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RECEIVED

AUG 02 2007

Department of Water Resources
Eastern Region

August 1, 2007

Dave Carlson
Idaho Department of Water Resources
900 N. Skyline Dr., Ste. A
Idaho Falls, ID 83402

RE: Applications for Permit of Elliot Creek Ranch, LLC and Elliott Creek, LLC

Dear Mr. Carlson:

In connection with the five applications for permit we recently filed on behalf of Elliott Creek Ranch, LLC and Elliott Creek, LLC, you requested some additional information with respect to the historic consumptive use of water on the wetlands compared to the projected consumptive use after the proposed development of the small pond system. We have obtained affidavits with attachments from both the expert who did the wetlands analysis and delineation and the engineer who prepared the water budget to compare the before and after consumptive use analysis. We are enclosing those affidavits and attachments with this letter. Bill Anderson, the Engineer, has been in California for the last couple of weeks at a hospital where his wife has had some surgery. Consequently, his affidavit was finally signed and acknowledged in California. Please feel free to contact either or both of these individuals directly if you have questions or wish to discuss their work and findings. Please also contact us if we may be of assistance in expediting the processing of the pending applications.

Yours very truly,



Kent W. Foster

Enclosures

c: James Crowley
Bill Anderson

**AFFIDAVIT OF
WILLIAM H. ANDERSON**

STATE OF CALIFORNIA)
County of LOS ANGELES)ss

William H. Anderson, being first duly sworn, on his oath deposes and says:

1. Affiant has personal knowledge of the facts set forth herein and makes this affidavit based upon such personal knowledge.
2. I personally prepared a water budget dated 2-27-2007, and performed the calculations for historic and proposed consumptive use based on an IDWR Study on Potential Evapotranspiration, "*Allen, Richard G. and Clarence W. Robison, 2006. **Evapotranspiration and Consumptive Irrigation Water Requirements for Idaho**, Research Technical Completion Report, Kimberly Research and Extension Center, University of Idaho, Moscow, ID. 145 p.*" Table "**Driggs, ID Evapotranspiration**" is attached listing specific potential evapotranspiration rates for the ground cover specific to the Elliott Creek Property (approximately 388 acres).
3. The historic consumptive use calculations were based on existing ground cover as documented in a wetland study approved by the Walla Walla District, Army Corps of Engineers September 12, 2005 and completed by Mr. Tom Campbell, Biota Research and Consulting, Inc., Jackson, Wyoming.
4. The proposed consumptive use is based on the proposed ground cover, open pond surface area, habitat enhancements, roads, and other property improvements.
5. The historic and proposed ground cover types were calculated based on consumptive use on an annual bases, for each month, and for the growing season. The proposed features did not significantly change the historic consumptive use of water on the property.
6. Consumptive use calculations were performed on July 17, 2007 to determine the effect of small changes in the square footage of vegetative cover types as prepared by Mr. Tom Campbell, Biota Research and Consulting. The attached calculations demonstrate that small changes in vegetative cover types did not significantly change the overall results of the historic and proposed consumptive use.

RECEIVED

AUG 02 2007

Department of Water Resources
Eastern Region

²⁰ ~~18~~^{add}
DATED this 18th day of July, 2007.

William H. Anderson

SUBSCRIBED AND SWORN TO before me this 10th day of July, 2007.

*See attached
guar wording
7/20/07
U.N.*

Notary Public for

Residing at,

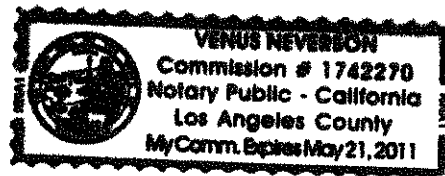
My commission expires:

State Of: CALIFORNIA

County Of: LOS ANGELES

Subscribed and sworn to (or affirmed) before me on this 20th day
of JULY (month), 2007 (year)
by WILLIAM H. ANDERSON, personally known to me or proved to
me on the basis of satisfactory evidence to be the person(s) who appeared
before me.

Venus Neverson
Notary Signature



(Notary Seal)

Description of Attached Document

Title/Type of Document: AFFIDAVIT

Document Date: 7/20/07 Number Of Pages: 2^{VIV} II

Signer(s) Other Than Named Above: N/A

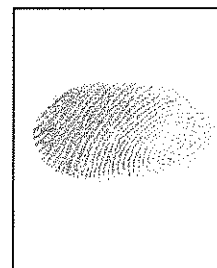
Capacity(ies) Claimed by Signer

Signer's Name: WILLIAM H. ANDERSON

- ☒ Individual
☐ Corporate Officer – Title: _____
☐ Partner
☐ Attorney In Fact
☐ Trustee
☐ Guardian or Conservator
☐ Other: _____

Signer is Representing: N/A

**Right Thumbprint
Of Signer**



January 2007

Driggs, ID
Evapotranspiration
IDWR Study

Potential Evapotranspiration:

(mm/day)	January	February	March	April	May	June	July	August	September	October	November	December
Wetlands - narrow stand	0.56	0.80	0.83	1.24	1.67	2.96	7.57	9.10	3.08	0.99	0.56	0.52
Open Water - shallow systems	0.76	1.17	1.56	2.61	3.63	4.32	4.58	4.25	3.24	2.33	1.20	0.79
Open Water -Stock Ponds/lakes	0.88	1.37	1.82	3.04	4.23	5.04	5.35	4.96	3.78	2.72	1.40	0.93
Grass Pasture - High Management	0.47	0.69	0.82	1.36	3.55	6.20	6.67	6.15	3.74	1.33	0.58	0.45
Grass Pasture - Low Management	0.47	0.68	0.81	1.32	2.95	5.16	5.53	5.12	3.24	1.27	0.58	0.45
Bare Soil - Gravels	0.81	1.05	1.12	1.56	2.05	2.16	1.62	1.62	1.50	1.20	0.79	0.77
Willows - shrub communities	0.55	0.73	0.79	1.19	2.69	5.19	5.96	5.54	3.46	1.07	0.56	0.52
Poplar Trees - Aspen	0.56	0.75	0.84	1.21	2.06	5.81	7.87	7.30	4.31	1.34	0.58	0.52

The potential daily ETc (ETpot) represents the total estimated flux of ET that would occur if there were no moisture stress imposed by soil water shortage in the 'root zone.'
ETpot includes evaporation from the soil surface from both precipitation and any simulated irrigation. ETpot was computed as $ET_{pot} = ET_{bas} + K_e$.

