

1 Case No. CV1204049
2 Dept. 1

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6 IN THE SEVENTH JUDICIAL DISTRICT COURT OF THE STATE OF NEVADA
7 IN AND FOR THE COUNTY OF WHITE PINE

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9 _____
10 WHITE PINE COUNTY and CONSOLIDATED
11 CASES, E.T.. al.,

12 Plaintiffs,

13 vs.

DECISION

14 JASON KING, P.E., NEVADA STATE
15 ENGINEER, STATE OF NEVADA,
16 DIVISION OF WATER RESOURCES,

17 Defendant.
18 _____ /

19 This matter is an appeal from the Nevada State Engineer, Jason Kings' rulings 6164,
20 6165, 6166 and 6167 concerning the grant of water rights to Southern Nevada Water
21 Authority in Spring Valley (Lincoln and White Pine Counties), Cave Valley, Dry Lake Valley
22 and Delarmar Valley.

23 Petitioners include the Great Basin Water Network, (GBWN),¹ White Pine County,
24 Nevada, Millard and Juab County, Utah, Ely Shoshone and Duckwater Shoshone Tribes,
25 Confederate Tribe of the Goshute Reservation and the Presiding Bishop of the Churchill of
26 Latter-Day Saints on behalf of the Cleveland Ranch.

27 As explained below, the State Engineer's rulings is remanded: for recalculation of
28 water available from the respective basins; for additional hydrological study of Delamar, Dry

¹ GBWN is a non-profit corporation formed by over fifty individuals and related conservation groups.

1 Lake and Cave Valley; and to establish standards for mitigation in the event of a conflict with
2 existing water rights or unreasonable effects to the environment or the public interest.

3
4 **I**
HISTORY

5 In 1989, Las Vegas Valley Water District applied for unappropriated water in
6 hydrographic basins 180, 181, 182 and 184; Cave Valley, Dry Lake, Delamar Valley and
7 Spring Valley respectively. In 1991, the current real party in interest, South Nevada Water
8 Authority (SNWA) became the successor in interest to the Las Vegas Valley Water District.

9 Several protests were filed against the application in July of 1989. The Nevada State
10 Engineer (Engineer) was required to rule on the application within one-year of the protest's
11 filing date. NRS 533.370(2). The applications were not ruled on within one-year, however,
12 hearings on the application were held in 2006. By 2006, the water rights had changed hands
13 many times and few right holders received notice of the 2006 hearings. Great Basin Water
14 Network v Nevada State Eng'r, 126 Nev. Adv. Op. 20, 234 P.3d 912 (2010).²

15
16 Prior to the 2006 hearings, The National Park Service, Bureau of Fish and Wildlife,
17 Bureau of Land Management (BLM) and the Bureau of Indian Affairs (BIA) were actively
18 protesting the orders granting water rights to SNWA: All of these entities are divisions of the
19 Department of the Interior. ROA 000007. Each entity entered into an agreement with SNWA,
20 withdrawing their protests in exchange for implementation of a hydrologic and biologic
21 Monitoring, Management and Mitigation plan. ROA 000012; 020791; 020806; Ex. SE 041.
22 This plan's stipulation was affirmed prior to the 2011 hearings, Id. and later revised to the
23 current plan approved by the Engineer. Certain specifics of this agreement will be addressed
24 later in this order. The Engineer is not a party to the stipulation, but has approved of the
25 agreement and incorporated its terms into his rulings. ROA 000103-000106.
26

27
28

² Subsequently, the Engineer's orders were vacated, new notices were sent, and the hearings rescheduled for September and November, 2011.

1 After the Fall 2011 hearings, the Engineer approved 61,127 acre-feet annually (afa)
2 to SNWA from Spring Valley and reserving 4,000 afa for future growth in Order 6164 (March,
3 2012). ROA 000216. Other terms of the Order include:

- 4 A. First stage pumping is limited to 38,000 afa for eight
5 years, data to be collected, modelled reported to the Engineer
6 annually.
- 7 B. Stage two pumping shall be limited to 50,000 afa
8 for a minimum of eight years with the data collection
and modelling to be reported annually.
- 9 C. Stage three, SNWA will be allowed to pump the full
10 61,127 afa.

11 Id.

12 Further, the Enginner must approve each stage of pumping and SNWA must comply with the
13 MMM plan prepared by SNWA and approved by the Engineer. ROA 000216-000217.

14 Orders 6165, 6166 and 6167 concern the water rights granted to SNWA in Cave
15 Valley, Dry Lake Valley and Delamar Valley respectively. All three orders condition the water
16 grants as Compliance with the Hydrologic MMM plan prepared by SNWA and the Biological
17 Monitoring plan. ROA 00387-8; 000551; 00713-4. The MMM plan shall be subject to
18 modification by the Engineer. SNWA must report annually and provide 10-25-100 year
19 predictive models to the Engineer.

20 The Cave Valley appropriation is 5,235 afa with 50 afa reserved for future growth.
21 Dry Lake Valley's appropriation is 11,584 afa, 50 afa for future growth. Delamar Valley's
22 appropriation is 6,042 afa and 50 afa for future growth. Id.

23 The four rulings by the Engineer represent the largest water appropriations in Nevada
24 history. The water basins concerned including Spring, Cave, Dry Lake and Delamar Valleys
25 encompass 20,688 square miles of Nevada. ROA 000125.

