

IN THE SUPREME COURT OF THE STATE OF NEVADA

NEVADA GOLD MINES LLC,

Petitioner,

vs.

NEVADA DEPARTMENT OF
CONSERVATION AND NATURAL
RESOURCES, OFFICE OF THE
STATE ENGINEER OF THE STATE
OF NEVADA, AND ADAM
SULLIVAN, IN HIS CAPACITY AS
STATE ENGINEER,

Respondents.

Case No.

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Elizabeth A. Brown
Clerk of Supreme Court

**APPENDIX IN SUPPORT OF
PETITIONER NEVADA GOLD
MINES LLC'S PETITION FOR
WRIT OF PROHIBITION**

VOLUME I OF II

DATED this 25th day of May, 2022.

PISANELLI BICE PLLC

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CERTIFICATE OF SERVICE

I HEREBY CERTIFY that I am an employee of Pisanelli Bice PLLC, and that on this 25th day of May, 2022, I electronically filed and served via United States Mail, postage prepaid, a true and correct copy of the above and foregoing **APPENDIX IN SUPPORT OF NEVADA GOLD MINES, LLC'S PETITION FOR WRIT OF PROHIBITION OR MANDAMUS UNDER NRAP 21** properly addressed to the following:

Adam Sullivan, P.E.
State Engineer
Division of Water Resources
901 South Stewart Street, Suite 2002
Carson City, Nevada 89701

*State Engineer, Division of Water Resources,
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/s/ Kimberly Peets
An employee of Pisanelli Bice PLLC

IN THE OFFICE OF THE STATE ENGINEER
OF THE STATE OF NEVADA

IN THE MATTER OF APPLICATIONS 66555,)
66556 AND 66557 FILED TO CHANGE THE)
MANNER AND PLACE OF USE OF WATER)
PREVIOUSLY APPROPRIATED FROM AN)
UNDERGROUND SOURCE WITHIN THE DODGE)
FLAT HYDROGRAPHIC BASIN (082),)
WASHOE COUNTY, NEVADA)

RULING

5079

GENERAL

I.

Application 66555 was filed on July 13, 2000, by Nevada Land and Resource Co., LLC (NLRC) to change the manner and place of use of 4.0 cubic feet per second (cfs) of water previously appropriated under Permit 46908 from the underground waters of the Dodge Flat ground-water basin, Washoe County, Nevada, for industrial power generating purposes within the NW¼, the NE¼ and the SE¼ of Section 25, T.21N., R.23E., M.D.B.&M.¹ The proposed point of diversion is described as being located within the SW¼ SW¼ of Section 19, T.21N., R.24E., M.D.B.&M. The existing manner of use is for mining, milling and domestic purposes.

II.

Application 66556 was filed on July 13, 2000, by NLRC to change the manner and place of use of 4.0 cfs of water previously appropriated under Permit 57310 from the underground waters of the Dodge Flat ground-water basin, Washoe County, Nevada, for industrial power generating purposes within the NW¼, the NE¼ and the SE¼ of Section 25, T.21N., R.23E., M.D.B.&M.² The proposed point of diversion is described as being located within the NE¼ SE¼ of Section 24, T.21N., R.23E., M.D.B.&M. The existing manner of use is for mining, milling and domestic purposes.

¹ File No. 66555, official records in the office of the State Engineer. Exhibit No. 2, public administrative hearing before the State Engineer, June 19-21, 2001, official records in the office of the State Engineer. (Hereinafter exhibits will be identified solely by the exhibit number.)

² File No. 66556, official records in the office of the State Engineer. Exhibit No. 3.

III.

Application 66557 was filed on July 13, 2000, by NLRC to change the manner and place of use of 4.0 cfs of water previously appropriated under Permit 52763 from the underground waters of the Dodge Flat ground-water basin, Washoe County, Nevada, for industrial power generating purposes within the NW¼, the NE¼ and the SE¼ of Section 25, T.21N., R.23E., M.D.B.&M.³ The proposed point of diversion is described as being located within the NE¼ NE¼ of Section 25, T.21N., R.23E., M.D.B.&M. The existing manner of use is for mining, milling and domestic purposes.

IV.

Permits 46908, 52763 and 57310 were issued for a total annual consumptive use of 943.6 million gallons per year.⁴

V.

Applications 66555, 66556 and 66557 were timely protested by Washoe County on the grounds that: the applications represent a change of a temporary water right to a permanent one thereby mining ground water and violating the Washoe County Development Code; the use of water as applied for may have an adverse impact on the County water systems at Stampmill Estates and Wadsworth; the proposed applications may adversely impact the efforts on the lower Truckee River to obtain water or water rights for instream/water quality purposes; and, depletion of Truckee River flows may result in an Endangered Species Act Jeopardy Opinion.⁵

VI.

Applications 66555, 66556 and 66557 were timely protested by the Pyramid Lake Paiute Tribe of Indians on the grounds that: the applications would withdraw water from the Truckee River and

³ File No. 66557, official records in the office of the State Engineer. Exhibit No. 4.

⁴ File Nos. 46908, 52763 and 57310, official records in the office of the State Engineer.

⁵ Exhibit No. 6.

conflict with water rights of the Tribe under Claims No. 1 and 2 of the Orr Ditch Decree and other water rights of the Tribe; the applications request a change from a temporary use to a permanent use; the water rights being sought to be changed have never been put to beneficial use demonstrating a lack of diligence; the applications will intercept regional ground-water recharge and reduce surface-water flows in the Truckee River; water quality in the Truckee River will be diminished; regional ground-water levels will be adversely affected; ground-water quality will be adversely affected; the changes will interfere with the conservation or recovery of the endangered cui-ui and threatened Lahontan cutthroat trout; the applications will adversely affect the recreational value of Pyramid Lake; the applications will interfere with the purposes for which the Pyramid Lake Indian Reservation was established; and adversely affect the interests of the Tribe.⁶

VII.

Applications 66555, 66556 and 66557 were timely protested by the Town of Fernley on the grounds that they could have a potential adverse impact on a proposed regional water system source of supply (ground water) in the Fernley/Wadsworth area.

VIII.

Application 66557 was timely protested by Northern Nevada Placer Resources, Inc. on the grounds that it appreciates the need for electricity, but they "do not appreciate the way in which Duke Energy (through NLRC) is maneuvering its way through the channels by shortcutting their way to operation. Especially when this way can destroy or definitely set-back a part of Nevada so very dear to all of us, the success of the Olinghouse mining district and the gainful employment by large numbers of local residents. Although gold mining is taking a beating at present, the license plates that

⁶ Exhibit No. 7.

say "100 years of vision" rings so true for the forefathers and protectors of this state."⁷

IX.

After all parties of interest were duly noticed by certified mail, a public administrative hearing was held on June 19-21, 2001, before the State Engineer at Carson City, Nevada.⁸

FINDINGS OF FACT

I.

In State Engineer's Ruling No. 4656,⁹ it was provided that the magnitude of the Dodge Flat ground-water basin's ground-water resource can be determined by an evaluation of the ground-water basin's recharge and discharge components. Sources of ground-water recharge which contribute to the amount of ground water which is available for appropriation consist of precipitation, subsurface inflow of ground water from adjacent basins, infiltration of water from surface-water sources and return flows generated from man-developed activities. Under developed conditions, ground water discharges from the Dodge Flat ground-water basin by evaporation, outflow, transpiration, and pumpage from domestic and permitted wells.

State Engineer's Ruling No. 4656, further provided that the perennial yield of a hydrologic basin is the maximum amount of water of usable chemical quality that can be consumed economically each year for an indefinite period of time. Perennial yield cannot exceed the natural replenishment to an area indefinitely, and ultimately is limited to the maximum amount of natural recharge that can be salvaged for beneficial use. If the perennial yield is continually exceeded, ground-water levels will decline until the ground-water reservoir is depleted. Withdrawals of ground water in

⁷ Exhibit No. 9.

⁸ Transcript, public administrative hearing before the State Engineer, June 19-21, 2001 (hereinafter "Transcript").

⁹ Exhibit No. 58.

excess of the perennial yield contribute to adverse conditions such as water quality degradation, storage depletion, diminishing yield of wells, increase in cost due to increase in pumping lifts, land subsidence and possible reversal of ground-water gradients, which could result in significant changes in the recharge-discharge relationship.¹⁰

The United States Geological survey estimates that the perennial yield of the Dodge Flat ground-water basin is approximately 2,100 acre-feet.¹¹ This 2,100 acre-feet is comprised of 1,400 acre-feet of recharge and 700 acre-feet of inflow from the Tracy Segment hydrographic area.¹² Witnesses were presented at this hearing to either concur with or challenge the perennial yield numbers.

A witness for Washoe County was presented to concur with estimates of recharge to the Dodge Flat area off the Pah Rah Range of 1,250 to 1,400 acre-feet and 700 acre-feet of ground water movement beneath the Truckee River for the total of 2,100 acre-feet annual perennial yield of the Dodge Flat ground-water basin.¹³ The witness further concurred, given the uncertainties of techniques, that actual recharge could range from a minimum of 1,400 acre-feet to a maximum of 2,000 acre-feet annually.¹⁴ The witness discussed 700 acre-feet of recharge off the Virginia Range and 9,000 acre-feet of irrigation return flow that discharges to the Truckee River

¹⁰ State Engineer's Office, Water for Nevada, State of Nevada Planning Report No. 3, p. 13, Oct. 1971.

¹¹ Nowlin, Jon, Groundwater Quality in Nevada - A Proposed Monitoring Program, Open File Report 78-768, U.S. Geological Survey, p. 195.

¹² State Engineer's Office, Water for Nevada, State of Nevada Planning Report No. 3, p. 44, Oct. 1971.

¹³ Transcript, pp. 72-74, 90-103.

¹⁴ Transcript, pp. 72-74, 90-92.

from the Fernley farming area,¹⁵ but retained his ultimate opinion that the recharge to the ground-water basin is in the range of 1,400 to 2,100 acre-feet.¹⁶

A witness for the Town of Fernley concurred with a recharge number of 1,400 to 2,000 acre-feet annually.¹⁷

Witnesses for the PLPT presented testimony and evidence in support of an argument that the State Engineer should not consider recharge to the whole ground-water basin in the determination of the quantity of water available under these change applications, but rather should consider only that recharge available in the subbasin,¹⁸ and that the surface-water and ground-water resources should be considered together in terms of priority of appropriation, because part of the ground-water recharge and all of the subsurface flow under the Truckee River should be considered as part of the appropriated flows of the Truckee River.¹⁹

These witnesses provided testimony that if the applications are granted as filed, there could be potential large drawdowns of water levels in the Dodge Flat and Wadsworth area eventually resulting in stream depletion of the Truckee River if the water levels fall below the streambed.²⁰ A witness testified that only 37% of a recharge figure of 1,400 acre-feet annually (approximately 500 acre-feet) should be considered as available for use from these wells, because only 37% of the recharge to the ground-water basin is available from 3 subdrainage basins contributing to the recharge

¹⁵ Transcript, p. 103.

¹⁶ Transcript, p. 106.

¹⁷ Transcript, p. 121.

¹⁸ Transcript, pp. 210-311.

¹⁹ See generally, testimony of Peter Pyle and Ali Sahroody; Transcript, pp. 182-385; Exhibit Nos. 20 and 21.

²⁰ Transcript, pp. 183-186.

available for these wells.²¹ Further, that the 700 acre-feet of subsurface flow under the Truckee River should be considered as part of the river flows appropriated and not as part of the ground-water basin's water available for appropriation.

The State Engineer finds that in Nevada the ground-water resources have been managed on a perennial yield basis of the entire hydrographic basin. Each ground-water basin in Nevada was defined and a perennial yield figure calculated based on a recharge/discharge relationship, which keeps the basin in balance. The water that is not calculated as the water contributing to recharge of the ground-water system is accounted for in the amounts available for appropriation from surface-water sources. There is no logical reason to deviate from the management scheme now in place and accept the PLPT's proposal that the ground-water basin should be managed drainage by drainage. The State Engineer finds that the ground-water discharge to the Truckee River should not be counted as part of the PLPT's surface-water rights in the Truckee River whether established under Claims No. 1 and 2 of the Orr Ditch Decree or appropriated pursuant to Permits 48061 and 48494 ("the unappropriated water applications") issued by the State Engineer, since this ground-water discharge was determined to be utilized as part of the ground-water system by previous studies in the basin.

The State Engineer further finds there is nothing in the Orr Ditch Decree that indicates possible ground-water discharge to the Truckee River was even contemplated by the decree court as a part of the water of the river. The State Engineer finds the water requested for appropriation under these applications is not part of what was considered the unappropriated water of Truckee River granted to the PLPT in State Engineer's Ruling No. 4683.²² The water under consideration in that ruling is the most junior water right on the river in terms of priority, and the right can only be

²¹ Transcript, pp. 268-269; Exhibit No. 29.

²² Exhibit No. 10.

exercised in those years where there is high flow in the river in excess of senior rights (flood flows).

The State Engineer finds to instigate a management technique such as that suggested by the PLPT for the ground-water basins of Nevada is impractical, overly burdensome and unnecessary because of how the perennial yields are calculated. In addition, the water law provides for the appropriation of ground water. Quantifying the amount available using a perennial yield analysis for the entire ground-water basin is a reasonable tool for determination of the amount of water available for appropriation and has been the method utilized to date.

The State Engineer finds there are not sufficient reasons to deviate from using the United States Geological Survey's estimate that the perennial yield of the Dodge Flat ground-water basin is approximately 2,100 acre-feet.²³

II.

The committed ground-water resource in the form of permits and certificates issued by the State Engineer's office to appropriate underground water from the Dodge Flat ground-water basin currently exceeds 5115.00 acre-feet annually.²⁴

The State Engineer finds that only 672.00 acre-feet of the resource of the Dodge Flat ground-water basin has been committed to permanent uses out of the 2,100 acre-feet perennial yield of the ground-water basin. The remaining water resources are committed to temporary uses under mining and milling permits. The mining and milling permits requested to be changed under Applications 66555, 66556 and 66557 are the most senior permits in the groundwater basin for mining and milling purposes.

²³ Nowlin, Jon, Groundwater Quality in Nevada - A Proposed Monitoring Program, Open File Report 78-768, U.S. Geological Survey, p. 195.

²⁴ Transcript, pp. 161-164; Exhibit No. 13; Hydrographic Basin Summary, Water Rights Database, August 31, 2001, official records in the office of the State Engineer.

III.

Applications 66555, 66556 and 66557 seek to change the manner of use of Permits 46908, 57310 and 52763, respectively. Permits 46908, 57310 and 52763 were issued to provide underground water for a precious metals mining and milling project located within the Olinghouse Mining District.

A permit term under which Permits 46908 and 52763 and Permit 45042, which was changed by Permits 46910 and 57310, were issued provides:

The manner of use of water under this permit is by nature of its activity a temporary use and any application to change the manner of use granted under this permit will be subject to additional determination and evaluation with respect to the permanent effects on existing rights and resources within the groundwater basin.²⁵

Given the above-referenced permit term, the State Engineer finds that Applications 66555, 66556 and 66557 must be reviewed to determine their potential effects on existing water rights and to determine the availability of water for the Dodge Flat ground-water basin available to be changed from a temporary use to a permanent use.

IV.

Duke Energy North America ("Duke") filed a written response to the protest issue alleging that these change applications request a change of a use from one that is temporary to one that is permanent. In that response, Duke "declares as a matter of public record that the proposed use of water under the Change Applications is indeed a temporary use and not a permanent use."²⁶

It is the position of Duke that the contemplated power-generation facilities utilizing natural gas fueled combined cycle operations is a power-generating facility with an economic life and equipment life range between 30 to 50 years. Based on that analysis, Duke is prepared to

²⁵ Files Nos. 45042, 46908, 52763 and 57310, official records in the office of the State Engineer.

²⁶ Exhibit No. 71.

stipulate to the State Engineer and for the record that the contemplated use of the Change Applications is temporary and is estimated to be approximately 35 years. If it is determined by the State Engineer and as a result of a monitoring plan to be administered for the above Change Applications that it would be necessary to terminate the temporary use of this water after 35 years of use, Duke will agree to such conditions which would be imposed by the Office of the State Engineer including reduction and/or termination of the water rights.²⁷

Testimony provided by a witness for the PLPT indicates the belief that the use of water by either the Tribe or anyone else for the purpose enunciated under these applications is considered a permanent use of water.²⁸ Other testimony presented, by a representative of a power company the PLPT is working with for the development of its own power plant project in the Dodge Flat area, indicated that potential sites for power plants around the country are limited and the market is further limited from a transmission standpoint, particularly as to the alternating current system. Therefore, any plant that is located on that alternating current system, such as the power plant under consideration by Duke, would be beneficial to the plant owner for a long period of time, and once that plant was in operation it would certainly operate past 35 years.²⁹

Testimony provided by a representative for Duke indicated that if other economically viable water sources become available to the project, Duke would agree to reduce or terminate the use of water under the rights applied for under these applications.³⁰

The State Engineer finds on the one hand Duke alleges the use is temporary, but then indicates that it would only agree to terminate the "temporary use" if a monitoring plan indicates such

²⁷ Ibid.

²⁸ Transcript, pp. 337, 374-378.

²⁹ Transcript, pp. 635-637.

³⁰ Transcript, pp. 477-479, 488-492, 511.

to be necessary after 35 years of use thereby indicating a much longer contemplated use. The State Engineer finds that use of water for 35 years by a power-generating facility is not a temporary use of water.

The State Engineer finds that currently an imbalance exists between the perennial yield of the Dodge Flat ground-water basin and its committed ground-water resource.³¹ The State Engineer finds that the temporary nature of these mining and milling permits makes them unsuitable for changes to a permanent manner of use such as a power-generating facility without further restrictions on the quantity of water that can be used in order to bring the use more in line with the perennial yield of the ground-water basin.

V.

Duke addressed mitigation potential by testifying that it has an option to acquire what is called the Cowles water right Permits 61931 and 62584,³² and by pursuing that option it could either relinquish or terminate those water rights upon operation of this facility. Permit 61931 was granted pursuant to a change application filed on Permit 46997, and has a maximum duty of 224.04 afa.³³ Permit 62584 has a maximum duty of 1,223.96 afa.³⁴ These permits were also issued for the temporary purposes of milling and mining.

Since the Cowles' rights were also issued under the temporary terms of mining and milling rights, they are not considered as part of the permanent use of the ground-water resource and will be discounted from the analysis of permanent ground-water rights in

³¹ Exhibit No. 58. State Engineer's Ruling No. 4656, dated August 13, 1998, official records in the office of the State Engineer.

³² Transcript, pp. 483-484.

³³ File No. 61931, official records in the office of the State Engineer.

³⁴ File No. 62584, official records in the office of the State Engineer.

the basin. Deducting the 672.00 acre-feet committed in water rights from the 2,100 acre-feet perennial yield of the basin leaves a difference in 1,428.00 acre-feet annually available from the perennial yield on a permanent basis.

VI.

The State Engineer finds that the protest filed by Northern Nevada Placer Resources, Inc. provides no legitimate grounds that need to be addressed.

VII.

The Town of Fernley claimed that the applications could have a potential adverse impact on a proposed regional water system source of supply (ground water) in the Fernley/Wadsworth area.³⁵ Testimony indicated that a regional water system is still in the exploratory stages.³⁶ The State Engineer finds that Nevada is a prior appropriation state and contemplated applications to be filed in the future are not part of the consideration of whether applications or change applications conflict with existing water rights or threaten to prove detrimental to the public interest.

VIII.

Washoe County protested the applications on the ground that the water rights as applied for may have an adverse impact on County owned water systems at Stampmill Estates and Wadsworth. The County provided testimony that in 10 years the pumping as contemplated under these applications would draw down the water level at the Gregory Street well between 23 and 38 feet, but further testimony provided a tenuous opinion that if water levels within the Wadsworth area decline, the Gregory Street well will be affected,³⁷ and the County's witness indicated that he could not form an opinion whether the proposed pumping would impact the

³⁵ See generally, testimony of George Ball, Transcript, pp. 110- 153; Exhibit No. 64.

³⁶ Transcript, pp. 381-382.

³⁷ Transcript, pp. 75-107.

Stampmill Estates wells.³⁸ The State Engineer finds that Washoe County did not provide substantial evidence that the granting of these applications would conflict with its existing rights. The State Engineer finds that by reducing the quantity of water requested under the change applications any conflict with existing rights on the Washoe County owned water systems at Wadsworth should be minimized to reasonable levels or eliminated.

IX.

The PLPT claimed that the applications would withdraw water from the Truckee River and conflict with the water rights of the Tribe under Claims No. 1 and 2 of the Orr Ditch Decree and other water rights of the Tribe.³⁹ The PLPT's own witness admitted, however, that the Tribe's water rights under Claims No. 1 and 2 would not be affected if the change applications were approved.⁴⁰ The PLPT provided testimony that the base flow of the Truckee River is supported by ground-water recharge that occurs from the edge of the basin, and it is that ground-water recharge that sustains the stream during dry periods.⁴¹ The PLPT advances the position that the 700 acre-feet of subsurface flow under the Truckee River is more a part of the river than the ground water, and that capture of ground water in excess of approximately 500 acre-feet (37% of 1,400 afa available recharge)⁴² will capture water that belongs to the river thereby interfering with its existing water rights, and that most of the recharge captured under these applications will deplete the flow of the river.⁴³ The PLPT advances an argument that eventually the recharge, which is the base flow of the river and

³⁸ Transcript, p. 107.

³⁹ Transcript, pp. 342-345.

⁴⁰ Transcript, pp. 359-360.

⁴¹ Transcript, pp. 210-215; Exhibit Nos. 20, 21, 23, 24, 25.

⁴² Transcript, pp. 221-239.

⁴³ Transcript, p. 301.

maintains stream flow during dry periods, will be cut off and water will be taken from the stream.⁴⁴ Its witness testified that the ground-water development of approximately 3,000 afa as proposed by these applications will deplete the Truckee River by 3 to 3½ cfs over the life of the project.⁴⁵

The State Engineer finds that Nevada has never managed ground-water basins where the perennial yield available is only that water actually recharged on a smaller portion of the hydrographic basin. The point of assessing a perennial yield number is management of the system as a whole.

The State Engineer finds the subsurface flow under the Truckee River is not part of the water decreed to the Tribe pursuant to the Orr Ditch Decree, but is part of those waters counted as the perennial yield of the ground-water system. While many stream systems have some hydrologic connection to ground water, based on the very fact that it starts as water falling on the surface of the land, in Nevada, the underground water and surface water have been managed separately under different statutory schemes for more than half a century. To change the policy set forth in that statutory scheme at this late date would upset the entire history of Nevada water law and would not be prudent. The State Engineer finds that the water rights under Claims No. 1 and 2, which are the most senior water rights on the Truckee River system, are to be satisfied from the flows of the Truckee River.

X.

The PLPT provided evidence as to water rights it obtained through a land exchange with Mary DePaoli,⁴⁶ water rights it holds

⁴⁴ See generally, testimony of Peter Pyle; Transcript, pp. 210-304.

⁴⁵ Transcript, pp. 185-186.

⁴⁶ Transcript, pp. 316-317.

to the unappropriated water of the Truckee River,⁴⁷ as to ground water it uses in the Dodge Flat area,⁴⁸ and as to future growth anticipated for the Dodge Flat-Wadsworth area.⁴⁹ The State Engineer finds the water requested for appropriation under these applications is not part of what was considered the unappropriated water of the Truckee River granted to the PLPT in the State Engineer's Ruling No. 4683. The water under consideration in that ruling is the most junior water right on the river in terms of priority, and the right can only be exercised in those years where there is high flow in the river in excess of senior rights (flood flows). The State Engineer finds the restriction as to pumping quantities that are being placed on these change applications will protect those state appropriative rights acquired pursuant to the land exchange. The State Engineer finds the State of Nevada does not subscribe to the federal implied reserved right to ground water theory; therefore, use of ground water on the reservation is without the benefit of a permit. The State Engineer finds that, just as with the Town of Fernley, anticipated projects for which applications are not on file cannot be considered as relevant to the decision making on these applications.

XI.

A protestant alleged that the applications may adversely impact the efforts on the lower Truckee River to obtain water or water rights for instream/water quality purposes and impact water quality in the Truckee River and ground-water quality could be adversely affected. Testimony was provided that if the applications are granted in the quantities for which they are filed they would eventually deplete flows in the Truckee River thereby

⁴⁷ Transcript, pp. 323-336; Exhibit Nos. 10, 11 and 30.

⁴⁸ Transcript, pp. 191-195; Exhibit Nos. 15-17.

⁴⁹ Transcript, pp. 349-353.

affecting water quality in the lower river.⁵⁰

The State Engineer finds that whether or not the granting of these change applications may or may not impact the efforts to obtain water rights for instream/water quality purposes on the lower Truckee River is not a relevant factor he needs to consider as to the granting of these applications. The difficulty of obtaining those rights may go to the consideration of whether the purchase of water rights for mitigation is plausible. The State Engineer finds the reduction in the amount authorized for appropriation under these change applications should protect ground-water quality, and that if there is any impact on the Truckee River it will be unmeasurable.

XII.

Protests allege that depletion of Truckee River flow may result in an Endangered Species Act jeopardy opinion and could interfere with the conservation or recovery of the endangered cui-ui and threatened Lahontan cutthroat trout, and adversely affect the recreational value of Pyramid Lake, interfere with the purposes for which the Pyramid Lake Indian Reservation was established and adversely affect the interests of the Tribe. Testimony was provided as to the cui-ui and Lahontan cutthroat trout, which indicates that depletion in flows in the river could harm both fish.⁵¹ A witness for the PLPT indicated that the use of more than 500 afa is water that would have gone to the river and is 100% reduction in river flow;⁵² and therefore, in time would reduce the flow in the river. However, the testimony provided by the fisheries witness was not at all conclusive as to whether it would

⁵⁰ Transcript, pp. 315, 329-334, 338-341, 392-401; Exhibit No. 32.

⁵¹ See generally, testimony of Chester Buchanan, Transcript, pp. 386-413.

⁵² Transcript, pp. 228-229.

be biologically significant.⁵³

The State Engineer finds, particularly in light of the decision to reduce the amount authorized for use under these change applications, that there is not substantial evidence to support the claims of the threat of an Endangered Species Act jeopardy opinion, interference with the conservation or recovery of the endangered cui-ui and threatened Lahontan cutthroat trout, adverse affects to the recreational value of Pyramid Lake, interference with the purposes for which the Pyramid Lake Indian Reservation was established, or adverse affects to the interests of the Tribe.

XIII.

Testimony was presented which indicates that the amount of water sought to be changed under Application 66556 is more than is available under the base permitted water right sought to be changed.⁵⁴ Application 66556 requested the change of 4.0 cfs, not to exceed 943.6 million gallons annually (mga), of water previously appropriated under Permit 57310. Permit 57310 was granted in the amount of 0.864 cfs, not to exceed 203.758 mga.

Testimony and evidence presented indicates that Permit 42609, which was changed by Permit 45042, which was changed by Permit 46910 were all granted for 4.0 cfs, not to exceed 943.6 mga. However, a Proof of Beneficial Use was filed under Permit 46910 for 0.864 cfs and 203.758 mga. Therefore, the only amount available to be changed by Permit 57310 was that amount. The State Engineer finds that when Permit 57310 was issued a permit term was imposed that totally abrogated Permit 46910. The State Engineer finds that Application 66556 cannot be considered for an amount greater than available under the water right sought to be changed.

XIV.

The PLPT provided testimony and evidence to support its argument that the water rights being sought to be changed have

⁵³ Transcript, pp. 407, 435.

⁵⁴ Transcript, p. 167; Exhibit No. 33.

never been put to beneficial use thereby demonstrating a lack of diligence.⁵⁵ Nevada Revised Statute § 533.345(1) provides that an application can be filed to change the place of diversion, manner or place of use of water already appropriated. Water already appropriated, in reference to a change application, refers to water represented by a water right permit or certificate in good standing.⁵⁶ The water rights requested for change here are in good standing under extensions of time with the limitation that due to their temporary nature they require further scrutiny before they can be considered for a permanent use such as a power plant.

The State Engineer finds that diligence arguments raised by the PLPT are ones that can be addressed upon the filing of applications for extension of time, but are not relevant to the consideration of change applications where the rights being sought to be changed are in good standing.

XV.

Duke Energy, as the real party in interest who wants to put water to beneficial use under these applications, indicated that it would plan to mitigate any effects its pumping had on the Truckee River. However, Duke did not provide any evidence as to surface-water rights it owns that could be used to mitigate such effects, and testified that the alternative proposal for water cooling using Truckee River water was deemed not viable based on the various settlements and agreements that exist to date with regards to the use of Truckee River water.⁵⁷ Furthermore, it has been seen through the efforts undertaken in reference to the Water Quality Settlement⁵⁸ only 2,000 acre-feet of water has been acquired, which is far short of the intended goal. Acquisition of water rights on

⁵⁵ Exhibit Nos. 34-52; testimony of Allan Richards.

⁵⁶ NRS § 533.324.

⁵⁷ Transcript, pp. 521-522.

⁵⁸ Exhibit No. 31; Transcript, pp. 329-334, 450-452.

the Truckee River for mitigation purposes has been slow and difficult⁵⁹ and many different entities are seeking water rights for mitigation purposes.

Duke further addressed mitigation potential by testifying that it has an option to acquire what is called the Cowles water right Permits 61931 and 62584,⁶⁰ and by pursuing that option it could either relinquish or terminate those water rights upon operation of this facility. Permit 61931 was granted pursuant to a change application filed on Permit 46887, and has a maximum duty of 224.04 afa. Permit 62584 has a maximum duty of 1,223.96 afa. These permits were also issued for the purposes of milling and mining and with the same permit term regarding the temporary nature of the water rights.

The State Engineer finds that the purchase of significant quantities of surface-water rights on the Truckee River with senior priorities, which could be used to keep the river flowing in times of drought, is not a task readily accomplished. The State Engineer finds the possibility of future purchases of river water by Duke Energy to support possible impacts under these applications as filed is not a viable mitigation base on which to grant the full amounts requested. The State Engineer finds that the possible future option on the purchase of the Cowles' water rights and relinquishment of those rights is too speculative at this point for consideration in this ruling and would not change the calculations of water available under these change applications even if they were acquired by Duke as those water rights are also temporary appropriations.

CONCLUSIONS

I.

The State Engineer has jurisdiction over the parties and

⁵⁹ Transcript, p. 451.

⁶⁰ Transcript, pp. 483-484.

subject matter of this action and determination.⁶¹

II.

The State Engineer is prohibited by law from granting a permit under a change application to appropriate the public waters where:⁶²

- A. there is no unappropriated water at the proposed source;
- B. the proposed use or change conflicts with existing rights;
- C. the proposed use or change conflicts with protectible interests in domestic wells as set forth in NRS § 533.024; or
- D. the proposed use or change threatens to prove detrimental to the public interest.

III.

The State Engineer concludes that the water rights sought to be changed were in good standing and that the protest argument as to lack of diligence is without merit during the consideration of these change applications.

IV.

The State Engineer concludes that Nevada water law provides for the management of surface water and ground water as distinct sources. The State Engineer concludes that to change that scheme of water management at this point in time would conflict with existing rights and threaten to prove detrimental to the public interest. The State Engineer also concludes that since he has found the requested use under the change Applications 66555, 66556 and 66557 to be permanent in nature, the permit terms required re-evaluation of the amounts appropriated. This re-evaluation is necessary in order to determine the availability of water for permanent appropriation, conflict with existing rights and if the changes threaten to prove detrimental to the public interest. The State Engineer concludes that the water available for appropriation on a permanent basis must not allow the perennial yield of the

⁶¹ NRS chapters 533 and 534.

⁶² NRS § 533.370(3).

Dodge Flat ground-water basin to be exceeded with long-term permits. The State Engineer concludes that by taking the perennial yield of 2,100 acre-feet and deducting the 672.00 leaves a difference of 1,428.00 acre-feet annually available from the perennial yield on a permanent basis under change Applications 66555, 66556 and 66557.

V.

The State Engineer concludes the grounds of the protests filed by Northern Nevada Placer Resources, Inc. and the Town of Fernley are without merit.

VI.

The State Engineer concludes by limiting the ground water allowed to be utilized under these permits to the amount available for permanent rights from the perennial yield of the ground-water basin, the use will not conflict with existing rights of the PLPT or Washoe County.

VII.

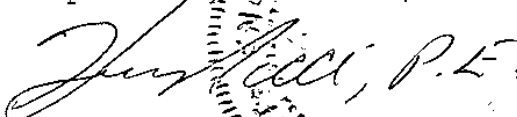
The State Engineer concludes by limiting the ground water allowed to be utilized under these permits to the amount available from the perennial yield of the ground-water basin, the use will not be detrimental to the water quality of the ground-water basin or the surface-water source and will not present risk of injury to the endangered cui-ui or threatened Lahontan cutthroat trout.

RULING

The protests to change Applications 66555, 66556 and 66557 are hereby overruled in part and granted in part. The amount of water allowed for appropriation under Applications 66555, 66556 and 66557 is limited to a total combined duty of 1,428.00 acre-feet annually and the requested transfers are subject to:

1. the payment of statutory permit fees;
2. existing water rights.

Respectfully submitted,




HUGH RICCI, P.E.
State Engineer

HR/SJT

Dated this 27th day of
September, 2001.

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IN THE ELEVENTH JUDICIAL DISTRICT COURT OF THE STATE OF NEVADA
IN AND FOR THE COUNTY OF PERSHING

PERSHING COUNTY WATER
CONSERVATION DISTRICT,

Petitioner,

v.

JASON KING, P.E., State Engineer of the
State of Nevada, DIVISION OF WATER
RESOURCES, DEPARTMENT OF
CONSERVATION AND NATURAL
RESOURCES,

Respondent.

Case No. **CV 15-12019**

Department No. 01

**PETITION FOR WRIT OF MANDAMUS,
OR IN THE ALTERNATIVE, WRIT OF
PROHIBITION**

PETITIONER, Pershing County Water Conservation District ("PCWCD" or "District"),
by and through Schroeder Law Offices, P.C. and its attorneys, hereby seeks a writ of mandamus,
or alternatively, a writ of prohibition, to require the State Engineer to establish a critical
groundwater management area over all over-appropriated groundwater basins within the
Humboldt River Basin in order to: 1) bring all over-appropriated groundwater basins surrounding
the Humboldt River back to their perennial annual yield; 2) eliminate the cone of depression



1 caused by over-allocation of groundwater pumping causing interference with surface water flows
2 in the Humboldt River; and 3) regulate water used for mining and milling pursuant to Nevada
3 statutory code.

4 PCWCD has worked extensively with the Nevada State Engineer ("State Engineer") and
5 Nevada Division of Water Resources ("NDWR") to develop a plan which will allow the District
6 to be served their senior decreed water rights, while at the same time limit, to the extent possible,
7 curtailment of groundwater pumping that is pulling water away from the Humboldt River to the
8 detriment of the District. The State Engineer has repeatedly failed to take action to effectively
9 manage the water resources within the Humboldt River Basin, after many attempts by PCWCD
10 to assist in developing a suitable plan. Accordingly, the District is now forced to take legal
11 action in order to ensure their senior decreed water rights are served and protected under Nevada
12 law.

13 This writ is based on the Memorandum of Points and Authorities and Affidavit of Bennie
14 B. Hodges filed in conjunction herewith, the papers and pleadings that will be filed in this
15 matter, and any argument the Court may allow.

16 **MEMORANDUM OF POINTS AND AUTHORITIES**

17 Pursuant to NRS 34.150 et seq., PCWCD hereby submits the following Memorandum of
18 Points and Authorities in support of its *Petition for Writ of Mandamus, or in the alternative, Writ*
19 *of Prohibition*.

20 A District Court may issue a writ of mandamus to compel the performance, or writ of
21 prohibition to dispel the performance, of an act by one whom the law enjoins has a duty resulting
22 from their public office. The State Engineer, in violation of Nevada law, has allowed the
23 majority of groundwater basins surrounding the Humboldt River to become over-appropriated,
24 and thereby capture Humboldt River water, in violation of Nevada's statutory water code and the
25 prior appropriation doctrine. There is no other plain, speedy, and adequate remedy at law, and
26 the Court must therefore order the State Engineer to establish a critical groundwater management



1 area encompassing all over-appropriated groundwater basins within the Humboldt River Basin in
2 order to:

3 1) Bring all over-appropriated groundwater basins surrounding the Humboldt River back
4 to their perennial annual yield;

5 2) Eliminate the cone of depression caused by over-allocation of groundwater pumping
6 causing interference with surface water flows in the Humboldt River; and

7 3) Regulate water used for mining and milling pursuant to Nevada statutory code.

8 1. INTRODUCTION

9 PCWCD is an irrigation district in Lovelock Nevada, formed under Chapter 539 of the
10 Nevada Revised Statutes. *Affidavit of Bennie B. Hodges in Support of Petition for Writ of*
11 *Mandamus, or in the alternative, Writ of Prohibition* ("Affidavit of Hodges") ¶ 1. PCWCD is a
12 quasi-municipal agency that is led by a Board of Directors and its manager Bennie Hodges.
13 *Affidavit of Hodges* ¶¶ 1, 2. PCWCD owns, controls, and operates a water conveyance system
14 that provides water to approximately 100 constituents holding approximately 37,506 acres of
15 irrigated agricultural lands within the District boundaries. *Affidavit of Hodges* ¶ 3. PCWCD
16 operates diversion structures and dams along the Humboldt River, as well as diversion structures
17 within the District's boundaries. *Affidavit of Hodges* ¶ 4.

