate by the 304.8 conversion factor and multiplying this number by the pond surface area to attain a combined daily acre feet requirement.
Minimum Maintenance Flow (CFS)	**0.00**	The "Minimum Maintenance Flow" is the minimum amount of flow required to maintain the level of the pond. This number is determined by dividing the "Maximum Required Daily Maintenance Volume" by 1.9835. This flow can be used to determine if the flow rate into the pond is adequate to maintain the pond level.
Days Required to Fill the Pond	**1**	The "Days Required to Fill the Pond" is calculated by dividing the "Pond Capacity" by the "Flow Rate" minus "Minimum Maintenance Flow" multiplied by 1.9835. This section will assist you in determining if the flow rate being diverted to the pond is adequate to fill the pond while maintaining the pond level. The length of time to fill the pond will help determine if the flow rate is adequate for the size of pond being proposed. If this number is *approximately* 6 months (180 days) or more, the reviewer should have a discussion with the applicant to make sure he/she understands that it will take a significant length of time to fill the pond.
Days Required to Fill the Pond at 13,000 Gallons per Day	**31**	Some water users may want to fill a pond under the 13,000 gallons per day domestic exemption. The "Days Required to Fill the Pond at 13,000 Gallons per Day" is calculated by converting the "Pond Capacity" and the "Required Daily Maintenance Volume" to gallons. The "Pond Capacity" is then divided by 13,000 gallons minus the "Required Daily Maintenance Volume" in gallons to determine the number of days to fill pond. If this number is *approximately* 6 months (180 days) or more, the reviewer should have a discussion with the applicant to make sure he/she understands that it will take a significant length of time to fill the pond. Negative values indicate that the supply of 13,000 gallons per day is not enough volume to overcome the required daily maintenance volume; the pond will never fill.

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University of Idaho
Kimberly Research and Extension Center

Water Resources Program

ETI$_{daho}$ 2017

Evapotranspiration and Consumptive Irrigation Water Requirements for Idaho

Please send suggestions for improving this site to robison at uidaho dot edu

2023-04-12 07:27

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Kuna (NWS -- USC00105038)

Statistics based on thirty year normal spans 1959 to 1995 years

For a different land cover or crop click on the above link.
You can highlight this table and copy via the clipboard to a Mircosoft Excel or OpenOffice spreadsheet to plot or otherwise work with this data.

Open water - small stock ponds
Precipitation Deficit (Click here for a graph)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Growing Season[a]	Non Growing Season[b]	Annual
Mean[j]	mm/day												mm		
Monthly[c]	-0.41	0.55	1.83	3.18	4.04	4.97	5.54	4.58	3.25	2.19	0.14	-0.21	908	0	908
15-Day Moving Average[d]	-0.45	0.40	1.77	3.20	4.07	5.05	5.57	4.49	3.16	2.15	0.10	-0.27			
7-Day Moving Average[e]	-0.42	0.49	1.81	3.18	4.02	4.97	5.57	4.55	3.20	2.15	0.06	-0.24			
3-Day Moving Average[f]	-0.40	0.55	1.83	3.19	4.03	4.97	5.55	4.58	3.23	2.18	0.10	-0.22			

