EUREKA_033

Field Investigative Report and Analysis of the BLM's Public Water Reserves in the Preliminary Order of Determination in Support of Eureka County's Objections

1. While Eureka County supports efforts to expedite the Diamond Valley Adjudication, this should not come at the expense of reviewing and verifying the claims thoroughly and with great care and accuracy. The general approach by the State Engineer in making a determination on the BLM Public Water Reserves 107 (PWR 107) appears to have been merely to accept the BLM's Public Water Reserves at face value with very little, if any, review or verification. We argue that proper and thorough review and analysis would have determined that most, if not all, of the 27 PWRs the State Engineer found as valid are in actuality not valid. This has created many issues and erroneous findings in the Preliminary Order of Determination that could have been easily avoided if a more thorough review had been performed for ALL BLM PWR 107 claims.

   As the Preliminary Order of Determination (POD) acknowledges, any valid PWR 107 is not just simply a reservation of an amount of water. Valid PWRs are land reservations reserving either the 40 acre land subdivision in which the PWR spring lies, in cases of surveyed land, or one-quarter of a mile of land around every PWR spring, in cases of unsurveyed land. The approach by the State Engineer in making determinations on PWRs through simple flow rate analysis has major implications on the multiple-uses of public land and in effect locks up thousands of acres of public land from many multiple uses including non-metalliferous mining, oil and gas exploration and development, rights of way, and range improvements, among other uses.

   The State Engineer did not complete the necessary field work or evidence review to justify most if not all of the PWRs found to be valid. It appears that there were no field investigations whatsoever by the State Engineer's office on many of PWR claimed springs nor a thorough investigation of the other water rights that we have identified that exist on many of the same sources. Further, there appears to have been no review or analyses of General Land Office (GLO) records, BLM Master Title Plats and other Plat maps, existing rights and infrastructure recorded through deeds, etc. to justifiably conclude that either the 40 acre land subdivision in which the PWR spring lies, in cases of surveyed land, or one-quarter of a mile of land around every PWR spring, in cases of unsurveyed land, were actually "vacant" or "unappropriated" as required in the 1926 Executive Order. We have identified that two of the PWR springs found to be valid by the State Engineer are on private land and many others already fully appropriated with water rights prior to 1926.

2. While we acknowledge, understand, and agree that sending back claims for corrections is appropriate and NRS 533.125(3) and (4) allow this, we do not believe it is appropriate for "coaching" from the State Engineer's office to BLM about how to amend a PWR claim in order for it to meet the PWR "standard." In the State Engineer files associated with the PWR claims, there was a June 15, 2016 email with attachment from the State Engineer's office to the BLM that identified "a few thing you may want to address" and "maybe some ideas on how to fix them." We do not argue that it was inappropriate to send back claims for typographical errors, corrections in legal descriptions, and corrections on supporting maps. However, some of the unsolicited "ideas" provided to BLM that we argue were not simple "corrections" and were inappropriate include:

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1. Claims that do not have enough diversion claimed and not enough flow measured in the
field. These Claims were filed without a domestic component. You may want to file amended
Claims to add this domestic component to bring the claimed diversion rate up to at least
0.0028cfs.
2. Claims that do not have enough diversion claimed but have enough flow measured in the
field. These Claims were filed without a domestic component. You will want to file amended
Claims to add this domestic component to bring the claimed diversion rate up to at least
0.0028cfs.
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   This email provided an avenue for BLM to amend claims in a way that allowed the State Engineer to find many to be valid. Vested claimants on sources that also had BLM PWRs could just have easily been allowed to "add a domestic component" or increase the diversion rate to increase their claims.

3. In the files of the State Engineer for the BLM PWR claims, it appears the BLM filed the required supporting maps after the deadline provided by the State Engineer in Order 1266. Order 1266 required "claimants to the waters of said Diamond Valley must file their Proofs of Appropriation...*on or before the 31st day of May, 2016*... " (emphasis added). NRS 533.115(3) states "The proof of appropriation submitted by the claimant ***must be accompanied by a map prepared***, except as otherwise provided in subsection 4, in accordance with and depicting any information required pursuant to the requirements of subsections 3 and 4 of NRS 533.100" (emphasis added). The BLM letter dated June 1, 2016 and stamped "Received" by the State Engineer's office on June 1, 2016 at 4:30 pm appears to be the transmittal letter or supporting maps stating "BLM is filing maps to accompany Reserved and Vested water rights on the subject order pursuant to a notice to file claims issued by the State Engineer on October 16, 2015." Any maps supporting BLMs PWR claims received after May 31, 2016 are not in accordance with Order 1266 and must be rejected.

4. While we do not object to the findings on the PWRs that were found to not be valid, the same analysis mentioned above needs to be completed by the State Engineer to bolster the finding that these springs are not PWRs due to other factors in addition to rejecting the claim based on a low flow rate.

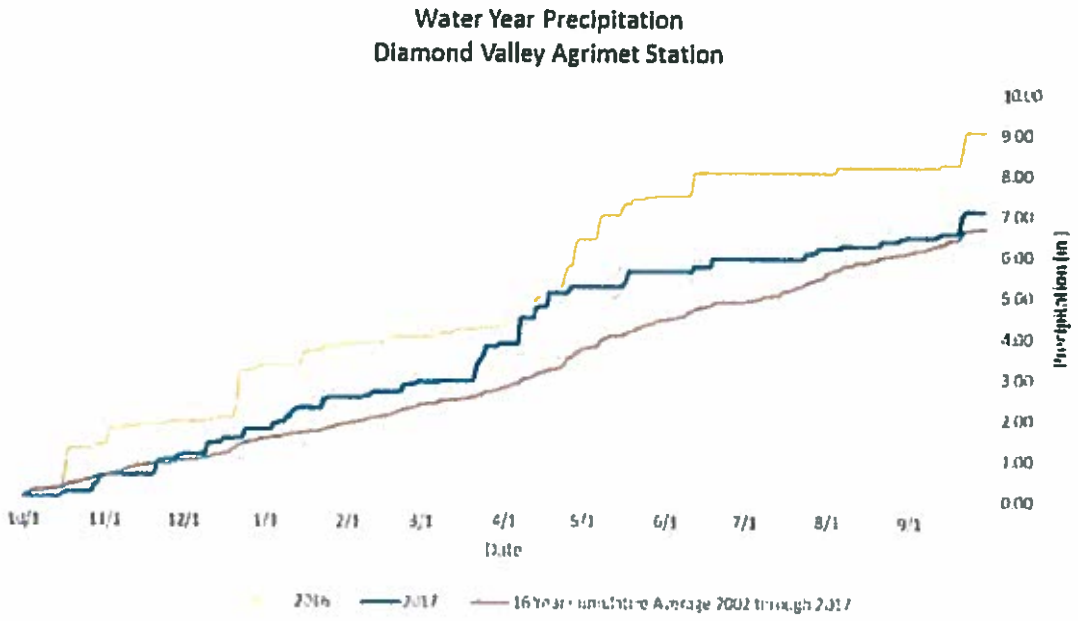
5. Our review has found the lands where PWR springs are located found valid (and those found not valid) have never been withdrawn because the BLM land status maps, BLM Resource Management Plan (and amendments), Master Title Plat Maps, indicate that these lands were eligible for homestead or Desert Land Entry. Most of the private land in Diamond Valley was acquired through homestead entry of Desert Land Entry (DLE). As the State Engineer is aware, there was somewhat of a land rush in Diamond Valley and much of the land in Diamond Valley became private land in the 1950s through 1960s. Through personal communication with landowners in Diamond Valley that developed and received land patents through DLE in the 1960s and 1970s, the maps available to these potential DLE claimants from Department of Interior for Diamond Valley during the 1950s through the 1970s did not depict ***any*** land in all of Diamond Valley being reserved from DLE.

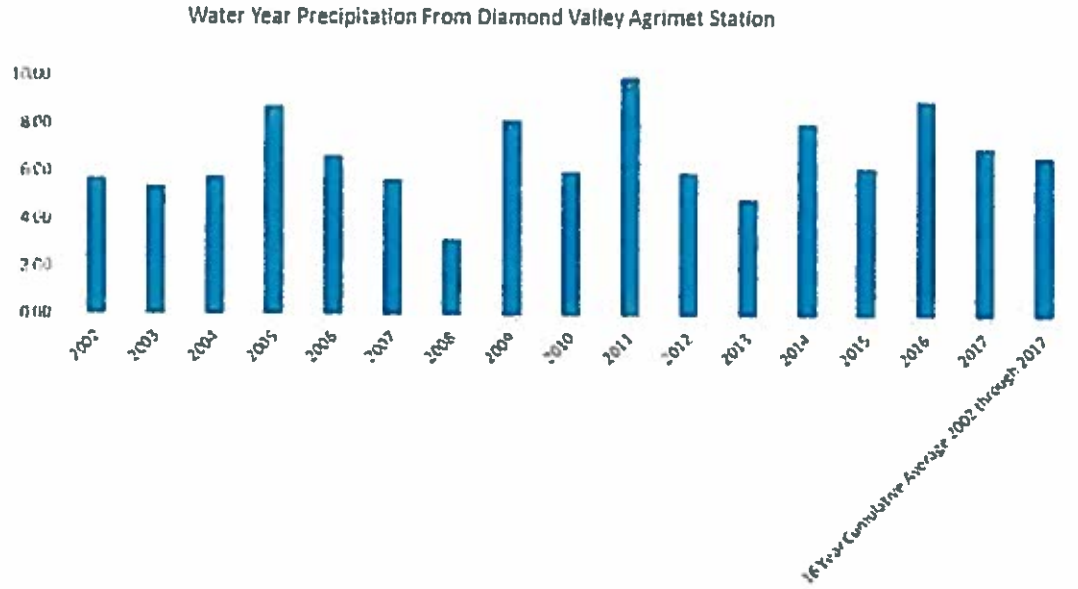
6. In this POD, the State Engineer adopted and incorporated the analysis from his Ruling 5729 (p. 284). Yet, the State Engineer did not apply the complete analyses necessary to the PWR claims in this Adjudication to address the findings in Ruling 5729. For instance, in many circumstances, the following findings from Ruling 5729 (pp. 18-19) were not analyzed in the POD.
    a. "PWR 107 claims cannot divert or displace a water right vested under Nevada law prior to April 17, 1926."
    b. "PWR 107 claims can only be made on springs that have a discrete natural flow of water emerging...at a reasonable distinct location. It does not apply to a seep or wet spot...."
    c. "PWR 107 claims do not act upon a source of water that only becomes important through artificial development or man-made structures."
    d. PWR 107 claims do not apply to springs or waterholes that are inaccessible to domestic livestock or are of unsatisfactory quality to satisfy the need for human and stockwatering consumption"
    e. "Not more than one PWR 107 claim can be made within any 40-acre parcel and any two PWR 107 claims must be more than ¼ mile apart."

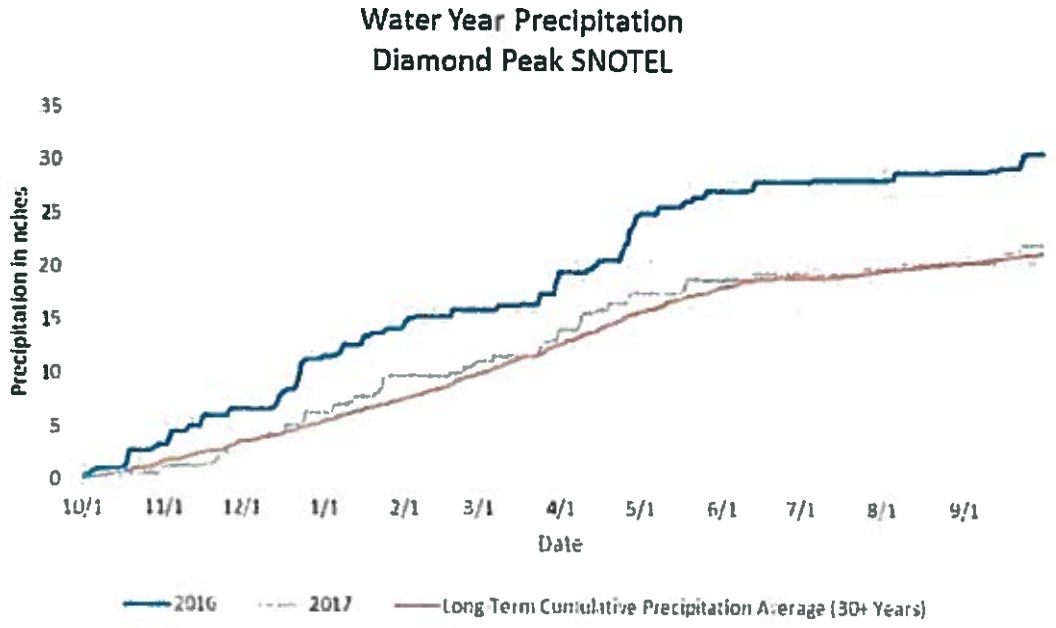
    If the State Engineer completed analyses consistent with these findings, it would have been found that many of the PWRs found to be valid are, in fact, not valid.

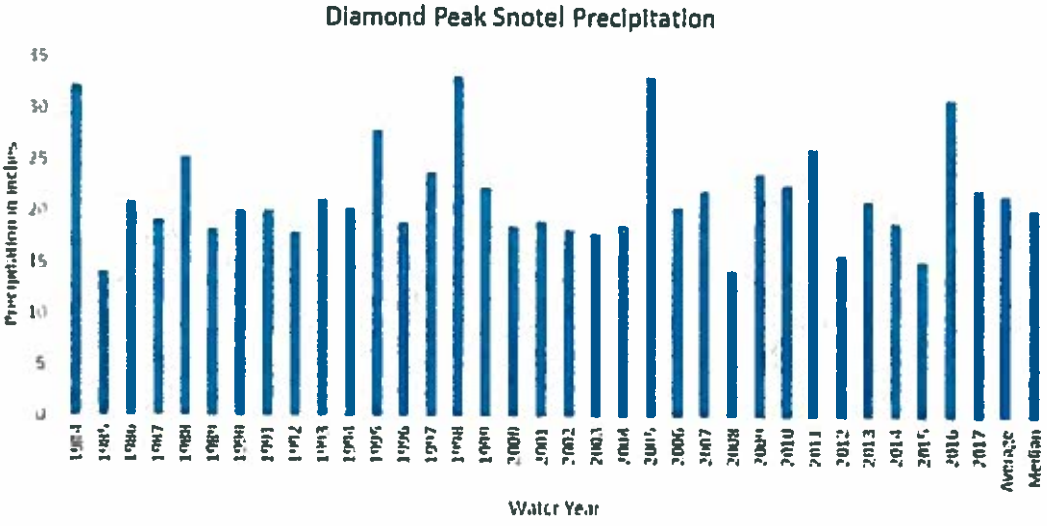
7. It appears the State Engineer took BLM's flow measurements at face-value to determine if enough flow was available to provide for a PWR. BLM's flow measurements were measured in April and May 2016. Runoff flows were high as this was one of the wettest springs (and years) we have had especially during the timeframe BLM was doing field measurements and BLM was likely measuring runoff as a component of the total flow, in many cases. Precipitation data from local sources, including the two nearby NRCS SNOTEL sites, Vacarro Springs (ID 1137) and Diamond Peak (ID 443), and the Diamond Valley USBR AgriMet Station, amongst others, irrefutably show that precipitation for water year 2016 leading up

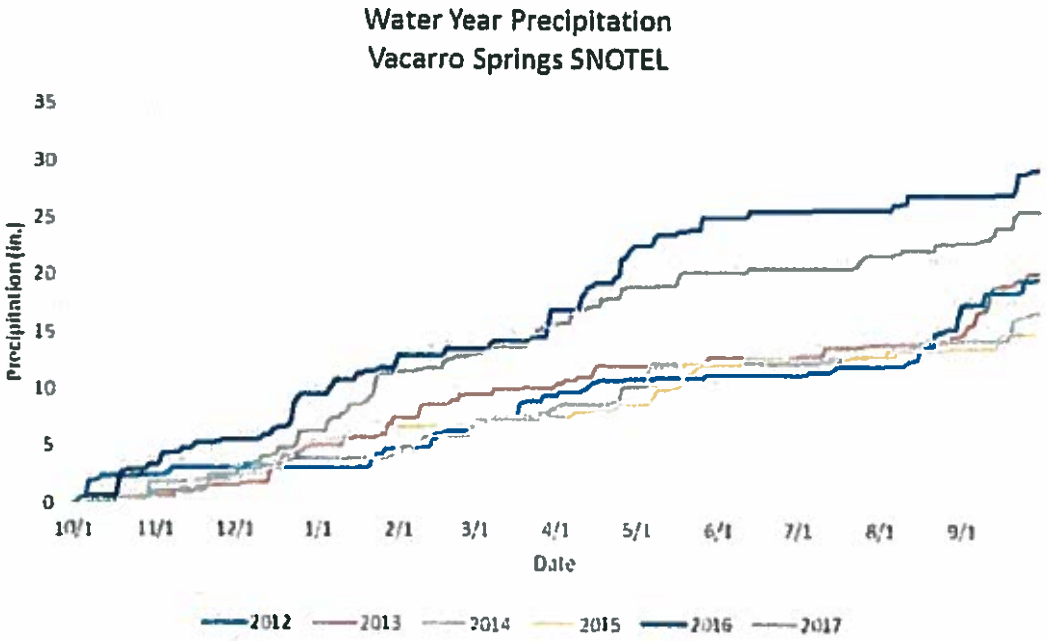
and during the timeframe of BLM's measurements was well above average. See the figures below:






Water Year Precipitation
Diamond Peak SNOTEL
Precipitation in inches
35
30
25
20
15
10
5
0
10/1
11/1
12/1
1/1
2/1
3/1
4/1
5/1
6/1
7/1
8/1
9/1
Date
2016
2017
Long Term Cumulative Precipitation Average (30+ Years)


Diamond Peak Snotel Precipitation
Water Year



8. The PWR 107 checklist (attached) used by BLM as the tool to determine whether or not a water source could be a PWR 107 was first developed and directed for use in two 1983 BLM Nevada State Office instructional memoranda, IM 83-454 and IM 83-331. Based on this BLM memoranda, BLM should not even apply for any spring for PWR 107 that does not meet the criteria in the checklist. The State Engineer should use BLM's own rules and guidance to assist in the analysis of valid PWRs. We assert that none of the PWR 107 claims meet the standard in the BLM checklist and BLM, based on its own policy, was precluded from even filing these PWRs. The BLM checklist uses the following criteria to assess the PWR 107 eligibility of springs and waterholes. BLM asks whether:
    1) Private control of the spring or waterhole would monopolize the public resources;
    2) The source supplies a sufficient quantity of water for public watering purposes;
    3) The spring or waterhole came into existence prior to October 21, 1976;
    4) A private water right does not exist on this source;
    5) The land on which the source is located was not acquired after April 17, 1926;
    6) The source is not artificially developed (i.e., well or reservoir); and
    7) The source is important. One or more of the following circumstances must be applied for the source to be important.
        a. The spring or waterhole is used or needed by the public for watering purposes;
        b. The spring or waterhole is located so that it is of utility and benefit to the general public;
        c. The availability of the spring or waterhole for public watering purposes affects the use of surrounding lands, water uses and users, habitat, and/or inhabitants of the surrounding lands;

d. The distance to the next nearest PWR or available source of water is such that there is no readily available, suitable alternative source of water; and
e. Competing private interests could obtain water rights under State law for this water source if it were not reserved.

BLM's own policy requires that each-and-every item 1-6 above and at least one circumstance in Item 7 from their checklist apply for BLM to even file a PWR claim. We assert that none of the PWRs found valid by the State Engineer meet BLM's own policy.

9. The purpose of PWR 107 was to assure that no person could monopolize or control a large territory by locating as a homestead the only available water supply for stock in that vicinity and for the general public purposes of human and domestic animal (stock) consumption. It was put in place prior to the Taylor Grazing Act (TGA) to ensure water would be available for stockwatering and human consumption and to ensure against monopolization of water for purposes other than stockwater and human consumption. The historical PWR 107 documentation makes it clear that the concern about privatizing and monopolizing the public resource was related to these springs being privatized through homestead entry and actually becoming private land. Nevada Water Law is clear that all water belongs to the public where NRS 533.025 states that "The water of all sources of water supply within the boundaries of the State whether above or beneath the surface of the ground, belongs to the public." Water rights owners have just that, a water right. But the ownership of the water itself belongs to the public. As such, private interests cannot monopolize the public resource. Further, the TGA required grazing permittees to have associated "base property" that is a required basis for having a grazing permit. The base property is land and water that provide the needs for livestock raising in tandem with the public land grazing allotment. This required attachment of private water rights for stockwatering ensures that these waters on public land are used for the primary purpose which PWR 107 was intended to meet – livestock watering on the public domain. Since 1934 when the TGA was passed there have been multiple other Acts of Congress that have further refined land management including the National Environmental Policy Act of 1969 (NEPA) and the Federal Land Policy and Management Act of 1976 (FLPMA). In today's circumstance, there is no longer a threat of monopolization counter to livestock and human watering when 1) Homestead entry is no longer authorized, 2) the range is settled under grazing permits through the TGA, 3) FLPMA ensures lands be managed for sustainability and multiple-use, 4) NEPA sets an extremely high bar for permitting of the necessary facilities and infrastructure that would allow a person to sever springs from public land, and 5) there are dozens of other documented water sources and water rights in the allotments that provide the express needs for stockwatering and human use.

10. A field investigation was undertaken by Eureka County Natural Resources Department on October 16, 18, 19, and 20, 2018 to measure spring flows for each PWR claim to determine

if the flows claimed by the BLM are continuously available. The County's reconnaissance provided spring flow measurements taken in the Fall of the year that are more representative of base flow than measurements without runoff taken in the Spring and yield a better assessment of the available resource to determine sustained flows for PWRs. Given field conditions and the short amount of time available between the date of the Preliminary Order (August 30, 2018) and the deadline for filing objections to the Preliminary Order (November 7, 2018) only 23 of the 27 springs were visited. However, as will become apparent, the measurements made in the Spring of 2016 over-state the amount of water available from the source year round.

The location of each claim, based on coordinates provided by the BLM, was compared with those from the Coordinates provided by the BLM along with their claims. In many instances there was good correlation between the BLM coordinates and the field locations of the springs, but not for each and every spring.

The spring sources claimed by the BLM are located in the mountain block and are associated with local, as opposed to regional, watersheds and their flows are known by the residents of Eureka County to vary seasonally. Many are ephemeral, ceasing to flow by the end of summer or early fall. As such, there is often insufficient flow to fulfill claims of vested water rights on the same source, much less a Public Water Reserve which by its very nature is junior to vested claims and must be available year-round. Some of the spring sources claimed by the BLM also comprise sources of stream flow that has been appropriated.

Data Collection Methodology

The coordinates (in UTM, meters; NAD 1983) of each of the PWR claims of interest provided in the Preliminary Order were imported to a handheld Trimble GeoXH Global Navigation Satellite System (GNSS) data receiver. Private land ownership was also imported into the Trimble to assess whether any claims to Public Water Reserves might have been mistakenly filed on springs located on private land. Locations were also imported to a Garmin InReach Explorer+ handheld GPS receiver as a backup to the Trimble receiver. USGS topographic maps were also imported to the InReach Explorer+ to aid with overland navigation to the claim locations. It also recorded a trace of travel to/from the location of the BLM coordinates. The field location of each PWR claim was compared to the BLM's coordinates and descriptions of the sources prepared by it (Ibid.). Any discrepancies between observed conditions at the site and those provided in the Preliminary determination were noted.

Flow rates were determined by measuring the time to collect a measured volume of the spring discharge. Each visit was photographed to document the conditions on the ground at the time the measurements were made.

Reporting

The location of each PWR claim based on coordinates provided by the BLM is depicted below on an aerial image obtained from https://us0.inreach.garmin.com/Map sourced from Digital Globe, USDA (2018). These images depict the BLM's reported location of the source (a larger blue circle), location of additional points of interest near each source (green circle) and a trace of the travel around each site (depicted as a blue line with small blue circles). Digital photographs of each site are provided. Lastly, and most importantly, the flow rates for each spring measured during the October 2018 reconnaissance are documented and compared with measurements made by the BLM in April and May 2016.

Summary

A table comparing the flow rates measured in October 2018 with the previous BLM measurements is provided as Table 1. From the Table, it is apparent that:

- Of the 23 sites where the BLM claimed a Public Water Reserve and were field checked by Eureka County, two (2) are located on private property.
- Of the sites field checked by Eureka County in October 2018, the spring was either "dry" or wet, but there was no measureable flow at 6 sites.
- The measured flow at all but two sites was less than that reported by the BLM when they visited the sites in April and May 2016. The reasons behind these differences include:
    - Some springs are seasonal in nature, sourced by small, local recharge areas, and the source becomes depleted over the course of the year.
    - Some of the measurements may have had a component of surface runoff in addition to discharge from the spring.
    - The table prepared by the BLM may contain typographical errors.

Table 1. Summary of Spring Measurements by Eureka County and BLM.