Evapotranspiration - Mean of the average daily value for month

Credits:

1. "Allen, Richard G. and Clarence W. Robison, 2006. *Evapotranspiration and Consumptive Irrigation Water Requirements for Idaho* , Research Technical Completion Report, Kimberly Research and Extension Center, University of Idaho, Moscow, ID. 145 p."



ELLIOTT CREEK - POND 1, PARCEL A

POND 1 (Parcel A) - 3.2 acres:

HISTORIC ET

	Sq. Ft.	% Tot. Area	January	February	March	April	May	June	July	August	September	October	November	December	Growing Season	Net Annual
Open Wetlands - narrow stand	85906.00	61.6%	4892.87	6313.13	7261.64	10494.30	14590.65	26027.04	66138.47	79505.95	26041.65	8648.55	4734.85	4543.20	153.00	365
Open Wetlands - shallow systems	51687.00	37.1%	3895.12	5555.18	8202.51	13277.50	19081.95	21876.54	24675.85	22341.12	16492.41	12248.19	6104.80	4152.82	103957.87	258173.11
Open Water - Stock Ponds/Lakes	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Open Water - Shrub Communities	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grass Pasture - High Management	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grass Pasture - Low Management	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bare Soil - Gravel	1799.00	1.3%	100.63	120.64	144.54	210.70	492.17	918.95	1090.47	1013.62	612.63	196.77	99.15	95.14	4127.85	5094.43
Willows - shrub communities	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Poplar Trees - Aspen	0.00	0.0%	8988.42	11988.95	15986.69	23972.50	34164.77	47922.54	91304.78	102860.70	43136.70	21093.51	10938.60	8791.16	319389.49	420759.32
Total Historic ET (HET)	138392.00	100.0%														

PROPOSED ET

Open Wetlands - narrow stand	41818.00	30.0%	2381.69	3073.15	3530.01	5103.63	7102.55	12182.86	32195.41	38702.54	12676.76	4210.50	2304.87	2211.57	102860.12	125675.54
Open Water - shallow systems	27878.00	20.0%	2154.81	2995.25	4423.04	7161.33	10292.08	11853.31	12885.60	12049.95	8889.98	6006.21	3252.53	2239.87	56070.92	84946.07
Open Water - Stock Ponds/Lakes	41818.00	30.0%	3742.66	5262.78	7740.51	12512.13	17990.30	20743.79	22753.69	21095.01	15557.84	11550.23	5762.16	3955.31	98140.63	148984.41
Grass Pasture - High Management	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grass Pasture - Low Management	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bare Soil - Gravel	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Willows - shrub communities	27878.00	20.0%	1555.41	1869.46	2239.87	3265.15	7626.91	14240.44	16888.29	15707.47	9493.62	3033.75	1536.54	1474.35	63966.72	79945.25
Poplar Trees - Aspen	0.00	0.0%	9638.58	13201.84	17933.43	28042.28	43011.94	59020.40	84832.97	87554.96	46618.21	25418.89	12896.16	9881.11	321038.39	439250.27
Total Proposed ET (PET)	138392.00	100.0%														

HET minus PET (CF/month)

Net change - In CFS

Roads and Driveways - 0.61 Acres (12' travel/16' total) - Parcel A:

	Sq. Ft.	% Tot. Area	January	February	March	April	May	June	July	August	September	October	November	December	Growing Season	Net Annual
Open Wetlands - narrow stand	3700.22	14.0%	211.87	273.38	314.02	454.01	631.82	1083.76	2854.02	3442.88	1127.69	374.55	205.03	136.74	153.90	365
Open Water - shallow systems	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Open Water - Stock Ponds/Lakes	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Open Water - Shrub Communities	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grass Pasture - High Management	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grass Pasture - Low Management	22891.58	86.0%	1092.32	1427.43	1892.50	2968.82	6956.03	11605.40	12852.18	11889.29	7287.11	2951.58	1304.48	1045.84	50500.00	63172.98
Bare Soil - Gravel	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Willows - shrub communities	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Poplar Trees - Aspen	0.00	0.0%	1304.19	1700.81	2196.53	3422.83	7487.86	12689.16	15716.18	15342.16	8414.81	3326.14	1589.52	1242.57	59650.17	74352.75
Total Historic ET (HET)	26571.60	100.0%														

PROPOSED ET

Open Wetlands - narrow stand	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Open Water - shallow systems	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Open Water - Stock Ponds/Lakes	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Open Water - Shrub Communities	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grass Pasture - High Management	11891.50	44.0%	558.86	730.32	985.14	1518.53	3507.74	5837.66	6575.52	6088.00	3728.29	1510.11	657.41	535.08	25837.20	32321.04
Grass Pasture - Low Management	14890.10	56.0%	1225.82	1435.25	1894.96	2284.68	3102.38	3163.40	2451.63	2451.63	2196.80	1816.03	1155.98	1165.28	13565.85	24144.64
Bare Soil - Gravel (roads)	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Willows - shrub communities	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Poplar Trees - Aspen	0.00	0.0%	1784.68	2165.56	2858.10	3803.61	6610.11	9101.04	9027.15	8539.64	5925.09	3326.14	1854.39	1700.36	39203.04	56465.48
Total Proposed ET (PET)	28571.60	100.0%														

HET minus PET (CF/month)

Net change - In CFS

Summary: (Positive numbers = less consumptive use, negative numbers = more consumptive use)

HET minus PET (CF/month)	-1330.64
HET minus PET Average daily CFS	-4.0015
HET minus PET Average daily GPM	-4.2210

Summary without roads:

HET minus PET (CF/month)	-450.15
HET minus PET Average daily CFS	-0.0003
HET minus PET Average daily GPM	-0.1425

Conclusion: The water features do not significantly change the consumptive use of water on the property. This is based on calculating the historic consumptive use (HET) and subtracting the proposed consumptive use (PET). With proposed roads, the consumptive use decreased 0.0014 cfs and with out roads the consumptive use increased 0.0001 cfs during the growing season.

