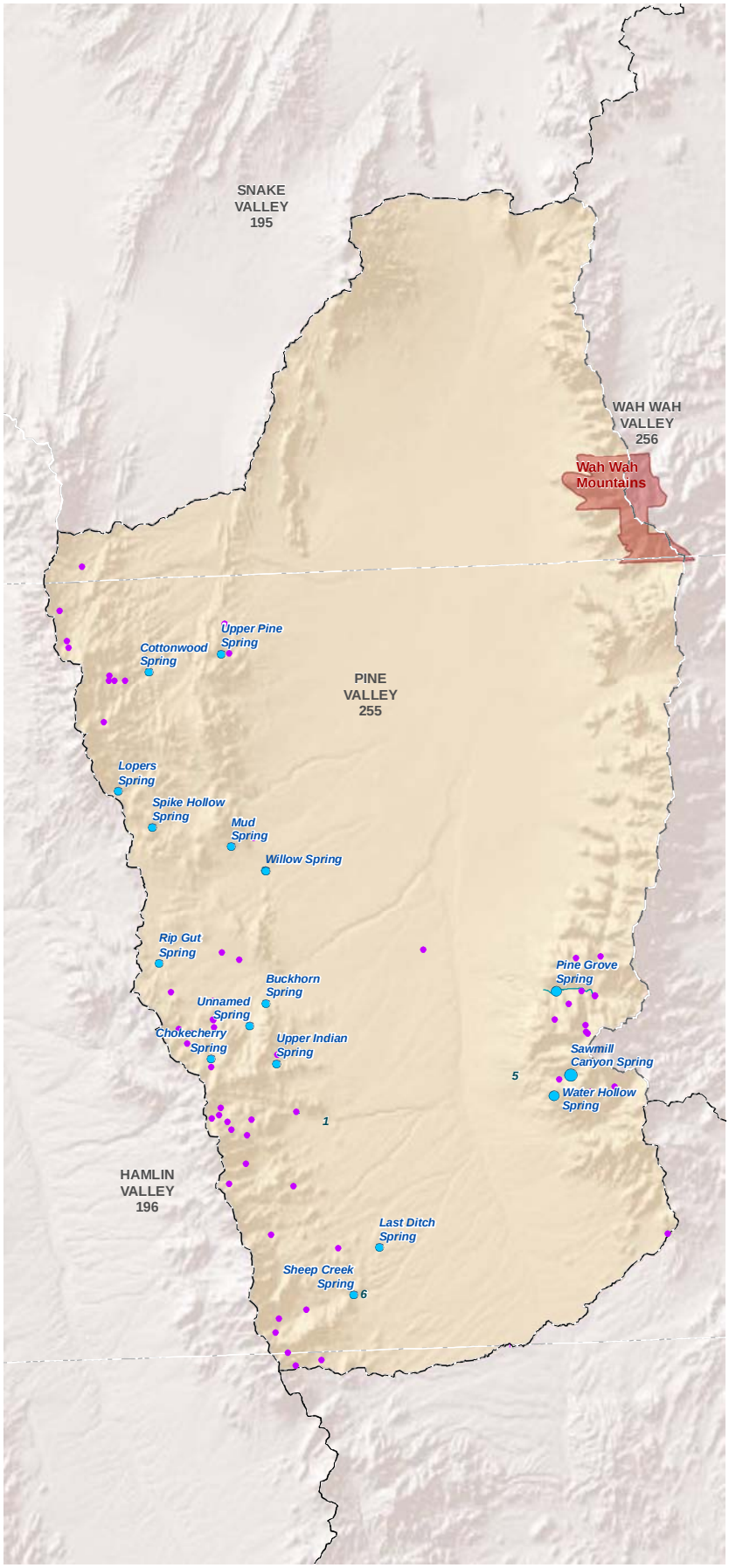
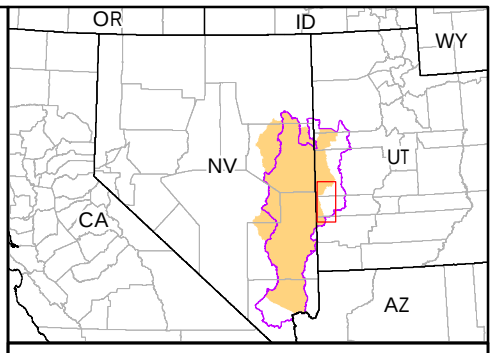
F3.3.17

Hydrologic Baseline Data Summary – Pine Valley





Legend

Inventoried Springs

Discharge (gpm)

- 0 - 10
- 10 - 100
- 100 - 1000
- Additional Spring Location
- Perennial Stream Reach
- Hydrologic Model Boundary
- Natural Resources Region of Study
- Hydrographic Basin
- BLM Areas of Critical Environmental Concern