26 The basins size has been compared to New England, encompassing great portions of
27 Vermont, New Hampshire, Massachusetts, Connecticut and some of New York.
28

1 SNWA Ex. 339, ROA 020181. It is likely the largest interbasin transfer of water in U.S.
2 history.

3
4 **II**
AUTHORITY AND OBLIGATIONS OF THE STATE ENGINEER

5 The Engineer “[s]hall approve an application submitted in proper form which
6 contemplates the application to beneficial use if:”

- 7 (a) The application is accompanied by the prescribed fee;
- 8 (b) The proposed use or change, if within an irrigation district,
9 does not adversely affect the cost of water for other holders
10 of water rights in the district or lessen the efficiency of the
11 district in its delivery or use of water; and
- 12 (c) The applicant provides proof satisfactory to the State
13 Engineer of the applicant’s:
- 14 (1) Intention is good faith to construct any work necessary to
15 apply the water to the intended beneficial use with
16 reasonable diligence; and
- 17 (2) Financial ability and reasonable expectation actually to
18 construct the work and apply the water to the intended
19 beneficial use with reasonable diligence.

20 NRS 533.370 (1).

21 Additionally, the Engineer must determine;

- 22 1. Whether there is unappropriated water;
- 23 2. Whether the proposed use will conflict with existing rights
24 and/or domestic wells; or
- 25 (a) If the appropriation threatens to prove detrimental to
26 the public interest,

27 “The State Engineer shall reject the application” NRS 533.370 (2).

28 The Engineer must also consider:

- (a) Whether the applicant has justified the need to import the
water from another basin.
- (b) If the State Engineer determines that a plan for conservation
of water is advisable for the basin into which the water is to be
imported, whether the applicant has demonstrated that such a
plan has been adopted and is being effectively carried out;

- 1 (c) Whether the proposed action is environmentally sound as it
2 relates to the basin from which the water is exported;
- 3 (d) Whether the proposed action is an appropriate long-term use
4 which will not unduly limit the future growth and development
5 to the basin from which the water is exported; and
- 6 (e) Any other factor the State Engineer determines to be relevant.

7 NRS 533.370(3).

8 **III**
STANDARD OF REVIEW

9 After the Engineer issues the rulings, an aggrieved party is entitled to have the order
10 or decision reviewed by the District Court, in the nature of an appeal. NRS 533.450. On a
11 petition for judicial review, the Court is confined to considering the administrative record.

12 NRS 533.450 (1). The proceedings in every case must be heard by the Court, and must be
13 informal and a summary, but a full opportunity to be heard must be had before judgment is
14 pronounced. NRS 533.450 (2).

15 In reviewing the record, the Court must treat the State Engineer's decision as "prima
16 facie correct, and the burden of proof shall be upon the party" challenging the decision. NRS
17 533.450 (9). The Court may not substitute its judgment for that of the State Engineer, but is
18 limited to determining whether there is substantial evidence in the record to support the
19 decision. Revert v. Ray, 95 Nev. 782, 786, 603 P.2d 262, 264 (1979). Substantial evidence
20 is "that which a reasonable mind might accept as adequate to support a conclusion." Bacher
21 v. Office of the State Eng'r of Nev., 122 Nev. 1110, 1121, 146 P.3d 793, 800 (2006).

22
23 [A] conclusion that substantial evidence supports the findings of
24 the State Engineer does not, however, dispose of the . . . appeal.
25 The applicable standard of review of the decisions of the State
26 Engineer, limited to an inquiry as to substantial evidence,
27 presupposes the fullness and fairness of the administrative
28 proceedings: all interested parties must have had a "full
opportunity to be heard," See NRS 533.450 (2); the State
Engineer must clearly resolve all the crucial issues presented, see
Nolan v. State Dep't of Commerce, 86 Nev. 428, 470 P.2d 124
(1970) (on rehearing); the decision maker must prepare findings in
sufficient detail to permit judicial review, *id.*; *Wright v State*

1 *Insurance Commissioner, 449 P.2d 419 (Or. 1969)*; see also *NRS*
2 *233B.125*. When these procedures, grounded in basic notions of
3 fairness and due process, are not followed, and the resulting
4 administrative decision is arbitrary, oppressive, or accompanied
5 by a manifest abuse of discretion, this court will not hesitate to
6 intervene. *State ex rel. Johns v. Gragson, 85 Nev. 478, 515 P.2d*
7 *65 (1973)*.

8 *Revert, 95 Nev. At 786, 603 P.2d at 264*.

9 The Court is free to decide purely legal questions de novo. *Town of Eureka v. Office*
10 *of the State Eng'r of Nev., 108 Nev. 163, 165, 626 P.2d 948, 949 (1992)*. A purely legal
11 question is one that is not dependant (sic) upon, and must necessarily be resolved without
12 reference to, any fact in the case. *Beavers v Department of Motor Vehicles & Pub. Safety,*
13 *109 Nev. 435, 438 n.1, 851 P.2d 432, 434 n.1 (1993)*. While the State Engineer's
14 interpretation of law is persuasive, and the court should give it great deference when it is
15 within the language of the applicable statutory provisions, it is not controlling. *Town of*
16 *Eureka, 108 Nev. at 165, 826 P.2d at 950; Andersen Family Assocs., v Ricci, 124 Nev. Adv.*
17 *Rep. 17, 179 P.3d 1201, 1203 (2008)*.

18 IV

19 NEVADA ENGINEERS' RULINGS COMMON TO 20 SPRING, DELAMAR, CAVE AND DRY LAKE VALLEY

21 "The State Engineer held a hearing on the Spring, Cave, Dry Lake and
22 Delamar Valley application between September 26, 2011, and November 18, 2011." ROA
23 000010. NRS 533.370 (1) (c); (2) and (3) requires findings that water is available to be
24 appropriated and that the statutory criteria for granting the water is satisfied by substantial
25 evidence. "Both the Applicant [SNWA] and protestants submitted thousands of pages of
26 scientific information, evidence and testimony for consideration during a record-long six-week
27 hearing." ROA 000029.