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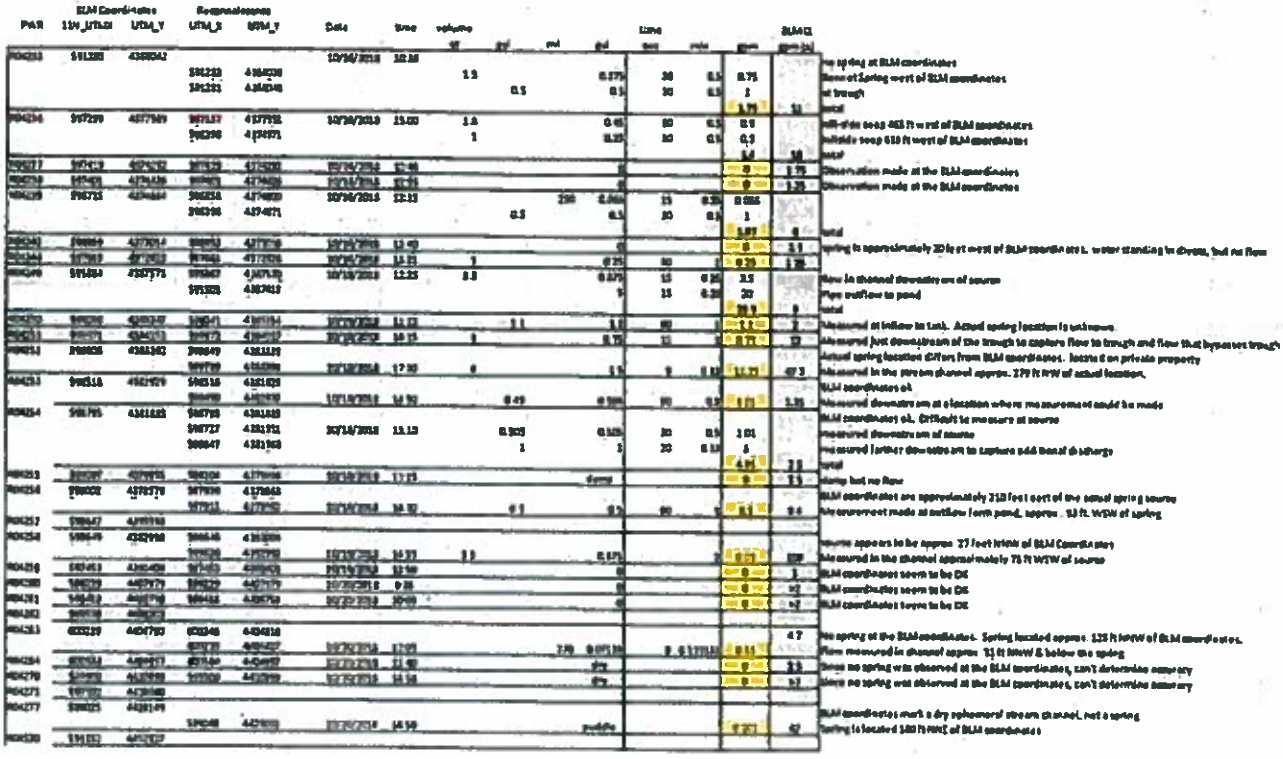


Notes

a source: 2016 Sutro Mountain, Diamond Valley, Basin 131, PUBLIC WATER RESERVES

PWR	11N_UTMX	UTM_Y	Date	time	volume				time			BLM Q
					qt	gal	ml	gal	sec	min	gpm	gpm (a)
R04233	591280	4368042	10/16/2018	10:36	1.5			0.375	30	0.5	0.75	
						0.5		0.5	30	0.5	1	
											1.75	11
R04236	597299	4377569	10/16/2018	15:00	1.8			0.45	30	0.5	0.9	
					1			0.25	30	0.5	0.5	
											1.4	18
R04237	597419	4374282	10/16/2018					0			0	1.75
R04238	597401	4374426	10/16/2018	12:55				0			0	1.25
R04239	596715	4374864	10/16/2018				250	0.066043	15	0.25	0.26	
						0.5		0.5	30	0.5	1	
											1.26	6
R04243	496959	4373014	10/16/2018	13:40				0			0	2.5
R04244	597663	4372923	10/16/2018	13:21	1			0.25	60	1	0.25	1.25
R04249	595884	4387573	10/19/2018	12:25	3.5			0.875	15	0.25	3.5	
								5	15	0.25	20	
											23.5	3
R04250	599050	4385347	10/19/2018	11:12		1.1		1.1	60	1	1.1	2
R04251	599971	4384153	10/18/2018	16:15	3			0.75	12	1	0.75	12
R04252	599806	4383392	10/18/2018	17:30	6			1.5	8	0.13	11.25	47.3
R04253	598516	4381929	10/18/2018	14:50		0.49		0.505	30	0.5	1.01	2.35
R04254	598795	4381835	10/18/2018	15:10		0.505		0.505	30	0.5	1.01	
						1		1	20	0.33	3	
											4.01	2.5
R04255	598097	4379955	10/18/2018	13:15				damp			0	2.5
R04256	598002	4378578	10/16/2018	16:30		0.5		0.5	60	1	0.5	9.4
R04257	599647	4395593										
R04258	599649	4392998	10/19/2018	14:55	3.5			0.875		2	0.03	109
R04259	597453	4390408	10/19/2018	13:50				0			0	3
R04260	599229	4407979	10/20/2018	9:35				0			0	>2
R04261	598418	4406758	10/20/2018	10:05				0			0	>2
R04262	599550	4401202										
R04263	600239	4404780	10/20/2018	12:05			270	0.07128	8	0.133333	0.53	4.7
R04264	600584	4404957	10/20/2018	13:40				dry			0	2.5
R04270	599300	4410899	10/20/2018	14:56				dry			0	>2
R04271	597502	4426660										
R04277	599025	4429149	10/20/2018	16:50				puddle			0.001	42
R04520	591132	4452827										

Notes

a source: 2016 Battloe Mountain, Diamond Valley, Basin 153, PUBLIC WATER RESERVES

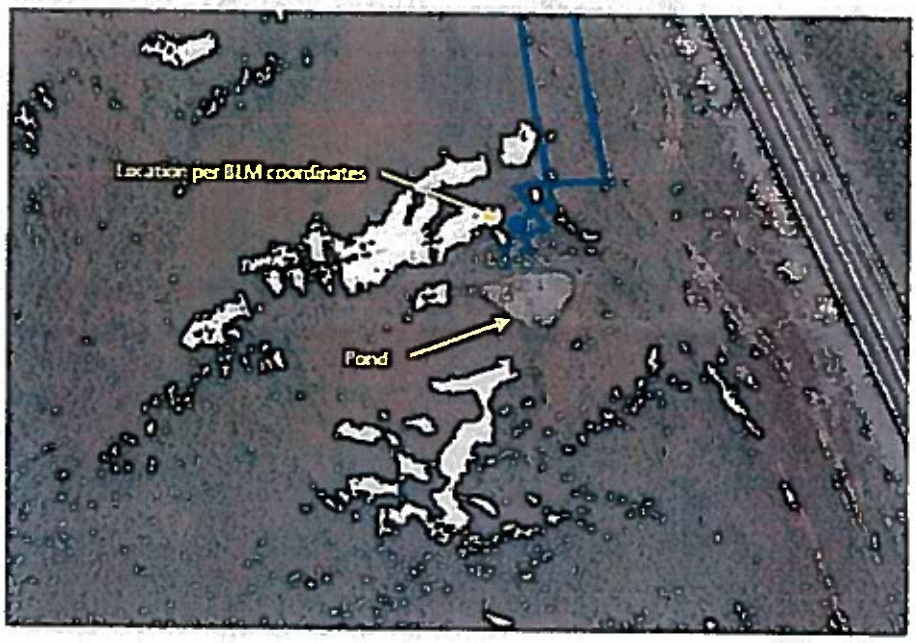
This effort is further documented below in the analysis of each individual PWR spring at issue.

11. Each of the PWRs found to be valid by the State Engineer are individually analyzed below.

R-04233

Eureka County Field Reconnaissance

BLM description: "Spring Complex, at least 3 springs expressions, all flow into a stock pond. There is a trough but it is nonfunctional."



Aerial image of R04233.

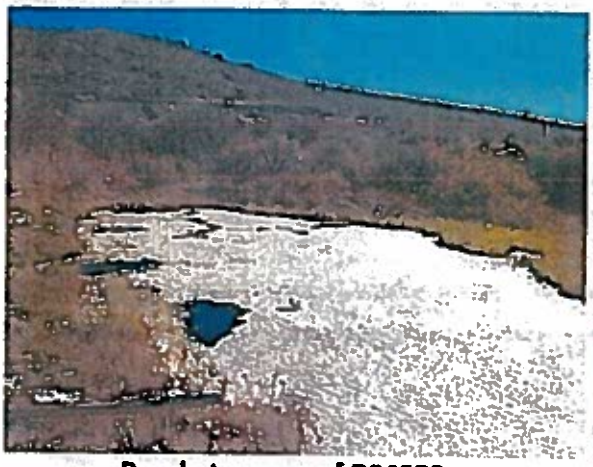
Eureka County Field Reconnaissance Date/Time: 10/16/18 10:36

Site description

The discharge from the spring(s) is impounded in a small man-made pond near the source. It is piped to the nearby trough. A small quantity of water flows overland from the pond.

Spring discharge

The discharge from the R04233 was determined from the combined measurements of the surface discharge at the spring pond and the discharge from the pipe from the pond made during the October 16, 2016 field visit. Overland discharge from the pond was measured at 0.75 gpm, discharge from the pipe was measured at 1.0 gpm, for a total of 1.75 gpm. By comparison, BLM reported the spring low to be 11 gpm on April 12, 2016. The spring discharge appears to be variable, depending on the time of year with higher flows when runoff is occurring. The recent measurement made on behalf of Eureka County may be more representative of base flow conditions.



Pond at source of R04233.

Installing a pipe in order to measure surface outflow from R04233 pond.

Additional outflow from R04233 via pipe.

Flow Rate Is Not Enough for Prior Vested Right Let Alone PWR

In the Preliminary Order of Determination, the State Engineer found that Chad and Rosie Bliss have a vested right under Proof V-04495 for stockwatering on Summit Spring No.2 for 0.15 cfs or 8.5 afs which is the same spring under PWR R-04233 which BLM calls "unnamed." The State Engineer used BLM's flow measurements of this spring on April 12, 2016 at 11.0 gpm and found that "if the water is available on a year-round basis" would be "0.0245 cfs, 7.71 afa, and 15,840 gpd" and enough to satisfy both the vested right and PWR. This finding by the State Engineer is arbitrary and incorrect based on higher-than-average precipitation and run-off that inflated the flow under BLM's measurement and consideration of flow measurements taken by others. This spring does not even flow enough on a year round basis most years to satisfy the vested right V-04495 each year.

BLM's flow measurements are artificially inflated due to higher than average precipitation and run-off, especially during the timeframe measured by BLM in spring 2016. Precipitation data from local sources, including the two nearby NRCS SNOTEL sites, Vacarro Springs (ID 1137) and

Diamond Peak (ID 443), and the Diamond Valley USBR AgriMet Station, amongst others, irrefutably show that precipitation for water year 2016 and leading up to the BLM's measurements was well above average.

Further, flow measurements from others show that this spring does not sustain annual flows to satisfy both the vested right and the BLM PWR. On October 22, 2007, SRK Consulting measured flow at this spring at 0.32 gpm (source: July 2010 "Hydrogeology and Numerical Flow Modeling, Mt. Hope Project, Eureka County, Nevada" Appendix E, Spring Inventory Dataset). This data from SRK Consulting is part of the records of the State Engineer through the Kobeh Valley Ranch (General Moly) water rights hearings process. Further, the water resources specialist from the State Engineer's office measured the flow at 1.2 gpm on June 19, 2017 (source: June 27, 2018 NDWR Memorandum to Adjudication Files). On October 16, 2018, Eureka County Department of Natural Resources and Contract Hydrogeologist measured the flow at 1.75 gpm.

Consideration of precipitation data at the time of BLM's measurement and all known available flow data proves that the spring is fully appropriated under Proof V- 04495 and there is not enough sustained flow to satisfy even the vested right.

Land Is Not "Vacant" Or "Unappropriated" As Required In 1926 Executive Order

There is no way that the 40 acre subdivision of land (NESW Section 6, T18N, R 54E) in which the spring lies could have been reserved in the 1926 Executive Order because it was and is not actually "vacant" or "unappropriated" as required. US Highway 50 runs right through the center of this 40 acres. Further, the original federal Lincoln Highway runs through this 40 acres and this highway existed prior to the 1926 Executive Order. Also, in 1926, there were already rights of way established on this 40 acres under Revised Statute (RS) 2477 for travel and access by people and livestock as well as RS 2339 and RS 2340 easements for water storage and rights-of-way for water conveyance (ditches, dams, pipelines, etc.). This is in addition to no BLM land status maps, BLM Resource Management Plan (and amendments), and Master Title Plat Map indicating that these lands were reserved from homestead or Desert Land Entry.

All State Engineer Findings under Ruling 5729 Not Met

The finding that "PWR 107 claims cannot divert or displace a water right vested under Nevada law prior to April 17, 1926" is not met because the flow at this spring is insufficient to even satisfy the vested right.

The finding that "PWR 107 claims do not act upon a source of water that only becomes important through artificial development or man-made structures" is not met because there has been substantial artificial development and man-made structures put in at this source to cross the threshold to being "important." This includes a man-made pond with a dirt embankment, piping, and stock troughs.

The finding that "PWR 107 claims do not apply to springs or waterholes that are...of unsatisfactory quality to satisfy the need for human and stockwatering consumption" was not met because the State Engineer did not complete an analysis of the quality of the source.

BLM PWR Checklist Criteria Not Met

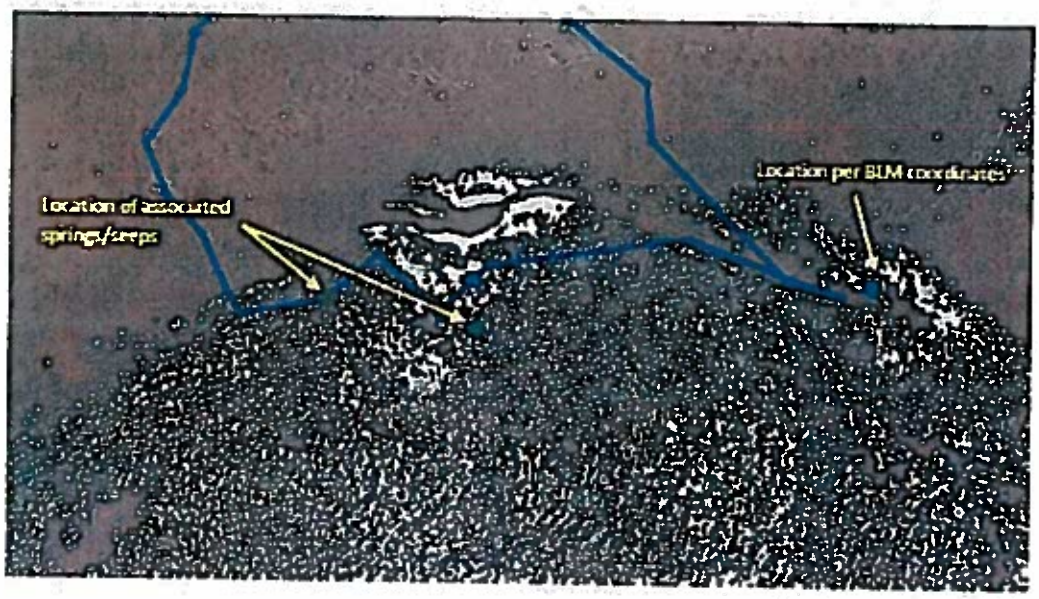
BLM's own policy was not met and should have precluded BLM from filing on this spring. The following PWR criteria based on BLM's own policy were not met:

- Private control of the spring or waterhole would monopolize the public resources – there are dozens of stockwater rights available on the grazing allotment. Nearby springs provide water expressly for human watering and are available to the public (Eureka County municipal springs).
- The source supplies a sufficient quantity of water for public watering purposes – as documented above, the spring flows are insufficient to provide enough water for public watering purposes let alone the prior vested right on this source.
- A private water right does not exist on this source – it is irrefutable that a private, prior right exists on this source.
- The source is not artificially developed (i.e., well or reservoir) – the source has been extensively, artificially developed through excavation, a man-made pond, piping, and troughs.

R-04236

Eureka County Field Reconnaissance

BLM description: "Large spring complex with 4-5 seeps and 2 meadows, all leading to an intermittent stream. Several troughs, one functional and one no longer functioning."



Aerial Image of R04236.

Aerial Image of R04236.

Eureka County Field Reconnaissance Date/Time: 10/16/18 15:00 hrs

Land Ownership and Site Description

Land ownership data show the spring is located on private land, not public land. Springs described at R04236 might be considered a spring complex that includes the two seeps to the west. The main spring at R04236 is located at the floor of the arroyo. There are additional nearby springs, all located on the same private land, located a short distance off the canyon floor that might be considered part of a spring complex. The middle spring is 460 feet west of the R04236 location and pipes water to a tank at the spring site. A seep is located approximately 630 feet west of R04236.

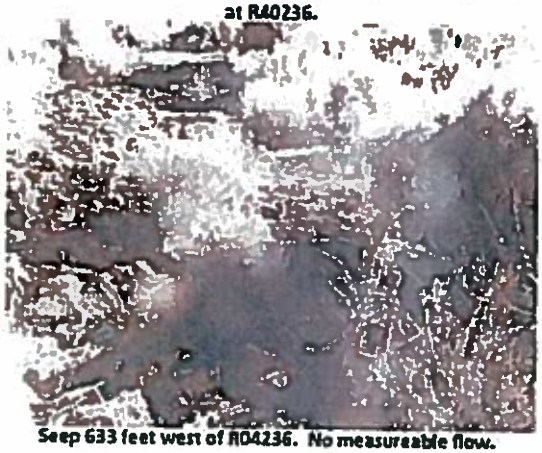
Spring Discharge

Flow at the easternmost spring was measured at 0.9 gpm. Flow at the middle spring was measured at 0.5 gpm. Although water stands in depressions at the western seep, no flow could be discerned. **The flow at the complex measured 10/16/18 totaled 1.4 gpm.**

By comparison, the BLM reported a flow 18 gpm measured May 13, 2016. The discrepancy might be explained if the BLM measurement was capturing runoff and the measurement made 10/16/18 was representative of base flow conditions.

Pipe placed in the spring discharge channel to measure flow at R40236.

Hillside spring 460 feet west of R04236 site. Pipe placed in spring discharge channel to measure flow.



Seep 633 feet west of R04236. No measureable flow.

Land Is Not Even Public Land and No Additional Analysis Necessary

This PWR should have been rejected because the spring and associated 40 acre subdivision are private land. There is no way that the 40 acre subdivision of land in which spring lies could have been reserved in the 1926 Executive Order because it is now private land. While no additional analysis is needed since this is private land, we do provide flow rate analysis below. We also assert that even if this spring were on public land, the spring would still not meet the findings and criteria to be a PWR including State Engineer findings in Ruling 5729 and the BLM PWR policy and checklist.

Flow Rate Is Not Enough for Prior Vested Right Let Alone PWR

In the Preliminary Order of Determination, the State Engineer found that Beck Properties has a vested right under Proof V-10809 for stockwatering on Pastorino East Springs for 0.03 cfs or 1.13 afs which is the same spring under PWR R-04236 which BLM calls "unnamed." The State Engineer used BLM's flow measurements of this spring on May 13, 2016 at 18.0 gpm and found that "if the water is available on a year-round basis" would be "0.0401 cfs, 28.98 afa, and 25,920 gpd" and enough to satisfy both the vested right and PWR. This finding by the State Engineer is arbitrary and incorrect based on higher-than-average precipitation and run-off that

inflated the flow under BLM's measurement and consideration of flow measurements taken by others. This spring does not even flow enough on a year round basis most years to satisfy the vested right V-10809 each year.

BLM's flow measurements are artificially inflated due to higher than average precipitation and run-off, especially during the timeframe measured by BLM in spring 2016. Precipitation data from local sources, including the two nearby NRCS SNOTEL sites, Vacarro Springs (ID 1137) and Diamond Peak (ID 443), and the Diamond Valley USBR AgriMet Station, amongst others, irrefutably show that precipitation for water year 2016 and leading up to the BLM's measurements was well above average.

It appears that even with this source having two different claims on it, there were no field investigations completed by the State Engineer's office as there were no State Engineer staff field notes with flow measurements in the State Engineer files for R-04236 nor V-10809. On October 16, 2018, Eureka County Department of Natural Resources and Contract Hydrogeologist measured the flow at 1.4 gpm.

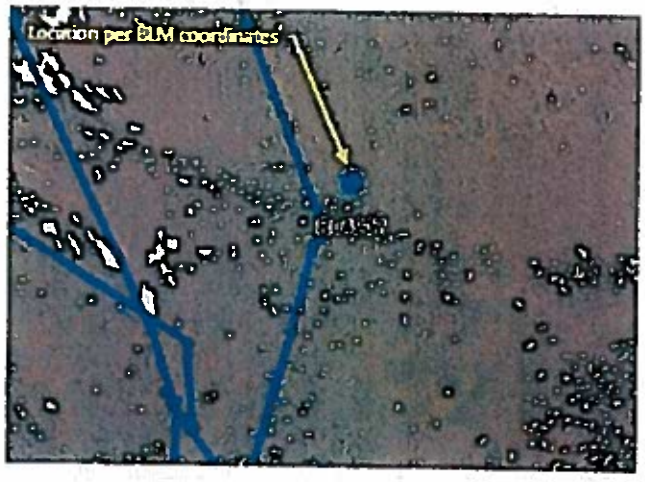
Consideration of precipitation data at the time of BLM's measurement and the field measurement by Eureka County proves that the spring is fully appropriated under Proof V-10809 and there is not enough sustained flow to satisfy even the vested right.

R-04237

Eureka County Field Reconnaissance

BLM description: "Spring expresses from small rock outcrop in drainage, then flows ~200 feet to meadow. Meadow is heavily utilized by livestock."

Aerial Image of R04237.



Aerial Image of R04237.

Eureka County Field Reconnaissance Date/Time: 10/16/18 12:45 hrs

Site Description

There was no active spring at the small rock outcrop at the coordinates provided by the BLM. There is no riparian vegetation at the site, only bitterbrush, mountain sage and Wyoming sage. The area may be wet at some time of year with some overland flow in the ephemeral channel, likely for a short period during the spring.

Spring flow

No spring flow was observed at R04237 on 10/16/18 and the site was dry. By comparison, the BLM reported 1.75 gpm on April 13, 2016. The difference between the two measurements is likely explained by the different sampling dates and spring runoff. From all appearances, the source is ephemeral with flow limited to the springtime.

R04237 location.

Flow Rate Is Not Sustained and is Ephemeral

The State Engineer used BLM's flow measurements of this spring on April 13, 2016 at 1.75 gpm and found that "if the water is available on a year-round basis" would be "0.0039 cfs, 2.82 afa, and 2,520 gpd" and enough to be a valid PWR. This finding by the State Engineer is arbitrary and incorrect based on higher-than-average precipitation and run-off that inflated the flow under BLM's measurement and consideration of flow measurements taken by others. This is obviously an ephemeral seep that does not flow for a long enough period of time each year to develop riparian vegetation. All of the vegetation at the site and in the ephemeral channel is upland rangeland vegetation.

BLM's flow measurements are artificially inflated due to higher than average precipitation and run-off, especially during the timeframe measured by BLM in spring 2016. Precipitation data from local sources, including the two nearby NRCS SNOTEL sites, Vacarro Springs (ID 1137) and Diamond Peak (ID 443), and the Diamond Valley USBR AgriMet Station, amongst others,

irrefutably show that precipitation for water year 2016 and leading up to the BLM's measurements was well above average.

It appears that there were no field investigations completed by the State Engineer's office as there were no State Engineer staff field notes with flow measurements in the State Engineer files for R-04237. On October 16, 2018, Eureka County Department of Natural Resources and Contract Hydrogeologist found the site completely dry.

Consideration of precipitation data at the time of BLM's measurement and the County's field visit proves that there is not enough sustained flow to satisfy a PWR under R-04237.

Land Is Not "Vacant" Or "Unappropriated" As Required In 1926 Executive Order

Based on the 1905 GLO survey, there were existing roads and trails in this 40 acre subdivision at least 20 years before 1926 so the land was not "vacant" or "unappropriated" in 1926 and are not today. These are rights of way established on this 40 acres under Revised Statute (RS) 2477 for travel. There may have been rights already established on this 40 acres under RS 2339 and RS 2340 easements for water storage and rights-of-way for water conveyance (ditches, dams, pipelines, etc.). This is in addition to no BLM land status maps, BLM Resource Management Plan (and amendments), and Master Title Plat Map indicating that these lands were reserved from homestead or Desert Land Entry.

All State Engineer Findings under Ruling 5729 Not Met

The finding that "PWR 107 claims can only be made on springs that have a discrete natural flow of water emerging...at a reasonable distinct location. It does not apply to a seep or wet spot..." was not met because this water cannot even be considered a "seep" or "wet spot" for most of every year.

The finding that "Not more than one PWR 107 claim can be made within any 40-acre parcel and any two PWR 107 claims must be more than ¼ mile apart" was not met because there is another PWR claim (which we also dispute below), R-04238, less than 500 feet away.

The finding that "PWR 107 claims do not apply to springs or waterholes that are...of unsatisfactory quality to satisfy the need for human and stockwatering consumption" was not met because the State Engineer and the BLM did not complete an analysis of the quality of the source.

BLM PWR Checklist Criteria Not Met

BLM's own policy was not met and should have precluded BLM from filing on this spring. The following PWR criteria based on BLM's own policy were not met:

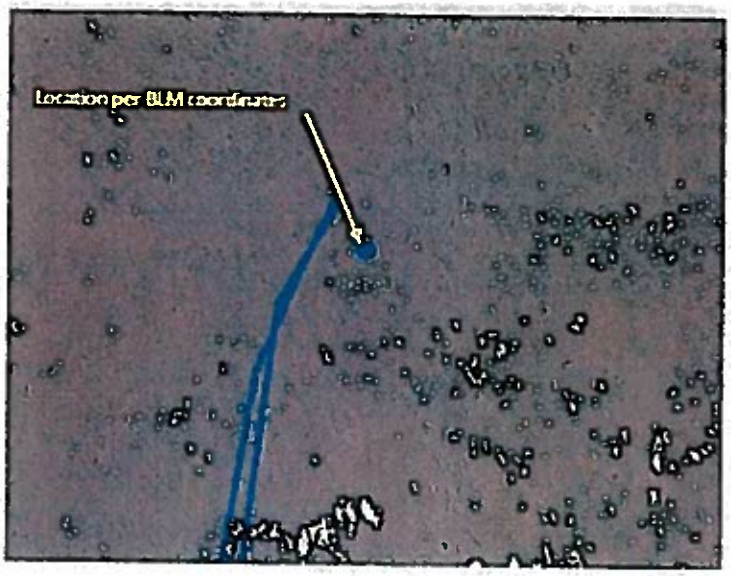
- Private control of the spring or waterhole would monopolize the public resources – there are dozens of stockwater rights available on the grazing allotment.

- The source supplies a sufficient quantity of water for public watering purposes – as documented above, the spring flows are insufficient to provide enough water for public watering purposes.

R-04238

R04238

BLM description: "Spring maybe part of a larger complex, expresses from side of a channel."



Aerial Image of R04238

Eureka County Field Reconnaissance Date/Time: 10/16/18 12:55 hrs.

Site description

The conditions at R04238 are similar to R04237. Except that the vegetation suggests there may be some seepage earlier in the year, but there is no evidence of continuous, year-round flow.

Spring flow

No flow was observed during the visit on 10/16/18 and the site was dry. In contrast, the BLM reported a flow of 1.25 gpm on April 13, 2016. The source apparently is ephemeral and only may provide a source of supply during runoff periods.

PWR R04238 location. Dry.

Flow Rate Is Not Sustained and is Ephemeral

The State Engineer used BLM's flow measurements of this spring on April 13, 2016 at 1.25 gpm and found that "if the water is available on a year-round basis" would be "0.0.28 cfs, 2.01 afa, and 1,000 gpd" which is exactly enough to be a valid PWR. This finding by the State Engineer is arbitrary and incorrect based on higher-than-average precipitation and run-off that inflated the flow under BLM's measurement and consideration of flow measurements taken by others. This is obviously an ephemeral seep.

BLM's flow measurements are artificially inflated due to higher than average precipitation and run-off, especially during the timeframe measured by BLM in spring 2016. Precipitation data from local sources, including the two nearby NRCS SNOTEL sites, Vacarro Springs (ID 1137) and Diamond Peak (ID 443), and the Diamond Valley USBR AgriMet Station, amongst others, irrefutably show that precipitation for water year 2016 and leading up to the BLM's measurements was well above average.

