



# Delamar Valley

## Hydrographic Basin 10-182

### NRS § 533.364 Inventory



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August 2011

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## SUMMARY

Nevada Revised Statute (NRS) § 533.364 requires that before approving an application for an interbasin transfer of more than 250 acre-feet of groundwater from a basin, an inventory of the source basin must be conducted. This report meets the specific requirements of NRS § 533.364 for Delamar Valley, being the inclusion of (a) the total amount of surface water and groundwater appropriated in accordance with a decreed, certificated or permitted right; (b) an estimate of the amount and location of all surface water and groundwater that is available for appropriation; and (c) the name of each owner of record set forth in the records of the Office of the State Engineer for each decreed, certificated or permitted right.

NRS § 533.364(1)(a): The total amount of surface water appropriated with a decreed, certificated, or permitted right is 309 acre-feet annually (AFA). The total amount of groundwater appropriated with a decreed, certificated, or permitted right is 7 AFA (Table 1).

NRS § 533.364(1)(b): The amount of surface water that is available for appropriation is estimated to be 43 AFA, after consideration of all rights and claims, including claims of pre-statutory vested water rights and public water reserves. Pertinent data relating to individual surface water sources, their location, and available water are shown in Appendix A. The annual groundwater supply is equal to the basin perennial yield, which is 2,550 acre-feet, of which 2,542 AFA is available for appropriation. Groundwater is managed by the State Engineer on a Basin scale, and can be developed anywhere in the Basin, with certain practical considerations such as accessibility, the location of aquifers or existing rights.

NRS § 533.364(1)(c): The name of each owner of record in the Office of the State Engineer for each decreed, certificated, or permitted right is shown in Appendix B.

**Table 1. Surface water and groundwater appropriated in Delamar Valley (AFA)**

Source	Status					Total	
	Permit	Certificate	Decreed	Vested	Reserved	w/o Vested or Reserved	w/ Vested and Reserved
<b>Other Surface Water</b>	0	22	0	0	0	22	22
<b>Reservoir</b>	0	89	0	0	0	89	89
<b>Spring</b>	18	179	0	76	0	197	274
<b>Stream</b>	0	0	0	0	0	0	0
<b>Total Surface Water</b>	18	291	0	76	0	309	385
<b>Total Groundwater</b>	0	7	0	0	0	7	7

# INVENTORY

This report is for the Delamar Valley Hydrographic Basin (10-182). Surface water estimates are based on field measurements from a variety of sources and review of records of the Office of the State Engineer, and include measurements reported by owners of record in their filing of Proof of Beneficial Use. Groundwater estimates are based on the records of the Office of the State Engineer and currently accepted values for perennial yield. The information in this report is limited to the data and records available to the State Engineer at the time of conducting the inventory. NRS § 533.364(2) provides that the State Engineer is not required to make a determination of rights or to conduct an adjudication, and with respect to claims of pre-statutory vested water rights and public water reserves, the information contained thereon is taken at face value for the purpose of this inventory.

## **Existing Appropriations: NRS § 533.364(1)(a)**

The total amount of surface water and groundwater appropriated in accordance with decreed, certificated or permitted rights is listed in Appendix A. Table A1 lists Stream Availability, Table A2 lists Spring Availability and Table A3 lists Groundwater Rights. The stream and spring rights are sorted by source to facilitate tabulation of total appropriation of each source. Permits for reservoir and other surface water are included in the Stream Availability table because the source in each case is intermittent stream and flood flow. Claims of vested water rights and public water reserves are also shown in these tables. While not intended to adjudicate the waters of this basin, it was deemed necessary to identify the claims on each source before determining the amount available for future appropriation.

Duties (total quantities appropriated) for all decreed, certificated or permitted rights was taken directly from the files of the State Engineer. For claims of vested water rights and public water reserves, duties in the State Engineer's files often are shown as zero, and in these cases a duty was computed based on the proof filing for the water right.

In Delamar Valley, there are no stream rights, 197 AFA of spring rights, 22 AFA of other surface water rights, and 89 AFA of reservoir rights that are certificated or permitted. Groundwater rights total 7 AFA. There are no decreed rights in the basin.