Consumptive Use With Small Changes in Vegetative Cover

ANDERSON
ENGINEERING

ELLIOTT CREEK - POND 1, PARCEL A

Parcel	Pond Number	Driveway (ft.)		Road (ft.)		Wetland		Total Access (ft.)		Total Access (Acres, 16' wide)	
		UPLAND	WETLAND	UPLAND	WETLAND	UPLAND	WETLAND	UPLAND	WETLAND	UPLAND	WETLAND
A		740.00	280.00	550.00	100.00	1290.00	380.00	0.47	0.14		
		Point of Diversion (2)	Place of Use	Average Pond Surface	Average Pond Depth	Pond Capacity	One Time Fill Volume above Ground Water				
		T4N R46E	T4N R46E	acres	ft (1)	acre-feet (1)	ft	acre-feet	irrigated acreage		
1		NENW, NWNW, Sec. 22	NENW, NWNW, Sec. 22	3.20	4.50	14.40	2	6.4	2.13		

Consumptive Use With Small Changes in Vegetative Cover



ELLIOTT CREEK - POND 3, PARCEL A

POND 3 (Parcel A) - 2.4 acres + 0.6 ac. edges:

	Sq. Ft.	% Tot. Area	January	February	March	April	May	June	July	August	September	October	November	December	Growing Season	Net Annual
HISTORIC ET																
Wetlands - narrow stand	95218.00	73.9%	5422.91	6997.31	8037.53	11620.53	16171.90	27739.33	73306.18	88122.35	28863.90	9586.94	5247.98	5035.56	153.00	365
Open Water - shallow systems	2200.00	1.7%	170.05	236.45	349.05	565.14	812.20	935.41	1024.76	950.93	701.56	521.33	259.84	176.76	4424.85	286152.43
Open Water - Stock Ponds/Lakes	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6703.46
Grass Pasture - High Management	16983.00	13.2%	811.80	1076.45	1416.33	2273.25	6131.65	10363.36	11520.60	10622.44	8521.44	2237.21	969.48	777.25	44899.49	54511.53
Grass Pasture - Low Management	14400.00	11.2%	688.33	899.50	1186.27	1870.81	4320.35	7313.18	8098.83	7496.38	4592.00	1859.95	822.02	659.04	31822.75	39808.67
Bare Soil - Gravels	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Willows - shrub communities	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Poplar Trees - Aspen	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Historic ET (HET)	128799.00	100.0%	7093.09	9209.71	10989.17	16329.74	27436.11	46351.28	93950.37	107194.09	40408.90	14265.43	7299.32	6648.61	315340.75	387175.81

PROPOSED ET

Wetlands - narrow stand	31363.00	24.4%	1786.24	2304.83	2647.47	3827.66	5326.83	9137.00	24146.17	28026.44	9507.42	3157.82	1728.62	1658.65	77143.86	94255.15
Open Water - shallow systems	29247.00	22.7%	2260.53	3143.39	4640.24	7513.05	10797.49	12335.39	13623.28	12641.69	9326.54	6930.62	3454.27	2349.87	58824.36	89116.45
Open Water - Stock Ponds/Lakes	31363.00	24.4%	2806.95	3947.02	5805.29	9383.95	13492.51	15557.59	17064.99	15821.00	11669.20	8676.03	4321.55	2966.44	73604.30	115111.53
Grass Pasture - High Management	15918.00	12.4%	760.89	1008.95	1327.51	2130.70	5747.14	9713.47	10798.14	9956.31	5859.42	2153.15	908.68	728.51	42074.48	51092.87
Grass Pasture - Low Management	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bare Soil - Gravels	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Willows - shrub communities	10454.00	8.1%	584.76	701.03	839.93	1224.40	2860.02	5340.04	6336.71	5890.16	3560.02	1137.63	576.19	552.87	23986.95	29603.76
Poplar Trees - Aspen	10454.00	8.1%	595.40	720.24	893.08	1244.98	2190.20	5977.96	8367.43	7761.40	4434.60	1424.70	596.77	552.87	28731.59	34759.62
Total Proposed ET (PET)	128799.00	100.0%	8794.87	11825.45	16153.53	26324.73	40414.19	58161.45	80336.72	81097.00	44356.19	23479.95	11586.09	8809.20	304385.55	410339.38
HET minus PET (CF/month)			-1701.79	-2615.74	-5164.36	-8995.00	-12578.08	-11810.17	13613.65	26097.10	-3947.30	-9214.53	-4286.77	-2160.59	10975.20	-23163.57
Net change - In CFS															0.0008	-0.0007

Summary: (Positive numbers = less consumptive use, negative numbers = more consumptive use)

HET minus PET (CF/month)

HET minus PET Average daily CFS

HET minus PET Average daily GPM

Conclusion: The water features do not significantly change the consumptive use of water on the property. This is based on calculating the historic consumptive use (HET) and subtracting the proposed consumptive use (PET). The consumptive use decreased 0.0008 cfs during the growing season. There are no roads associated with pond 3.

Pond Number	Point of Diversion (2)	Place of Use	Average Pond Surface	Average Pond Depth	Pond Capacity	One Time Fill Volume above Ground Water
	T4N R45E	T4N R45E	ft (1)	ft	acre-feet (1)	acre-feet irrigated acreage
3	NWNE, Sec.22	NWNE, Sec.22	3.50	2	4.84	1.61



CONSUMPTIVE USE WITH SMALL CHANGES IN VEGETATIVE COVER

ELLIOTT CREEK - POND 4, PARCEL C IRRIGATION DIVERSION

POND 4 (Parcel C) - 0.2 acres:

	Sq. Ft.	% Tot. Area	January	February	March	April	May	June	July	August	September	October	November	December	Growing Season	Net Annual
HISTORIC ET																
Wetlands - narrow stand	8712.00	100.0%	496.18	640.23	735.41	1063.25	1479.68	2538.07	6707.31	8062.95	2640.97	877.18	480.18	460.74	21428.99	26182.15
Open Water - shallow systems	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Open Water - Stock Ponds/Lakes	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grass Pasture - High Management	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grass Pasture - Low Management	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bare Soil - Gravel	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Willows - shrub communities	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Poplar Trees - Aspen	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Historic ET (HET)	8712.00	100.0%	496.18	640.23	735.41	1063.25	1479.68	2538.07	6707.31	8062.95	2640.97	877.18	480.18	460.74	21428.99	26182.15

PROPOSED ET

Wetlands - narrow stand	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Open Water - shallow systems	8712.00	100.0%	673.39	936.34	1382.22	2237.86	3216.32	3704.21	4058.06	3765.66	2778.16	2064.47	1028.95	699.97	17522.41	26545.72
Open Water - Stock Ponds/Lakes	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grass Pasture - High Management	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grass Pasture - Low Management	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bare Soil - Gravel	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Willows - shrub communities	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Poplar Trees - Aspen	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Proposed ET (PET)	8712.00	100.0%	673.39	936.34	1382.22	2237.86	3216.32	3704.21	4058.06	3765.66	2778.16	2064.47	1028.95	699.97	17522.41	26545.72
HET minus PET (CF/month)			-177.21	-296.11	-646.81	-1174.72	-1738.64	-1166.14	2649.26	4297.29	-137.19	-1187.29	-548.77	-239.23	3906.57	-363.56
Net change - In CFS															0.0003	0.0000

Summary: (Positive numbers = less consumptive use, negative numbers = more consumptive use)

HET minus PET (CF/month)	-177.21
HET minus PET Average daily CFS	-0.0001
HET minus PET Average daily GPM	-0.0297

Conclusion: The water features do not significantly change the consumptive use of water on the property. This is based on calculating the historic consumptive use (HET) and subtracting the proposed consumptive use (PET). The consumptive use decreased 0.0003 CFS during the growing season. There are no roads associated with pond 4 and it is associated with an existing irrigation diversion.

Pond Number	Point of Diversion (2)	Place of Use	Average Pond Surface	Average Pond Depth	Pond Capacity	One Time Fill	Volume above Ground Water
	T4N R45E	T4N R45E	acres	ft (1)	acre-feet (1)	ft	acres
4	SWNW, Sec.22	SWNW, Sec.22	0.20	4.00	0.80	2	0.4
							0.13



CONSUMPTIVE USE WITH SMALL CHANGES IN VEGETATIVE COVER

7/19/2007

ELLIOTT CREEK - PONDS 5, 6, 7, PARCELS B AND C

POND 5 (Parcel B) - 5.8 acres:

HISTORIC ET

	Sq. Ft.	% Tot. Area	January	February	March	April	May	June	July	August	September	October	November	December	Growing Season	Net Annual
Wetlands - narrow stand	252648.00	100.0%	14399.27	18566.80	21326.95	30834.14	42910.85	73904.08	194512.05	233925.58	76588.03	25438.17	19925.10	13361.46	153.00	365
Open Water - shallow systems	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Open Water - Stock Ponds/Lakes	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grass Pasture - High Management	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grass Pasture - Low Management	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bare Soil - Gravels	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Willows - shrub communities	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Poplar Trees - Aspen	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Historic ET (HET)	252648.00	100.0%	14399.27	18566.80	21326.95	30834.14	42910.85	73904.08	194512.05	233925.58	76588.03	25438.17	19925.10	13361.46	621440.59	759282.47

PROPOSED ET

Wetlands - narrow stand	75794.00	30.0%	4316.76	5570.01	6398.05	9250.19	12873.19	22081.11	58353.31	70147.30	22976.29	7631.41	4177.51	4008.42	18643.19	227783.54
Open Water - shallow systems	88427.00	35.0%	6834.92	9503.90	14029.57	22715.37	32645.72	37597.85	41788.37	38221.58	28198.38	20954.42	10443.85	7104.72	17882.90	269439.62
Open Water - Stock Ponds/Lakes	50530.00	20.0%	4522.38	6359.18	9353.10	15118.80	21738.24	25065.37	27493.99	25489.76	18799.03	13978.26	6852.60	4775.33	11856.03	178960.03
Grass Pasture - High Management	21500.00	8.5%	1027.71	1382.76	1793.03	2877.87	7762.50	13119.72	14594.75	13447.71	7914.15	2908.20	1227.33	963.98	5828.83	69008.71
Grass Pasture - Low Management	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bare Soil - Gravels	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Willows - shrub communities	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Poplar Trees - Aspen	16397.00	6.5%	917.20	1099.56	1317.43	1920.46	4485.92	8375.80	9839.06	9238.66	5953.66	1784.36	903.75	867.17	37823.30	46433.22
Total Proposed ET (PET)	252648.00	100.0%	17818.96	23895.40	32891.17	51862.69	79505.57	106239.84	151560.48	156545.01	83471.72	47256.65	23715.03	17743.61	577322.62	792226.12

HET minus PET (CF/month)

Net change - in CFS

PONDS 6 & 7 (Parcel C) - 2.0 acres:

HISTORIC ET

Wetlands - narrow stand	83249.00	95.6%	4741.35	6117.87	7027.35	10160.03	14139.38	24252.98	64092.86	77046.90	25236.21	8382.03	4588.40	4402.68	153.00	365
Open Water - shallow systems	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Open Water - Stock Ponds/Lakes	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grass Pasture - High Management	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grass Pasture - Low Management	3871.00	4.4%	185.04	241.80	318.89	502.91	1161.39	1965.93	2177.12	2015.71	1234.42	499.99	220.98	177.16	8554.57	10701.34
Bare Soil - Gravels	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Willows - shrub communities	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Poplar Trees - Aspen	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Historic ET (HET)	87120.00	100.0%	4926.36	6359.67	7346.25	10862.94	15300.77	26216.90	66269.89	79062.61	26470.62	8862.02	4809.38	4578.84	213322.90	260889.38