It appears that there were no field investigations completed by the State Engineer's office as there were no State Engineer staff field notes with flow measurements in the State Engineer files for R-04238. On October 16, 2018, Eureka County Department of Natural Resources and Contract Hydrogeologist found the site completely dry.

Consideration of precipitation data at the time of BLM's measurement and the County's field visit proves that there is not enough sustained flow to satisfy a PWR under R-04238.

Land Is Not "Vacant" Or "Unappropriated" As Required In 1926 Executive Order

Based on the 1905 GLO survey, there were existing roads and trails in this 40 acre subdivision at least 20 years before 1926 so the land was not "vacant" or "unappropriated" in 1926 and are not today. These are rights of way established on this 40 acres under Revised Statute (RS) 2477 for travel. There may have been rights already established on this 40 acres under RS 2339 and

RS 2340 easements for water storage and rights-of-way for water conveyance (ditches, dams, pipelines, etc.). This is in addition to no BLM land status maps, BLM Resource Management Plan (and amendments), and Master Title Plat Map indicating that these lands were reserved from homestead or Desert Land Entry.

All State Engineer Findings under Ruling 5729 Not Met

The finding that "PWR 107 claims can only be made on springs that have a discrete natural flow of water emerging...at a reasonable distinct location. It does not apply to a seep or wet spot..." was not met because this water cannot even be considered a "seep" or "wet spot" for most of every year.

The finding that "Not more than one PWR 107 claim can be made within any 40-acre parcel and any two PWR 107 claims must be more than ¼ mile apart" was not met because there is another PWR claim (which we also dispute above), R-04237, less than 500 feet away.

The finding that "PWR 107 claims do not apply to springs or waterholes that are...of unsatisfactory quality to satisfy the need for human and stockwatering consumption" was not met because the State Engineer and BLM did not complete an analysis of the quality of the source.

BLM PWR Checklist Criteria Not Met

BLM's own policy was not met and should have precluded BLM from filing on this spring. The following PWR criteria based on BLM's own policy were not met:

- Private control of the spring or waterhole would monopolize the public resources – there are dozens of stockwater rights available on the grazing allotment.
- The source supplies a sufficient quantity of water for public watering purposes – as documented above, the spring flows are insufficient to provide enough water for public watering purposes.

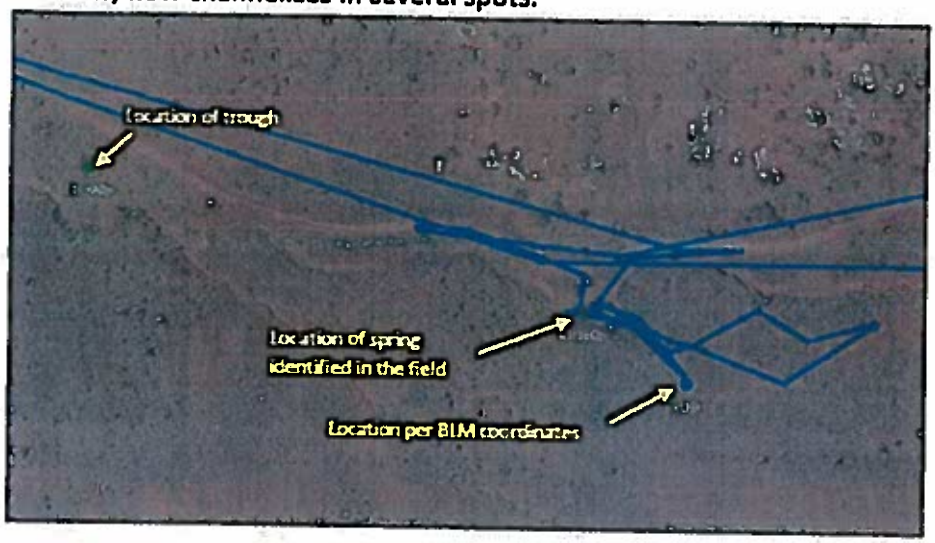
R-04239

Eureka County Field Reconnaissance

R04239

Bennett Spring

BLM description: "Possible spring complex, several spring expressions flowing into large meadow, flow channelizes in several spots."



Aerial View of R04239 location.

Eureka County Field Reconnaissance Date/Time: 10/16/18 12:15 hrs

Site description

A spring was not present at the location provided by the BLM which is situated within an area above the spring within a mixed sagebrush meadow area. The site was consistent with the description described in the State Engineer staff "Field Investigation Report" dated April 18, 2018 for V-01089, V-01133, and R-04239. However, this report was before most of the spring flow was re-piped at the source to a trough located approximately 1,000 feet down-drainage to the west. The description of a 2016 washout of a prior trough at the location where flow was documented in the Field Investigation Report was corroborated by Eureka County through correspondence with the Baumann's. After the State Engineer staff field visit, Baumann reconstructed the spring collection area and piped the water to the new trough location that was measured by Eureka County.

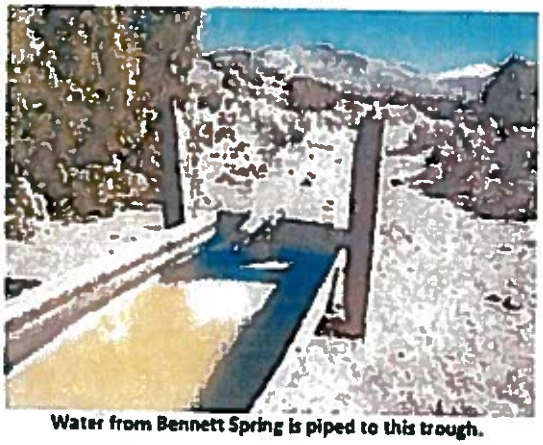
Spring flow

The discharge from the spring was determined from the combined measurements of the surface discharge at the spring site and the discharge from the pipe where it flows into the trough made 10/16/18. Discharge at the source that bypasses the collection system was measured at 0.26 gpm. Discharge to the trough was measured at 1.0 gpm, for a total of 1.26 gpm. By comparison, the BLM reported a flow of 6 gpm on 4/13/16 and the State Engineer Field Investigation Report reported the flow in 2017 "of 12 gpm discharging from a...pipe...along with an estimated unmeasured 3 gpm from the nearby immediate area near the pipe." This was at the exact same location where Eureka County measured the 0.26 gpm in October 2018. It would not be surprising if there were more water in the springtime when both BLM and State

Engineer staff measured flow, but the area is dry later in the year and only Bennett Spring which has been developed, not the meadow area, provides a continuous, year-round source of water.

R04239 Location per BLM coordinates

Location of Spring 217 feet northwest of BLM location. Water is piped to trough.



Water from Bennett Spring is piped to this trough.

Prior Vested Right Fully Appropriates the Spring and Flow Rate Is Not Enough for Prior Vested Right Let Alone PWR

There are discrepancies in the Preliminary Order of Determination on this spring. On page 289, the State Engineer used BLM's flow measurements of this spring, Bennett Spring, on April 13, 2016 at 6.0 gpm and found that "if the water is available on a year-round basis" would be "0.0134 cfs, 9.66 afa, and 8,640 gpd" and enough to be a PWR. On this same page, the State Engineer stated that "There are no other water right claims on this source." Yet, on page 104 – 105 (and footnote 51), the State Engineer recognizes that R-04239 is the same Bennett Spring as Proof V-01089 and is also tied to Proof V-01133 and referenced the BLM measured flow of 6 gpm. In the State Engineer Field Investigation Report dated April 18, 2018 for V-01089, V-01133, and R-04239, there are statements that "Recent use of Old Bennett Spring, V-01089 has

been mainly for stockwatering purposes, with the irrigation limited to co-mingling of water with Simpson Creek, and used within the upper V-01133 portion of its claimed POU. ***Based on this, the Public Water Reserve R-04239 does not appear valid***" (emphasis added).

This finding by the State Engineer that PWR R-04239 is valid is arbitrary and incorrect based on multiple facts: 1) higher-than-average precipitation and run-off that inflated the flow under BLM's measurement and consideration of flow measurements taken by others; and 2) two prior vested rights, V-01089, V-01133, appropriate all of the flow. Any flow of Bennett Spring above that appropriated for irrigation and stockwatering under V-01089 then becomes flow to Simpson Creek and is appropriated under V-01133. This spring does not even flow enough on a year round basis most years to satisfy these vested rights.

Additionally, BLM's flow measurements are artificially inflated due to higher than average precipitation and run-off, especially during the timeframe measured by BLM in spring 2016. Precipitation data from local sources, including the two nearby NRCS SNOTEL sites, Vacarro Springs (ID 1137) and Diamond Peak (ID 443), and the Diamond Valley USBR AgriMet Station, amongst others, irrefutably show that precipitation for water year 2016 and leading up to the BLM's measurements was well above average.

Flow Extends Across Many Separate 40 Acre Subdivisions

First, the only flow (measured by Eureka County and the State Engineer staff) attributed to Bennett Spring is in a totally different 40 acre subdivision than the legal description of the claim and where the BLM GPS location plots. Further, the pipe where measurements were taken at the washed out stock trough referenced in the State Engineer Field Investigation Report and the current trough where the spring is piped are not in the same 40 acres claimed by BLM. These are located in SW ¼ NE ¼ of T19N, R54E, not SE ¼ NE ¼. Second, the H.M. Payne field notes of October 25, 1912 referenced in the Field Investigations Report note that Bennett Spring, in 1912, was captured in a reservoir ***½ mile*** below the spring which is two-full 40 acre subdivisions to the west of the BLM claimed 40 acre subdivision (located closer to where Baumann's vested right for Bennett Spring for irrigation is diverted). As noted in State Engineer's Field Investigation Report, during their visit, there are remnants of the small reservoir with the "spring brook flowing directly down Newark Canyon and into Simpson Creek. ***With melting snow and heavier precipitation, flows reached Simpson Creek in the morning hours, but there was lesser to no flow at the junction by afternoon on the several visits***" (p. 13-14, emphasis added). This all is further evidence that the flow from Bennett Spring, prior to 1926, extended across multiple 40 acre subdivisions and did not remain as a "discrete" flow on the 40 acres BLM claims. The extension of this water across multiple 40 acre subdivisions onto land that became private land is also further proof that this land was not reserved from homestead entry and could not have been monopolized.

Land Is Not "Vacant" Or "Unappropriated" As Required In 1926 Executive Order

Based on the 1905 GLO survey, there were existing roads and trails in this 40 acre subdivision at least 20 years before 1926. This includes the "Eureka and Hamilton Road" identified on the 1905 survey map. So the land was not "vacant" or "unappropriated" in 1926 and are not today. These are rights of way established on this 40 acres under Revised Statute (RS) 2477 for travel. There may have been rights already established on this 40 acres under RS 2339 and RS 2340 easements for water storage and rights-of-way for water conveyance (ditches, dams, pipelines, etc.). This is in addition to no BLM land status maps, BLM Resource Management Plan (and amendments), and Master Title Plat Map indicating that these lands were reserved from homestead or Desert Land Entry.

Further, the private land on which this water is appurtenant (Simpson Creek Ranch, previously Hunter Ranch) was acquired through the Desert Land Act in 1948, Patent No. 1127283, 22 years after PWR 107 Executive Order. In that patent, it grants "all the rights...and appurtenances, of whatsoever nature, thereunto belonging...subject to any vested and accrued water rights for...agriculture, or other purposes, and rights to ditches and reservoirs used in connection with such water rights...." The water from Bennett Spring could not have been reserved at the source since 22 years after the Executive Order, a patent was issued by the United States to land in which the water flowed and is appurtenant under a vested right.

All State Engineer Findings under Ruling 5729 and Other Previous Orders Not Met

The finding that "PWR 107 claims cannot divert or displace a water right vested under Nevada law prior to April 17, 1926" is not met because the flow of this spring is insufficient to even satisfy the associated vested rights.

The finding that "PWR 107 claims can only be made on springs that have a discrete natural flow of water emerging...at a reasonable distinct location. It does not apply to a seep or wet spot..." is not met because Bennett Spring is not a discrete flow at a reasonable distinct location. As noted above, the flow from Bennett Spring extends across multiple 40 acre subdivisions of land.

The finding that "PWR 107 claims do not act upon a source of water that only becomes important through artificial development or man-made structures" is not met because there has been substantial artificial development and man-made structures put in at this source to cross the threshold to being "important." This includes man-made reservoir, spring collection gallery, piping, and stock troughs.

The finding that "PWR 107 claims do not apply to springs or waterholes that are...of unsatisfactory quality to satisfy the need for human and stockwatering consumption" was not met because the State Engineer did not complete an analysis of the quality of the source.

Further, in the POD and carried into the Order of Determination by the State Engineer for the East Fork Owyhee River, the State Engineer found that "if a claim of PWR is alongside or

tributary to a perennial stream, it would be impossible for the homesteader to monopolize or control vast areas of land through homesteading the spring, therefore, the primary purpose of a PWR 107 withdrawal is not served and there is no reservation." We touch on this above; since Bennett Spring is a primary source spring "alongside or tributary to a perennial stream," Simpson Creek, this previous finding was not applied here.

BLM PWR Checklist Criteria Not Met

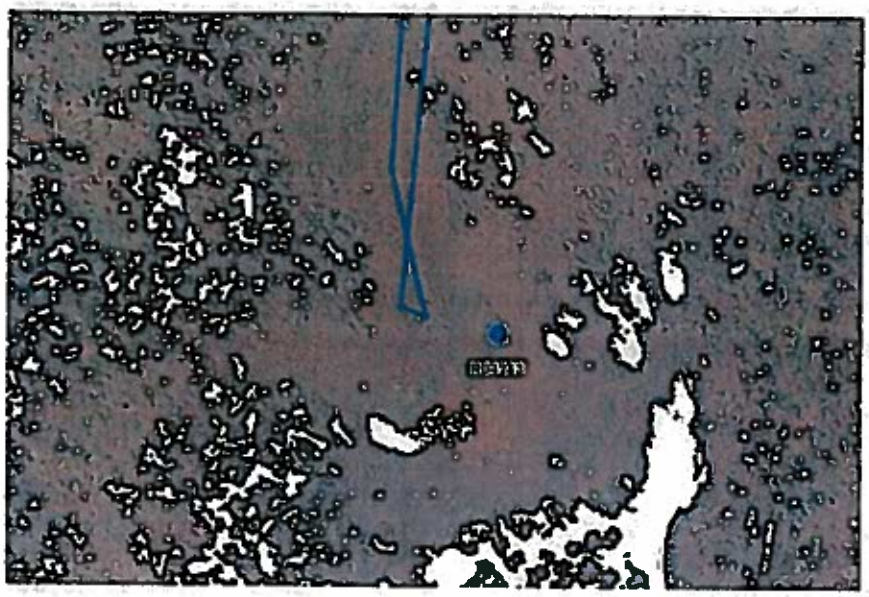
BLM's own policy was not met and should have precluded BLM from filing on this spring. The following PWR criteria based on BLM's own policy were not met:

- Private control of the spring or waterhole would monopolize the public resources – there are dozens of stockwater rights available on the grazing allotment. Nearby springs provide water expressly for human watering and are available to the public (Eureka County municipal springs).
- The source supplies a sufficient quantity of water for public watering purposes – as documented above, the spring flows are insufficient to provide enough water for public watering purposes let alone the prior vested right on this source.
- A private water right does not exist on this source – it is irrefutable that a private, prior right exists on this source.
- The source is not artificially developed (i.e., well or reservoir) – the source has been extensively, artificially developed through excavation, a man-made reservoir, piping, and troughs.

<u>R-04243</u>

Eureka County Field Reconnaissance

BLM description: "Spring supports a large meadow."



Aerial view of R04243.

Eureka County Field Reconnaissance Date/Time: 10/16/18 13:40

Site Description

R04243 is a hillside seep. The ground is hummocky, and there is water standing in shallow depressions, but there is no flow away from the seep this time of year. It is possible that there is flow from the spring earlier in the year, but the discharge is not available continuously.

Spring Flow

Although standing water is present, there was no measureable or observable flow on 10/16/18. In contrast, the BLM reported a flow of 2.5 gpm on April 13, 2016. Apparently, the flow measured by BLM during the spring of the year is not available continuously, year-round.

Hillside seep at R04243.

Prior Vested Right Fully Appropriates the Spring and Flow Rate Is Not Enough for Prior Vested Right Let Alone PWR

There are discrepancies in the Preliminary Order of Determination on this spring. On page 290, the State Engineer used BLM's flow measurements of this spring, "unnamed" by BLM, on April 13, 2016 at 2.5 gpm and found that "if the water is available on a year-round basis" would be "0.0056 cfs, 4.03 afa, and 3,600 gpd" and enough to be a PWR. On this same page, the State Engineer stated that "There are no other water right claims on this source." But, this is the same source as Proof V-09757 by Baumann, Depaoli Creek Spring, in the same 40 acre subdivision. Proof V-09757 was recognized by the State Engineer for 0.067 cfs which equals over 30 gpm, well more than BLM measured.

This finding by the State Engineer that PWR R-04243 is valid is arbitrary and incorrect based on multiple facts: 1) higher-than-average precipitation and run-off that inflated the flow under BLM's measurement and consideration of flow measurements taken by others; and 2) a prior vested right, V-09757, appropriates all of the flow.

BLM's flow measurements are artificially inflated due to higher than average precipitation and run-off, especially during the timeframe measured by BLM in spring 2016. Precipitation data from local sources, including the two nearby NRCS SNOTEL sites, Vacarro Springs (ID 1137) and Diamond Peak (ID 443), and the Diamond Valley USBR AgriMet Station, amongst others, irrefutably show that precipitation for water year 2016 and leading up to the BLM's measurements was well above average.

It appears that there were no field investigations completed by the State Engineer's office as there were no State Engineer staff field notes with flow measurements in the State Engineer

files for R-04243. On October 16, 2018, Eureka County Department of Natural Resources and Contract Hydrogeologist found the site had no measurable flow.

Land Is Not "Vacant" Or "Unappropriated" As Required In 1926 Executive Order

Based on the 1905 GLO survey, there were existing roads and trails in this 40 acre subdivision at least 20 years before 1926. So the land was not "vacant" or "unappropriated" in 1926 and is not today. These are rights of way established on this 40 acres under Revised Statute (RS) 2477 for travel. There may have been rights already established on this 40 acres under RS 2339 and RS 2340 easements for water storage and rights-of-way for water conveyance (ditches, dams, pipelines, etc.). This is in addition to no BLM land status maps, BLM Resource Management Plan (and amendments), and Master Title Plat Map indicating that these lands were reserved from homestead or Desert Land Entry.

All State Engineer Findings under Ruling 5729 and Other Previous Orders Not Met

The finding that "PWR 107 claims cannot divert or displace a water right vested under Nevada law prior to April 17, 1926" is not met because the flow of this spring is insufficient to even satisfy the associated vested rights.

The finding that "PWR 107 claims can only be made on springs that have a discrete natural flow of water emerging...at a reasonable distinct location. It does not apply to a seep or wet spot..." was not met because this water is not more than a "seep" or "wet spot" for most of every year.

The finding that "PWR 107 claims do not apply to springs or waterholes that are...of unsatisfactory quality to satisfy the need for human and stockwatering consumption" was not met because the State Engineer did not complete an analysis of the quality of the source.

BLM PWR Checklist Criteria Not Met

BLM's own policy was not met and should have precluded BLM from filing on this spring. The following PWR criteria based on BLM's own policy were not met:

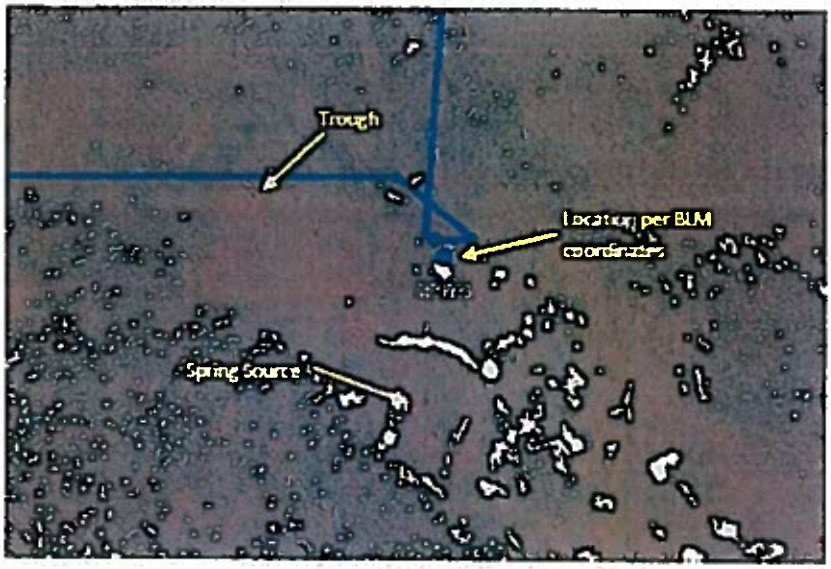
- Private control of the spring or waterhole would monopolize the public resources – there are dozens of stockwater rights available on the grazing allotment. Nearby springs provide water expressly for human watering and are available to the public (Eureka County municipal springs).
- The source supplies a sufficient quantity of water for public watering purposes – as documented above, the spring flows are insufficient to provide enough water for public watering purposes let alone the prior vested right on this source.
- A private water right does not exist on this source –a private, prior right exists on this source.

R-04244

Eureka County Field Reconnaissance

R04244

BLM description: "Spring is incised within a meadow."



Aerial Image of R04244

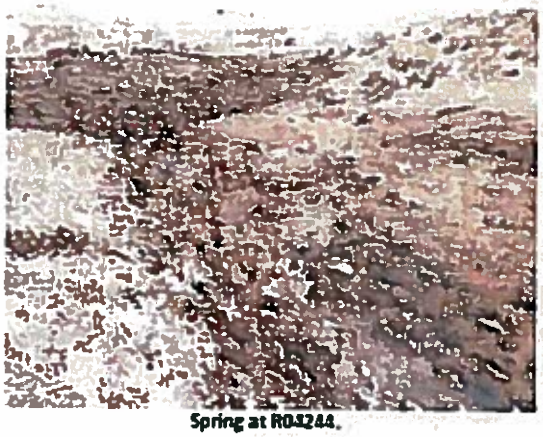
Eureka County Field Reconnaissance Date/Time: 10/16/18 13:21 hours

Site description

The spring has excavated resulting in a low earthen embankment. Water is piped 120 feet to the northwest to a trough. No flow to the trough was observed. There is a small overland flow from the spring source.

Spring flow

The discharge for R04244 was measured 10/16/18 in the channel below the spring source at 0.25 gpm. There was no flow to the trough at this time. In contrast, the BLM reported a flow of 1.25 gpm on 4/13/16. The spring flow apparently is variable, with the measurement made 4/13/16 potentially affected by springtime soil moisture conditions or runoff from the hillside above the spring, but the spring does not flow year-round at 1.25 gpm.



Spring at R04244.

R04244 Discharge Channel, viewed in a downstream direction from the source area.

Prior Vested Right Fully Appropriates the Spring and Flow Rate Is Not Enough for Prior Vested Right Let Alone PWR

There are discrepancies in the Preliminary Order of Determination on this spring. On page 290, the State Engineer used BLM's flow measurements of this spring, "unnamed" by BLM, on April 13, 2016 at 1.25 gpm and found that "If the water is available on a year-round basis" would be "0.0028 cfs, 2.01 afa, and 1,800 gpd" which is exactly enough to be a PWR. On this same page, the State Engineer stated that "There are no other water right claims on this source." But, this is the same source as Proof V-02326 by Baumann, Simpson No. 1 Spring. Proof V-02326 was recognized by the State Engineer for 0.05 cfs which equals over 22 gpm, well more than BLM measured. The water claimed by BLM under R-04244 are the same waters from Simpson No. 1 Spring that flow, when available, "via a reservoir and ditch to water...cattle" referenced in the POD on page 196.

This finding by the State Engineer that PWR R-04244 is valid is arbitrary and incorrect based on multiple facts: 1) higher-than-average precipitation and run-off that inflated the flow under BLM's measurement and consideration of flow measurements taken by others; and 2) a prior vested right, V-02326, appropriates all of the flow.

BLM's flow measurements are artificially inflated due to higher than average precipitation and run-off, especially during the timeframe measured by BLM in spring 2016. Precipitation data from local sources, including the two nearby NRCS SNOTEL sites, Vacarro Springs (ID 1137) and Diamond Peak (ID 443), and the Diamond Valley USBR AgriMet Station, amongst others, irrefutably show that precipitation for water year 2016 and leading up to the BLM's measurements was well above average.

While the POD states on page 196 that Simpson No. 1 Spring was visited by State Engineer staff in August 2017 that "confirmed the location and extent" it appears that there were no flow measurements or investigations to document that this is the same water claimed under R-04244. On October 16, 2018, Eureka County Department of Natural Resources and Contract

Hydrogeologist measured flow at 0.25 gpm, well below the vested amount and below the flow to be a valid PWR.

Land Is Not "Vacant" Or "Unappropriated" As Required In 1926 Executive Order

Based on the 1905 GLO survey, there were existing roads and trails in this 40 acre subdivision at least 20 years before 1926. So the land was not "vacant" or "unappropriated" in 1926 and is not today. These are rights of way established on this 40 acres under Revised Statute (RS) 2477 for travel. There may have been rights already established on this 40 acres under RS 2339 and RS 2340 easements for water storage and rights-of-way for water conveyance (ditches, dams, pipelines, etc.) including the ditch referenced in Proof V-02326. This is in addition to no BLM land status maps, BLM Resource Management Plan (and amendments), and Master Title Plat Map indicating that these lands were reserved from homestead or Desert Land Entry.

All State Engineer Findings under Ruling 5729 and Other Previous Orders Not Met

The finding that "PWR 107 claims cannot divert or displace a water right vested under Nevada law prior to April 17, 1926" is not met because the flow of this spring is insufficient to even satisfy the associated vested right.

The finding that "PWR 107 claims do not act upon a source of water that only becomes important through artificial development or man-made structures" is not met because there has been substantial artificial development and man-made structures put in at this source to cross the threshold to being "important." This includes excavation at the source, spring collection gallery, piping, ditch digging, and stock troughs.

The finding that "PWR 107 claims do not apply to springs or waterholes that are...of unsatisfactory quality to satisfy the need for human and stockwatering consumption" was not met because the State Engineer and BLM did not complete an analysis of the quality of the source.

BLM PWR Checklist Criteria Not Met

BLM's own policy was not met and should have precluded BLM from filing on this spring. The following PWR criteria based on BLM's own policy were not met:

- Private control of the spring or waterhole would monopolize the public resources – there are dozens of stockwater rights available on the grazing allotment.
- The source supplies a sufficient quantity of water for public watering purposes – as documented above, the spring flows are insufficient to provide enough water for public watering purposes let alone the prior vested right on this source.
- A private water right does not exist on this source –a private, prior right exists on this source.