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Standard Deviation[k]	mm/day												mm		
Monthly[c]	0.91	0.73	0.95	1.03	1.36	0.85	0.62	1.16	0.85	0.99	0.81	1.06	96	0	96
15-Day Moving Average[d]	1.04	1.00	0.97	1.20	1.36	1.18	0.65	1.14	1.19	0.91	0.96	0.91			
7-Day Moving Average[e]	1.31	1.31	1.29	1.56	1.90	1.71	0.89	1.33	1.46	1.31	1.38	1.13			
3-Day Moving Average[f]	1.75	1.61	1.69	2.13	2.45	2.28	1.26	1.62	1.80	1.65	1.88	1.51			
20% Exceedance[l]	mm/day												mm		
Monthly[c]	0.06	1.23	2.40	4.05	4.67	5.74	5.81	5.19	3.97	2.73	0.87	0.43	979	0	979
15-Day Moving Average[d]	0.59	1.58	3.23	4.55	5.96	6.39	6.17	5.53	4.48	3.27	1.48	0.68			
7-Day Moving Average[e]	0.83	2.31	3.61	5.20	6.65	7.09	6.48	5.86	4.83	3.78	1.88	1.02			
3-Day Moving Average[f]	1.14	2.56	4.42	5.96	7.28	7.62	6.88	6.16	5.15	4.22	2.40	1.22			
80% Exceedance[m]	mm/day												mm		
Monthly[c]	-0.94	-0.06	1.29	2.16	3.31	4.07	5.15	3.98	2.71	1.54	-0.53	-0.93	802	0	802
15-Day Moving Average[d]	-2.06	-0.81	0.01	1.40	1.95	3.11	4.33	2.71	1.45	0.71	-1.45	-1.75			
7-Day Moving Average[e]	-4.01	-2.33	-1.28	-0.57	-0.57	0.86	3.38	1.22	-0.51	-0.76	-3.13	-3.10			
3-Day Moving Average[f]	-7.01	-3.90	-3.72	-4.52	-4.58	-3.79	1.29	-2.41	-2.77	-3.18	-5.37	-5.44			
Ave Highest P_{def}	mm/day												--		
15-Day Moving Average[g]	0.35	1.08	2.61	3.97	5.06	5.93	5.98	5.07	3.92	2.85	0.84	0.42			
7-Day Moving Average[h]	0.68	1.73	3.24	4.71	5.92	6.62	6.29	5.63	4.50	3.47	1.43	0.70			
3-Day Moving Average[i]	0.89	2.11	3.86	5.43	6.60	7.19	6.66	5.94	4.91	3.92	1.98	0.98			
Ave Lowest P_{def}	mm/day												--		
15-Day Moving Average[g]	-1.10	-0.12	1.01	2.45	3.06	4.17	5.05	3.90	2.42	1.51	-0.56	-0.73			

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7-Day Moving Average[h]	-2.22	-1.07	0.06	1.32	1.38	2.51	4.28	3.12	1.34	0.53	-1.72	-1.50			
3-Day Moving Average[i]	-4.34	-2.41	-1.58	-0.97	-0.92	0.08	2.86	1.75	-0.29	-0.92	-3.68	-3.20			
Special normal distribution parameters for monthly, seasonal, and annual intervals															
Skew[m]	-0.32	-0.56	-0.14	0.35	-0.47	0.12	-0.26	-0.60	-0.92	0.01	-0.36	-0.20	0.16	0.00	0.16
Kurtosis[o]	1.02	3.78	0.67	2.53	1.20	2.08	1.35	1.48	4.52	0.65	3.49	0.77	2.42	0.00	2.42

[a] Growing Season: This is usually the time from green up or planting in the spring to a killing frost or harvest in the fall. It is not applicable for entries without a growing season and will be blank.

[b] Nongrowing Season: This is usually the time from a killing frost or harvest in the fall to the of green up in the spring. It is not applicable for entries without a growing season.

[c] Mean of the average daily value for month

[d] Mean of the fourteen 15-day period averages contained in the month

[e] Mean of the twenty three 7-day period averages contained in the month

[f] Mean of the twenty seven 3-day period averages contained in the month

[g] Mean of the highest/lowest 15-day period average in month

[h] Mean of the highest/lowest 7-day period average in month

[i] Mean of the highest/lowest 3-day period average in month

[j] This value represents the *mean value* for the parameter for the month over the 'normal' period of record. Generally, the 'normal' period is the last thirty years with data.

[k] This value represents the *standard deviation* for the parameter for the month over the 'normal' period.

[l] This value represents the *value* for the parameter that has a 20% chance of being exceeded that month durning any particular year. Conversely, there is an 80% chance that the parameter value will be less than the *value* shown.

[m] This value represents the *value* for the parameter that has a 80% chance of being exceeded that month durning any particular year. Conversely, there is an 20% chance that the parameter value will be less than the *value* shown.