PROPOSED ET

Wetlands - narrow stand	26136.00	30.0%	1488.54	1920.70	2206.24	3188.74	4439.05	7614.22	20121.94	24188.85	7922.90	2631.53	1440.53	1382.22	64266.96	78546.46
Open Water - shallow systems	34848.00	40.0%	2693.56	3745.37	5528.88	8951.85	12865.28	14815.85	16232.23	15062.66	11112.64	8257.88	4115.79	2799.88	70099.65	105162.86
Open Water - Stock Ponds/Lakes	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grass Pasture - High Management	8712.00	10.0%	416.44	552.20	728.55	1166.14	3145.44	5315.23	5909.88	5449.14	3206.89	1178.43	497.32	398.72	23027.57	27963.38
Grass Pasture - Low Management	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bare Soil - Gravels	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Willows - shrub communities	17424.00	20.0%	974.64	1168.43	1399.94	2040.75	4766.89	8900.40	10561.59	9817.31	5933.60	1696.12	980.35	921.48	39979.78	49341.49
Poplar Trees - Aspen	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Proposed ET (PET)	87120.00	100.0%	5573.18	7386.70	9861.51	15348.47	26216.66	36647.70	52825.62	54517.95	26176.03	13963.97	7014.00	5502.30	187383.96	282034.19

HET minus PET (CF/month)

Net change - in CFS

CONSUMPTIVE USE WITH SMALL CHANGES IN VEGETATIVE COVER



ELLIOTT CREEK - PONDS 5, 6, 7, PARCELS B AND C

Roads and Driveways - 2.35 Acres (12' travel/16' total) - Parcels B and C:

	Sq. Ft.	% Tot. Area	January	February	March	April	May	June	July	August	September	October	November	December	Growing Season	Net Annual
HISTORIC ET																
Wetlands - narrow stand	48011.83	48.9%	2734.46	3528.33	4052.86	5859.55	8154.54	13397.31	36993.39	44434.92	14554.37	4834.13	2646.25	2539.14	185.00	365
Open Water - shallow systems	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Open Water - Stock Ponds/Lakes	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Gross Pasture - High Management	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Gross Pasture - Low Management	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bare Soil - Low Management	44866.80	43.8%	2144.66	2802.63	3696.11	5828.39	13461.14	22786.05	25233.94	23363.07	14307.52	5795.14	2561.22	2053.38	99151.72	124033.85
Bare Soil - Gravel	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Willows - shrub communities	5634.92	5.5%	315.20	377.87	452.74	659.98	1541.61	2878.39	3415.61	3174.92	1918.93	613.21	310.58	298.01	12929.46	15957.03
Poplar Trees - Aspen	3852.45	3.8%	219.41	285.42	328.12	458.79	807.12	2202.96	3083.52	2860.19	1634.21	525.02	219.92	203.74	10588.01	12809.42
Total Historic ET (HET)	102366.00	100.0%	5413.72	6874.24	8530.82	12807.31	23964.41	41854.72	68697.06	73833.09	32415.03	11767.49	5737.97	5094.28	240764.31	297090.15

PROPOSED ET

Wetlands - narrow stand	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Open Water - shallow systems	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Open Water - Stock Ponds/Lakes	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Gross Pasture - High Management	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Gross Pasture - Low Management	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bare Soil - Low Management	45041.00	44.0%	2152.98	2813.51	3710.46	5851.62	13513.41	22874.53	25331.91	23453.78	14363.07	5817.64	2571.17	2061.37	99538.69	124515.44
Bare Soil - Gravel (roads)	57325.00	56.0%	4722.41	5529.23	6529.75	8901.63	11951.78	12185.87	9444.82	9444.82	8463.10	6996.17	4457.23	4489.21	51491.40	93017.03
Willows - shrub communities	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Poplar Trees - Aspen	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Proposed ET (PET)	102366.00	100.0%	6875.40	8342.74	10240.22	14653.25	25465.19	35061.39	34776.73	32898.60	22826.18	12813.80	7028.40	6550.57	151028.10	217532.47
HET minus PET (CF/month)			-1461.67	-1368.49	-1709.39	-1845.94	-1500.78	6793.33	33920.33	40814.49	9588.85	-1046.31	-1290.44	-1458.29	89736.22	79557.69
Net change - In CFS															0.0068	0.0025

Summary: (Positive numbers = less consumptive use, negative numbers = more consumptive use)

HET minus PET (CF/month)	-5338.16	-7724.13	-15788.97	-27380.02	-48011.38	-36271.23	90316.26	142759.72	989.76	-13284.99	-6760.90	148793.13	45369.21
HET minus PET Average daily CFS	-0.0920	-0.0632	-0.0059	-0.0106	-0.0179	-0.0140	0.0337	0.0533	0.0004	-0.0051	-0.0025	0.0113	0.0014
HET minus PET Average daily GPM	-0.89	-1.43	-2.65	-4.78	-8.04	-6.28	15.13	23.92	0.17	-4.68	-1.13	5.09	0.65
Summary without roads:													
HET minus PET (CF/month)	-3878.49	-6355.64	-14078.58	-25734.08	-46510.81	-43064.55	56395.93	101825.23	-8589.09	-11894.55	-5304.60	60056.91	-34188.47
HET minus PET Average daily CFS	-0.0014	-0.0026	-0.0053	-0.0099	-0.0174	-0.0166	0.0211	0.0380	-0.0033	-0.0046	-0.0020	0.0045	-0.0011
HET minus PET Average daily GPM	-0.6486	-1.1791	-2.3592	-4.4558	-7.7834	-7.4565	9.4499	17.0621	-1.4872	-2.0768	-0.8859	2.0390	-0.4865

Conclusion: The water features do not significantly change the consumptive use of water on the property. This is based on calculating the historic consumptive use (HET) and subtracting the proposed consumptive use (PET). With proposed roads, the consumptive use decreased 0.0113cfs and with out roads the consumptive use decreased 0.0045 cfs during the growing season.