- The source is not artificially developed (i.e., well or reservoir) – the source has been extensively developed through excavation at the source, spring collection gallery, piping, ditch digging, and stock troughs.

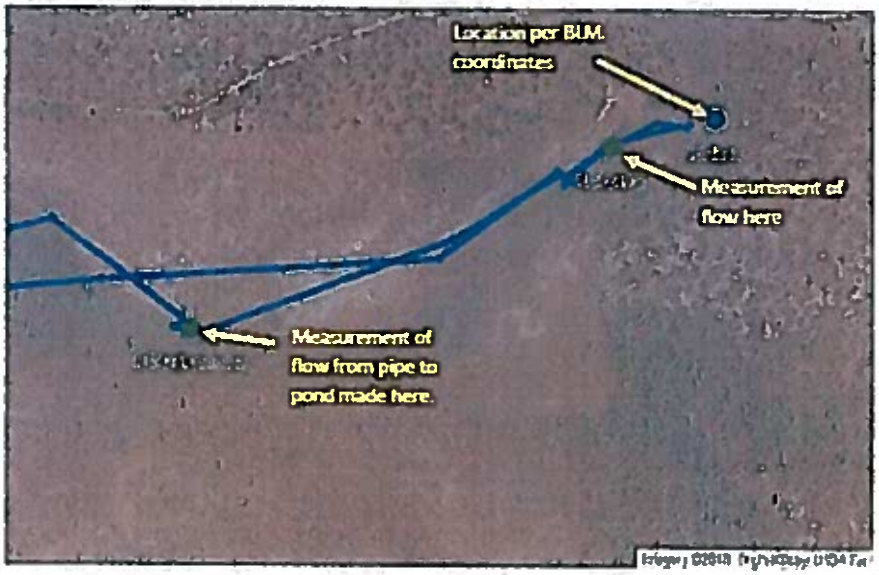
R-04249

Eureka County Field Reconnaissance

R04249

Coreales Spring

BLM description: "Spring head is fenced for about 50 meters, riparian vegetation is developed within fence."



Aerial image of R04249 site.

Eureka County Field Reconnaissance Date/Time: 10/19/18 12:25 hrs

Site description

The spring as located by BLM is a few feet beyond the boundary between pubic land and private property. Extensive spring development has taken place at the source, including remnant of a reservoir at the source, extending into the private property. Water is piped approximately one-quarter mile west-southwest to a pond. A small portion of the spring discharge flows overland west of the source.

Spring flow

The discharge from the spring was measured at two locations – in the channel approximately 250 feet west of the location depicted by the BLM and at the outfall of the pipe at the pond approximately ¼ mile to the west-southwest. Flow was measured at 3.5 gpm in the channel near the source and 20 gpm at the outfall to the pond, for a total of 23.5 gpm. In contrast, the BLM reported a flow of 3 gpm on May 16, 2016. Clearly, the spring development has captured flow in excess of the spring's natural discharge.

R0429 location based on BLM coordinates. Spring has been extensively developed to deliver water to pond ¼ mile to west-southwest.

Measurement of Spring flow not captured by pipe to pond.

Prior Right Fully Appropriates the Spring and Flow Rate Is Not Enough for Prior Right Let Alone PWR

There are discrepancies in the Preliminary Order of Determination on this spring. On page 291, the State Engineer used BLM's flow measurements of this spring, Coreales, on May 16, 2016 at 3.0 gpm and found that "if the water is available on a year-round basis" would be "0.0067 cfs, 4.83 afa, and 4,320 gpd" or enough to be a PWR. On this same page, the State Engineer stated that "There are no other water right claims on this source." But, this is the same source as Certificate 43 (Application 1937) with a priority date of January 25, 1911, more than fifteen years prior to PWR 107. This water right is for domestic, stockwatering, and irrigation at a diversion rate of 0.43 cfs. The irrigation portion of this right is for 126.48 acre-feet per season (afs) and the domestic and stockwatering portion of this right are in addition to this 126.48 afs. This water right is for the waters of Preston Creek in which the spring under R-04249 is part of.

This finding by the State Engineer that PWR R-04244 is valid is arbitrary and incorrect based on multiple facts: 1) higher-than-average precipitation and run-off that inflated the flow under

BLM's measurement and consideration of flow measurements taken by others; and 2) a prior right, Certificate 43, appropriates all of the flow.

It appears that there were no field investigations completed by the State Engineer's office as there were no State Engineer staff field notes with flow measurements in the State Engineer files for R-04249.

BLM measured the spring flow on May 16, 2016 at only 3.00 gpm. BLM failed to identify for the State Engineer that the spring area is only a few feet beyond the boundary of private property on which the water immediately flows. Extensive spring development has taken place at the source by the current and prior water rights holder. See the map associated with Application 1937 that identifies a reservoir immediately adjacent to the spring where all the water of the spring was previously impounded before being piped. Remnants of this reservoir still remain today.

BLM did not identify that most of the water is actually captured and piped approximately one-quarter mile west-southwest to a pond/reservoir on private property. A small portion of the spring discharge expresses at the source. It appears that BLM only measured this small portion that is not captured in the pipe. On October 16, 2018, Eureka County Department of Natural Resources and Contract Hydrogeologist correctly measured the flow at two locations – in the channel approximately 250 feet west of the GPS location in the BLM spreadsheet and at the outfall of the pipe at the pond approximately ¼ mile to the west-southwest. Flow was measured at 3.5 gpm in the channel at the source and 20 gpm at the outfall to the pond, for a total of 23.5 gpm. This equates to 0.052 cfs, well below the certificated amount of 0.43 cfs. So even with a flow much higher than what BLM measured, there is not enough flow to satisfy the preexisting certificated right. Also, based on the conditions of the spring development outlined above, there is no way that BLM could have obtained a flow measurement at the GPS location provided in their spreadsheet. The only location available to actually measure any of the flow at the spring that is not captured in the pipe is at the location 250 feet west of the BLM GPS point where Eureka County measured.

Land Is Not "Vacant" Or "Unappropriated" As Required In 1926 Executive Order

The spring is identified by the BLM PWR claim and the POD description as being in SE ¼ NW ¼ of Section 3, T20N, R54E. This is correct, for the most part, but some of the spring discharge area also exists in the adjacent 40 acres subdivision just to the north, Lot 3 of Section 3, T20N, R54E. The spring development area tied to the prior certifcated water right is in both 40 acre subdivisions. SE ¼ NW ¼ of Section 3, T20N, R54E (and also Lot 3 of the same section) are not "vacant" or "unappropriated" and were not in 1926. As noted in the maps associated with the water right Certificate 43 that are records of the State Engineer, in 1911, and when this right was certificated, there were identified private reservoirs, ditches, and development on these 40 acre subdivision. Further, a review of the General Land Office (GLO) records for this 40 acre subdivision reveal GLO survey and survey notes from 1905 that identify the spring, a ditch from

the spring to the main stem of Preston Creek, reservoir, a "House" on the adjacent 40 acre subdivision, and a fence around the entire homestead, and roads and trails. This area was not reserved from Homestead Entry because the infrastructure to eventually complete the homestead patent was included extensively on the entire Section 3 including the 40 acres in question. These infrastructure and rights-of-way prove that the 40 acres in question and each of the adjacent 40 acres can in no way be "vacant" or "unappropriated." These are rights of way established on this 40 acres under Revised Statute (RS) 2477 for travel and RS 2339 and RS 2340 easements for water storage and rights-of-way for water conveyance (ditches, dams, pipelines, etc.) including the ditches mentioned above. This is in addition to no BLM land status maps, BLM Resource Management Plan (and amendments), and Master Title Plat Map indicating that these lands were reserved from homestead or Desert Land Entry.

Further, the patent for the private land on which this water is appurtenant, Patent No. 394049, in 1914 granted "all the rights...and appurtenances, of whatsoever nature, thereunto belonging...subject to any vested and accrued water rights for...agriculture, or other purposes, and rights to ditches and reservoirs used in connection with such water rights...." The water and 40 acres in question could not have been reserved at the source since 12 years prior to the the Executive Order, a patent was issued by the United States to land in which the water flowed and is appurtenant under a right with associated ditches and reservoirs, etc., in the 40 acres in question.

All State Engineer Findings under Ruling 5729 and Other Previous Orders Not Met

The finding that "PWR 107 claims cannot divert or displace a water right vested under Nevada law prior to April 17, 1926" is not met because the flow of this spring is insufficient to even satisfy the associated certificated right.

The finding that "PWR 107 claims do not act upon a source of water that only becomes important through artificial development or man-made structures" is not met because there has been substantial artificial development and man-made structures put in at this source to cross the threshold to being "important." This includes excavation at the source, extensive spring collection gallery, piping, ditch digging, and reservoir building.

The finding that "PWR 107 claims do not apply to springs or waterholes that are inaccessible to domestic livestock or are of unsatisfactory quality to satisfy the need for human and stockwatering consumption" was not met because first, the State Engineer or the BLM did not complete an analysis of the quality of the source; and second, the spring has been fenced off from the public and grazing allotment since at least 1905 as depicted in the GLO survey. The area is still fenced off from the public lands grazing allotment today and remains inaccessible to livestock. Based on the evidence, this spring has been continually fenced off for over 100 years from livestock ranging on public lands.

BLM PWR Checklist Criteria Not Met

BLM's own policy was not met and should have precluded BLM from filing on this spring. The following PWR criteria based on BLM's own policy were not met:

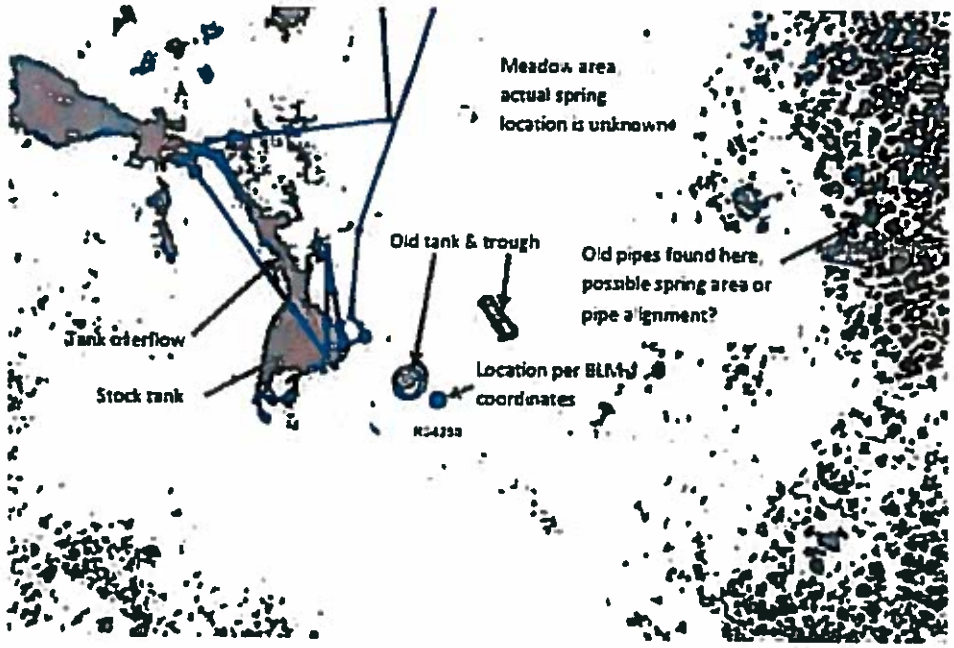
- Private control of the spring or waterhole would monopolize the public resources – there are dozens of stockwater rights available on the grazing allotment.
- The source supplies a sufficient quantity of water for public watering purposes – as documented above, the spring flows are insufficient to provide enough water for public watering purposes let alone the prior vested right on this source.
- A private water right does not exist on this source –a private, prior right exists on this source.
- The source is not artificially developed (i.e., well or reservoir) – the source has been extensively developed through excavation at the source, extensive spring collection gallery, piping, ditch digging, and reservoir building

R-04250

Eureka County Field Reconnaissance

R04250

BLM description. "3 meadows lead to a piped trough which then leads to an overflow stream."



Aerial image of R04250 site.

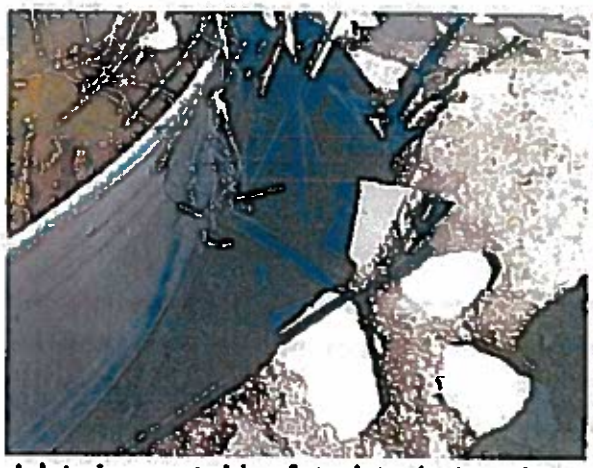
Eureka County Field Reconnaissance Date/Time: 10/19/18 11:12 hrs

Site description

A stock tank is located down-slope of a fairly large meadow area located to the northeast of a stock tank that has been placed in an excavated area where a dirt embankment has been built. No springs or seeps were obvious at the time of the field inspection. The location of the developed spring(s) is unknown. There is an aspen stand ½ mile to the east in the same drainage that plots in the same 40 acre subdivision as Permit 2157, Certificate 165. More research needs to be done to determine if that is the source of the pipe. Old pipe was found approximately 150 feet east of the tank at the location of a shallow depression, suggesting the pipe may have been installed in this direction, but this conclusion is speculative. Overflow from the tanks runs off to the west-northwest.

Spring Flow

The inflow to the tank from the spring was measured at **1.1 gpm**. This compares with the measurement of 2 gpm on 5/16/18 report by the BLM. The measurement made 10/19/18 is more representative of base flow from the spring and the spring apparently does not flow continuously at 2 gpm.



Inlet pipe, east side of stock tank. Location of spring source cannot be determined.

Overflow from tank flows to the north-northwest.

Inlet pipe to stock tank points toward the east, but the developed spring source cannot be determined.

Flow Rate Is Not Enough for a PWR

The State Engineer used BLM's flow measurements of this spring on May 16, 2016 at 2.0 gpm and found that "if the water is available on a year-round basis" would be "0.0045 cfs, 3.22 afa, and 2,880 gpd" and enough to be a valid PWR. This finding by the State Engineer is arbitrary and incorrect based on higher-than-average precipitation and run-off that inflated the flow under BLM's measurement and consideration of flow measurements taken by others.

BLM's flow measurements are artificially inflated due to higher than average precipitation and run-off, especially during the timeframe measured by BLM in spring 2016. Precipitation data from local sources, including the two nearby NRCS SNOTEL sites, Vacarro Springs (ID 1137) and Diamond Peak (ID 443), and the Diamond Valley USBR AgriMet Station, amongst others, irrefutably show that precipitation for water year 2016 and leading up to the BLM's measurements was well above average.

It appears that there were no field investigations completed by the State Engineer's office as there were no State Engineer staff field notes with flow measurements in the State Engineer files for R-04250. On October 19, 2018, Eureka County Department of Natural Resources and Contract Hydrogeologist measured the flow at 1.1 gpm, below the amount necessary to be a valid PWR.

Consideration of precipitation data at the time of BLM's measurement and the County's field visit proves that there is not enough sustained flow to satisfy a PWR under R-04250.

Flow Extends Across Separate 40 Acre Subdivisions

While the BLM claims a spring in NE ¼ SW ¼ Sec. 12, T20N, R54E, it is not clear where a spring actually is in this 40 acres subdivision. As noted in the Eureka County field work, there is no obvious spring in this 40 acre subdivision. There is evidence of substantial development including pipe strewn around, an excavated area with a dirt embankment where a stock trough is located, and a pipe flowing water into this trough. The trough and excavated area plot as dividing the 40 acres claimed by BLM and the 40 acres immediately to the west (NW ¼ SW ¼ Sec. 12, T20N, R54E). This all is further evidence that the flow from this source extends across multiple 40 acre subdivisions and is not a "discrete" flow on the 40 acres BLM claims.

Spring May Be Water Appropriated Under Permit 2157 or Permit 2289, both under Certificate 165 and Also Vested As Referenced In Permit 2289

In the field, Eureka County documented an aspen stand ½ mile up the drainage to the east. Further research on this found that Permit 2157, Certificate 165 (irrigation, stock, and domestic purposes) for Red Rock Spring is located at these aspen trees. Permit 2157 states that "water runs in the natural creek for one and one-half mile and then carried through a ditch..." and also that "this permit is granted as a part of permit No. 2289 as the lands enumerated in each application are identical. Permit No. 2289 is situated lower on the stream and ***takes water from all tributaries. This source is one of the tributaries***" (emphasis added). Certificate 165 states that "The area herein allowed is also named in proof of beneficial use under permit No. 2157 from Red Rock Spring. That source is tributary of Cottonwood Creek and therefore this certificate will cover both permits." Permit 2289 is for "Cottonwood Creek and all of its tributaries" and states that "This permit is granted in conjunction with permit No. 2157....The later permit No. 2289 is ***to perfect an old vested right***, and the permit thereunder is granted without jeopardizing the priority to water, though recorded under this permit" (emphasis added). It appears that this water is fully appropriated under Permit 2157 or Permit 2289, both certificated in Certificate 165, as either Red Rock Spring or "Cottonwood Creek and all of its tributaries" and more than a decade prior to 1926.

Land Is Not "Vacant" Or "Unappropriated" As Required In 1926 Executive Order

Based on the 1905 GLO survey, there were existing roads and trails in this 40 acre subdivision at least 20 years before 1926 so the land was not "vacant" or "unappropriated" in 1926 and are

not today. These are rights of way established on this 40 acres under Revised Statute (RS) 2477 for travel. There may have been rights already established on this 40 acres under RS 2339 and RS 2340 easements for water storage and rights-of-way for water conveyance (ditches, dams, pipelines, etc.) including the conveyance of Red Rock Spring as identified in Permit 2157, Certificate 165. This is in addition to no BLM land status maps, BLM Resource Management Plan (and amendments), and Master Title Plat Map indicating that these lands were reserved from homestead or Desert Land Entry.

All State Engineer Findings under Ruling 5729 Not Met

The finding that "PWR 107 claims cannot divert or displace a water right vested under Nevada law prior to April 17, 1926" may not have been met because this spring appears to be appropriated under prior rights and flow is insufficient to even satisfy the associated certificated right.

The finding that "PWR 107 claims do not act upon a source of water that only becomes important through artificial development or man-made structures" is not met because there has been substantial artificial development and man-made structures put in at this source to cross the threshold to being "important." This includes excavation at the source, extensive spring collection gallery, piping, and reservoir building.

The finding that "PWR 107 claims do not apply to springs or waterholes that are inaccessible to domestic livestock or are of unsatisfactory quality to satisfy the need for human and stockwatering consumption" was not met because the State Engineer and BLM did not complete an analysis of the quality of the source.

BLM PWR Checklist Criteria Not Met

BLM's own policy was not met and should have precluded BLM from filing on this spring. The following PWR criteria based on BLM's own policy were not met:

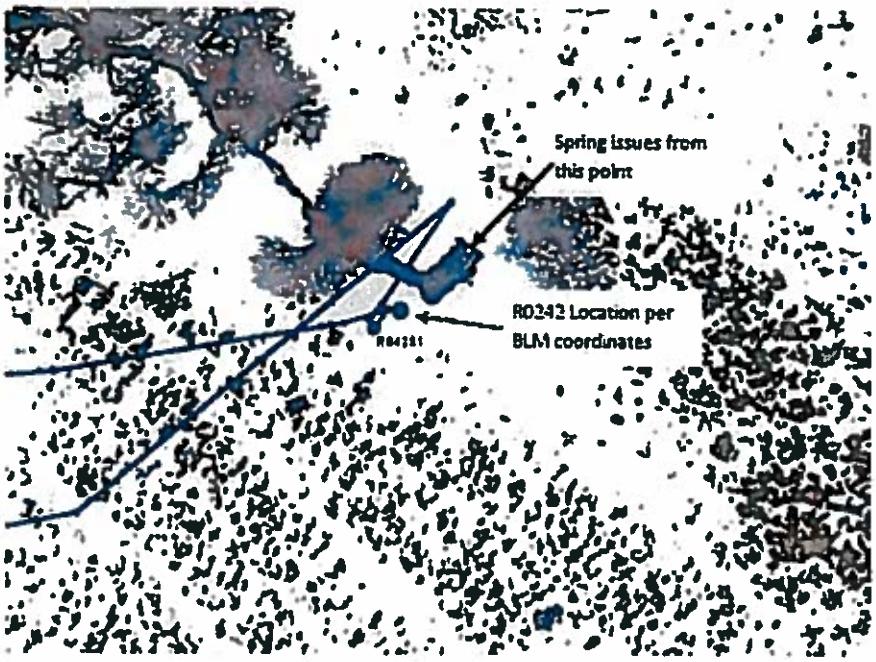
- Private control of the spring or waterhole would monopolize the public resources – there are dozens of stockwater rights available on the grazing allotment.
- The source supplies a sufficient quantity of water for public watering purposes – as documented above, the spring flows are insufficient to provide enough water for public watering purposes let alone the likely prior right on this source.
- A private water right does not exist on this source –a private, prior right likely exists on this source.
- The source is not artificially developed (i.e., well or reservoir) – the source has been extensively developed through excavation at the source, extensive spring collection gallery, piping, and reservoir building.

R-04251

Eureka County Field Reconnaissance

R04251

BLM description: "Spring expresses from a rock outcropping and forms a small stream, which flows into a larger tributary. There is lush riparian and small meadows flanking the streambed. There is also a trough which catches some of the spring flow."



Aerial image of R04251 site.

Eureka County Field Reconnaissance Date/Time: 10/18/18 18:15 hrs

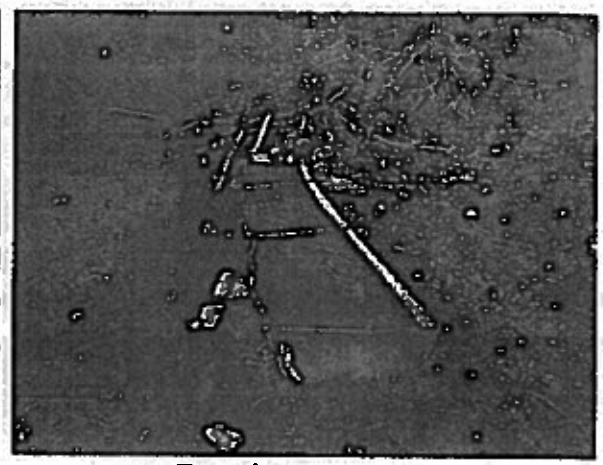
Site description

The site is consistent with the BLM description, except that the rock outcrop appears to be locally-sourced riprap placed to protect the source. Water from the source is piped to a trough, but not all of the discharge is captured. The remainder flows in a small channel leading down the draw. There is a second trough, although it is non-functional.

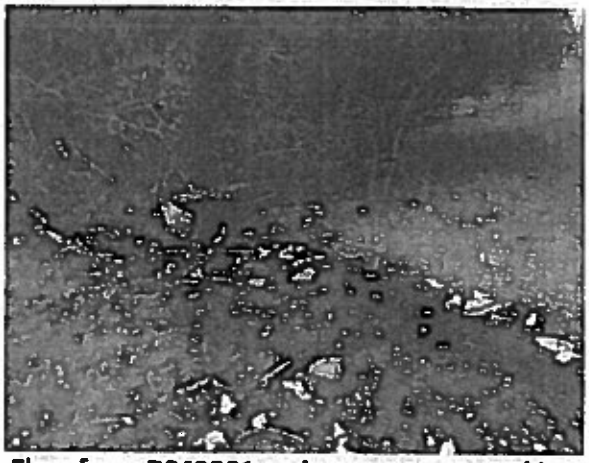
Spring flow

The spring flow measurement on 10/18/18 of 0.75 gpm was taken in the stream channel below the trough such that it includes the overflow from the trough as well as the spring discharge that is not collected and conveyed to the trough. This measurement contrasts with reported flow of 12 gpm reported by the BLM on 5/16/16. It seems likely that the BLM measurement was affected by seasonal recharge or runoff.

Spring at R04251.



Trough at R04251.



Flow from R042501 spring was measured in the channel below the trough at the source. This trough is not functional.

Flow Rate Is Not Enough for a PWR

The State Engineer used BLM's flow measurements of this spring on May 16, 2016 at 12.0 gpm and found that "if the water is available on a year-round basis" would be "0.0267 cfs, 19.32 afa, and 17,280 gpd" and enough to be a valid PWR. This finding by the State Engineer is arbitrary and incorrect based on higher-than-average precipitation and run-off that inflated the flow under BLM's measurement and consideration of flow measurements taken by others.

BLM's flow measurements are artificially inflated due to higher than average precipitation and run-off, especially during the timeframe measured by BLM in spring 2016. Precipitation data from local sources, including the two nearby NRCS SNOTEL sites, Vacarro Springs (ID 1137) and Diamond Peak (ID 443), and the Diamond Valley USBR AgriMet Station, amongst others,

irrefutably show that precipitation for water year 2016 and leading up to the BLM's measurements was well above average.

It appears that there were no field investigations completed by the State Engineer's office as there were no State Engineer staff field notes with flow measurements in the State Engineer files for R-04251. On October 8, 2007, SRK Consulting measured flow at this spring at 0.41 gpm (source: July 2010 "Hydrogeology and Numerical Flow Modeling, Mt. Hope Project, Eureka County, Nevada" Appendix E, Spring Inventory Dataset). This data from SRK Consulting is part of the records of the State Engineer through the Kobeh Valley Ranch (General Moly) water rights hearings process. On October 18, 2018, Eureka County Department of Natural Resources and Contract Hydrogeologist measured the flow at 0.75 gpm. Both SRK's and Eureka County's measurements are well below the amount necessary to be a valid PWR.

Consideration of precipitation data at the time of BLM's measurement and SRK's and the County's field visit proves that there is not enough sustained flow to satisfy a PWR under R-04251.

Spring May Be Water Appropriated Under Permit 2289, Certificate 165 and Also Vested As Referenced In Permit 2289

This spring is irrefutably in the Cottonwood Creek tributary. Permit 2289 is for "Cottonwood Creek and all of its tributaries" and states that "This permit is granted in conjunction with permit No. 2157....The later permit No. 2289 is ***to perfect an old vested right***, and the permit thereunder is granted without jeopardizing the priority to water, though recorded under this permit" (emphasis added). It appears that this water is fully appropriated under Permit 2289, Certificate 165 more than a decade prior to 1926.

