Robertson, Jean

From: Zach Latham [zach.latham@brockwayeng.com]

Sent: Friday, January 22, 2010 11:47 AM

To: Robertson, Jean

Subject: RE: SV Ranch LLC- 37-2597, 37-2764 and Dry Up Acres Shapefiles

Attachments: SCR_Permit_&_Transfer_Areas_to_dry_up_new_1-21-2010.shx; SCR_Permit_&_Transfer_Areas_to_dry_up_new_1-21-2010.prj; SCR_Permit_&_Transfer_Areas_to_dry_up_new_1-21-2010.shp; SCR_Permit_&_Transfer_Areas_to_dry_up_new_1-21-2010.dbf; SCR_Permit_&_Transfer_Areas_to_dry_up_new_1-21-2010.sbn; SCR_Permit_&_Transfer_Areas_to_dry_up_new_1-21-2010.sbx; Sun Valley Ranch LLC- Zone 2 Channel Connected Storage 1-22-10.pdf; Sun Valley Ranch LLC- Zone 1 Oxbow Schematic 1-22-10.pdf

Jeanie-
I'm glad you can view that file...attached is the correct shapefile outlining the 7.5 acres proposed to be dried up under the two consumptive use scenarios that our office presented to yourself, Allen Merritt and Jeff Cooper in yesterdays meeting at IDWR. This shapefile is meant to supersede the one that I sent to you yesterday afternoon, please discard that file.

Also attached are 2 schematic drawings made by Dave Rosgen of Wildland Hydrology of the proposed stream restoration features. We thought that the mechanics of the project as they relate to the on-stream and near-stream storage features proposed in permit application 37-22459 would be easier to understand with some simple schematics.

- One schematic shows the upper Oxbow system which extends south from the northern boundary of the Sun Valley Ranch LLC property along Crystal Creek and Black Slough to the ranch access road coming in from Highway 75. This has been referred to as Zone 1 where the oxbow features are proposed to be constructed.
- The second schematic shows the connected, near-stream features proposed South of Zone 1 to the southwest extent of the restoration project near the Willow Creek and Big Wood River confluence. Zone 2 begins with a restoration design that includes creating new Crystal Creek and Black Slough channels on the existing floodplain terraces, plugging the existing incised channels and connecting and filling the plugged features to the restored channels via 2 interconnected channels. The connected, near-stream storage features found in Zone 2 extend down Black Slough, Crystal Creek and onto lower Willow Creek.

Please let me know if you have troubles projecting or opening the attached shapefile. Thanks again for your time and effort and please let me know if you need any additional material. We are working on getting you an additional schematic and analysis of the volume of ground water that will naturally fill the proposed storage features listed in permit 37-22459. Talk to you soon-