#	Stream Name
1	Indian Creek
4	Pine Grove Creek
5	Sawmill Canyon
6	Sheep Creek

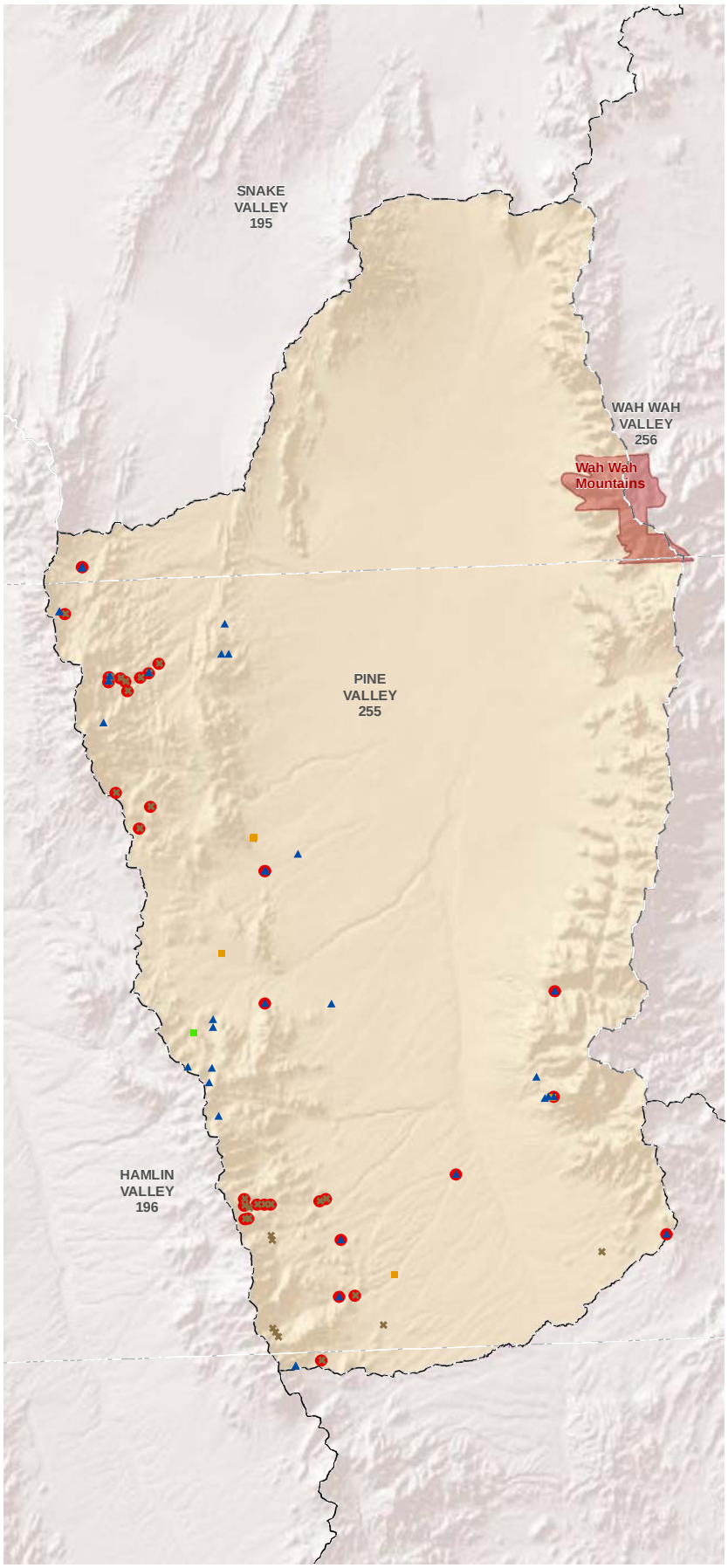
Proposed Clark, Lincoln, and White Pine Counties Groundwater Development Project

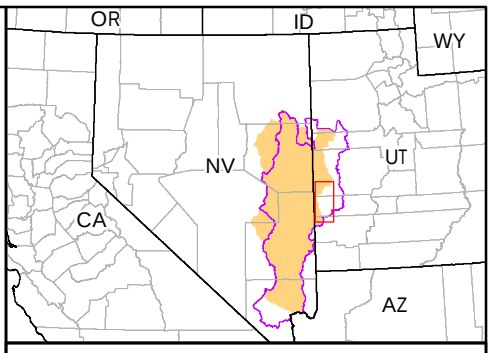
Figure F3.3.17-1

Pine Valley
Perennial Streams and Springs

0 5 10 Miles
0 5 10 15 Kilometers
1:400,000

No Warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data.





Legend

Water Rights (Manner of Use)

- Domestic
- Irrigation
- Stockwatering
- Other

Federal Agency Water Rights

- BLM
- Hydrologic Model Boundary
- Natural Resources Region of Study
- Hydrographic Basin
- BLM Areas of Critical Environmental Concern