## **Water Available for Appropriation: NRS § 533.364(1)(b)**

Estimates of the amount of surface water and groundwater available for appropriation requires a tabulation of each separate surface water source, the rights or claims on each source, and the annual supply from the source. If there are other claims on the source, such as claims of vested rights or federal claims of public water reserves, additional appropriations might not be allowed until those claims are quantified or adjudicated. While NRS § 533.364 does not require the State Engineer to quantify any vested water right claim prior to approving an application for an interbasin transfer of groundwater, some basic quantification of vested claims is necessary in order to determine the amount of water available for appropriation from an individual surface water source. Since groundwater is managed at a basin scale, it is available

anywhere in the basin, but with certain practical considerations for local factors, such as depth to water, the productivity of the aquifer and possible conflicts with existing rights.

Estimates of surface water average annual flow are based on very limited data. Furthermore, surface water supply is highly variable, being dependent on weather patterns on time scales ranging from daily to decadal. Estimates of the amount available for appropriation may not, in fact, be available on a year to year basis, and applications for such water may be denied. This inventory is a snapshot in time of water availability and should not be relied upon as satisfying the statutory criteria found in NRS § 533.370(5) for the filing of applications to appropriate.

As shown in the Spring and Stream Availability tables in Appendix A, many of the discharge estimates are based on filings for vested rights or proofs of beneficial use, while other estimates are based on few actual measurements. Unless there are specific estimates of flow that can be used to estimate the average annual discharge of a surface water source, the discharge was assumed to be equal to the existing permits on the source. The reasoning behind this approach is that most of these sources are limited, and it is presumed that the water right user has filed on the entire supply.

There are no perennial streams in Delamar Valley and there are no water rights that are classified as 'Stream' rights. There are, however, 'Reservoir' and 'Other Surface Water' (OSW) rights that capture flood flows and ephemeral runoff. All water courses will flow at some time, and those ephemeral or intermittent flows can be captured and placed to beneficial use. Water can be diverted directly to beneficial use or diverted to reservoir storage before being placed to a beneficial use. These water rights total 111 acre-feet and are shown in Table A1. The total amount of water available from these sources is unknown. There are no available stream rights in the basin. Quantification of the average annual flood flow of each watercourse is beyond the scope of this statutory requirement.

The amount of spring water available for appropriation is estimated to be about 43 AFA. These estimates include one right in the OSW category because it pertains to a seep rather than flood flows like the other OSW permits.

The perennial yield for Delamar Valley was established in State Engineer's Ruling 5875 as 2,550 AFA. As shown in Table A3, existing groundwater rights total 7 AFA. There is one domestic well in Delamar Valley. Domestic wells are allowed to use up to 2.0 AFA; however for inventory purposes, domestic wells in rural areas have been shown to pump approximately 1 AFA on average. Available groundwater in Delamar Valley is the perennial yield of 2,550 AFA less 8 AFA of groundwater rights and one domestic well. There is 2,542 AFA of available groundwater in Delamar Valley.

**Owners of Record: NRS § 533.364(1)(c)**

The name of each owner of record set forth in the records of the Office of the State Engineer for each decreed, certificated or permitted right is listed in Appendix B.

## LIMITATIONS

NRS § 533.364(1)(a) directs the State Engineer to identify the "total amount of surface water and groundwater appropriated in accordance with a decreed, certified or permitted right." Though claims of pre-statutory vested water rights are specifically excluded from the provisions of 533.364(1)(a), they have been included in this inventory in order to make an analysis of the availability as required by NRS § 533.364(1)(b). Note that only those water rights that have been filed with the State Engineer can be considered in this inventory. It is possible that vested rights exist for which no filing has been made.

NRS § 533.364(1)(b) requires an "estimate of the amount and location of all surface water and groundwater available for appropriation in the basin." In order to estimate the amount of surface water available, it is necessary to estimate the average annual discharge of the source.

Due to the limited nature of the data used to arrive at the discharge estimate, no guarantee can be made of the accuracy of the estimate and any application filed to appropriate any of the public waters of the State of Nevada will be evaluated as prescribed in Chapters 533 and 534 of the Nevada Revised Statutes.

NRS § 533.364(1)(c) requires that "the name of each owner of record set forth in the records of the Office of the State Engineer for each decreed, certified or permitted right in the basin" be included in the inventory. Because claims of vested water rights have been included in this report for the purposes described above, they have also been included in this component of the inventory. The owners of record listed in this report are those persons that are currently identified as such by documents filed with and confirmed by the State Engineer in accordance with NRS §§ 533.384 through 533.386.