Parcel	Driveway (ft.)	Road (ft.)	Total Access (ft.)		Total Access (Acres, 16' wide)	
			UPLAND	WETLAND	UPLAND	WETLAND
B	0.00	116.00	1260.00	1260.00	0.04	0.44
C	2300.00	400.00	2700.00	2400.00	0.39	0.88
Total, ac.	0.84	0.07			1.03	1.32

Pond Number	Point of Diversion (2)	Place of Use	Average Pond Surface	Average Pond Depth	Pond Capacity	One Time Fill Volume above Ground Water	
						acre-feet	acres
5	NWSE, NESW, Sec.22	NWSE, NESW, Sec.22	5.60	3.00	16.80	2	11.2
6 & 7	NWSE, Sec.22	NWSE, Sec.22	2.00	3.00	6.00	2	4
TOTAL			7.60		22.80		5.97

Notes:

1. Average pond depth equals average total pond depth that includes ground water.
2. The point of diversion area includes surface and waste water and springs upstream of the place of use.



CONSUMPTIVE USE WITH SMALL CHANGES IN VEGETATIVE COVER

7/18/2007

ELLIOTT CREEK - PONDS 8 AND 9, PARCEL F

PONDS 8 & 9 (Parcel F) - 5.8 acres:

	Sq. Ft.	% Tot. Area	January	February	March	April	May	June	July	August	September	October	November	December	Growing Season	Net Annual
HISTORIC ET																
Wetlands - narrow stand	203154.00	77.1%	11570.39	14929.39	17148.98	24793.70	34904.57	59184.97	156406.34	188018.91	61594.38	20454.80	11197.16	10743.94	153.00	365
Open Water - shallow systems	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	610538.26
Open Water - Stock Ponds/lakes	40720.00	15.5%	3644.39	5124.59	7537.27	12183.60	17517.93	20199.13	22156.25	20541.12	15149.35	11264.49	5610.87	3851.46	0.00	0.00
Grass Pasture - High Management	13953.00	5.3%	685.96	884.40	1183.63	1687.67	5037.68	8514.39	9465.17	8727.25	5136.10	1887.36	796.51	638.58	0.00	144780.46
Grass Pasture - Low Management	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	44765.70
Bare Soil - Gravels	5380.00	2.0%	443.20	518.92	612.82	826.04	1121.88	1143.75	886.40	886.40	794.27	656.60	418.32	421.32	0.00	8729.73
Willows - shrub communities	200.00	0.1%	11.19	13.41	16.07	23.42	54.72	102.16	121.23	112.69	68.11	21.76	11.02	10.58	0.00	566.36
Poplar Trees - Aspen	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	809400.51
Total Historic ET (HET)	263407.00	100.0%	19336.14	21470.87	26478.77	39694.44	58236.59	89144.40	189035.99	219286.38	82732.18	34285.01	18033.87	15685.87	637435.54	

PROPOSED ET

Wetlands - narrow stand	75794.00	28.8%	4316.76	5570.01	6398.05	9250.19	12873.19	22081.11	58353.31	70147.30	22976.29	7631.41	4177.51	4008.42	186431.19	227783.54
Open Water - shallow systems	61290.00	23.3%	4737.38	6597.29	9724.09	15744.34	22627.21	26059.60	28548.93	26491.91	19544.70	14526.80	7238.78	4924.38	123273.35	186752.40
Open Water - Stock Ponds/lakes	101059.00	38.4%	9044.66	12718.23	18706.01	30237.29	43476.05	50130.25	54987.45	50979.01	37597.69	27956.23	13925.07	9358.57	237178.45	359316.51
Grass Pasture - High Management	12632.00	4.8%	603.82	800.57	1053.47	1690.85	4560.74	7708.29	8599.05	7901.00	4649.84	1708.67	721.10	578.12	33398.92	40545.61
Grass Pasture - Low Management	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bare Soil - Gravels	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Willows - shrub communities	12632.00	4.8%	706.59	847.08	1014.93	1479.48	3455.88	6452.59	7656.90	7117.32	4301.72	1374.65	696.23	668.05	28994.42	35771.45
Poplar Trees - Aspen	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Proposed ET (PET)	263407.00	100.0%	19409.21	26523.28	36896.54	58402.17	86993.07	112431.83	156115.64	162636.55	89070.24	53194.76	26758.68	19737.54	609247.33	850169.51

HET minus PET (CF/month) Net change - in CFS

			-3073.07	-5052.41	-10417.77	-18707.73	-28756.49	-23287.43	30920.36	55649.83	-6338.05	-18909.75	-8724.81	-4071.66	28188.21	-40769.00
															0.0021	-0.0013

Roads and Driveways - 1.04 acres (12' travel/16' total) - Parcel F:

	Sq. Ft.	% Tot. Area	January	February	March	April	May	June	July	August	September	October	November	December	Growing Season	Net Annual
HISTORIC ET																
Wetlands - narrow stand	20037.60	44.2%	1141.22	1472.54	1691.46	2445.47	3403.27	5637.57	15426.82	18544.79	6074.22	2017.51	1104.40	1059.70	153.00	365
Open Water - shallow systems	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	60218.95
Open Water - Stock Ponds/lakes	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grass Pasture - High Management	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grass Pasture - Low Management	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bare Soil - Gravels	25264.80	55.8%	1207.67	1578.18	2081.30	3282.34	7580.06	12830.98	14209.40	13155.90	8056.66	3263.28	1442.24	1156.28	55833.01	69844.31
Willows - shrub communities	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Poplar Trees - Aspen	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Historic ET (HET)	45302.40	100.0%	2348.89	3050.72	3772.76	5727.81	10983.33	18688.55	29638.22	31700.69	14130.89	5280.79	2546.65	2215.96	105119.57	130063.26

PROPOSED ET

Wetlands - narrow stand	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Open Water - shallow systems	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Open Water - Stock Ponds/lakes	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grass Pasture - High Management	19933.06	44.0%	952.81	1245.13	1642.06	2589.86	5960.41	10123.20	11210.73	10379.55	6356.43	2574.62	1137.86	912.27	44050.33	55104.76
Grass Pasture - Low Management	25369.34	56.0%	2089.92	2446.98	2899.76	3895.19	5289.30	5393.33	4179.83	4179.83	3745.37	3096.17	1972.56	1886.71	22787.66	41164.95
Bare Soil - Gravels (roads)	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Willows - shrub communities	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Poplar Trees - Aspen	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Proposed ET (PET)	45302.40	100.0%	3042.73	3692.10	4531.84	6484.84	11269.70	16516.54	15350.56	14599.39	10101.80	5670.79	3110.44	2888.98	66837.99	96289.71