18 The District controls an extensive amount of senior decreed surface water rights for the
19 use of Humboldt River water. *Affidavit of Hodges* ¶ 5. In recent years, many water related issues
20 have plagued the Humboldt River and the basin. Many of the Humboldt River Basin
21 groundwater aquifers are greatly over-appropriated, and groundwater pumping within the
22 vicinity of the river is pulling water away from the river. PCWCD's land is situated at the lowest
23 reaches of the Humboldt River Basin, therefore, while they hold very senior decreed water
24 rights, little water is making it to the District's service and water righted areas. *Affidavit of*
25 *Hodges* ¶ 6. The District is in its second year with 0% water allocated to its constituents.
26 *Affidavit of Hodges* ¶¶ 7, 8.



1 Due to the increase in groundwater pumping in the Humboldt River Basin, along with
2 many temporary permits¹ to appropriate water being issued by the NDWR, less water is available
3 in the Humboldt River for diversion. This "new" appropriation of water is creating a system of
4 water allocation in violation of the prior appropriation doctrine, and Nevada's statutory water
5 code. The State Engineer has failed to take required action to sustainably manage the water
6 resources in the Humboldt River Basin.

7 II. ISSUE PRESENTED

8 Must this Court issue a writ of mandamus, or in the alternative, writ of prohibition,
9 ordering the State Engineer to sustainably manage groundwater in the Humboldt River basin
10 according to Nevada law?

11 III. FACTUAL BACKGROUND

12 a. Humboldt River Basin Groundwater Pumping

13 The Humboldt River Basin is comprised of 34 separate and distinct hydrographic
14 groundwater basins. *Affidavit of Hodges, Exhibit 1: Affidavit of Hodges ¶ 10*. According to
15 NDWR, there are 1,852 wells within the Humboldt River Basin, and 1,291 groundwater permits
16 with their point of diversion within 5 miles of the Humboldt River and its tributaries, of which
17 273 capture 10% or more of their water from the Humboldt River. *Affidavit of Hodges, Exhibit 7*
18 *at 19-21*. The total combined perennial yield² of all collective groundwater basins in the
19 Humboldt River Basin is 476,400 AFA. *Affidavit of Hodges, Exhibit 2: Affidavit of Hodges ¶ 11*.
20 However, the total combined permitted groundwater allocation is 753,394 AFA. *Id.* Of the 34
21 hydrographic basins within the Humboldt River Basin, 23 are over-appropriated. *Id.*

22 ///

23 ¹ A "temporary permit" is a permit issued to appropriate groundwater which is limited as to time. See NRS
24 534.120(3)(a).

25 ² Perennial Yield is "The amount of usable water of a ground water reservoir that can be withdrawn and consumed
26 economically each year for an indefinite period of time. It cannot exceed the sum of the Natural Recharge, the
Artificial (or Induced) Recharge, and the Incidental Recharge without causing depletion of the groundwater
reservoir." NDWR Water Words. <http://water.nv.gov/programs/planning/dictionary/wwords-P.pdf> at 236.



1 The majority of groundwater in the Humboldt River Basin is used for irrigation and
2 mining purposes. *Id.* Of these groundwater permits, irrigation use accounts for 455,385 AFA of
3 appropriation, and mining use accounts for 171,343 AFA of appropriation. *Id.* Water use for
4 mining is most significantly used to dewater open pit mines, which is the current practice of
5 extracting minerals in the Humboldt River Basin.³ This practice often seeks to extract ore from
6 below the water table, which requires the mining area to be “dewatered.”⁴ Generally, the mine
7 drills a number of wells around the mining pit, then pumps water to create a cone of depression
8 under the pit, thereby drying up the mining area.⁵ When the pit is not being dewatered, the pit
9 fills up to the level of the water table, creating a pit lake.⁶

10 In Nevada, the State Engineer grants permits for mining and milling on a “temporary”
11 basis. *See, Affidavit of Hodges, Exhibit 5.* However, rather than issuing one-year temporary
12 permits, historically, the State Engineer issues permits for mining and milling akin to permanent
13 water rights while side-stepping an analysis as to whether water is available for appropriation.
14 *See, Affidavit of Hodges, Exhibits 9, 10.* The Humboldt River Chronology states that “mine
15 dewatering and mine pit lake formation, and their potential near-term and long-term effects on
16 groundwater levels and surface-water flows” has been identified as a principal water-related
17 issue plaguing the Humboldt River Basin.⁷ State Engineer Ruling 5876 states:

18 The State Engineers Office considers water used in mining and
19 milling to be a temporary use of water and as such is not
20 considered in the amount of water appropriated in a basin. The
21 State Engineer finds if the water used for mining and milling is
22 removed from the amount of water appropriated for each basin...
23 there is water available for appropriation. The State Engineer finds

23 ³ Humboldt River Chronology Volume I, Part I, <http://water.nv.gov/mapping/chronologies/humboldt/hrc-pt1.pdf> at
24 94.

24 ⁴ *Id.*

25 ⁵ *Id.*

26 ⁶ *Id.*

⁷ *Id.* at 14.



1 the perennial yield of the ground-water belongs to the basin and
2 not to the Humboldt River.

3 *Affidavit of Hodges, Exhibit 5 at 2.* Accordingly, the State Engineer has not considered the use
4 of water for mining and milling to be appropriate, and finds a lack of interconnection between
5 surface and groundwater sources, and states that the perennial yield of the groundwater basin
6 belongs to the basin and not the Humboldt River. *Id.*

7 In more recent years, the State Engineer has recognized interconnection between
8 groundwater and surface water in the Humboldt River Basin. *Affidavit of Hodges, Exhibit 4.* In
9 State Engineer Ruling 6299, the State Engineer changed the perennial yield for the Lovelock
10 Valley groundwater basin, finding that it is over-appropriated, and denied applications due to a
11 potential influence on decreed Humboldt River rights. *Affidavit of Hodges, Exhibit 4.*

12 **b. PCWCD's Water Rights**

13 Through the acquisition of additional water, including change applications approved by
14 the State Engineer, PCWCD currently holds the following Humboldt River Decree⁸ water rights
15 of use⁹:

- 16 • Water Right Permit 12955 (Certificate 4861) has a combined duty of 14,432.32
17 acre-feet per year ("AFA"), and a priority date ranging between January 1, 1873
18 to January 1, 1887;
- 19 • Water Right Permit 12953 (Certificate 4436) has a combined duty of 4,154.08
20 AFA, and a priority date of January 1, 1871;

21
22
23 ⁸ "Humboldt River Decree" or "decreed" rights referenced herein refer to surface water rights, issued subject to the
adjudication of the Humboldt River, under Sixth Judicial District Court, County of Humboldt, Case No. 2804.

24 ⁹ A portion of the water rights referenced are currently held in trust by the United States Department of Interior
25 (Permits: 12955, 12953, 12954, 12952, 12951, 12950, 12957, 12956, 10283) and Department of Reclamation
26 (Permits: 12948, 12947, 12957), for the District. Currently, the water rights are in the process of being transferred
back to the District as they have now fulfilled their repayment obligations pursuant to contracts entered into with the
United States. (See, *Affidavit of Hodges* ¶ 13).



- Water Right Permit 12954 (Certificate 4437) has a combined duty of 1,925.52 AFA, and a priority date ranging between January 1, 1873 to January 1, 1877;
- Water Right Permit 12952 (Certificate 4572) has a combined duty of 14,432.32 AFA, and a priority date ranging between January 1, 1873 to January 1, 1887;
- Water Right Permit 12951 (Certificate 4435) has a combined duty of 1,282.87 AFA, and a priority date of January 1, 1873;
- Water Right Permit 12950 (Certificate 4571) has a combined duty of 3,023.49 AFA, and a priority date of January 1, 1874;
- Water Right Permit 12949 (Certificate 4570) has a combined duty of 2,626.30 AFA, and a priority date ranging between January 1, 1874 to January 1, 1887;
- Water Right Permit 12948 (Certificate 4434) has a combined duty of 1,925.52 AFA, and a priority date ranging between January 1, 1863 to January 1, 1866;
- Water Right Permit 12947 (Certificate 5040) has combined duty of 562.17 AFA, and a priority date ranging between January 1, 1873 to January 1, 1880;
- Water Right Permit 12957 (Certificate 5180) has a combined duty of 1,647.18 AFA, and a priority date of January 1, 1877;
- Water Right Permit 12956 (Certificate 4506) has a combined duty of 100,000 AFA for storage in Rye Patch Reservoir, and a priority date of December 12, 1933;
- Water Right Permit 10283 (Certificate 9258) has a combined duty of 15,152.32 AFA for storage in Rye Patch Reservoir, and a priority date of August 13, 1938;
- Water Right Permit 1098 (Certificate 2130) has a combined duty of 20,200 AFA, and a priority date of August 21, 1908;
- Water Right Permit 1948 (Certificate 2131) has a combined duty of 29,570 AFA, and a priority date of February 10, 1911.

Affidavit of Hodges, Exhibit 3; Affidavit of Hodges ¶ 12.



1 **c. PCWCD attempted to reach solution with the State Engineer.**

2 After feeling the effect of groundwater pumping that decreases flows within the
3 Humboldt River, coupled with the ongoing drought in the West, the District sought the assistance
4 of the State Engineer to develop a collective plan to ensure PCWCD's senior water rights are
5 delivered, while at the same time attempting to allow junior rights to continue to allocate water
6 to the greatest extent possible. *Affidavit of Hodges* ¶ 16. On August 21, 2014, PCWCD prepared
7 a report for the State Engineer to assist in the development of such a plan. *Affidavit of Hodges* ¶
8 17.

9 The report, titled *Water Management in a Prior Appropriation System: Conjunctive*
10 *Management Solutions to Groundwater Withdrawals Affecting Surface Water Flows within the*
11 *Humboldt River Basin*, is meant to provide the State Engineer with information about how other
12 western states are approaching the issue of interconnection of water resources, as well as provide
13 data regarding the interconnection issues in the Humboldt River Basin. *Affidavit of Hodges*,
14 *Exhibit 6: Affidavit of Hodges* ¶ 17. The report then provides the State Engineer with a list of
15 requested "Action Items" and asks the State Engineer to take action to: 1) develop a system of
16 conjunctive management; 2) regulate mine dewatering under statutory code; 3) account for
17 "temporary" permits in the hydrographic basins' annual budget; 4) regulate mining pit lakes
18 under statutory code for water storage; 5) curtail junior groundwater rights in basins surrounding
19 the Humboldt River, until perennial yield equilibrium is met; 6) require mandatory metering on
20 groundwater wells in the Humboldt River Basin; 7) create an enforcement officer to regulate
21 groundwater use; and 8) bring groundwater basins back to sustainability. *Id.* On September 9,
22 2014, the PCWCD Board Members and Manager met with the State Engineer to discuss the
23 report and request action. *Affidavit of Hodges* ¶ 18. While the District understands that not all
24 actions taken by other states are applicable to the difficulties effecting Nevada, the point was to

25 ///

26 ///



1 start the conversation to develop a system of water management that will work for Nevada.
2 PCWCD received no written response to their report or otherwise.¹⁰ *Id.*

3 On January 14, 2015 and January 15, 2015, the State Engineer held a series of workshops
4 on the Humboldt River stating their intent to prepare a capture model in the basin, to be
5 completed within 4 to 5 years. *Affidavit of Hodges, Exhibit 7 at 12; Affidavit of Hodges ¶ 19.*
6 The State Engineer also demonstrated a simple "Glover" analysis capture model illustrating that
7 groundwater pumping curtailment would supply additional water to the Humboldt River, but
8 determined that the "Glover analysis shows that curtailment of pumping over one irrigation
9 season will not cause an appreciable gain in Humboldt River flows." *Affidavit of Hodges, Exhibit*
10 *7 at 23.* The State Engineer concluded that "it is anticipated that there will be NO groundwater
11 curtailment in 2015." *Id.*

12 On March 24, 2015, with a second irrigation season with 0% allocation looming, the
13 PCWCD Board Members again met with the State Engineer, this time presenting data through a
14 District retained hydrogeologist. *Affidavit of Hodges ¶ 20.* The District provided to the State
15 Engineer a *Request for Implementation of Water Management Strategies*. *Affidavit of Hodges,*
16 *Exhibit 8; Affidavit of Hodges ¶ 20.* PCWCD expressly asked for a written response to their
17 letter and presentation. *Id.* No response was received. *Id.*

18 IV. ARGUMENT

19 This Court must issue a writ of mandamus, or in the alternative, writ of prohibition,
20 ordering the State Engineer to regulate the water resources of the Humboldt River Basin
21 according to Nevada law. The District has exhausted every remedy available to them, and thus
22 there is no plain, speedy, or adequate remedy available.

23 ///

24 ///

25 _____
26 ¹⁰ The State Engineer has begun the process to require groundwater meters to be installed on wells within the Humboldt River Basin.

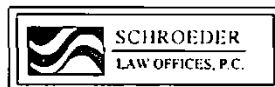


1 a. A District Court may issue a writ of mandamus or prohibition to compel or
2 dispel the performance by a state official of an act that the law requires.

3 A district court may issue a writ of mandamus, or in the alternative, writ of prohibition, to
4 compel or dispel the performance by a state official of an act the law requires. A writ of
5 mandamus “may be issued by the Supreme Court, the Court of Appeals, a district court or a
6 judge of the district court, to compel the performance of an act which the law especially enjoins
7 as a duty resulting from an office, trust or station...” NRS 34.160. In other words, “[a] writ of
8 mandamus may be issued to compel the performance of an act that the law requires as a duty
9 resulting from an office, trust or station, or to control an arbitrary or capricious exercise of
10 discretion.” *Diaz v. Eighth Judicial Dist. Court*, 116 Nev. 88, 93 (2000). A writ of mandamus
11 “shall be issued in all cases where there is not a plain, speedy and adequate remedy in the
12 ordinary course of law.” NRS 34.170; see also, *Diaz v. Eighth Judicial Dist. Court*, 116 Nev. 88,
13 93 (2000). “Mandamus is an extraordinary remedy, and the decision as to whether a petition will
14 be entertained lies within the sound discretion of this court.” *Brewery Arts Ctr. v. State Bd.*
15 *Examiners*, 108 Nev. 1050, 1053 (1992). A formal order refusing to perform is not required.
16 *See, Whitehead v. Nevada Comm’n on Judicial Discipline*, 873 P.2d 946, 964 (1994).

17 A writ of prohibition “is the counterpart of the writ of mandate.” NRS 34.320. “It arrests
18 the proceedings of any tribunal, corporation, board or person exercising judicial functions, when
19 such proceedings are without or in excess of the jurisdiction of such tribunal, corporation, board
20 or person.” *Id.* “While a writ of prohibition is most often used to restrain courts or judicial
21 tribunals, it can also be used to restrain persons in other classes who are exercising or attempting
22 to exercise judicial or quasi-judicial functions beyond their powers.” *Mineral County v. State*,
23 117 Nev. 235, 243-244 (2001).

24 This Court must issue a writ of mandamus, or in the alternative, writ of prohibition,
25 because there is no plain, speedy, and adequate remedy at law, and the State Engineer has failed
26 to take action and sustainably manage the groundwater basins surrounding the Humboldt River.



1 The State Engineer has a statutory duty to sustainably manage the groundwater basins within the
2 Humboldt River Basin, and ensure that junior groundwater use does not impact senior decreed
3 surface water rights, and must perform such duties prescribed by law.

4 **b. The State Engineer has failed in his statutory duty to manage groundwater in**
5 **the Humboldt River Basin sustainably, and is prohibited by law from granting**
6 **applications that conflict with a prior decree, senior water right, are detrimental**
7 **to the public interest, or where there is no water available at the proposed**
8 **source.**

9 The Nevada State Engineer has a duty to manage groundwater in a sustainable manner,
10 and cannot grant an application to appropriate water in the State of Nevada, if such appropriation
11 conflicts with a decree or senior water right, is detrimental to the public interest, or where there
12 is no water available at the proposed source. Chapter 533 of the Nevada Revised Statutes
13 governs the State Engineer's ability to grant a new or change application to appropriate water in
14 Nevada. Each time an application is made to appropriate new water, or change an existing right,
15 the State Engineer must perform a multi-step process to determine whether the application may
16 be granted.

17 NRS 533.370(2) sets the test the State Engineer is required to perform prior to granting
18 an application to appropriate water, and provides as follows:

19 [W]here there is no unappropriated water in the proposed source of
20 supply, or where its proposed use or change conflicts with existing
21 rights...or threatens to prove detrimental to the public interest, the
22 State Engineer shall reject the application and refuse to issue the
23 requested permit.

24 *See also. Redrock Valley Ranch, LLC v. Washoe County, 254 P.3d 641, 647 (2011).*

25 Similarly, NRS 533.371 governs the issuance of a temporary permit to appropriate water,
26 and states:

The State Engineer shall reject the application and refuse to issue a
permit to appropriate water for a specified period if the State
Engineer determines that:



- 1 1. The application is incomplete;
- 2 2. The prescribed fees have not been paid;
- 3 3. The proposed use is not temporary;
- 4 4. There is no water available from the proposed
source of supply without exceeding the perennial yield or
safe yield of that source;
- 5 5. The proposed use conflicts with existing rights; or
- 6 6. The proposed use threatens to prove detrimental to
the public interest.

7 The State Engineer violated his statutory duties by allowing groundwater allocation
8 within basins surrounding the Humboldt River where there 1) is no unappropriated water, 2) that
9 conflict with existing rights, 3) that are detrimental to the public interest, and 4) that conflict with
10 the Humboldt River Decree. Further, the State Engineer violated his statutory duties by finding
11 that groundwater used for mining and milling is a temporary use of water, and is not
12 appropriate.

13 **1. The State Engineer violated his statutory duties by allowing groundwater**
14 **allocation where there is no unappropriated water available.**

15 The State Engineer cannot grant an application to appropriate water when there is no
16 unappropriated water at the proposed source to fulfill the application. NRS 533.370(2). To make
17 this determination, the State Engineer must assess whether there is "unappropriated" water
18 available. *Id.* The amount of unappropriated water available is based on the perennial yield of
19 the groundwater basin where application is sought. The term "perennial yield" is defined as:

20 The amount of usable water of a ground water reservoir that can be
21 withdrawn and consumed economically each year for an indefinite
22 period of time. It cannot exceed the sum of the Natural Recharge,
23 the Artificial (or Induced) Recharge, and the Incidental Recharge
without causing depletion of the groundwater reservoir. Also
referred to as Safe Yield.¹¹

24 ///

25 ///

26 ¹¹ NDWR Water Words, <http://water.nv.gov/programs/planning/dictionary/wwords-P.pdf> at 236.



1 Similarly, the Nevada Supreme Court has stated that “[t]he perennial yield of a hydrological
2 basin is the equilibrium amount or maximum amount of water that can safely be used without
3 depleting the source.” *Pyramid Lake Paiute Tribe of Indians v. Ricci*, 245 P.3d 1145, 1147
4 (2010). If granting an application to appropriate water causes the groundwater basin to exceed
5 its “perennial yield” then there is no “unappropriated water in the proposed source of supply”
6 and the “State Engineer shall reject the application and refuse to issue the requested permit.”
7 NRS 533.370(2).

8 The Humboldt River Basin contains 34 groundwater basins, of which 23 are over-
9 appropriated. *Affidavit of Hodges, Exhibit 2*. Over-allocation of groundwater resources
10 surrounding the Humboldt River directly violates NRS 533.370(2), requiring the State Engineer
11 to deny applications to appropriate water when there is not enough water in the groundwater
12 basin to serve the application. In violation of his statutory duties, the State Engineer has granted,
13 and continues to grant applications to appropriate groundwater in excess of perennial yield, when
14 “there is no unappropriated water in the proposed source of supply...” *Id.*

15 **2. The State Engineer violated his statutory duties by allowing groundwater**
16 **pumping that conflicts with existing rights.**

17 The State Engineer cannot grant an application to appropriate water that conflicts with an
18 existing right. NRS 533.370(2). Pursuant to NRS 533.030, “[a]ll appropriation of water in the
19 State of Nevada for a beneficial use, is subject to existing rights.” Regarding groundwater, an
20 application can only be granted if “rights of holders of existing appropriations can be
21 satisfied...” NRS 534.110(5). The State Engineer cannot allow a new or changed appropriation
22 to conflict with another’s pre-existing water right of use. Allowing conflicting water use violates
23 both Nevada statutory law and the prior appropriation doctrine.¹²

24 _____
25 ¹² In 1885, the Supreme Court of Nevada firmly repudiated the common law riparian doctrine and confirmed that
26 prior appropriation is the law in Nevada. *Jones v. Adams*, 19 Nev. 78, 84-88, 6 P. 442 (1885). Once prior
appropriation became the law in Nevada, the prior appropriation doctrine required a claimant to show actual
physical diversion of water from its source with intent to apply the water to beneficial use within a reasonable time



1 PCWCD holds senior decreed surface water rights to the Humboldt River. Because their
2 rights are senior in priority to almost every other groundwater right within the Humboldt River
3 Basin, groundwater rights granted by the State Engineer with a priority date junior to that of the
4 District's decreed rights cannot conflict with the District's senior rights. Any "conflict" violates
5 NRS 533.370(2) and the prior appropriation doctrine.

6 The State Engineer has granted hundreds of permits to appropriate groundwater within
7 the Humboldt River Basin. *Affidavit of Hodges, Exhibit 7*. Upon consideration of each
8 application to appropriate water, the State Engineer is required to determine whether the
9 appropriation will conflict with existing rights. *See* NRS 533.370(2). The State Engineer
10 recognizes that groundwater pumping in the Humboldt River Basin is pulling water away from
11 the Humboldt River, making less water available to decreed surface water right holders. *Affidavit*
12 *of Hodges, Exhibit 7*.

13 While the State Engineer has historically not found that groundwater pumping conflicts
14 with surface water rights (*Affidavit of Hodges, Exhibit 5*), in recent years, the State Engineer has
15 denied some applications because "additional pumping would cause an increase in infiltration of
16 the surface water of the Humboldt River into the groundwater aquifer, thereby potentially
17 reducing river flow to the extent that it could conflict with existing decreed Humboldt River
18 water rights." *Affidavit of Hodges, Exhibit 4 at 11*. This inconsistent water resource management
19 demonstrates that while the State Engineer now recognizes that Humboldt River decreed
20 "existing rights" are negatively impacted by groundwater pumping, other applications were
21 granted to the detriment of decreed Humboldt River rights. This impact and conflict is
22
23

24 _____ (Cont.)
25 to establish a possessory interest in water. *Application of Filippini*, 66 Nev. 17, 22 (Nev. 1949). Generally, an
26 appropriation of water relates back to the time when the first step to secure it was taken, if the work was prosecuted
with reasonable diligence. *Irwin v. Strait*, 18 Nev. 436, 436 (1884). Water allocation in the State cannot interfere
with earlier senior appropriations. *See generally, Desert Irrigation, Ltd. v. State*, 113 Nev. 1049, 1051 (1997). This
doctrine does not distinguish between groundwater and surface water.



1 something the State Engineer should have taken into consideration before allowing the junior
2 groundwater use, and before allowing the basins to become over-appropriated.

3 Because junior rights continue to conflict with senior rights, the State Engineer violated
4 his statutory duties by approving the conflicting groundwater use, by allowing the groundwater
5 basins to become over-appropriated, and by allowing the groundwater use to continue when it
6 conflicts with the District's senior decreed rights. *See* NRS 533.370(2).

7 **3. The State Engineer violated his statutory duties by allowing groundwater**
8 **pumping that is detrimental to the public interest.**

9 The State Engineer cannot grant an application to appropriate water when such
10 appropriation is in detriment to the public interest. NRS 533.370(2). The State Engineer must
11 perform a public interest assessment prior to allowing any appropriation of water in the state. A
12 public interest determination requires the State Engineer to review both environmental and
13 economic interests in the area, and determine whether these interests are impacted. *See generally,*
14 *Pyramid Lake Paiute Tribe of Indians v. Washoe County*, 112 Nev. 743.

15 Humboldt River surface flows are being pulled away from the river, and being allocated
16 by groundwater users in the Basin. *Affidavit of Hodges, Exhibit 7*. This interconnection causes
17 great economic and environmental hardship to PCWCD and its constituents. With less water in
18 the river, the District's constituents are unable to produce viable crops in sufficient quantity to
19 justify continued agricultural use, something detrimental to both the economic and
20 environmental interests in the area. *Affidavit of Hodges* ¶ 8. These public interest factors should
21 have been taken into consideration by the State Engineer before allowing the over-appropriation
22 of the groundwater basins surrounding the Humboldt River.

23 The State Engineer violated NRS 533.370(2) by allowing groundwater use that is
24 detrimental to the public interest.

25 ///

26 ///



1 **4. The State Engineer violated his statutory duties by finding that**
2 **groundwater use for mining and milling is not appropriative, and issuing**
3 **permanent water rights.**

4 Similar to the above analysis, the State Engineer is required to assess temporary uses of
5 water pursuant to NRS 533.371. Under NRS 533.371, groundwater appropriations in conflict
6 with existing rights, that are detrimental to the public interest, and where there is no
7 unappropriated water available, are not allowed. Further, a statutory temporary change in use of
8 water cannot be granted for a period of more than one year. NRS 533.345. The State Engineer
9 also cannot grant a statutory temporary application to appropriate water when the use of water is
10 not actually a temporary use. NRS 533.371.

11 In the Humboldt River Basin, the State Engineer considers water used for mining and
12 milling to be a "temporary use" of water, and does not consider this use of water to be
13 appropriative. *Affidavit of Hodges, Exhibit 5 at 2.* Water used for mining and milling purposes,
14 among other uses, is used to "dewater" open pit mines, which use often continues for many years,
15 even after the mine ceases operations. Rather than issuing "temporary" permits for this use, and
16 conducting the necessary analysis under NRS 533.371, the State Engineer allows this
17 "temporary" use of water to continue indefinitely under a permanent water right. *See, Affidavit of*
18 *Hodges, Exhibits 9, 10.*

19 Even if the State Engineer were to issue the proper statutory temporary permit for mining
20 and milling use, his action would again violate Nevada law, because water used for mining and
21 milling is not a temporary use of water. *See NRS 533.371.* While the mines may not be in
22 operation forever, the effects the pit lakes created when the mine ceases to pump will hold water
23 open to the air and land surface, and out of the enclosed groundwater aquifer indefinitely. Also,
24 the State Engineer refuses to recognize the evaporative losses pit lakes create as an appropriation
25 requiring a water right. *See, Affidavit of Hodges, Exhibit 11 at 5.* The State Engineer violated
26



1 Nevada Law by issuing permanent water rights for mining and milling in the Humboldt River
2 Basin, without considering the appropriative nature of such use.

3 **5. The State Engineer violated his statutory duties by allowing groundwater**
4 **pumping in conflict with a State issued court decree.**

5 In addition to the State Engineer's power over the approval of groundwater appropriation,
6 the State Engineer is an officer of the Court in its administration of Court issued State decrees.
7 The State Engineer must uphold State issued decrees, and ensure no interference occurs. NRS
8 533.0245 states:

9 The State Engineer shall not carry out his or her duties pursuant to
10 this chapter in a manner that conflicts with any applicable
11 provision of a decree or order issued by a state or federal court, an
12 interstate compact or an agreement to which this State is a party
for the interstate allocation of water pursuant to an act of
Congress.

13 As demonstrated above, the State Engineer has allowed numerous groundwater basins
14 surrounding the Humboldt River to become over-appropriated. This over-appropriation is now
15 pulling water away from the Humboldt River, thereby making less water available to
16 downstream senior water right users such as PCWCD. By allowing groundwater pumping to
17 impact Humboldt River Decree rights, the State Engineer is violating the Humboldt River
18 Decree, the very Decree he is charged to uphold, and in doing so, he also violates NRS 533.0245.

19 **c. The State Engineer has tools available to sustainably manage over-appropriated**
20 **groundwater basins and bring them back to perennial yield, including**
designating a critical groundwater management area.

21 The State Engineer, in violation of his statutory duties, has allowed the groundwater
22 basins surrounding the Humboldt River to become over-appropriated. The State Engineer has
23 statutory tools available to more effectively manage over-appropriated groundwater basins and
24 bring them back into perennial yield, and has a legal obligation to do so, including designating a
25 critical groundwater management area. Pursuant to NRS 534.110(7), the State Engineer "may
26 designate as a critical management area any basin in which withdrawals of groundwater



1 consistently exceed the perennial yield.” This designation gives the State Engineer additional
2 power to more effectively carry out groundwater basin management.

3 Upon designation as a critical management area, groundwater users within the designated
4 basin may petition the State Engineer for approval of a groundwater management plan. NRS
5 534.037(1). This plan, if approved, allows groundwater users to take steps to bring the basin
6 back to sustainability, and eventually remove the critical management basin designation. *Id.* If a
7 plan is not approved, and sustainability is not reached within 10 years, the State Engineer is then
8 required to curtail groundwater pumping. NRS 534.110(7)(b). “If a basin has been designated as
9 a critical management area for at least 10 consecutive years, the State Engineer shall order that
10 withdrawals, including, without limitation, withdrawals from domestic wells, be restricted in that
11 basin to conform to priority rights, unless a groundwater management plan has been approved
12 for the basin pursuant to NRS 534.037.” *Id.* In other words, the designation allows groundwater
13 appropriators time to develop a plan to bring the basin back to sustainability, and alleviate
14 curtailment to the greatest extent possible.

15 By designating the over-appropriated basins surrounding the Humboldt River a critical
16 groundwater management areas, the State Engineer can begin to develop a plan with the
17 groundwater users to bring the basins back to their sustainable yield. This in turn will begin to
18 ease the impact this over-appropriation has on the surrounding river, and the negative effect on
19 the District’s senior decreed water rights. The State Engineer must use his statutory powers to
20 correct his previous violations allowing the over-appropriation in the first place. If the State
21 Engineer does not use his statutory powers to bring the groundwater basins back to
22 sustainability, he has no choice but to curtail groundwater use by priority, and pursuant to the
23 prior appropriation doctrine.

24 ///

25 ///

26 ///



1 **d. The District has exhausted every remedy in an attempt to have their senior**
2 **rights served.**

3 The District owns and controls a substantial number of senior Humboldt River decreed
4 water rights. *See, Affidavit of Hodges, Exhibit 3.* In turn, the District and its constituents have a
5 great deal to lose should groundwater pumping be allowed that continues to deplete surface
6 water flows. The District has met with the State Engineer on multiple occasions to discuss
7 options and develop a plan to better manage the water resources within the Humboldt River
8 Basin, and to ensure they receive their water, pursuant to the Humboldt River Decree. The
9 District has further provided the State Engineer with research, information, and data regarding
10 other states' methods, as well as data pertaining to the Humboldt River Basin. *See, Affidavit of*
11 *Hodges, Exhibit 6.* The District has made written requests for action by the State Engineer. *See,*
12 *Affidavit of Hodges, Exhibits 6, 8.* The District has asked for a written response to their requests.
13 *See, Affidavit of Hodges, Exhibit 8.* The State Engineer has made no response to the District's
14 requests, and has taken little action in response to the ongoing over-allocation of water in the
15 basin, in violation of the prior appropriation doctrine. *Affidavit of Hodges* ¶ 20. By making no
16 response, the District is deprived of the opportunity for an adequate and speedy legal remedy.

17 Historically, the State Engineer has not recognized the connection between surface and
18 groundwater sources, however, now concedes that connection does exist between the two water
19 sources. *See, Affidavit of Hodges, Exhibits 4, 7.* In his January 2015 Humboldt River workshop,
20 the State Engineer provided a Glover analysis in an attempt to determine groundwater pumping's
21 effect on surface water flows. This simplified scenario used water wells capturing at least 10%
22 of their water from the Humboldt River, and ran the scenario over one (1) 180-day irrigation
23 season. It was determined that curtailment of groundwater pumping will place additional water
24 into the river. This solution did not take into consideration the years of pumping before the
25 scenario, and did not take into consideration the effect of curtailment moving forward more than
26



1 a single irrigation season. The benefit of groundwater basin sustainability will be greater when
2 one takes into account the history and future of groundwater pumping.

3 By failing to take any immediate action to bring the over-appropriated groundwater
4 basins surrounding the Humboldt River back to perennial yield, the State Engineer continues to
5 violate Nevada statutory code, and the prior appropriation doctrine. PCWCD has exhausted all
6 options and therefore, there is no other plain, speedy, and adequate remedy to bring the
7 groundwater basins back to perennial yield, and to eliminate the negative effect to the Humboldt
8 River.

9 **V. REQUESTED RELIEF**

10 The District has a beneficial interest in obtaining writ relief. The State Engineer has
11 granted groundwater applications in excess of perennial yield in the Humboldt River Basin, and
12 in violation of Nevada's statutory water code and the prior appropriation doctrine. Groundwater
13 pumping in the Humboldt River Basin is pulling water away from the Humboldt River, leaving
14 less water to serve decreed water right holders. PCWCD and its constituents hold some of the
15 most senior decreed rights to the Humboldt River, rights senior to most groundwater users.
16 When a junior water right captures water meant to serve a senior right, this action violates
17 Nevada law and the prior appropriation doctrine. The State Engineer has failed to take action to
18 sustainably manage groundwater as required under Nevada law.

19 This Court must issue a writ of mandamus, or in the alternative, writ of prohibition
20 ordering the State Engineer to establish a critical groundwater management area over all over-
21 appropriated groundwater basins within the Humboldt River Basin in order to:

- 22 1) Bring all over-appropriated groundwater basins surrounding the Humboldt River back
23 to their perennial annual yield;
- 24 2) Eliminate the cone of depression caused by over-allocation of groundwater pumping
25 causing interference with surface water flows in the Humboldt River; and
- 26 3) Regulate water used for mining and milling pursuant to Nevada statutory code.



1 If the State Engineer fails to use his statutory powers to bring sustainability back to the
2 Humboldt River Basin groundwater aquifers, curtailment is necessary to achieve sustainability
3 pursuant to the prior appropriation doctrine.

4 This Court should order Respondent to show cause before the Court, at a time and place
5 set by the Court, why he has not fulfilled his statutory duties established herein.

6
7 RESPECTFULLY SUBMITTED, this 12th day of August, 2015.

8 SCHROEDER LAW OFFICES, P.C.

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CERTIFICATE OF SERVICE

I hereby certify that on August 12, 2015, I caused a copy of the forgoing *PETITION*
FOR WRIT OF MANDAMUS, OR IN THE ALTERNATIVE, WRIT OF PROHIBITION to
be deposited with the United States Postal Service within the State of Nevada for mailing,
postage pre-paid, as noted below:

Nevada State Engineer
901 South Stewart Street, Suite 2002
Carson City, NV 89701
Certified Mail #7013 2630 0000 0975 0670

Nevada Attorney General
Office of the Attorney General
100 North Carson Street
Carson City, NV 89701
Certified Mail #7013 2630 0000 0975 0663

Dated this 12th day of August, 2015.



Laura A. Schroeder, NSB #3595
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*

A.B. 51

ASSEMBLY BILL NO. 51—COMMITTEE ON NATURAL
RESOURCES, AGRICULTURE, AND MINING

(ON BEHALF OF THE DIVISION OF WATER RESOURCES
OF THE STATE DEPARTMENT OF
CONSERVATION AND NATURAL RESOURCES)

PREFILED NOVEMBER 18, 2018

Referred to Committee on Natural Resources,
Agriculture, and Mining

SUMMARY—Revises provisions governing the management of
water. (BDR 48-213)

FISCAL NOTE: Effect on Local Government: May have Fiscal Impact.
Effect on the State: Yes.

CONTAINS UNFUNDED MANDATE (§ 4)
(NOT REQUESTED BY AFFECTED LOCAL GOVERNMENT)

~

EXPLANATION – Matter in *bolded italics* is new; matter between brackets ~~omitted material~~ is material to be omitted.

AN ACT relating to water; requiring the State Engineer to adopt
regulations relating to the conjunctive management of
groundwater and surface water; authorizing the State
Engineer to impose certain special assessments related to
a program for the conjunctive management of
groundwater and surface water; providing that certain
water rights are not subject to abandonment or forfeiture;
and providing other matters properly relating thereto.

Legislative Counsel's Digest:

1 Existing law declares that it is the policy of this State to manage conjunctively
2 all waters of this State, regardless of the source of water. (NRS 533.024) **Section 3**
3 of this bill requires the State Engineer to adopt regulations related to the
4 conjunctive management of groundwater and surface water. The regulations may
5 include, without limitation: (1) requirements or guidelines for establishing
6 mitigation plans; (2) the creation of a program for the conjunctive management of
7 groundwater and surface water in a particular hydrographic basin to mitigate
8 conflicts between groundwater and surface water users; and (3) any other provision
9 necessary to conjunctively manage groundwater and surface water, determine the



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amount of conflict between groundwater and surface water users or resolve a conflict between groundwater and surface water users.

Section 4 of this bill authorizes the State Engineer to levy certain special assessments related to a program for the conjunctive management of groundwater and surface water. **Section 7** of this bill provides that the partial abatements of property taxes does not apply to any such special assessment, consistent with other assessments levied against groundwater and surface water users.