28 The Engineer made the following findings of fact:

1 That Southern Nevada provided substantial evidence of
2 need for additional water "independent of the Colorado
3 River," ROA 000037, and that "current available supplies
4 [are] insufficient to meet projected future water demands
5 under normal conditions." ROA 000038.

6 That Southern Nevada provided substantial evidence that it
7 "intends to construct the works necessary and put water
8 from the applications to beneficial use . . . with reasonable
9 diligence." ROA 000046.

10 That Southern Nevada provided substantial evidence of
11 financial ability and a "feasible conceptual plan of
12 development. ROA 000047.

13 These findings were opposed by many of the Protestants and countered with expert
14 opinions. However, there is no real question that the Engineer's findings above were not
15 based on substantial evidence acceptable to a reasonable mind. Further, the Protestants
16 had a full and fair opportunity to present their evidence. Thus, the Engineer's findings were
17 not arbitrary or capricious.

18 **V**
19 **OBJECTIONS MADE BY PROTESTANTS**

20 Virtually all of the Protestants which include Cleveland Ranch (Corp. of the Church of
21 Latter-Day Saints), White Pine, Eureka, Elko, and Nye counties, Nevada, The Confederate
22 Tribes of the Goshute Reservation, Ely and Duckwater Shoshone Tribes and Millard and
23 Juab counties, Utah, object to the Engineer's orders on the basis of the Monitor, Manage and
24 Mitigate Plan (MMM). The Protestants allege that as the plan is currently written it cannot
25 adequately protect existing rights or the environment.

26 Most of the Protestants object to the Orders alleging that any amount of water
27 awarded to SNWA is excessive or should not be granted at all, citing to evidence and
28 arguments presented to the Engineer at the 2011 hearings. Essentially, the objections are
that the award is neither environmentally sound nor in the public interest, pursuant to NRS
533.370. The objections are either relating to the entire Spring Valley Basin and/or Delamar,

1 Cave or Dry Lake Valleys, or localized areas inhabited or used by the Ely, Duckwater and
2 Goshute Native Americans.

3 Other, more specific objections are that NRS 533.3705 (which allows staged
4 development of a water award) is inapplicable to the instant case because the statute is not
5 retroactive to SNWA's 1989 application; and that hydrological knowledge of the respective
6 basins is so incomplete that any water award is premature and; that the perennial yield of
7 Delamar, Dry Lake, and Cave Valley, as part of the White Pine River Flow System is already
8 appropriated in the lower parts of the flow system.
9

10 Some of the Protestants argue that SNWA failed to meet its burden of proving need,
11 good faith intentions to construct the infrastructure, and financial ability to perform the
12 construction. As stated above, this court finds the Engineer's ruling valid regarding need,
13 good faith and financial ability.

14 Regarding the argument that NRS 533.3705, allowing staged development, does not
15 apply retroactively, as interpretation is a matter of law, this court finds that NRS 533.3705
16 does apply in this case. Enacted in 2007 the law states "[u]pon approval of an application to
17 appropriate water, the State Engineer may limit the initial use of water to a quantity that is
18 less than the total amount approved for the application." The applications in question were
19 approved in March, 2012, after the enactment of the statute. See generally PEBP v LVMPD,
20 124 Nev. 138 (2008).
21

22 Millard and Juab counties, Utah, object that Ruling 6164 does not specifically include
23 Snake Valley, Utah in the mitigation process. Snake Valley is specifically to be monitored by
24 six (6) wells and sixteen (16) monitoring sites. ROA 000114-115. Snake Valley, Utah is not
25 specifically mentioned as a mitigation site. Whether the omission was inadvertent or not,
26 Ruling 6164 is remanded to include Snake Valley, Utah in the mitigation plan.
27

28 The Confederated Tribes of the Goshute Reservation argue that pursuant to the
Public Trust Doctrine, the Spring Valley awards must be vacated.

1 If the current law governing the water Engineer does not clearly
2 direct the Engineer to continuously consider in the course of his
3 work the public's interest in Nevada's natural water resources, the
4 law is deficient. It is then appropriate, if not our constitutional
5 duty, to expressly reaffirm the Engineer's continuing responsibility
6 as a public trustee to allocate and supervise water rights so that
7 the appropriations do not substantially impair the public interest in
8 the lands and waters remaining. [The public trust] is an affirmation
of the duty of the state to protect the people's common heritage of
streams, lakes, marshlands, and tidelands, surrendering that right
of protection only in rare cases when the abandonment of that
right is consistent with the purposes of the trust. Our dwindling
natural resources deserve no less.

9 Lawrence v Clark County, 127 Nev. Adv. Op. 32, 254 P.2d. 606, 611 (2011).

10 The Goshute's argument is well taken, but whether Spring Valley groundwater is part
11 of the Public Trust Doctrine or not, Nevada law requires the Engineer to oversee an
12 environmentally sound stewardship of the water, the same goal as the doctrine.

13 **VI**
14 **SPRING VALLEY APPROPRIATIONS**

15 **A. THE AWARD OF 61,127 AFA VIOLATES THE STATE ENGINEER'S RULES**

16 The Engineer relied on substantial evidence, produced from numerous sources, when
17 determining the amount of water available for the Spring Valley appropriation granted to
18 SNWA. ROA 000057-000090. Considering the evidence of evapotranspiration, inter-basin
19 flow and recharge, the Engineer found 84,000 afa available. ROA 000090. Further, he
20 found, "there is no substantial evidence that the proposed use will conflict with protectable
21 interests in existing domestic wells, or that the use will threaten to prove detrimental to the
22 public interest." ROA 000215.