Zach Latham

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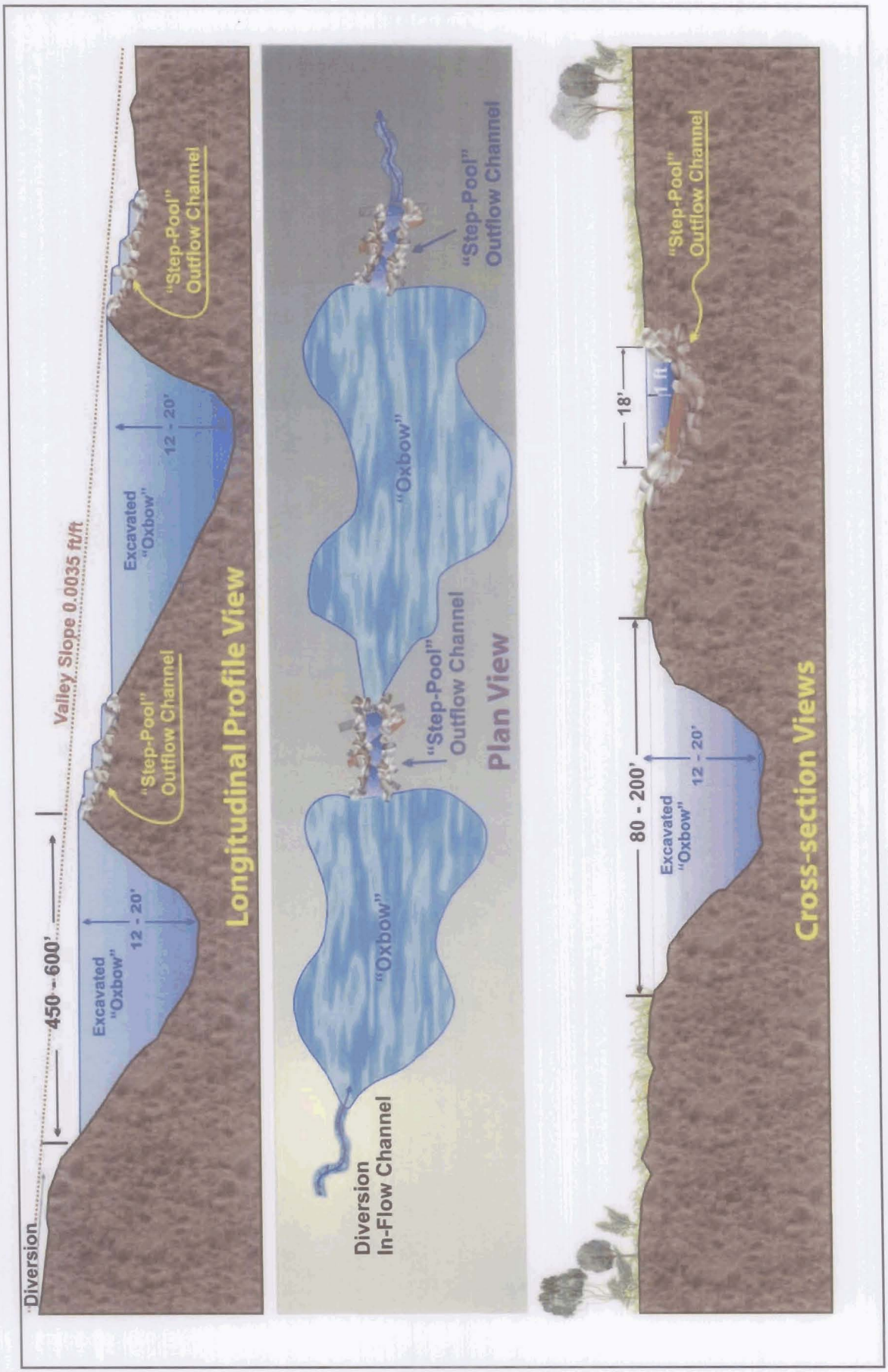


Figure 24. Design of the oxbow step/pool system in Zone 1.