NRS § 533.364(2)(a) states that the State Engineer is not required to quantify any claims of vested water rights within the basin. This report is not an adjudication of any water source, nor a quantification of any claim of vested water right. The values utilized in this report for claims of vested rights are in no way an acknowledgment by this office of the validity of the claim or that the water so claimed has actually been put to beneficial use. The amount of water associated with each claim of vested right is obtained from the documents filed with the State Engineer and is taken at face value.

NRS § 533.035 provides, "Beneficial use shall be the basis, the measure and the limit of the right to the use of the water." Availability of unappropriated water at a source is not the only criterion for approval or denial of an application. NRS Chapters 533 and 534 establish the criteria for approval or denial of an application before the State Engineer, including availability of water at the source. Evidence of availability of water from a specific source for a specific application before the State Engineer is required at the time of application; this inventory is limited to estimates of availability for the timeframe of the inventory.

## Explanation of Column Headings and Abbreviations for Tables

APP	The application/file number of the Permit, Claim of Vested Right or Public Water Reserve.	
CERT	Certificate number.	
STATUS	This is the status of the water right.	
	CER	A certificated right.
	DEC	A claim of vested right that has been adjudicated and is part of a decree.
	PER	A permit that has not been certificated.
	RES	A claim of public water reserve.
	VST	A claim of vested right not yet adjudicated.
	###	The serial number of a certificate. See "CER" above.
SOURCE	The source of water associated with the subject water right.	
	OSW	Other Surface Water
	SPR	Spring
	OGW	Other Groundwater
	RES	Reservoir
	STR	Stream
	UG	Groundwater
MOU	Manner of use of the water right.	
	IRR	Irrigation
	STK	Stock
	DOM	Domestic
	OTH	Other
POD	Point of diversion.	
QQ	The quarter-quarter of the section in which the point of diversion or source is located.	
Q	The quarter of the section in which the point of diversion or source is located.	
S	The section in which the point of diversion or source is located.	
T	The township in which the point of diversion or source is located.	
R	The range in which the point of diversion or source is located.	
DUTY	The amount of water appropriated by the right in acre-feet (either annually or seasonally, see "UNITS" below). In some cases, the duty is not explicit in terms of acre-feet because it is based on the number of animals or has not been determined. In such cases a conservative value of the diversion rate expanded over the period of use is used; this is the theoretical maximum that could be diverted and not necessarily the extent of the right since beneficial use is the basis, measure and the limit of the water right.	
UNITS	AFS is acre-feet per season. AFA is acre-feet annually. CFS is cubic feet per second.	

### **Explanation of Column Headings and Abbreviations for Tables (Cont.)**

SUP	Supplemental indicates a water right is supplemental to another water right.
TCD	Some rights are limited to a total combined duty (TCD), which can be less than the sum of the individual rights comprising the entire group. To properly calculate the appropriations on a source, a TCD value is needed to represent the entire group. If there is no TCD group, then the duty of the individual right is placed in this column for calculation purposes.
UG TCD GROUP	This is the list of groundwater rights that comprise a TCD group
OWNER OF RECORD	Owner of the water right as recorded in the files of the State Engineer. A water right may have more than one owner of record.