[n] This value represents the *skewness (asymmetry) of the distribution of the parameter values* for the month (year) over the 'normal' period. A value near zero indicates that the distribution approximates a normal (Gaussian) and symmetrical distribution. A negative skew indicates that the parameter distribution has

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relatively few low values compared to high values. A positive skew indicates that the distribution has relatively few high values compared to the number of low values. A skew value near 1 indicates that the underlying distribution approximates a lognormal distribution.

[o] This value represents the *kurtosis* of the parameter value distribution for the month (year) over the 'normal' period. Kurtosis is a measurement of the height to width ratio of the probability distribution, or the *peakedness (slenderness)*. A normal (Gaussian) distribution has a kurtosis of 3. A high kurtosis distribution has a sharper peak and longer tails, while a low kurtosis distribution has a more rounded peak and shorter tails.

This work and report were prepared by the University of Idaho Research and Extension Center at Kimberly, Idaho under contract with the Idaho Department of Water Resources. Work was supported by funding from IDWR and the Idaho Agricultural Experiment Station and Idaho Engineering Experiment Station. The authors gratefully acknowledge the long-term evapotranspiration data collection and long-standing advice provided by Dr. James L. Wright, USDA-ARS Kimberly (ret.), the more than two decades of high quality agricultural weather data collection by the U.S. Bureau of Reclamation AgriMet system, and the very long-standing, routine data collection by the hundreds of cooperative weather station volunteers across the state who, for more than one-hundred years, have faithfully observed daily air temperature and precipitation.

The citation for the evapotranspiration data used from this site should be: Allen, Richard G. and Clarence W. Robison, 2017. ***Evapotranspiration and Consumptive Irrigation Water Requirements for Idaho: Supplement updating the Time Series through December 2016****, Research Technical Completion Report, Kimberly Research and Extension Center, University of Idaho, Moscow, ID.*

Questions regarding the data should be addressed to Richard G. Allen, or Clarence W. Robison University of Idaho, Kimberly Research and Extension Center, 3793 North 3600 East, Kimberly, ID 83341. Telephone (208)-423-6610

ETIdaho web site powered by Debian, Apache, Firebird DBMS, Python

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IDAHO DEPARTMENT OF
WATER RESOURCES

Southern Region • 650 Addison Ave W, Suite 500 • Twin Falls, ID 83301-5858
Phone: 208-736-3033 • Fax: 208-736-3037 • Email: southerninfo@idwr.idaho.gov • Web: idwr.idaho.gov

Governor Brad Little **Director Gary Spackman**

April 17, 2023

KELLY SIMPER
4597 W DEER FLAT RD
KUNA ID 83634-1547

Correspondence

RE: License No. 63-34686

ISSUANCE OF LICENSE

Dear Water Right Holder(s):

The Department of Water Resources ("Department") has issued the enclosed Water Right License confirming that a water right has been established in accordance with your permit. Please be sure to thoroughly review all the conditions of approval listed on your license. The conditions may include ongoing requirements, such as maintenance of a measuring device or implementation of mitigation, as well as information about how your water use may be administered, such as regulation by a watermaster in a water district.

The license is a PRELIMINARY ORDER issued by the Department pursuant to Rule 730 of the Department's Rules of Procedure (IDAPA 37.01.01.730). It can and will become a final order without further action by the Department unless a party petitions for reconsideration, files exceptions, or requests a hearing as described in the enclosed information sheet.

Also, please note that water right owners are required to report any change of water right ownership and/or mailing address to the Department within 120 days of the change. Water right forms are available from any office of the Department or on the Department's website at idwr.idaho.gov

If you have any questions concerning the enclosed information, please contact me at (208) 736-3033.