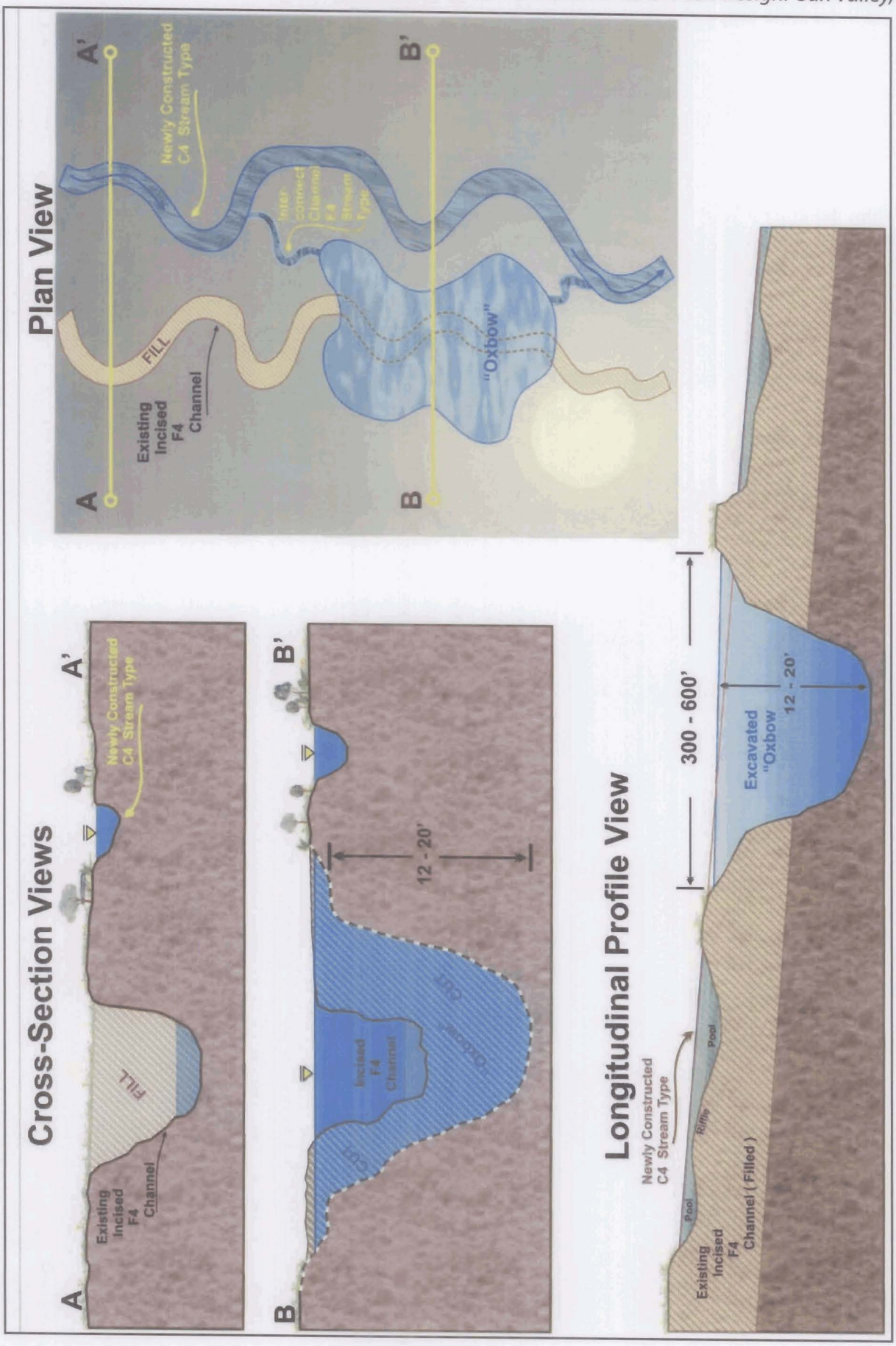


Figure 1. Schematic depiction of the method to reconnect channel to floodplain.

SUN VALLEY RANCH LLC

CONSUMPTIVE USE BALANCE FOR ASSOCIATED WATER RIGHT TRANSFERS

Sun Valley Ranch LLC Irrigation Water Rights Used for Project:	IDWR Water Right Transfer #	**, ***Existing Consumptive Use (acre-ft):	**, ***Proposed Consumptive Use (acre-ft):	*Change in Consumptive Use- Reduction is Positive (acre-feet):	**Acres To Be Dried Up to Balance Consumptive Use (acre):
37-60	75849	2065.9	2042.7	23.2	0.0
37-61	75849	2065.9	2042.7	23.2	0.0
37-62	75849	2065.9	2042.7	23.2	0.0
37-63A	75849	2065.9	2042.7	23.2	0.0
37-64A	75849	2065.9	2042.7	23.2	0.0
37-66A	75849	2065.9	2042.7	23.2	0.0
37-67B	75849	2065.9	2042.7	23.2	0.0
37-68A	75849	2065.9	2042.7	23.2	0.0
37-69B	75850	350.0	347.4	2.6	0.0
37-70	75850	350.0	347.4	2.6	0.0
37-71B	75850	350.0	347.4	2.6	0.0
37-230	75849	2065.9	2042.7	23.2	0.0
37-231B	75849	2065.9	2042.7	23.2	0.0
37-232	75849	2065.9	2042.7	23.2	0.0
37-577AZ	75849	2065.9	2042.7	23.2	0.0
37-2492	75853	225.4	224.8	0.5	0.0
37-2538	75851	158.0	170.6	-12.6	0.0
37-22050	75852	294.1	285.6	8.5	0.0
Totals:		17227.5	17036.8	**22.1**	**0.0**

* Gross Irrigated Area Decreases with Project, Open Water Increases with Project, Total Consumptive Use Decreases with Project.