Source: Nevada Division of Water Resources and Utah Division of Water Rights

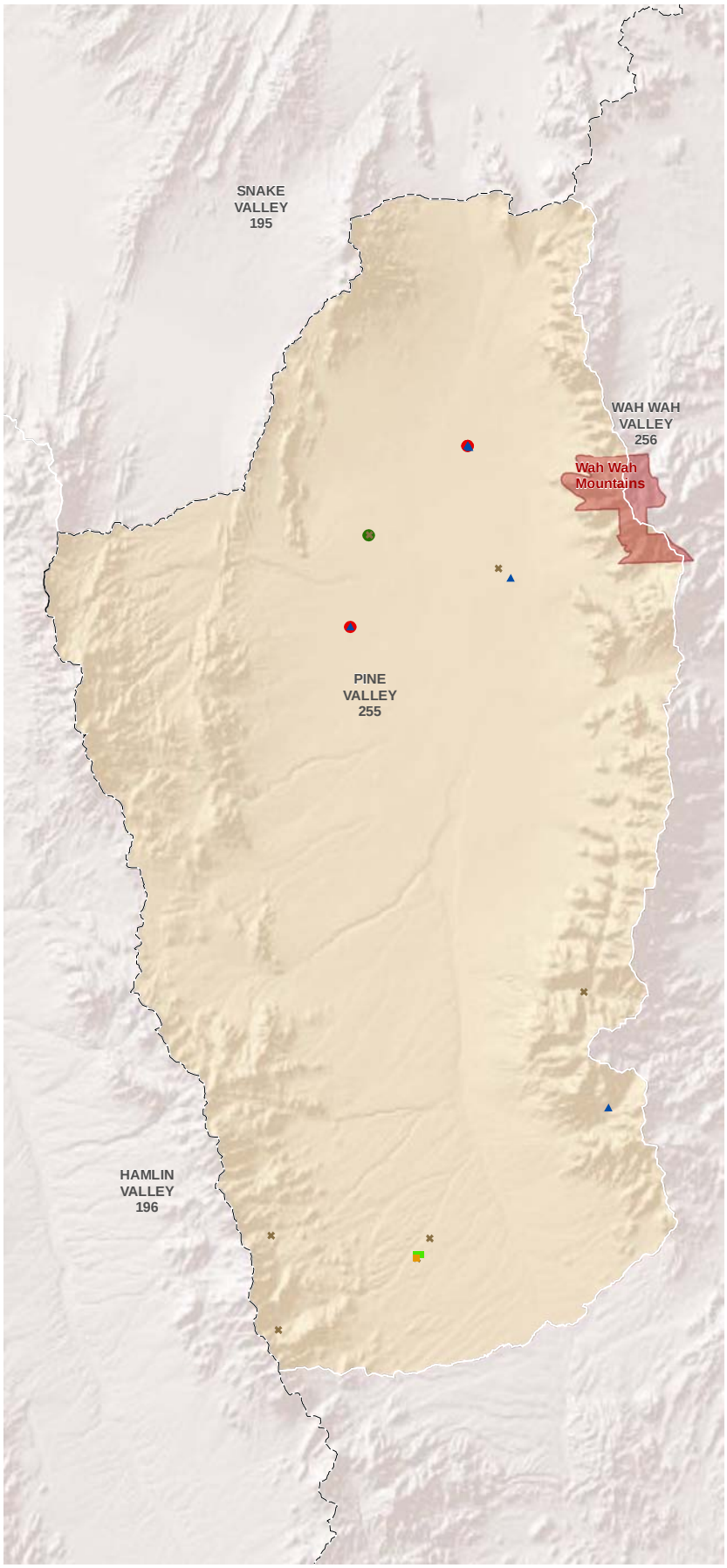
Proposed Clark, Lincoln, and White Pine Counties Groundwater Development Project

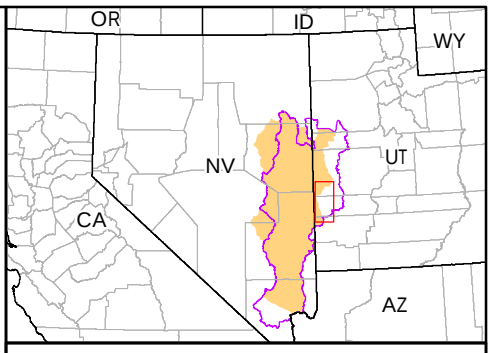
Figure F3.3.17-2

Pine Valley Surface Water Rights

0 5 10 Miles
0 5 10 15 Kilometers
1:400,000

No Warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data.





Legend

Water Rights (Manner of Use)

- Domestic
- Irrigation
- Stockwatering
- Other

Federal Agency Water Rights

- BLM
- USFS
- Hydrologic Model Boundary
- Natural Resources Region of Study
- Hydrographic Basin
- BLM Areas of Critical Environmental Concern

Source: Nevada Division of Water Resources and Utah Division of Water Rights

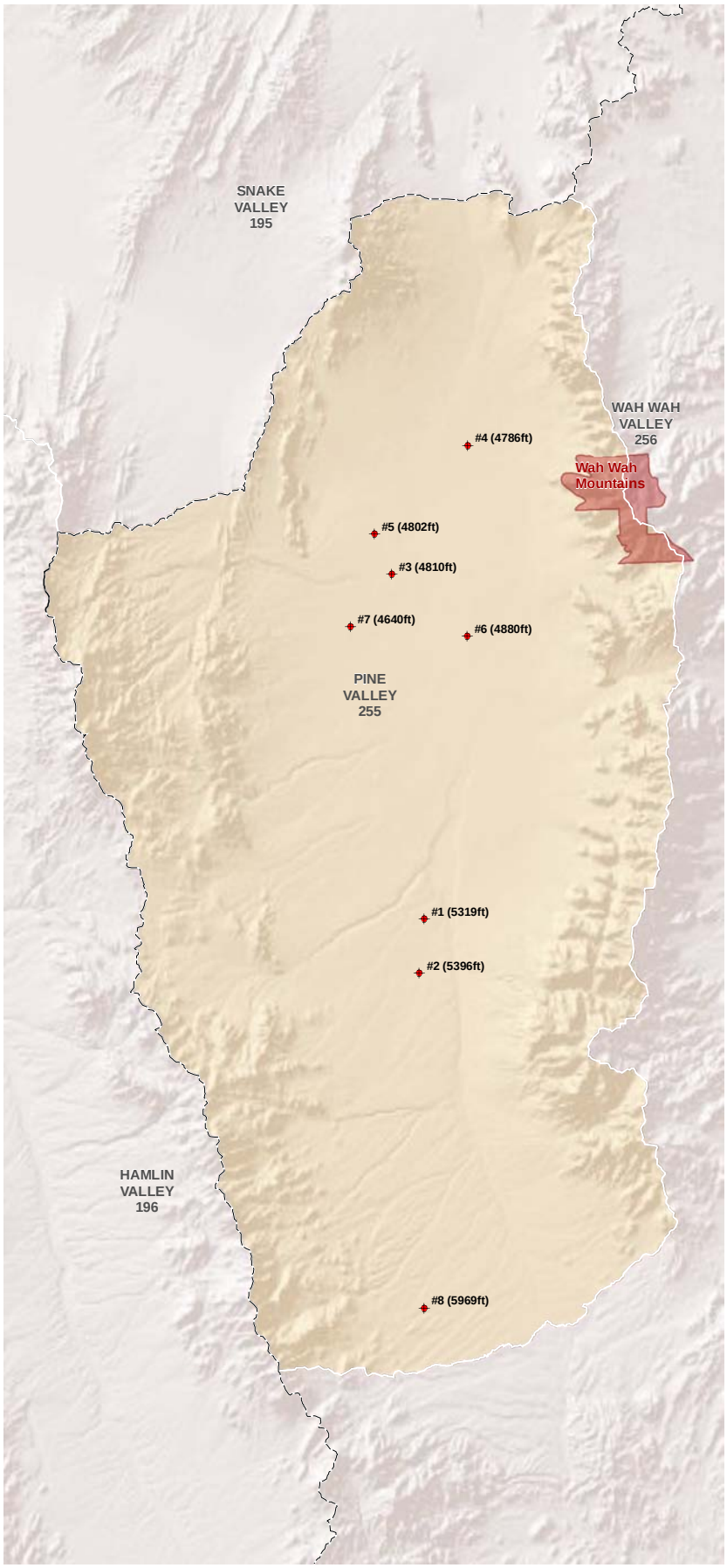
Proposed Clark, Lincoln, and White Pine Counties Groundwater Development Project