## APPENDIX A - Commitment and Availability Tables

Table A1 - Stream supply and availability

Table A2 - Spring supply and availability

Table A3 - Groundwater commitments

Table A1 - Delamar Valley Stream Supply and Availability

Source Name	APP	Status	MOU	QQ	Q	S	T	R	Existing Active Water Rights		Estimated Average Annual Flow		Estimated Amount of Water Available (AFA): Estimated Streamflow - Existing Rights = Available	Notes
									CFS	Duty (AFA)	CFS	AFA		
									DELAMAR FLAT RESERVOIR	4462	CER	STK		
DELAMAR FLAT RESERVOIR	5301	CER	STK	SE	NE	16	05S	64E	0.014	10.00	Unknown	Unknown	RES	
POINT OF ROCK RESERVOIR	5316	CER	STK	NW	NE	31	04S	64E	0	15.68	Unknown	Unknown	RES, 6000 HEAD OF SHEEP	
THIRIOT RESERVOIR	5318	CER	STK	SW	SE	26	04S	63E	0.01	3.99	Unknown	Unknown	RES, 6000 HEAD OF SHEEP	
WHITE SAGE RESERVOIR	6576	CER	STK	NW	SW	21	04S	63E	0.014	4.97	Unknown	Unknown	RES, 2200 HEAD OF SHEEP	
NORTH SIDE RESERVOIR	6885	CER	STK	NW	SE	7	07S	63E	0	9.97	Unknown	Unknown	RES, 200 CATTLE	
SOUTH WEST RESERVOIR	6886	CER	STK	SE	NE	33	07S	63E	0	9.97	Unknown	Unknown	RES, 200 CATTLE	
DRY LAKE	9659	CER	STK	NW	NW	12	06S	63E	0.009	5.98	Unknown	Unknown	OSW	
GREGERSON BASIN	10440	CER	STK	SW	SE	20	07S	64E	0.003	2.79	Unknown	Unknown	RES, 75 CATTLE AND 50 HORSES	
DELMAR VALLEY DRAINAGE	10654	CER	STK	SW	NE	16	07S	63E	0.007	5.00	Unknown	Unknown	OSW, 250 CATTLE	
DELAMAR FLAT HARDPAN	10659	CER	STK	NE	SE	17	07S	63E	0	9.97	Unknown	Unknown	RES	
DELAMAR FLAT RESERVOIR	10736	CER	STK	NW	NE	35	04S	63E	0.005	3.99	Unknown	Unknown	RES, 300 CATTLE	
DELAMAR & CEDAR WASHES	10789	CER	STK	NE	SE	26	06S	63E	0.012	8.96	Unknown	Unknown	OSW, 300 CATTLE AND 100 HORSES	

Table A2 - Delamar Valley Spring Supply and Availability

Spring Name	APP	Status	MOU	Latitude	Longitude	Existing Active Water Rights		Estimated Average Annual Discharge		Estimation Method	Estimated Amount of Water Available (AFA): Estimated Discharge - Existing Rights = Available		Notes
				NAD 83	NAD 83	CFS	Duty (AFA)	CFS	AFA				
ABANDONED SPRING	52115	CER	STK	-114.72852	37.49862	0.002	1.14	0.003	2.42	PBU	1	50 CATTLE. TCD=6.57MGA	
BEN HUR SPRING	V01550	VST	STK	-114.79556	37.33500	0.025	0.12		0.12	Proof Filing	0	SUFFICIENT FOR 10 HEAD OF CATTLE.	
BIRD SPRING	4622	CER	STK	-114.31583	37.46806	0.002	0.55	0.006	4.52	PBU	4	25 head of cattle	
BISHOP SPRING	V01598	VST	STK	-114.76667	37.45111	0.025	0.92		0.92	Proof Filing	0	50 CATTLE	
BOULDER SPRING	V01420	VST	STK	-115.02278	37.48278	0.025	13.44		13.44	Proof Filing	0	3000 sheep	
BRUNO SPRING	4620	CER	STK	-115.02501	37.49663	0.002	0.71	0.013	9.05	PBU	8	50 CATTLE	
Cottonwood Spring	V01399	VST	STK			0.025	2.24					100 CATTLE	
Cottonwood Spring	52113	CER	STK			0.008	5.65	0.008	5.65	PBU		900 CATTLE. TCD=6.57MGA	
Cottonwood Spring	5782	CER	STK			0.012	9.05	0.013	9.05	PBU		500 CATTLE	
Cottonwood Spring	5783	CER	STK			0.015	10.86	0.013	9.05	PBU		500 CATTLE	
<b>Cottonwood Spring Total</b>				-114.74467	37.53451	0.060	27.804	0.013	9.05	Permit 5782 PBU	0		
COYOTE SPRING	V01419	VST	STK	-114.73276	37.50082	0.025	22.40		22.40	Proof Filing	0	5000 HEAD OF SHEEP	
E.SIDE BOULDER MTN SPG	4632	CER	STK	-114.98501	37.50496	0.003	2.12	0.025	18.10	PBU	16	100 CATTLE	
EIGHT MILE SPRING	10088	CER	STK			0.003	2.24	0.013	9.05	PBU		100 CATTLE	
EIGHT MILE SPRING	3271	CER	STK			0.012	8.96					400 CATTLE	
<b>Eight Mile Spring Total</b>				-114.97750	37.46139	0.015	11.201	0.013	9.05	Permit 10088 PBU	0		
FENCELINE SPR	R04339	RES	OTH	-114.80528	37.54028	0.001	0.38	0.001	0.38	Proof Filing	0	15 HORSES, 10 DEER	
FLOYD SPRING	4973	CER	STK	-114.28833	36.96306	0.002	1.14	0.002	1.61	PBU	0	50 COWS.	
GRASSY SPRING	10189	CER	STK			0.025	18.11	0.025	18.10	PBU		300 TO 1500 CATTLE	
GRASSY SPRING	52112	CER	STK			0.008	5.80	0.022	16.13	PBU		260 CATTLE. TCD=6.57MGA	
GRASSY SPRING	V01400	VST	STK			0.025	0.00					600 CATTLE	
<b>Grassy Spring Total</b>				-114.79223	37.54107	0.058	23.907	0.007	4.84	SNWA & NDWR Measurements	0		
HORN SPRING	11378	CER	STK			0.002	1.44	0.002	1.68	PBU		75 HEAD OF CATTLE	
HORN SPRING	V01822	VST	STK			0.050	1.69					75 HEAD OF CATTLE	
<b>Horn Spring Total</b>				-114.72917	37.33885	0.052	3.130	0.002	1.68	Permit 11378 PBU	0		
HUGHIESPRING	V01654	VST	STK	-114.86751	37.55218	0.025	0.68		0.68	Proof Filing	0	30 HEAD OF CATTLE	
JENSEN SPRING	52118	CER	STK	-114.73389	37.43111	0.001	0.34	0.009	6.45	PBU	6	15 CATTLE	
JUMBO SPRING	11167	CER	STK			0.003	2.18		2.18	PBU		100 CATTLE	
JUMBO SPRING	V01520	VST	STK			0.000	0.00		0.00	Proof Filing		50 cattle	
<b>Jumbo Spring Total</b>				-114.77314	37.32143	0.003	2.179		2.18	Sum of Permits	0		
JUMP UP SPRING	11525	CER	STK	-114.84444	37.25722	0.003	2.24	0.003	2.17	PBU	0	100 CATTLE	