** CU = Picabo- Grass Pasture, Low Management (Pdef) 1.90 ft per acre
*** CU = Picabo- Open Water- Shallow Systems (Pdef) 1.68 ft per acre
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.

BROCKWAY ENGINEERING PLLC
1/21/2010

SPRING CREEK IDAHO RANCH LLC

CONSUMPTIVE USE BALANCE FOR ASSOCIATED WATER RIGHT TRANSFERS

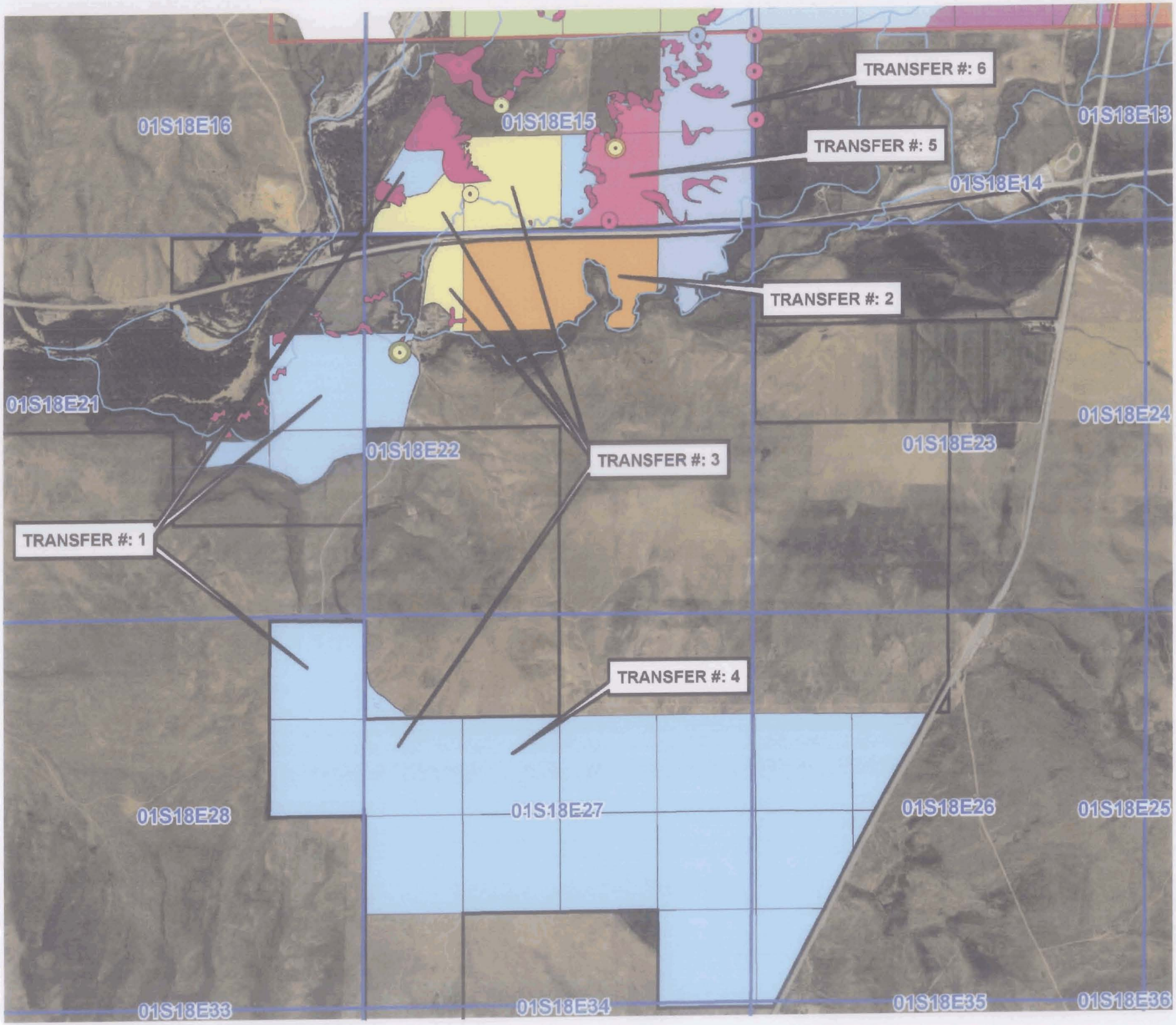
Spring Creek Idaho Ranch LLC Irrigation Water Rights Used for Project:	IDWR Water Right Transfer #	*,**Existing Consumptive Use (acre-ft):	*,**Proposed Consumptive Use within IDWR POU Shapefile(acre-ft):	Change in Consumptive Use within IDWR POU Shapefile- Reduction is Positive (acre-feet):	Acres of Proprosed Open Water Un-Accounted For Outside IDWR POU Shapefile (acre):	*Consumptive Use of Proprosed Open Water Un-Accounted For Outside IDWR POU Shapefile (acre-ft):	**Excess Consumptive Use with Project (40.6 - 26.2) (acre-ft):	**Acres To Be Dried Up to Balance Consumptive Use (acre):
37-139	**75854**	185.0	180.5	4.4				0.0
37-180	**75840**	411.1	410.0	1.1				**7.5**
37-181	**75840**	411.1	410.0	1.1				**7.5**
37-231A	**75840**	276.6	274.3	2.3				0.0
37-233	**75840**	276.6	274.3	2.3				0.0
37-1187	**75855**	127.3	124.6	2.7				0.0
37-1207	**75838**	283.1	280.5	2.6				0.0
37-2597	**75856**	198.3	193.6	4.8				0.0
37-2764	**75856**	322.0	317.3	4.8				0.0
								0.0
Totals:		2491.2	2465.0	26.2	24.2	40.6	14.3	**7.5**