Land Is Not "Vacant" Or "Unappropriated" As Required In 1926 Executive Order

Based on the 1905 GLO survey, there were existing roads and trails in this 40 acre subdivision at least 20 years before 1926 so the land was not "vacant" or "unappropriated" in 1926 and are not today. These are rights of way established on this 40 acres under Revised Statute (RS) 2477 for travel. There may have been rights already established on this 40 acres under RS 2339 and RS 2340 easements for water storage and rights-of-way for water conveyance (ditches, dams, pipelines, etc.). This is in addition to no BLM land status maps, BLM Resource Management Plan (and amendments), and Master Title Plat Map indicating that these lands were reserved from homestead or Desert Land Entry.

All State Engineer Findings under Ruling 5729 Not Met

The finding that "PWR 107 claims cannot divert or displace a water right vested under Nevada law prior to April 17, 1926" may not have been met because this spring appears to be appropriated under prior rights and flow is insufficient to even satisfy the associated certificated right.

The finding that "PWR 107 claims do not act upon a source of water that only becomes important through artificial development or man-made structures" is not met because there has been substantial artificial development and man-made structures put in at this source to cross the threshold to being "important." This includes excavation at the source, extensive spring collection gallery, piping, and reservoir building.

The finding that "PWR 107 claims do not apply to springs or waterholes that are inaccessible to domestic livestock or are of unsatisfactory quality to satisfy the need for human and stockwatering consumption" was not met because the State Engineer or BLM did not complete an analysis of the quality of the source.

BLM PWR Checklist Criteria Not Met

BLM's own policy was not met and should have precluded BLM from filing on this spring. The following PWR criteria based on BLM's own policy were not met:

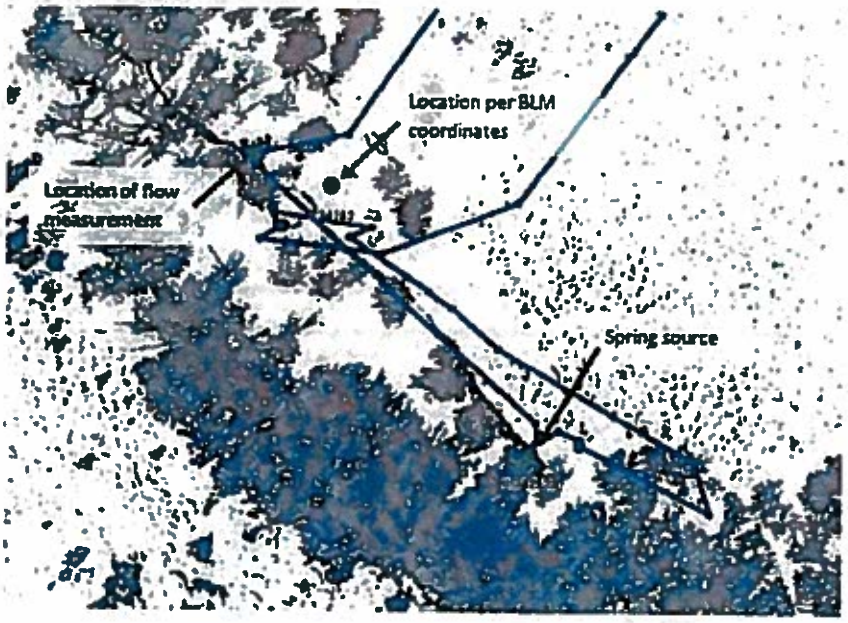
- Private control of the spring or waterhole would monopolize the public resources – there are dozens of stockwater rights available on the grazing allotment.
- The source supplies a sufficient quantity of water for public watering purposes – as documented above, the spring flows are insufficient to provide enough water for public watering purposes let alone the likely prior right on this source.
- A private water right does not exist on this source –a private, prior right likely exists on this source.
- The source is not artificially developed (i.e., well or reservoir) – the source has been extensively developed through excavation at the source, extensive spring collection gallery, piping, and reservoir building.

R-04252

Eureka County Field Reconnaissance

R04252

BLM description: "4 seeps channelize into a stream which flows into larger streams along a large stand of aspen, willow, and cottonwood trees. Each seep channelizes separately, but ultimately lead to the same intermittent stream."



Aerial image of R0452 site.

Eureka County Field Reconnaissance Date/Time: 10/18/18 17:30 hrs

Land ownership and Site description

The spring claimed as a PWR is located on private property and is a source of flow to Cottonwood Creek. Although additional seeps are present, the primary source observed 10/18/18 is located southeast and upslope from the location indicated by the BLM.

Spring flow

Spring discharge was measured at 11.5 gpm on 10/18/18 downstream of the location indicated by the BLM in order to capture the combined discharge at this location. This compares to a flow of 47.3 gpm reported by the BLM on 5/16/16. The large difference suggests that spring runoff may have contributed to the high flow measured by the BLM and 11.5 gpm may be more representative of the base flow from this spring.

Source of spring at R04252

Location of measurement downstream of R04252.

Land Is Not Even Public Land and No Additional Analysis Necessary

This PWR should been rejected because the spring and associated 40 acre subdivision are private land. There is no way that the 40 acre subdivision of land in which spring lies could have been reserved in the 1926 Executive Order because it is now private land. While no additional analysis is needed since this is private land, we do additional analysis below as this has bearing on other water rights and PWR claims in the area. We assert that even if this spring were on public land, the spring would still not meet the findings and criteria to be a PWR including State Engineer findings in Ruling 5729 and the BLM PWR policy and checklist.

Spring May Be a Vested Right As Referenced In Permit 2289, Certificate 165 and Permit 8815, Certificate 2023

This spring is irrefutably in the Cottonwood Creek tributary. It is named "Cottonwood Springs" as it is the primary, perennial source water for Cottonwood Creek. Permit 2289 is for "Cottonwood Creek and all of its tributaries" and states that "This permit is granted in conjunction with permit No. 2157....The later permit No. 2289 is ***to perfect an old vested right***, and the permit thereunder is granted without jeopardizing the priority to water, though recorded under this permit" (emphasis added). It appears that this water is fully appropriated under Permit 2289, Certificate 165 more than a decade prior to 1926. Permit 8815 is for "Cottonwood Springs and Creek" for "stockwatering and domestic purposes." Permit 8815 also states that "Applicants and their predecessors have used water from this source, together with the range territory in the vicinity thereof, for many years prior to 1905 and claim a vested right thereby...." Certificate 2023 is for "Cottonwood Spring and Creek (Main Branch) through pipeline and troughs for stockwatering and domestic."

Even If on Public Land, Flow Rate Is Not Enough for Prior Rights and a PWR

The State Engineer used BLM's flow measurements of this spring on May 16, 2016 of 47.30 gpm and found that "if the water is available on a year-round basis" would be "0.1054 cfs, 76.15 afa, and 68,112 gpd" and enough to be a valid PWR. This finding by the State Engineer is arbitrary and incorrect based on higher-than-average precipitation and run-off that inflated the flow under BLM's measurement and consideration of flow measurements taken by others.

BLM's flow measurements are artificially inflated due to higher than average precipitation and run-off, especially during the timeframe measured by BLM in spring 2016. Precipitation data from local sources, including the two nearby NRCS SNOTEL sites, Vacarro Springs (ID 1137) and Diamond Peak (ID 443), and the Diamond Valley USBR AgriMet Station, amongst others, irrefutably show that precipitation for water year 2016 and leading up to the BLM's measurements was well above average.

It appears that there were no field investigations completed by the State Engineer's office as there were no State Engineer staff field notes with flow measurements in the State Engineer files for R-04252. On October 18, 2018, Eureka County Department of Natural Resources and Contract Hydrogeologist measured the flow at 11.5 gpm which equals 0.026 cfs which is less that the amount necessary to satisfy the prior rights discussed above.

Consideration of precipitation data at the time of BLM's measurement and the County's field measurement proves that there is not enough sustained flow to satisfy existing rights let alone a PWR under R-04252.

Even If on Public Land, Land Is Not "Vacant" Or "Unappropriated" As Required In 1926 Executive Order

Again, Based on the 1905 GLO survey, there were existing roads and trails in this 40 acre subdivision at least 20 years before 1926 so the land was not "vacant" or "unappropriated" in 1926 and are not today. These are rights of way established on this 40 acres under Revised Statute (RS) 2477 for travel. There may have been rights already established on this 40 acres under RS 2339 and RS 2340 easements for water storage and rights-of-way for water conveyance (ditches, dams, pipelines, etc.). This is in addition to no BLM land status maps, BLM Resource Management Plan (and amendments), and Master Title Plat Map indicating that these lands were reserved from homestead or Desert Land Entry.

All State Engineer Findings under Ruling 5729 Not Met

First off, these findings do not apply because the 40 acres and spring in question are private land. However, even if it were public land the following were not met.

The finding that "PWR 107 claims cannot divert or displace a water right vested under Nevada law prior to April 17, 1926" may not have been met because this spring appears to be appropriated under prior rights and flow is insufficient to even satisfy the associated certificated right.

The finding that "PWR 107 claims do not act upon a source of water that only becomes important through artificial development or man-made structures" is not met because there has been substantial artificial development and man-made structures put in at this source to cross the threshold to being "important." This includes excavation, extensive spring collection gallery, piping, trough installation, and reservoir building.

The finding that "PWR 107 claims do not apply to springs or waterholes that are inaccessible to domestic livestock or are of unsatisfactory quality to satisfy the need for human and stockwatering consumption" was not met because the State Engineer or BLM did not complete an analysis of the quality of the source.

BLM PWR Checklist Criteria Not Met

First off, these criteria do not apply because the 40 acres and spring in question are private land. However, even if it were public land, BLM's own policy was not met and should have precluded BLM from filing on this spring. The following PWR criteria based on BLM's own policy were not met:

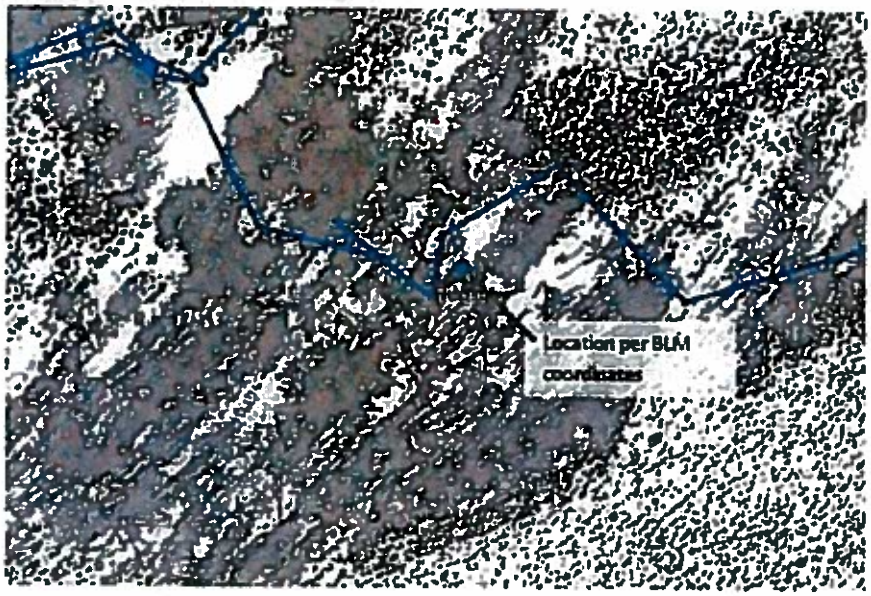
- Private control of the spring or waterhole would monopolize the public resources – there are dozens of stockwater rights available on the grazing allotment. The source is fully private.
- The source supplies a sufficient quantity of water for public watering purposes – as documented above, the spring flows are insufficient to provide enough water for the prior right on this source let alone for public watering purposes.
- A private water right does not exist on this source –a private, prior right likely exists on this source.
- The source is not artificially developed (i.e., well or reservoir) – the source has been extensively developed through excavation at the source, extensive spring collection gallery, piping, trough installation, and reservoir building.

R-04253

Eureka County Field Reconnaissance

R04253

BLM description: "Spring located in a large aspen stand."



Aerial image of R04253 site.

Eureka County Field Reconnaissance Date/Time: 10/18/18 14:50 hrs

Site description

Multiple seeps are dispersed in a large stand of Aspens.

Spring flow

Spring discharge was measured in the stream channel below the seeps at 1.01 gpm on 10/18/18. This compares to a flow of 2.35 gpm reported by the BLM on 5/13/16. The flow measured 10/18/18 is more representative of base flow from this complex and indicates the flow measured by the BLM is not available continuously.

Location of seep at coordinates provided by BLM for R04253. Site is wet, but no measureable flow.

Location where measurement was taken in stream channel below seeps.

Prior Vested Right Fully Appropriates the Spring and Flow Rate Is Not Enough for Prior Vested Right Let Alone PWR

There are discrepancies in the Preliminary Order of Determination on this spring. On page 293, the State Engineer used BLM's flow measurements of this spring, "Unnamed Spring," on April 14, 2016 at 2.35 gpm and found that "if the water is available on a year-round basis" would be "0.0052 cfs, 3.78 afa, and 3,384 gpd" and enough to be a valid PWR. On this same page, the State Engineer stated that "There are no other water right claims on this source." But, this is part of the source water for Proof V-02884 for Hildebrand Canyon Creek. Proof V-02884 was recognized by the State Engineer for 0.15 cfs and 62.18 afs, well more than BLM measured.

This finding by the State Engineer that PWR R-04253 is valid is arbitrary and incorrect based on multiple facts: 1) higher-than-average precipitation and run-off that inflated the flow under BLM's measurement and consideration of flow measurements taken by others; and 2) a prior vested right, V-02884, appropriates all of the flow.

BLM's flow measurements are artificially inflated due to higher than average precipitation and run-off, especially during the timeframe measured by BLM in spring 2016. Precipitation data from local sources, including the two nearby NRCS SNOTEL sites, Vacarro Springs (ID 1137) and Diamond Peak (ID 443), and the Diamond Valley USBR AgriMet Station, amongst others, irrefutably show that precipitation for water year 2016 and leading up to the BLM's measurements was well above average.

It appears that there were no field investigations completed by the State Engineer's office as there were no State Engineer staff field notes with flow measurements in the State Engineer files for R-04253. On October 18, 2018, Eureka County Department of Natural Resources and Contract Hydrogeologist measured flow at 1.01 gpm, below the threshold to be a PWR spring.

Consideration of precipitation data at the time of BLM's measurement and the County's measurement proves that there is not enough sustained flow to satisfy a PWR and the associated vested right.

Land Is Not "Vacant" Or "Unappropriated" As Required In 1926 Executive Order

The 40 acres directly adjacent to the 40 acres claimed by BLM was in fact homesteaded and is private land. The stream channel from this spring and the main channel from Hildebrand Creek both run through the private parcel. This parcel is owned by the same owner of Proof V-02884 and this land was likely claimed as a homestead because of the adjacent water in the spring of question and Hildebrand Creek. Further, these were State Contract Lands as referenced in the POD on page 112. This is obvious proof that these lands were not reserved from homestead entry in 1926.

This 40 acres was included in the 1893 GLO survey, there were existing roads and trails in this 40 acre subdivision well before 1926 so the land was not "vacant" or "unappropriated" in 1926 and are not today. These are rights of way established on this 40 acres under Revised Statute (RS) 2477 for travel. There may have been rights already established on this 40 acres under RS 2339 and RS 2340 easements for water storage and rights-of-way for water conveyance (ditches, dams, pipelines, etc.). This is in addition to no BLM land status maps, BLM Resource Management Plan (and amendments), and Master Title Plat Map indicating that these lands were reserved from homestead or Desert Land Entry.

All State Engineer Findings under Ruling 5729 Not Met

The finding that "PWR 107 claims cannot divert or displace a water right vested under Nevada law prior to April 17, 1926" may not have been met because this spring appears to be appropriated under prior rights and flow is insufficient to even satisfy the associated certificated right.

The finding that "PWR 107 claims do not act upon a source of water that only becomes important through artificial development or man-made structures" is not met because there has been substantial artificial development and man-made structures put in at this source to cross the threshold to being "important."

The finding that "Not more than one PWR 107 claim can be made within any 40-acre parcel and any two PWR 107 claims must be more than ¼ mile apart" was not met because there is another PWR claim (which we also dispute below), R-04254, less than ¼ mile away.

The finding that "PWR 107 claims do not apply to springs or waterholes that are inaccessible to domestic livestock or are of unsatisfactory quality to satisfy the need for human and stockwatering consumption" was not met because the State Engineer or BLM did not complete an analysis of the quality of the source.

BLM PWR Checklist Criteria Not Met

BLM's own policy was not met and should have precluded BLM from filing on this spring. The following PWR criteria based on BLM's own policy were not met:

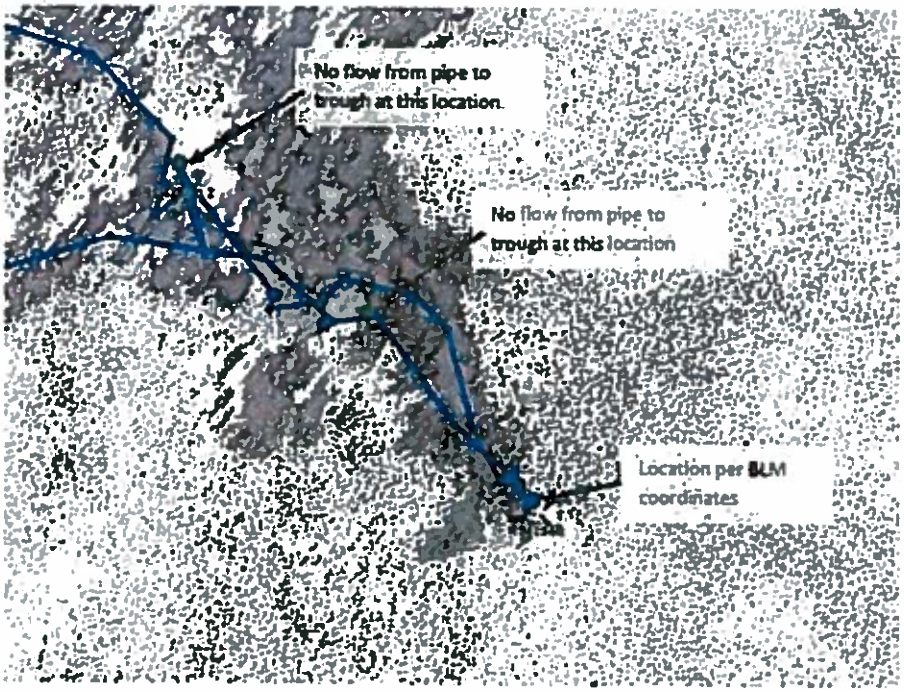
- Private control of the spring or waterhole would monopolize the public resources – there are dozens of stockwater rights available on the grazing allotment.
- The source supplies a sufficient quantity of water for public watering purposes – as documented above, the spring flows are insufficient to provide enough water for public watering purposes let alone the likely prior right on this source.
- A private water right does not exist on this source –a private, prior right likely exists on this source.
- The source is not artificially developed (i.e., well or reservoir) – the source has been extensively developed.

R-04254

Eureka County Field Reconnaissance

R04254

BLM description: "Spring flows out of topographic break at bottom of mountain. Feeds into small meadow and then into a large aspen stand."



Aerial image of R04254 site.

Eureka County Field Reconnaissance Date/Time: 10/18/18 14:50 hrs

Site description

Conditions at the site are somewhat consistent with the BLM description. BLM did not report the spring might be part of a spring complex within the aspen grove. Spring has been developed with pipes to two troughs located down-slope of the spring that were not mentioned in the BLM description of the spring. A few sections of old riveted pipe are strewn on the ground below the source.

Spring flow

The spring flow measurements were taken at two locations in the stream channel - one located approximately 50 feet downslope of the source, the second at the lower trough approximately 1,000 feet downstream of the source – to obtain the combined flow of the spring complex. Total spring discharged measured 10/18/18 was 4.01 gpm. This rate is greater than the measurement of 2.5 gpm reported by the BLM April 14, 2016.

R04254 source as described by BLM.

Location of measurement from channel located approximately 50 feet downslope of source.

Lower trough where 2nd flow measurement was collected.

Prior Vested Right Fully Appropriates the Spring and Flow Rate Is Not Enough for Prior Vested Right Let Alone PWR

There are discrepancies in the Preliminary Order of Determination on this spring. On page 294, the State Engineer used BLM's flow measurements of this spring, "Hildebrand Spring Number 2," on April 14, 2016 at 2.50 gpm and found that "if the water is available on a year-round basis" would be "0.0056 cfs, 4.03 afa, and 3,600" and enough to be a valid PWR. On this same page, the State Engineer stated that "There are no other water right claims on this source." But, this is part of the source water for Proof V-02884 for Hildebrand Canyon Creek. Proof V-02884 was recognized by the State Engineer for 0.15 cfs and 62.18 afs, well more than BLM measured.

This finding by the State Engineer that PWR R-04254 is valid is arbitrary and incorrect based on a prior vested right, V-02884, which appropriates all of the flow.

It appears that there were no field investigations completed by the State Engineer's office as there were no State Engineer staff field notes with flow measurements in the State Engineer files for R-04253. On October 18, 2018, Eureka County Department of Natural Resources and Contract Hydrogeologist measured flow at 4.01 gpm. This is the only spring measured by Eureka County that had a flow greater than that measured by BLM. However, the facts that BLM did not note that the spring has been extensively developed with pipes to two troughs located down-slope of the spring, and Eureka County's flow measurements were taken at two locations in the stream channel - one located approximately 50 feet downslope of the source, the second at the lower trough approximately 1,000 feet downstream of the source – to obtain the combined flow of the spring complex, it is highly likely that BLM did not measure the entire flow at the site. BLM was likely not measuring the spring flow at all but instead runoff completely.

Land Is Not "Vacant" Or "Unappropriated" As Required In 1926 Executive Order

The 40 acres directly adjacent to the 40 acres claimed by BLM was in fact homesteaded and is private land. The stream channel from this spring and the main channel from Hildebrand Creek both run through the private parcel. This parcel is owned by the same owner of Proof V-02884 and this land was likely claimed as a homestead because of the adjacent water in the spring of question and Hildebrand Creek. Further, these were State Contract Lands as referenced in the POD on page 112. This is obvious proof that these lands were not reserved from homestead entry in 1926.

This 40 acres was included in the 1893 GLO survey, there were existing roads and trails in this 40 acre subdivision well before 1926 so the land was not "vacant" or "unappropriated" in 1926 and are not today. These are rights of way established on this 40 acres under Revised Statute (RS) 2477 for travel. There may have been rights already established on this 40 acres under RS 2339 and RS 2340 easements for water storage and rights-of-way for water conveyance (ditches, dams, pipelines, etc.). This is in addition to no BLM land status maps, BLM Resource Management Plan (and amendments), and Master Title Plat Map indicating that these lands were reserved from homestead or Desert Land Entry.

All State Engineer Findings under Ruling 5729 Not Met

The finding that "PWR 107 claims cannot divert or displace a water right vested under Nevada law prior to April 17, 1926" may not have been met because this spring appears to be appropriated under prior rights and flow is insufficient to even satisfy the associated certificated right.

The finding that "PWR 107 claims do not act upon a source of water that only becomes important through artificial development or man-made structures" is not met because there

has been substantial artificial development and man-made structures put in at this source to cross the threshold to being "important."

The finding that "Not more than one PWR 107 claim can be made within any 40-acre parcel and any two PWR 107 claims must be more than ¼ mile apart" was not met because there is another PWR claim (which we also dispute above), R-04253, less than ¼ mile away.

The finding that "PWR 107 claims do not apply to springs or waterholes that are inaccessible to domestic livestock or are of unsatisfactory quality to satisfy the need for human and stockwatering consumption" was not met because the State Engineer or BLM did not complete an analysis of the quality of the source.

BLM PWR Checklist Criteria Not Met

BLM's own policy was not met and should have precluded BLM from filing on this spring. The following PWR criteria based on BLM's own policy were not met:

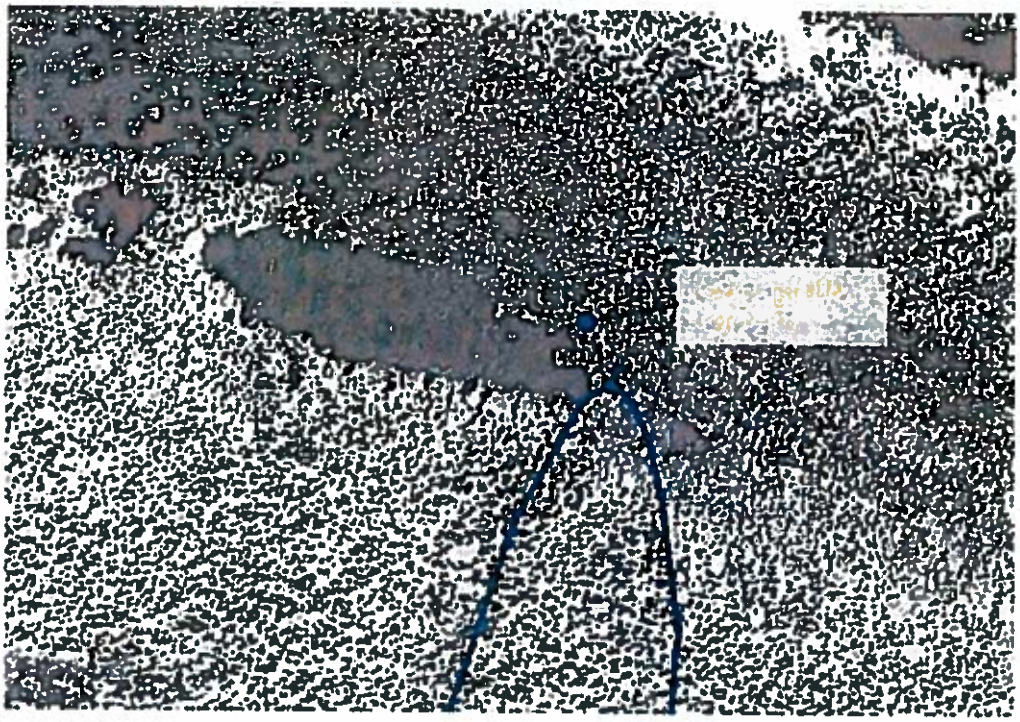
- Private control of the spring or waterhole would monopolize the public resources – there are dozens of stockwater rights available on the grazing allotment.
- The source supplies a sufficient quantity of water for public watering purposes – as documented above, the spring flows are insufficient to provide enough water for public watering purposes let alone the likely prior right on this source.
- A private water right does not exist on this source –a private, prior right likely exists on this source.
- The source is not artificially developed (i.e., well or reservoir) – the source has been extensively developed.

R-04255

Eureka County Field Reconnaissance

R04255

BLM description: "Large spring and stream heavily populated with willow trees in approximately a 300 foot stand along the stream banks with a few breaks in the trees. Stream is clear and runs quickly."



Aerial view of R04255 site.

Date/Time: 10/18/18 13:15 hrs

Site description

The spring described by the BLM is located upstream of the stand of willows. It was damp, with no standing water and there was no observed flow from the site. There is an ephemeral stream channel along the north edge of the willows that extends upstream and downstream of the site that is visible in the aerial view.