Table A2 - Delamar Valley Spring Supply and Availability

Spring Name	APP	Status	MOU	Latitude	Longitude	Existing Active Water Rights		Estimated Average Annual Discharge		Estimation Method	Estimated Amount of Water Available (AFA): Estimated Discharge - Existing Rights = Available		Notes
				NAD 83	NAD 83	CFS	Duty (AFA)	CFS	AFA				
LOWER SQUAW SPRING	4693	CER	STK	-114.73555	37.46556	0.011	7.98		7.98	PBU	0	500 CATTLE	
MONA SPRING	10629	CER	STK	-114.72584	37.40689	0.006	4.33	0.006	4.34	PBU	0	350 CATTLE AND HORSES.	
MOON SPRING	4621	CER	STK	-114.77473	37.53833	0.003	2.18	0.013	9.05	PBU	7	100 CATTLE	
PAHROCK	V01449	VST	STK	-114.98051	37.66435	0.100	13.44		13.44	Proof Filing	0	150 TO 600 CATTLE	
POINT OF ROCKS	3879	CER	STK	-114.95750	37.65611	0.009	3.87	0.009	3.87	PBU	0	1500 SHEEP	
PONY SPRING DRY CHANNEL	10627	CER	STK	-114.84444	37.25722	0.010	7.41		7.41	PBU	0		
ROBINSON SEAPS	52114	CER	STK	-114.74308	37.51825	0.003	2.39	0.003	2.42	PBU	0	900 CATTLE. TCD=6.57MGA	
RYE PATCH SPRING	V01418	VST	STK	-115.02224	37.47496	0.025	13.44		13.44	Proof Filing	0	3000 SHEEP	
SEEP SPRING	4894	PER	DOM	-114.81278	37.50945	0.025	18.10		18.10	Proof Filing	0		
THREE TUNNELS	3475	CER	IRR	-114.72528	37.42361	0.037	25.15		25.15	Proof Filing	0	12 acres	
THREE TUNNELS	9713	CER	MM	-114.73389	37.42361	0.050	25.00	0.050	36.20	PBU			
<b>Three Tunnels Total</b>						0.087	50.150	0.050	36.20	Permit 9713 PBU	0		
TUNNEL SPRING #1	51259	CER	STK			0.017	7.15	0.017	12.31	PBU		800 CATTLE	
TUNNEL SPRING #1	51260	CER	STK			0.017	7.37	0.017	12.31	PBU		800 HEAD OF CATTLE.	
<b>Tunnel Spring #1 Total</b>				-114.72389	37.42580	0.034	14.520	0.017	12.31	Permit 51259 PBU	0		
UPPER SQUAW SPRING	4695	CER	STK	-114.73555	37.46556	0.011	11.20		11.20	PBU	0	500 CATTLE	
GEORGE BLYTHE SPRING	V01022A01	VST	STK	-114.70470	37.45202	0.011	7.96		7.96	Proof Filing	0		
SEVENOKES SEEP	10551	CER	STK			0.003	2.24		2.24	PBU	0	OSW, 100 CATTLE	