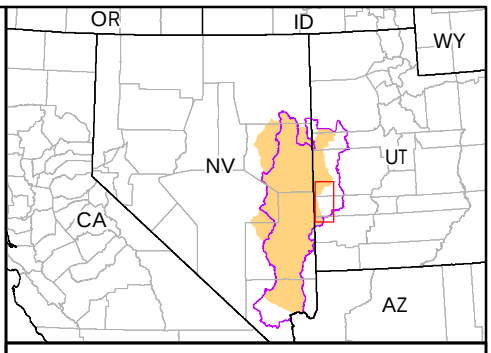
Figure F3.3.17-3

Pine Valley Groundwater Rights

0 5 10 Miles
0 5 10 15 Kilometers
1:400,000

No Warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data.





Legend

Monitoring Points

- Basin Fill Well (Groundwater elevation, ft-amsl)
- Hydrologic Model Boundary
- Natural Resources Region of Study
- Hydrographic Basin
- BLM Areas of Critical Environmental Concern

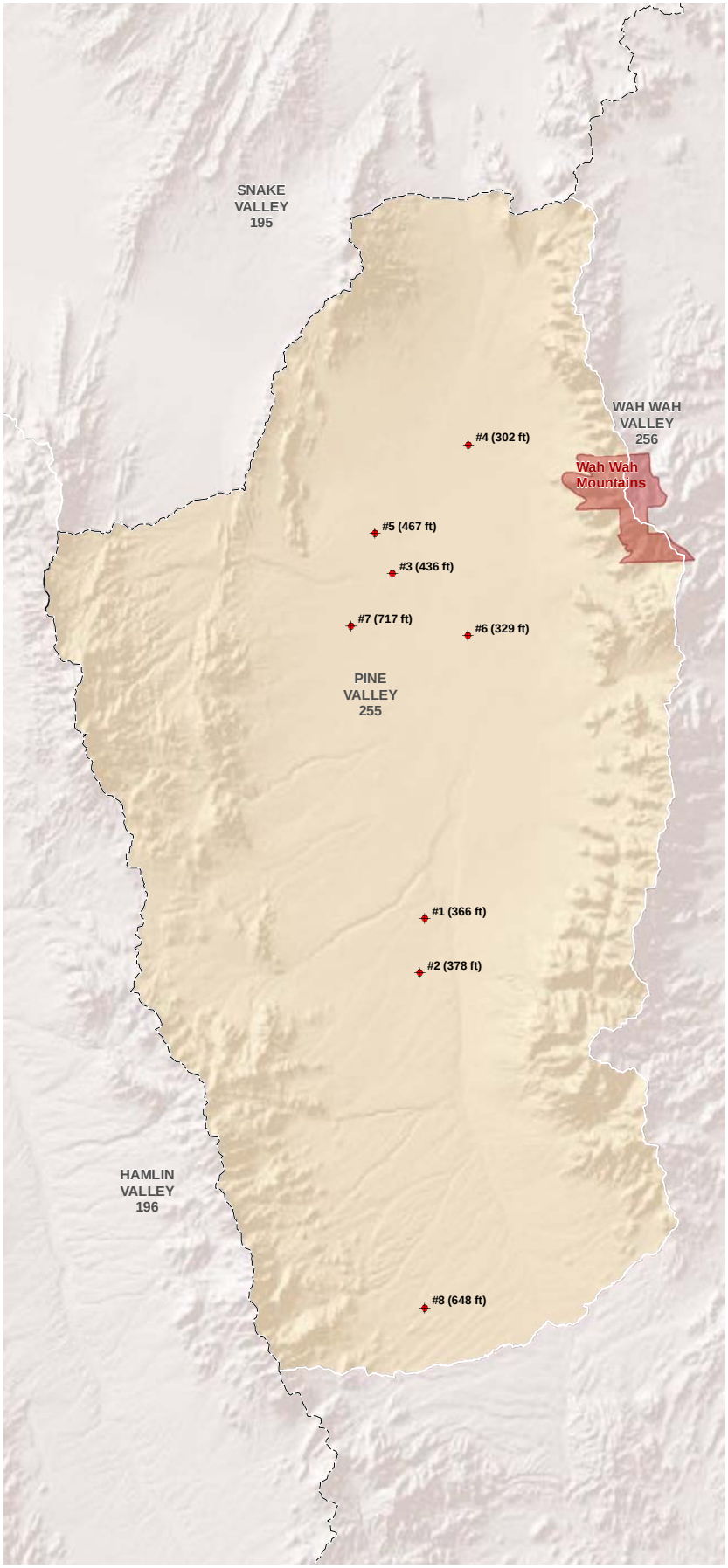
Proposed Clark, Lincoln, and White Pine Counties Groundwater Development Project

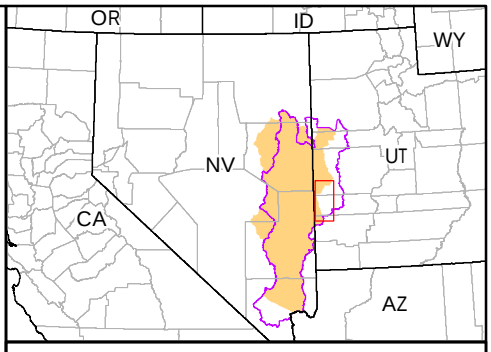
Figure F3.3.17-4

Pine Valley - Basin Fill Aquifer Water-Level Elevation Map

0 5 10 Miles
0 5 10 15 Kilometers
1:400,000

No Warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data.