Spring flow

No flow was observed during the 10/18/18 site inspection. In contrast, BLM reported 2.5 gpm on 5/13/16. The source is obviously ephemeral.

R04255 site upstream of the stand of willows. Note channel is dry.

Dry stream channel downstream of the R04255 site. Stream channel is dry.

Flow Rate Is Not Enough for a PWR

The State Engineer used BLM's flow measurements of this spring on May 13, 2016 at 2.5 gpm and found that "if the water is available on a year-round basis" would be "0.0056 cfs, 4.03 afa, and 3,600 gpd" and enough to be a valid PWR. This finding by the State Engineer is arbitrary and incorrect based on higher-than-average precipitation and run-off that inflated the flow under BLM's measurement and consideration of flow measurements taken by others.

BLM's flow measurements are artificially inflated due to higher than average precipitation and run-off, especially during the timeframe measured by BLM in spring 2016. Precipitation data from local sources, including the two nearby NRCS SNOTEL sites, Vacarro Springs (ID 1137) and Diamond Peak (ID 443), and the Diamond Valley USBR AgriMet Station, amongst others, irrefutably show that precipitation for water year 2016 and leading up to the BLM's measurements was well above average.

It appears that there were no field investigations completed by the State Engineer's office as there were no State Engineer staff field notes with flow measurements in the State Engineer files for R-04251. On October 18, 2018, Eureka County Department of Natural Resources and Contract Hydrogeologist found that the source was completely dry with no flow, obviously ephemeral, and unable to be a valid PWR.

Spring May Be Vested Water Appropriated Under Proof V-02888

This spring is irrefutably in the Torre Creek tributary and is within the channel of the south fork of Torre Creek. Proof V-02888 is for all the waters of Torre Creek for irrigation and stockwater. It appears that this water is fully appropriated under Proof V-02888.

Land Is Not "Vacant" Or "Unappropriated" As Required In 1926 Executive Order

This 40 acres was included in the 1893 GLO survey, there were existing roads and trails in this 40 acre subdivision well before 1926 so the land was not "vacant" or "unappropriated" in 1926 and are not today. These are rights of way established on this 40 acres under Revised Statute (RS) 2477 for travel. There may have been rights already established on this 40 acres under RS 2339 and RS 2340 easements for water storage and rights-of-way for water conveyance (ditches, dams, pipelines, etc.). This is in addition to no BLM land status maps, BLM Resource Management Plan (and amendments), and Master Title Plat Map indicating that these lands were reserved from homestead or Desert Land Entry.

All State Engineer Findings under Ruling 5729 Not Met

The finding that "PWR 107 claims cannot divert or displace a water right vested under Nevada law prior to April 17, 1926" may not have been met because this spring appears to be appropriated under prior rights and flow is insufficient to even satisfy a PWR let alone the associated vested right.

The finding that "PWR 107 claims do not apply to springs or waterholes that are inaccessible to domestic livestock or are of unsatisfactory quality to satisfy the need for human and stockwatering consumption" was not met because the State Engineer or BLM did not complete an analysis of the quality of the source.

BLM PWR Checklist Criteria Not Met

BLM's own policy was not met and should have precluded BLM from filing on this spring. The following PWR criteria based on BLM's own policy were not met:

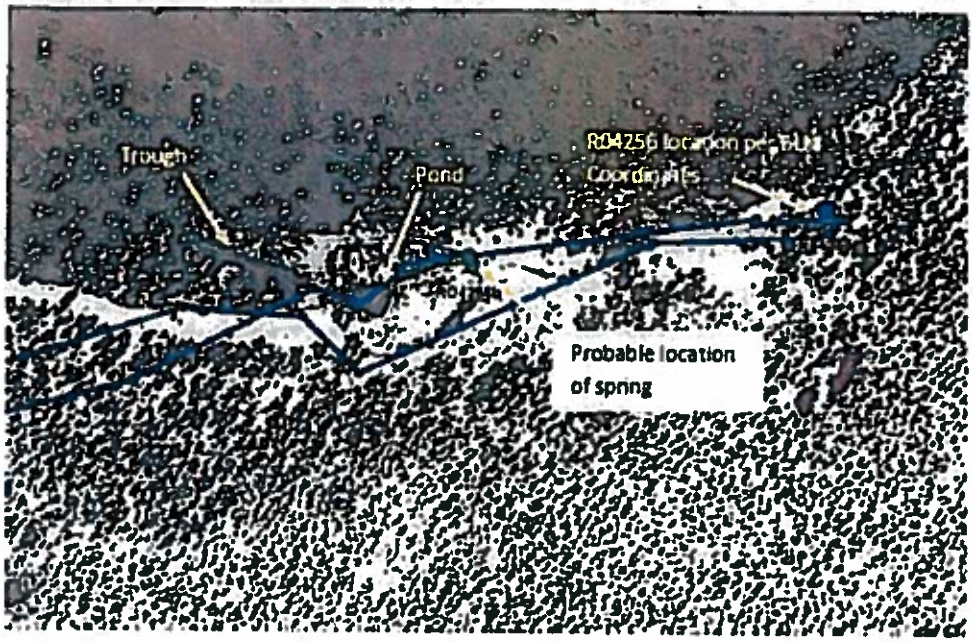
- Private control of the spring or waterhole would monopolize the public resources – there are dozens of stockwater rights available on the grazing allotment.
- The source supplies a sufficient quantity of water for public watering purposes – as documented above, the spring flows are insufficient to provide enough water for public watering purposes let alone the likely prior right on this source.
- A private water right does not exist on this source –a private, prior right likely exists on this source.

<u>R-04256</u>

Eureka County Field Reconnaissance

R04256

BLM description: "0.078 Acre meadow. Spring leads to large meadow with sedges and rushes. Connects to second meadow while forming a stream. This meadow has large grasses and forbes [sic] with some sign of loafing. The stream leads to a fenced exclusion where water is piped to a trough. In the exclusion there is a small pond (10 Ft X 15 Ft). The pipe leads to a trough and overflows into a stream ~150 Feet long."



Aerial image of R04256.

Eureka County Field Reconnaissance Date/Time: 10/16/18 16:30 hrs

Site description

No spring appears to exist at the coordinates provided by BLM, which is populated by large sagebrush, not riparian vegetation. The spring under R04256 is likely 210 feet to the west at the location in the image identified as R04256b where the ground is hummocky. There appears to be a collection gallery there from which water is piped to the pond to the west. From the pond, water can flow to the trough via a pipe or flow past the trough via an open channel. During the site visit there was no flow to the trough and all flow was confined to the channel.

Spring flow

Spring discharge was measured at the outflow from the pond at 0.50 gallon per minute. No flow was observed from the pipe to the troughs. In contrast, BLM reported the flow was 9.4 gpm May 13, 2016. The flow from the spring appears to by variable, with the October 2018 measurement more representative of base flow conditions.

R04256 location based on BLM coordinates.

Hummocky ground at the likely location of R04256, west of the location suggested by BLM coordinates.

Flow in channel below pond west of R04256.

Flow Rate Is Not Enough for a PWR

The State Engineer used BLM's flow measurements of this spring, "Etchemendy Spring," on May 13, 2016 at 9.40 gpm and found that "if the water is available on a year-round basis" would be "0.0209 cfs, 15.13 afa, and 13,536 gpd" and enough to be a valid PWR. This finding by the State Engineer is arbitrary and incorrect based on higher-than-average precipitation and run-off that inflated the flow under BLM's measurement and consideration of flow measurements taken by others.

BLM's flow measurements are artificially inflated due to higher than average precipitation and run-off, especially during the timeframe measured by BLM in spring 2016. Precipitation data from local sources, including the two nearby NRCS SNOTEL sites, Vacarro Springs (ID 1137) and Diamond Peak (ID 443), and the Diamond Valley USBR AgriMet Station, amongst others, irrefutably show that precipitation for water year 2016 and leading up to the BLM's measurements was well above average.

It appears that there were no field investigations completed by the State Engineer's office as there were no State Engineer staff field notes with flow measurements in the State Engineer files for R-04256. On October 16, 2018, Eureka County Department of Natural Resources and

Contract Hydrogeologist measured the flow at 0.50 gpm, well below the threshold of being a valid PWR.

No Obvious Spring in Claimed 40 Acre Subdivision

While the BLM claims Etchemendy Spring is in SW ¼ SE ¼ Sec. 35, T20N, R54E, as noted in the Eureka County field work, there is no obvious spring with any measurable flow in this 40 acre subdivision. Eureka County did identify a seep as noted below with evidence of excavation for a collection gallery and piping to a nearby trough and overflow from the trough. However, these features are in a completely different 40 acre subdivision, SE ¼ SW ¼ Sec. 35, T20N, R54E. BLM was very likely measuring run off in the 40 acres it claims.

Land Is Not "Vacant" Or "Unappropriated" As Required In 1926 Executive Order

This 40 acres was included in the 1893 GLO survey, there was no spring depicted and there were existing roads and trails in this 40 acre subdivision well before 1926 so the land was not "vacant" or "unappropriated" in 1926 and are not today. These are rights of way established on this 40 acres under Revised Statute (RS) 2477 for travel. There may have been rights already established on this 40 acres under RS 2339 and RS 2340 easements for water storage and rights-of-way for water conveyance (ditches, dams, pipelines, etc.). This is in addition to no BLM land status maps, BLM Resource Management Plan (and amendments), and Master Title Plat Map indicating that these lands were reserved from homestead or Desert Land Entry.

All State Engineer Findings under Ruling 5729 Not Met

The finding that "PWR 107 claims do not act upon a source of water that only becomes important through artificial development or man-made structures" is not met because there has been substantial artificial development and man-made structures put in at this source to cross the threshold to being "important." This includes an excavated area, spring collection gallery, piping, and stock troughs. But again, this is all situated in the 40 acre subdivision directly west of the 40 acres claimed by BLM.

The finding that "PWR 107 claims do not apply to springs or waterholes that are...of unsatisfactory quality to satisfy the need for human and stockwatering consumption" was not met because the State Engineer or BLM did not complete an analysis of the quality of the source.

Further, in the POD and carried into the Order of Determination by the State Engineer for the East Fork Owyhee River, the State Engineer found that "if a claim of PWR is alongside or tributary to a perennial stream, it would be impossible for the homesteader to monopolize or control vast areas of land through homesteading the spring, therefore, the primary purpose of a PWR 107 withdrawal is not served and there is no reservation." Since Etchemendy Spring is a primary source spring "alongside or tributary to a perennial stream," this previous finding was not applied here.

BLM PWR Checklist Criteria Not Met

BLM's own policy was not met and should have precluded BLM from filing on this spring. The following PWR criteria based on BLM's own policy were not met:

- Private control of the spring or waterhole would monopolize the public resources – there are dozens of stockwater rights available on the grazing allotment.
- The source supplies a sufficient quantity of water for public watering purposes – as documented above, the spring flows are insufficient to provide enough water for public watering purposes on this source.

R-04257

PWR claim R-04257 was one of the four (4) PWR springs Eureka County was unable to visit due to field conditions and the short amount of time available between the date of the Preliminary Order (August 30, 2018) and the deadline for filing objections to the Preliminary Order (November 7, 2018).

BLM description: "Spring head expresses through rocky outcrop before channelizing downhill in a stream."

Flow Rate Needs to Be Verified for State Engineer to Ensure Enough Flow for a PWR

It appears that there were no field investigations completed by the State Engineer's office as there were no State Engineer staff field notes with flow measurements in the State Engineer files for R-04257. In all but one case, compared to Eureka County's recent flow measurements, and other available date, BLM's flow measurements have been artificially inflated due to higher than average precipitation and run-off, especially during the timeframe measured by BLM in spring 2016. Precipitation data from local sources, including the two nearby NRCS SNOTEL sites, Vacarro Springs (ID 1137) and Diamond Peak (ID 443), and the Diamond Valley USBR AgriMet Station, amongst others, irrefutably show that precipitation for water year 2016 and leading up to the BLM's measurements was well above average.

It is highly probable that the flow of this spring may be insufficient to meet the minimal flow necessary to be a valid PWR.

Spring May Be Already Appropriated Under Prior Right Permit 2789, Certificate 307

This spring exists in unsurveyed Section 12 of T21N, R54E which is also called Nigren Canyon. Permit 2789, Certificate 307 exists in Nigren Canyon and potentially is the same water. Permit 2789, Certificate 307 have a priority of 1913 for "Nigren Canyon Spring through Nigren Creek ditch and reservoirs for stock-watering and domestic" with an appropriation at 0.025 cfs.

Land Is Not "Vacant" Or "Unappropriated" As Required In 1926 Executive Order

As mentioned, this spring is located on lands not surveyed and if found valid would reserve ¼ mile around the spring. The 1905 survey of the adjacent area (ending two miles west at Section 10) show existing roads and trails extending into the area likely evidence that the land was not "vacant" or "unappropriated" in 1926 and not today. These are rights of way established under Revised Statute (RS) 2477 for travel. There may have been rights already established on this 40 acres under RS 2339 and RS 2340 easements for water storage and rights-of-way for water conveyance (ditches, dams, pipelines, etc.), including the ditches, reservoirs, and other referenced in Permit 2789, Certificate 307. This is in addition to no BLM land status maps, BLM Resource Management Plan (and amendments), and Master Title Plat Map indicating that these lands were reserved from homestead or Desert Land Entry.

All State Engineer Findings under Ruling 5729 Not Met

The finding that "PWR 107 claims do not act upon a source of water that only becomes important through artificial development or man-made structures" may not have been met if this is, in fact, the same water under Permit 2789, Certificate 307 because there has been substantial artificial development and man-made structures put in at this source to cross the threshold to being "important."

The finding that "PWR 107 claims do not apply to springs or waterholes that are...of unsatisfactory quality to satisfy the need for human and stockwatering consumption" was not met because the State Engineer or BLM did not complete an analysis of the quality of the source.

Further, in the POD and carried into the Order of Determination by the State Engineer for the East Fork Owyhee River, the State Engineer found that "if a claim of PWR is alongside or tributary to a perennial stream, it would be impossible for the homesteader to monopolize or control vast areas of land through homesteading the spring, therefore, the primary purpose of a PWR 107 withdrawal is not served and there is no reservation." Since this spring is described by BLM as a primary source spring "alongside or tributary to a perennial stream," this previous finding was not applied here.

BLM PWR Checklist Criteria Not Met

BLM's own policy was not met and should have precluded BLM from filing on this spring. The following PWR criteria based on BLM's own policy were not met:

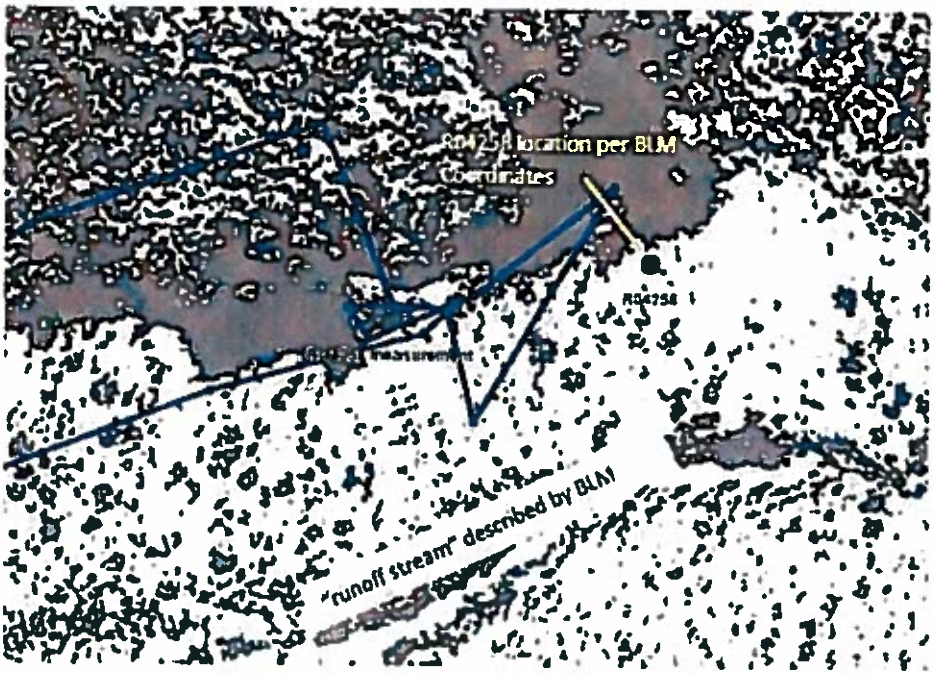
- Private control of the spring or waterhole would monopolize the public resources – there are dozens of stockwater rights available on the grazing allotment.

R-04258

Eureka County Field Reconnaissance

R04258

BLM description: "Spring head with several expression creating a large tributary, stream runs for approximately 0.5 miles before meeting with runoff stream."



Aerial image of R04258 site.

Eureka County Field Reconnaissance Date/Time: 10/19/18 14:55 hrs

Site description

The spring is situated on the hillside north of the "runoff stream" described by the BLM.

Spring flow

Spring discharge was measured in the channel downstream (southwest) of the spring at 0.03 gpm on 10/19/18. In contrast, BLM reported a flow of 109 gpm on 5/17/16 that likely was affected by runoff given the huge discrepancy in flow. Based on BLM's description, it appears that flow may have been measured where the spring flow met the "runoff stream." The October 2018 measurement is more representative of base flow from the spring.

Spring identified in R04258.

Flow Rate Is Not Enough for a PWR

The State Engineer used BLM's flow measurements of this spring on May 17, 2016 at 109.00 gpm and found that "if the water is available on a year-round basis" would be "0.2429 cfs, 175.49 afa, and 156,960 gpd" and enough to be a valid PWR. This finding by the State Engineer is arbitrary and incorrect based on higher-than-average precipitation and run-off that inflated the flow under BLM's measurement and consideration of flow measurements taken by others.

BLM's flow measurements are artificially inflated due to higher than average precipitation and run-off, especially during the timeframe measured by BLM in spring 2016. Precipitation data from local sources, including the two nearby NRCS SNOTEL sites, Vacarro Springs (ID 1137) and Diamond Peak (ID 443), and the Diamond Valley USBR AgriMet Station, amongst others, irrefutably show that precipitation for water year 2016 and leading up to the BLM's measurements was well above average.

It appears that there were no field investigations completed by the State Engineer's office as there were no State Engineer staff field notes with flow measurements in the State Engineer files for R-04258. On October 19, 2018, Eureka County Department of Natural Resources and Contract Hydrogeologist measured the flow at 0.03 gpm, greatly less that BLM's measurement, and well below the threshold of being a valid PWR.

Spring May Be Appropriated Under Prior Rights Permit 7606, Certificate 2079 and Permit 7607, Certificate 2080

There are two prior 1925 water rights on Pedroli Creek in which R-04258 is a source spring and tributary. Permit 7606, Certificate 2079 and Permit 7607, Certificate 2080 both appropriate

what appears to be all the flow from Pedroli Creek, diverted in two separate ditches, for stockwatering at the mouth of Pedroli Canyon, on private land.

Land Is Not "Vacant" Or "Unappropriated" As Required In 1926 Executive Order

While the section where this spring is located is not surveyed and if found valid would reserve ¼ mile around the spring, the area where this spring lies is included on the 1905 survey map actually showing the spring and an existing road circling north around the spring. There are other roads and trails in this area well before 1926. So, the land was not "vacant" or "unappropriated" in 1926 and are not today. These are rights of way established on this 40 acres under Revised Statute (RS) 2477 for travel. There may have been rights already established on this 40 acres under RS 2339 and RS 2340 easements for water storage and rights-of-way for water conveyance (ditches, dams, pipelines, etc.). This is in addition to no BLM land status maps, BLM Resource Management Plan (and amendments), and Master Title Plat Map indicating that these lands were reserved from homestead or Desert Land Entry.

All State Engineer Findings under Ruling 5729 Not Met

The finding that "PWR 107 claims cannot divert or displace a water right vested under Nevada law prior to April 17, 1926" may not have been met because this spring appears to be appropriated under prior rights and flow is insufficient to even satisfy a PWR let alone the associated vested right.

The finding that "PWR 107 claims do not apply to springs or waterholes that are inaccessible to domestic livestock or are of unsatisfactory quality to satisfy the need for human and stockwatering consumption" was not met because the State Engineer or BLM did not complete an analysis of the quality of the source.

BLM PWR Checklist Criteria Not Met

BLM's own policy was not met and should have precluded BLM from filing on this spring. The following PWR criteria based on BLM's own policy were not met:

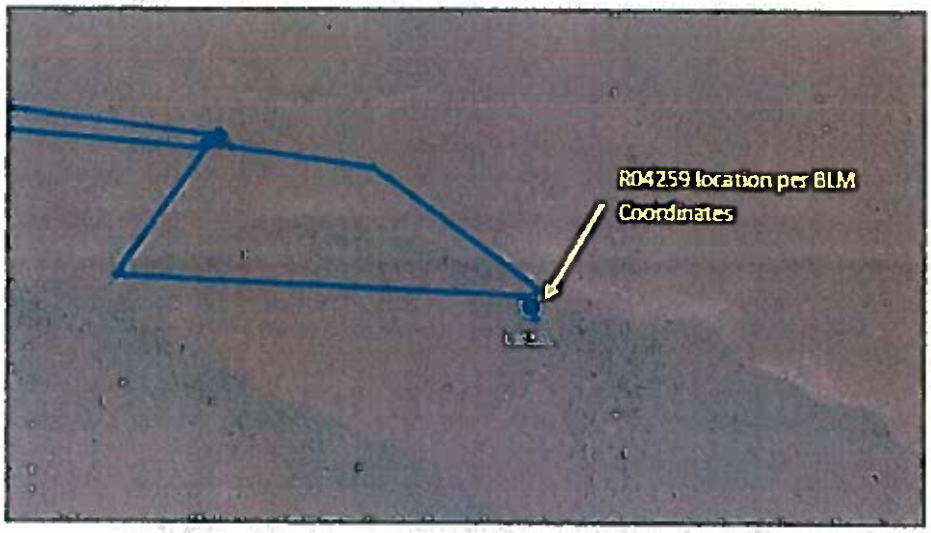
- Private control of the spring or waterhole would monopolize the public resources – there are dozens of stockwater rights available on the grazing allotment.
- The source supplies a sufficient quantity of water for public watering purposes – as documented above, the spring flows are insufficient to provide enough water for public watering purposes let alone the potential prior right on this source.
- A private water right does not exist on this source –a private, prior right may exists on this source.

R-04259

Eureka County Field Reconnaissance

R04259

BLM description: "Large meadow complex, several seep expressions creating a stream."



Aerial image of R04259 site.

Eureka County Field Reconnaissance Date/Time: 10/19/18 13:50 hrs

Site description

No spring expressed itself at the location described by the BLM. It is located in a meadow area associated with a stream channel. The site was dry during the October 2018 site visit, but vegetation suggests it may be wet during the spring runoff season.

Spring flow

No spring flow was observed at the site during the October 2018 site visit, nor was there any evidence of recent flow in the stream channel immediately below the spring site. In contrast, BLM reported a flow of 3 gpm on May 17, 2016. The spring flow apparently varies seasonally, with some flow during the spring runoff period, drying up later in the year.

Location of R04259.

Flow Rate Is Not Enough for a PWR

The State Engineer used BLM's flow measurements of this spring on May 17, 2016 at 3.00 gpm and found that "if the water is available on a year-round basis" would be "0.0067 cfs, 4.83 afa, and 4,320 gpd" and enough to be a valid PWR. This finding by the State Engineer is arbitrary and incorrect based on higher-than-average precipitation and run-off that inflated the flow under BLM's measurement and consideration of flow measurements taken by others.

BLM's flow measurements are artificially inflated due to higher than average precipitation and run-off, especially during the timeframe measured by BLM in spring 2016. Precipitation data from local sources, including the two nearby NRCS SNOTEL sites, Vacarro Springs (ID 1137) and Diamond Peak (ID 443), and the Diamond Valley USBR AgriMet Station, amongst others, irrefutably show that precipitation for water year 2016 and leading up to the BLM's measurements was well above average.

It appears that there were no field investigations completed by the State Engineer's office as there were no State Engineer staff field notes with flow measurements in the State Engineer files for R-04259. On October 19, 2018, Eureka County Department of Natural Resources and Contract Hydrogeologist found the site completely dry, therefore this spring could not be a valid PWR.

Land Is Not "Vacant" Or "Unappropriated" As Required In 1926 Executive Order

This 40 acres was included in the 1905 GLO survey, there was no spring depicted and there were existing roads and trails in this 40 acre subdivision well before 1926 so the land was not "vacant" or "unappropriated" in 1926 and are not today. These are rights of way established on this 40 acres under Revised Statute (RS) 2477 for travel. There may have been rights already established on this 40 acres under RS 2339 and RS 2340 easements for water storage and rights-of-way for water conveyance (ditches, dams, pipelines, etc.). This is in addition to no

BLM land status maps, BLM Resource Management Plan (and amendments), and Master Title Plat Map indicating that these lands were reserved from homestead or Desert Land Entry.

All State Engineer Findings under Ruling 5729 Not Met

The finding that "PWR 107 claims do not apply to springs or waterholes that are...of unsatisfactory quality to satisfy the need for human and stockwatering consumption" was not met because the State Engineer or BLM did not complete an analysis of the quality of the source.

BLM PWR Checklist Criteria Not Met

BLM's own policy was not met and should have precluded BLM from filing on this spring. The following PWR criteria based on BLM's own policy were not met:

- Private control of the spring or waterhole would monopolize the public resources – there are dozens of stockwater rights available on the grazing allotment.
- The source supplies a sufficient quantity of water for public watering purposes – as documented above, the spring flows are insufficient to provide enough water for public watering purposes on this source.

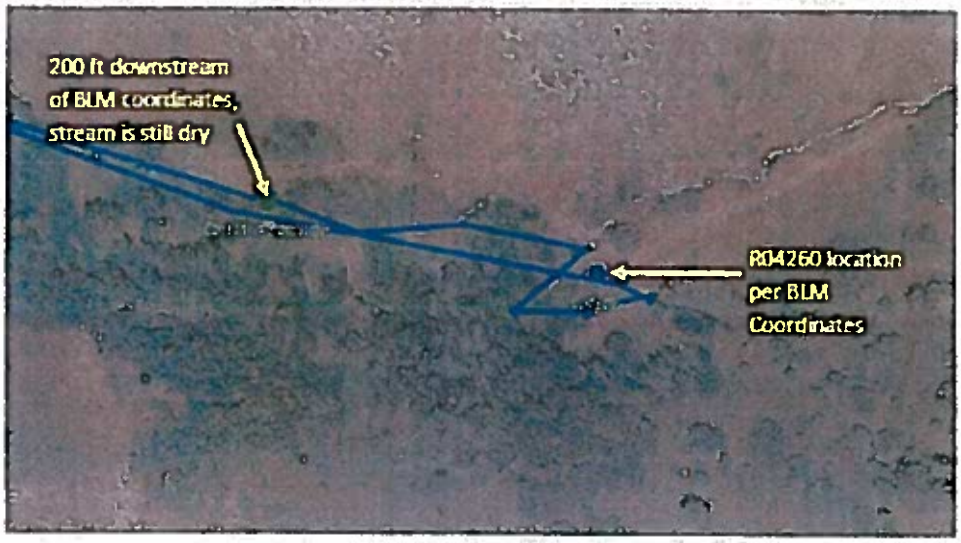
R-04260

Eureka County Field Reconnaissance

R04260

Potato Spring

BLM description of the source: Large meadow complex, several seep expressions creating a stream.