23
24 The Engineer began his calculation of the Spring Valley appropriation with the
25 "estimated average groundwater evapotranspiration (E.T.)," at 84,100 afa. Thus, the
26 perennial yield of Spring Valley is 84,000 afa. ROA 000214. Existing water rights are 18,873
27 afa and "an additional 4,000 afa is reserved for future growth and development for a total of
28

1 22,873 afa of water committed to the basin. Subtracting 22,873 afa from the perennial yield
2 of 84,000 afa leaves 61,127 afa available for appropriation." ROA 000215.

3 Perennial yield has been for many years defined by the Engineer as:

4 The perennial yield of a groundwater reservoir may be defined as
5 the maximum amount of groundwater that can be salvaged each
6 year over the long term without depleting the groundwater
7 reservoir. Perennial yield is ultimately limited to the maximum
8 amount of natural discharge that can be salvaged for beneficial
9 use. The perennial yield cannot be more than the natural
10 recharge to a groundwater basin and in some cases is less.

11 ROA 000056.

12 In theory, with enough time the water removed from the system equals the recharge
13 of the system thereby reaching equilibrium. However, reaching equilibrium may take
14 hundreds of years, and "always involves the depletion of water from transitional storage."
15 Engineer Ans. Brief, p.54. If more water comes out of a reservoir than goes into the
16 reservoir, equilibrium can never be reached. This is known as water mining and "[w]hile
17 there is no statute that specifically prevents groundwater mining, the policy of the Engineer
18 for over one hundred (100) years has been to disallow groundwater mining. This policy
19 remains today. Id.

20 The Engineer defines groundwater mining as pumping exceeding the perennial yield
21 over time such that the system never reaches equilibrium. ROA 56. Natural discharge in
22 Spring Valley is almost exclusively E.T. ROA 000057. E.T. occurs by plants and
23 phreatophytes discharging the groundwater from the basin through use. In Spring Valley,
24 this is the water sought for beneficial use. Of course, to do so, the phreatophytes must be
25 completely eliminated. Engineer Ans. Brief, p.53-54.

26 Obviously, any water-well cannot capture all of the E.T., and while pumping and E.T.
27 are both occurring, the water table drops. A reasonable lowering of the water table and
28 death of most of the phreatophytes is a trade-off for a beneficial use of the water. "It is a
condition of each appropriation of groundwater acquired under this Chapter that the right of

1 the appropriator relates to a specific quantity of water and that the right must allow for a
2 reasonable lowering of the static water level at the appropriator's point of diversion." NRS
3 534.110(4). The Engineer specifically found "there is no provision in Nevada water law that
4 addresses time to capture, and no State Engineer has required that E.T. be captured within a
5 specific period of time. It will often take a long time to reach near equilibrium in large basins .
6 . . and this is no reason to deny water right applications." ROA 000090. The Engineer is
7 correct that the time to reach equilibrium is not a valid reason to deny the grant of water, but
8 it may very well be a reason to limit the appropriation below the calculated E.T.
9

10 Here, there is no valid evidence of when SNWA will capture E.T., if ever. Evidence
11 was submitted at the hearing over many days, the Engineer stated that seventy-five (75) year
12 models of groundwater pumping are appropriate due to "existing data." ROA 000146.
13 However, over seventy-five (75) years becomes less certain. Id. Moreover, the Engineer did
14 not require SNWA to prove that they could capture all of the E.T. SNWA did claim that after
15 two hundred (200) years; their evidence showed that eighty-four (84%) percent of the E.T.
16 would be captured and eighty four percent [is] close to a hundred percent." SNWA Ans. Brief
17 p.288. Simple arithmetic shows that after two hundred (200) years, SNWA pumping and
18 evapotranspiration removes 70,977 afa from the basin with no equilibrium in sight. That is
19 9,780 afa more than SNWA's grant.
20

21 Mr. Stockton, arguing on behalf of the Engineer stated that, "requiring these E.T.
22 salvage projects . . . it's just not appropriate. It can't be done in most basins because the
23 federal government owns the land. They're not going to allow it to be dotted with wells all
24 over the place and the State Engineer found that it wasn't appropriate to require an E.T.
25 salvage project." SE Ans. Brief, Vol. I, p.54. SNWA stated that "[t]he whole question of
26 groundwater mining and E.T. capture and timed equilibrium are not part of the water law and
27 they are not necessary." SNWA Ans. Brief, Vol. I, p.69.
28

1 The Engineer acknowledged that it is unlikely all of the E.T. in a basin will be
2 captured. Additionally, “[i]t is unclear where [Cleveland Ranch] got the impression that
3 groundwater development in Nevada is required to be an E.T. salvage project, which is
4 certainly not contained in statutory law.” Engineer Ans. Brief, p.54. Perhaps Cleveland
5 Ranch and the other Protestants “got the impression” from the Engineer’s definition:
6 “Perennial yield is ultimately limited to the maximum amount of natural discharge that can be
7 salvaged for beneficial use.” ROA 000056. Moreover, in the Engineer’s Ruling 5726 he
8 defined perennial yield as an “assumption that water lost to natural E.T. can be captured by
9 wells and placed to beneficial use.” Cleveland Ranch Opening Brief, App. 1 at 27, citing
10 Ruling 5726. The Nevada Supreme Court stated, “[t]he perennial yield of a hydrological
11 basin is the equilibrium amount or maximum amount of water that can safely be used without
12 depleting the source.” *Pyramid Lake Paiute Tribe of Indians v Ricci*, 126 Nev. Adv. Op. 48;
13 245 P.3d 1146, 1147 (2010).