Legend

Monitoring Points

- Basin Fill Well (Depth-to-Water, ft)
- Hydrologic Model Boundary
- Natural Resources Region of Study
- Hydrographic Basin
- BLM Areas of Critical Environmental Concern

Proposed Clark, Lincoln, and White Pine Counties Groundwater Development Project

Figure F3.3.17-5

Pine Valley - Basin Fill Aquifer Depth-to-Water Map

0 5 10 Miles
0 5 10 15 Kilometers
1:400,000

No Warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data.

Table F3.3.17-1 Inventoried Springs - Pine Valley

GW Flow System	Basin Number	Basin Name	Id	Name	Avg. Flow (gpm)	Easting	Northing	Elevation (feet amsl)	Data Source
Great Salt Lake Desert	255	PINE VALLEY	SPPIV0039	Upper Pine Spring	0.8	773512	4269430	6716	NHD High Res.
Great Salt Lake Desert	255	PINE VALLEY	SPPIV0017	Cottonwood Spring	2.0	769126	4268331	6909	NHD High Res.
Great Salt Lake Desert	255	PINE VALLEY	SPPIV0022	Lopers Spring	1.0	767258	4261104	7510	NHD High Res.
Great Salt Lake Desert	255	PINE VALLEY	SPPIV0035	Spike Hollow Spring	2.0	769338	4258915	7323	NHD High Res.
Great Salt Lake Desert	255	PINE VALLEY	SPPIV0026	Mud Spring	9.0	774114	4257761	6663	SNWA 2010c
Great Salt Lake Desert	255	PINE VALLEY	SPPIV0043	Willow Spring	3.6	776205	4256289	6280	SNWA 2010c
Great Salt Lake Desert	255	PINE VALLEY	SPPIV0031	Rip Gut Spring	9.0	769723	4250669	7031	NHD High Res.
Great Salt Lake Desert	255	PINE VALLEY	SPPIV0027	Pine Grove Spring	19.7	793775	4249006	6713	NHD High Res.
Great Salt Lake Desert	255	PINE VALLEY	SPPIV0012	Buckhorn Spring	10.0	776189	4248263	6657	Stephens 1976
Great Salt Lake Desert	255	PINE VALLEY	SPPIV0037	Unnamed Spring	9.0	775228	4246889	6818	NHD High Res.
Great Salt Lake Desert	255	PINE VALLEY	SPPIV0016	Chokecherry Spring	7.0	772899	4244905	7300	NHD High Res.
Great Salt Lake Desert	255	PINE VALLEY	SPPIV0038	Upper Indian Spring	5.0	776843	4244602	7005	NHD High Res.
Great Salt Lake Desert	255	PINE VALLEY	SPPIV0033	Sawmill Canyon Spring	448.8	794671	4243914	7631	NHD High Res.
Great Salt Lake Desert	255	PINE VALLEY	SPPIV0042	Water Hollow Spring	27.0	793657	4242643	7306	SNWA 2010c
Great Salt Lake Desert	255	PINE VALLEY	SPPIV0020	Last Ditch Spring	10.0	783064	4233465	6663	NHD High Res.
Great Salt Lake Desert	255	PINE VALLEY	SPPIV0034	Sheep Creek Spring	7.6	781523	4230589	6913	NHD High Res.