Section 5 of this bill provides that a right to groundwater or surface water that is not being used because of a program for the conjunctive management of groundwater or surface water is not subject to forfeiture or abandonment for as long as the program is in effect.

THE PEOPLE OF THE STATE OF NEVADA, REPRESENTED IN
SENATE AND ASSEMBLY, DO ENACT AS FOLLOWS:

Section 1. Chapter 533 of NRS is hereby amended by adding thereto the provisions set forth as sections 2 to 5, inclusive, of this act.

Sec. 2. *As used in sections 2 to 5, inclusive, of this act, "groundwater user" includes, without limitation, an owner of a domestic well.*

Sec. 3. 1. *The State Engineer shall adopt regulations related to the conjunctive management of groundwater and surface water. In adopting such regulations, the State Engineer must recognize existing uses of water while protecting water rights that are senior in priority.*

2. The regulations adopted pursuant to this section may include, without limitation:

(a) Requirements or guidelines for establishing a mitigation plan to address conflicts between groundwater and surface water users.

(b) The creation of a program for the conjunctive management of groundwater and surface water in a hydrographic basin in the State in order to mitigate conflicts between groundwater and surface water users.

(c) Any other provision that the State Engineer finds necessary to conjunctively manage groundwater and surface water, determine the amount of conflict between groundwater and surface water users or resolve a conflict between groundwater and surface water users.

Sec. 4. 1. *If the State Engineer creates a program for the conjunctive management of groundwater and surface water in a hydrographic basin, the State Engineer:*

(a) Is not required to curtail a groundwater user who has a conflict with a surface water user whose water right is senior in priority if the State Engineer finds that curtailment will not be



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1 *effective to provide water for the beneficial use of the surface*
2 *water user.*

3 *(b) May require a groundwater user to furnish replacement*
4 *water to a surface water user so long as the replacement water is*
5 *of sufficient quality.*

6 *(c) May levy a special assessment annually or at such times as*
7 *needed against the taxable property of a groundwater user for the*
8 *purpose of providing compensation for a conflict or injurious*
9 *depletion of a surface water user whose water right is senior in*
10 *priority to the groundwater user's water right or protectable*
11 *interest in a domestic well, as applicable. Any such special*
12 *assessment must be proportionate to the amount of conflict caused*
13 *by the groundwater user to the surface water user whose water*
14 *right is senior in priority.*

15 *(d) May levy a special assessment annually or at such times as*
16 *needed against the taxable property of water users in the basin to*
17 *pay for the expenses of administering the program.*

18 *2. Any charge or fee levied pursuant to subsection 1 must be:*

19 *(a) Collected on the tax roll in the same manner, by the same*
20 *persons, and at the same time as the county's general taxes. Such*
21 *charge or fee is a lien against the property.*

22 *(b) Accounted for separately and may only be used for the*
23 *purposes described in subsection 1.*

24 *Sec. 5. If the State Engineer creates a program for the*
25 *conjunctive management of groundwater and surface water in a*
26 *hydrographic basin, a right to groundwater or surface water that*
27 *is not being used because of the program is not subject to a*
28 *determination of abandonment or forfeiture for as long as the*
29 *program is in effect.*

30 *Sec. 6. NRS 534.090 is hereby amended to read as follows:*

31 *534.090 1. Except as otherwise provided in this section ~~and~~*
32 *and section 5 of this act, failure for 5 successive years after*
33 *April 15, 1967, on the part of the holder of any right, whether it is*
34 *an adjudicated right, an unadjudicated right or a right for which a*
35 *certificate has been issued pursuant to NRS 533.425, and further*
36 *whether the right is initiated after or before March 25, 1939, to use*
37 *beneficially all or any part of the underground water for the purpose*
38 *for which the right is acquired or claimed, works a forfeiture of both*
39 *undetermined rights and determined rights to the use of that water to*
40 *the extent of the nonuse.*

41 *2. If the records of the State Engineer or any other documents*
42 *obtained by or provided to the State Engineer indicate 4 or more*
43 *consecutive years of nonuse of all or any part of a water right which*
44 *is governed by this chapter:*



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(a) The State Engineer shall notify the owner of the water right, as determined in the records of the Office of the State Engineer, by registered or certified mail of the nonuse and that the owner has 1 year after the date of the notice of nonuse in which to use the water right beneficially and to provide proof of such use to the State Engineer or apply for relief pursuant to subsection 3 to avoid forfeiting the water right.

(b) If, after 1 year after the date of the notice of nonuse pursuant to paragraph (a), proof of resumption of beneficial use is not filed in the Office of the State Engineer, the State Engineer shall, unless the State Engineer has granted a request to extend the time necessary to work a forfeiture of the water right, send a final notice to the owner of the water right, as determined in the records of the Office of the State Engineer, by registered or certified mail, that the water right is held for forfeiture. If the owner of the water right, within 30 days after the date of such final notice, fails to file the required proof of resumption of beneficial use or an application for an extension of time to prevent forfeiture, the State Engineer shall declare the right, or the portion of the right not returned to beneficial use, forfeited. The State Engineer shall send notice of the declaration of forfeiture, by registered or certified mail, to the owner of record, as determined in the records of the Office of the State Engineer, of the water right that has been declared forfeited.

(c) If, after receipt of a notice of the declaration of forfeiture pursuant to paragraph (b), the owner of record of the water right fails to appeal the ruling in the manner provided for in NRS 533.450, and within the time provided for therein, the forfeiture becomes final. Upon the forfeiture of the water right, the water reverts to the public and is available for further appropriation, subject to existing rights.

3. The State Engineer may, upon the request of the holder of any right described in subsection 1, extend the time necessary to work a forfeiture under subsection 2 if the request is made before the expiration of the time necessary to work a forfeiture. Except as otherwise provided in subsection 4, the State Engineer may grant, upon request and for good cause shown, any number of extensions, but a single extension must not exceed 1 year. In determining whether to grant or deny a request, the State Engineer shall, among other reasons, consider:

(a) Whether the holder has submitted proof and evidence that the holder is proceeding in good faith and with reasonable diligence to resume use of the water beneficially for the purpose for which the holder's right is acquired or claimed;

(b) The number of years during which the water has not been put to the beneficial use for which the right is acquired or claimed;



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(c) Any economic conditions or natural disasters which made the holder unable to put the water to that use;

(d) Whether the water right is located in a basin within a county under a declaration of drought by the Governor, United States Secretary of Agriculture or the President of the United States;

(e) Whether the holder has demonstrated efforts to conserve water which have resulted in a reduction in water consumption;

(f) Whether the water right is located in a basin that has been designated as a critical management area by the State Engineer pursuant to subsection 7 of NRS 534.110;

(g) The date of priority of the water right as it relates to the potential curtailment of water use in the basin;

(h) The availability of water in the basin, including, without limitation, whether withdrawals of water consistently exceed the perennial yield of the basin; and

(i) Any orders restricting use or appropriation of water in the basin.

➔ The State Engineer shall notify, by registered or certified mail, the owner of the water right, as determined in the records of the Office of the State Engineer, of whether the State Engineer has granted or denied the holder's request for an extension pursuant to this subsection. If the State Engineer grants an extension pursuant to this subsection and, before the expiration of that extension, proof of resumption of beneficial use or another request for an extension is not filed in the Office of the State Engineer, the State Engineer shall send a final notice to the owner of the water right, by registered or certified mail, that the water right will be declared forfeited if the owner of the water right fails to file the required proof of resumption of beneficial use or an application for an extension of time to prevent forfeiture within 30 days after the date of the final notice. If the owner of the water right fails to file the required proof of resumption of beneficial use or an application for an extension of time to prevent forfeiture within 30 days after the date of such final notice, the State Engineer shall declare the water right, or the portion of the right not returned to beneficial use, forfeited.

4. If the State Engineer grants an extension pursuant to subsection 1 in a basin:

(a) Where withdrawals of groundwater consistently exceed the perennial yield of the basin; or

(b) That has been designated as a critical management area by the State Engineer pursuant to subsection 7 of NRS 534.110,

➔ a single extension must not exceed 3 years, but any number of extensions may be granted to the holder of such a right.



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5. The failure to receive a notice pursuant to subsection 2 or 3 does not nullify the forfeiture or extend the time necessary to work the forfeiture of a water right.

6. A right to use underground water whether it is vested or otherwise may be lost by abandonment. If the State Engineer, in investigating a groundwater source, upon which there has been a prior right, for the purpose of acting upon an application to appropriate water from the same source, is of the belief from his or her examination that an abandonment has taken place, the State Engineer shall so state in the ruling approving the application. If, upon notice by registered or certified mail to the owner of record who had the prior right, the owner of record of the prior right fails to appeal the ruling in the manner provided for in NRS 533.450, and within the time provided for therein, the alleged abandonment declaration as set forth by the State Engineer becomes final.

Sec. 7. NRS 361.47111 is hereby amended to read as follows:

361.47111 "Ad valorem taxes" does not include any assessments levied pursuant to NRS 533.190, 533.285 or 534.040 ~~H~~ *or section 4 of this act.*

Sec. 8. The provisions of NRS 354.599 do not apply to any additional expenses of a local government that are related to the provisions of this act.

Sec. 9. This act becomes effective:

1. Upon passage and approval for the purpose of adopting regulations and performing any other administrative tasks that are necessary to carry out the provisions of this act; and

2. On July 1, 2019, for all other purposes.



**MINUTES OF THE MEETING
OF THE
ASSEMBLY COMMITTEE ON NATURAL RESOURCES, AGRICULTURE,
AND MINING**

**Eightieth Session
February 27, 2019**

The Committee on Natural Resources, Agriculture, and Mining was called to order by Chair Heidi Swank at 4 p.m. on Wednesday, February 27, 2019, in Room 3138 of the Legislative Building, 401 South Carson Street, Carson City, Nevada. The meeting was videoconferenced to Room 4401 of the Grant Sawyer State Office Building, 555 East Washington Avenue, Las Vegas, Nevada and to Room 203, Carl Diekhans Center Industrial Tech Bldg., Great Basin College, 1500 College Parkway, Elko, Nevada. Copies of the minutes, including the Agenda ([Exhibit A](#)), the Attendance Roster ([Exhibit B](#)), and other substantive exhibits, are available and on file in the Research Library of the Legislative Counsel Bureau and on the Nevada Legislature's website at www.leg.state.nv.us/App/NELIS/REL/80th2019.

COMMITTEE MEMBERS PRESENT:

Assemblywoman Heidi Swank, Chair
Assemblywoman Shannon Bilbray-Axelrod, Vice Chair
Assemblyman Alex Assefa
Assemblywoman Maggie Carlton
Assemblywoman Lesley E. Cohen
Assemblyman John Ellison
Assemblyman Ozzie Fumo
Assemblywoman Alexis Hansen
Assemblywoman Sarah Peters
Assemblywoman Robin L. Titus
Assemblyman Howard Watts
Assemblyman Jim Wheeler

COMMITTEE MEMBERS ABSENT:

None

GUEST LEGISLATORS PRESENT:

None

Minutes ID: 309



NGM0051

STAFF MEMBERS PRESENT:

Jann Stinnesbeck, Committee Policy Analyst
Allan Amburn, Committee Counsel
Nancy Davis, Committee Secretary
Alejandra Medina, Committee Assistant

OTHERS PRESENT:

Bradley R. Crowell, Director, State Department of Conservation and Natural Resources
Tim Wilson, Acting State Engineer and Administrator, Division of Water Resources, State Department of Conservation and Natural Resources
Micheline Fairbank, Deputy Administrator, Division of Water Resources, State Department of Conservation and Natural Resources
Rupert Steele, Chairman, Confederated Tribes of the Goshute Reservation, Iapah, Utah
Robert McDougal, Commissioner, Board of Commissioners, Pershing County
Norman Harry, Environmental Director, Environmental Protection Department, Washoe Tribe of Nevada and California
Norman Frey, Private Citizen, Fallon, Nevada
Jeff Fontaine, Executive Director, Central Nevada Regional Water Authority and Humboldt River Basin Water Authority
Jake Tibbitts, Natural Resources Manager, Department of Natural Resources, Eureka County
Kyle Roerink, Executive Director, Great Basin Water Network
Doug Busselman, Executive Vice President, Nevada Farm Bureau Federation
Patrick Donnelly, Nevada State Director, Center for Biological Diversity
Tobi Tyler, Executive Committee Member, Toiyabe Chapter, Sierra Club
Laurel Saito, Nevada Water Program Director, The Nature Conservancy
Mark Butler, Executive Council Member, Coalition to Protect America's National Parks
Susan Juetten, Private Citizen, Reno, Nevada
Kenny Bent, Private Citizen, Pahrump, Nevada
John Hiatt, Conservation Chair – Press Liaison, Red Rock Audubon Society
Patti Jesinoski, Private Citizen, Henderson, Nevada
Ed James, General Manager, Carson Water Subconservancy District
Andrew M. Belanger, Director of Public Services, Southern Nevada Water Authority
Adam Sullivan, Deputy Administrator, Division of Water Resources, State Department of Conservation and Natural Resources
David G. Hillis, Jr., Principal Engineer, Turnipseed Engineering, LTD, Carson City, Nevada
Steve Walker, representing Douglas County; and Storey County
Bennie B. Hodges, Manager, Pershing County Water Conservation District
Rebekah Stetson, Private Citizen, Reno, Nevada

Anthony Sampson, Tribal Chairman, Pyramid Lake Paiute Tribe
Will Adler, representing Pyramid Lake Paiute Tribe

Chair Swank:

[Roll was called. Committee rules and protocol were reviewed.] Assembly Bill 62 will be heard on another day, in order to allow enough time for public participation. I will begin with a presentation by the Division of Water Resources, State Department of Conservation and Natural Resources.

Bradley R. Crowell, Director, State Department of Conservation and Natural Resources:

Thank you for holding this hearing today to discuss the important topic of how best to manage Nevada's most precious resource, our water. Before we provide some background for the Committee on Nevada's water statutes and the manner in which those statutes are implemented, I would like to introduce the leadership of our Division of Water Resources and then take a moment to offer the big picture of the challenges Nevada faces today in managing our limited water supply. I am joined by Mr. Tim Wilson, Acting State Engineer and Administrator of the Division of Water Resources as well as the two deputy administrators, Adam Sullivan and Micheline Fairbank. We are happy to answer any and all questions you have today.

To help set the stage for this hearing, I would like to highlight three indisputable facts: One, Nevada is the driest state in the nation. Two, Nevada has been one of the fastest growing states in the nation for the past two decades and is continuing to grow and diversify its economy. Three, climate change is real. The impacts are being felt in Nevada and it is our responsibility to take the impacts into account in managing Nevada's water resources. These three facts demand we take a proactive approach to responsibly manage our water in every corner of Nevada. It is imperative that we recognize these fundamental truths and exercise our collective responsibilities to protect the best interests of all Nevadans.

There is a fourth potential reality lurking just around the corner, which is the very real and growing possibility that the federal government will enact mandatory curtailment of our water supply from the Colorado River. If this reality comes to pass, our water challenges in Nevada will become magnified exponentially.

We are here today not to ignore these challenges, but to recognize them and to take action. Taking action will require both courage and shared sacrifice. There can be no winners and losers when there is a collective understanding of the challenges we face and the willingness to ensure a sustainable water future for all Nevadans. I am optimistic that we can and will rise to this challenge.

With regard to the bills we will discuss today, these are our neutral and good-faith attempts to address complex issues based on years of experience and expertise within the Office of the State Engineer which is within the Division of Water Resources. We have not cornered the market on the best ideas, and we welcome the informed views and suggestions of this

Committee and the many stakeholders who are here today. One thing is without question, the status quo is not an option. We look forward to your questions and discussing the legislation that is before us today.

Tim Wilson, Acting State Engineer and Administrator, Division of Water Resources, State Department of Conservation and Natural Resources:

I would like to provide an overview of Nevada water law, our agency, and some of our water issues. Most people know that our mission statement is to conserve, protect, manage and enhance the state's water resources for Nevada's citizens through the appropriation and reallocation of the public waters [page 2, ([Exhibit C](#))].

What we do is quite a bit more than that. Page 3 shows a short list of some of the many activities we perform—many are very important, such as well drilling, dam safety, innovative solutions like aquifer storage and recovery, and many others.

In recent years, the Division has also made a concerted effort to use advanced technology to improve our services to the public. We are utilizing modeling techniques in processing power, in cooperation with other agencies and the University of Nevada to better understand basin-scale hydrology. We are utilizing unmanned aerial vehicles for dam safety inspections and for mapping to complement, but not replace, boots on the ground for inspections. We use geographical information systems to improve mapping, public accessibility, and historic and current data. We have some really good Truckee-Carson Irrigation District mapping, Smith Valley and Mason Valley interactive monthly pumpage reports, and historic hydrologic data that was formerly only in paper records and is now all on interactive databases.

Page 5 shows a few quick facts about Nevada. We sometimes argue with New Mexico over who is the driest, but we think we still hold the moniker as the driest in the nation, averaging approximately 11 inches of precipitation annually. When I started with the state of Nevada, it does not seem very long ago but it was 1995, there were about 1.5 million people in this state. Our population is now over 3 million. I point that out because the amount of water we have is the same, obviously, about 4 million to 5 million acre-feet of surface water and about 2 million acre-feet of groundwater. We manage our water resources that are available through 14 hydrographic regions divided into 256 groundwater basins. We group those basins and assign them to water resource specialists. Any time you contact our office, if you tell us what groundwater basin you are in, you will be directed to a water resource specialist who is assigned to that basin and can personally assist you.

Page 6 shows who uses our water. Most of it is irrigation. Irrigation for surface water takes up about 64.9 percent. The second largest user of surface water is recreation and wildlife at almost 19 percent; this amount represents instream flow rights, recreational rights, and evaporation off of terminal lakes. Municipal use is third at about 16 percent; this includes Las Vegas' use of the Colorado River water and the Reno and Sparks use of the Truckee River water.

Page 7 shows groundwater use; irrigation use is the dominant use at about 67 percent, mining is at about 10 percent, and municipal use at about 9 percent.

Our water rights are committed through permits and vested claims. Page 8 is a chart comparing groundwater pumpage to the water that is actually committed for each manner of use in the state. If you were to add up both columns, the actual usage is about 50 percent of the committed rights for all manners of use.

Page 9 ([Exhibit C](#)) is a simple illustration showing that on a statewide scale, even though we use less than 50 percent of our total committed supply, we do exceed our committed resources in many localized areas. This map shows the ratio of committed groundwater resources—that is the addition of permits, certificates, claims, and domestic wells versus the amount of water we estimate is available through perennial yield. We estimate about 106 basins are over our estimated perennial yield. I would also like to point out that there are about 54 of the 256 basins for which commitments are more than double their perennial yield. These are some very serious issues.

Page 10 gives you an even better picture where actual groundwater pumpage exceeds the perennial yield on about 51 of our 256 basins. These are the basins that are most likely to be experiencing significant water level drawdown and conflict amongst users. In some cases, we have worked with local management very actively to prevent harmful effects: notably, Las Vegas Valley, Truckee Meadows area, and Diamond Valley.

I would like to discuss Nevada water law. We have three basic tenets of Nevada water law: the prior appropriation doctrine, which means if you are first in time—you are the senior user—you get your water first. Beneficial use is an expectation that you place your water to beneficial use, that is the limit of the right to use of water. Related to the beneficial use is that if you are not using your water, you can lose it to cancellation, abandonment, or forfeiture.

Page 12 describes a very important concept that comes up that some people do not realize. It is by statute that the public owns the water in the state of Nevada, above and below the ground. What people have through the statutory permitting process is the right to the use of the water. That is considered a type of property right. It is appurtenance to the property, it can pass from seller to buyer, it can be sold and leased, but it is still a permit.

Page 14 makes it look like it is very easy to obtain a permit. It can be a very complex process to file an application. If you meet all of those statutory criteria, you can be issued a water rights permit. As part of the permit terms, you will be required to do a proof of completion of work and proof of beneficial use. If you do so, then you will be allowed to have a water rights certificate, which is the last step in the process. If you were using your water prior to the enactment of Nevada water law, you can make a vested claim to water as well. We have an entire section that does the adjudication process to make a determination on those claims—prior to 1905 for surface water, 1913 for artesian wells, and 1939 for groundwater.

There is not a lot we can do when someone files an application. We are either going to approve it, approve it with conditions, or we are going to deny it [page 15]. Many times, in addition to the regular permit terms, we will condition permits on monitoring. We have conditioned permits on mitigation, pumpage reporting, the depth of the well as far as limitation, and reducing the rate of flow and volume that were requested in the application. Or we can deny the application. Any of our decisions in that regard can be appealed to district court.

Page 16 ([Exhibit C](#)) shows four basic conditions of approval. The ones we will be looking at today are part of *Nevada Revised Statutes* (NRS) 533.370, which deals with conflicting with existing rights. We also consider whether the use of the water will prove detrimental to public interest, whether there will be a conflict with existing domestic wells, and whether there is unappropriated water available.

We also consider legislative directives, which are in NRS 533.024. "Conjunctive use" was recently added. We will discuss Assembly Bill 51 later, which attempts to address this part of the legislative declaration. "Conjunctive use" means managing the surface water and groundwater as a single source and recognizing the interaction between the two. Previously, under Nevada water law, we have treated surface water and groundwater separately, and we will talk about that when we discuss our bills.

We have another bill that is not going to be heard today. It really helps add to the antispeculation doctrines we have in statute. If you apply for a permit, you cannot just hold the spot, you have to actually diligently apply yourself to place your water to beneficial use—construct the works necessary, drill your well, construct your ditches, and actually use the water beneficially and in accordance with the terms of your permit. We have a lot of antispeculation doctrines to keep people from grabbing a spot. If they do not intend to use the water, they need to move aside and let the next person in line have that water.

Page 19 shows that we have a tenet that you can lose a water right permit through cancellation, forfeiture for five years of nonuse of certificated groundwater, and also abandonment.

We have many significant water management challenges. In 2017, the Legislature directed the Division to conjunctively manage all waters, regardless of their source. Since the water laws traditionally treated surface water and groundwater as separate sources, there is a lot of room for statutory changes to allow our office to fulfill this mandate. Concentrated areas of domestic wells are a continuing concern in dealing with conflicts, along with overappropriated basins and litigation are our largest challenges.

To tie this all together, the Division would like to have additional statutory authority. We have three bills this session and I look forward to explaining the bills and addressing any misconceptions about the intent of our bills that may be out there. We are all in this together and I hope we can all come together and work toward solutions. As Mr. Crowell mentioned, we may not have all the ideas, but we are willing to listen to everyone's ideas and bring

everyone together to work toward bringing some statutory structure and correcting some mistakes from our past, as you can see by the overappropriated basins.

Chair Swank:

Thank you for the presentation. We will now move to the bill hearings. I will open the hearing on Assembly Bill 30.

**Assembly Bill 30: Revises provisions governing the appropriation of water.
(BDR 48-214)**

**Tim Wilson, Acting State Engineer and Administrator, Division of Water Resources,
State Department of Conservation and Natural Resources:**

I am here today to present testimony in support of Assembly Bill 30. As I enter my testimony, it is imperative to stress that this—and every bill the Division of Water Resources, State Department of Conservation and Natural Resources has offered this session—is the product of extensive experience managing Nevada’s limited water resources (Exhibit D). To adapt to today’s water resource challenges, the Division of Water Resources needs opportunities for flexibility to best manage Nevada’s limited water resources and to fulfill its legal duties and responsibilities. As Nevada’s population grows, there will be an ever-increasing demand on our water resources. These demands will inevitably create conflicts, and therefore the responsibility to manage those conflicts is imperative.

Nevada’s water resources belong to all Nevadans, and it is the responsibility of the State Engineer through the Division of Water Resources to manage our shared water resources with consistency, in accordance with the law, and using the best available science. And to preemptively dispel any rumors that I have heard and to put to rest any perception that this, or any Division bill, is intended to, or is for the purpose of facilitating large water development projects, let me be clear: This is absolutely untrue. These bills are the Division’s best effort to address real challenges and issues the Division grapples with regularly in all parts of the state. The Division of Water Resources has heard an abundance of criticism of A.B. 30, much of which we believe misinterprets the bill, and we are open to an ongoing dialogue as to how to best achieve the purpose of this bill.

The intent of this bill is to bring needed consistency and clarity to Nevada’s water law. Assembly Bill 30 seeks to harmonize existing provisions of Nevada’s water law under *Nevada Revised Statutes* (NRS) Chapters 533 and 534. Specifically, the mandate within NRS 533.370 subsection 2 that applications conflicting with existing rights be denied in contrast with the express authority under NRS 533.024 subsection 1, paragraph (b) to mitigate conflicts with domestic wells and the additional express authorities under NRS 534.110 subsection 4, permitting the use of monitoring, management and mitigation plans (3M plans) as a condition on approval of water rights, and the allowance for the reasonable lowering of the groundwater table. These provisions currently provide conflicting guidance to the Division of Water Resources regarding the issuance of water rights and the ability to resolve potential conflicts among water rights holders. Assembly Bill 30 is intended to help resolve this discrepancy by providing the Division clear legislative direction to help avoid or

eliminate a potential conflict when deciding whether or not to grant a water rights application.

Nevada water law anticipates that any water appropriation may result in some degree of foreseen or unforeseen conflict or impact to existing water rights. And, while the terms “mitigation” and “3M plans” have been somewhat villainized due to conflict over a particular groundwater development project, the fact of the matter is that current law authorizes the State Engineer to resolve a conflict based on the principle that any impacted senior water rights holders are made whole and the overreaching public interest remains balanced.

This bill merely seeks to provide needed clarity and consistency in Nevada water law. The commitment of the Division of Water Resources is that harmonization of the law will be applied in a balanced, responsible manner through consultation with and contribution by affected water rights holders and domestic well owners, and based on the most current and best available hydrologic and engineering data.

In offering additional context within Nevada water law as to why this bill is both permissible and necessary, Nevada’s water resources are owned by all Nevadans, as enshrined in state law under NRS 533.025 since 1913. Whereas, a water right does not confer ownership, but merely the right to the use of water in a specified quantity and manner as allowed for under the terms of a water rights permit. For the purpose of this bill and today’s testimony, there are two important principles to keep in mind regarding the right to use water: Every new water rights permit is conditioned on and subject to existing water rights. If a new junior right is determined to impair a senior right in a manner that cannot be resolved, the junior right holder must cede to the senior right holder; any water right in Nevada, whether it is a prestatutory vested claim, a decreed right, or a statutory appropriation, carries with it the requirement that all water rights must be put to beneficial use. A water rights holder neither holds ownership nor title to the water itself, but only the particular beneficial use as approved according to the underlying water rights.

This is important because Nevada water law accounts for the fact that certain water rights appropriations may result in an adverse impact to existing rights. The Nevada Division of Water Resources has applied this statutory provision by seeking to minimize, avoid, or eliminate any existing or reasonably foreseeable impacts on all impacted water users. This basic principle is the foundation for managing Nevada’s limited water resources without undermining the responsible development of water to provide for the continued economic growth of our state.

Before I walk through the specific provisions of A.B. 30, I want to address certain perceptions and concerns regarding the Division’s water management practices. First, the Division routinely conducts, or requires holders of water rights to conduct, water monitoring to better understand local groundwater conditions and the effects of a particular project on the sustainability of groundwater development in a particular basin or region. Currently, the Division of Water Resources has approximately 90 groundwater monitoring plans in place as a condition of existing water right permits within one or more of Nevada’s 256 groundwater

basins. Monitoring is necessary because we cannot predict with absolute accuracy what the impacts of pumping will be, even utilizing the best available science. Accurate monitoring data improves the science, which in turn leads to better management. Second, 3M plans are not the panacea to achieving balanced water development in Nevada, and we recognize that. In fact, very few water rights permits have been granted with a requirement for a 3M plan, only one of which was developed by the applicant, accepted by the State Engineer, and implemented. In short, 3M plans may be applicable or useful in the future, and may be an appropriate proposal for the elimination or avoidance of a conflict, but 3M plans should not and will not be used to push through any questionable water development projects. With that, please allow me to provide a summary of A.B. 30.

Section 1 proposes to add a new section to NRS Chapter 533. This new statutory section would harmonize and bring consistency to Nevada's water statutes by clearly identifying the conditions under which the State Engineer may consider a proposal to avoid or eliminate a conflict. A proposal may only be considered if water is available for appropriation.

Section 1, subsection 1, paragraph (a) grants the State Engineer discretion to consider a proposal that would avoid or eliminate a conflict, and sets forth the criteria the State Engineer may consider within such a proposal. This includes an agreement between the water right applicant and the owner of an existing water right or domestic well, if there is concern that a conflict may manifest. An example could include the deepening of an existing well where the anticipated reasonable lowering of the groundwater level would interfere with the well's use. These types of agreements are only limited by the needs of the individual water rights holders.

Section 1, subsection 1, paragraph (b) allows for the development of a 3M plan. These plans should be viewed in their proper light as contingency plans, not as forgone conclusions to address conflicts that cannot be avoided. Depending on the known and unknown conditions of a groundwater aquifer and the inherent degree of uncertain response by a particular groundwater project, a 3M plan may be the most appropriate option. The Division of Water Resources will continue to use its technical expertise to require stringent standards, primarily focused on the first two "Ms" of monitoring and proactive project management, to be the mechanism to avoid conflicts. But because the exact effects of pumping are never certain, and environmental conditions will always be variable, a comprehensive and in-depth analysis of the possibilities with flexible responses aimed to avoid or eliminate conflicts is an important tool needed to facilitate the management of Nevada's water resources. Therefore, responsible management of our water resources requires this type of upfront, proactive management rather than after-the-fact conflict resolution.

The third option outlined in section 1, subsection 1, paragraph (c) is, "Any other plan to avoid or eliminate the conflict or replenish the source of supply impacted or depleted by the conflict." Again, providing the Division of Water Resources flexibility to consider alternative proposals and solutions that may be "out of the box" or creative alternatives is imperative as water conflicts become more prevalent, particularly when these solutions are proposed and agreed to by the impacted users themselves, which is always the Division's

preferred scenario. The concept of mitigation should not be universally maligned, and the Division welcomes any and all creative solutions to best manage our shared water resources in a manner consistent with the fundamental tenets of Nevada's water law.

Section 1, subsection 2 expressly authorizes the State Engineer to grant a water rights application if the proposal is found to avoid or eliminate the conflict, and to condition the appropriation on the applicant's performance of the measures or actions in the proposal determined to be necessary to avoid and eliminate the conflict.

The remainder of Assembly Bill 30, sections 2 through 10, contains conforming changes.

The Division of Water Resources recognizes and appreciates extensive feedback to A.B. 30; however, resolving the existing statutory conflict is imperative. Furthermore, despite many misplaced concerns regarding 3M plans, particularly the concept of mitigation, this effort is the Division's attempt to implement the direction of the Legislature to utilize tools such as 3M plans as a condition to appropriations. The Division believes there is, at some level, consensus that proposals to avoid or eliminate conflicts is good water policy in instances where water is available to appropriate. The Division is open to, and welcomes, alternative ideas as to how to address these issues. A constructive dialogue should be a priority for every stakeholder because the status quo is not, in the end, serving the interest of the public who owns Nevada's water. At this time, I am happy to take any questions from the members of the Committee.

Assemblywoman Cohen:

Looking at section 1, subsection 1, paragraph (c), can you give an example of what one of those agreements might look like?

Tim Wilson:

We have one approved 3M plan within our office. It is quite extensive. It lays out all of the monitoring requirements that will be necessary, it lays out pumping management, and it follows up with mitigation measures that could be used if conflicts arise. It is not a simple plan, it is very complex and it took a lot of effort to bring everyone together as much as possible to come to some type of consensus. It is difficult to get a consensus amongst everyone, but we thought we had the best plan we possibly could to set the applicant up front to have to be responsible for mitigation as a final contingency. That is the significant point to the 3M plan. When you have an applicant that only has to do monitoring and management, we can tell them to stop using the water. If they do not have a specific up-front responsibility for mitigation, then they are not on the hook for mitigation. We do not want them to walk away, we want them to be up front and responsible.

Assemblywoman Cohen:

Are you already able to develop a 3M plan?

Tim Wilson:

That is correct. In statute, we have a mention of monitoring, management, and mitigation plans and a requirement to consult with local counties as part of issuing those plans, and we have conditioned permits on the 3M plan. We have lesser versions of 3M plans also. As I mentioned, we have a significant number of conditioned permits on monitoring and management of pumping.

Bradley R. Crowell, Director, State Department of Conservation and Natural Resources:

The issue with the authorization of the 3M plans is that we have authorization to do 3M plans in instances where water is available. The 3M plan would be to mitigate a conflict, but there is also statute that says, when there is a conflict, you have to deny the application. Those two provisions are inconsistent. If we take one route, we get sued by people who think we should have taken the other route. If we take the "no" route, we get sued by people who think we should take the mitigation route. We are stuck in a lose-lose situation from a management perspective.

Chair Swank:

Will you please repeat the two pieces that conflict for me?

Bradley Crowell:

I would like to have Ms. Fairbank repeat that in a more articulate way.

Micheline Fairbank, Deputy Administrator, Division of Water Resources, State Department of Conservation and Natural Resources:

We have two statutory provisions under NRS 533.353: We have an allowance in which our office is authorized to approve an application to appropriate water, contingent on a monitoring, management, and mitigation plan. Yet, under NRS 533.370 subsection 2, as was spoken to earlier, we also have the requirement that if there is water available to appropriate and/or whether that new appropriation would conflict with existing rights. Inherent in the 3M plan is an anticipation of conflict, and we have a requirement to deny that application; on the other hand, we are guided by the Legislature to consider these plans in determining whether to appropriate water.

Chair Swank:

Would this bill, should it pass, solve that conflict currently in Nevada water law?

Micheline Fairbank:

Yes, this bill would resolve that conflict or at least bring harmonization to these different provisions with the state. We also have provisions that allow for our office to mitigate conflicts with domestic wells under certain conditions and to allow for reasonable lowering of the groundwater table in NRS Chapter 534. Again, in each of those is the inherent idea that there is conflict. We have provisions that allow us to mitigate conflict. We are trying to provide that harmonization so that we have a clear direction as to when and under what conditions that we proceed with applications.

Chair Swank:

Is it fair to say that there is not a lot in this bill that is new, and this bill is mostly a harmonization of things that we already have in statute?

Micheline Fairbank:

Yes, that is correct.

Assemblyman Watts:

Do you see the 3M plan as applying to mitigating the public interests, or in the case of interbasin groundwater transfers, environmental soundness? Or do you see this only applying to conflicts with water rights holders or interest in domestic wells?

Micheline Fairbank:

The idea behind 3M plans is not necessarily to mitigate conflicts to the public interest. Certainly, the idea of the public interest is out there in terms of the balancing of development of water and balancing that as to what those interests are with that particular project. To the extent that it talks about the interbasin transfers, within the statute we also have to have environmental soundness when it comes to interbasin transfers. It is a very in-depth and complex analysis that has to take place based upon each individual application and project. That is one of the challenges; there is not a universal one-size-fits-all solution. We have to look at each project, each application, the hydrographic basin, and the conditions within that basin on an individualized basis to provide the balance. Our office has denied applications on the basis that it is not in the public interest due to multiple considerations. We take great care, and we try to strive to do that balancing within the confines of the statute.

Assemblyman Watts:

Would a 3M plan apply to monitoring, management, and mitigation in those areas, or is it geared toward monitoring, managing, and mitigating conflict between water rights, only?

Bradley Crowell:

What we are seeking in this bill is the expressed authorization to build regulations governing 3M plans. Part of that process of building regulations is the stakeholder or public process. With that interaction, we hope to strike a balance between various interests, including the environmental concerns and the public interest. Instead of being overly prescriptive in the legislation, or having the State Engineer do it without the utmost transparency, we are asking for direction to undertake the regulatory process with stakeholders to strike that balance.

Assemblyman Watts:

I know that sometimes we have legislation that asks for regulations to be promulgated, so I appreciate the clarification of the intent. I want to make clear where my question was coming from and my concern. If we were to set the foundation in legislation, I am concerned that we can have a situation where conflict between water rights is being mitigated, but that the mitigation measures—which I know this legislative framework leaves wide open—could potentially result in harm to the public interest or to environmental soundness. I am concerned if this is focused on mitigating conflicts for water rights, we could end up with

things like aquifer decline, groundwater mining, or other things that have negative impacts in those other areas that would not be considered under the policy framework.

Bradley Crowell:

There are some environmental concerns and public interest determinations that cannot be either fully or partially mitigated.

Assemblywoman Titus:

I have an observation: using "harmony" and "water law" in the same sentence is a little bit of an oxymoron. In your presentation prior to the bill, you gave us a review on water law in the state. You mentioned that one of your tenets—one of the things you do not want to do—is upend decades of decisions. Then, looking at A.B. 30, section 1, begins, "If there is water available for appropriation in the proposed source of supply, before rejecting an application because the proposed use or change set forth in an application conflicts with existing rights." It seems that very first line upends the very tenet of our Nevada water law since its inception—the first in time is the first in rights.

Tim Wilson:

We feel that instead of an outright rejection of the application, there should be an opportunity to bring the parties together to resolve the conflict. We might even have an ability to avoid the conflict through management of the project. That management could be staged development, altering points of diversion, or reducing pumpage from certain wells. We think that in order to maximize our available water resources, and again, we are talking about when water is available for appropriation, that we need to have the opportunity to try to avoid conflict through a 3M plan and not outright reject an application.