HET minus PET (CF/month) Net change - in CFS

			-693.84	-641.39	-759.09	-757.03	-286.37	3152.01	14245.66	17141.30	4029.09	-390.00	-563.79	-682.99	38281.68	33793.55
															0.0029	0.0011

Summary: (Positive numbers = less consumptive use, negative numbers = more consumptive use)

HET minus PET (CF/month)	-3768.91
HET minus PET Average daily CFS	-0.0014
HET minus PET Average daily GPM	-0.63
Summary without roads:	
HET minus PET (CF/month)	-3073.07
HET minus PET Average daily CFS	-0.0011
HET minus PET Average daily GPM	-0.51

Conclusion: The water features do not significantly change the consumptive use of water on the property. This is based on calculating the historic consumptive use (HET) and subtracting the proposed consumptive use (PET). With proposed roads, the consumptive use decreased 0.0050 cfs and with out roads the consumptive use decreased 0.0021 cfs during the growing season.

CONSUMPTIVE USE WITH SMALL CHANGES IN VEGETATIVE COVER



7/18/2007

ELLIOTT CREEK - PONDS 8 AND 9, PARCEL F

Parcel	Driveway (ft.)		Road (ft.)		Total Access (ft.)		Total Access (Acres, 16' wide)	
	UPLAND	WETLAND	UPLAND	WETLAND	UPLAND	WETLAND	UPLAND	WETLAND
F	1516.00	674.00	75.00	575.00	1591.00	1249.00	0.58	0.46

Pond Number	Point of Diversion (2)	Place of Use	Average Pond Surface	Average Pond Depth	Pond Capacity	One Time Fill Volume above Ground Water
			acres	ft (1)	acre-feet (1)	acre-feet
8 & 9	NESE, Sec.21	NESE, Sec.21	5.80	4.50	26.10	2

Notes:

1. Average pond depth equals average total pond depth that includes ground water.
2. The point of diversion area includes surface and waste water and springs upstream of the place of use.

3.87



CONSUMPTIVE USE WITH SMALL CHANGES IN VEGETATIVE COVER

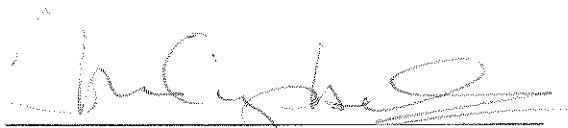
**AFFIDAVIT OF
THOMAS M. CAMPBELL III**

STATE OF WYOMING)
)ss
County of Teton)

Thomas M. Campbell III, being first duly sworn, on his oath deposes and says:

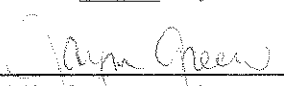
1. Affiant has personal knowledge of the facts set forth herein and makes this affidavit based upon such personal knowledge.
2. I and the staff at Biota Research and Consulting, Inc. prepared a wetland delineation for the entire 390-acre Elliott Creek property in 2005. As part of this effort, a number of site visits were made and detailed information was collected on the plant species and vegetative covertypes present on the tract.
3. I was requested to, and staff did a) generate a vegetative covertype map for the entire Elliott Creek property and b) develop site-specific vegetative characterizations for each of the proposed water features on the property. These characterizations are provided as an attachment to this Affidavit, entitled "Comparison and Description of Vegetative Covertypes, on the Elliott Creek property, Teton County, Idaho."
4. I compared the vegetative characteristics for each of the proposed water features with the vegetative classifications and areal coverage that were used and analyzed for determining historic consumptive use of water in the "Water Budget" dated February 27, 2007 prepared by Mr. William H. Anderson, and found them to be generally consistent.
5. Based on these efforts and to the best of my knowledge, the historic consumptive use of water calculations presented in the "Water Budget" and the conclusions made by the author of said document appear to be both reasonable and correct.

DATED this 18th day of July, 2007.


Thomas M. Campbell III

SUBSCRIBED AND SWORN TO before me this 18th day of July, 2007.



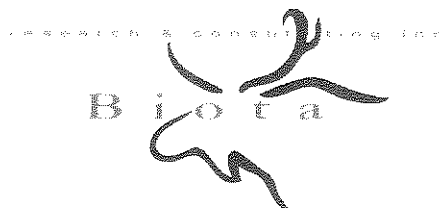

Notary Public for Wyoming
Residing at PO Box 4008, Jackson, Wyoming
My commission expires: 9-18-10

RECEIVED

AUG 02 2007

Department of Water Resources
Eastern Region

**COMPARISON AND DESCRIPTION OF VEGETATIVE COVERTYPES
ON THE ELLIOTT CREEK PROPERTY,
TETON COUNTY, IDAHO**



P. O. Box 8578, Jackson, Wyoming 83002; voice: (307) 733-4216 • fax: (307) 733-1245
P. O. Box 880 • 73 N. Main, Suite 3, Victor, ID 83455; voice: (208) 787-4215 • fax: (208) 787-4217

July 18, 2007

IDWR-Vegetation Classification

Wetlands - narrow stand

Open Water - shallow systems
Open Water - Stock Ponds/lakes
Grass Pasture - High Management
Grass Pasture - Low Management
Bare Soil - Gravels
Willows - shrub communities
Poplar Trees – Aspen

Biota Covertyping

Emergent Wetlands
Scrub-Shrub Wetlands
Forested Wetlands

Emergent Wetlands - Marsh
Open Water
Agricultural Meadow/Disturbed Grassland
Mesic Grassland
Disturbed
Mesic Shrub - Willows & Shrubby Cinquefoil
Mesic Deciduous Forest - Aspen

The following information is a comparison of the vegetation classification system employed by IDWR and vegetative covertyping used by Biota Research and Consulting, Inc. as part of performing the wetland delineation on the Elliott Creek property in Teton County, Idaho. Included in this comparison are the existing areal coverage (sq ft) of these vegetated areas within the project area, as it pertains to the "Water Budget" dated February 27, 2007, and subsequently revised, prepared by Mr. William H. Anderson for the Elliot Creek property project.