Sincerely,

Corey Skinner
Southern Regional Manager

Enclosure(s)

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CERTIFICATE OF SERVICE

I hereby certify that on April 17, 2023, I served a true and correct copy of Water Right License No. 63-34686 by U.S. Mail, postage prepaid, to the following:

KELLY SIMPER (Current Owner)
4597 W DEER FLAT RD
KUNA ID 83634-1547

WATER DISTRICT #63
MIKE MEYERS (Watermaster)
PO BOX 767
STAR ID 83669-4500

Denise Maline

Denise Maline
Administrative Assistant 1

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EXPLANATORY INFORMATION TO ACCOMPANY A PRELIMINARY ORDER

(To be used in connection with actions when a hearing was **not** held)

(Required by Rule of Procedure 730.02)

The accompanying order or approved document is a "**Preliminary Order**" issued by the department pursuant to section 67-5243, Idaho Code. **It can and will become a final order without further action of the Department of Water Resources ("department") unless a party petitions for reconsideration, files an exception and brief, or requests a hearing as further described below:**

PETITION FOR RECONSIDERATION

Any party may file a petition for reconsideration of a preliminary order with the department within fourteen (14) days of the service date of this order. **Note: the petition must be received by the department within this fourteen (14) day period.** The department will act on a petition for reconsideration within twenty-one (21) days of its receipt, or the petition will be considered denied by operation of law. See Section 67-5243(3) Idaho Code.

EXCEPTIONS AND BRIEFS

Within fourteen (14) days after: (a) the service date of a preliminary order, (b) the service date of a denial of a petition for reconsideration from this preliminary order, or (c) the failure within twenty-one (21) days to grant or deny a petition for reconsideration from this preliminary order, any party may in writing support or take exceptions to any part of a preliminary order and may file briefs in support of the party's position on any issue in the proceeding with the Director. Otherwise, this preliminary order will become a final order of the agency.

REQUEST FOR HEARING

Unless a right to a hearing before the Department or the Water Resource Board is otherwise provided by statute, any person aggrieved by any final decision, determination, order or action of the Director of the Department and who has not previously been afforded an opportunity for a hearing on the matter may request a hearing pursuant to section 42-1701A(3), Idaho Code. A written petition contesting the action of the Director and requesting a hearing shall be filed within fifteen (15) days after receipt of the denial or conditional approval.

ORAL ARGUMENT

If the Director grants a petition to review the preliminary order, the Director shall allow all parties an opportunity to file briefs in support of or taking exceptions to the preliminary order and may schedule oral argument in the matter before issuing a final order. If oral arguments are to be heard, the Director will within a reasonable time period notify each party of the place, date and hour for the argument of the case. Unless the Director orders otherwise, all oral arguments will be heard in Boise, Idaho.

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CERTIFICATE OF SERVICE

All exceptions, briefs, requests for oral argument and any other matters filed with the Director in connection with the preliminary order shall be served on all other parties to the proceedings in accordance with IDAPA Rules 37.01.01302 and 37.01.01303 (Rules of Procedure 302 and 303).

FINAL ORDER

The Director will issue a final order within fifty-six (56) days of receipt of the written briefs, oral argument or response to briefs, whichever is later, unless waived by the parties or for good cause shown. The Director may remand the matter for further evidentiary hearings if further factual development of the record is necessary before issuing a final order. The department will serve a copy of the final order on all parties of record.

Section 67-5246(5), Idaho Code, provides as follows:

Unless a different date is stated in a final order, the order is effective fourteen (14) days after its service date if a party has not filed a petition for reconsideration. If a party has filed a petition for reconsideration with the agency head, the final order becomes effective when:

(a) The petition for reconsideration is disposed of; or
(b) The petition is deemed denied because the agency head did not dispose of the petition within twenty-one (21) days.

APPEAL OF FINAL ORDER TO DISTRICT COURT

Pursuant to sections 67-5270 and 67-5272, Idaho Code, if this preliminary order becomes final, any party aggrieved by the final order or orders previously issued in this case may appeal the final order and all previously issued orders in this case to district court by filing a petition in the district court of the county in which:

i. A hearing was held,
ii. The final agency action was taken,
iii. The party seeking review of the order resides, or
iv. The real property or personal property that was the subject of the agency action is located.

The appeal must be filed within twenty-eight (28) days of this preliminary order becoming final. See section 67-5273, Idaho Code. The filing of an appeal to district court does not itself stay the effectiveness or enforcement of the order under appeal.

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