Assemblywoman Titus:

Frankly, you did not answer my question. What I asked was this: Because you want to take permittees to arbitration or discussion, you are saying that the person with the senior right—which is the one this protects—you are forcing him into a negotiation or a conflict. By nature of doing that, it takes away his right to say, "I am the senior water rights holder, and this interferes with me." Is that not what this is trying to change?

Tim Wilson:

I think Ms. Fairbank might be able to assist me.

Micheline Fairbank:

I think the direct answer to your question is, the right to the use of water is merely to the use. It is not the actual ownership to the particles of the water; it is not even necessarily the place of diversion or the source of the water, so long as the senior water rights holder is made whole in some manner. Again, there are a lot of variables and different types of scenarios. That is why it is difficult because what might be an appropriate resolution to avoid or eliminate the conflict may be through the reasonable lowering of the groundwater table if someone has a shallow well. That well is no longer going to be functional, or the draw may not be sufficient based upon the lowering of the groundwater; therefore, that alternate plan

could be simply something as simple as deepening the well. You are still providing access and respecting the prior appropriation because you are ensuring that the senior water rights holder is being made whole in an appropriate manner which satisfies their manner of use and their beneficial use. You are also balancing the development of the available water without allowing a particular water rights holder to hold hostage available water that could be used for the development and economic growth of a particular area where water is available. It is a balancing of interest. There is not an easy dialogue because you must look at each one on a case-by-case basis. Overall, that fundamental tenet in the Nevada water law is that you have the right to the use of the water.

Assemblywoman Titus:

Would you agree that the water is a property right, a right of ownership?

Micheline Fairbank:

You have a right to the use of the water, but it does not give you the ownership over the particles of water because that belongs to the public.

Assemblywoman Bilbray-Axelrod:

You used the term "reasonable groundwater levels." How is "reasonable" defined?

Tim Wilson:

In NRS 534.110 subsection 4, all groundwater appropriations allow for reasonable lowering of the water table. There is no definition of "reasonable"; it is left to the State Engineer's discretion.

Assemblywoman Bilbray-Axelrod:

Did any outside agencies, such as the Southern Nevada Water Authority (SNWA), offer any language or advice or supply any help in drafting these bills?

Tim Wilson:

No, absolutely not. We did not meet with SNWA when we were drafting this legislation. These are bills that we feel are necessary to address unclear statutory language, in particular with this bill, to eliminate what we feel is a conflict in the statute. Our next bill is something that we feel goes straight to the directive of the Legislature on conjunctive management.

Assemblywoman Bilbray-Axelrod:

To be clear, no other agency has asked you to bring this forward?

Bradley Crowell:

The response to your question is an emphatic "no," be it the entity that you mentioned or any other stakeholder.

Chair Swank:

I would like Mr. Amburn to talk a little bit about both of these bills. We have received a lot of comments about a lack of due process. We have had our staff look at that, and I would like him to talk about those issues for both this bill and the next one.

Allan Amburn, Committee Counsel:

When we were drafting these bills, our office looked into whether these bills violate due process concerns or issues. Essentially, our conclusion was that there were no due process violations or issues coming as a result of these bills. There are procedures in place, either by regulatory action or in statute, that allow someone to be heard if there is an issue. We are also talking about a situation in which there is the taking of water, there is adequate compensation provided with replacement of water, or in Assembly Bill 51, financial compensation.

Chair Swank:

We have a lot of people who are sending in comments to that effect. I think it is important to have that cleared up.

Assemblywoman Hansen:

Along the lines of a 3M plan, if a senior water rights holder is injured, what does the remedy look like?

Tim Wilson:

We look to developing these plans when they are needed. It has been rare that we try to utilize the 3M plans. For the mitigation process, we need to know what source might be impacted. Is it a nearby well that is not drilled very deep and could easily be deepened? Is it an issue where it could be a conflict with a spring? Springs are more problematic, you cannot replace a spring if it has other intrinsic values to it. There are instances, one in particular, in which we have a spring that is basically a hole someone dug in a shallow water table. Someone put a piece of casing in it and called it a spring. It is very small and maybe produces one or two gallons per minute. It is not very useful, but there is a certificated water right on it. It could easily be mitigated and that water rights holder could be made whole with an even better water right that flows year round. In this particular case, there is nothing dependent on the spring. There is no obvious evidence of any flora or fauna or dependent species—considering that it was most likely a hand-dug hole and was not originally a spring. We think something like that can be mitigated with a replacement well, for instance.

Bradley Crowell:

Every water system is different, so every solution to address an impact or conflict is going to be different. The idea is that the burden for keeping that senior water rights holder whole is not on them: so if there is a deepening of a well, it is not at their expense; it is at the new water right applicant's expense. To the greatest degree possible, it is done with the consent and agreement of the senior water rights holder.

Micheline Fairbank:

To elaborate a little more, when you look at A.B. 30, section 1, subsection 1, paragraph (b), the emphasis is on "monitoring." The idea is that if you have a project that is going to be affecting groundwater, you are going to be monitoring the effects of that project so that you can get in front of potential impacts to those senior water rights holders. If you see that the monitoring is demonstrating that there may be an effect or that an adverse impact could occur, that is when "management" steps in. Management is that you manage that project either by reducing pumping or moving the location of pumping—or any other variables—to avoid getting to "mitigation." Again, mitigation has been characterized as the last resort, or the contingency plan, and that is if all the other things occur in an unanticipated way, then you have some form of recourse. The idea is that mitigation is the last resort, and monitoring and management should be the focal point that provides protection for those senior water rights holders.

Assemblywoman Hansen:

Is it agreed that because of the state we are in, if we implement this, there could be some severe hardships to current senior water rights holders? My concern is, it is not a matter of just deepening a well, it could have some severe impact to their ability to maintain their operation. What would the remedy be for them if this bill were to pass?

Tim Wilson:

Remember, we are talking about cases in which water is available. If there is obviously not enough water and you are going to impact the senior water rights holder, we are not going to approve the application. We would never get past the denial stage. It is in cases in which there is great uncertainty whether there will be any impact, and we would like to have the ability to try to avoid that impact through monitoring and management. Even then, if we see that it is not working, we can order the pumpage to stop. We only want mitigation to hold the applicant responsible just in case.

Assemblywoman Peters:

With regard to environmental protection, we really do not talk about water quality and ecosystem management in water law. Many of those things are rather new to water law in the state of Nevada. I have concerns with that not being explicitly within the language of this mitigation, that we have to consider those issues. I think Assemblyman Watts touched on that. I also have a dilemma with the idea of the authority for conflict determination. We have an opinion from our legal counsel that due process is not impacted by this, but I just do not understand how the process of determining that a conflict is avoided takes into account the complexities of water in Nevada. We have water use, water availability, history, and culture of the water use for the impacted user. We have primary water rights and senior water rights—all of those things that have play in the idea of a conflict. Just coming up with an engineered plan will not necessarily mitigate those conflicts, those emotionally attached conflicts. How do you envision this mitigation, or even management, to do that in addition to the general management of water and beneficial use in this state?

Bradley Crowell:

With regard to appropriately taking into account environmental concerns and public interest, which in many instances is the same, I would have no problem making that more explicit in this bill because our intention is to take into account all those considerations. What we are asking for here, as I mentioned to Assemblyman Watts, is to get the green light from the Legislature to undertake a process in which we can talk to stakeholders on all sides of an issue and hopefully come to an agreed upon resolution about what degree of environmental concern should be taken into account, whether it can be mitigated, on all of those issues. I know there has been concern that past decisions have not adequately taken that into account, but in putting together new regulations with transparent data and robust stakeholder participation, I am hoping we can get to that place. In terms of conflict, I will let Ms. Fairbank describe how they identify those issues.

Micheline Fairbank:

Again, when we are talking about trying to resolve the conflict, there is no easy answer. We all know that is why water law is not the most fun topic. When we are talking about trying to resolve all of these different variable conflicts—that is part of the stakeholder general process. That is what we strive to encourage and find manners and mechanisms to utilize that stakeholder input and process to guide and direct decisions that our office is making. We do engage with the stakeholders to try to come up with different types of plans to the extent possible, but these plans also have to be guided by science and by our existing law. To the extent that there are different interests that are not necessarily represented in the four corners of our existing water law, that is what our office is confined by. The opportunity to be able to have more options and more authority to engage in these different types of issues and create solutions is what is going to resolve those conflicts and move the process forward.

Assemblyman Wheeler:

As I read this, the end of section 1, subsection 1, says that "the State Engineer may instead consider a proposal to avoid or eliminate the conflict, which may include, without limitation:" and then paragraph (c) states, "Any other plan to avoid or eliminate the conflict." Given the answers we have heard here about "existing law" and "in the appropriate manner," what I am taking away from this bill is that the State Engineer will have unlimited power to give water and take water away from someone regardless of right. I am not saying that you would do that, I am saying that this particular bill gives you that power. Then we have to wait for the appropriate manner and existing law that might be usurped by this.

Tim Wilson:

I respectfully disagree that this gives me the power to take away water rights. This section goes to NRS 533.370, which currently says that if there is any type of conflict with an existing right, the State Engineer shall deny. This conflicts with other sections that allow for a 3M plan. What we are looking at here is an applicant who comes forward and meets all of the statutory criteria and there is water available at the source, which is the first criteria for approval. If it is a possibility, should they have the ability to avoid a conflict or mitigate a conflict? Should they have that ability or should we deny their water right outright? Those are the only two options I have. I have to do one or the other. I cannot take away the

existing water user. As I said, the whole point of this process is to keep the existing user whole, to keep the senior water rights holder protected. We have to protect senior water rights, which is a basic tenet of our water law—prior appropriation, first in time, first in rights. We feel that this gives us additional abilities to protect those existing water users. They may not get their water out of a one hundred foot well, maybe they need a two hundred foot well, but it is the applicant that drills the new well.

Assemblyman Wheeler:

Again, I understand and agree with what you are saying, to a point. That is not what the bill says. I think maybe some different language needs to be used. I believe that this law would usurp the statute you stated because this would be the newer law giving you the right, or your successor twenty years from now, the right to make up his own mind. It says right in the bill, any other plan "to avoid or eliminate the conflict."

Allan Amburn:

Looking at section 1, subsection 1, paragraph (c), it is essentially a catchall provision and it is very broad, as you have pointed out. The goal of that is, we are dealing with a situation where there is not an agreement among the parties as in paragraph (a)—it is not a 3M plan as in paragraph (b), it is something else. It essentially provides flexibility. When it comes to someone who has an issue with the plan being proposed, based on section 2, he can still protest that: He can still protest whether the application is approved or denied. There are other procedures that he can also appeal this plan with.

Assemblyman Ellison:

Will this impact wildlife and the environment? Right now we are looking at some of the endangered species in the desert. The Bureau of Land Management (BLM) within the U.S. Department of the Interior, estimates 305 springs and 112 miles of streams, 8,000 acres of wetlands and 191,000 acres of shrub habitat. I am asking if this bill passes, with the BLM study, you could endanger the wild horses, sage grouse, elk, big horn sheep, tortoises, not counting 20 threatened and endangered species.

Tim Wilson:

In short, I would say no.

Assemblyman Ellison:

Have you met with the Department of Wildlife?

Tim Wilson:

I have not met with the Department of Wildlife regarding Assembly Bill 30. However, this is for instances in which there is water available at the source. We are looking at potential impact that can be mitigated. If there is an impact that cannot be mitigated, the application does not meet our threshold for approval and would be denied. This cannot be used in any way to dry up springs. Those applications would be denied. This is for very specific instances where we might be able to come to an agreement where we think monitoring and management can avoid a conflict and have mitigation as a fail-safe. That is our goal.

Assemblyman Ellison:

By the time the springs start to dry up, it will then be a little too late.

Tim Wilson:

Monitoring is key. Having an aggressive monitoring plan in place will give us early warning of any potential impact. If we see, for instance, a propagation of drawdown headed toward a sensitive area that we are monitoring, we will be able to act before that impact takes place. That is the idea behind a 3M plan.

Assemblyman Ellison:

Is A.B. 30 necessary? Most of the new language attempts to codify the Supreme Court's decision in the *Eureka Cnty v. State Engineer*, 359 P.3d 1114 (2015).

Bradley Crowell:

It is necessary because without it, we are left with two conflicting directions under statute that, no matter which one we follow, we end up in court over our decision. I personally do not think that we should be abdicating the decisions on water policy to the courts. I think we should be clarifying the law so it could be implemented appropriately. I think it can be done, but as the law stands now, there is the inevitability of litigation, which is not the scenario that any of us want.

Assemblywoman Carlton:

What has been the cost of litigation that has gone on? Will this solve any of that so things are clearer so that no matter which way you rule, you will not end up in litigation?

Micheline Fairbank:

In terms of the costs, we pay an allocation for representation by the Office of the Attorney General. This last biennium, that cost allocation has gone up substantially based upon the hours that have been spent by the attorneys representing our office. I can say, having once been the attorney representing the Division of Water Resources, that the propensity and frequency of litigation is increasing. Is this bill an absolute bar to future litigation? The answer to that is no. What this bill does do is create a consistency and it provides resolution of conflicts within the statute that has that purpose and to at least remove that particular dispute from being litigated. This allows us the authority, explicitly, that we can consider these different alternatives where there is water available to appropriate. In the scenario that was addressed earlier, if we deny an application even though there is water available to appropriate, then we are challenged on the basis that we could have allowed mitigation or an alternative plan to avoid or eliminate the conflict. On the other hand, if we approve an application, then we are again subject to litigation because we did not deny it because it conflicts with existing rights. At least this bill takes that particular issue and claim out of the arena and we can move forward on other things. I do not foresee, in the near future, litigation going down extensively, but we have to start somewhere.

Assemblywoman Carlton:

That is only if you decide there is water available. If the decision is that there is no water available, that applicant is denied?

Micheline Fairbank:

That is correct.

Chair Swank:

With that, I will give everyone the lay of the land for testimony. Just to remind everyone that we may not always agree, but we can always be civil. I will allow 30 minutes for support, 30 minutes for opposition, and 30 minutes for neutral. If we do not use all of the 30 minutes for support, then we still only have 30 minutes for opposition. Each person will get two minutes. Also, if we have any currently elected officials who have come in today, please come forward first. We are going to start in Las Vegas. Is anyone in Las Vegas in support? Seeing no one, is there anyone in Carson City who would like to speak in support? Seeing no one, is there anyone in Elko who would like to speak in support? Seeing no one, I will go to opposition.

Rupert Steele, Chairman, Confederated Tribes of the Goshute Reservation, Ibapah, Utah:

[Opening remarks were spoken in Shoshone.] I come here to stand before you with a good cause and much respect that we ask you to vote no on A.B. 30 and A.B. 51. The language in bills sounds attractive, deceptively so. But behind the language is another side that would help lay ruin to one of Nevada's great cultural and historic resources, a national historic property called Swamp Cedar Natural Area, or "Bahsahwahbee."

We have been fighting a good fight to protect this special place. The SNWA aims to drain it—and water from other senior water rights holders—in order to pipe the water 310 miles to Las Vegas. Last summer, the State Engineer denied all of SNWA's groundwater applications but approved their monitoring and mitigation plan, one that the White Pine County District Court previously rejected due to serious and deceptive flaws. It was a sham. Now in their latest plan, SNWA would not mitigate impacts on Swamp Cedars until every last cedar tree is dead. They would be the sole decision-makers as to when and how to mitigate.

We believe this is very wrong. Wrong because, as the site of the largest Indian massacre in United States history, and two more that followed, it is a place to be protected. Wrong because Swamp Cedars is holy to us. It is a place where we pay our respects to our ancestors and where we go to pray and hold spiritual gatherings. The State Engineer agreed it was wrong. He denied certain water rights because it is in the public interest to preserve Swamp Cedars in perpetuity, rather than draining its medicinal waters and killing the sacred trees, both of which we use in our traditional ceremonies.

Assembly Bill 30 and Assembly Bill 51 would undo efforts to protect Swamp Cedars. The bills would pave a new way for SNWA's groundwater project while making rural Nevadans suffer. We would be left high and dry.

Please vote no on A.B. 30 and A.B. 51. [Additional material was provided ([Exhibit E](#)).]

Robert McDougal, Commissioner, Board of Commissioners, Pershing County:

I am here to encourage you to vote no on A.B. 30. One of the problems that I see with it is that it is a top-down approach that the State Engineer would be using when, in fact, where there are conflicts existing, it should be a cooperative effort on the part of the users. We are a small rural community in Pershing County. The Lovelock Valley is dependent on the existence of the prior appropriation doctrine. The farmers in that valley hold some of the oldest water rights on the Humboldt River. They have already felt the impact of conflicts due to over-pumping in certain areas upstream of the Humboldt River that have negatively impacted flows in the river. That study is ongoing and we look forward to its completion to find out exactly how much damage that has caused.

The State Engineer's solution in our case is a conjunctive management plan that would include mitigation. In all likelihood, it would mean money, not water, to the farmers of the Lovelock Valley. We have already seen, due to the drought, the loss of hundreds of residents who used to work on the farms. They left permanently because there was no work to be done. They went to the mines and other places.

I think we would like to see 3M plans implemented where existing conflicts happen. The difficulty in two conflicting statutes that the Division of Water Resources spoke to—the solution is to remove that portion of the statute that allows 3M plans in the granting of new water rights and rather restrict that to being used as a solution to existing problems.

Norman Harry, Environmental Director, Environmental Protection Department, Washoe Tribe of Nevada and California:

I have worked with several tribes within Nevada addressing their groundwater and surface water rights negotiations. I would like to quickly state that there seems to be some major issues that could probably be clarified through language if this were to pass. What are the thresholds? Also looking at mitigations, since we are talking about mostly federal lands, does it require the U.S. Environmental Protection Agency involvement with something that is going to accompany and substantiate these concerns? I think those things should be included if this were to pass. On the other hand, the language that is being used generally is soft language. It talks about harmonizing and so forth. The bottom line is these valleys are overappropriated with groundwater. In review of the mitigation plans, what are the thresholds? Are they going to impact more than 100,000 acre-feet, or 20,000 acre-feet? There is no defined threshold. If the water right permittee is going to pay for that, I see the prospect of some industry coming, and, again, if they are impacting the senior water rights holder, the big company could throw \$1 million at you to deepen your well. According to the state, if the Division wants to appropriate almost every drop of water, there is nothing there for the future for all of us.

Chair Swank:

I would like to clarify that this does not apply to water on federal lands. The federal government does not have to tell us anything about how much water they have in Nevada.

Norman Frey, Private Citizen, Fallon, Nevada:

I am a farmer in the Fallon area. My family has been farming in this state since the mid-1850s. I was a county commissioner in Churchill County, and the president of the Nevada Association of Counties. I was embroiled in a battle over transferring water rights from one place to the other on my own property; it cost me a lot of money to do that. It gets very expensive for a senior water rights holder to be involved in the process of developing a 3M plan. We do not have the expertise; that has to be hired. For senior water rights holders, sometimes it makes the difference in making improvements to your operation or sending your kids to college, et cetera. It is very expensive and puts a hardship on the farmers that have been there. I am in opposition to the way this legislation is written; 3M plans can work. Many of the issues have been addressed by others in their testimony.

Jeff Fontaine, Executive Director, Central Nevada Regional Water Authority and Humboldt River Basin Water Authority:

Central Nevada Regional Water Authority and Humboldt River Basin Water Authority are units of local government; together they have nine Nevada counties. As members, these nine counties encompass 70 percent of the land in Nevada, including communities, agriculture, mines, and vast expanses of public lands. These authorities were formed to protect the water resources in the membered counties. These membered counties not only have an economic future, but their value of quality of life and natural environment is maintained. These authorities share Director Crowell's and Acting State Engineer Wilson's concerns and certain interests in addressing the substantial and critical water issues that are facing our state. We must oppose A.B. 30. Arguably, A.B. 30 undermines the prior appropriation doctrine and weakens protections for existing water rights. We believe A.B. 30 will create uncertainty for the future.

Jake Tibbitts, Natural Resources Manager, Department of Natural Resources, Eureka County:

Eureka County opposes A.B. 30 for many reasons similar to what we had with Assembly Bill 298 of the 79th Session. We would like to point the Committee to our input and testimony we provided then and ask you to consider that. [Continued to read from prepared testimony, ([Exhibit F](#))].

The language in A.B. 30 to allow plans to "avoid conflicts" is misleading and unnecessary. If a conflict is avoided, there is no conflict. Regardless of a plan or a private party agreement, the State Engineer would find that there is no conflict. Options to avoid conflicts are available today without a change in the law. These include what I consider the three best management practices of sound water policy. First, applicants need to configure their points of diversion and diversion rates to eliminate the conflict. Second, reduce the size of the project or improve water-use efficiency to eliminate the conflict. Third, work cooperatively

with existing water rights holders, including domestic well owners, to resolve conflicts by mutual agreement before an application is even considered by the State Engineer.

That is the best management practice that we follow in this state, where we put it on the applicants to do the necessary work to come forward before they ever apply for the water. This bill would bypass that process.

We do not support 3M plans in the way this bill proposes. If a conflict with existing rights is identified when the application is considered, then it is apparent that the applicant has not done the groundwork necessary. We believe this bill pays "lip service" to prior appropriation in name only.

Regarding 3M plans, the only reference to monitoring, management, and mitigation in the statute is due to a bill that Eureka County brought forward in two separate attempts in two separate sessions. In 2011 there was an extreme effort to shelve the bill and place it in the drawer and it was not even brought forward. Our second try in 2013 through Senate Bill 133 of the 77th Session resulted in the language that is in statute today. I find it a little ironic that we are now speaking about a bill that is granting authority for a 3M plan in a way that it was never intended.

Monitoring, management, and mitigation need to be part of the process. Eureka County does not disagree, but we need to look at it in a surgical manner and in a way that protects prior appropriation, or it will be prior appropriation in name only.

Vested rights are under a different statutory scheme. These are rights that were put to use prior to 1905. Much of the mitigation that we have seen is to replace vested surface water rights with groundwater. There are some major considerations that you need to take in looking at replacing water that is under a totally different statutory scheme in our water law.

Kyle Roerink, Executive Director, Great Basin Water Network:

We represent ranchers, farmers, indigenous communities, public land advocates, and businesses who call the Great Basin home. Although A.B. 30 purports to be about 3M plans, it is a bill to further empower the powerful. Simply put, the bill would give the State Engineer the unfettered discretion to skirt current laws in order to give somebody's property that is senior in right to someone who is junior in right. This bill upends Nevada water law as we know it and attacks the prior appropriations doctrine.

Essentially, all of section 1 in A.B. 30 would give the State Engineer the ability to allow applicants to spend and buy their way around the law to get permits for water, even if granting those permits harms someone else. Considering that there are no long-term protections or guidelines for public participation in this bill, it is clear what entities this bill has in mind. This bill may not explicitly say Las Vegas pipeline, but those implications are all over it. We are currently in litigation over SWNA 3M plans that were erroneously approved by the State Engineer. Clearly, this is not the time for this bill. Indigenous communities, environmentalists, farmers, ranchers, elected officials from rural counties, and

even former and current Clark County commissioners all agree with this assessment. We stand united against a bill that will harm Nevadans and the environment. We ask for bottom-up, stakeholder-driven opportunities to collectively work on water policy. This bill was written by a State Engineer who did no public outreach and who no longer serves. We want to be involved and we are ready to do the work. [A letter was also provided ([Exhibit G](#)).]

Chair Swank:

If you would like to be involved, please reach out to the Division of Water Resources.

Doug Busselman, Executive Vice President, Nevada Farm Bureau Federation:

The Nevada Farm Bureau Federation is opposed to A.B. 30. Simply put, our opposition is our concern over the way in which senior water rights holders will be impacted by a mitigation plan that may reduce their water availability. One of the points that we would like to make is section 1, subsection 1 where it mentions water available for appropriation. We would like to make sure there is a clarification that the water that is available matches what the application is actually calling for, versus just "having water available" that may or may not relate to that particular perspective.

The other point I would like to raise is a question. I have looked through A.B. 30, and I did not see, in my initial review, where the regulation provisions are identified for how mitigation might go forward. I think if there is going to be a promise of creating some type of a regulatory structure, that needs to be spelled out in order for stakeholders to effectively participate in that process. We are opposed to the bill and we urge that the Committee not pass it.

Patrick Donnelly, Nevada State Director, Center for Biological Diversity:

We are a nationwide nonprofit that has been active in Nevada for a decade. Our No. 1 issue has been fighting against the Las Vegas pipeline, which we have successfully litigated in federal court. The SNWA's pipeline would pump billions of gallons of groundwater per year from the aquifers in eastern Nevada and ship it 300 miles to Las Vegas. The BLM's own assessment showed the widespread drying of springs, wetlands, marshes, and the dying off of groundwater-dependent vegetation. The Nevada Department of Wildlife said it would result in the wholesale localized extinction of native fishes and the drying of water sources would cause collapses in mule deer and antelope populations. In short, it would be the most destructive project in the history of the Silver State's environment.

Assembly Bill 30 would enable the Las Vegas pipeline, make no mistake. The State Department of Conservation and Natural Resources may say that is not the intent of this bill, and I think we can take them at their word on that because there are broad challenges we need to address with Nevada water law. If they are serious that this bill is not intended to authorize the Las Vegas pipeline, they can take steps in that direction, such as carving out large-scale interbasin transfers from the language of this bill. As it stands right now, our attorneys, who are the experts on this issue and have been working on it for over a decade, are very clear—this would enable the pipeline. The pipeline has lost in court repeatedly because of the inadequacy of its mitigation. Indeed, as Mr. Crowell said, there are some

things that simply cannot be mitigated. Withdrawing 100,000 acre-feet of water a year—billions of gallons—from the basins of eastern Nevada cannot be mitigated. Those losses are permanent, irreversible, and unmitigatable. This law would change the requirements of mitigation to allow the State Engineer to dictate his own terms of that mitigation. You can see how this would enable the pipeline by moving the goalposts for what is adequate mitigation. We are strongly encouraging the scrapping of this bill and starting over with a stakeholder-driven process. All the people in this room who care about water oppose this bill. Not a single person stood up to support this. The people in this room are the ones who are going to be affected, they should be the ones helping to determine the water future in Nevada. [A letter was also provided ([Exhibit H](#)).]

Tobi Tyler, Executive Committee Member, Toiyabe Chapter, Sierra Club:

The Toiyabe Chapter of the Sierra Club, representing more than 30,000 members and supporters in Nevada, is strongly opposed to A.B. 30. We urge the Assembly Committee on Natural Resources, Agriculture, and Mining to oppose and abandon this bill.

We oppose A.B. 30 because of the impacts it will have on Nevada's environment and its ability to facilitate a pumping and piping project that will siphon 58 billion gallons of water annually from eastern Nevada near Great Basin National Park to Las Vegas.

The bill allows the Nevada State Engineer to appropriate water when a conflict exists by giving junior water rights applicants the ability to negotiate away conflicts with senior water rights holders by any means, veering far from the current law and setting a dangerous precedent for the future. In the nation's driest state, it is most important for regulators to appropriate our limited water resources wisely.

Additionally, the bill allows replacement water as an acceptable tool for mitigating a conflict created by a junior rights holder against the environment or someone with senior rights. Replacement water is not an environmentally acceptable means of conflict resolution. Neither pipelines nor trucks full of water will ever make up for what Mother Nature naturally provides, nor will it ever guarantee that senior rights holders will be made whole with water of sufficient quality or quantity.

The aforementioned provisions would give life to disastrous projects like the Las Vegas pipeline and other water grabs in our state without providing sufficient long-term due process or public input.

Nevada's current water protections are among the most progressive in the West. All committee members must ask themselves: Why are we rushing to change a good thing? [A letter was also provided ([Exhibit I](#)).]

Laurel Saito, Nevada Water Program Director, The Nature Conservancy:

Our mission is to conserve the land and waters on which all life depends, and no issue is more important to protect the ecosystems and natural resources of Nevada than effectively managing the use and conservation of the state's limited water resources. Water is the

lifeblood of Nevada's residents and communities, and it is also essential for Nevada's natural environment—all plants, fish, wildlife, and people depend on freshwater resources.

We are testifying in opposition to A.B. 30 because we have concerns about this bill enabling the granting of applications where a known conflict exists with current water rights, domestic wells, and/or environmental resources in the public interest. In addition, we do not agree with using 3M plans to address known conflicts, and we do not believe that replacement water for environmental resources is a viable approach.

In addressing conflicts, The Nature Conservancy advocates applying the mitigation hierarchy for conflicts with water for the environment and existing water rights and domestic wells. The three tiers of the mitigation hierarchy are firstly, to seek to make water management decisions that avoid impacts to the environment and conflicts with existing water rights and domestic wells; secondly, to minimize impacts; and lastly, to mitigate, offset, or compensate impacts. Current Nevada water law is consistent with this hierarchy because it requires the State Engineer to deny applications with known impacts and conflicts, thereby avoiding them in the first place, and it serves to incentivize applicants to seek points of diversion that would not conflict with existing water rights or domestic wells or impact the environment.

Regarding section 1, subsection 1, paragraph (b) of A.B. 30, well-designed 3M plans are useful tools for protecting water for the environment in cases where it is uncertain if a conflict may occur. In the case presented in A.B. 30, however, 3M plans could be used where a known conflict occurs. In our view, this would put in statute a broader and riskier use of 3M plans that would weaken the incentives to avoid conflicts in the first place.

Finally, the replacement of water to replenish the source of supply is rarely ever adequate. Nevada is the driest state in the nation, yet it ranks eleventh in biodiversity with over 170 known endemic species; these are species found nowhere else in the world. The vast majority of these endemic species are associated with natural springs and other water resources on Nevada's landscape. We believe that it is highly unlikely that the unique geochemistry and physical habitat that species and ecosystems are adapted to can be replicated with water imported from elsewhere. [A letter was also provided ([Exhibit J](#)).]

Mark Butler, Executive Council Member, The Coalition to Protect America's National Parks:

I am also here on behalf of the National Parks Conservation Association to express our opposition to two bills before the Committee, Assembly Bill 30 and Assembly Bill 51.

We oppose A.B. 30 because of the potential to enable large-scale pumping projects that could cause irreparable harm to Great Basin National Park's unique water-dependent resources. Assembly Bill 30 would also expose Lake Mead National Recreation Area to harm by facilitating groundwater extraction from nearby aquifers where testing has shown that there has already been adverse impacts to the region's water resources from pumping at only one-third of current appropriations.

In our view, A.B. 30 would codify a "trust us" attitude rather than rely on sound science. The bill would give the State Engineer an overwhelming amount of discretion to continue appropriating our groundwater basins, even when the water does not exist for the taking. Those allocations will likely come at the expense of our parklands, public lands, and families who reside in these communities and regions.

Assembly Bill 51 would also enable large-scale pumping projects because it will alleviate the requirements to prove that water applicants' wants actually exist, by potentially masking or minimizing pumping impacts by using so-called conjunctive management. Conceivably, this bill could allow any applicant to sidestep the current groundwater protections that have worked in Nevada for decades.

Thanks to ongoing leadership in this Committee and others, Nevada offers spectacular outdoor recreational opportunities at many treasured destinations, including the Sierra Nevada Mountains, Great Basin National Park, Red Rock National Conservation Area, Lake Mead, and more than two dozen Nevada State Parks. These treasured destinations provide Nevadans with places to adventure and recharge while also bringing in billions of dollars into Nevada's economy. It is absolutely in line with the current preferences expressed by Nevadans as documented in a recent 2019 study, an astounding 81 percent of Nevadans believe that the outdoor recreation economy is important to the future of the state. An equally impressive 83 percent believe it is important to protect and restore the health of the state's rivers, lakes, and streams. Preserving our precious groundwater resources from overappropriation is the key to long-term health to many of the state's most wonderful outdoor recreational locations. Therefore, we urge members of this Committee to oppose this legislation. (A letter was also provided ([Exhibit K](#)).]

Susan Juetten, Private Citizen, Reno, Nevada:

I am representing Great Basin Resource Watch (GBRW), a Nevada-based nonprofit public interest organization which has been monitoring mining and extractive industries on our public lands since 1995. I will speak about both bills. Assembly Bill 30 proposes that the State Engineer may consider a proposal to avoid or eliminate the conflicts that occur between a new appropriation and an existing water right. The bill apparently provides no constraints or clear guidance on what is an acceptable proposal for conflict resolution. As a result this bill will give the State Engineer too much power, which has proved to be problematic in the past. For example, the State Engineer first approved water applications by Eureka Moly, LLC as Kobeh Valley Ranch, LLC (KVR) for the Mt. Hope Mine, a proposed molybdenum mine in Eureka County. However, these applications were in conflict with existing senior water rights, and it was necessary for the senior water rights holders to appeal the State Engineer's decision all the way to the Nevada Supreme Court. The Supreme Court overturned the decision of the State Engineer, stating in conclusion: "In sum, substantial evidence does not support the State Engineer's finding that KVR would be able to 'adequately and fully' mitigate the fact that its groundwater appropriations will cause Kobeh Valley springs that source existing rights to cease to flow."

In conclusion, Great Basin Resource Watch opposes A.B. 30. [A letter was also provided ([Exhibit L](#)).]

Kenny Bent, Private Citizen, Pahrump, Nevada:

I have to say our Assembly members asked some excellent questions. The public has given some brilliant testimony which helps me a lot. When I came in here, I was slightly nervous about this bill; now I am downright afraid. Assembly Bill 30 seeks to give the State Engineer even more undefined powers to use at his discretion. On its face, this type of power given to an unelected bureaucrat defies the established concept that laws should be clear, defined, and unambiguous. This bill allows him to approve water use that will very likely conflict with existing uses, including domestic use. It basically allows the State Engineer to create a future problem with the high hopes that the damaged parties will have to accept the outcome. It still feels likely that this bill was intended for a specific purpose not disclosed here.

These types of bills will likely lead to unintended consequences, including the type of court battles that inevitably end with the corporations with the most money prevailing over any opposition. The individual will almost always be the casualty. As far as the applicant paying the fees, if someone like Tesla moved in next to me, I do not think money would be an issue. I think applications that are in conflict should be denied, just as they are now. I do not see a reason to do this, it gives me a feeling that this is a 3M plan with an "M" for money.

Undefined powers are a very bad idea. This is what has led to the massive over-appropriation and a lot of the problems we have instead of following clear defined laws.

"Trust us" does not work for me.

John Hiatt, Conservation Chair – Press Liaison, Red Rock Audubon Society:

I would like to speak on behalf of the public interest and groundwater-dependent ecosystems which are not addressed in this bill and have historically been given short shrift by the State Engineer. We have many significantly overappropriated basins in Nevada. My concern is that we are going to do the same with additional basins, particularly places like Spring Valley which has a very vibrant groundwater-dependent ecosystem. There is nothing in this bill, or any other bill that I see, that will address those problems. Therefore, I have to oppose A.B. 30 and I think we need a much different process for resolving some of the conflicts in the Nevada water law. Looking to the future at how we actually preserve a living environment in the state of Nevada so that we do not repeat the problems we have in both Las Vegas and Reno, where vibrant groundwater-dependent ecosystems were essentially obliterated by development and no consideration, I am opposed to the bill and strongly suggest we go back and start over and come up with some legislation which really will address the problems and lead to sustainable groundwater development in the future.

Patti Jesinoski, Private Citizen, Henderson, Nevada:

I grew up in a small rural area in Minnesota, so I feel for the 16 counties outside of Clark County. At the budget meeting of the Henderson City Council last year, they were ecstatic of the 450 current permitted building projects going on at the same time. Building takes water.

The SNWA meeting last fall spoke to us about using our reclaimed water within budget—we were only using 10 percent.

However, these major building projects are not reclaimed water. Now we have the new Las Vegas Stadium that is being built. Last month, at a Henderson City Council meeting, it was stated that we may need to start looking for some other water conservation in our homes. We are only using 10 percent of what we are allowed to use in our homes. Our conflict at this time is too much building. I support the rural areas with a no on A.B. 30.

Chair Swank:

Is there anyone else who would like to testify in opposition? [There was no one.] Would anyone like to testify in neutral?

Ed James, General Manager, Carson Water Subconservancy District:

We are a multicounty, bistate organization dealing with water resources in the Carson watershed. We have had an opportunity to meet the State Engineer's staff and also many of the people in this room to talk about these various water bills. We applaud the State Engineer for being proactive in trying to take action, but sometimes you can hear the issues that need to be vetted a little more. We believe that with opportunities with this group and working with the State Engineer, we can make some better laws than this. Nevada has some very good, strong water laws today, but there is a need to look at some of these changes. We applaud the State Engineer in trying to do that, but again, I think we need to be working cooperatively with him. You will never hear consensus and water law in the same sentence, but I think we have a chance to work together to come up with better laws. If we do not move forward, we will start falling backward.

Chair Swank:

Is there anyone in Las Vegas who is speaking in neutral?

Andrew M. Belanger, Director of Public Services, Southern Nevada Water Authority:

I wanted to testify today in a neutral capacity. We at the SNWA are focused on three main things this year, as we indicated prior to session. We are focused on completing the low lake level pumping station at Lake Mead, completing the drought contingency plan on the Colorado River, and increasing water conservation in southern Nevada. Those are our priorities. While we worked on a 3M plan bill last year, and while we agree with the State Engineer's office that these issues are complex and that they require legislative action to solve, we also recognize that there is a lot of concern about what this bill will do.