* Gross Irrigated Area Decreases with Project, Open Water Increases with Project, Total Consumptive Use Increases with Project.

* CU = Picabo- Open Water- Shallow Systems (Pdef) 1.68 ft per acre

** CU = Picabo- Grass Pasture, Low Management (Pdef) 1.90 ft per acre

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.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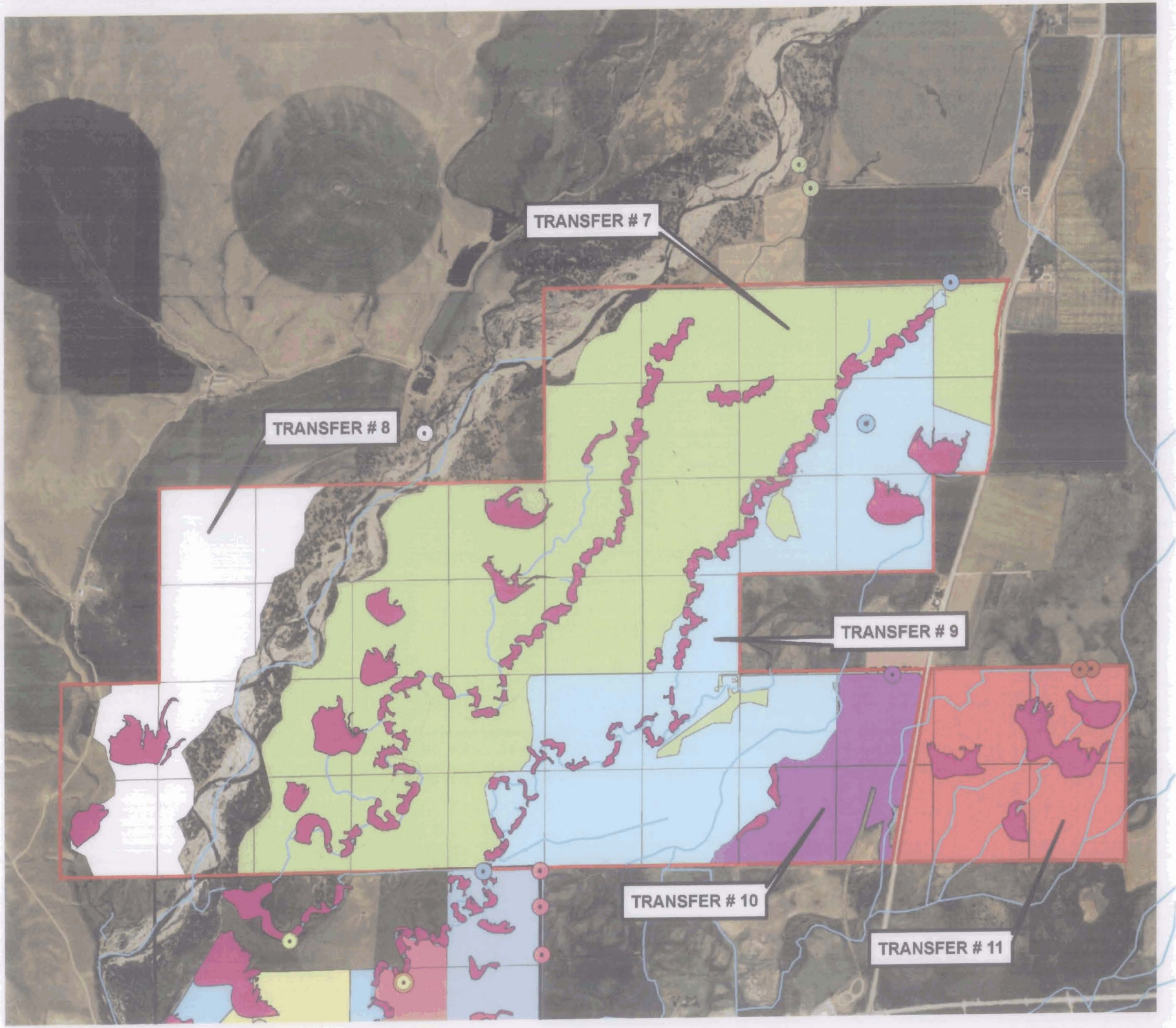
TRANSFER # 7
TRANSFER # 8
TRANSFER # 9
TRANSFER # 10
TRANSFER # 11