14
15 The Engineer ‘s finding that equilibrium in Spring Valley water basin will “take a long
16 time” was not based on substantial or reliable evidence, and is incorrect. Indeed, by his own
17 statements – and evidence – equilibrium will never be reached.

18
19 The Engineer has also said that “[d]rawdown of less than 50 feet over a seventy-five
20 year period is generally a reasonable lowering of the static water table.” ROA 000132.
21 However, after two hundred (200) years of pumping the water table is losing 9,780 afa over
22 and above the amount SNWA has been authorized to pump. SNWA’s expert certified that
23 uncaptured E.T. would have to be deducted from the perennial yield. ROA 34928. This, the
24 Engineer did not do.

25
26 This Court finds that the Engineer’s own calculations and findings, show that
27 equilibrium, with SNWA’s present award, will never be reached and that after two hundred
28 (200) years, SNWA will likely capture but eighty-four (84%) of the E.T. Further, this court
finds that losing 9,780 afa from the basin, over and above E.T. after 200 years is unfair to

1 following generations of Nevadans, and is not in the public interest. In violating the
2 Engineer's own standards, the award of 61,127 afa is arbitrary and capricious.

3 This finding by the court requires that this matter be remanded to the State Engineer
4 for an award less than the calculated E.T. for Spring Valley, Nevada, and that the amended
5 award has some prospect of reaching equilibrium in the reservoir.

6
7 **B. THERE ARE NO OBJECTIVE STANDARDS AS TO WHEN THE MITIGATION
PART OF THE MONITOR, MANAGE AND MITIGATE PLAN GO INTO EFFECT**

8 SNWA's expert reports make it clear that the hydrology of Spring Valley, as well as
9 Delamar, Dry Lake and Cave Valley, is not completely understood. Much of the data
10 collected over the years is analyzed by computer models and is "significantly" limited in
11 accuracy concerning the hydrological framework, actual precipitation, recharge and other
12 factors. ROA 010704; 010708-9. The experts recognize that inaccuracies exist because of
13 a lack of data collection over vast areas of Spring Valley, Delamar, Dry Lake and Cave
14 Valleys. ROA 010706. For example, 10 years of data collection generally means an
15 accurate predictive model for the next 10 years. ROA 000146. Thus, the Engineer has
16 stated that a 75 year model is a reasonable simulation because there are 75 years of existing
17 data. "Over 75 years becomes less certain." Id. "[U]ncertainty is reduced overtime as more
18 baseline and operational data become available." ROA 013244. "Much is not known about
19 the groundwater-influenced ecosystems in the [initial biological monitoring area] (e.g.,
20 relationship, between groundwater levels and spring-flow: relative dependence of certain
21 vegetation on groundwater versus other sources of water), and the response of these
22 systems to groundwater withdrawal by SNWA." Biological Monitoring Plan Spring Valley
23 Stipu. ROA 020648.

24 Recognizing that no one really knows what the impact of pumping water from Spring
25 Valley on such a large scale will be (ROA 000135-6 and 020066), the Engineer found that
26 staged pumping is environmentally sound and will insure no conflicts with existing rights.
27
28

1 ROA 000151. Additionally, the Engineer adopted the MMM Plan created by SNWA and the
2 National Park Service, Bureau of Fish and Wildlife, and the Bureau of Indian Affairs. A
3 description of the plan is contained in State Engineer's Order No. 6164. ROA 000103-120.

4 The MMM plan is a stipulation between SNWA and Federal agencies (supra). In
5 summary, SNWA's pumping will be managed to avoid "unreasonable harm to scenic values"
6 in the Great Basin National Park and the "loss of surface vegetation." ROA 020496. The
7 three principal components are:
8

9 *Monitoring Requirements* – including, but not limited to monitoring
10 wells, spring flow measurements, water chemistry analyses,
11 quality control procedures, and reporting requirements; and

12 *Management Requirements* – including, but not limited to the
13 creation of a Technical Review Panel ("TRP") to review
14 information collected under this Plan and advise the Executive
15 Committee (a group consisting of one management-level person
16 from each Party, as described below in Management
17 Requirements), the use of an agreed-upon regional groundwater
18 flow system numerical model(s) to predict effects of groundwater
19 withdrawals by SNWA in the Spring Valley HB, and the
20 establishment of a consensus-based decision-making process;
21 and

22 *Mitigation Requirements* – including, but not limited to the
23 modification relocation or reduction in points of diversion and/or
24 rates and quantities of groundwater withdrawals or the
25 augmentation of Federal Water Rights and/or Federal Resources
26 as well as measures designed and calculated to rehabilitate,
27 repair or replace any and all Federal Water Rights and Resources
28 if necessary to achieve the goals set forth in Recital G of the
Stipulation.

ROA 20791.

23 Similarly, the Biologic Monitoring, Management and Mitigation Plan has been
24 instituted to "determine the appropriate course of action to avoid and/or mitigate any effects
25 to Water-dependent Ecosystems . . . within the Great Basin National Park [and other
26 Federal] 'Areas of Interest.'" ROA 020806. The Biologic monitoring is to "determine potential
27 indicator species and appropriate parameters to monitor for early warning of unreasonable
28 adverse effects and of any effect within the boundaries of Great Basin National Park . . .

1 resulting from SNWA's withdrawal of ground water from the Spring Valley HB." Id. The
2 Mitigation portion of the Plan briefly describes what could possibly be done to mitigate
3 unreasonable effects. Id.

4 Appendix B of NSE Ruling 5726 contains objectives 6, 7, and 8 of the "Plan":

5 6. During the Pre-Withdrawal Phase, establish the range of
6 variation for each indicator (or suite of indicators) that will be
7 considered acceptable.