We recognized that last session when we withdrew our bill, and we recognize that today. We encourage the Legislature to address the issues of the 3M plan. We cannot support the bill in its current form, but we do not oppose the bill in its current form. We do believe that if the Legislature does not act at some point in the future, you are going to spend a lot more money in the courts than you are today. This is just a fact. Southern Nevada uses 5 percent of the state's water supply, with 70 percent of the state's population. Over the 50-year planning horizon that we look at when we consider the future, the groundwater project moves our

water demand from 5 percent to 6 percent. That is the context we are talking about here. While we appreciate some of the concern we are hearing from the opposition, there are a lot of overblown statements, distortions, and misinformation. There is a huge legislative record. The 2007 Legislature addressed staged development of water; in 2013, the Legislature addressed 3M plans. That record is there for your perusal.

Chair Swank:

Is there anyone in Elko who is speaking in neutral? Seeing no one, does the bill sponsor have closing remarks?

Bradley Crowell:

I want to say to everyone who made statements, we appreciate them. Specifically, I want to remind folks that in the context of A.B. 30, we are talking about available water and within that context, the best way to manage available water. There is obviously disagreement about the best way to manage it. I hope there is not disagreement about the need to manage available water. We do not have enough water in Nevada to let it be locked up or held hostage. We need to find a path forward if we are going to smartly and strategically use our limited water resources. I want to reference Mr. Tibbitts' remarks specifically. I appreciate his comments in that context, and I actually do not think we are that far apart. There are instances that are not being addressed or thought through. If you have a senior water rights holder with a groundwater well that has been there for 100 years and has been used—and through more contemporary science, we have learned that the aquifer is much deeper and more plentiful, and there is available water—if the senior water rights holder is unwilling to allow his well to be deepened so that others can access that water, he is holding hostage Nevada's water that belongs to everyone. It is those kinds of instances that we are trying to address with this legislation. It is clearly not perfect, but I hope the intent and understanding is common among us. There were a few folks who provided solutions, and I want to thank them. I understand criticisms, but I sure hope they come with solutions if we agree that there is a problem. As the Department, and as the Division of Water Resources, we stand ready to work with anyone and everyone in a collaborative process to understand concerns and come up with constructive solutions. I leave that as an open invitation.

Chair Swank:

I will close the hearing on A.B. 30. [Also provided but not mentioned are ([Exhibit M](#), [Exhibit N](#), and [Exhibit O](#)).] We will open the hearing on Assembly Bill 51.

Assembly Bill 51: Revises provisions governing the management of water.
(BDR 48-213)

Bradley R. Crowell, Director, State Department of Conservation and Natural Resources:

Assembly Bill 51 addresses the very real and prudent scenario of conjunctive management, which is recognizing that our surface waters and groundwaters are connected and we should manage them in that way. Nevada is a leader among our peers in the West in recognizing this. However, in recognizing the connectedness of water and managing it conjunctively, we

are going to have conflicts arise. We have been managing groundwater and surface water separately for over 100 years. If we now start to look at them as connected entities—which we should because the science is undisputable—we are inevitably going to have conflict among the existing right holders. We are not talking about new available water, we are talking about existing water rights holders, senior, junior, and everything in between. When we look at our waters conjunctively, we are going to have some conflict. Assembly Bill 51 is designed to recognize that and get some direction from the Legislature as to how to best manage that situation.

**Tim Wilson, Acting State Engineer and Administrator, Division of Water Resources,
State Department of Conservation and Natural Resources:**

I am here today to present testimony in support of Assembly Bill 51, which addresses the implementation of “conjunctive management,” an important water management concept approved by the Legislature in 2017. [Continued to read from prepared testimony ([Exhibit P](#))]. Please allow me to begin with a bit of background and context. In 2017, the Legislature amended *Nevada Revised Statutes* (NRS) 533.024, subsection 1, and added a new paragraph, (e), requiring the Division of Water Resources within the State Department of Conservation and Natural Resources “To manage conjunctively the appropriation, use and administration of all waters of this State, regardless of the source of the water.” This simple amendment acknowledges that surface water sources and groundwater sources that are hydrologically connected need to be managed conjunctively.

My office has provided the members of the Committee with PowerPoint slides that I will walk through to illustrate the concept of conjunctive management and how it relates to the bill before you today ([Exhibit Q](#)). When Nevada’s foundational water statutes were adopted in 1903, the statutes focused exclusively on surface water sources and did not even consider underground sources of water. Therefore, the implementation of Nevada water law initially focused only upon the allocation and management of surface water sources. During the period of early statehood and into the 1900s, this approach was sufficient given Nevada's small population and an economy that utilized water primarily for agricultural and mining needs. However, as groundwater well technology was developed and our economy expanded and diversified, the need to utilize and regulate additional water sources increased. In 1939, NRS Chapter 534, Underground Water and Wells, was adopted and specifically directed the management and administration of all groundwater sources. Because groundwater management is compartmentalized into its own chapter, since 1939 the State Engineer and the Division of Water Resources generally administered surface water and groundwater sources independently.

This practice, however, did not fully account for the fact that many surface and groundwater sources are hydrologically connected. In 2017, the Legislature took a proactive step to reconcile this disconnect. Specifically, the Legislature issued a declaration directing the Division to conjunctively manage all waters of the state, regardless of the source of water, as a necessary and appropriate first step towards harmonizing our laws with the science [Senate Bill 47 of the 79th Session].

Assembly Bill 51 is the next step to effectively and accurately implement conjunctive management practices in Nevada.

While the 2017 Legislative declaration helpfully recognizes the hydrological connection that often exists between groundwater and surface water sources, existing statute does not provide the framework necessary to effectively implement the Legislature's policy direction. Assembly Bill 51 seeks to incorporate conjunctive management into Nevada water law while balancing the interests of these formerly separately administered water sources in a legally defensible manner. This is a critical need, for unless statutes provide additional legislative direction for the manner in which the Division should implement the conjunctive management of Nevada's water resources, the ambiguity will ultimately be decided by the courts without the benefit of any substantive legislative intent to guide these inevitable judicial decisions.

As a continuation of the 2017 policy directive, Assembly Bill 51 proposes two basic first steps: First, it directs the Division of Water Resources to adopt regulations for the conjunctive management of groundwater and surface water resources. Regulations need to be specific to the affected region to account for different hydrologic settings and different manners of use. The process of developing regulations will include full public and stakeholder participation with full transparency. It is critical that any new regulations for conjunctive management have the benefit of careful consideration and a clear, understandable outcome. Second, A.B. 51 authorizes the Division of Water Resources to create the programs necessary to develop regulations and effectively implement conjunctive management of groundwater and surface water. Please allow me to walk through the language to accomplish the purposes as set forth in Assembly Bill 51.

Section 1 establishes a new section of NRS Chapter 533 with provisions allowing for the development of regulations and programs for the conjunctive management of connected surface and groundwater sources.

Section 2 incorporates domestic well owners, who are legally authorized to withdraw up to 2 acre-feet of groundwater without possessing a water right, into the definition of a "groundwater user." This does not require domestic wells to acquire a water right, but simply ensures that groundwater pumping from domestic wells is factored into overall usage when managing connected ground and surface water resources.

Section 3, subsection 1 directs the State Engineer to adopt conjunctive management regulations. This section further directs that any conjunctive management regulations must recognize existing uses of water while protecting senior water rights holders. Further, section 3, subsection 2 establishes certain elements that may be included in the adoption of conjunctive management regulations, including: (a) requirements or guidelines for establishing mitigation plans to address conflicts between groundwater and surface water users; (b) the creation of a conjunctive management program to help manage and mitigate conflicts between groundwater users and surface water users; and (c) establish additional methods as appropriate and necessary to effectively facilitate conjunctive management.

To provide some context regarding the hydrologic interaction between surface water and groundwater sources, page 2 ([Exhibit Q](#)) shows an illustration of how the Division of Water Resources historically administered surface water and groundwater sources. As illustrated, groundwater was administered as if there were an artificial barrier between appurtenant surface water sources. This was not a scientifically supported manner of administration. Today, we recognize that decisions made decades ago have incrementally led to conflict between surface water and groundwater users.

As illustrated on page 3, a groundwater source may have direct hydrological connectivity with a surface water source, such as a river or stream. When a well is first pumped, water is derived from aquifer storage. Over time, the water removed from aquifer storage may be replaced by capture from surface water. Capture can occur by reducing groundwater discharge to a stream or by inducing infiltration from the stream. Depending on the distance and hydrologic conductivity between the stream and the well, these effects may take years to manifest and many more years to recover, even after the pumping has ceased. The effects may also be muted by variability between wet and dry years.

Although groundwater pumping may capture surface water flows, this does not automatically mean there is a conflict with the surface water uses. Practically every stream and river system in Nevada is a fully appropriated system, meaning the totality of the flow of the surface water source is allocated to existing uses. The vast majority of these surface water rights are senior to all groundwater uses. Surface water rights are administered based upon “priority” and the seasonal flow of the river. If a surface water is flowing at a rate that satisfies each of the existing rights along the system, there is no harm or “conflict” to senior surface water rights, even if groundwater use has captured some of the flow, because all senior rights have been fully satisfied.

Conjunctive management is the mechanism for the Division of Water Resources to identify where, when, and how groundwater uses may cause near-term or long-term conflict with existing surface water uses. Presently, the Division has contracted with the United States Geological Survey (USGS) within the U.S. Department of the Interior and Desert Research Institute (DRI) to develop a capture model for the Humboldt River basin, depicted on page 4, which spans nearly 300 miles and includes 34 groundwater basins. Once completed early next year, this capture model will provide the best available science to accurately identify whether over a specified period of time, groundwater pumping results in capture of Humboldt River surface water. Based upon the results of the capture model, the Division will be able to determine the amount of conflict, if any, with senior surface water rights along the river system. Page 5 ([Exhibit Q](#)) demonstrates how the capture model helps identify a groundwater well location, and determine the quantity of water captured from the Humboldt River. The image on the lower right shows a hypothetical well located near the river. The different colors indicate model results of capture at any location after a certain duration of pumping. The chart on the upper left shows the percent capture of that same hypothetical well after pumping for 10 years. In this case, capture of stream flow is about 40 percent of the water pumped by that well.

Availing ourselves of the best available science is imperative when considering the development of conjunctive management programs. As illustrated on page 6 ([Exhibit Q](#)), unlike other states, Nevada is attempting to “sharpen the pencil” and identify with particularity whether a specific groundwater use is actually resulting in capture of surface water. Based upon that data, the Division has the ability to calculate the amount of conflict. Identifying a conflict using best available data is only the first step. Resolving conflicts based on sound management practices is equally important.

Each basin dominated by surface water in Nevada is hydrologically unique. The science and response in one region may not be appropriate in another region. Accordingly, the ability to develop regulations to address these unique areas is critical to assuring that the Division applies the best available science and avails itself of the best available management approaches.

Section 4 addresses the proposed scope of conjunctive management programs administered by the Division of Water Resources. Specifically, subsection 1, paragraph (a) provides that if the Division of Water Resources adopts a conjunctive management program, it is not required to curtail a conflicting groundwater use if it can be demonstrated that curtailment or the cessation of pumping will not result in the delivery of water to the conflicted surface water right. This is often referred to as the “futile call doctrine” because curtailment of a particular junior use is futile and will not result in an actual delivery of water to the senior use. In such instance, the junior use is not required to cease its use.

Section 4, subsection 1 paragraph (b) allows the Division to require a groundwater user, who is capturing surface water flow that results in conflict to senior users, to provide replacement water. It also requires the replacement water to be of sufficient quality to satisfy the use of the senior user. In essence, this provides the opportunity for a groundwater user to replace conflicted water rights by providing its own surface water rights or acquiring them from another surface water user. However, many groundwater users found to cause some conflict with surface water uses may not have substitute surface water available to use or offer to an impacted senior water rights holder.

Unfortunately, in these instances, curtailment of such uses may take years, if not longer, to reverse the surface water depletions and eliminate any conflict, with the very real potential to cause significant economic injury to those curtailed users and the communities in which they live. Therefore, section 4, subsection 1, paragraph (c) provides the Division of Water Resources authority to levy a special assessment for the purpose of creating a fund that would provide financial mitigation to senior surface water users in cases where replacement water is not immediately available. The mitigation fund would allow certainty for groundwater users and would provide a mechanism to make senior surface water users economically whole. It could also incentivize conservation, by exempting groundwater right holders from assessments if they choose not to pump. Subsection 1 paragraph (d) also allows the assessment of fees to pay the expenses of administering the conjunctive management program. It is important to emphasize that these assessments are not ad valorem taxes.

Section 4, subsection 2 addresses the mechanism for the collection of the assessments. Section 5 allows the Division of Water Resources to suspend the “use it or lose it” provision in law to help promote conservation over excessive use or waste as well as the unfair forfeiture of a water right when a conjunctive management plan is adopted. If a conjunctive management program is adopted, the best practice is to encourage water conservation. Accordingly, it is imperative that voluntary conservation, or mandated nonuse, of water does not subject the water rights holder to a claim of abandonment or forfeiture while the conjunctive management program is in effect. The goal of conjunctive management should be for the benefit of all users within the bounds of what the water resources in question can support over the short, medium, and long term.

Sections 6 through 9 contain conforming and clarifying language regarding existing law and establish that this bill would become effective upon approval. At this time, I am happy to take any questions from the members of the Committee.

Assemblywoman Peters:

My question is dependent on federal decisions and implications that they have on the idea of conjunctive management and how we manage it in the state of Nevada. What would it mean to be in the middle passing a law like this or even conducting management on the existing statutes? We have two situations, one is the *Agua Caliente Band of Cahuilla Indians v. Coachella Valley Water Dist.*, 849 F.3d 1262 (C.A.9 (Cal.), 2017). That confirmed jurisdiction to tribal governments to an aquifer for which they pull water from. That is for managing water quality, in particular. The other is that the Supreme Court has agreed to review whether the Clean Water Act can regulate groundwater, which also has to do with water quality. If we are addressing conjunctive management, and we get to the point where we address water quality in conjunctive management, how would those impact how we address conjunctive management?

Tim Wilson:

I would like to bring our attorney, Micheline Fairbank back. She is more familiar with those cases.

Micheline Fairbank, Deputy Administrator, Division of Water Resources, State Department of Conservation and Natural Resources:

When we talk about conjunctive management in the context of the *Agua Caliente* case, or some of the other pieces of litigation, this really establishes the framework for which our office can go ahead and address those particular issues. The *Agua Caliente* case is an extension of the analysis and potential application of a Federal Reserved Right Doctrine, otherwise known as the *Winters* doctrine, and that extension to groundwater. There are still a lot of questions and undecidedness in terms of how that is going to actually interplay in Nevada with respect to our water laws and the application.

Without a framework and guidance in terms of how we establish these management programs, we are stuck with competing interests. This is a mechanism to pave the way of how we can go ahead, within the statutory framework and through regulatory process,

provide that management solution, so that any potential conflict that may arise with regards to those differing and conflicting interests, can then have a mechanism in state law to be resolved. Again, the public owns the water, and we have to operate within those confines. With respect to water quality issues, obviously there is a little bit of an overlap with regards to water management and water quality, but that is a different agency that has the integral association with respect to the management of water quality. Obviously, we look at water quality issues when we are addressing issues of appropriation, but in terms of long-term management, that is more of a collaborative process within our agencies.

Assemblywoman Peters:

Is there is a way in this language that we could include our relationship with tribal governments and their right to the water, their ownership of the water in these aquifers, as the *Agua Caliente* case rolls out? I believe there are appeals happening around that, but perhaps we can make it clear in this bill that we consider the tribes in the decision making and build our framework for conjunctive management around, or at least with that in mind?

Micheline Fairbank:

I think that is part of the dialogue when it comes down to the regulations in terms of stakeholder involvement. Certainly, the regulations are intended to build upon stakeholder involvement, making sure we have all of the appropriate stakeholders involved is part of that dialogue. Whether that is a statutory amendment to the bill is certainly open for discussion. With regards to how that rolls out, I think that is part of not being overly specific while still allowing the regulatory process to ensure that we are doing our role, fulfilling our duty in terms of making sure we have that stakeholder and collaborative process as part of the program.

Bradley Crowell:

This should be duly considered as appropriate and we can discuss and figure out how to incorporate it. This also reminds me, as a point of clarification, during the comments on the last bill, there was discussion about federal land and federal ownership of water. While we do have approximately 86 percent of land in Nevada under federal control, all of the water in Nevada belongs to the people of Nevada. We want to be careful as we change our laws and do not subvert any of our water rights to the federal government.

Another point of emphasis, before we get to implementing conjunctive management in a way that meets everyone's concerns, there is a lot of analysis and data that needs to be done. The example of the Humboldt River and what we are doing with DRI, and the USGS, we need contemporary, best science like that in many other places in Nevada. We have it in some places, but not everywhere. There is a lot of hydrologically connected systems that would benefit from understanding their function and connectivity as a first step to implementing any plans that balance interest within conjunctive management.

Assemblywoman Titus:

Getting back to the language in the bill, section 4, subsection 1 states, "If the State Engineer creates a program for the conjunctive management of groundwater and surface water in a

hydrographic basin, the State Engineer . . . " and then it goes on about being required to curtail groundwater use, does not have to deal with the conflict, et cetera. Does this totally upend the prior appropriation concept in our laws? Also, it seems to me, this would actually strip seniors of property rights, their priority date, and therefore a taking. Would you clarify that?

Tim Wilson:

In the past when we administered surface water and groundwater separately, surface water priority has never been used against groundwater priority and vice versa. By eliminating that artificial brick wall, if we are going to look at both of those priorities together, the senior rights are almost always going to be senior to the groundwater rights. When people first came here, they obviously used surface water; we did not have good well technology to drill deep wells and tap our aquifers. We see this as protecting those senior surface water rights against groundwater depletion.

That is what the groundwater models are doing—they are telling us, first, is there an issue. Groundwater can be very compartmentalized, there can be lots of faulting. What is under the ground is very difficult to determine. We believe we have the technology to use groundwater models to determine an impact to the river. We have a well that is pumping near the Humboldt River. We do not know what that impact is today, but we think we will know what that impact is. If it is having a conflict with senior water rights holders on the Humboldt River, we want to make those senior water rights holders whole. We want to find a method to compensate them for the amount of water being taken out by that well. That is the goal of this legislation. Deputy Administrator Sullivan is intimately familiar with this subject and might be able to elaborate.

Adam Sullivan, Deputy Administrator, Division of Water Resources, State Department of Conservation and Natural Resources:

I think there is an additional point that will help clarify the answers. We need to work within the prior appropriations system, and in order to address existing conflicts, we have very limited tools within statute. Simply put, until the senior water user gets 100 percent of their water, the junior water user does not get any. The response to that would be to entirely curtail a groundwater user. In this example of the Humboldt River, we could entirely curtail groundwater users, but because of the hydrogeology of the system, that still would not result in a full delivery of water to the senior surface water users. This is a problem that has developed over many decades, and it would take many decades to solve it in that manner. What we need is to have some flexibility to work with the stakeholders in the affected region to fully satisfy the senior users but also allow junior users at least a portion of their water to the extent that it does not conflict.

Assemblywoman Titus:

Acting State Engineer Wilson, you stated that the senior water rights holders will always have priority in "most" cases. Will you clarify that statement?

Tim Wilson:

If I did state that, I did not intend it. If you are a senior water rights holder, you are a senior water rights holder. Our state is a prior appropriation state; it is based on the date when your water right came into fruition, either through a permit or through decree, and that sets your priority date. If we are going to balance surface water priorities to groundwater priorities, as I mentioned, the surface water is going to be senior in almost every case. There could be a very old well, maybe someone hand dug a well in the 1800s and they have a vested claim on it. That vested claim has an earlier priority date, and as a groundwater rights holder, he could have a senior right to a surface water holder later in time. That is almost never the case.

Assemblywoman Titus:

I have water rights on my property in Smith Valley. I understand if there is a drought year, we only get 10 percent, even though I have so many acre-feet, I may only get 10 percent of that due to the curtailment. I understand that. There are folks downstream from me, especially the Indian reservation in Schurz, who have much older rights than I have. We have to make sure they get their water, and I do understand all of that. I just want to make sure that we are managing the water with due process. I am concerned that, with this wording, there is potential for a loss of rights.

Assemblyman Wheeler:

Section 4, subsection 1, paragraph (c), says, "Any such special assessment must be proportionate to the amount of conflict caused by the groundwater user to the surface water user whose water right is senior in priority." The State Engineer can levy a special assessment annually. How much is a domestic well user going to be charged? How is the usage actually going to be measured? Are you going to put meters on wells? We went through that last session, and it was not good. I am trying to figure out what the "special assessment" really is.

Adam Sullivan:

For the specific example of the Humboldt River, the assessment would be based on the value of the portion of water that is not delivered. This is a concept that has been developed through working group negotiations with stakeholders as a potential mechanism for making surface water users whole. The assessment would be specific to that area for a given period of time. In this particular case, we have engaged with agricultural economists at the University of Nevada, Reno to make that determination. To address the point about domestic wells, in recent negotiations with the stakeholder working group, domestic well owners would be excluded from the mitigation program.

Assemblyman Wheeler:

What you are telling me is that you cannot put a figure on the assessment. It will just be something that is studied and we will define it later? This does not say anything about measurement. That is why I am asking about the meters on wells, how do you measure it? How do you know how much is being taken out, et cetera?

Adam Sullivan:

In the Humboldt region, all permitted water rights have meters on their wells and report monthly data to our office. To the first part of your question, the answer is, yes, specific for a region, we would directly study the value of water and make that determination with the assistance of a neutral third party.

Assemblywoman Hansen:

Section 4, subsection 1, paragraph (b) states, "May require a groundwater user to furnish replacement water to a surface water user so long as the replacement water is of sufficient quality." When there is a loss and the senior user has to be compensated, do you have any projections of how much water would need to be replaced? I am trying to envision what that looks like. How is the water getting there? Where is the water coming from? What kind of quantities are we talking about?

Adam Sullivan:

You are absolutely right, these are very difficult things to quantify. It is what we have to do because there is no fixed direction within our legislative prerogative to give us a more direct approach to resolve the existing conflict to the extent that it exists. The first point that you brought up was how to determine how much water is not being delivered. In the case of the Humboldt River, we have over 100 years of delivery records, an understanding of the system, and how much water is available to deliver to each user in priority based on flow at a given measuring point. Where those delivery schedules are not met, the challenge is in fractioning out exactly how much was deserved to be delivered to that user, how much was due to drought, for instance, versus how much was due to capture from surface water by groundwater pumping. These are all the difficult questions that we are trying to resolve through groundwater modeling and with the assistance of the USGS and DRI, and with abundant stakeholder engagement and negotiations on regional solutions.

Assemblywoman Hansen:

If there is a determination of water that needs to be supplied, how does the water get there? Where is the water coming from? If it is not going to come from the Humboldt River, where is the supply of water coming from?

Adam Sullivan:

Preferably, in that situation, the water would come from the Humboldt River. It would be an exchange or agreement to not divert an upstream users' rights so that it can be delivered as wet water to a downstream user.

Assemblywoman Hansen:

Section 5 states, "If the State Engineer creates a program for the conjunctive management of groundwater and surface water in a hydrographic basin, a right to groundwater or surface water that is not being used because of the program is not subject to a determination of abandonment or forfeiture for as long as the program is in effect." The discomfort I have with that is it is essentially giving all the authority to the State Engineer, someone who is not an elected official. This does not have a lot of input from the elected body, per se. During

Mr. Wilson's presentation he said ambiguity would be decided by the courts. To me, this shows that ambiguity will be decided by the State Engineer. Are we giving a lot of power to the State Engineer that does not reside there now?

Tim Wilson:

Section 5 goes a little bit to my very first presentation that I gave on water law. One of our concepts is that if you are not beneficially using the water, you could be subject to cancellation, forfeiture, or abandonment. In this case, if this program is in effect, we do not necessarily want the groundwater user to pump. That may be his solution, he does not want to pay for the interference of the surface water, so he is just not going to pump his well. That is a good thing. That is essentially like a voluntary curtailment. We do not want to take away his right through abandonment or forfeiture. Forfeiture works after five years of nonuse on a groundwater right, so we want to toll that provision while this program is in effect, so that people who choose to turn off their wells as their mitigation, they will not lose their water rights certificate. They can hold their water rights certificate so if they choose to participate in the program at a later date, they can pump their well and either supply the extra surface water to make up for their impact or have a financial obligation.

Assemblyman Watts:

I need some clarification around judicial review and how that might work through this process. I know in this bill, part of the framework is the development of regulations. I assume that as long as those are constitutional, they are set in terms of framework. When it comes to individual plans, I am wondering what that process would look like. Who would be able to initiate judicial review of a conjunctive management plan once it was approved? If it would only be the affected water rights holders, or if others would be able to participate in that process.

Bradley Crowell:

It is nearly impossible to predict the outcome of judicial review, especially in water cases. We get quite a range of outcomes from judicial review. If the regulations on conjunctive management conform to all of the rules, laws, and regulations, and the data and science underpinning the decisions related to conjunctive management are sound and defensible, I would hope that would guide any judicial review to the correct outcome. We cannot predict that, we can just set the table as appropriately as possible for that review.

Assemblyman Watts:

When a water rights application comes in, people have the ability to protest. Those protestants can participate in judicial review after an order is released. Outside of the regulations, when a conjunctive management is approved, who do you envision would be able to challenge the findings in that plan?

Bradley Crowell:

In the instance of judicial review for conjunctive management, we are not talking about new water right applicants, we are talking about all of the existing water rights. It is a matter of

the balancing of priority of different rights, based on different situations and hydrological scenarios.

Chair Swank:

I would like Mr. Amburn to answer that.

Allan Amburn:

When looking at NRS 533.450, which is what we are addressing with the new language, it addresses the judicial review of orders and decisions of the State Engineer. It states that any person feeling aggrieved by any order or decision of the State Engineer, acting in person or through the assistants, they have the ability to have that reviewed by a court.

Micheline Fairbank:

To build upon that response, any decision or order is subject to judicial review. The implementation of regulations are subject to one component of judicial review, not necessarily under NRS 533.450, but if the State Engineer were to adopt a conjunctive management program, if that adoption were to come through an order or other form of decision, then it is subject to the NRS 533.450 judicial review process. As already stated, any person feeling aggrieved by a decision or order is available to bring that action.

Assemblyman Ellison:

We have had hundreds of letters in opposition. Out of all of them, I have not seen one that says please adopt A.B. 51. These hundreds include letters from ranchers, farmers, businesses, The Nature Conservancy, et cetera. All of these letters show concern about this bill. I have a concern about this bill. I also have a concern about the lost value and collateral items. If you look at ranching and agriculture, and the impact, and the ecosystem, also, with the Southern Nevada Water Authority and what they have to say—I think you need to go back and take a look at this and maybe look at some other way to come up with a different approach. Assembly Bill 51 is totally against the reins of the people. I hope you will take that into consideration.

Chair Swank:

Are there any more questions? Seeing none, we will go back to the same process for testimony. Thirty minutes for support, 30 minutes for opposition, and 30 minutes for neutral. Each person gets two minutes. I will start with support in Carson City, Elko, or Las Vegas. Seeing no one, we will start with opposition in Las Vegas.

Kenny Bent, Private Citizen, Pahrump, Nevada:

Assembly Bill 51 strikes me as a kitchen sink concept. It is highly relying on what we heard before with Assembly Bill 30 for the mitigation aspect of it. I think this bill could easily change the balance and control of water in this state. In something like this, there are a lot of unintended consequences. I think we should be very cautious approaching this. It makes more sense to try this on a per-basin approach, rather than statewide, and do a test run on it. Largely, I am having a little trouble with the whole domestic well issue. I appreciate what Assemblyman Wheeler said, but I am going to address the domestic well issue here because

this seems to keep dragging around in the shadows, pretending that the State Engineer has authority to regulate. I think I heard that we are not going to regulate domestic wells, just their water. Domestic use was purposely exempted from 17 of the 18 western states. That was for both moral and legal reasons. What seems to be lacking here is anyone coming up and saying, From this day forward, we are going to deal with new domestic wells. There seems to be an intent here to take the water, at least 75 percent of it, from the existing domestic wells. I think it is very important that all of you on this Committee understand that the domestic use is exempt purposely out of water law.

Chair Swank:

Is there anyone in Carson City in opposition?

Doug Busselman, Executive Vice President, Nevada Farm Bureau Federation:

The Nevada Farm Bureau Federation is opposed to A.B. 51. One of the complicating factors in considering perennial yield assessments involves a way in which groundwater and surface water provide their respective and relative contributions to the basins. In the reach of the Humboldt River, and I think a lot of this bill is focused on that specific area, there are 32 basins that interact with groundwater and surface water. There are variations and complexities that I think some of this fails to recognize. Modeling is being carried out to attempt to capture a scientific perspective, but at this point, that is still a work in progress.

One of the things I would like to point out is in the discussions for this bill, much of this mirrors what was proposed as possible regulations during the interim process. Those proposed regulations never went anywhere, but they had a lot of components that were outlined here. There was mention made of stakeholders being involved in the construction of that. There were six or eight people who were involved representing different areas, but it did not involve stakeholders as a whole. I think that is part of our concern, there needs to be a greater level of input from the local stakeholders in order to facilitate meaningful solutions.

David G. Hillis, Jr., Principal Engineer, Turnipseed Engineering, LTD, Carson City, Nevada:

I work and deal exclusively with Nevada water rights. I have had the privilege of working with hundreds of Nevada ranchers, farmers, municipalities, and miners all across our state. I commend the State Engineer's proactive approach with both bills. We have heard tonight that the State Engineer's office wishes to collaborate with experts and stakeholders; however, to my knowledge, no collaboration has taken place in the drafting of the actual bills that are before you. Assembly Bill 51 promotes the concept of conjunctive management. This concept is not new; however, it is new within our state. I feel that this bill would rush forward legislation which has had no input from experts and stakeholders across our state. I would suggest the State Engineer's office collaborate and revise the bill for resubmission to the Committee. In addition, Director Crowell stated that it is beneficial to rely on the best and current science available; however, within our state, within some basins, we still rely on a perennial yield estimate, which was estimated from Hardman precipitation maps from 1936. That is a little outdated when it comes to establishing our most sacred concept when it comes to perennial yield. The newest, latest, and greatest science needs to apply to first

establish accurate perennial yields before we can begin management, especially across many basin lines. In addition, under A.B. 51 it is possible when implementing this legislation that a senior groundwater rights holder could be curtailed while a junior groundwater rights holder may not be affected based on his geographic proximity to the Humboldt River, for example.

Steve Walker, representing Douglas County; and Storey County:

Statewide application of conjunctive use methodology being developed on the Humboldt River is premature. The rulemaking process needs to be accepted, completed, and implemented before making a blanket state law or methodology that could affect other river systems. Each river system is unique both hydrologically and also have different decrees. Conjunctive use plans should be adapted on a case-by-case basis to recognize its uniqueness. We inherently know there is a relationship between surface water and groundwater, and our existing law could be used to deal with the current and future conflicts.

Bennie B. Hodges, Manager, Pershing County Water Conservation District:

I am here to speak in opposition to Assembly Bill 51. The Pershing County Water Conservation District (PCWCD) is a surface water irrigation district. Our reservoir is Rye Patch Reservoir. The main source of our water is the Humboldt River. We have an irrigation district 40,000 acres in size, and we are the largest surface water holders in the Humboldt River system. However, the downfall is that we are at the bottom of the system. The prior appropriation doctrine, "first in time, first in right," has been the cornerstone of Nevada water law for over 100 years. If it is not broken, please do not try to fix it.

Assembly Bill 51 would allow for the creation of a monetary assessment for conjunctive management of groundwater and surface water within the Humboldt River drainage. This mitigation program would allow junior underground water users to cause an injurious depletion of senior surface water users.

Water rights for the PCWCD constituents range from 1862 to 1921. These water rights are senior to all groundwater rights in the Humboldt River drainage.

Under this mitigation program, PCWCD constituents would receive monetary compensation from junior groundwater pumpers for causing injurious depletion and affecting base flows of the Humboldt River. The PCWCD constituents do not want money, they want their water. If they are compensated with money, the water table will drop and drastically affect current and future irrigation with less water.

Passage of A.B. 51 will slowly lead to the demise of a rural way of life in the Humboldt River drainage basin, namely the communities of Lovelock, Winnemucca, Battle Mountain, Carlin, and Elko.

Jake Tibbitts, Natural Resources Manager, Department of Natural Resources, Eureka County:

Eureka County does not support A.B. 51 as drafted. Again, we stand ready to continue our involvement in trying to find a good solution. I was happy to hear Director Crowell speak that this was intended to address existing appropriations in which there are conflicts. The bill as drafted does not make that clear. It seems that this bill could be used again, similar to our concerns with A.B. 30, where you could, under a conjunctive management rule, potentially appropriate new water that would be in conflict with existing rights. If the intent is truly to address conflicts that exist from rights that were already appropriated, I think there is some room to potentially find a solution. We have had this situation occur in Diamond Valley where we have had prestatutory vested rights affected and we feel that some rules to define situations like that are good to pursue. We do support localized approaches rather than a blanket conjunctive management rule for all of the state. We would support more localized rulemaking rather than blanket regulations. Again, we stand ready to assist in trying to find a common solution for this problem.

Kyle Roerink, Executive Director, Great Basin Water Network:

We oppose A.B. 51. We believe that A.B. 51 masquerades as conjunctive management, but the bill, in truth, intends to roll back existing laws and gives the State Engineer greater authority. State Engineers have the toughest job in the nation's driest state. I respect their service to Nevada, but over the years, State Engineers have overappropriated our basins and have lost many cases in court because the office mismanages its authority. We have to ask, why do we want to give him more power?

As written, A.B. 51 is a violation of constitutional rights under the Takings Clause. Section 4, subsection 1, paragraph (a) is a clear and explicit attempt to say that the "first in time, first in rights" doctrine no longer matters. Next, the bill sanctions unsound and unsustainable replacement water schemes. If someone takes your water, under A.B. 51 he can replenish it with something else—you could be getting your water from a pumper truck. Lastly, the bill sanctions monetary compensation as a means of repaying a harmed senior water rights holder. Assembly Bill 51 is giving the wealthy and powerful the upper hand with no recourse for the little guy. We envision scenarios where a powerful junior rights holder says, Take the money or take us to court. Money does not solve all problems in water policy, but A.B. 51 erroneously relies on that mantra and paves the way for powerful entities like the Southern Nevada Water Authority to build their disastrous 300-mile pipeline at the expense of hardworking families whose rights deserve protection. [A letter was also provided ([Exhibit R](#)).]

Patrick Donnelly, Nevada State Director, Center for Biological Diversity:

I think, with A.B. 51, what we have is an example of bad process leading to a bad outcome. This is really a top-down, heavy-handed approach with the State Engineer asking for almost unfettered discretion to pick winners and losers in our water system. We had Assembly Bill 298 of the 79th Session, which was an excruciating process involving the stakeholder negotiation in the committee room immediately before committee hearings. That was not the way to craft good water policy. In the interim, there have been no stakeholder processes on

this legislation. There are individual conjunctive management processes going on, some of which may result in good outcomes, but as far as addressing an overall framework, that has not happened. As a result, again, all of the people who would be affected by this legislation oppose it, even though I believe we all recognize groundwater and surface water are a single resource. I think there is widespread agreement that some form of conjunctive management is a good thing, and there is room for these parties to come together, but no effort has been made to do that. Instead, this seems like an attempt to railroad everyone who has an interest in rural water. Meanwhile, we have the ghost of former State Engineer, Jason King, looming over this process—these are Jason King's bills. These are not the current administration's bills. They are constituency lists. Nobody supports them, everyone who is affected opposes them, and we do not even have their progenitor in the room with us to defend them. These bills are a bad process leading to a bad outcome. They need to be scrapped and start over with a genuine bottom-up process to involve stakeholders to come up with something we can all at least live with, if not agree with. (A letter was also provided ([Exhibit S](#)).]

Tobi Tyler, Executive Committee Member, Toiyabe Chapter, Sierra Club:

The Toiyabe Chapter of the Sierra Club, representing more than 30,000 members and supporters in Nevada, is strongly opposed to A.B. 51. We urge the Committee to oppose and abandon this bill.

We oppose A.B. 51 because of the harm it will inflict on the people, wildlife, and scarce water resources of this state. It will encourage the overappropriation of our limited water resources and facilitate projects like the disastrous pumping and piping plan to siphon 58 billion gallons of water annually from eastern Nevada near Great Basin National Park to Las Vegas.

While the bill sets forth a path for outlining conjunctive management policies, the bill fails to mention any actual conjunctive management policies, only mitigation policies. The bill sanctions replacement water schemes, monetary compensation, and other unsound and inadequate gambits as a means for resolving conflicts when a junior rights holder harms a senior rights holder. This creates a situation where the powerful and wealthy will have the ability to push out anyone they like. That is not acceptable.

Most importantly, the bill completely upends Nevada water law's prior appropriations doctrine. The provision threatens the due process rights and constitutional rights of Nevadans by stripping senior water rights holders of a property right and their priority date, which results in a taking. After a permit is granted, an affected party would have only 30 days to file an appeal in district court. What about three months after? What about three years? Where is the recourse?

Progressive water policy ensures that a permit cannot be granted if conflicts exist between senior water rights holders, domestic well owners, and the environment. Nevada already has that enshrined in law. Our problem is not with the law. Our problem is with overappropriation of our scarce water resources. [A letter was also provided ([Exhibit T](#)).]