WF1 - POND 1 (Parcel A)

IDWR-Vegetation Classification

Wetlands - narrow stand
Open Water - shallow systems
Open Water - Stock Ponds/lakes
Grass Pasture - High Management
Grass Pasture - Low Management
Bare Soil - Gravels
Willows - shrub communities
Poplar Trees - Aspen

Biota Covertyping

85906/85906	Forested Wetlands-Aspens
51687/51687	Open Water
0	
0	
0	
0	
1799/1799	Mesic Shrub –Shrubby Cinquefoil
0	
<i>Total Existing Area (sq ft)</i>	<i>139392/139392</i>

Elliott Creek Property Vegetative Covertyping

WF2 & 3 – POND 3 (Parcel A)**IDWR-Vegetation Classification**

Wetlands - narrow stand	81498/95216
Open Water - shallow systems	2200/2200
Open Water -Stock Ponds/lakes	0
Grass Pasture - High Management	31383/16983
Grass Pasture - Low Management	0/14400
Bare Soil - Gravels	0
Willows - shrub communities	13718/0000
Poplar Trees - Aspen	0
Total Existing Area (sq ft)	128799/128799

Biota Coertyping

Scrub-Shrub Wetlands
Open Water
Agricultural Meadow
Mesic Grassland

WF4 – POND 4 (Parcel C)**IDWR-Vegetation Classification**

Wetlands - narrow stand	0000/8712
Open Water - shallow systems	8712/0000
Open Water -Stock Ponds/lakes	0
Grass Pasture - High Management	0
Grass Pasture - Low Management	0
Bare Soil - Gravels	0
Willows - shrub communities	0
Poplar Trees - Aspen	0
Total Existing Area (sq ft)	8712/8712

Biota Coertyping

Forested Wetlands-Aspens

WF5 – POND 5 (Parcel B)**IDWR-Vegetation Classification**

Wetlands - narrow stand	176854/252648
Open Water - shallow systems	75794/0000
Open Water -Stock Ponds/lakes	0
Grass Pasture - High Management	0
Grass Pasture - Low Management	0
Bare Soil - Gravels	0
Willows - shrub communities	0
Poplar Trees - Aspen	0
Total Existing Area (sq ft)	252648/252648

Biota Coertyping

Emergent Wetlands

WF6 & 7 – PONDS 6 & 7 (Parcel C)**IDWR-Vegetation Classification**

Wetlands - narrow stand	69696/83249
Open Water - shallow systems	13553/0000
Open Water -Stock Ponds/lakes	0
Grass Pasture - High Management	0
Grass Pasture - Low Management	3871/3871
Bare Soil - Gravels	0
Willows - shrub communities	0
Poplar Trees - Aspen	0
Total Existing Area (sq ft)	87120/87120

Biota Coertyping

Emergent Wetlands
Disturbed Grassland

WF8 & 9 – PONDS 8 & 9 (Parcel F)**IDWR-Vegetation Classification****Biota Covertyping**

Wetlands - narrow stand	99263/203154	Emergent Wetlands
Open Water - shallow systems	23560/0000	
Open Water -Stock Ponds/lakes	40720/40720	Open Water
Grass Pasture - High Management	13953/13953	
Grass Pasture - Low Management	80331/0000	
Bare Soil - Gravels	5380/5380	Disturbed
Willows - shrub communities	200/200	
Poplar Trees - Aspen	0	
Total Existing Area (sq ft)	263407/263407	

The following information, collected by Biota Research and Consulting, Inc. as part of performing the wetland delineation, provides details on the vegetative covertypes found to be present on the Elliott Creek property in Teton County, Idaho.

Descriptions of Vegetative Covertypes

Palustrine Emergent Wetlands are characterized by erect, rooted, herbaceous hydrophytic plants, excluding mosses and lichens. Vegetation is present for most of the growing season and is usually dominated by perennial plants. Plant species that dominate emergent wetlands in the project area include several species of sedges (*Carex* spp.), rushes (*Juncus* spp.), cattails (*Typha* spp.) and various grasses such as spreading bentgrass (*Agrostis stolonifera*), tufted hairgrass (*Deschampsia cespitosa*), meadow foxtail (*Alopecurus pratensis*), wildrye (*Elymus repens*), and Kentucky bluegrass (*Poa pratensis*). Palustrine emergent wetlands may exist in a variety of geomorphic settings and water regimes, both of which strongly influence plant species composition. Emergent wetlands may revert to open water habitats during wetter climatic periods. Emergent wetlands within the project area were widely distributed and were associated with depressional areas including swales, perennial and ephemeral drainages, irrigation ditches, wet meadows, agricultural meadows, and bottomland marsh.

Palustrine Scrub-Shrub Wetlands are dominated by woody vegetation less than 20 feet tall. Plant species may include true shrubs, young trees, and trees and shrubs that are stunted due to environmental conditions. Scrub-shrub wetlands may represent a seral stage leading to a forested wetland or they may be stable, self-perpetuating plant communities. Palustrine scrub-shrub wetlands in the project area are dominated by shrubby cinquefoil (*Pentaphylloides floribunda*), willows (*Salix* spp.), along with a scattering of swamp birch (*Betula pumila*) and red-osier dogwood (*Cornus sericea*). The herbaceous stratum is characterized by *Carex* spp., *Juncus* spp., *Agrostis stolonifera*, *Poa pratensis*, *Elymus repens*, *Deschampsia cespitosa*, and *Geum macrophyllum*. Scrub-shrub wetlands were scattered throughout the project area in association with bottomland marsh habitat as well as the banks bordering various channels of Elliott Creek.

Palustrine Forested Wetlands are dominated by trees 20 feet or taller. Aspen (*Populus tremuloides*) is the dominant species in the tree stratum of forested wetlands in the project area; *Salix* spp. are common in the shrub stratum. Understory vegetation includes a variety of herbaceous plants including *Agrostis stolonifera*, *Carex* spp., *Juncus* spp., *Deschampsia cespitosa*, *Alopecurus pratensis*, *Elymus repens*, and *Poa pratensis*. These wetlands are generally found in areas that experience a degree of flooding and