Aerial image of R04260 site.

Eureka County Field Reconnaissance Date/Time: 10/20/18 09:35hrs

Site description

No spring was observed at the coordinates provided by the BLM, although a seasonal spring likely exists at this location. The stream described by the BLM was dry for a distance of more than 200 feet downstream of the spring location.

Spring flow

No spring flow was detected at Potato Spring (R04260) in October 2018. SRK measured a flow of 0.46 gpm in October 2007. In contrast, BLM reported a flow of >2 gpm on May 17, 2016. Clearly, the flow of the spring varies seasonally and is dry in the fall some years.

No spring flow observed at the BLM Location for R04260 spring.

Flow Rate Is Not Enough for a PWR

The State Engineer used BLM's flow estimate of this spring on May 17, 2016 at >2.00 gpm and found that "if the water is available on a year-round basis" would be "at least 0.0045 cfs, 3.22 afa, and 2,880 gpd" and enough to be a valid PWR. This finding by the State Engineer is arbitrary and incorrect based on higher-than-average precipitation and run-off that inflated the flow under BLM's measurement and consideration of flow measurements taken by others.

BLM's flow measurements are artificially inflated due to higher than average precipitation and run-off, especially during the timeframe measured by BLM in spring 2016. Precipitation data from local sources, including the two nearby NRCS SNOTEL sites, Vacarro Springs (ID 1137) and Diamond Peak (ID 443), and the Diamond Valley USBR AgriMet Station, amongst others, irrefutably show that precipitation for water year 2016 and leading up to the BLM's measurements was well above average.

It appears that there were no field investigations completed by the State Engineer's office as there were no State Engineer staff field notes with flow measurements in the State Engineer files for R-04258. On October 20, 2018, Eureka County Department of Natural Resources and Contract Hydrogeologist found the site completely dry. On October 09, 2007, SRK Consulting measured flow at this spring at 0.46 gpm (source: July 2010 "Hydrogeology and Numerical Flow Modeling, Mt. Hope Project, Eureka County, Nevada" Appendix E, Spring Inventory Dataset). This data from SRK Consulting is part of the records of the State Engineer through the Kobeh Valley Ranch (General Moly) water rights hearings process. Based on these data, this spring does not have sustained flow to meet the threshold of being a valid PWR.

Spring Likely Appropriated Under Prior Rights Permit 3018, Certificate 1242

There is a 1914 water right on Potato Spring "through ditches for Irrigation and Domestic purposes" to irrigate 5.27 acres. In Permit 3018, Certificate 1242, it states that Section 1 was "unsurveyed" and, in fact, it was not surveyed until 1938 according to GLO records. As such, it is likely that the water rights description for Potato Spring in 1914 was estimated. This likely created the discrepancy between the legal description provided by BLM and the legal description in Permit 3018, Certificate 1242.

Land Not "Vacant" Or "Unappropriated" As Required In 1926 Executive Order nor Reserved in 1926

The area where the 40 acre subdivision where the spring lies was not surveyed until 1938, 12 years after PWR 107 in 1926. The GLO survey map does not depict the spring in this 40 acre subdivision nor any denotation that this area was reserved by PWR 107. There are roads and trails depicted in this area. These are rights of way established on this 40 acres under Revised Statute (RS) 2477 for travel. Also, the description in the Permit 3018, Certificate 1242 is

evidence that there were folks looking to homestead the 40 acres in question – "the land is Desert land and a portion of it is irrigated and a crop of alfalfa is growing on it" through "ditches already constructed which will lead the water on to the land." The water was certificated for over 5 acres of pasture, meadow, garden, and alfalfa and for ***domestic*** purposes. The land was obviously not "vacant" or "unappropriated" nor reserved from homestead entry. There may have been rights already established on this 40 acres under RS 2339 and RS 2340 easements for water storage and rights-of-way for water conveyance (ditches, dams, pipelines, etc.) including the water conveyance infrastructure referenced in Permit 3018, Certificate 1242. This is in addition to no BLM land status maps, BLM Resource Management Plan (and amendments), and Master Title Plat Map indicating that these lands were reserved from homestead or Desert Land Entry.

All State Engineer Findings under Ruling 5729 Not Met

The finding that "PWR 107 claims cannot divert or displace a water right vested under Nevada law prior to April 17, 1926" may not have been met because this spring appears to be appropriated under prior rights and flow is insufficient to even satisfy a PWR let alone the associated vested right.

The finding that "PWR 107 claims do not apply to springs or waterholes that are inaccessible to domestic livestock or are of unsatisfactory quality to satisfy the need for human and stockwatering consumption" was not met because the State Engineer or BLM did not complete an analysis of the quality of the source.

BLM PWR Checklist Criteria Not Met

BLM's own policy was not met and should have precluded BLM from filing on this spring. The following PWR criteria based on BLM's own policy were not met:

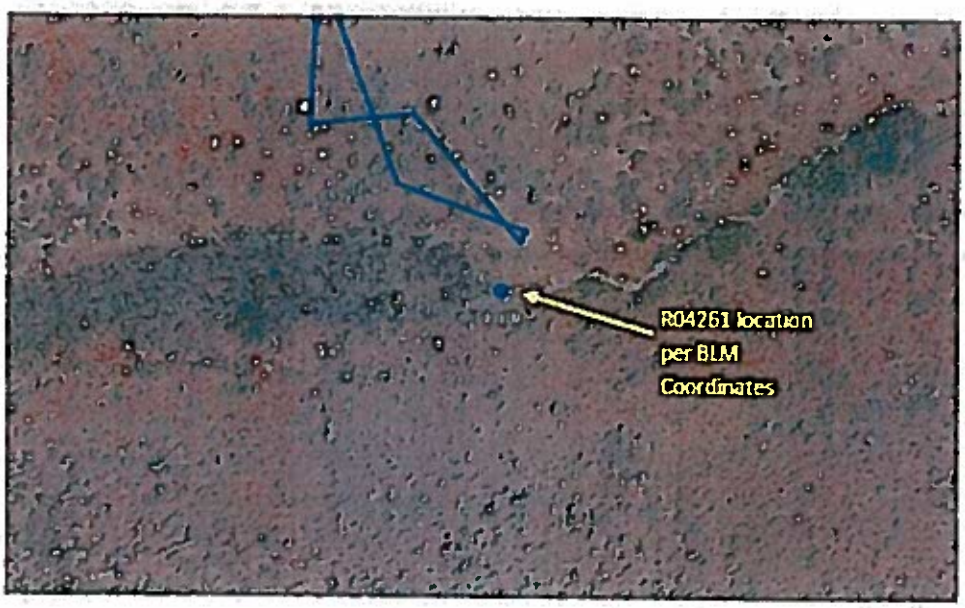
- Private control of the spring or waterhole would monopolize the public resources – there are dozens of stockwater rights available on the grazing allotment.
- The source supplies a sufficient quantity of water for public watering purposes – as documented above, the spring flows are insufficient to provide enough water for public watering purposes let alone the potential prior right on this source.
- A private water right does not exist on this source –a private, prior right may exists on this source.

R-04261

Eureka County Field Reconnaissance

R04261

BLM description: "Spring is in willow stand, unreachable, but stream below is channelized by cobble rocks. Ocular estimate of flow."



Aerial image of R04261 site.

Eureka County Field Reconnaissance Date/Time: 10/20/18 10:05 hrs

Site description

A spring reportedly was identified in the "willow stand" by the BLM in 2016, but the spring was not found during the October 2018 site inspection. The stream channel above and below the location provided by the BLM was also observed to be dry. There are remains of a rock house nearby suggesting someone used the water from the spring in the past.

Spring flow

No spring flow was observed October 20, 2018. The stream above and below the willows was dry. In contrast, BLM reported a flow of >2 gpm on May 17, 2016. The spring flow is apparently seasonal and it dries up later in the year.

Location of spring identified in R04261. No observed flow from the spring.

Flow Rate Is Not Enough for a PWR

The State Engineer used BLM's flow estimate of this spring on May 17, 2016 at >2.00 gpm and found that "if the water is available on a year-round basis" would be "at least 0.0045 cfs, 3.22 afa, and 2,880 gpd" and enough to be a valid PWR. This finding by the State Engineer is arbitrary and incorrect based on higher-than-average precipitation and run-off that inflated the flow under BLM's measurement and consideration of flow measurements taken by others.

BLM's flow measurements are artificially inflated due to higher than average precipitation and run-off, especially during the timeframe measured by BLM in spring 2016. Precipitation data from local sources, including the two nearby NRCS SNOTEL sites, Vacarro Springs (ID 1137) and Diamond Peak (ID 443), and the Diamond Valley USBR AgriMet Station, amongst others, irrefutably show that precipitation for water year 2016 and leading up to the BLM's measurements was well above average.

It appears that there were no field investigations completed by the State Engineer's office as there were no State Engineer staff field notes with flow measurements in the State Engineer files for R-04258. On October 20, 2018, Eureka County Department of Natural Resources and Contract Hydrogeologist found the site completely dry. This spring does not have sustained flow to meet the threshold of being a valid PWR.

Spring Likely Appropriated Under Prior Rights Permit 7549, Certificate 1472

There is a 1925 water right on Maggini Spring No. 2 "through reservoir, pipeline and troughs for Stockwatering" that appears to be the same source water as R-04261. A review of the records for this certificated right unveils there have been efforts to correct the spring location due to mislocation of the spring or clerical errors. A review of aerial imagery also highlights that there is no spring or green area at the location described by the certificate or permit.

Land Not "Vacant" Or "Unappropriated" As Required In 1926 Executive Order nor Reserved in 1926

The area in the 40 acre subdivision where the spring lies was not surveyed until 1938, 12 years after PWR 107 in 1926. The GLO survey map does not depict the spring in this 40 acre subdivision nor any denotation that this area was reserved by PWR 107. However, the survey map does show a "cabin" in the location of the rock house identified in the field by Eureka County and a fenced area around the "cabin" extending into a substantial portion of the 40 acres claimed by BLM. There are roads and trails also depicted in this area. These are rights of way established on this 40 acres under Revised Statute (RS) 2477 for travel. Also, the "cabin" is evidence that there were folks looking to homestead the 40 acres in question. The land was obviously not "vacant" or "unappropriated" nor reserved from homestead entry. There may have been rights already established on this 40 acres under RS 2339 and RS 2340 easements for water storage and rights-of-way for water conveyance (ditches, dams, pipelines, etc.) including the water conveyance infrastructure referenced in Permit 7549, Certificate 1472. This is in addition to no BLM land status maps, BLM Resource Management Plan (and amendments), and Master Title Plat Map indicating that these lands were reserved from homestead or Desert Land Entry.

All State Engineer Findings under Ruling 5729 Not Met

The finding that "PWR 107 claims cannot divert or displace a water right vested under Nevada law prior to April 17, 1926" may not have been met because this spring appears to be appropriated under prior rights and flow is insufficient to even satisfy a PWR let alone the associated right.

The finding that "PWR 107 claims do not apply to springs or waterholes that are inaccessible to domestic livestock or are of unsatisfactory quality to satisfy the need for human and stockwatering consumption" was not met because the State Engineer or BLM did not complete an analysis of the quality of the source.

BLM PWR Checklist Criteria Not Met

BLM's own policy was not met and should have precluded BLM from filing on this spring. The following PWR criteria based on BLM's own policy were not met:

- Private control of the spring or waterhole would monopolize the public resources – there are dozens of stockwater rights available on the grazing allotment.
- The source supplies a sufficient quantity of water for public watering purposes – as documented above, the spring flows are insufficient to provide enough water for public watering purposes let alone the potential prior right on this source.
- A private water right does not exist on this source –a private, prior right may exists on this source.

R-04262

PWR claim R-04262 was one of the four (4) PWR springs Eureka County was unable to visit due to field conditions and the short amount of time available between the date of the Preliminary Order (August 30, 2018) and the deadline for filing objections to the Preliminary Order (November 7, 2018).

BLM description: "Spring head is pumped to a trough that is no longer functional, water is channelized and runs downhill." We believe BLM meant "piped" not "pumped."

Prior Vested Right on Same Spring and Flow Rate Needs to Be Verified for State Engineer to Ensure Enough Flow for a PWR

There are discrepancies in the Preliminary Order of Determination on this spring. On page 298, the State Engineer used BLM's flow measurements of this spring, Water Canyon Spring, on May 17, 2016 at 10.0 gpm and found that "if the water is available on a year-round basis" would be "0.0223 cfs, 16.10 afa, and 14,400 gpd" and enough to be a PWR. On this same page, the State Engineer stated that "There are no other water right claims on this source." Yet, on page 215 of the POD, it states "A field investigation conducted by the Office of the State Engineer personnel on July 26, 2017, confirmed the location and extent of this spring source as noted in the Office of the State Engineer "Spring and Surface Water Inventory Form." ***Reserved claim R-04262 is filed on this same source***" (footnote omitted, emphasis added). V-10860 is for year-round stockwatering.

The legal description for V-10860 places Water Canyon Spring in NW¼ SE¼ Section 25, T22N, R54E while in R-04262, BLM places it in SW¼ SE¼ of Section 25 which is the adjacent 40 acres to the north. Plotting in GIS shows that BLM's GPS point for the spring plots just feet from the boundary between these two 40 acres. Along with BLM's description, aerial imagery shows that the spring complex extends across the two 40 acre subdivisions.

It appears that while there was a documented field investigation, there were no flow measurements taken by the State Engineer's office of Water Canyon Spring. In all but one case, compared to Eureka County's recent flow measurements, and other available date, BLM's flow measurements have been artificially inflated due to higher than average precipitation and run-off, especially during the timeframe measured by BLM in spring 2016. Precipitation data from local sources, including the two nearby NRCS SNOTEL sites, Vacarro Springs (ID 1137) and Diamond Peak (ID 443), and the Diamond Valley USBR AgriMet Station, amongst others, irrefutably show that precipitation for water year 2016 and leading up to the BLM's measurements was well above average. It is highly probable that the flow of this spring may be insufficient to meet the minimal flow necessary to be a valid PWR let alone satisfy V-10860.

While researching Water Canyon Spring, it appears that the POD has a typographical error referencing Water Canyon Spring under V-01329 for Little Willows Spring.

Land Is Not "Vacant" Or "Unappropriated" As Required In 1926 Executive Order

As mentioned, this spring is located on lands not surveyed and if found valid would reserve ¼ mile around the spring. The 1905 survey of the adjacent area (ending two miles west at Section 10) show existing roads and trails extending into the area likely evidence that the land was not "vacant" or "unappropriated" in 1926 and not today. These are rights of way established under Revised Statute (RS) 2477 for travel. There may have been rights already established on this 40 acres under RS 2339 and RS 2340 easements for water storage and rights-of-way for water conveyance (ditches, dams, pipelines, etc.), including the ditches, reservoirs, and other referenced in Permit 2789, Certificate 307. This is in addition to no BLM land status maps, BLM Resource Management Plan (and amendments), and Master Title Plat Map indicating that these lands were reserved from homestead or Desert Land Entry.

All State Engineer Findings under Ruling 5729 Not Met

The finding that "PWR 107 claims do not act upon a source of water that only becomes important through artificial development or man-made structures" may not have been met if this is, in fact, the same water under Permit 2789, Certificate 307 because there has been substantial artificial development and man-made structures put in at this source to cross the threshold to being "important."

The finding that "PWR 107 claims do not apply to springs or waterholes that are...of unsatisfactory quality to satisfy the need for human and stockwatering consumption" was not met because the State Engineer or BLM did not complete an analysis of the quality of the source.

Further, in the POD and carried into the Order of Determination by the State Engineer for the East Fork Owyhee River, the State Engineer found that "if a claim of PWR is alongside or tributary to a perennial stream, it would be impossible for the homesteader to monopolize or control vast areas of land through homesteading the spring, therefore, the primary purpose of a PWR 107 withdrawal is not served and there is no reservation." Since this spring is described by BLM as a primary source spring "alongside or tributary to a perennial stream," this previous finding was not applied here.

BLM PWR Checklist Criteria Not Met

BLM's own policy was not met and should have precluded BLM from filing on this spring. The following PWR criteria based on BLM's own policy were not met:

Private control of the spring or waterhole would monopolize the public resources – there are dozens of stockwater rights available on the grazing allotment.

The source supplies a sufficient quantity of water for public watering purposes – other data may show spring flows are insufficient to provide enough water for public watering purposes let alone the prior right on this source.

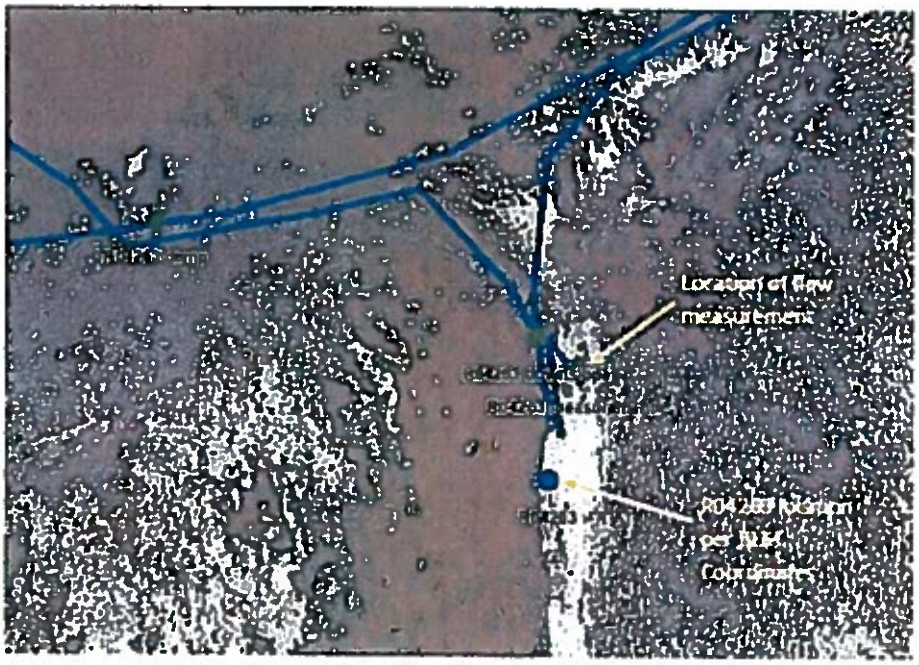
A private water right does not exist on this source –a private, prior right does exists on this source.

R-04263

Eureka County Field Reconnaissance

R04263

BLM description: "Spring near an intermittent stream expresses to form tributary. There is a sheep trough below the spring head at the bottom of the stream."



Aerial image of R04263 site.

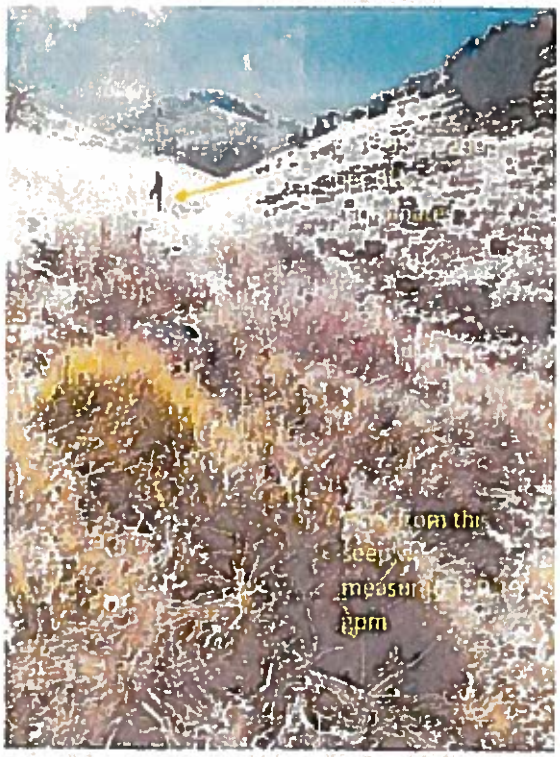
Eureka County Field Reconnaissance Date/Time: 10/20/18 12:05 hrs

Site description

BLM coordinates place the spring in an ephemeral stream channel at the base of a rock outcrop, but no spring was observed during the October 2018 site inspection. This channel is tributary to an ephemeral stream channel that had no flow on October 20, 2018. A seep exists 120 feet north of the BLM coordinates, on the west-facing slope, east of the stream channel. The spring may have been developed and sourced a trough in the Aspen stand in the canyon bottom, but there was no observed flow to the trough. The BLM claimed location is in Lot 4, Section 7, T22N, R55E, not SW¼ SW¼ as BLM describes. Said Lot 4 is about 30 acres rather than 40 acres.

Spring flow

No flow was observed at the coordinates provided by the BLM. A flow of 0.13 gpm was measured at the seep. In contrast, BLM reported a flow of 4.7 gpm on May 17, 2016. The flow from the spring appears to vary seasonally and the small flow observed in October 2018 may be more representative of base flow.



R04263 site.

Flow Rate Is Not Enough for a PWR

The State Engineer used BLM's flow measurements of this spring on May 17, 2016 at 4.7 gpm and found that "if the water is available on a year-round basis" would be "0.0105 cfs, 7.57 afa, and 6,768 gpd" and enough to be a valid PWR. This finding by the State Engineer is arbitrary and incorrect based on higher-than-average precipitation and run-off that inflated the flow under BLM's measurement and consideration of flow measurements taken by others.

BLM's flow measurements are artificially inflated due to higher than average precipitation and run-off, especially during the timeframe measured by BLM in spring 2016. Precipitation data from local sources, including the two nearby NRCS SNOTEL sites, Vacarro Springs (ID 1137) and Diamond Peak (ID 443), and the Diamond Valley USBR AgriMet Station, amongst others, irrefutably show that precipitation for water year 2016 and leading up to the BLM's measurements was well above average.

It appears that there were no field investigations completed by the State Engineer's office as there were no State Engineer staff field notes with flow measurements in the State Engineer files for R-04263. On October 20, 2018, Eureka County Department of Natural Resources and Contract Hydrogeologist measured flow at 0.13 gpm, well below the minimal amount to be a valid PWR.

Land Not "Vacant" Or "Unappropriated" As Required In 1926 Executive Order nor Reserved in 1926

This 30 acre lot where the claimed spring lies was not surveyed until 1956, 30 years after PWR 107 in 1926. The GLO survey map does not depict the spring in this 30 acre lot nor any denotation that this area was reserved by PWR 107. There are roads and trails depicted in this area. These are rights of way established on this 40 acres under Revised Statute (RS) 2477 for travel. This is in addition to no BLM land status maps, BLM Resource Management Plan (and amendments), and Master Title Plat Map indicating that these lands were reserved from homestead or Desert Land Entry.

All State Engineer Findings under Ruling 5729 Not Met

The finding that "PWR 107 claims do not apply to springs or waterholes that are...of unsatisfactory quality to satisfy the need for human and stockwatering consumption" was not met because the State Engineer or BLM did not complete an analysis of the quality of the source.

The finding that "Not more than one PWR 107 claim can be made within any 40-acre parcel and any two PWR 107 claims must be more than ¼ mile apart" was not met because there is another PWR claim (which we also dispute below), R-04264, less than ¼ mile away.

BLM PWR Checklist Criteria Not Met

BLM's own policy was not met and should have precluded BLM from filing on this spring. The following PWR criteria based on BLM's own policy were not met:

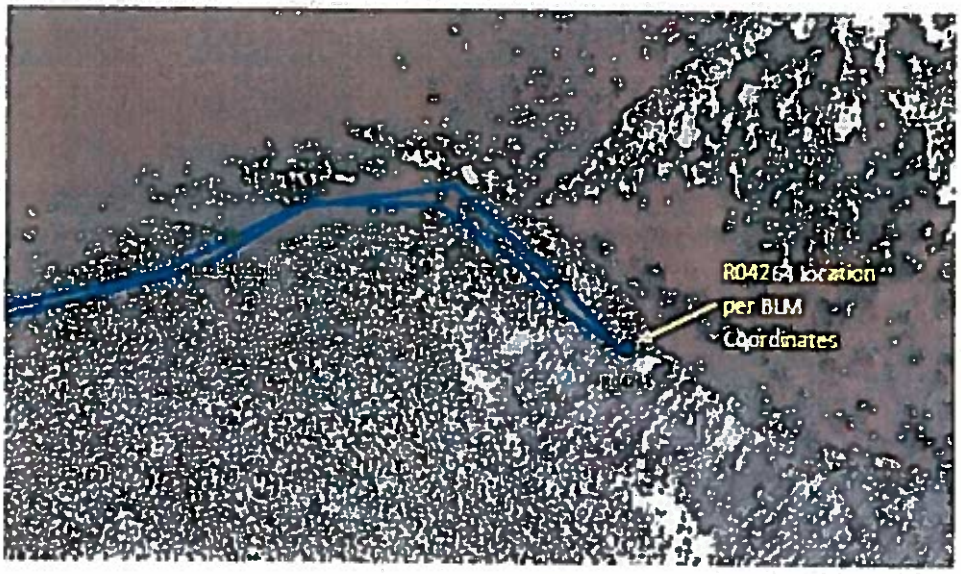
- Private control of the spring or waterhole would monopolize the public resources – there are dozens of stockwater rights available on the grazing allotment.
- The source supplies a sufficient quantity of water for public watering purposes – as documented above, the spring flows are insufficient to provide enough water for public watering purposes on this source.

<u>R-04264</u>

Eureka County Field Reconnaissance

R04264

BLM description: "Several springs express throughout, water is present, then returns subsurface downstream, before reemerging later downstream."



Aerial image of R04264 site.

Eureka County Field Reconnaissance Date/Time: 10/20/18 13:40 hrs

Site description

The BLM coordinates place the spring in an Aspen stand evident in the aerial image that was not mentioned by the BLM in their site description. The stream channel below the spring exhibits little evidence of regular flow or erosion, implying very low flows when the spring does flow. No flow was observed in the channel downstream of R04264 to its confluence with the ephemeral stream related to R04263.

Spring flow

No flow from the spring was observed during the October 2018 site inspection. In contrast, BLM reported a flow of 2.5 gpm on May 17, 2016. Similar to R04263, the flow from this spring varies seasonally and is dry during the latter parts of the year.

Location of R04264 based on BLM coordinates.

Flow Rate Is Not Sustained and is Ephemeral

The State Engineer used BLM's flow measurements of this spring, Sheep Spring, on May 17, 2016 at 2.5 gpm and found that "if the water is available on a year-round basis" would be "0.0056 cfs, 4.03 afa, and 3,600 gpd" and enough to be a valid PWR. This finding by the State Engineer is arbitrary and incorrect based on higher-than-average precipitation and run-off that inflated the flow under BLM's measurement and consideration of flow measurements taken by others. This is obviously an ephemeral seep that does not flow for a long enough period of time each year to develop riparian vegetation. All of the vegetation at the site and in the ephemeral channel is upland rangeland vegetation.