Laurel Saito, Nevada Water Program Director, The Nature Conservancy:

A goal of our Nevada water program is to ensure that there is water for people and nature for future generations. Dating back to the 2017 Legislative Session, The Nature Conservancy has consistently recognized conjunctive management as essential to the appropriate management of Nevada's scarce water resources. We commend the State Engineer's office for introducing A.B. 51 to address this topic.

However, we have some concerns with some areas of the bill and cannot support A.B. 51 in its current form. The bill should require conjunctive management to be environmentally sound. Most groundwater dependent ecosystems in Nevada are sensitive to the interaction of surface water and groundwater and could benefit from proper conjunctive management. Despite the importance of conjunctive management to the environment, the proposed legislation does not include any consideration of how conjunctive management regulations would influence or change the amount of water available for the environment. The Nature Conservancy recommends that the legislation be amended to direct the State Engineer's office, when adopting conjunctive management regulations, to recognize among existing uses of water not only water rights that are senior to priority, but also water that is being used by, and is necessary for, the environment. We believe this can be achieved by requiring that conjunctive management of groundwater and surface water be done in a manner that is environmentally sound.

As I said earlier, we support applying the mitigation hierarchy to avoid, minimize, and then mitigate. The language in A.B. 51 specifically mentions mitigation several times but does not acknowledge or require the need to avoid and minimize effects first. The Nature Conservancy recommends including such language to ensure that mitigation is not applied before all opportunities are explored to avoid and minimize conflicts first.

Finally, replacement water provisions are not appropriate for conjunctive management for environmental resources.

In summary, we are interested in working with interested parties to improve the legislation and hope that amendments can be made along the lines of our recommendations. Thank you for the opportunity to speak. [A letter was also provided ([Exhibit U](#)).]

Jeff Fontaine, Executive Director, Central Nevada Regional Water Authority and Humboldt River Basin Water Authority:

We are opposed to A.B. 51. That said, both authorities do support conjunctive management and certainly recognize the need to work within that arena. We also agree with Director Crowell's comments regarding the need for more detailed studies to determine the interaction between groundwater and surface water. We also agree very strongly with the previous speakers regarding the need for additional stakeholder input. The State Engineer has been working on promulgating regulations for conjunctive management in the Humboldt River Basin for about 18 months, and commented about the Humboldt River Basin working group to help craft those regulations. I have been a member of that group for a short period of time. There are not a lot of members, but to the extent that conjunctive management may, or can,

work out in a river basin, that may be the test case, or it may not. At this point we believe that the proposed legislation is probably not necessary and certainly premature.

Rebekah Stetson, Private Citizen, Reno, Nevada:

I am here representing our communities and specifically our children. Assembly Bill 51 is simply the destruction of Nevada's landscape history and future. Sustainability is most commonly defined as a way of meeting our needs while not limiting the ability of future generations to meet their needs. This legislation seriously puts in question the ability of our children to meet their needs in future generations. As written, A.B. 51 seems to encourage mismanagement of our most precious and already overappropriated resources in the nation's driest state. While we are looking at the effects of climate change, we are still uncertain of how severe that will be. Voting yes would be a modern day repeat of the Owens Valley disaster. Let us choose not to consciously and intentionally destroy our resources for our children. Please vote no on A.B. 51.

Anthony Sampson, Tribal Chairman, Pyramid Lake Paiute Tribe:

We oppose A.B. 51 for the simple fact that we have been through so much with water wars for over 100 years. We are dealing with water quality and the amount of water that is being flowed. We even have problems with our domestic wells in our area, to where we are looking at critical components of our groundwater in the Wadsworth area. When it comes down to it, you give the State Engineer all the power. He can do anything he wants. We were having problems with water recruitment; when it is going to happen, we do not know. That is something that is a reality. In opposing this bill, I hope that you will listen to what other people have to say about this. Some oppose it, some are for it. It is not about one group of people, it is about sharing it. We are a major stakeholder, one of the oldest in the state of Nevada. Thank you for your time. I hope you make the right decision.

Will Adler, representing Pyramid Lake Paiute Tribe:

I would like to ditto Mr. Sampson's comments and get a loud opposition to A.B. 51 on the record.

Chair Swank:

Is there anyone in Elko who would like to testify in opposition? [There was no one.] Is there anyone who would like to testify in neutral? Seeing no one, are there any closing remarks?

Bradley Crowell:

I would like to thank the Committee's indulgence and everyone in the room for some very good discussion. In the 2017 Legislative Session, this body approved the language in NRS 533.024 subsection 1, paragraph (e), that says, "To manage conjunctively the appropriation, use, and administration of all waters of this State, regardless of the source of water." That is what we are attempting to do. We do not have any further direction or guidance on how to do that. Assembly Bill 51 is our best attempt to untangle and address a very complex problem. If there is the sentiment and the will to not look at our waters conjunctively, then we can choose to do that. If we are going to move forward and manage

our waters conjunctively, then we need guidance to implement that. I hope that at the end of this hearing there is at least a sentiment of continuing constructive dialogue.

To folks who mentioned domestic wells, I understand the sensitivity, but if we ignore the fact that domestic wells in certain places can affect groundwater and surface water users, we are pretending and are not playing in the realm of reality. We have to recognize that.

To the comments regarding the accuracy of perennial yield, we fully agree. We would love to have the resources to do that on as quick a basis as we can. Data is essential for anything we do here, no matter what we come up with.

To comments regarding localized solutions, that is absolutely our goal and intention. That is what we are doing in the Humboldt River; that is what we are doing on the Lower White River Flow System and the Muddy River in Clark and Lincoln Counties, which we are happy to discuss further if folks are interested.

To comments regarding keeping the status quo, I would ask if that means you do not see any problems now or in the future with how our water laws allow us to administer and manage water.

I appreciate the comments regarding the importance of conjunctive management as the proper approach that reflects science and data, and I also appreciate the comments regarding the fact that more upfront work is needed. We agree. The system is not always designed to allow us to do that, but going forward, we certainly have no opposition and hope we have the support and participation of everyone in doing that.

To comments regarding monitoring, management, and mitigation as a last resort, that is absolutely our intention. Mitigation is not the preferred outcome, nor is it the first solution. Through monitoring and management we hope to never have to do mitigation, but if you simply want to ignore the need for mitigation after monitoring and management has not shown to be able to manage the situation, then what are we left to do?

This is a long way of saying I appreciate everyone's comments and hope we can have some additional guidance from this body as well as the stakeholders in the room.

Micheline Fairbank:

I want to build upon one of the elements that was discussed—that is that there is a desire and emphasis for a localized solution. That is absolutely what the structure of this bill is intended to do. The first part of A.B. 51 allows and directs our office to establish conjunctive management regulations and to allow for the authorization to adopt conjunctive management programs. The second part of the bill references what a conjunctive management program may or may not include. The reality is, the Humboldt River situation and process has been partly instructive and guiding with regards to the language, but the Humboldt River is not the only system that we are actively engaged in with this process. It certainly is not representative of the state. We understand that each system is unique and has to have its own

independent and individualized regulation and program. That is what this bill is conceptualized to do. What is going to work on the Humboldt River, ultimately, is not going to be appropriate for the Lower White River Flow System and the management of that interconnected water system. That is the idea; we need the ability, we need direction, and we need to have that from this body because right now we are left with very little.

Chair Swank:

Thank you for all the work done this evening. I will close the hearing on Assembly Bill 51. [Also provided and not mentioned were ([Exhibit V](#) and [Exhibit W](#)).] I will open it up for public comment. Seeing no one, we are adjourned [at 7:20 p.m.].

RESPECTFULLY SUBMITTED:

Nancy Davis
Committee Secretary

APPROVED BY:

Assemblywoman Heidi Swank, Chair

DATE: _____

EXHIBITS

[Exhibit A](#) is the Agenda.

[Exhibit B](#) is the Attendance Roster.

[Exhibit C](#) is a copy of a PowerPoint presentation titled "Division of Water Resources Overview," dated February 27, 2019, presented by Tim Wilson, P.E., Acting State Engineer and Administrator, Division of Water Resources, State Department of Conservation and Natural Resources.

[Exhibit D](#) is written testimony dated February 27, 2019, presented by Tim Wilson, P.E., Acting State Engineer and Administrator, Division of Water Resources, State Department of Conservation and Natural Resources regarding Assembly Bill 30.

[Exhibit E](#) material submitted by Rupert Steele, Chairman, Confederated Tribes of the Goshute Reservation, Ibadah, Utah, consisting of the following:

1. A letter to Assemblyman Ellison, dated February 26, 2019, in opposition to Assembly Bill 30 and Assembly Bill 51.
2. A document titled "Talking Points on Water."
3. A document titled "Swamp Cedars Massacre Site," dated September 19, 2016, offered by the Confederated Tribes of the Goshute Reservation.

[Exhibit F](#) is written testimony dated February 27, 2019, presented by Jake Tibbitts, Natural Resources Manager, Department of Natural Resources, Eureka County, in opposition to Assembly Bill 30 and Assembly Bill 51.

[Exhibit G](#) is a letter dated February 25, 2018, to Chair Swank, authored by Kyle Roerink, Executive Director, Great Basin Water Network, in opposition to Assembly Bill 30.

[Exhibit H](#) is a letter dated February 26, 2019, to Chair Swank, authored by Patrick Donnelly, Nevada State Director, Center for Biological Diversity, in opposition to Assembly Bill 30.

[Exhibit I](#) is a letter dated February 27, 2019, to the Assembly Committee on Natural Resources, Agriculture and Mining, authored by Tobi Tyler, Executive Committee Member, Toiyabe Chapter, Sierra Club, in opposition to Assembly Bill 30.

[Exhibit J](#) is a letter dated February 26, 2019, to Chair Swank, authored by Juan Palma, Nevada State Director, The Nature Conservancy, presented by Laurel Saito, Nevada Water Program Director, The Nature Conservancy in opposition to Assembly Bill 30.

[Exhibit K](#) is a letter dated February 26, 2019, to Chair Swank and Members of the Assembly Committee on Natural Resources, Agriculture, and Mining, authored by Mark Butler, Executive Council Member, Coalition to Protect America's National Parks, et al., in opposition to Assembly Bill 30.

[Exhibit L](#) is a letter dated February 27, 2019, to the Assembly Committee on Natural Resources, Agriculture, and Mining, authored by John Hadder, Director, Great Basin Resource Watch, presented by Susan Juetten, Private Citizen, Reno, Nevada, in opposition to [Assembly Bill 30](#).

[Exhibit M](#) is a letter dated February 26, 2019, to Chair Swank, authored by Richard Howe, Chairman, White Pine County Commission, in opposition to [Assembly Bill 30](#) and [Assembly Bill 51](#).

[Exhibit N](#) is a letter dated February 26, 2019, to the Assembly Committee on Natural Resources, Agriculture, and Mining, authored by Simeon Herskovits and Iris Thornton on behalf of Great Basin Water Network, submitted by Advocates for Community and Environment, in opposition to [Assembly Bill 30](#) and [Assembly Bill 51](#).

[Exhibit O](#) is a compilation of material in opposition to [Assembly Bill 30](#), consisting of the following:

1. A letter to Members of the Assembly Committee on Natural Resources, Agriculture, and Mining, written by Christine Saunders, Policy Director, Progressive Leadership Alliance of Nevada.
2. A letter dated February 25, 2018, to Chair Swank, authored by Tick Segerblom, Commissioner, Board of County Commissioners, Clark County.
3. A letter dated February 25, 2018, to Chair Swank, authored by Meghan Wolf, Environmental Activism Manager, Patagonia.
4. A letter dated February 26, 2019, to Nevada State Assembly, written by Dave Mendiola, Humboldt County Manager on behalf of the Humboldt County Commission.
5. A statement written by Delaine Spilsbury, Private Citizen, McGill, Nevada.

[Exhibit P](#) is written testimony dated February 27, 2019, presented by Tim Wilson, P.E., Acting State Engineer and Administrator, Division of Water Resources, State Department of Conservation and Natural Resources, regarding [Assembly Bill 51](#).

[Exhibit Q](#) is a copy of a PowerPoint presentation titled "[Assembly Bill 51](#)" dated February 27, 2019, presented by Tim Wilson, P.E., Acting State Engineer and Administrator, Division of Water Resources, State Department of Conservation and Natural Resources.

[Exhibit R](#) is a letter dated February 25, 2018, to Chair Swank, authored by Kyle Roerink, Executive Director, Great Basin Water Network, in opposition to [Assembly Bill 51](#).

[Exhibit S](#) is a letter dated February 26, 2019, to Chair Swank, authored by Patrick Donnelly, Nevada State Director, Center for Biological Diversity, in opposition to [Assembly Bill 51](#).

[Exhibit T](#) is a letter dated February 27, 2019, to Assembly Committee on Natural Resources, Agriculture, and Mining, authored by Tobi Tyler, Executive Committee Member, Toiyabe Chapter, Sierra Club, in opposition to [Assembly Bill 51](#).

Assembly Committee on Natural Resources, Agriculture, and Mining
February 27, 2019
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[Exhibit U](#) is a letter dated February 26, 2019, to Chair Swank, authored by Juan Palma, Nevada State Director, The Nature Conservancy, presented by Laurel Saito, Nevada Water Program Director, The Nature Conservancy, in opposition to [Assembly Bill 51](#).

Exhibit V is a letter dated February 26, 2019, to Chair Swank and Members of the Assembly Committee on Natural Resources, Agriculture, and Mining, authored by Mark Butler, Executive Council Member, Coalition to Protect America's National Parks, et al., in opposition to [Assembly Bill 51](#).

[Exhibit W](#) is a compilation of letters in opposition to [Assembly Bill 51](#), consisting of the following:

1. A letter to Members of the Assembly Committee on Natural Resources, Agriculture, and Mining, authored by Christine Saunders, Policy Director, Progressive Leadership Alliance of Nevada.
2. A letter dated February 25, 2018, to Chair Swank, authored by Tick Segerblom, Commissioner, Board of County Commissioners, Clark County.
3. A letter dated February 25, 2018, to Chair Swank, authored by Meghan Wolf, Environmental Activism Manager, Patagonia.
4. A letter dated February 27, 2019, to the Assembly Committee on Natural Resources, Agriculture, and Mining, authored by John Hadder, Director, Great Basin Resource Watch.

Affirmation: This document does
not contain the social security
number of any person.

IN THE ELEVENTH JUDICIAL DISTRICT COURT OF THE STATE OF NEVADA
IN AND FOR THE COUNTY OF PERSHING

PERSHING COUNTY WATER
CONSERVATION DISTRICT,

Petitioner,

v.

TIM WILSON, State Engineer of the State
of Nevada, DIVISION OF WATER
RESOURCES, DEPARTMENT OF
CONSERVATION AND NATURAL
RESOURCES,

Respondent.

Nevada Goldmines LLC, Newmont USA
Limited/Marigold Gold Corp., Eldon
Crawford et al., Erik M. and Kristin W.
Taylor, US Water and Land, LLC, and City
of Elko,

Intervenors.

Case No. CV 15-12019

Department No. 01

[Proposed]

SCHEDULING ORDER

AND

**ORDER ON INTERVENTION AND
SERVICE**

SCHEDULING

A Motion Hearing was held before this Court on October 21, 2019.

At this Hearing, the following parties appeared and were present before the Court:

Petitioner, Pershing County Water Conservation District ("PCWCD") by and through its counsel

Laura A. Schroeder and Therese A. Ure of Schroeder Law Offices, P.C.; Respondent Tim

Wilson, P.E. in his capacity as Acting State Engineer of the State of Nevada by and through his

counsel, Nevada Attorney General Aaron D. Ford and Senior Deputy Attorney General James N.

1 Bolotin of the Nevada State Attorney General's Office; proposed intervenor Nevada
2 Goldmines, LLC by and through its counsel Gregory H. Morrison of Parsons, Behle & Latimer;
3 proposed intervenor Newmont USA Limited/Marigold Gold Corp. by and through its counsel
4 Alex Flangas of Alex Flangas Law; and, proposed intervenors Eldon Crawford et al., Erik M.
5 and Kristin W. Taylor, US Water and Land, LLC, and City of Elko by and through their counsel
6 Paul Taggart of Taggart & Taggart, Ltd.

- 7 1. The Court and Parties agreed on the following schedule related to these proceedings:
8 **November 11, 2019:** Deadline for State Engineer to produce to Petitioner an
9 electronic spreadsheet of contact information for all water users in the Humboldt
10 River Basin;
- 11 2. **December 13, 2019:** Deadline for Petitioner to serve Notice of Legal Proceedings by
12 certified mail and publication to all water users in the Humboldt River Basin;
- 13 3. **January 15, 2020:** Deadline for interested parties to file Notices of Intervention and
14 sign up for electronic service or file a request for a hardship waiver;
- 15 4. **January 22, 2020 at 12:00PM (noon):** Status Conference to consider procedure for
16 Evidentiary Hearing. Parties can participate via teleconference.
- 17 5. **February 14, 2020:** Deadline for filing Witness Lists, Summary of Testimony,
18 Expert Reports, and Exhibits;
- 19 6. **February 28, 2020:** Deadline for PCWCD to file its reply to the parties' Witness
20 Lists, Exhibits and Summaries of Testimony;
- 21 7. **March 9-13, 2020:** Evidentiary Proof Hearing starting at 9:00 AM to hear evidence
22 from the State Engineer for the Court to determine if a Writ of Mandamus or Writ of
23 Prohibition should be issued;
- 24 8. **June 22-26, 2020:** Remedy Hearing starting at 9:00 AM for the Court to determine a
25 remedy or remedies on the Writ of Mandamus or Writ of Prohibition.

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1 participating in the e-filing system. Intervenors may participate in the status
2 teleconference on January 22, 2020 at 12:00 PM (noon) by calling
3 _____; and

4 ORDERED that on or before February 14, 2020, all intervenors must file a
5 witness list, exhibits, and a summary of the testimony they may present at the evidentiary
6 hearing on March 9, 2020 through March 13, 2020.

7
8 DATED this ____ day of November, 2019.

9
10 _____
11 Honorable Judge Shirley

12 Respectfully submitted by:

13 Therese A. Ure, NSB #10255
14 Laura A. Schroeder, NSB #3595
15 Schroeder Law Office, P.C.
16 10615 Double R. Blvd. Ste. 100
17 Reno, NV 89521
18 PHONE – (775) 786-8800
19 FAX – (877) 600-4971
20 counsel@water-law.com
21 *Attorneys for Petitioner*
22
23
24
25
26

**ELEVENTH JUDICIAL
DISTRICT COURT**



Eleventh Judicial District Court

Case Title: Pershing County Water Conservation District -vs- Jason King, P.E.,
State Engineer of the State of Nevada, Division of Water Resources,
Department of Conservation and Natural Resources

Case Number: CV5-12019

Type: Order

It is so Ordered.

Judge Shirley

Case No. CV5-12019

Dept. No. 1

**IN THE ELEVENTH JUDICIAL DISTRICT COURT OF THE STATE OF NEVADA
IN AND FOR THE COUNTY OF PERSHING**

PERSHING COUNTY WATER
CONSERVATION DISTRICT,

Petitioner,

vs.

TIM WILSON, P.E., State Engineer of the
State of Nevada, DIVISION OF WATER
RESOURCES, DEPARTMENT OF
CONSERVATION AND NATURAL
RESOURCES,

Respondent

NEVADA GOLD MINES LLC, MARIGOLD
MINING COMPANY, CRAWFORD ET AL.,
ERIK M. AND KRISTINE W. TAYLOR,
UNITED STATES WATER AND LAND
LLC,
CITY OF ELKO, NEVADA, and
GREAT BASIN WATER COMPANY,

Intervenors.

**ORDER OF DISMISSAL
WITH PREJUDICE**

This matter comes before the Court pursuant to the Stipulation and Order for Dismissal with Prejudice ("Stipulation") submitted by PCWCD and the State Engineer.¹ Good cause appearing, IT IS HEREBY ORDERED that in light of the final settlement as reflected in Exhibit 1 to the Stipulation, which is hereby approved by the Court, PCWCD's First Amended Petition for Writ of Mandamus, or in the Alternative, Writ or Prohibition is hereby dismissed with prejudice with each party to bear its own fees and costs.

IT IS SO ORDERED.

¹ The Court, having waited thirty days and having received no objection, does hereby grant the Motion. All outstanding Motions are hereby denied as moot.

**ELEVENTH JUDICIAL
DISTRICT COURT**



Eleventh Judicial District Court

Case Title: Pershing County Water Conservation District -vs- Jason King, P.E.,
State Engineer of the State of Nevada, Division of Water Resources,
Department of Conservation and Natural Resources

Case Number: CV5-12019

Type: Order - Dismissal with Prejudice

It is so Ordered.

Judge Shirley

EXHIBIT 1

EXHIBIT 1

SETTLEMENT AGREEMENT AND MUTUAL RELEASE

This Settlement Agreement and Release ("Agreement") is hereby entered into and effective upon the date of the full execution of this Agreement ("Effective Date"), by and between Pershing County Water Conservation District ("PCWCD"), and Tim Wilson, P.E., as State Engineer, Department of Conservation and Natural Resources, State of Nevada ("State Engineer").

RECITALS

A. On August 12, 2015, PCWCD filed its original Petition for Writ of Mandamus, or in the Alternative, Writ of Prohibition in the Eleventh Judicial District Court of the State of Nevada in and for the County of Pershing ("the Court") in Case No. CV15-12019 ("the Dispute").

B. On January 2, 2018, after being granted leave to do so by the Court, PCWCD filed its First Amended Petition for Writ of Mandamus, or in the Alternative, Writ of Prohibition ("Amended Writ Petition").

C. On June 14, 2018, the Court held an evidentiary hearing on PCWCD's Amended Writ Petition, wherein the Court provided PCWCD with an opportunity to provide evidence to prove up the basis for its Amended Writ Petition.

D. On October 23, 2018, the Court issued its Order to Answer Writ of Mandamus, finding that PCWCD presented sufficient evidence to meet its initial burden that its Amended Writ Petition was proper and should go forward, and therefore requiring the State Engineer to Answer PCWCD's Amended Writ Petition to show why a writ should not issue, with an evidentiary hearing to follow.

E. On February 4, 2019, the State Engineer filed his Answer to PCWCD's Amended Writ Petition.

F. During a hearing before the Court on July 28, 2020, the Court ordered PCWCD to provide notice of the Dispute to holders of water rights in the Humboldt River Basin by mail as well as publish notice in newspapers of general circulation in the Humboldt River Basin by October 14, 2020. The Court also set an evidentiary hearing for March 22 through March 26, 2021, for the State Engineer to present evidence in opposition to PCWCD's Amended Writ Petition, as well as providing an opportunity for intervening parties to present supplemental evidence in opposition to PCWCD's Amended Writ Petition.

G. On October 12, 2020, pursuant to a stipulation submitted by the State Engineer and PCWCD, the Court entered its Order Staying Judicial Proceedings and All Currently Pending Matters, staying all proceedings in the Dispute for a period of 90 days so that the State Engineer and PCWCD could engage in settlement discussions.

H. While the Dispute has been proceeding in the Court, the State Engineer has undertaken the following endeavors in an effort to proactively manage the Humboldt River Region in an effort to balance the interests of the senior decreed rights of the Humboldt River with those groundwater uses in the region. These efforts include, but are not limited to:

- a. In 2016, in an effort to utilize the best available science to inform decisions relating to the appropriate management of the Humboldt River Basin, the State Engineer initiated work with the United States Geological Survey ("USGS") and the Desert Research Institute ("DRI") on a groundwater capture model ("the Model") for the Humboldt River Region to more accurately understand the relationships between groundwater and surface water, and to determine the effects of groundwater pumping on Humboldt River flows. The State Engineer retained USGS and DRI to develop a scientifically-sound calibrated numerical model and to develop improved groundwater budgets at the basin scale using modern methods to update estimates from early USGS Reconnaissance Series Reports and Water Resource Bulletins. The Model will be a science-based tool to determine to what extent groundwater withdrawals within the Humboldt River Region capture river flow, and to assist in determining effective measures to avoid conflict with deliveries of Humboldt River water.
- b. Recognition of the hydrologic connections between the Humboldt River and the tributary groundwater basins, in accordance with the Nevada Legislature's adoption of NRS 533.024(1)(e) declaring it the policy of the state to "manage conjunctively the appropriation, use and administration of all waters of [Nevada], regardless of the source of the water."
- c. Establishment of a policy relating to evaporative losses from pit lakes, including requirements that evaporative losses be accounted for through permanent relinquishment of groundwater rights and included within the basin groundwater budget.
- d. Continued communication and stakeholder outreach relating to the State Engineer's efforts within the Humboldt River Region to work toward data sharing and uniform management within the Humboldt River Region.
- e. Issuance of an order requiring the installation of totalizing meters and required reporting of water use, subsequent field verification of meter installation and data accuracy, and development of a database to manage and report groundwater pumping data.

1. Through negotiations, the State Engineer and PCWCD (together as "Parties" or separately as a "Party") have reached a compromise that will settle and resolve the Dispute.

NOW, THEREFORE, in consideration of the mutual promises and agreements herein and other good and valuable consideration, the receipt and sufficiency of which the Parties acknowledge, the Parties hereby agree to the following terms, conditions, and covenants:

TERMS OF SETTLEMENT

1. Recitals. The Recitals stated above are true and incorporated herein as though set forth in full.

2. Forthcoming Administrative Order. The State Engineer is in the process of developing an administrative draft order ("Order") that is intended to provide clear procedures and standards for review of groundwater applications within the Humboldt River Region as informed by the Model. These procedures will provide the following:

- a. New Groundwater Appropriations. The Order will set out specific thresholds for capture for new groundwater appropriations, including requirements to provide replacement water in a manner sufficient to avoid conflict resulting from the application. The mitigation requirements will be specific as to quantity, priority, and other considerations of the State Engineer to assure that the replacement water is sufficient to avoid conflict with existing rights.
- b. Groundwater Change Applications. The Order will set out specific thresholds for capture for applications to change existing groundwater appropriations that consider the changes in capture, and resulting potential for conflict, caused by a change in the point of diversion. Where such a change results in an increase in capture the Order will set out specific requirements to offset any increase in capture with surface water replacement or relinquishment of groundwater rights. Such requirements are intended to be specific and intended to assure any change is sufficiently mitigated so as to not increase any resulting capture and potential conflict.
- c. Addressing Future Conflicts. The Order will set out a mechanism to address future conflicts between valid existing groundwater uses and decreed Humboldt River rights within the Humboldt River Region. This will include articulating a basis upon which to make determination, based upon the best available science, as to issuing future orders that would restrict withdrawals to conform to priority of rights, and the establishment of specific considerations that would be reviewed by the State Engineer in determining whether to invoke a curtailment order.
- d. Notice. The Order will seek to notify all applicants of new rights, as well as those applying for changes to existing rights, that approval of the application does not constitute an exception to any long-term conjunctive management plan determined to be necessary by the State Engineer to prevent or avoid conflict so as to meet the needs of the water users.

The Order will first be issued as a Draft Order and will be subject to a public administrative process that will include taking comments from interested parties and the general public on the Draft Order as well as a public administrative hearing. A Final Order will be issued following the public administrative hearing.

3. Issuance of the Administrative Order. The State Engineer hereby agrees to issue the aforementioned Draft Order within ninety (90) days of the Effective Date of this Agreement.

4. Dismissal of PCWCD's Amended Writ Petition. In exchange for the State Engineer's agreement to issue the aforementioned Draft Order within the aforementioned time period, PCWCD agrees to dismiss its Amended Writ Petition with prejudice.

5. Full and Final Release. The Parties agree that this Agreement is intended to be a full and final compromise, release and settlement of all claims, demands, lawsuits, expenses, injuries, attorney fees, actions, suits, causes of action, known or unknown, suspected or unsuspected, against the other relating in any manner to the Dispute. Nothing herein shall be construed as a release of or otherwise affect the right of any party to enforce any right under this Agreement.

6. Dismissal of the Dispute. The Parties, through counsel, agree to fully execute the Stipulation and Order for Dismissal with Prejudice shown in Exhibit 1 hereto simultaneous with the execution of this Agreement.

7. Complete Agreement. The Parties understand and agree that this Agreement sets forth the full and complete agreement of the Parties, and that no statement or representation, other than those contained herein, have been made or relied upon by the Parties as an inducement for executing this Agreement. No part of this Agreement may be changed except in a writing executed by a duly authorized representative of each Party.

8. Representation by Counsel. All Parties to this agreement hereby represent and acknowledge that they have been represented by counsel regarding the terms of this Agreement and that their counsel have fully advised them with respect to the consequences associated with agreeing to its terms.

9. Litigation Attorneys' Fees. The Parties hereby acknowledge and agree to bear their own attorneys' fees and costs in connection with the Litigation and the preparation of this Agreement.

10. Miscellaneous:

a) Execution of Additional Documents: Each of the Parties hereto agrees to perform any and all acts and to execute and deliver any and all documents reasonably necessary to carry out the intent and the provisions of this Agreement.

b) Governing Law and Choice of Venue: This Agreement is executed and intended to be performed in the State of Nevada, and the laws of Nevada shall govern its interpretation and effect, and any dispute arising from this agreement shall be commenced before the First Judicial District Court, in and for Carson City, Nevada.

c) Severance: Should any term, part, portion or provision of this Agreement be decided or declared by the Courts to be, or otherwise found to be, illegal or in conflict with any law of the State of Nevada or the United States, or otherwise be rendered unenforceable or ineffectual, the validity of the remaining parts, terms, portions and provisions shall be deemed severable and shall not be affected thereby, providing such remaining parts, terms, portions or

provisions can be construed in substance to constitute the agreement that the parties intended to enter into in the first instance.

d) Successors and Assigns: This Agreement shall be binding and inure to the benefit of the Parties hereto, their predecessors, parents, subsidiary and affiliated business entities, all officers, directors, shareholders, members, agents, employees, attorneys, assigns, successors, heirs, executors, administrators and legal representatives of whatsoever kind or character in privity therewith.

e) Third-Party Beneficiary: This Agreement is for the benefit of the Parties, their successors and assigns only. No other third-party beneficiary rights are intended by this Agreement.

f) No Precedential Effect: Each of the parties hereto acknowledges and agrees that certain negotiated provisions of this Agreement were agreed as an accommodation to the Parties and may be unique to the facts and circumstances surrounding this particular relationship. By entering into this Agreement, it is not the intention of the State Engineer to establish any policy, procedure, course of dealing or plan of general application irrespective of any similarity in facts or circumstances involving such other person or party. This Agreement shall not be binding or controlling in any proceeding before the State Engineer or any court reviewing the State Engineer's decisions, other than to enforce the terms of this Agreement.

g) No Liability: This Agreement is a compromise and is not to be construed as an admission of liability on the part of any Party. Nothing in this agreement shall be construed as an admission against the interest of any Party.

h) Counterparts: This Agreement may be executed in counterparts, one or more of which may be facsimiles or color scanned copies but all of which shall constitute one and the same Agreement. Facsimile or scanned signatures of this Agreement shall be accepted by the Parties to this Agreement as valid and binding in lieu of original signatures.

IN WITNESS WHEREOF, this Agreement is executed as of:

SIGNATORIES


On Behalf of Nevada Division of Water Resources:

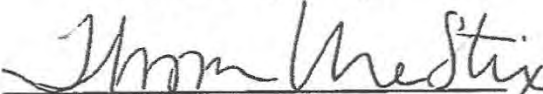
By: Tim Wilson, P.E. Date: 10/19, 2020
Tim Wilson, P.E.
State Engineer

By: James Bolotin Date: 10/19, 2020
James Bolotin, Esq.
Senior Deputy Attorney General

On Behalf of Pershing County Water Conservation District:

By:  Date: 10/15, 2020
Ronnie Burrows
PCWCD President

By:  Date: 10-15, 2020
Ryan Collins
PCWCD Secretary/Manager

By:  Date: 10/15, 2020
Therese A. Ure Stix, Esq
Attorney for PCWCD

**Comments of Nevada Gold Mines LLC
In Response to
The Nevada State Engineer's**

Draft Interim Order

**Establishing Procedures For Review Of Applications To
Appropriate Groundwater In The Humboldt River Region
With Regard To The Potential For Capture Of And Conflict
With Decreed Rights To The Waters Of The Humboldt
River And Tributaries**

April 16, 2021

I. INTRODUCTION

Nevada Gold Mines, LLC ("NGM") submits the following comments on the proposed Draft Interim Order entitled "Establishing Procedures for Review of Applications to Appropriate Groundwater in the Humboldt River Region with Regard to the Potential for Capture of and Conflict with Decreed Rights to the Waters of the Humboldt River and Tributaries" (the "Draft Order"). NGM appreciates the opportunity to raise certain concerns and objections regarding the Draft Order. While NGM applauds and supports the State Engineer's ongoing work with the U.S. Geological Survey ("USGS") and Desert Research Institute ("DRI") to establish capture models of the Humboldt River Basin, the Draft Order – coming as it does before that work is complete – is premature. The research and data upon which decisions would be made pursuant to the Draft Order have not even been finalized and published. NGM also notes the State Engineer has not properly considered the primary source of scientific information about any river system: the USGS streamflow data. Finalizing the Draft Order before those materials are in the record would be arbitrary and capricious. More importantly, even when the models are available, hopefully later this year, the State Engineer will still need to seek authority from the Legislature to fully implement conjunctive management regulations in Nevada. That authority does not exist currently under Nevada law.

NGM is particularly concerned about the timing and circumstances under which the State Engineer has proposed the Draft Order. This is not the State Engineer's reasonable exercise of regulatory authority, based on the best available science, but rather a precipitous action the State Engineer has taken to settle a lawsuit with the Pershing County Water Conservation District (PCWCD). The Draft Order contorts the purpose and timeline of public policymaking to address the unsubstantiated grievances of a single party. In doing so, the State Engineer asserts authority that he does not have. Whatever his authority to settle litigation, the State Engineer cannot acquire the power to institute conjunctive management via a settlement agreement, particularly when the State Engineer has himself unambiguously acknowledged the lack of such authority. The State Engineer should withdraw the Draft Order, wait for the finalization of the USGS/DRI capture models, and seek statutory authority from the Legislature to manage Nevada water rights conjunctively.

With this proposed order, the State Engineer is attempting to impose an entirely new legal framework on about 20% of the surface area of the State of Nevada, primarily to appease PCWCD. That is despite the fact that if PCWCD believes its water rights are being affected by an existing water right, it already has access to the courts, where PCWCD appropriately has the burden of proving harm to its rights. Similarly, PCWCD has the opportunity to protest any new water right or change application if it believes the applied-for water will conflict with its senior rights. As the State Engineer acknowledges in the Draft Order, such conflicts have been resolved "in numerous State Engineer decisions." Draft Order at p. 3. These resolutions often are based on mitigation measures volunteered by the applicant, or on agreements between the applicant and the protestor(s). If the State Engineer issues a permit without addressing the reasons for the protest, PCWCD can petition for review of the permit issuance in District Court. Given the existing available remedies, it is difficult to see a need or rationale for the Draft Order.

The Draft Order stands the existing system – prescribed in Nevada statutes – on its head by creating new standards and burdens of proof for water right applications and for applications to change existing water rights, and does so without considering pending and existing scientific information. Imposing one-size-fits-all mitigation requirements as proposed in the Draft Order relieves PCWCD of the burden to prove harm; indeed, the Draft Order would impose mitigation requirements even when no actual conflict is established. The State Engineer does not have this power.

NGM's comments are organized in five sections. The first section recounts the background of the controversy over water uses in the Humboldt River basin, and the litigation with the PCWCD, settlement of which led to the Draft Order. The second section details the legal flaws of the Draft Order. The third section explains why numerous models and decades of research and available data rebut any assertion that mine dewatering has had or is having any impact on deliveries of surface water to PCWCD or others in the lower Humboldt River Basin. The fourth section contains detailed comments on the Draft Order. And finally, the fifth section briefly discusses conjunctive management tools the State Engineer should study as he proposes legislation, drafts regulations, and manages interconnected surface and groundwater resources.

Included with these comments are three appendices. Appendix A is a newly-completed study of Humboldt River flows over the last 75 years, prepared by Dr. David Prudic. David E. Prudic, Trends in Flow of the Humboldt River, North Central Nevada, 1946-2020 at 17 (“2020 Prudic Report”).¹ Appendix B is a redlined version of the Draft Order, with edits proposed by NGM and described in the fourth section of these comments. Appendix C presents brief examples of conjunctive management tools in use in other western states, to be read in conjunction with the fifth section of these comments.

NGM hopes to continue dialogue with the State Engineer as he decides whether to move forward with the Draft Order, and more generally, as he takes further steps to implement conjunctive management in Nevada. Please contact Hiliary Wilson, General Counsel of NGM ((775) 385-4093, hiliary.wilson@nevadagoldmines.com) to discuss these comments.