Table A3 - Delamar Valley Groundwater Commitments

<b>APP</b>	<b>CER</b>	<b>Source</b>	<b>QQ</b>	<b>Q</b>	<b>S</b>	<b>T</b>	<b>R</b>	<b>MOU</b>	<b>SUP</b>	<b>Div Rate (CFS)</b>	<b>Duty</b>	<b>Units</b>
51261	12371	UG	SE	SE	12	07S	64E	STK		0.01	7.24	AFA

## APPENDIX B

Owners of Record

APP	Owner of Record	STATUS	CERT	SOURCE	MOU	SUP
3271	PAGE, SID,PAGE, W.B.,RICHARDS, J.W.	CER	1923	SPR	STK	
3475	LDS	CER	427	SPR	IRR	
3879	CORP PRESIDING BISHOP CHURCH JC LDS	CER	1090	SPR	STK	
4462	CORP PRESIDING BISHOP CHURCH JC LDS	CER	3186	RES	STK	
4620	GARDNER RANCH CO.	CER	727	SPR	STK	
4621	DUFFIN JR., PRESS W.,DUFFIN, MAME R.,DUFFIN, PRESS W. SR.,DUFFIN, THOMAS J.	CER	728	SPR	STK	
4622	GARDNER RANCH COMPANY	CER	729	SPR	STK	
4632	NEVADA ROCK AND SAND CORPORATION	CER	704	SPR	STK	
4693	DUFFIN, MAINE R.,DUFFIN, PRESS W. JR.,DUFFIN, PRESS W. SR.,DUFFIN, THOMAS J.	CER	730	SPR	STK	
4695	GARDNER RANCH COMPANY	CER	731	SPR	STK	
4894	SAWYER, TILLIE B.	PER		SPR	DOM	
4973	GARDNER RANCH CO.	CER	735	SPR	STK	
5301	DUFFIN, MAME R.,DUFFIN, PRESS W. JR.,DUFFIN, PRESS W. SR.,DUFFIN, THOMAS J.	CER	736	RES	STK	
5316	CARTER, DONA,CORP PRESIDING BISHOP CHURCH JC LDS,CULVERWELL, CHARLES	CER	581	RES	STK	
5318	CORP PRESIDING BISHOP CHURCH JC LDS,HENRIE, S.E.	CER	582	RES	STK	
5782	DUFFINS, MAMIE R.,DUFFINS, PRESS W. JR.,DUFFINS, PRESS W. SR.,DUFFINS, THOMAS J.	CER	1005	SPR	STK	
5783	DUFFINS, MAMIE R.,DUFFINS, PRESS W. JR.,DUFFINS, PRESS W. SR.,DUFFINS, THOMAS J.	CER	1006	SPR	STK	
6576	NEVADA ROCK AND SAND CORPORATION	CER	1500	RES	STK	
6885	L D S	CER	1225	RES	STK	
6886	LDS	CER	1226	RES	STK	
9659	LDS	CER	2109	OSW	STK	
9713	LDS	CER	2423	SPR	MM	
10088	NEVADA ROCK AND SAND CORPORATION	CER	2622	SPR	STK	
10189	CORP PRESIDING BISHOP CHURCH JC LDS	CER	2403	SPR	STK	
10440	LDS	CER	2720	RES	STK	
10551	CORP PRESIDING BISHOP CHURCH JC LDS	CER	2595	OSW	STK	
10627	THE CHURCH OF JESUS CHRIST OF LATTER DAY SAINTS	CER	2615	SPR	STK	
10629	CORP PRESIDING BISHOP CHURCH JC LDS	CER	2596	SPR	STK	
10654	LDS	CER	2633	OSW	STK	
10659	LDS	CER	2637	RES	STK	
10736	LDS	CER	2668	RES	STK	
10789	LDS	CER	2722	OSW	STK	
11167	LDS	CER	3073	SPR	STK	
11378	CORP PRESIDING BISHOP CHURCH JC LDS	CER	4047	SPR	STK	
11525	CHURCH OF J. CHRIST LATTER DAY SAINT	CER	3356	SPR	STK	
51259	LDS	CER	12369	SPR	STK	