Sun Valley Ranch LLC and Spring Creek Ranch LLC

Summary of Water Right Transfer and Permit Applications

Brockway Engineering PLLC

Water Right Transfer #:	Property Owner:	Water Rights Involved:	Source:	SRBA Objection Status:	Proposed Processing Schedule:	IDWR Processing Agent:	
1	Spring Creek Idaho Ranch LLC	37-180, 37-181, 37-231A, 37-233	Surface Water	SF-5's Signed	AS SOON AS POSSIBLE	75840	
2	Spring Creek Idaho Ranch LLC	37-1187	Surface Water	SF-5's Signed	AS SOON AS POSSIBLE	75855	
3	Spring Creek Idaho Ranch LLC	37-1207	Surface Water	SF-5's Signed	AS SOON AS POSSIBLE	75838	
4	Spring Creek Idaho Ranch LLC	37-310A, 37-19831	Surface Water	SF-5's Signed	AS SOON AS POSSIBLE	75839	
5	Spring Creek Idaho Ranch LLC	37-2597, 37-2764	Ground Water	SF-5's Signed	AS SOON AS POSSIBLE	75856	
6	Spring Creek Idaho Ranch LLC	37-139	Surface Water	SF-5's Signed	AS SOON AS POSSIBLE	75854	
7	Sun Valley Ranch LLC	37-60, 37-61, 37-62, 37-63A, 37-64A, 37-66A, 37-67B, 37-68A, 37-230, 37-231B, 37-232, 37-577AZ	Surface Water	SF-5's Signed	AS SOON AS POSSIBLE	JR	75849
8	Sun Valley Ranch LLC	37-69B, 37-70, 37-71B	Surface Water	SF-5's Signed	AS SOON AS POSSIBLE	JR	75850
9	Sun Valley Ranch LLC	37-22050	Ground Water	Objection Pending	AT A LATER DATE	JR	75852
10	Sun Valley Ranch LLC	37-2492	Ground Water	Objection Pending	AT A LATER DATE	JR	75853
11	Sun Valley Ranch LLC	37-2538	Ground Water	Objection Pending	AT A LATER DATE	JR	75851
Permit	Spring Creek Idaho Ranch LLC and Sun Valley Ranch LLC	See Table Provided 1-14-2010	Surface Water	N/A	AS SOON AS POSSIBLE	JR	

37-22459