II. COMMENTS

A. Background.

1. The Humboldt River.

The river’s headwaters rise in the mountain ranges of Northeastern Nevada, and its course is west/southwest across the state, ending in the Humboldt Sink. Nevada Division of Water Planning, Humboldt River Chronology at p. I-1 (2000). The dividing line between the upper and lower stretches of the river is at Palisade, and river flows at Palisade – measured at a USGS streamflow gage – determine water deliveries on a daily basis for surface water rights holders. Humboldt River Chronology at p. I-27, Draft Order at pp. 1-2. There are six gages on the mainstem of the river at which Humboldt streamflow has been continuously monitored since October 1, 1945. These six gages are the best source of data about flows in the Humboldt over

¹ NGM shared a draft of Dr. Prudic’s report with the State Engineer on January 8, 2021.

the long term. They are: (1) near Elko, (2) near Carlin, (3) at Palisade, (4) at Comus, (5) near Imlay, just upstream of the Rye Patch Reservoir, and (6) at the downstream end of the Rye Patch Reservoir. 2020 Prudic Report at pp. 2, 4. PCWCD receives its water allocation at Imlay. The water is stored in and distributed to its members from the Rye Patch Reservoir.

2. The Settlement with PCWCD and the Draft Order.

The State Engineer agreed to propose the Draft Order as part of a settlement of litigation. The State Engineer negotiated the settlement in secret with PCWCD. The parties signed the agreement on October 19, 2020, and the court endorsed it and dismissed the case the following day, on October 20, 2020. *Pershing County Water Conservancy District v. State Engineer*, in the Eleventh Judicial District Court, CV15-12019 (the "Settlement"). Pursuant to that secretly-negotiated Settlement, the State Engineer committed to develop the Draft Order "to provide clear procedures and standards for review of groundwater applications within the Humboldt River Region as informed by the [USGS/DRI] Model." Settlement at 3. The Settlement refers specifically to the State Engineer's recognition of "the hydrologic connections between the Humboldt River and the tributary groundwater basins, in accordance with the Nevada Legislature's adoption of NRS 533.024(1)(e) declaring it the policy of the state to 'manage conjunctively the appropriation, use and administration of all waters of [Nevada], regardless of the source of water.'" *Id.* at 2.

PCWCD initiated the litigation against the State Engineer in 2015, towards the end of one of the most extreme droughts in the recorded history of the Humboldt River, during which water deliveries to satisfy PCWCD's senior water rights were drastically reduced. Despite the drought conditions that obviously were the immediate cause of the 2012-2015 crisis in water deliveries, PCWCD alleged in the lawsuit that groundwater pumping – and specifically mine dewatering – was capturing surface water flows and impeding delivery of its water rights. *See* First Amended Petition for Writ of Mandamus, or in the Alternative, Writ of Prohibition ("Mandamus Petition") at p. 4. The Mandamus Petition demanded that the State Engineer curb permitted water use by mines to solve the problem.

Significantly, PCWCD sued the State Engineer, but not any mining companies or other Humboldt Basin groundwater users. Groundwater users – including NGM – sought to intervene to protect their interests, but PCWCD opposed their entry into the case, and the judge hearing the case allowed only limited intervention. Intervenors were not allowed to participate in the only evidentiary hearing conducted in the case, and were excluded from secret settlement negotiations.

On July 28, 2020, responding to requests filed by the State Engineer and NGM, the court ordered PCWCD to provide notice of the lawsuit to all Humboldt River Basin water rights holders and owners of domestic wells by October 14, 2020. Just two days before it would have had to comply with the court's order to inform Humboldt water users of its request to curtail or restrict their use of water, PCWCD asked the court to stay the case, including the notice deadline, while it engaged in settlement discussions with the State Engineer, without the involvement or knowledge of NGM or other limited intervenors. The settlement was finalized a few days later, on October 20, 2020.

The litigation was an escalation of complaints PCWCD has previously made to the State Engineer: that pit dewatering is not just a cause, but the *principal* cause of reduced flows in the Humboldt River.² On the contrary, significant groundwater pumping in the Humboldt River Basin began in the 1960's, mostly for irrigation purposes and decades before mines began to dewater pits. Agriculture continues to be the dominant use of groundwater in the Humboldt River Region. In 2015, mines pumped approximately 52,500 acre-feet from groundwater, about 14% of all groundwater pumped in the river basin, while other water rights holders pumped approximately 284,000 acre-feet of water – or 77% of the total – for irrigation. 2020 Prudic Report at pp. 1, 18. These data alone discredit the notion that mine dewatering was the principal cause of reduced water deliveries to PCWCD in 2014 and 2015. The peak of mine dewatering was around 1999, over twenty years ago. Even at the peak, 70% to 90% of the water removed from mines was discharged to the Humboldt River (*increasing* surface flows), re-infiltrated into aquifers near the mines, or used to replace existing water rights for irrigation. The vast majority of water use in pit dewatering is non-consumptive because the water is actually returned to the basin. 2020 Prudic Report at p. 19.

Despite the lack of evidence to support PCWCD's assertions about mine dewatering, the State Engineer has taken a number of steps to address PCWCD's concerns, before and after PCWCD filed suit. Significantly, however, the State Engineer refused PCWCD's calls to curtail groundwater pumping during the drought, because in his judgment, applying the long-established futile call doctrine, curtailment of mine dewatering would not result in increased water deliveries to PCWCD. *See* Draft Order at pp. 4-5; State Engineer's Answer to PCWCD's First Amended Petition at p. 25 (Feb. 4, 2019) ("State Engineer's Answer"). Addressing PCWCD's concerns, the State Engineer has:

- Designated all remaining undesignated basins within the Humboldt River Basin (2015), conferring greater authority to establish priorities among water uses;
- Accounted for "temporary" permits issued for mine dewatering in basin water budgets (2015);
- Required all groundwater users to install meters on groundwater wells and report pumping data to the State Engineer (2015);
- Conducted field work to verify well meter data, and created a publicly accessible database of metering data (2015-2016); and
- Established a policy requiring mines to relinquish permanent water rights to compensate for pit lake evaporation (2016).

Most importantly, the State Engineer in 2015 initiated development of the studies with USGS and DRI described at page 5 of the Draft Order. The work will produce "numerical groundwater capture" models for the Humboldt River Basin. If successful, the models will be the first-ever tools capable of quantifying where and when capture of surface flows due to groundwater

² *See, e.g.,* Schroeder Law Offices, P.C., Water Management in a Prior Appropriation System: *Conjunctive Management Solutions to Groundwater Withdrawals Affecting Surface Water Flows within the Humboldt River Basin* 21 (August 2014) ("PCWCD Conjunctive Management Report") ("...[Groundwater withdrawals are beginning to create a negative impact on surface water flows. This has been predominantly linked to ... dewatering of pit mines.]")

pumping may occur at specific points along the river course. The work is expected to be complete later this year.

While the State Engineer has taken these steps, he also has emphasized that PCWCD has never identified a single specific case where curtailment of groundwater rights would place water at its head gate. In the absence of such evidence, the State Engineer has declined to curtail groundwater rights. State Engineer's Answer at p. 16. He also has observed that low flows in the Humboldt River have corresponded with drought conditions over recorded history, that shortages, while rare, are not a recent phenomenon, and that water shortages in 2014 and 2015 were – in his expert judgment – due to drought conditions, not groundwater pumping. *Id.* at p. 20. Indeed, in 2014, in response to entreaties from PCWCD, the State Engineer looked into curtailing groundwater rights to address expected water shortages in the 2015 irrigation season, but declined, based on his analysis that curtailment would not solve the problem. *Id.* at p. 25.

B. The Draft Order is Beyond the State Engineer's Legal Authority.

1. The Legislature Has Not Empowered the State Engineer to Implement Conjunctive Management Regulations.

Based upon the Settlement with PCWCD, a process of which NGM had no knowledge, the State Engineer obligated himself to develop the Draft Order to establish procedures and standards for review of groundwater applications within the Humboldt River Region. The timetable for publishing the Draft Order comes not from the Nevada Legislature, much less from the State Engineer's own regulatory agenda, but from the Settlement, which says the draft order is to be issued within 90 days and further purports to direct and restrict the substance of the order and the State Engineer's subsequent administrative actions, including the issuance and the contents of a final order.

Despite the demands of PCWCD and the Settlement, the State Engineer does not currently have authority to adopt conjunctive management regulations, which is what the Settlement commits him to do. An administrative body cannot acquire or expand its powers based upon consent or a negotiated agreement. "Administrative agencies cannot enlarge their own jurisdiction" and the scope of an agency's authority is confined to the matters the Legislature has expressly or implicitly delegated. *City of Reno v. Civil Service Comm'n of City of Reno*, 117 Nev. 855, 858, 34 P.3d 120, 122 (2001), citing *Southern Nev. Mem. Hosp. v. State*, 101 Nev. 387, 394, 705 P.2d 139, 144 (1985) and *Clark Co. v. State, Equal Rights Comm'n*, 107 Nev. 489, 492, 813 P.2d 1006, 1007 (1991).

The settlement of litigation is an agreement between private parties, binding only upon those parties. An order, adjudication or settlement does not create a regulation or binding norm that the government can impose upon the general public, and it does not vest an agency with statutory authority that otherwise does not exist. *See Home Builders Ass'n of Chester & Delaware Ctys. v. Com., Dep't of Envtl. Prot.*, 828 A.2d 446, 455 (Pa. Commw. Ct. 2003); *Andrews v. Nevada State Board of Cosmetology*, 86 Nev. 207, 208, 467 P.2d 96, 97 (1970) ("powers of an administrative agency cannot be assumed by the agency, nor can they be created by the courts in the exercise of their judicial function."). An agency's authority is limited to the matters the legislative body has expressly or implicitly delegated to the agency.

Because the State Engineer has no inherent powers, he only has those expressly given by the Legislature, and those that may "be implied even though they were not expressly granted by statute, when those powers are necessary to the agency's performance of its enumerated duties." *Stockmeier v. State, Bd. of Parole Com'rs*, 127 Nev. 243, 248, 255 P.3d 209, 212 (2011), citing *City of Henderson v. Kilgore*, 122 Nev. 331, 334, 131 P.3d 11, 13 (2006). For such implied authority to exist, the implication must be essential to carrying out an express power given by the Legislature. *Id.*, citing *City of Henderson* at 335, 14. As a result, the "State Engineer's powers . . . are limited to 'only those . . . which the Legislature expressly or impliedly delegates.'" *Tim Wilson, P.E., Nevada State Engineer v. Pahrump Fair Water, LLC*, 137 Nev. Adv. Rep. 2 at 7 (Feb. 25, 2021).

Any action, rule, regulation, or order from an administrative agency is invalid when it "violates the constitution, conflicts with existing statutory provisions or exceeds the statutory authority of the agency or is otherwise arbitrary and capricious." *Felton v. Douglas Cty.*, 410 P.3d 991, 995 (Nev. 2018) (quotations omitted); *State, Div. of Ins. v. State Farm Mut. Auto. Ins. Co.*, 116 Nev. 290, 293, 995 P.2d 482, 485 (2000); *Jerry's Nugget v. Keith*, 111 Nev. 49, 54, 888 P.2d 921, 924 (1995). The State Engineer is forbidden from acting beyond statutory authority granted by the Legislature. *Howell v. Ricci*, 124 Nev. 1222, 1230, 197 P.3d 1044, 1050 (2008). And since the State Engineer's authority is a question of statutory interpretation, it is subject to de novo review by the judiciary. *Tim Wilson, P.E., Nevada State Engineer*, 137 Nev. Adv. Rep. 2 at 8.

2. NRS 533.024 Is a Statement of Policy, Not a Grant of Statutory Authority.

As authority, the Draft Order cites NRS 533.024, which is a broad declaration of legislative policy. The Legislature amended NRS 533.024 in 2017 to declare: "*It is the policy of this State . . . (e) To manage conjunctively the appropriation, use and administration of all waters of this State, regardless of the source of the water.*" (emphasis added). The 2017 amendment contained no authority to *implement* this new policy. Before 2017, the State Engineer, the Legislature, and water users understood that Nevada water law addressed surface water and groundwater use separately. *See, e.g.*, Ruling 5079 at p. 20, September 25, 2001 ("Nevada law provides for the management of surface water and ground water as distinct sources."). Separate administration of surface water and groundwater supplies has been the law and practice in Nevada for more than 150 years, since before Nevada statehood. The addition of one line of text to Nevada statutes does not upend more than a century of law and grant the State Engineer authority to fundamentally remake that system.

This is not to diminish the significance of the 2017 amendment to NRS 533.024. To be sure, it signals a future of integrated water resource management in Nevada, and NGM agrees that more integrated management is called for. However, in addition to the policy declaration, such sweeping change must be authorized by Nevada's elected representatives and the Legislature must lead the way. NRS 533.024 by itself cannot be construed as a grant of express or implied authority to implement conjunctive management regulations. Courts recognize that such legislative policy declarations are not self-executing and are instead simply an interpretive guide for authority that is otherwise granted. *See e.g., Pawlik v. Deng*, 412 P.3d 68, 71 (Nev.

2018) quoting *J.E. Dunn Nw., Inc. v. Corus Constr. Venture, LLC*, 127 Nev. 72, 79, 249 P.3d 501, 505 (2011).

In addition to NRS 533.024, the State Engineer cited NRS 533.370 and 534.020 as authority to issue the Draft Order, but neither of these statutes provides express authority that – when coupled with NRS 533.024’s statement of policy – could be understood to authorize conjunctive management regulations in Nevada. NRS 533.024 can only be read to grant implied authority if that authority is necessary to carry out some other express provision of the law. *City of Henderson*, 122 Nev. at 335, 14. NRS 533.370 provides the grounds upon which the State Engineer can approve or deny an application to appropriate water. The statute directs him to approve applications if unappropriated water is available, the application is complete, and fees are paid, and to reject them in cases where there is no unappropriated water, or the appropriation would conflict with existing rights. Nothing in that section empowers the State Engineer to implement conjunctive management measures. And NRS 534.020 merely provides that groundwater belongs to the public and is subject to all existing rights, an uncontroversial statement of Nevada water law that also applies to surface water. *See* NRS 533.025 (“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.”).

Importantly, the State Engineer’s own contemporaneous interpretation of NRS 533.024 following the 2017 amendments demonstrates that further authorizing legislation is necessary, and belies the assertion that the 2017 policy amendment delegates any broad new authority. Courts recognize that an agency’s contemporaneous interpretation of a purported enabling statute, one developed while legislative directives are fresh, is considered to be highly authoritative. *See Roberts v. State*, 104 Nev. 33, 39, 752 P.2d 221, 225 (1988). Accordingly, interpretations of NRS 533.024 offered by the State Engineer just after its 2017 enactment are most instructive. On the other hand, no deference can be afforded where an agency’s interpretation as to its authority is a reversal of position and newly-minted, particularly when this later conflicting interpretation is adopted as a “litigation position” or “a post hoc rationalization.” *See Christopher v. SmithKline Beecham Corp.*, 567 U.S. 142, 155 (2012); *Bowen v. Georgetown Univ. Hosp.*, 488 U.S. 204, 213 (1988) (“Deference to what appears to be nothing more than an agency’s convenient litigation position would be entirely inappropriate.”); *Defs. of Wildlife v. Norton*, 258 F.3d 1136, 1146 (9th Cir. 2001).

And here, cementing that further legislation is required, the State Engineer promptly confirmed his understanding that the 2017 amendments to NRS 533.024 did not grant some of the powers now being asserted as authorizing the Draft Order. To the contrary, in the 2019 Legislative Session – the one immediately following the 2017 amendments – the State Engineer requested and urged the Legislature to pass Assembly Bill 51 (“AB 51”), which would have authorized the State Engineer to adopt conjunctive management regulations and require mitigation plans. The draft regulations already existed at the time; they were developed with the Humboldt Working Group, a body created by the State Engineer to obtain stakeholder input on conjunctive management issues in the Humboldt River Basin. *See* Draft Order at p. 5. AB 51 received a hearing in the Assembly Committee on Natural Resources, Agriculture, and Mining, but was not voted out of committee, and was never debated in either chamber of the legislature. In other words, in 2019 the State Engineer requested but was denied some of the very powers

that he now claims authority to exercise in propounding the Draft Order. The Legislature did not even seriously consider giving the State Engineer the authority to implement conjunctive management.

The State Engineer admitted in testimony during the only hearing on AB 51 that existing statutes fail to grant him authority to implement conjunctive management: "While the 2017 Legislative declaration helpfully recognizes the hydrological connection that often exists between groundwater and surface water sources, ***existing statute does not provide the framework necessary to effectively implement the Legislature's policy direction***" (Testimony of Tim Wilson, P.E., Administrator, Division of Water Resources; Minutes of the Meeting of the Assembly Committee on Natural Resources, February 27, 2019) (emphasis added). Given the State Engineer's current assertion of authority to impose conjunctive management requirements, this is a stunning admission, and one that is fatal to the Draft Order.

The Director of the Department of Conservation and Natural Resources ("DCNR"), Brad Crowell, confirmed the same when testifying in support of AB 51, stating that "[w]hen we look at our waters conjunctively, we are going to have some conflict" and that the bill ". . . is designed to recognize that [conflict] and get some direction from the Legislature as to how to best manage that situation." (Testimony of Bradley R. Crowell, Director of DCNR; Minutes of the Meeting of the Assembly Committee on Natural Resources, February 27, 2019). Mr. Crowell also stated: "If there is sentiment and the will to not look at our waters conjunctively, then we can choose to do that. If we are going to move forward and manage our waters conjunctively, *then we need guidance to implement that.*" *Id.* (emphasis added).

The Deputy Administrator for the Division of Water Resources ("DWR"), Micheline Fairbank, echoed these points when she testified: "Without a framework and guidance in terms of how we establish these [conjunctive] management programs, we are stuck with competing interests." (Testimony of Micheline Fairbank, Deputy Administrator, Division of Water Resources, Minutes of the Meeting of the Assembly Committee on Natural Resources, February 27, 2019). Ms. Fairbank further offered: "This is a mechanism to pave the way of how we can go ahead, within the statutory framework and through regulatory process, provide that management solution, so that any potential conflict that may arise with regards to those differing and conflicting interests [surface water and groundwater], can have a mechanism in state law to be resolved. *Id.* Finally, she testified: "The first part of AB 51 allows and directs our office to establish conjunctive management regulations and *to allow for the authorization to adopt conjunctive management programs...we need the ability*, we need direction, and we need to have that from this body because right now we are left with very little." *Id.* (emphasis added).

Deputy Administrator Adam Sullivan, who later signed the Draft Order as Acting State Engineer, also testified and explained:

We need to work within the prior appropriations system, and in order to address existing conflicts, we have very limited tools within the statute. Simply put, until the senior water user gets 100 percent of their water, the junior water user does not get any. The response to that would be to entirely curtail a groundwater user. In this example of the Humboldt River, we could entirely curtail groundwater

users, but because of the hydrogeology of the system, that still would not result in a full delivery of water to the senior surface water users.... What we need is to have some flexibility to work with the stakeholders in the affected region to fully satisfy the senior users but also allow junior users at least a portion of their water to the extent that it does not conflict."

Testimony of Adam Sullivan, Deputy Administrator, Division of Water Resources, Minutes of the Meeting of the Assembly Committee on Natural Resources, February 27, 2019. He further testified: "... there is no fixed direction within our legislative prerogative to give us a more direct approach to resolve the existing conflict [between surface and groundwater] to the extent that it exists." *Id.*

But as the State Engineer is well aware, and the Draft Order acknowledges, the Legislature declined to enact AB 51; indeed, the bill was not advanced out of the committee of jurisdiction. Draft Order at p. 5. Another bill considered in the same legislative session – Assembly Bill 30 – would have given the State Engineer explicit authority to “require any person who submits an application [for a water right] to submit a monitoring, management and mitigation plan.” AB 30 actually was passed by the Assembly, but did not receive floor consideration in the Senate. Thus, the 2019 Legislature declined – not once, but twice – to grant the State Engineer the very statutory authority it now asserts that NRS 533.024 confers. The State Engineer’s position finds no support in the law. In fact, his prior statements, the statements of his deputies, and their actions seeking legislative authority all explicitly acknowledge this reality. In enacting the 2017 amendments to NRS 533.024 the Legislature in no way granted the State Engineer the powers now claimed in the Draft Order. *City of Boulder City v. Gen. Sales Drivers*, 101 Nev. 117, 118-19, 694 P.2d 498, 500 (1985) ("It is presumed that in enacting a statute the legislature acts with full knowledge of existing statutes relating to the same subject."). And, as the State Engineer has long recognized, the existing statutory scheme provides no means or mechanism to conjunctively manage surface water and ground water. Under those statutes, they have been managed as distinct sources for over a century. To acquire the powers that the State Engineer seeks to assert in the Draft Order, the Legislature would have to authorize them. The Legislature not only did not do so, it expressly declined to enact AB 51 and AB 30.

3. The Draft Order Unlawfully Mandates Conjunctive Management.

Nevada law unquestionably provides the State Engineer some authority to act when proposed groundwater use conflicts with existing surface rights, but that authority is limited, and as the State Engineer and his deputies have acknowledged, does not include conjunctive management. NRS 533.370(2) and 533.371(6)-(7) direct the State Engineer to reject a permit application when the proposed use conflicts with existing rights, including when an application to appropriate groundwater would conflict with a senior surface water right. *Office of State Eng’r v. Morris*, 107 Nev. 699, 701, 819 P.2d 203, 204 (1991) (where a proposed water use or change would conflict with existing rights, the State Engineer shall reject the application and refuse to issue the permit). NGM does not quarrel with the State Engineer’s authority to address surface water/groundwater conflicts in this way, or to impose some conditions on his granting of new appropriations permits. *See, e.g., United States v. Alpine Land & Reservoir Co.*, 919 F.Supp. 1470 (D.Nev. 1996) (affirming State Engineer’s imposition of conditions). However, the Draft

Order extends beyond those boundaries to create an approach that effectively replicates key elements of the conjunctive management approach in the draft regulations the 2019 Legislature declined to endorse.

Indeed, the key feature of the draft conjunctive management regulations was the establishment of a “Humboldt Basin Mitigation Program,” which would require all groundwater users in the Basin to submit mitigation plans to compensate for their “injurious depletion” or “capture” of surface water flow in the Humboldt River, or alternatively, to provide financial mitigation. Preliminary Draft Regulations for the Mitigation of Surface Water Conflicts in the Humboldt River Basin at pp. 4-5 (“Draft Regulations”). Specifically, Section 3 of AB 51 would have granted the State Engineer authority to implement these regulations and require mitigation plans “to address conflicts between groundwater and surface water users.” Section 4 of the bill would have empowered the State Engineer to require replacement water or financial compensation as part of mitigation plans.

Despite the failure of AB 51 (and AB 30) in the 2019 session, the Draft Order would require that groundwater applications – for new appropriations and for changes to existing appropriations where “capture” of surface water is predicted – include either in-stream replacement water or withdrawal of existing groundwater rights. Draft Order at pp. 7-8. To be sure, the Draft Order does not use the term “mitigation plan,” but effectively, this is a requirement for a mitigation plan.

Significantly, the Draft Order would require this mitigation whenever capture is modeled, not just in cases where capture may result in an actual conflict with senior water rights. This is pro-active conjunctive management, not appropriate conditions on the granting of new groundwater rights. This provision of the Draft Order violates NRS 533.370. Subsection 1 of that provision *requires* the State Engineer to approve a complete and properly submitted application if water is available in the source. NRS 533.370.2 authorizes the State Engineer to deny an application if the proposed appropriation would create a conflict with existing water rights. There is no authority to reject an application on the basis of predicted capture, where no conflict with existing water rights is identified.

Further, as posited in the Draft Order, the State Engineer would not even consider a groundwater application where models predict capture, unless the application is accompanied by an offer of replacement water or the withdrawal of existing groundwater rights. Draft Order at pp. 7-8. These conditions also explicitly violate NRS 533.370. The requirements for applications are found in NRS 533.335, .340, .345, and .350. There is no requirement to provide replacement water, withdraw water rights, or take other mitigation measures in order to *apply* for a water right. NRS 533.355, .360, and .365 set out the State Engineer’s duties upon receipt of an application. He records the date the application was received, determines whether it is complete, returns it (if necessary) for the correction of defects, provides notice of the application to the public, and considers protests if they are filed. He then must consider and approve or reject the application within deadlines established in the statute. There is no authority for the State Engineer to impose conditions on his receipt and consideration of water rights applications.

As a practical matter, the State Engineer often conditions groundwater permit applications on the provision of replacement water or other mitigation measures to assure new or modified water rights are not in conflict with existing rights. Nevada courts have heard disputes regarding such arrangements without ever addressing the State Engineer's authority to require them. *See, e.g., Redrock Valley Ranch, LLC v. Washoe County*, 127 Nev. 451, 254 P.3d 641 (2011) (State Engineer approved interbasin transfer subject to submission of monitoring and mitigation plan). In 2015, in *Eureka County v. State Engineer of Nevada*, petitioners directly challenged the State Engineer's authority to require mitigation. 131 Nev. 846, 359 P.3d 1114 (2015). NGM is not objecting to the use of mitigation on a site-specific basis to resolve permit application issues.

4. If NRS 533.024 Is A Grant of Authority to Implement Conjunctive Management, It Is An Unconstitutional Delegation of Legislative Powers.

The State Engineer's attempt to enlist NRS 533.024 as a grant of expansive substantive powers – as opposed to a mere policy declaration – also presents serious constitutional flaws. After all, if that was the Legislature's intent with the 2017 amendments – even though the State Engineer subsequently testified otherwise – then NRS 533.024 would violate the Constitution's prohibition on the delegation of legislative power to the executive branch. The Nevada Constitution contains an express separation of powers requirement. It provides that "[t]he powers of the Government of the State of Nevada shall be divided into three separate departments – the Legislative, the Executive, and the Judicial; and no persons charged with the exercise of powers properly belonging to one of these departments shall exercise any functions, appertaining to either of the others, except in the cases expressly directed or permitted in this constitution." Nev. Const. art. 3, § 1(1). The Legislature may only delegate to administrative agencies "the power to determine the facts or state of things upon which the law makes its own operations depend." *Sheriff, Clark Cty. v. Luqman*, 101 Nev. 149, 153, 697 P.2d 107, 110 (1985). Agencies are only authorized to ascertain the facts which will make the statute applicable or operative. *Id.*

"Such [delegations of] authority will be upheld as constitutional so long as suitable standards are established by the legislature for the agency's use of its power. These standards must be sufficient to guide the agency with respect to the purpose of the law and the power authorized." *Id.* at 153-54, 697 P.2d at 110. Without supplying suitable standards to cabin an agency's authority to promulgate regulations, the executive agency's power is virtually boundless and prone to arbitrary and capricious abuses. *Id.* at 154, 697 P.2d at 110 ("Sufficient legislative standards are required in order to assure that the agency will neither act capriciously nor arbitrarily.").

As the State Engineer acknowledged to the Legislature in 2019, NRS 533.024 does not contain any "suitable standards" dictating how the State Engineer should or can conjunctively manage surface and groundwater. *See* pp 8-9 above. There are no guidelines about when, how, or under what circumstances the State Engineer may create rules or programs to conjunctively manage surface and groundwater. *See McNeill v. State*, 132 Nev. 551, 557, 375 P.3d 1022, 1026 (2016) (finding an unlawful delegation and explaining "the Legislature did not explicitly provide the Board the authority to create additional conditions. And even assuming that the Legislature had intended to do so, that delegation of power would fail because the Legislature has not

provided guidelines informing the Board how, when, or under what circumstances, it may create additional conditions.").

Indeed, this was the entire point of the State Engineer's, and related representatives' testimony before the Legislature in support of AB 51. (*See, e.g.*, Minutes of the Meeting of the Assembly Committee on Natural Resources, February 27, 2019) ("... existing statute does not provide the framework necessary to effectively implement the Legislature's policy direction"); (***"If we are going to move forward and manage our waters conjunctively, then we need guidance to implement that."*** (emphasis added)); ("... ***we need direction, and we need to have that from this body*** because right now we are left with very little." (emphasis added)). NRS 522.024 is a general policy statement and is void of any factors or elements to guide the State Engineer in implementing conjunctive management of surface and groundwater in the State. If this statute indeed were intended to enable the State Engineer to act, it provides absolutely no direction for, or limits on, the types of rules, regulations, or orders the State Engineer could impose, and as such, would be an unconstitutional delegation of legislative powers. Only the Legislature possesses this type of lawmaking power. As such, if the State Engineer is now currently suggesting – contrary to his prior position – that the 2017 amendments to NRS 533.024 constitute a substantive grant of power, then it is an unconstitutional one. As the State Engineer previously acknowledged, the Legislature has provided no guidelines. The current claims of authority in the Draft Order are purely a litigation-driven interpretation, and would be entitled to little or no deference by a reviewing court.

5. The Draft Order is Also Arbitrary and Capricious.

Even if the State Engineer had the legal authority to impose conjunctive management measures on new permit applications, the Draft Order would be an abuse of that authority. The Draft Order is not deliberative legislative or executive branch action. The entire reason for the Draft Order at this moment in time is the private agreement between the State Engineer and PCWCD to settle their litigation. Prior to the receipt of comments on the Draft Order and completion of the USGS/DRI modeling work, the entirety of the “evidence” supporting this action is the unproven allegations in the litigation.

Indeed, the State Engineer has made clear that in his judgment, and based on available data, surface water shortages during 2012-2015 were caused by the drought, not by groundwater pumping, let alone mine dewatering. State Engineer's Answer at pp. 3, 15, 17, 18, 19, 30; Draft Order at p. 4. Additionally, records show that Humboldt surface water rights holders – including PCWCD – have received their water rights (or more) in all but seven years since 1936.³ Draft Order at p. 2. In every case, reduced water deliveries in those seven years coincided with drought conditions in the Humboldt River Basin. *Id.*; *see also* 2020 Prudic Report at pp. 1, 41-43, 51. Significantly, the State Engineer highlights in the Draft Order that Lamoille Creek, upstream from groundwater pumping, also experienced its lowest recorded flows during the 2012-2015 drought. Draft Order at p. 3. This data point emphasizes the severity of the drought along the entire course of the river, including at the headwaters, where almost all of the surface water in the Humboldt Basin originates, and casts further doubt on the allegation that groundwater

³ The Draft Order says that there were six years of reduced deliveries, but the graph at page 2 of Draft Order shows reduced deliveries in seven years: 1955, 1961, 2002, 2003, 2013, 2014, and 2015.

pumping by mines interfered with PCWCD's water rights during the drought years. *See, e.g.,* Humboldt River Chronology at p. I-7. Far from supporting PCWCD's complaints, the data show that PCWCD has received its legal allotments of water, or more, in 92% of the last 85 years, without regard to groundwater pumping. Its years of shortages correlate with droughts, not groundwater pumping, at least upstream of the Comus gage. *See* pp. 16-20 below.

Despite the paucity of evidence in the record for placing significant limitations on groundwater pumping, the State Engineer has agreed to move forward with such restrictions in the Settlement, and Draft Order. His doing so now highlights the lack of another legal prerequisite: the final USGS/DRI modeling effort, revised basin water budgets, and updated perennial yields. Those work products, which are due to be finalized soon, are expected to shed light on the extent to which capture may be occurring, and where such capture may be causing conflicts with surface water rights. Though finalization has been delayed several times, the State Engineer says now that the work will be complete, and publicly available, in 2021. Given the centrality of this question to the litigation, the Settlement, and the Draft Order, NGM asks why it is necessary to proceed now with the Draft Order and a final order, in advance of those results? Why did PCWCD insist in the Settlement on the Draft Order being issued within 90 days, before the USGS/DRI models would be available? The answers are self-evident and underscore another legal flaw in the Draft Order.

When an agency negotiates a lawsuit settlement that provides the agency will adopt rules or regulations, such agreements to regulate are often viewed skeptically by the courts. This skepticism is of course for good reason. Administrative rules and regulations “are presumed to be promulgated by agencies acting in the public interest, while negotiated rulemaking creates a system in which parties make an agreement among and for themselves, resulting in the transformation of a process that was created to promulgate public law serving the public interest into a private law relation and is nothing more than the expression of private interests mediated through some governmental body.” *Home Builders*, 828 A.2d at 454 (citations and quotations omitted). These judicial misgivings resonate in the current case, where PCWCD has pointed to mine dewatering as singularly harmful to its senior water rights, but has sought to achieve its goals in a lawsuit and through settlement negotiations with the State Engineer that purposely excluded NGM and other mine operators who would be most harmed if PCWCD's demands were met.⁴

Allowing NGM and other mine operators to comment on the Draft Order this late in the process does not cure administrative deficiencies or transform the process into a public one. While it is true that the State Engineer is now allowing for comment on the Draft Order, it is also true the State Engineer previously agreed, in October of 2020, to “issue the Aforementioned Draft Order,” which the State Engineer was already “in the process of developing,” in exchange for PCWCD's concession to “dismiss its Amended Writ Petition *with prejudice*” (emphasis

⁴ As the State Engineer pointed out in its Answer to the Amended Mandamus Writ, PCWCD filed protests to numerous groundwater permit applications, but never appealed any of them. State Engineer's Answer at pp. 11-15. Challenging the State Engineer *at the time* he grants water rights is the ordinary, and more importantly, the most appropriate way to obtain the relief PCWCD seeks. Such challenges would allow all interested parties to be heard and a reasoned decision by the State Engineer made, at the time of application, unlike the extraordinary writ proceeding PCWCD started, and the resulting Settlement, actions that intentionally excluded the very parties that would be most affected if the court had granted PCWCD's requested relief.

added).⁵ Further, the Settlement Agreement appears to commit the Order to a specific conjunctive management approach.⁶ If the substance of the Order has been predetermined or the underlying matters prejudged, then the comment period would be simply be a meaningless *pro forma* exercise. See, e.g., *Davis v. Mineta*, 302 F.3d 1104 (10th Cir. 2002), in which the Court of Appeals for the Tenth Circuit rejected an environmental assessment (“EA”) and Finding of No Significant Impact (“FONSI”) for a highway project because the Department of Transportation (DOT) “prejudged” the outcome of the EA by agreeing that no environmental impact statement (“EIS”) would be required. 302 F.3d at 1112. The agency’s failure to adequately consider the need for an EIS was arbitrary and capricious. The court in *Davis* also noted that because the DOT had prejudged the outcome of the EA, the public opportunity to comment on the EA had been only *pro forma*. 302 F.3d at 1113.

Also relevant is *Conservation Northwest v. Sherman*, 715 F.3d 1181 (9th Cir. 2013), in which the Ninth Circuit invalidated a consent decree requiring changes to a federal land use plan. The court held: “Because the consent decree allows for substantial, permanent amendments to [the Forest Plan], it impermissibly conflicts with laws governing the process for such amendments.” 715 F.3d at 1188. The State Engineer’s exemption from the Nevada Administrative Procedure Act does not render *Sherman* less instructive regarding the legality of the Draft Order. The Settlement with PCWCD dictates substantive actions the State Engineer must take, including the issuance of the Draft Order within 90 days, the issuance of a Final Order, and a description of what substantive provisions “The Order” will contain. The Settlement requires final action, regardless of whether that final action is a reasoned decision supported by substantial evidence. Subsequent public comment on substantive terms already set in the Settlement cannot retroactively cure the defectiveness of those terms.

The State Engineer’s consent to both this schedule and to the substantive requirements of Settlement is arbitrary and capricious on its face. Before he receives the final USGS/DRI products, and allows NGM and other Humboldt water users to review and comment on them, the State Engineer has no basis to impose the requirements proposed in the Draft Order, even if he had the legal authority to do so. In fact, all of the State Engineer’s public statements on this subject, including numerous statements and findings in the Draft Order, contradict any argument that the Draft Order is necessary or warranted now. See Draft Order at p. 2 (“Scheduled deliveries for the irrigation seasons were exceeded in all but six years since 1936.”); p. 3 (“[D]uring the 2012-2015 period the Humboldt River Region experienced one of the worst droughts since 1902.”); p. 3 (“[S]ite-specific capture data is generally not available to accurately quantify potential conflict....”); pp. 3-4 (“The potential for hydraulic connectivity and capture by itself does not demonstrate that conflict is occurring or will occur in the future, unless it is shown that scheduled surface water deliveries cannot be met, and those unmet deliveries are caused by groundwater pumping.”); p. 4 (“[S]ince the end of the 2012-2015 drought, all scheduled deliveries at Imlay were fully served through the 2020 irrigation season.”); p. 4 (“[NRS 534.110] is the regulatory mechanism established in statute for the State Engineer to address conflict due

⁵ Draft Order at pp. 3 and 4.

⁶ See Settlement Agreement at p. 3 (“The Order will set out specific thresholds for capture for applications to change existing groundwater appropriations that consider the changes in capture Where such a change results in an increase in capture the Order will set out specific requirements to offset any increase in capture with surface water replacement or relinquishment of grounds water rights”).

to inadequate supply of groundwater or unreasonable lowering of the water table.”); p. 4 (“During the drought period of 2012-2015 there were insufficient data to identify to what extent groundwater pumping was causing the inadequacy of water supply for Humboldt River senior decreed right holders...”); p. 4 (“Analysis of the data at the time indicated that curtailing junior groundwater pumping to protect senior decreed rights would result in a nominal addition to flow in the River...”); p. 5 (“[USGS/DRI] efforts are intended to serve as a basis for determining the effect of groundwater pumping on flows in the Humboldt River and its tributaries... [and] completion is expected in 2021...”); p. 6 (“NRS 533.024 directs the State Engineer ‘to consider the best available science in rendering decisions concerning the availability of surface and underground sources of water in Nevada.’”); p. 7, fn. 18 (“[T]he mechanism to be used by the State Engineer to make this determination will be demonstrated in public workshops and available for public review.”); p. 8 (“The principle (*sic*) statutory mechanism available to the State Engineer to address conflict among water users is curtailment of junior priority rights pursuant to NRS 534.110. The State Engineer finds that the data currently available do not demonstrate that curtailment of junior rights could be implemented in a manner that would eliminate potential future conflict without unduly restricting valid existing groundwater rights.”).