APP	Owner of Record	STATUS	CERT	SOURCE	MOU	SUP
51260	LDS	CER	12370	SPR	STK	
51261	LDS	CER	12371	UG	STK	
52112	CORP PRESIDING BISHOP CHURCH JC LDS	CER	13782	SPR	STK	
52113	H.H. LAND AND CATTLE COMPANY	CER	14737	SPR	STK	
52114	LDS	CER	14738	SPR	STK	
52115	CORP PRESIDING BISHOP CHURCH JC LDS	CER	14739	SPR	STK	
52118	CORP PRESIDING BISHOP CHURCH JC LDS	CER	14740	SPR	STK	
R04339	BLM	RES		SPR	OTH	
V01022A01	LDS, PRESIDING BISHOP	VST		SPR	STK	
V01022A02	LINCOLN LND & LVSTK	VST		SPR	STK	
V01022A03	DUFFIN, PRESS W ET ALL	VST		SPR	STK	
V01022A04	BALLOW, CARL,LDS, PRESIDING BISHOP, LONGHORN CATTLE CO, SCHLARMAN R, BALLOW R	VST		SPR	STK	
V01022A05	LDS, PRESIDING BISHOP	VST		SPR	STK	
V01022A06	LDS, PRESIDING BISHOP	VST		SPR	STK	
V01399	HENRIE, JAMES JR.	VST		SPR	STK	
V01400	DUFFIN, MAMIE RYAN, DUFFIN, PRESS, DUFFIN, PRESS R., DUFFIN, TOM	VST		SPR	STK	
V01418	HENRIE, JAMES	VST		SPR	STK	
V01419	MACKIE, A.J.	VST		SPR	STK	
V01420	HENRIE, JAMES	VST		SPR	STK	
V01449	NEVADA ROCK AND SAND CORPORATION	VST		SPR	STK	
V01520	GARDNER RANCH CO	VST		SPR	STK	
V01550	DUFFIN, MAMIE RYAN, DUFFIN, TOM, HIKO LAND AND CATTLE CO.	VST		SPR	STK	
V01598	LINCOLN LAND AND LIVESTOCK CO.	VST		SPR	STK	
V01654	DUFFIN, MAME R., DUFFIN, PRESS W. SR., DUFFIN, PROSS W. JR., DUFFIN, THOMAS J.	VST		SPR	STK	
V01822	HORN, C.A.	VST		SPR	STK	



# APPENDIX C

List of Available Flow Measurements

## Delamar Valley Flow Measurements

<i>Station</i>	<i>Data Source</i>	<i>Measure Date</i>	<i>Rating Code</i>	<i>Longitude NAD83</i>	<i>Latitude NAD83</i>	<i>Discharge (gpm)</i>	<i>Discharge (cfs)</i>	<i>Notes</i>
Grassy Spring	USGS	5/1/1980	Unknown			7	0.02	REPORT
Grassy Spring	SNWA	6/2/2004	Fair			0.1	0	Discharge is .06 gpm,<.002. Estimated Q from 1 PVC pipe into trough.
Grassy Spring	SNWA	7/14/2005	Good			6	0.013	--
Grassy Spring	SNWA	7/25/2005	Fair			5.4	0.012	--
Grassy Spring	SNWA	5/10/2010	Excellent			0	0	No discharge into trough. Ground around spring head was damp but there was no discharge.
Grassy Spring	SNWA	11/8/2010	Fair			0.449	0.001	Took photos of spring and trough for DDC Stipulation. pH seems low.
Grassy Spring	NDWR	05/19/11	Good	37.54107	-114.79223	0.3		15 ft deep dug out spring in small wash in andesitic volc at range front
Cedar Wash	NDWR	05/19/11	Good	37.44551	-114.79284	12.3		Pipeline near mouth of Cedar Wash, collected flow from numerous springs, including Tunnel Springs, Mona Spring, Three Tunnels.