8 7. Define what constitutes an "unreasonable adverse effect"
9 during the Pre-Withdrawal Phase.

10 8. In coordination with TRP, during the Pre-Withdrawal Phase,
11 establish criteria that will initiate the BWG consultation process as
12 outlined in the Stipulation.

13 The Stipulation directs there be no "unreasonable adverse effect"
14 to groundwater-influenced ecosystems in the IBMA and no
15 adverse effect to GBNP as a result of SNWA's groundwater
16 withdrawal in Spring Valley. In order to meet these requirements,
17 it is imperative that impacts are detected and assessed, and
18 appropriate management actions are initiated, prior to such effect
19 occurring.

20 ROA 020647.

21 As noted above, the Engineer has instituted the MMM Plan as a condition of the
22 SNWA appropriations (ROA 000181), and has been involved in developing the Plan. ROA
23 013243-44. However, the MMM Plan is flawed in several respects, most notably: "Mitigation
24 planning is not part of this plan but will be handled separately when impact location and
25 magnitude are better understood." ROA 020648. Nonetheless, the MMM Plan emphasizes
26 that mitigation will cure any adverse effects and the Engineer has found that the existing,
27 non-Federal rights are sufficiently protected by the Plan. ROA 000215.

28 There are no objective standards to determine when mitigation will be required and
implemented. The Engineer has listed what mitigation efforts can possibly be made, i.e.,
stop pumping, modifying pumping, change location of pumps, drill new wells, or increase or
improve leopard frog populations in a different location from one that suffers an

1 unreasonable impact. ROA 000190. Also, the Engineer has noted that if pumping has an
2 adverse effect on swamp cedars, SNWA could mitigate, ROA 000189. but does not cite
3 objective standards of when mitigation is necessary. The Engineer states: “where
4 unreasonable impacts may occur and how bad the impacts may be is not understood and
5 thus mitigation cannot be part of the plan at the present.” Not knowing where or how bad an
6 impact is, is not the same thing as defining what an adverse impact..
7

8 The Engineer has found that it is “premature to attempt to set quantitative standards
9 or triggers for mitigation actions,” because “[f]actors such as natural variation in the
10 environmental resources must be understood before any standards or triggers are set.” ROA
11 000311. “Selecting specific standards before a full baseline is developed would be
12 premature. It would not lead to sound scientific decisions.” ROA 000182-183.

13 While this Court cannot completely disagree with the Engineer’s statement above, he
14 has also stated: “The State Engineer finds that the applicant [SNWA,] gathered and
15 presented substantial environmental resource baseline material and that the environmental
16 resource baseline information provides a platform for sound, informed decision making.”
17 ROA 00176. Thus, if SNWA, and thereby the Engineer, has enough data to make informed
18 decisions, setting standards and “triggers” is not premature. Curiously, the Engineer has
19 made the finding that a failure to even make “Mitigation” a part of the current MMM plan
20 “demonstrates Applicant’s determination to proceed in a scientifically informed,
21 environmentally sound manner.” ROA 000183. It seems that if there is enough data to make
22 informed decisions, exactly when an unreasonable impact to either the environment or
23 existing rights occurs, the Engineer or SNWA should recognize it and make the decision to
24 mitigate. If there is not enough data (as shown earlier, no one really knows what will happen
25 with large scale pumping in Spring Valley), granting the appropriation is premature. The
26 ruling is arbitrary and capricious.
27
28

1 Still other flaws with the MMM Plan are evident. The Engineer stated: "the regulation
2 of water rights is in the State Engineer's purview, and the State Engineer proactively
3 monitors impacts to existing rights and the environment." ROA 000183.

4 Also, "[t]he State Engineer finds that the potentially impacted water rights . . . are or will be
5 monitored and that this monitoring will allow for early warning of potential impacts to these
6 water rights . . . and will exercise his authority as needed to protect these existing rights and
7 will require mitigation if needed." ROA 000139-140.

9 The Engineer found that lowering the Spring Valley water table by 50 feet is
10 "reasonable," but has avoided any mention of what is unreasonable. Nor did he state how
11 monitoring will be accomplished, or what constitutes an impact, potential or otherwise. There
12 is no standard to know how much of an impact is unreasonable to leopard frogs, or to swamp
13 cedars, before mitigation is necessary. The Engineer gives a vague statement of how
14 mitigation can be done, but has no real plan or standard of when mitigation would be
15 implemented. Without a stated, objective standard, the ruling is arbitrary and capricious.

17 Regarding monitoring and proactive monitoring by the Engineer, there is no plan.
18 The Federal/SNWA stipulation requires yearly reports to the Engineer, but even a cursory
19 examination of the stipulation reveals that between SNWA, the Federal agencies and
20 existing water right holders, the goals and motivations of each party will certainly conflict.
21 The Engineer finds that he has jurisdiction to oversee the "environmental soundness" of the
22 project "and will do so." ROA 000178. Again, he has not stated how this will be
23 accomplished. If the Engineer believes that his department will monitor the non-Federal
24 rights and environment, he has not said how it will be done. The Engineer pointed out in
25 *Great Basin Water Network v. State Engineer*, 126 Nev. Adv. Op. 20; 234 P.3d 912 (2010),
26 that he is short staffed. There are 172,605 acres in Spring Valley alone. ROA 18788.
27 Without a plan to monitor that large of an area, a statement that the Engineer will monitor the
28 area is also arbitrary and capricious.

1 Impliedly, the Engineer has ceded the monitoring responsibilities to SNWA. “The
 2 State Engineer finds that [SNWA] has the ability to identify impacts of the project through its
 3 environmental monitoring plan.” ROA 000193. Yet, the plan has failed to set any standard
 4 of how impacts may be recognized. Essentially, the Engineer is simply saying, “we can’t
 5 define adverse impacts, but we will know it when we see it.”