Table F3.3.17-2 Pine Valley Water Rights Inventory

Basin Number	Basin Name	Water Right Number	Priority Date	Status[1,2]	Source[3]	Section	Township	Range	Diversion Rate (cfs)	Annual Duty (AFY)	State[4]	Type of Use	Owner of Record
255	Pine Valley	14-54	1/1/1903	DILIGENCE CLAIM	OSW	35	27S	18W	0.01	7.96	Utah	Stockwatering	BLM
255	Pine Valley	14-67	3/12/1903	DILIGENCE CLAIM	OSW	1	31S	18W	0.01	7.96	Utah	Other	BLM
255	Pine Valley	14-5	2/27/1905	CERTIFICATE	OSW	7	29S	18W	0.06	43.44	Utah	Stockwatering	MURRAY SHEEP COMPANY
255	Pine Valley	14-6	2/27/1905	CERTIFICATE	OSW	8	29S	18W	0.05	32.58	Utah	Stockwatering	KAY AND SUSAN GRIFFITHS
255	Pine Valley	14-1	9/20/1906	APPROVED	OSW	16	28S	18W	0.01	4.34	Utah	Irrigation	JOHN RYAN
255	Pine Valley	14-4	12/31/1906	CERTIFICATE	OSW	16	29S	18W	0.05	36.20	Utah	Stockwatering	MURRAY SHEEP COMPANY
255	Pine Valley	14-10	11/22/1912	CERTIFICATE	OSW	9	26S	19W	0.00	1.45	Utah	Stockwatering	E. W. CLAY
255	Pine Valley	14-11	11/22/1912	CERTIFICATE	OSW	16	26S	18W	0.00	2.90	Utah	Stockwatering	E. W. CLAY
255	Pine Valley	14-12	11/22/1912	CERTIFICATE	OSW	26	26S	19W	0.00	2.90	Utah	Stockwatering	E. W. CLAY
255	Pine Valley	14-13	11/22/1912	CERTIFICATE	OSW	26	26S	19W	0.00	1.45	Utah	Stockwatering	E. C. CLAY
255	Pine Valley	14-7	11/22/1912	CERTIFICATE	OSW	25	26S	19W	0.00	2.17	Utah	Stockwatering	E. W. CLAY
255	Pine Valley	14-8	11/22/1912	CERTIFICATE	OSW	2	27S	19W	0.00	1.45	Utah	Stockwatering	W. CLAY
255	Pine Valley	14-9	11/22/1912	CERTIFICATE	OSW	3	26S	19W	0.01	3.62	Utah	Stockwatering	E. W. CLAY
255	Pine Valley	14-19	6/28/1920	CERTIFICATE	OSW	32	30S	17W	0.38	278.00	Utah	Other	JOSEPH V. DECKER
255	Pine Valley	14-21	5/1/1922	CERTIFICATE	OSW	35	27S	18W	0.01	6.52	Utah	Stockwatering	THOMAS D. ROBINSON
255	Pine Valley	14-23	7/20/1926	CERTIFICATE	OSW	8	29S	18W	0.00	1.45	Utah	Stockwatering	PETER MACKELPRANG
255	Pine Valley	14-30	10/1/1948	CERTIFICATE	OSW	27	28S	18W	0.02	15.93	Utah	Stockwatering	BLM
255	Pine Valley	14-33	4/12/1955	CERTIFICATE	OSW	27	27S	18W	0.05	36.20	Utah	Irrigation	REED M. CARTER, DANIEL CARTER AND MITCHELL CARTER
255	Pine Valley	14-34	12/24/1955	CERTIFICATE	OSW	27	27S	18W	0.00	0.00	Utah	Irrigation	REED M. CARTER, DANIEL CARTER AND MITCHELL CARTER
255	Pine Valley	14-34	12/24/1955	CERTIFICATE	OSW	27	27S	18W	0.00	0.00	Utah	Irrigation	REED M. CARTER, DANIEL CARTER AND MITCHELL CARTER
255	Pine Valley	14-32	1/9/1956	CERTIFICATE	OSW	27	27S	18W	0.05	36.20	Utah	Other	REED M. CARTER, DANIEL CARTER AND MITCHELL CARTER
255	Pine Valley	14-36	7/24/1964	CERTIFICATE	OSW	19	30S	17W	0.02	13.03	Utah	Other	BLM
255	Pine Valley	14-38	11/17/1964	CERTIFICATE	OSW	19	30S	17W	0.00	0.00	Utah	Stockwatering	CEDAR CITY DISTRICT USA BUREAU OF LAND MANAGEMENT
255	Pine Valley	14-39	11/17/1964	CERTIFICATE	OSW	7	30S	17W	0.00	0.00	Utah	Stockwatering	CEDAR CITY DISTRICT USA BUREAU OF LAND MANAGEMENT
255	Pine Valley	14-75	10/7/1981	CERTIFICATE	OSW	3	26S	19W	0.02	10.86	Utah	Stockwatering	RICHFIELD DISTRICT USA BUREAU OF LAND MANAGEMENT
255	Pine Valley	14-54	6/25/1984	APPROVED	OSW	35	27S	18W	0.01	7.96	Utah	Stockwatering	CEDAR CITY DISTRICT USA BUREAU OF LAND MANAGEMENT
255	Pine Valley	14-90	7/12/1991	CERTIFICATE	OSW	9	26S	19W	0.00	1.45	Utah	Other	BLM
255	Pine Valley	14-92	7/12/1991	CERTIFICATE	OSW	25	27S	19W	0.00	2.90	Utah	Other	BLM
255	Pine Valley	14-93	7/12/1991	APPROVED	OSW	24	27S	19W	0.01	5.07	Utah	Other	CEDAR CITY DISTRICT USA BUREAU OF LAND MANAGEMENT
255	Pine Valley	14-94	7/12/1991	CERTIFICATE	OSW	25	26S	19W	0.00	2.90	Utah	Other	BLM
255	Pine Valley	14-96	9/23/1992	CERTIFICATE	OSW	26	26S	19W	0.00	2.90	Utah	Other	MONTE AND LYNN BETTRIDGE
255	Pine Valley	14-100	9/25/1992	CERTIFICATE	OSW	26	26S	19W	0.01	4.34	Utah	Other	BLM
255	Pine Valley	14-99	9/25/1992	CERTIFICATE	OSW	26	26S	19W	0.01	7.96	Utah	Other	BLM
255	Pine Valley	14-102	12/16/1992	CERTIFICATE	OSW	3	30S	18W	0.01	7.96	Utah	Other	BLM
255	Pine Valley	14-105	12/16/1992	CERTIFICATE	OSW	25	26S	19W	0.01	7.96	Utah	Other	BLM
255	Pine Valley	14-81	11/8/1993	APPROVED	OSW	26	26S	19W	0.22	161.44	Utah	Other	J. CHESTER YOUNG
255	Pine Valley	14-75	2/4/1994	APPROVED	OSW	3	26S	19W	0.02	10.86	Utah	Stockwatering	RICHFIELD DISTRICT USA BUREAU OF LAND MANAGEMENT
255	Pine Valley	14-110	4/27/1995	CERTIFICATE	OSW	1	30S	18W	0.00	0.00	Utah	Other	BLM
255	Pine Valley	14-110	4/27/1995	CERTIFICATE	OSW	1	30S	18W	0.00	0.00	Utah	Other	BLM
255	Pine Valley	14-87	4/26/1999	APPROVED	OSW	2	31S	18W	0.05	32.58	Utah	Stockwatering	ESCALANTE FARMS COMPANY
255	Pine Valley	14-116	5/17/2004	APPROVED	OSW	32	28S	18W	0.00	0.00	Utah	Domestic	ORIN R. SPEIRS SPECIAL TRUST #1
255	Pine Valley	14-117	8/5/2005	APPROVED	OSW	34	30S	18W	0.00	0.00	Utah	Other	MCCORNICK LAND LLC,
255	Pine Valley	14-117	8/5/2005	APPROVED	OSW	34	30S	18W	0.00	0.00	Utah	Other	MCCORNICK LAND LLC,
255	Pine Valley	14-117	8/5/2005	APPROVED	OSW	34	30S	18W	0.00	0.00	Utah	Other	MCCORNICK LAND LLC,
255	Pine Valley	14-120	7/13/2007	APPROVED	OSW	10	30S	18W	0.00	0.00	Utah	Other	KERRY SHERWOOD & MARK WHITNEY
255	Pine Valley	14-2	9/20/1906	APPROVED	SPR	0			0.00	0.00	Utah	Irrigation	JOHN RYAN
255	Pine Valley	14-14	12/14/1910	CERTIFICATE	SPR	0			0.00	0.00	Utah	Stockwatering	E. W. CLAY
255	Pine Valley	14-112	5/10/1911	CERTIFICATE	SPR	0			0.28	0.00	Utah	Irrigation	DUSTY PULSIPHER
255	Pine Valley	14-10	11/22/1912	CERTIFICATE	SPR	0			0.00	0.00	Utah	Stockwatering	E. W. CLAY
255	Pine Valley	14-17	11/21/1919	CERTIFICATE	SPR	0			0.01	0.00	Utah	Stockwatering	JOHN R. ROBINSON
255	Pine Valley	14-18	11/21/1919	CERTIFICATE	SPR	0			0.00	0.00	Utah	Stockwatering	FAIRVIEW LAND & LIVESTOCK COMPANY