BLM's flow measurements are artificially inflated due to higher than average precipitation and run-off, especially during the timeframe measured by BLM in spring 2016. Precipitation data from local sources, including the two nearby NRCS SNOTEL sites, Vacarro Springs (ID 1137) and Diamond Peak (ID 443), and the Diamond Valley USBR AgriMet Station, amongst others, irrefutably show that precipitation for water year 2016 and leading up to the BLM's measurements was well above average.

It appears that there were no field investigations completed by the State Engineer's office as there were no State Engineer staff field notes with flow measurements in the State Engineer files for R-04264. On October 20, 2018, Eureka County Department of Natural Resources and Contract Hydrogeologist found the site completely dry.

Consideration of precipitation data at the time of BLM's measurement and the County's field visit proves that there is not enough sustained flow to satisfy a PWR under R-04264.

Land Not "Vacant" Or "Unappropriated" As Required In 1926 Executive Order nor Reserved in 1926

This 30 acre lot where the claimed spring lies was not surveyed until 1956, 30 years after PWR 107 in 1926. The GLO survey map does not depict the spring in this 30 acre lot nor any denotation that this area was reserved by PWR 107. There are roads and trails depicted in this area. These are rights of way established on this 40 acres under Revised Statute (RS) 2477 for travel. This is in addition to no BLM land status maps, BLM Resource Management Plan (and amendments), and Master Title Plat Map indicating that these lands were reserved from homestead or Desert Land Entry.

All State Engineer Findings under Ruling 5729 Not Met

The finding that "PWR 107 claims do not apply to springs or waterholes that are...of unsatisfactory quality to satisfy the need for human and stockwatering consumption" was not met because the State Engineer or BLM did not complete an analysis of the quality of the source.

The finding that "Not more than one PWR 107 claim can be made within any 40-acre parcel and any two PWR 107 claims must be more than ¼ mile apart" was not met because there is another PWR claim (which we also dispute above), R-04263, less than ¼ mile away.

BLM PWR Checklist Criteria Not Met

BLM's own policy was not met and should have precluded them from filing on this spring. The following PWR criteria based on BLM's own policy were not met:

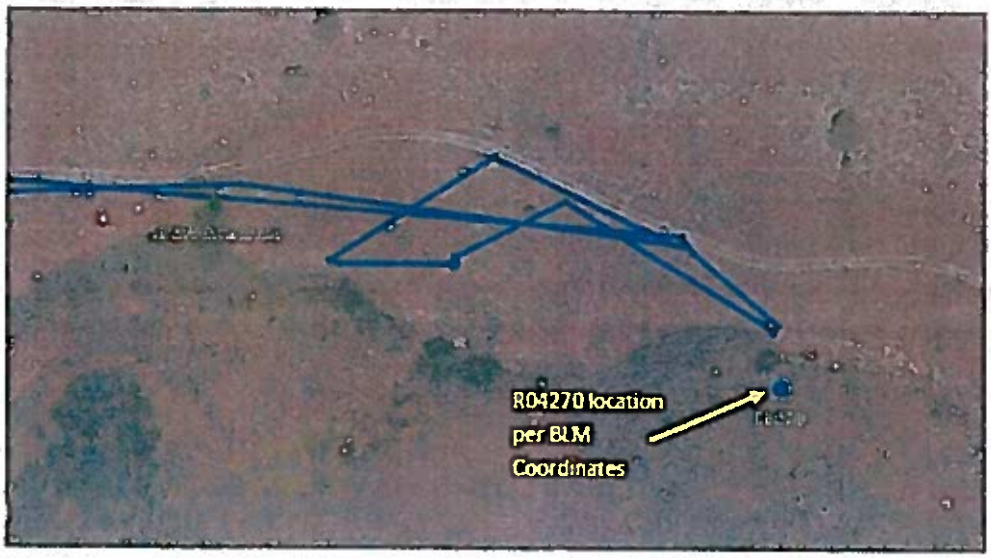
- Private control of the spring or waterhole would monopolize the public resources – there are dozens of stockwater rights available on the grazing allotment.
- The source supplies a sufficient quantity of water for public watering purposes – as documented above, the spring flows are insufficient to provide enough water for public watering purposes on this source.

<u>R-04270</u>

Eureka County Field Reconnaissance

R04270

BLM description: "Intermittent stream leads to spring with additional water, makes measurement of flow difficult. Occular flow estimate. Willows surround stream below."



Aerial image of R04270 site.

Eureka County Field Reconnaissance Date/Time: 10/20/18 14:56 hrs

Site description

The BLM coordinates place the spring at the upstream extent of willows described by the BLM as shown in the figure above and where the stream channel contains dry land vegetation as shown in the photograph below. No spring was observed at or near this location and the stream channel was dry a distance of more than 400 feet downstream.

Spring flow

No spring flow was observed during the October 2018 site inspection. BLM reported a flow of >2gpm on May 17, 2016. As seems to be the case for many of the BLM's claims for Public Water Reserves, the small flow measured by BLM is not available year-round.

Location of R04270.

Flow Rate Is Not Enough for a PWR

The State Engineer used BLM's flow estimate of this spring on May 17, 2016 at >2.00 gpm and found that "if the water is available on a year-round basis" would be "at least 0.0045 cfs, 3.22 afa, and 2,880 gpd" and enough to be a valid PWR. This finding by the State Engineer is arbitrary and incorrect based on higher-than-average precipitation and run-off that inflated the flow under BLM's measurement and consideration of flow measurements taken by others.

BLM's flow measurements are artificially inflated due to higher than average precipitation and run-off, especially during the timeframe measured by BLM in spring 2016. Precipitation data from local sources, including the two nearby NRCS SNOTEL sites, Vacarro Springs (ID 1137) and Diamond Peak (ID 443), and the Diamond Valley USBR AgriMet Station, amongst others, irrefutably show that precipitation for water year 2016 and leading up to the BLM's measurements was well above average.

It appears that there were no field investigations completed by the State Engineer's office as there were no State Engineer staff field notes with flow measurements in the State Engineer files for R-04270. On October 20, 2018, Eureka County Department of Natural Resources and Contract Hydrogeologist found the site completely dry. This spring does not have sustained flow to meet the threshold of being a valid PWR.

Spring Likely Appropriated Under Prior Vested Right V-01137

All waters of Threemile Canyon appear to be appropriated under V-01137 for irrigation and domestic purposes on private land below the mouth of the canyon. Therefore, when flowing, there is not enough water remaining for R-04270.

Land Not "Vacant" Or "Unappropriated" As Required In 1926 Executive Order nor Reserved in 1926

The State Engineer notes on page 302 that Proof V-01900 was for this same source. This vested claim was for irrigation of potatoes and stockwatering. The State Engineer found this right abandoned. On page 132 and 133, the State Engineer discusses the field notes of H.M. Payne in 1912 documenting a one acre garden in the canyon. The State Engineer also notes the "very old wooden fence posts and barbed wire" that "may have enclosed a former garden area." This is further evidence that the land, in 1926, was not "vacant" or "unappropriated" or reserved from homesteading.

This spring exists in an unsurveyed section and if found valid would reserve ¼ mile around the spring. The 1879 and 1975 GLO survey maps of the adjacent area show existing roads and trails extending into the area likely evidence that the land was not "vacant" or "unappropriated" in 1926 and not today. These are rights of way established under Revised Statute (RS) 2477 for travel. There may have been rights already established on this 40 acres under RS 2339 and RS 2340 easements for water storage and rights-of-way for water conveyance (ditches, dams, pipelines, etc.), including the ditches, reservoirs, and other referenced in the prior vested right. This is in addition to no BLM land status maps, BLM Resource Management Plan (and amendments), and Master Title Plat Map indicating that these lands were reserved from homestead or Desert Land Entry.

All State Engineer Findings under Ruling 5729 Not Met

The finding that "PWR 107 claims cannot divert or displace a water right vested under Nevada law prior to April 17, 1926" may not have been met because this spring appears to be appropriated under prior rights and flow is insufficient to even satisfy a PWR let alone the associated right.

The finding that "PWR 107 claims do not apply to springs or waterholes that are inaccessible to domestic livestock or are of unsatisfactory quality to satisfy the need for human and stockwatering consumption" was not met because the State Engineer or BLM did not complete an analysis of the quality of the source.

BLM PWR Checklist Criteria Not Met

BLM's own policy was not met and should have precluded BLM from filing on this spring. The following PWR criteria based on BLM's own policy were not met:

- Private control of the spring or waterhole would monopolize the public resources – there are dozens of stockwater rights available on the grazing allotment.
- The source supplies a sufficient quantity of water for public watering purposes – as documented above, the spring flows are insufficient to provide enough water for public watering purposes let alone the potential prior right on this source.

- A private water right does not exist on this source –a private, prior right may exists on this source.

R-04271

PWR claim R-04271 was one of the four (4) PWR springs Eureka County was unable to visit due to field conditions and the short amount of time available between the date of the Preliminary Order (August 30, 2018) and the deadline for filing objections to the Preliminary Order (November 7, 2018).

BLM description: "Spring flows next to intermittent runoff stream, developed with a rock based stock pond but pipe flowing to it is no longer functional."

Flow Rate Needs to Be Verified for State Engineer to Ensure Enough Flow for Vested Right and PWR

In the Preliminary Order of Determination, the State Engineer found that Daniel Venturacci has a vested right under Proof V-10999 for stockwatering on Rocky Canyon Spring for 0.025 cfs or 6.22 afa. The State Engineer used BLM's flow measurements of this spring on May 18, 2016 at 240.9 gpm and found that "if the water is available on a year-round basis" would be "0.5368 cfs, 387.85 afa, and 346,896 gpd" and enough to satisfy both the vested right and PWR. This finding by the State Engineer is arbitrary and incorrect based on higher-than-average precipitation and run-off that inflated the flow under BLM's measurements. Based on discussions with Daniel Venturacci, this spring does not flow enough nearly every year to satisfy even the vested right.

BLM's flow measurements are artificially inflated due to higher than average precipitation and run-off, especially during the timeframe measured by BLM in spring 2016. Precipitation data from local sources, including the two nearby NRCS SNOTEL sites, Vacarro Springs (ID 1137) and Diamond Peak (ID 443), and the Diamond Valley USBR AgriMet Station, amongst others, irrefutably show that precipitation for water year 2016 and leading up to the BLM's measurements was well above average.

It appears that there were no field investigations by the State Engineer on this spring. This is very troubling especially given the extremely high flow rate provided by BLM (240.9 gpm). BLM's description during their measurement provides insight that they very likely measured runoff, not spring flow, (i.e., "Spring flows next to intermittent runoff stream"). The State Engineer must visit this spring to verify its flow before finding a PWR to be valid.

Land Is Not "Vacant" Or "Unappropriated" As Required In 1926 Executive Order

This spring is located on lands not surveyed and if found valid would reserve ¼ mile around the spring. The 1879 survey of the adjacent area (ending one mile west at Section 3) shows existing roads and trails extending into the area likely evidence that the land was not "vacant" or "unappropriated" in 1926 and not today. These are rights of way established under Revised

Statute (RS) 2477 for travel. There may have been rights already established on this 40 acres under RS 2339 and RS 2340 easements for water storage and rights-of-way for water conveyance (ditches, dams, pipelines, etc.), items noted by BLM (rock based pond and pipes). This is in addition to no BLM land status maps, BLM Resource Management Plan (and amendments), and Master Title Plat Map indicating that these lands were reserved from homestead or Desert Land Entry.

All State Engineer Findings under Ruling 5729 Not Met

The finding that "PWR 107 claims do not act upon a source of water that only becomes important through artificial development or man-made structures" has not been met because there has been substantial artificial development and man-made structures put in at this source to cross the threshold to being "important" including the referenced rock pond and piping.

The finding that "PWR 107 claims do not apply to springs or waterholes that are...of unsatisfactory quality to satisfy the need for human and stockwatering consumption" was not met because the State Engineer or BLM did not complete an analysis of the quality of the source.

BLM PWR Checklist Criteria Not Met

BLM's own policy was not met and should have precluded BLM from filing on this spring. The following PWR criteria based on BLM's own policy were not met:

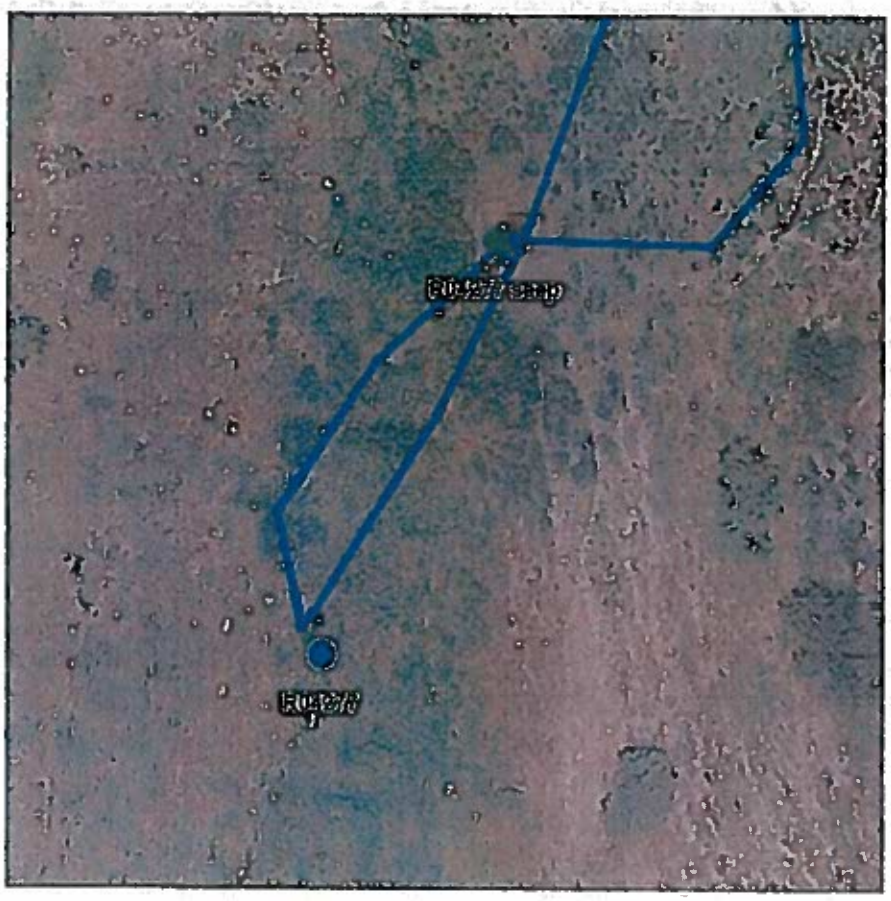
- Private control of the spring or waterhole would monopolize the public resources – there are dozens of stockwater rights available on the grazing allotment.
- The source supplies a sufficient quantity of water for public watering purposes – other data may show spring flows are insufficient to provide enough water for public watering purposes let alone the prior right on this source.
- The source is not artificially developed (i.e., well or reservoir) – Based on BLM's description, the source appears to have been extensively, artificially developed through excavation, man-made ponds, and piping.
- A private water right does not exist on this source –a private, prior right does exists on this source.

R-04277

Eureka County Field Reconnaissance

R04277

BLM description: "Natural system."



Aerial image of the R04277 site.

Eureka County Field Reconnaissance Date/Time: 10/20/18 16:50 hrs

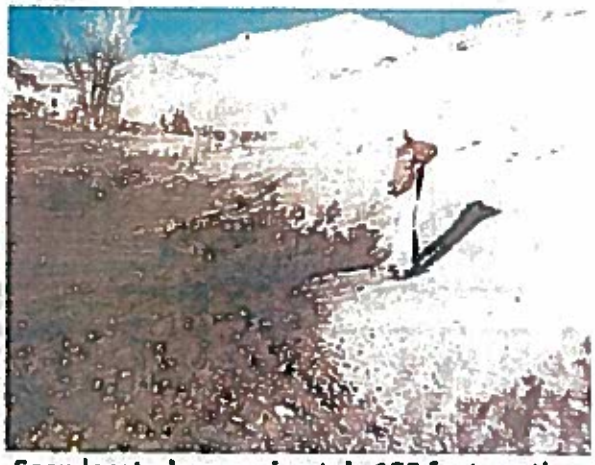
Site description

The BLM's coordinates place the spring in an ephemeral stream channel, which was dry at the time of the October 2018 site inspection. A seep is present on the hillside approximately 180 feet to the north-northwest. At first glance, the seep appears to have been hand excavated, but after discussion with Daniel Venturacci, the depression may be natural, the result of use by wild horses.

Spring flow

No flow was observed at the location given by the BLM's coordinates. At the nearby seep, water was observed in the depression but there was no measureable flow observed during the October 2018 site inspection such that the flow is likely less than 0.1 gpm. In contrast, the BLM reported a flow of 42 gpm on May 18, 2016. Given the location provided for R-04277 that places it in an ephemeral stream channel, the flow measured by the BLM was very likely affected by runoff.

Location of R04277.



Seep located approximately 180 feet north-northeast of R04277.

Flow Rate Is Not Enough for Prior Vested Right Let Alone PWR

In the Preliminary Order of Determination, the State Engineer found that Daniel Venturacci has a vested right under Proof V-11009 for stockwatering on Box Canyon Spring No. 3 for 0.025 cfs or 6.22 afa. The State Engineer used BLM's flow measurements of this spring, which they call just Box Spring, on May 18, 2016 at 42 gpm and found that "if the water is available on a year-round basis" would be "0.0936 cfs, 67.62 afa, and 60,480 gpd" and enough to satisfy both the vested right and PWR. This finding by the State Engineer is arbitrary and incorrect based on higher-than-average precipitation and run-off that inflated the flow under BLM's measurement and consideration of flow measurements taken by others. This spring does not even flow enough on a year round basis most years to satisfy the vested right V-11009 each year.

BLM's flow measurements are artificially inflated due to higher than average precipitation and run-off, especially during the timeframe measured by BLM in spring 2016. Precipitation data from local sources, including the two nearby NRCS SNOTEL sites, Vacarro Springs (ID 1137) and Diamond Peak (ID 443), and the Diamond Valley USBR AgriMet Station, amongst others, irrefutably show that precipitation for water year 2016 and leading up to the BLM's measurements was well above average.

Further, flow measurements from others show that this spring does not sustain annual flows to satisfy both the vested right and the BLM PWR. The water resources specialist from the State Engineer's office measured the flow at 3.0 gpm on June 17, 2017 and noted "BLM reported flow of 42 gpm...which seems way too high....R04277 would be where 2 sources merge in drainage, but clearly is not at spring source." (source: August 16, 2018 NDWR Memorandum to Adjudication Files). On October 20, 2018, Eureka County Department of Natural Resources and Contract Hydrogeologist documented some water was present with no measurable flow and estimated flow at less than 0.1 gpm. As documented by both Eureka County and the State Engineer's memo, it appears BLM measured flow in the "merge in drainage" where runoff was likely measured, not spring flow.

Consideration of precipitation data at the time of BLM's measurement and all know available flow data proves that the spring is fully appropriated under Proof V- 11009 and there is not enough sustained flow to satisfy even the vested right.

Land Is Not "Vacant" Or "Unappropriated" As Required In 1926 Executive Order

Based on the 1923 GLO survey, there appear to be existing roads and trails in this 40 acre subdivision before 1926 so the land was not "vacant" or "unappropriated" in 1926 and are not today. These are rights of way established on this 40 acres under Revised Statute (RS) 2477 for travel. There may have been rights already established on this 40 acres under RS 2339 and RS 2340 easements for water storage and rights-of-way for water conveyance (ditches, dams, pipelines, etc.). This is in addition to no BLM land status maps, BLM Resource Management Plan (and amendments), and Master Title Plat Map indicating that these lands were reserved from homestead or Desert Land Entry.

All State Engineer Findings under Ruling 5729 Not Met

The finding that "PWR 107 claims cannot divert or displace a water right vested under Nevada law prior to April 17, 1926" is not met because the flow at this spring is insufficient to even satisfy the vested right.

The finding that "PWR 107 claims do not apply to springs or waterholes that are...of unsatisfactory quality to satisfy the need for human and stockwatering consumption" was not met because the State Engineer or BLM did not complete an analysis of the quality of the source.

BLM PWR Checklist Criteria Not Met

BLM's own policy was not met and should have precluded BLM from filing on this spring. The following PWR criteria based on BLM's own policy were not met:

- Private control of the spring or waterhole would monopolize the public resources – there are dozens of stockwater rights available on the grazing allotment.
- The source supplies a sufficient quantity of water for public watering purposes – as documented above, the spring flows are insufficient to provide enough water for public watering purposes let alone the prior vested right on this source.
- A private water right does not exist on this source – it is irrefutable that a private, prior right exists on this source.

<u>R-04520</u>

PWR claim R-04520 was one of the four (4) PWR springs Eureka County was unable to visit due to field conditions and the short amount of time available between the date of the Preliminary

Order (August 30, 2018) and the deadline for filing objections to the Preliminary Order (November 7, 2018).

BLM description: "Flow rate estimated 3-4 gpm. No surface expression of spring. Trough present with discharge coming from pipe. Water is clear, but some algae present."

Prior Vested Right on Same Spring and Flow Rate Needs to Be Verified for State Engineer to Ensure Enough Flow for a PWR

There are discrepancies in the Preliminary Order of Determination on this spring. On page 303, the State Engineer used BLM's flow measurements of this spring, Badger Spring, on May 26, 2016 at 3.5 gpm and found that "if the water is available on a year-round basis" would be "0.0078 cfs, 5.64 afa, and 5,040 gpd" and enough to be a PWR. However, BLM did not measure the flow, it was estimated at "3-4 gpm." On this same page, the State Engineer stated that "There are no other water right claims on this source." Further, BLM claim lists the spring as being in SE¼ NE¼ Section 18, T27N, R54E but the GPS location provided by BLM plots the location in NE¼ SE¼ of Section 18 which is the 40 acres directly south.

Vested right V-10828 for Badger Spring is the same spring and source claimed by BLM. Vested right V-10828 appropriates all of Badger Spring flow at 0.013 cfs or 5.43 afs. The legal description for V-10828 is in the 40 acres where BLM's GPS point plots. A review of aerial imagery in GIS shows that BLM's GPS point is co-located with a trough as described in their description. BLM's legal description for this PWR claim is wrong.

It appears that there were no flow measurements taken by the State Engineer's office of Badger Spring. In all but one case, compared to Eureka County's recent flow measurements, and other available date, BLM's flow measurements have been artificially inflated due to higher than average precipitation and run-off, especially during the timeframe measured by BLM in spring 2016. Precipitation data from local sources, including the two nearby NRCS SNOTEL sites, Vacarro Springs (ID 1137) and Diamond Peak (ID 443), and the Diamond Valley USBR AgriMet Station, amongst others, irrefutably show that precipitation for water year 2016 and leading up to the BLM's measurements was well above average. It is highly probable that the flow of this spring may be insufficient to meet the minimal flow necessary to be a valid PWR let alone satisfy V-10828.

Land Is Not "Vacant" Or "Unappropriated" As Required In 1926 Executive Order

The area in the 40 acre subdivision where the spring lies was not surveyed until 1944, 18 years after PWR 107 in 1926. The GLO survey map does not depict the spring in this 40 acre subdivision nor any denotation that this area was reserved by PWR 107. There are roads and trails depicted in this area. These are rights of way established on this 40 acres under Revised Statute (RS) 2477 for travel. There may have been rights already established on this 40 acres under RS 2339 and RS 2340 easements for water storage and rights-of-way for water conveyance (ditches, dams, pipelines, etc.) including the water conveyance infrastructure

referenced in V-10828 and described by BLM. This is in addition to no BLM land status maps, BLM Resource Management Plan (and amendments), and Master Title Plat Map indicating that these lands were reserved from homestead or Desert Land Entry.

All State Engineer Findings under Ruling 5729 Not Met

The finding that "PWR 107 claims do not act upon a source of water that only becomes important through artificial development or man-made structures" is not met because there has been substantial artificial development and man-made structures put in at this source to cross the threshold to being "important." This is evidenced by BLM themselves where they describe the artificial development in their description and note "No surface expression of spring. Trough present with discharge coming from pipe."

The finding that "PWR 107 claims do not apply to springs or waterholes that are...of unsatisfactory quality to satisfy the need for human and stockwatering consumption" was not met because the State Engineer or BLM did not complete an analysis of the quality of the source.

BLM PWR Checklist Criteria Not Met

BLM's own policy was not met and should have precluded BLM from filing on this spring. The following PWR criteria based on BLM's own policy were not met:

- Private control of the spring or waterhole would monopolize the public resources – there are dozens of stockwater rights available on the grazing allotment.
- The source supplies a sufficient quantity of water for public watering purposes – other data may show spring flows are insufficient to provide enough water for public watering purposes let alone the prior right on this source.
- The source is not artificially developed (i.e., well or reservoir) – the source has been extensively, artificially developed through excavation, piping, and troughs.
- A private water right does not exist on this source –a private, prior right does exists on this source.

Attachment to
Field Investigative Report and Analysis of the BLM's Public Water Reserves in the Preliminary Order of Determination in Support of Eureka County's Objections

Public Water Reserve (PWR 107) Checklist

Source Name: _____

Source Location: _____

Project #: _____

Allotment: _____

1. Private control of this spring or waterhole would monopolize the public resources. _____

2. The source supplies a sufficient quantity of water for public watering purposes. (The specific quantity may vary seasonally because of variations in consumptive use requirements.) _____

3. The spring or waterhole came into existence prior to October 21, 1976. _____

4. A private water right does not exist on this source. _____

5. The land on which the source is located was not acquired after April 17, 1926. _____

6. The source is naturally occurring and not an artificially developed source (i.e., well or reservoir). _____

7. The source is important. One or more of the following circumstances must be applied for the source to be important. _____

a. The spring or waterhole is used or needed by the public for watering purposes. Describe briefly. _____

_____

_____

b. The spring or waterhole is located so that it is of utility and benefit to the general public. Describe briefly. _____

_____

_____

c. The availability of the spring or waterhole for public watering purposes affects the use of surrounding lands, water uses and users, habitat, and/or inhabitants of the surrounding lands. _____

_____

_____

d. The distance to the next nearest PWR or available source of water is such that there is no readily available, suitable alternative source of water. _____

_____

_____

e. Competing private interests could obtain water rights under State law for this water source if it were not reserved. Describe briefly.

_____

_____

As a result of this PWR Analysis I have determined that Items 1-6 and at least one circumstance in Item 7 apply. Consequently this source fulfills the criteria outline for a public water reserve.

(Attach additional support narrative as necessary)

_____	_____	_____
Signature of Evaluator	Title	Date

Concurrence:

_____	_____
Area Manager	Date