6 Both SNWA and the Engineer have properly referenced the successful MMM plan
 7 used at Devil’s Hole in the Armagosa Valley. In Devil’s Hole, aside from being a small
 8 fraction of area compared to Spring Valley, Delamar, Dry Lake and Cave Valley, the MMM
 9 plan specifically has a “trigger.” When the water level falls 2.7 feet below a copper washer,
 10 mitigation must occur. Transcript, Vol. I, p.65. This is an objective and recognizable
 11 standard.

12 The Engineer has stated several times that “under specific conditions” SNWA will be
 13 required to modify or curtail pumping. ROA 013248 and 013264. Yet again, there are no
 14 specifics stated.

15 The Engineer rightly recognized his “heavy burden of ensuring” that this water project
 16 is environmentally sound. ROA 000173. A heavy burden indeed and one which is not
 17 complete. Several of the Protestants noted that the MMM plan is filled with good intentions
 18 but lacks objective standards. This Court agrees. Granting water to SNWA is premature
 19 without knowing the impacts to existing water right holders and not having a clear standard to
 20 identify impacts, conflicts or unreasonable environmental effects so that mitigation may
 21 proceed in a timely manner. Based on the above, this matter must be remanded to the State
 22 Engineer until objective standards can be established and stated – as to when mitigation
 23 must occur.
 24
 25
 26

27 **VII**
 CAVE, DRY LAKE AND DELAMAR VALLEY

28 A. THE WATER AWARDED TO SNWA IN RULINGS 6165, 6166 AND 6167 IS ALREADY APPROPRIATED IN THE LOWER BASINS

1
2 Cave, Dry Lake, and Delamar Valley (CDD) are contiguous and linear, stretching from
3 White Pine County, Nevada, southerly, into Lincoln County. It is approximately sixty (60)
4 miles from the Northern tip of Cave Valley to the Southern end of Delamar Valley.

5 ROA 020507. Unlike Spring Valley, which is a “closed valley”, the CDD basins are “not
6 closed”. ROA 000599. In closed valleys, natural water discharge is by evapotranspiration
7 (E.T.). In CDD, water is discharged by water flow from one basin into another. “Just like
8 water in streams, groundwater moves from areas of higher hydraulic heads to areas of lower
9 hydraulic heads.” ROA 017407.

10
11 The Engineer described the CDD basins as part of the White River Flow system,
12 consisting of ten (10) additional hydrographic basins, which discharge primarily into the
13 White River Valley, Pahrnagat Valley, and the Muddy Springs Area. ROA 000599.
14 Approximately 2,000 afa flow into Dry Lake Valley from Pahroc. ROA 010588. “There is no
15 groundwater E.T. in Dry Lake Valley, (ROA 017415) so all groundwater in Dry Lake Valley
16 flows down gradient to the south to Delamar Valley.” Id. and continues from Delamar to
17 northern Coyote Springs Valley. Id.

18
19 The Protestants allege that the CDD water allocation to SNWA, has been previously
20 appropriated. The awarding SNWA water from the higher gradient of the White River Flow
21 allows SNWA to take the water before it recharges the lower basins, which conflicts with
22 earlier established water rights. In other words, the same water has been awarded twice,
23 once in the upper basins, and again in the lower basins.

24
25 The Engineer tacitly acknowledges the double appropriation of the same water but
26 rationalizes it in two different ways. First, he refers to the rights in Coyote Springs as “paper
27 water rights.” Oral Arg. Trans., Vol. II, p.255. Exactly what the Engineer means by “paper
28 water rights” is unclear, but this Court takes it to mean: valid, existing rights. If the rights
were invalid, there would be no over appropriation. Second, the Engineer states that “up-

1 gradient use will not, if at all, measurably affect down-gradient supply for hundreds of years.”
2 ROA 000599-600. Further, he found that “if no measurable impacts to existing rights occur
3 within hundreds of years, then the statutory requirement of not conflicting with existing water
4 rights is satisfied.” ROA 000600.

5 Considering that models which project water disbursement longer than seventy-five
6 (75) years are uncertain (ROA 020061) – and giving some deference to the Engineer’s
7 ruling, (see *Town of Eureka*, 108 Nev. 163 (1992)), this Court cannot agree with the
8 Engineer’s interpretation of NRS 533.370 (2). The statute is unequivocal, if there is a conflict
9 with existing rights, the applications “shall” be rejected.
10

11 Moreover, it is also unseemly to this court, that one transitory individual may simply
12 defer serious water problems and conflict to later generations, whether in seventy-five (75)
13 years or “hundreds,” especially when the “hundreds” of years is only a *hoped* for resolution.
14

15 There may be water from the CDD basins which could properly be appropriated
16 without conflicting with down-gradient rights. The current orders do not contain such a
17 calculation. For this reason, rather than an outright reversal of the appropriations from Cave,
18 Dry Lake and Delamar Valleys, the matter is remanded to the Engineer for recalculation of
19 possibly unappropriated water.

20 **B. LIKE SPRING VALLEY, THE MONITOR, MANAGE AND MITIGATION**
21 **PLAN REQUIRES SPECIFIC STANDARDS TO BE AN EFFECTIVE**
22 **PLAN**

23 The analysis of the MMM Plan and the requirement for standards to be applied to
24 determine when mitigation is necessary in the Cave, Dry Lake and Delamar Valleys is much
25 the same as in Spring Valley. There is still a great deal of uncertainty regarding the
26 hydrology of CDD. ROA 000671. Because of the unknowns, the Engineer has adopted the
27 MMM Plan in the CDD valleys:

28 The State Engineer finds an effective management program that includes monitoring activities, management tools and mitigation options is critical to the determination that the Applications will not

1 conflict with existing water rights or with protectable interests in
2 existing domestic wells.