Table F3.3.17-2 Pine Valley Water Rights Inventory

Basin Number	Basin Name	Water Right Number	Priority Date	Status[1,2]	Source[3]	Section	Township	Range	Diversion Rate (cfs)	Annual Duty (AFY)	State[4]	Type of Use	Owner of Record
255	Pine Valley	14-46	1/1/1927	UG WATER CLAIM	SPR	0			0.01	0.00	Utah	Other	NELLIE R. EYRE
255	Pine Valley	14-24	6/15/1931	CERTIFICATE	SPR	0			0.04	0.00	Utah	Stockwatering	H. D. BAYLES
255	Pine Valley	14-35	1/22/1959	CERTIFICATE	SPR	0			0.05	0.00	Utah	Stockwatering	USA BUREAU OF LAND MANAGEMENT
255	Pine Valley	14-91	7/12/1991	CERTIFICATE	SPR	14	27S	19W	0.00	1.45	Utah	Other	BLM
255	Pine Valley	14-41	8/19/1997	APPROVED	SPR	0			0.06	0.00	Utah	Stockwatering	CEDAR CITY DISTRICT USA BUREAU OF LAND MANAGEMENT
255	Pine Valley	14-87	4/26/1999	APPROVED	SPR	0			0.05	0.00	Utah	Stockwatering	ESCALANTE FARMS COMPANY
255	Pine Valley	14-120	7/13/2007	APPROVED	SPR	10	30S	18W	0.00	0.00	Utah	Other	KERRY SHERWOOD & MARK WHITNEY
255	Pine Valley	14-121	12/6/2007	APPROVED	SPR	3	30S	18W	0.00	0.00	Utah	Other	LARY M. CARTER
255	Pine Valley	14-122	12/15/2008	APPROVED	SPR	32	28S	18W	0.00	0.00	Utah	Stockwatering	STATE OF UTAH SCHOOL AND INSTITUTIONAL TRUST LANDS
255	Pine Valley	14-123	12/15/2008	APPROVED	SPR	32	28S	18W	0.00	0.00	Utah	Stockwatering	STATE OF UTAH SCHOOL AND INSTITUTIONAL TRUST LANDS
255	Pine Valley	71-3765	18600101	DILIGENCE CLAIM	SPR	0			0.00	0.00	Utah	Stockwatering	USA BUREAU OF LAND MANAGEMENT
255	Pine Valley	14-15	5/10/1911	CERTIFICATE	STR	0			0.28	0.00	Utah	Irrigation	MEL D. BUNDY
255	Pine Valley	14-16	4/17/1912	CERTIFICATE	STR	0			0.02	0.00	Utah	Stockwatering	L.N. MARSDEN
255	Pine Valley	14-20	11/15/1920	CERTIFICATE	STR	0			0.01	0.00	Utah	Stockwatering	THOMAS D. ROBINSON
255	Pine Valley	14-22	6/17/1926	CERTIFICATE	STR	0			0.01	0.00	Utah	Stockwatering	HERMAN E. BAYLES
255	Pine Valley	14-31	10/16/1951	CERTIFICATE	STR	0			0.00	0.00	Utah	Stockwatering	USA BUREAU OF LAND MANAGEMENT
255	Pine Valley	14-97	9/25/1992	CERTIFICATE	STR	4	30S	18W	0.01	5.07	Utah	Other	BLM
255	Pine Valley	14-98	9/25/1992	CERTIFICATE	STR	4	30S	18W	0.01	7.96	Utah	Other	BLM
255	Pine Valley	14-98	9/25/1992	CERTIFICATE	STR	3	30S	18W	0.01	7.96	Utah	Other	BLM
255	Pine Valley	14-97	9/25/1992	CERTIFICATE	STR	4	30S	18W	0.01	5.07	Utah	Other	BLM
255	Pine Valley	14-98	9/25/1992	CERTIFICATE	STR	4	30S	18W	0.01	7.96	Utah	Other	BLM
255	Pine Valley	14-98	9/25/1992	CERTIFICATE	STR	3	30S	18W	0.01	7.96	Utah	Other	BLM
255	Pine Valley	14-103	12/16/1992	CERTIFICATE	STR	25	26S	19W	0.01	7.96	Utah	Other	BLM
255	Pine Valley	14-104	12/16/1992	CERTIFICATE	STR	26	26S	19W	0.01	7.96	Utah	Other	BLM
255	Pine Valley	14-103	12/16/1992	CERTIFICATE	STR	25	26S	18W	0.01	7.96	Utah	Other	BLM
255	Pine Valley	14-104	12/16/1992	CERTIFICATE	STR	26	26S	19W	0.01	7.96	Utah	Other	BLM
255	Pine Valley	14-112	8/10/1998	APPROVED	STR	0			0.28	0.00	Utah	Irrigation	DUSTY PULSIPHER
255	Pine Valley	14-45	11/30/1928	UG WATER CLAIM	UG	0			0.05	0.00	Utah	Stockwatering	THOMAS D. DEARDEN