3 ROA 000632.

4 The Engineer has also found that a drawdown of less than fifty (50) feet over a
5 seventy-five (75) year period is a reasonable lowering of the static water table “made on a
6 case-by-case basis”. ROA 000653. He has presumably accepted testimony of SNWA’s
7 expert predicting one (1%) percent to seventeen (17%) percent spring flow reductions in the
8 White River and Pahranaagat Valleys and has determined a seventeen (17%) percent flow
9 reduction is reasonable.

10 Additionally, he found that “Federal and state laws, including the National
11 Environmental Policy Act (“NEPA”), the [Environmental Species Act (ESA)], the Clean Water
12 Act (“CWA”) and Nevada water law, require environmental protection through comprehensive
13 permitting and regulatory process.” ROA 000683. “The ESA imposes strict substantive
14 protections, in the form of reasonable and prudent alternatives, that include minimization and
15 mitigation measures that prevent jeopardy to listed species or their critical habitat.” ROA
16 000684. Further, “non-listed” species will also be protected – “resulting in an even greater
17 breadth of coverage.” Id. Notwithstanding the Federal involvement, the Engineer states that
18 he still has the jurisdiction and responsibility to determine environmental soundness
19 independently of other agencies – “and will do so.” ROA 000684.

20 The Engineer has, in effect, relinquished his responsibilities to others. Again, the
21 Engineer has failed to state under what specific conditions he will require mitigation. The
22 Engineer also recognizes that SNWA will extensively monitor springs and sensitive sites in
23 the CDD valleys and finds that the Applicants’ monitoring plan will be effective. ROA
24 000636-000640.

25 Like the Spring Valley Plan, the Engineer finds that it is premature to set standards
26 and/or triggers because there is not enough “baseline” data. ROA 000641. Yet, the
27
28

1 Engineer has also made the specific finding “that the Applicant gathered and presented
2 substantial environmental resource baseline material and that the environmental resource
3 baseline information provides a platform for sound, informed decision-making.” ROA
4 000683. Whether this is contradictory or not (sufficient baseline data v. insufficient baseline
5 data), standards, triggers or thresholds, however phrased, must be objective to provide
6 notice of when and where mitigation is necessary. Without standards, any decision to
7 mitigate is subjective and thus, arbitrary and capricious.
8

9 Stated differently, the Engineer decided that because the final configuration of the
10 wells and locations of wells within the valleys is unknown at the present, setting quantitative
11 standards, “or triggers” for mitigation is pre-mature because it must be known how the
12 aquifer responds to pumping. ROA 000641. It seems that when and where unreasonable
13 effects occur, is not the same as recognizing an unreasonable effect, wherever or whenever
14 it appears. Paraphrasing Samuel Clemens, show me a man who knows what’s reasonable
15 and I’ll show you a man who knows what isn’t.
16

17 Further, the Engineer found that “natural variability in the system must be
18 documented to determine if observed changes are due to pumping, rather than natural
19 fluctuations due to seasonal recharge or other factors.” ROA 000641. The Engineer has
20 already found that SNWA has gathered and presented enough baseline data to make sound
21 and informed decisions, not to mention that SNWA has been studying the basins and valleys
22 for at least twenty-five (25) years and likely longer. In short, without standards, triggers or
23 thresholds the MMM Plan is not a “comprehensive” plan, “critical to the determination that the
24 Applications will not conflict with existing water rights or with protectable interests in existing
25 domestic wells”. ROA 000632.
26

27 This Court is charged with “determining whether there is substantial evidence in the
28 record to support the [Engineer’s] decision.” *Revert v. Ray*, 95 Nev. 782, 786 (1979). Here,
the Engineer said, however not quite consistently, that there is not enough evidence to

1 implement, what he has characterized as "critical," the MMM Plan. Thus, if there is
2 insubstantial evidence and it is premature to set triggers and thresholds, it is premature to
3 grant water rights.

4 As stated in the Plan, a definition of an unreasonable adverse effect, i.e. a trigger, a
5 standard, a threshold must be defined. ROA 020647. Absent a thorough plan and
6 comprehensive standards for mitigation, any mitigation, (or lack thereof) is subjective,
7 unscientific, arbitrary and capricious. This matter must be remanded to the Engineer so that
8 objective standards may be established.
9

10 **VIII**
11 **CONCLUSION**

12 After an in-depth review of the record this Court will not disturb the findings of the
13 Engineer save those findings that are the subject of this Order. This Court remands orders
14 6164, 6165, 6166 and 6167 for:

- 15 1. The addition of Millard and Juab counties, Utah in the mitigation plan so far as
16 water basins in Utah are affected by pumping of water from Spring Valley Basin,
17 Nevada;
- 18 2. A recalculation of water available for appropriation from Spring Valley assuring
19 that the basin will reach equilibrium between discharge and recharge in a
20 reasonable time;
- 21 3. Define standards, thresholds or triggers so that mitigation of unreasonable
22 effects from pumping of water are neither arbitrary nor capricious in Spring
23 Valley, Cave Valley, Dry Lake Valley and Delamar Valley, and;
- 24 4. Recalculate the appropriations from Cave Valley, Dry Lake and Delamar Valley
25 to avoid over appropriations or conflicts with down-gradient, existing water rights.

26 DATED this 10th day of December, 2013.

27 
28 ROBERT E. ESTES
SENIOR DISTRICT JUDGE