255	Pine Valley	14-42	10/1/1929	UG WATER CLAIM	UG	0			0.04	0.00	Utah	Stockwatering	CARTER CATTLE FAMILY PARTNERSHIP, LP
255	Pine Valley	14-89	10/1/1929	UG WATER CLAIM	UG	0			0.03	0.00	Utah	Stockwatering	RICHFIELD DISTRICT USA BUREAU OF LAND MANAGEMENT
255	Pine Valley	14-47	1/1/1930	UG WATER CLAIM	UG	0			0.00	0.00	Utah	Stockwatering	NELLIE R. EYRE
255	Pine Valley	14-48	1/1/1930	UG WATER CLAIM	UG	0			0.08	0.00	Utah	Other	WAH WAH MINING COMPANY
255	Pine Valley	14-43	2/1/1931	UG WATER CLAIM	UG	0			0.03	0.00	Utah	Stockwatering	THOMAS BEARDEN
255	Pine Valley	14-44	11/14/1933	UG WATER CLAIM	UG	33	25S	17W	0.02	15.93	Utah	Other	USA FOREST SERVICE
255	Pine Valley	14-27	4/8/1944	CERTIFICATE	UG	0			0.02	0.00	Utah	Stockwatering	USA BUREAU OF LAND MANAGEMENT
255	Pine Valley	14-28	5/22/1944	CERTIFICATE	UG	10	30S	18W	0.09	68.05	Utah	Other	TINTIC STANDARD MINING COMPANY
255	Pine Valley	71-2820	10/30/1958	NO PROOF REQ	UG	0			0.00	0.00	Utah	Other	LEORNAL GARDNER
255	Pine Valley	14-108	6/7/1994	APPROVED	UG	0			0.00	0.00	Utah	Domestic	WILLIAM C. GARRETT
255	Pine Valley	14-108	6/7/1994	APPROVED	UG	0			0.00	0.00	Utah	Domestic	WILLIAM C. GARRETT
255	Pine Valley	14-114	1/10/2000	CERTIFICATE	UG	0			0.00	0.00	Utah	Other	WILLIAM C. GARRETT
255	Pine Valley	14-109	2/1/2000	APPROVED	UG	0			0.00	0.00	Utah	Irrigation	WILLIAM C. GARRETT
255	Pine Valley	14-109	12/7/2000	APPROVED	UG	0			0.00	0.00	Utah	Domestic	WILLIAM C. GARRETT
255	Pine Valley	14-89	12/18/2002	APPROVED	UG	0			0.00	0.00	Utah	Stockwatering	USA BUREAU OF LAND MANAGEMENT
255	Pine Valley	14-117	8/5/2005	APPROVED	UG	34	30S	18W	0.00	0.00	Utah	Other	MCCORNICK LAND LLC,
255	Pine Valley	14-119	11/21/2006	APPROVED	UG	0			0.00	0.00	Utah	Other	WILLIAM AND KATHERINE SAVAGE

[1]Table Includes only existing or "active" water rights.

[2] Monitoring wells and abandoned wells are excluded from this water-right listing.

[3]Source Types include:

EFF – Effluent

GEO – Geothermal

LAK – Lake

OGW – Other groundwater

OSW – Other surface water

RES – Reservoir

SPR – Spring

STR – Stream

UG – Underground (i.e., groundwater)

[4]Includes water rights for Utah as of April 2011

Table F3.3.17-3 Pine Valley Depth-to-Groundwater Data

Well ID	Site Description	Well Depth	Surface Elevation	Depth to Water	Water Elevation	Data Source
		(feet bgs)	(feet amsl)	(feet bgs)	(feet amsl)	
1	(C-28-17)11cca- 1	970	5,685	366	5,319	USGS[1]
2	(C-28-17)22dda- 1	2,006	5,774	378	5,396	USGS[1]
3	(C-26-17) 3cdd- 1	870	5,246	436	4,810	USGS[1]
4	(C-25-16)18bdd- 1	340	5,088	302	4,786	USGS[1]
5	(C-25-17)33dab-1	628	5,269	467	4,802	Stephens (1976)[2]
6	(C-26-16)19bbd-1	394	5,209	329	4,880	Stephens (1976)[2]
7	(C-26-17)17d	801	5,357	717	4,640	Stephens (1976)[2]
8	(C-30-17)27aaa-1	648	6,617	648	5,969	Stephens (1976)[2]

Data Sources:

[1] USGS (2010) Groundwater Watch (http://groundwaterwatch.usgs.gov/)

[2] Stephens (1976) - Table 5