In other words, the State Engineer acknowledges: (1) the drought was likely the cause of reduced water deliveries to PCWCD in 2012-2015, not groundwater pumping; (2) since 2015, flows have recovered and PCWCD has received all the water to which it is entitled in the years since, and, indeed, has received its full water deliveries in all but six of the last 85 years; (3) the data necessary to make capture determinations were not available in 2015, and the means will not be available until at least later this year, when the USGS/DRI work product becomes available (and assuming that the models function as expected); (4) although Nevada statutes direct the State Engineer to rely on the best available science, that science will not be available for public review until later this year, which is apparently after the date the State Engineer has arbitrarily picked to finalize the Draft Order; (5) analysis of data that were available indicated that curtailment of groundwater pumping during the 2012-2015 drought likely would not have increased surface flow more than a nominal amount, and perhaps not at all at the Imlay gage (for service of PCWCD’s water rights); and (6) even if the yet-to-be-completed model predicts capture, it does not follow that capture in any particular case would create a conflict with PCWCD’s surface water rights. These are not grounds for an extraordinary order testing the limits of the State Engineer’s authority. On the contrary, these findings argue *against* the issuance of the Draft Order. Taken together, the State Engineer’s prior statements and his findings in the Draft Order raise a legitimate question whether there is any basis for an order at all, and in any event they make clear that there is no rational basis now, before the USGS/DRI work is complete and available for interested parties to review. Finalization of the Draft Order at any time before then would be arbitrary and capricious.

The Nevada Supreme Court notes that decisions by the State Engineer are arbitrary and capricious if they are not based on substantial evidence. *King v. St. Clair*, 414 P.3d 314, 316 (Nev. 2018) (“[W]e determine whether the agency’s decision was arbitrary and capricious. ... According to that standard, factual findings of the State Engineer should only be overturned if they are not supported by substantial evidence.”); *Wilson v. Pahrump Fair Water, LLC*, 2021 Nev. LEXIS 2 at 12 (2021) (“State Engineer’s decision must be supported by substantial record evidence.”). Without the results of the USGS/DRI work, and guidance about how the models

will be applied in specific cases, the State Engineer has no evidence upon which to base the significant restrictions detailed in the Draft Order. It is not enough for the State Engineer to share those results with the public after the fact, as he has indicated is the plan. Draft Order at p. 7. The Draft Order is premised on the accuracy and functionality of the USGS/DRI capture models but the parties that will be impacted and perhaps prejudiced by the use of the models have yet to see them in action, test them, or validate them. If the models do not function as advertised, the actions proposed in the Draft Order may not be warranted or even feasible. The State Engineer's orders should be based on what he knows now, not what he hopes to know in the future. *See Eureka Cnty*, 359 P.3d at 1120 (State Engineer's decision must be based upon presently known substantial evidence, not evidence to be determined in the future).

C. Mine Dewatering Is Not Reducing Surface Flows in the Lower Humboldt River.

Dr. David Prudic is a recognized authority on the Humboldt River Basin. The 2020 Prudic Report examines decades of actual Humboldt River flow data along with geologic, hydrogeologic, climate, and other data to: (1) establish the relation of river flow to climate; and (2) evaluate the extent to which groundwater pumping could be causing a decrease in river flow in the lower Humboldt River. Dr. Prudic has studied the river system for over 40 years, as a USGS research hydrogeologist, professor at the University of Nevada Reno, and currently as a consulting hydrogeologist. Dr. Prudic's research and publications on the Humboldt river system are widely cited and relied upon by stakeholders.⁷

As detailed in the 2020 Prudic Report, the data do not support limitations on mine dewatering. On the contrary, Dr. Prudic demonstrates – using five different data analysis methods – that Humboldt River flow volumes over time have been markedly similar, before, during, and after the heyday of mine dewatering, with the notable exception of flows between the Comus and Imlay gages. The Comus gage is upstream of Winnemucca, and the Imlay gage is downstream, just above PCWCD's place of diversion. These gaging stations are on the lower Humboldt River, and downstream of any potential capture of Humboldt river flows by mine dewatering. The actual data show that low-flow days (days of less than one cubic feet per second of flow) at Imlay (downstream of Winnemucca) have increased dramatically in the last 30 years, while flows at Comus (upstream of Winnemucca) have remained almost the same. 2020 Prudic Report at pp. 48-53. Clearly, there is a documented decrease in the amount of water reaching the Imlay gage, but whatever actions are causing that reduction are occurring downstream of Comus, and cannot be caused by mine dewatering.⁸

⁷ *See, e.g.*, PCWCD Conjunctive Management Report at p. 16 (“Dr. David Prudic is the front runner in studying the Humboldt River Basin.”).

⁸ Despite the documented decrease in flows in the lower Humboldt at Imlay, the data also show that PCWCD has received all the water to which it is entitled – or more – in all but seven years since 1936. Reduced deliveries in those those years correspond with droughts, not groundwater pumping. *See* Draft Order at 2. The Draft Order says that deliveries were impacted in six years, but the graph at page 2 shows reduced deliveries in seven years.

1. Decades of Data and Numerous Studies Are Available Predicting and Measuring the Impacts of Mine Dewatering on Surface Flows in the Humboldt River.

PCWCD's allegations about the impacts of mine dewatering have been broad and general, and notably, *not* supported by actual data. *See e.g.*, Mandamus Petition at pp. 4; PCWCD Conjunctive Management Report at pp. 2, 5, 20. That may be because the available data – collected and evaluated continually by government agencies and private entities for decades – do not support PCWCD's claims. Significantly, stream flow data extend back to at least 1945, and for the Palisade gage, to 1902. These data make it possible to understand Humboldt River flows *before* significant groundwater pumping occurred, and to compare those flows to flows during the periods of groundwater pumping for irrigation and mine dewatering, and after most mine dewatering ceased. The Humboldt River system has been extensively observed and studied by government and other scientists and water users. Simply stated, while the USGS/DRI model will be a valuable addition to Humboldt River science, it is not necessary to establish the impacts of mine dewatering on water deliveries in the lower Humboldt River. The ample, currently available data show mine dewatering is not reducing and *has not reduced* water deliveries to PCWCD. These data undermine any justification for the Draft Order.

Mines in Northern Nevada began dewatering pits and other mine works on a large scale thirty years ago, in the early 1990's. This new water use drove the creation and continuing development of what is now a massive corpus of research, modeling, and data-gathering on the hydrogeology of the region. In connection with its approval of mine plans of operations, the Bureau of Land Management ("BLM") is required by law to prepare environmental impact statements ("EISs") that include detailed investigations and modeling efforts designed to identify the likely impacts of mine dewatering on groundwater and surface water, among other environmental consequences. NGM and others have installed *thousands* of monitoring wells and established *dozens* of surface water monitoring sites. Mines are required to monitor impacts during dewatering, collect and report data, and to calibrate and update models periodically to improve them and align them with field observations. These studies and modeling efforts also were necessary to obtain Nevada Water Pollution Control Permits ("WPCPs") for discharging the pumped water to aquifers and surface waters. And these modeling tools and data were also presented to the State Engineer to support permit applications to conduct dewatering.

The following models reproduce and predict groundwater impacts for the Carlin Trend mines (Leeville, Goldstrike, Meikle, Arturo, and Gold Quarry), the Cortez District (Cortez/Cortez Hills and Pipeline/Crossroads), and Phoenix, Twin Creeks, and Lone Tree, all in the Humboldt River basin.

- **Carlin Trend:** The Barrick Model was created in 1991, and has been updated, recalibrated, and regridded numerous times to incorporate monitoring data and new information, most recently in 2019.
- **Carlin Trend:** The Newmont Model was created in 1992 for Gold Quarry, and expanded in the mid-1990s to include the entire Carlin Trend. This model is required to be recalibrated every two years, which occurred most recently in 2020.

- **Cortez District:** The original model was created in 1995 to model groundwater impacts of the Pipeline Project, and later was expanded to address Pipeline/South Pipeline plan amendments, the Cortez Hills Expansion Project, and the Deep South Expansion Project, and eventually to include all four hydrographic areas underlying the Cortez operations. The model has been updated annually for the last decade, most recently in 2020.
- **Phoenix, Lone Tree, and Twin Creeks:** These models were created in the mid-1990s and have been updated periodically, most recently in 2018 for Lone Tree and 2020 for Phoenix and Twin Creeks.

These models have been recalibrated over a period of thirty years using millions of data points. As a result, these are no longer predictive models, but rather are data-rich 3-D reports detailing the actual impacts of mine dewatering. The data-supported and -validated models have become very accurate tools for forecasting remaining future impacts of dewatering, although it should be reemphasized that the peak of mine dewatering was over a decade ago. The models and associated monitoring have demonstrated overwhelmingly that mine dewatering has not affected surface water supplies in the lower Humboldt River.

2. **The Data Demonstrate that Mine Dewatering Has Not Caused the Reduced Flows Below the Comus Gaging Station.**

As compelling as these models and monitoring data are, it is not necessary to rely on them. Independent USGS streamflow data also show that mine dewatering has not reduced surface flows in the Humboldt River.

a. **Mine Dewatering is Occurring in Bedrock Aquifers Not Hydrologically Connected to the Humboldt River.**

In order for groundwater to supply flow to the river, or to capture surface flows, the aquifer that contains it must be in contact with the streambed; in other words, it must be hydrologically connected to the stream. The uppermost aquifers in the Humboldt River Basin are alluvial and “basin-fill” deposits, consisting of sediments deposited in or near the valley floor. 2020 Prudic Report at p. 12. The sand and gravel alluvial and basin-fill deposits along the Humboldt riverbed are those most likely to interact significantly with the river, but there are only a few such deposits large enough to have a significant impact on lower Humboldt river flows. The largest is a 100+ foot thick deposit of sand and gravel near Winnemucca (downstream of the Comus gage), which is indisputably in contact with the river. 2020 Prudic Report at p. 13. In contrast, mine dewatering is occurring principally in deeper bedrock aquifers, upstream from Comus, and with poor connectivity to the basin-fill aquifers that overlie them. *See id.* at pp. 20-25.

b. **Analysis of Humboldt River Flow Records and Climate Data Suggests Little to No Impact on Surface Flows of Mine Dewatering.**

If mine dewatering were capturing Humboldt surface flows, the capture would be occurring upstream of the Comus gage. To identify areas where capture *may* be occurring, Dr. Prudic looked for changes in groundwater contributions between gaging stations using a “flow-

duration curve” analysis and comparing flow data for the period 1946-1969 (before mine dewatering) with the period 2007-2020 (during mine dewatering). Flows at Carlin, Elko, Palisade, and Battle Mountain gages were comparable between the two periods, with some *higher* flows in the more recent period attributable to pumped groundwater added to the river by certain mines, and contributions from tributaries in higher flow years that do not occur in most years. 2020 Prudic Report at pp. 47-50. Similarly, the flow duration curves at Comus for the two periods are virtually the same, strongly indicating no *negative* impacts on surface flows at this point in the river from mine dewatering occurring upstream.

In contrast, the comparison of flow duration curves at Imlay (downstream of Winnemucca) shows a marked difference between the periods 1946-1969 and 2007-2020. In the earlier period, flow was perennial at the Imlay gage, but it became intermittent by the latter period, with flows lower than those in the earlier period 90% of the time. These reductions between Comus and Imlay cannot be attributed to capture occurring upstream of Comus, because the data show no reduction in surface flows upstream. The data instead indicate capture of surface water occurring downstream of the Comus gage, most likely from groundwater pumping in the basin-fill aquifer near Winnemucca. *Id.* at p. 48.

Dr. Prudic’s statistical analysis comparing Humboldt river flows to cumulative precipitation for the period since 1946 yielded a similar result. 2020 Prudic Report at pp. 28-32. The analysis shows that river flows responded to previous drought conditions much as they did to the most recent drought in 2012-2015 at Elko, Carlin, Palisade, Battle Mountain, and Comus gages. If mine dewatering – which was not occurring during previous droughts – were having an impact on surface flows in the lower Humboldt River in 2014-2015, flows measured at one or more of these gages should have been significantly *lower* relative to precipitation than in previous droughts. Dr. Prudic’s analysis demonstrates that flows at these gages have been relatively consistent in the periods before, during, and after the peak of mine dewatering. However, the analysis demonstrates a marked reduction in surface flows since 1969 in the lower Humboldt basin between Comus and Imlay, even though flows *increased* at the Comus station from the earlier period to the latter one. 2020 Prudic Report at pp. 32-36. The analysis further supports the conclusion that the net decrease in flow between Comus and Imlay is attributable to groundwater pumping in the basin-fill aquifer near Winnemucca, and is not attributable to mine dewatering or other groundwater pumping upstream of the Comus gage. *Id.*

Dr. Prudic’s analysis of flows in drought years further confirms these findings. Because depletion of river flows by groundwater pumping would be most observable during drought periods, Dr. Prudic separated out the drought years from other flow data, and compared flow at each gaging station to cumulative precipitation and tributary flow. *Id.* at pp. 38-41. Analysis of flows between gaging stations for the month of September – the month with lowest flows of the entire year – is consistent. *Id.* at pp. 47-50. If groundwater pumping were impacting surface flows, it would be most obvious in September data. Again however, the only reach where flows decreased compared to previous years is the one between the Comus and Imlay gages.

c. Groundwater Pumping for Irrigation Appears to be Reducing Surface Flows in the Lower Humboldt River.

As detailed above, Dr. Prudic's analyses of Humboldt flow data for periods before (1946-1969) and after (2007-2020) most mine dewatering show that streamflows in earlier droughts were markedly similar to flows in the 2012-2015 drought, except in the lower Humboldt stretch between Comus and Imlay gages. If groundwater pumping from mine dewatering were affecting surface flows, the data should document lower flows at the Carlin, Palisade, or Battle Mountain gaging stations in 2012-2015. Instead, the observable disruption in surface flows occurs downstream, between Comus and Imlay gages, which cannot be attributed to mine dewatering far upstream. The more likely cause is groundwater pumping in the basin-fill aquifer near Winnemucca.

An analysis of low-flow days bolsters this conclusion. Dr. Prudic accumulated all days when daily mean flow at Comus and Imlay gaging stations was less than 1 cubic foot per second ("cfs") since October 1, 1945, and compared the number of such days before significant groundwater pumping with an equal number of days after groundwater pumping had become common. 2020 Prudic Report at pp. 51-53. The number of such days at the Comus gage (upstream of Winnemucca) was virtually the same, but the number of days with less than 1 cfs flow at Imlay (downstream of Winnemucca) increased dramatically in the later period. *Id.* at pp. 52-53. Between 1947 and 1960, there were only 64 days of flows less than 1 cfs at Imlay, but since water year 2007, the Imlay gage has recorded 973 days of flows less than 1 cfs.

The data indeed show that PCWCD water users are experiencing reductions in surface flows, but those reductions occur between Comus and Imlay gages, not upstream where any impacts from mine dewatering would be evident. Accordingly, the reductions cannot be attributed to mine dewatering, but rather to groundwater pumping for irrigation that occurs near Winnemucca. Thus, while the State Engineer indeed may need to address conflicts between senior surface water rights holders and junior groundwater rights below the Comus gage, the State Engineer's rush to issue the Draft Order is being driven by allegations about mine dewatering upstream of Comus that are unfounded and are thoroughly rebutted by voluminous data. NGM urges the State Engineer to withdraw the Draft Order, await the completion of the USGS/DRI groundwater capture model, and seek statutory authority from the Legislature to manage surface water and groundwater resources conjunctively.

D. Detailed Comments on the Draft Order.

The most fundamental problem with the substance of the Draft Order is that there is no record to support it. As explained above (pp. 12-16), the State Engineer's actions must be based on substantial evidence. NRS 233B.039 exempts the State Engineer from the procedural requirements of the Nevada Administrative Procedure Act, but not from the obligation to engage in reasoned decision-making. Instead of holding hearings, studying the laws and regulations of other western states, analyzing available data, and otherwise taking steps to create an evidentiary basis for his proposed action, the State Engineer is proceeding primarily based on unproven allegations in litigation with PCWCD, and on the terms of their settlement agreement. Terms agreed to in settlement of a lawsuit are not by themselves an appropriate basis for agency action,

especially precedent-setting action of the kind proposed here. *See, e.g., Conservation Northwest v. Sherman*, 715 F.3d 1181, 1187 (9th Cir. 2013) (“We therefore hold that a district court abuses its discretion when it enters a consent decree that permanently and substantially amends an agency rule that would have otherwise been subject to statutory rulemaking procedures.”). The State Engineer can still remedy these shortcomings, among other ways by considering and responding to these and other comments, and withdrawing the order, or re-proposing a draft order that is supported by substantial evidence. Finalizing this Draft Order without the underlying evidence to support it would be arbitrary and capricious.

NGM would like to work with the State Engineer on crafting an order that addresses current water management concerns. To that end, NGM offers the following detailed comments on the Draft Order. In some cases, NGM is proposing edits or additions to the current Draft Order. These are discussed below and can be found in a redlined version of the Draft Order at Appendix B to these comments. Other comments address problematic or unclear language that NGM did not edit, but that should be revised, clarified, or omitted by the State Engineer. These passages are highlighted in the redlined Draft Order at Appendix B.

Pages 1, 3, 5, 6, 7, 8 / The Term “Capture.” The order should clearly define the term “capture.” The term is used throughout the Draft Order, without ever being specifically defined. In some cases (p. 3), the term appears to refer to actual capture, while in others (pp. 7, 8), the term refers to “modeled capture.” It is also not clear whether capture refers only to capture of streamflows, or includes other types of capture (i.e. evapotranspiration). Referring to capture imprecisely in the order will lead to confusion, hinder the enforceability of the final order, and increase the likelihood of disputes over implementation of the final order.

Page 1, Second Paragraph / The Bartlett Decree. The Bartlett Decree addressed surface water rights. See proposed insertion at Appendix B.

Page 2, First Paragraph, and Graph / Years of Reduced Deliveries. The Draft Order incorrectly states that reduced deliveries occurred only in six of the last 85 years. See proposed correction at Appendix B. In fact, there were reduced deliveries in seven years: 1955, 1961, 2002, 2003, 2013, 2014, and 2015.

Also, Newmont’s Lone Tree mine was adding pumped groundwater to the stream immediately above the Comus gage in 2002 and 2003. Given the *increase* in flow in those years because of mine dewatering, the reasons for reduced deliveries to PCWCD in those years are not clear, but must be related to water use between Comus and Imlay (and in any event cannot be related to water use in the upper Humboldt River basin). It is unclear whether the graph on page 2 depicts water years or calendar years.

Page 3, First Paragraph / Lamoille Creek. Continuous flow records also exist for Lamoille Creek from May 1915 to June 1923.

Page 3, First Paragraph / The State Engineer’s Authority. Whether the relief requested by PCWCD in the litigation was within the State Engineer’s authority is a matter of dispute. See proposed deletion at Appendix B.

Page 3, Third Paragraph / Potential to Capture Stream Flow. The first sentence is too general to be stated as a fact. It is generally understood that groundwater pumping has the potential to capture streamflow *when surface water and groundwater are hydrologically connected*. As the State Engineer is aware, the extent to which bedrock aquifers dewatered for mining purposes are hydrologically connected to the Humboldt River was a question at the center of the PCWCD litigation, and accordingly also the Draft Order. A substantial amount of data demonstrate that these dewatering activities have not affected and are not affecting surface flows at or below the Comus gage. *See* pp 15-20 above. NGM was prevented from presenting these data in the litigation, but they are relevant to this proposed action, and should be acknowledged and addressed by the State Engineer as part of the record upon which any decision will be based. See proposed edits at Appendix B.

Page 3, Third Paragraph / No Site-Specific Data. The Draft Order acknowledges that “site-specific capture data” are generally not available to accurately quantify potential conflict. This is essentially an admission that the State Engineer presently does not have the tools to quantify capture or conflict, and highlights the arbitrariness of proposing the Draft Order *before* the USGS/DRI models are available. Until stakeholders have had the opportunity to review and comment on the models, “improved groundwater budgets,” and updated perennial yields, there is no rational basis for taking the actions proposed in the Draft Order.

Page 3, Footnote 12 / State Engineer’s Rulings. The footnote cites five State Engineer’s Rulings, including Ruling 55. This appears to be a typographical error. Please provide a citation to the correct ruling.

Pages 3-4, Last Full Paragraph and Continuation on Page 4 / Determination of Conflicts. The Draft Order states: “The potential for hydraulic connectivity and capture by itself does not demonstrate that conflict is occurring or will occur in the future, unless it is shown that scheduled surface water deliveries cannot be met, and those unmet deliveries are caused by groundwater pumping.” How exactly will that determination be made, and what role will the USGS/DRI models play in it? Section IV of the Draft Order (pages 7-8) apparently would require mitigation in the form of replacement water or a withdrawn groundwater right whenever the capture threshold is exceeded, as predicted by the yet-to-be disclosed USGS/DRI models, but would mitigation be required even in the absence of an identified conflict pursuant to NRS 533.370? Presumably the models will predict some capture that does not result in conflicts with senior water rights. How will such situations be addressed in a final order?

Page 4, First Full Paragraph / Increased Reliance on Groundwater. The Draft Order speculates here that surface flows could be affected by “greater drawdown due to increased reliance on groundwater during drought.” The Whereas clauses in the Draft Order should refer to the facts and science upon which the State Engineer’s decision will rest. The State Engineer cites no source or authority for this assertion. It likely also is not an accurate generalization. Groundwater users are permitted to pump specific amounts of water whether surface flows are normal, high, or low. Some drawdown of the water table in the area of pumping is expected; it is the inevitable consequence of permitting the groundwater use. *See* NRS 534.110.4. Drawdown does not inevitably result in capture, or in conflict with surface water rights. NGM believes this

scenario could only arise in the case of a user that has both surface water and supplemental groundwater rights, and who had not been pumping the maximum water duty from groundwater in normal flow years. And even then, pumping the maximum allowed from groundwater does not mean that senior surface rights would be affected. As the State Engineer acknowledges elsewhere (p. 3), the tools to identify site-specific capture and conflict are not currently available. See proposed deletion at Appendix B.

Page 4, First Full Paragraph / The Bartlett Decree. The Draft Order cites climate-related hydrologic “uncertainties” unforeseen in the Bartlett Decree as one rationale for the Draft Order. The same could be said of the State Engineer’s grants of underground water rights. Importantly, the State Engineer cites only uncertainties, not evidence. Uncertainties by themselves are not sufficient grounds upon which to promulgate a binding order. *See* p. 15 above. However, the Draft Order proposes solutions to these uncertainties that would impact only groundwater rights, not senior surface rights. While that approach may be consistent with NRS 533.0245, it also reinforces the reality that the Draft Order exceeds the State Engineer’s authority to take conjunctive management steps.

Legislative action is necessary in order to give the State Engineer authority to implement real conjunctive management that will require compromises and cooperation on the part of surface water and groundwater users to address over-appropriation and future current hydrologic uncertainties. These compromises inevitably will involve hard choices and impact existing property rights, which are both reasons why the State Engineer should not act without clear direction from the Legislature.

Page 4, Second Full Paragraph, Third Sentence / NRS 534.110. The State Engineer asserts here (and later on page 8) that NRS 534.110 provides authority to curtail groundwater rights to avoid impacts on existing surface water rights. That is incorrect. NRS 534.110 applies to groundwater exclusively, not to surface water. Any authority the State Engineer may have to administer surface water and groundwater rights conjunctively, as the Draft Order proposes to do, must be found in NRS 533.370 or elsewhere in Chapter 533. Application of NRS 534.110 to conflicts between surface water and groundwater rights exceeds the State Engineer’s authority.

Page 4, Second Full Paragraph, Fifth Sentence / Flow Data During Drought. It is inaccurate to assert that data were not available in 2012-2015 to identify impacts of drought and groundwater pumping on surface water supplies. While those resources do not include site-specific capture data, reliable flow data do exist for the six major gages on the Humboldt River since 1945. *See* pp. 16-20 above. These and other data were available to the State Engineer in 2012-2015. Dr. Prudic’s analyses of the data establish with some specificity that groundwater pumping near Winnemucca (downstream of the Comus gage) may indeed have contributed to reduced water deliveries to PCWCD during the drought, but reduced flows cannot be attributed to mine dewatering. NGM provided a draft of the 2020 Prudic Report to the State Engineer on January 8, 2021. The analysis is directly relevant to the matters addressed in the Draft Order, and should be included as part of the evidence considered before finalizing the Draft Order. Indeed, NGM urges the State Engineer to withdraw the Draft Order and reconsider the need for any order, in light of the 2020 Prudic Report, other available data, and these comments. If the State

Engineer determines to go forward, he should time any re-proposal to coincide with publication of the USGS/DRI models and make all supporting materials available for public review.

In addition to the 2020 Prudic Report, the State Engineer has access to modeling tools created to support mine dewatering, and enormous amounts of data collected over decades up to the present to support, calibrate, and upgrade those models. Those data confirm that mine dewatering has not impacted, and is not impacting, water deliveries to PCWCD. These materials are the kinds of evidence which the State Engineer *should* be including in a record supporting the Draft Order. They establish a basis for decision-making, which the State Engineer needs before undertaking actions of this magnitude. When available evidence is considered, it is clear that the measures proposed in the Draft Order are not warranted. Moving forward without considering the available data would be arbitrary and capricious. *See* pp. 12-16 above.

Page 4, Second Full Paragraph, Last Sentence / Analysis of Potential Curtailment. The Draft Order mentions an analysis of available data during the drought, on the basis of which the State Engineer decided not to order curtailment of groundwater pumping. The Draft Order cites public presentations in 2015, but this is a reference to a PowerPoint presentation that at best summarized the analysis. The PowerPoint slide deck is not an analysis. Who conducted this analysis? Was the analysis made available to the public? How detailed was the analysis? Since some groundwater rights are senior to some surface water rights in the Humboldt River Basin (see Draft Order at p. 4), did the analysis make a distinction between senior groundwater rights and junior surface water rights, or did it look only at groundwater vs. surface water? These or any other materials referred to or relied on in the Draft Order should be included in a record that is available for stakeholders to evaluate along with the text of the Draft Order.

Page 4, Last Paragraph / Sound Basis for Decision-Making. As detailed above, it is inaccurate to say that sound data did not exist upon which to “render defensible decisions with regarding to avoiding potential conflict.” The stream flow data were and are available, and now Dr. Prudic’s comprehensive analyses of those data are also available to the State Engineer. The available data also strongly support the State Engineer’s previous grants of permits to conduct mine dewatering. The USGS/DRI models are not necessary to make decisions about the impacts of mine dewatering; those data have existed for years. NGM recognizes that the USGS/DRI models will be important and useful as the State Engineer begins to administer water rights conjunctively, but their functions and limits must be acknowledged. They will be a predictive tool, based initially on previous modeling and data, but their accuracy must be confirmed and improved going forward by the accumulation of more data. More importantly, the USGS/DRI models will not reduce or resolve conflicts among water users automatically. To make them effective as a conjunctive management tool, the State Engineer must do what is necessary to obtain buy-in from the community of Humboldt water users. The credibility of the models must be established; it cannot be assumed. Indeed, this is the best argument for why the Draft Order must not go forward before the models are available to the public. Without the context of the models, it is simply not possible to fully evaluate the potential impacts of the Draft Order on water users.

Page 5, First Full Paragraph, Last Three Sentences / AB 51. The Draft Order inaccurately states that “the supporting statutory revisions” (AB 51) “lacked unanimous support.” In fact, AB

51 never made it out of the Assembly committee of jurisdiction, and was not even considered by the full Assembly or the Senate. *See* proposed edits at Appendix B.

Page 5, Second Full Paragraph / Groundwater Budgets and Perennial Yield. The Draft Order describes the State Engineer’s work with USGS/DRI “to develop improved groundwater budgets at the basin scale.” What is the status of this work? How will budgets allocate or distinguish natural evapotranspiration between streams and groundwater? How will budgets be applied in valleys where surface water and groundwater are hydrologically connected to account for natural evapotranspiration by non-beneficial plants, without causing a change in the hydraulic gradient between the stream and areas of natural evapotranspiration of groundwater?

Page 5, Third Full Paragraph / Preliminary Results of USGS/DRI Modeling. The Draft Order mentions but does not disclose “preliminary results” of the model study, saying only that the “findings indicate that there may be important non-linear, climate-driven behaviors that influence interactions between the surface water and groundwater systems.” The Draft Order continues: “These behaviors suggest that pumping-related capture of surface water tends to increase during wet years when excess water is available and decrease during dry years when the potential for conflict is greater.” The significance of these observations in the context of the Draft Order is unclear. If anything, they seem to militate against the idea that surface water/groundwater conflicts are occurring during low flows. More importantly, without access to the USGS/DRI materials, it is impossible for NGM and other interested parties to understand what these observations mean, and how they may be relevant to the actions proposed in the Draft Order. The Draft Order should not be based on “preliminary findings.” *See* proposed deletion at Appendix B, Page 5.

The (preliminary) finding that stream-flow capture is greater during years of high stream flows versus drought years is consistent with the natural system even before there was significant groundwater pumping in the Humboldt Basin. Analyses of stream-flow data along the Humboldt River in the 1950’s and early 1960’s showed increased stream flow losses during wet years and decreased stream flow losses during dry years (G.B. Maxey and H.A. Schamberger, 1961, *The Humboldt River Research Project, Nevada*: I.A.S.H. publication no. 57, *Groundwater in arid zones*, pages 437 to 454). The reason for the greater losses in wet years is that more water is being spread over a larger area, either naturally or by diversion of irrigation water. This was clearly illustrated in several reports by Philip Cohen (USGS) published in the 1960s. Most of the excess water that is spread over the land during high flows is used either by native non-beneficial plants or by beneficial agriculture, and much less returns back to the streams and rivers later in the season from bank storage. Only in a few reaches of the Humboldt River and its tributaries will baseflow increase and sustain stream flows over a longer period following well above average stream flows. More information is needed to determine where exactly baseflow to the Humboldt River and its tributaries is maintained by groundwater discharge and when such baseflow may be affected by droughts and/or groundwater pumping.

Page 6, First Paragraph / Best Available Science. The best science available now (streamflow data, Prudic Report, modeling, and monitoring results) does not support finalization of the Draft Order. The USGS/DRI models cannot be the basis upon which the State Engineer finalizes the

Draft Order because they are not currently “available.” Preliminary findings are not “substantial evidence.”

Page 6, Second Paragraph / 2017 Amendment. The 2017 amendment to NRS 533.024 is a statement of policy. It does not convey substantive conjunctive management authority. Conjunctive management authority must be found, if at all, in other substantive provisions of the Nevada Revised Code. *See* pp. 5-12 above.

Page 6, Fifth Paragraph / State Engineer’s Procedures. The rationale offered here for the Draft Order applies to all water users, not just groundwater users. *See* proposed edit at Appendix B.

Page 6, Sixth Paragraph / Interim Procedures. The order is entitled “Draft Interim Order, but it has no sunset or transition provision, and its substantive provisions are written as permanent changes in Division of Water Resources practice. NGM could support an order that is truly temporary, and that is tailored to address specific water administration issues using existing statutory authority. *See* proposed edits at Appendix B.

Page 6, Sixth Paragraph / Reduction in Total Groundwater Commitments. The Draft Order predicts here that it will “result in a reduction in total groundwater commitments.” As an interim solution, the State Engineer should be working to maintain the status quo pending a more complete implementation of conjunctive management. Reduction of groundwater commitments suggests the State Engineer intends to interfere with existing property rights in groundwater. *See* proposed edits at Appendix B.

Page 7, Section IV. 1. A. / Definition of Replacement Water. The Draft Order needs a definition of the term “replacement water.” How will groundwater budgets account for the natural amounts of evapotranspiration between groundwater and surface water? How will budgets applied in real world circumstances in valleys with hydrologically connected surface and groundwater supplies account for evapotranspiration from non-beneficial plants without causing a change in the hydraulic gradient between the stream and areas of natural evapotranspiration of groundwater?

Page 7, Section IV. 1. A. i. / Cumulative Capture Amount. The term “cumulative capture amount” is unclear, and thus it is unclear how this provision would work in practice. If the term means the predicted total capture amount over a 50-year period, how would mitigation work? For instance, if the replacement requirement is satisfied by withdrawal of a groundwater right equal to total capture divided by 50, the mitigation may unduly impact the groundwater right holder in the early period (because capture impacts are likely to be minimal initially and to build over time), and may not fully compensate the surface water right holder after 50 years (because the capture will reach a steady state over the long term).

Page 7, Sections IV. 1. A. i. and ii. / “Continual” and “Continuous” Pumping.” The Draft Order would place limits on consideration of applications for new appropriations of groundwater “where capture, as a percentage of pumping rate, exceeds 10% after 50-years of continual pumping...” What does “continual pumping” mean in this context? Agricultural pumping does

not tend to be continual, while mine dewatering and municipal uses are more likely to be continual. This threshold should be stated and explained more precisely, given different types of groundwater users. A similar problem occurs in the section addressing change applications, but there, the Draft Order uses the term “continuous” pumping. These references should be standardized and explained.

Page 7, Section IV. 1. A. ii. / Replacement Water. How will the State Engineer determine that replacement water will equal or exceed predicted annual capture in 80% of the years over 50 years? This provision of the Draft Order is likely to generate significant controversy in its implementation, and the State Engineer’s process for making this determination should be more clearly described. For instance, if replacement water compensates for capture *except* in years of lower than normal flow (as long as those years equal less than 20%), is that sufficient to meet this requirement? Does the applicant get to choose which years its replacement water will not meet or exceed the modeled capture amount? The same questions apply to Section IV. 1. B. ii., where withdrawal of a groundwater right must meet or exceed the predicted capture during 90% of the years.

Page 7, Section IV.1.A.iii. / Water Used in Areas of Flooding. The Draft Order states: “Water used in areas of flooding or other areas that cannot be isolated from the natural or man-caused application of that water will not be considered for replacement water.” The language is unclear and should be clarified.

Page 7, Section IV. 1. B. i. Is the amount of withdrawn groundwater the diversion volume, consumptive volume, or modeled impact of the withdrawn right? The State Engineer should clarify that the volume should be based on the predicted impact of the groundwater right (i.e., trading the impact of the withdrawn groundwater right for the impact of the new appropriation).

Pages 7 and 8, Sections IV. 1, 1.A. and B., 2. / Capture v. Conflict. The trigger for requiring mitigation should be conflict, not modeled capture. The State Engineer does not currently have authority to condition appropriations as proposed in the Draft Order when there is no conflict with existing water rights. *See* pp. 5-12 above, and proposed edits at Appendix B.

Pages 7 and 8, Sections IV. 1. And 2. / Consumptive Use. Are new appropriations for groundwater evaluated at the full rate of the requested appropriation, or will there be consideration of consumptive use, i.e., what gets returned to groundwater via recharge through infiltration beneath irrigated fields, septic systems, treated effluent, rapid infiltration basins, or well injections? The discussions imply that only the total appropriation will be considered without consideration for water returned to groundwater.

Page 7 / Guidance Document Needed. There will be a great deal of uncertainty regarding how the Order should be implemented. If the State Engineer goes forward, NGM believes implementing guidance will be necessary.

Pages 7 and 8, Section IV.2. / More Stringent Replacement Standard for Change Applications. Change applicants would be required to replace 100% of net capture, while applications for new water rights would be burdened only if capture exceeds 10% after 50 years

of continual pumping. What is the rationale for this difference in treatment between new and existing water rights?

Pages 7 and 8, Section IV. 2. / Reach-Specific Capture and Net Capture. Net capture is defined as the difference between capture at the proposed POD and capture at the existing POD. The amount of net capture determines how/whether the change application will be considered, except that in cases where the applicant proposes to move the point of diversion upstream of the existing POD, “or nearer to a different tributary,” “reach-specific capture impacts to senior decreed water rights,” rather than net capture, are determinative. Reach-specific capture is not defined. How does it differ from net capture? What is the rationale for this distinction? Reach-specific capture appears to focus on actual conflict with senior surface water rights, which should be the threshold for mitigation in all cases. *See* proposed edits at Appendix B.

Page 8, Section IV.2 / Inapplicability to Change Applications Required by Existing Spacing Orders. *See* proposed language at Appendix B.

Pages 8 and 9, Section IV. 3. / NRS 534.110. The Draft Order states: “The principle (*sic*) statutory mechanism available to the State Engineer to address conflict among water users is curtailment of junior-priority water use pursuant to NRS 534.110.” However, NRS 534.110 applies only to groundwater, and cannot be the source of authority to curtail junior surface water rights. Similarly, NRS 534.120(2) applies to groundwater only, so the State Engineer may not use that provision to establish use priorities among surface water rights holders.

Section IV.3, which is captioned “Addressing Future Conflict Between Existing Valid Groundwater Rights and Decreed Humboldt River Surface Water Rights,” should be rewritten or deleted entirely. It describes how the State Engineer will approach curtailment decisions, based on NRS 534.110. However, as noted above, NRS 534.110 applies only to groundwater; it cannot be the basis for resolving conflicts between groundwater and surface water users. If that authority exists, it must be found in Chapter 533 of the Nevada Revised Statutes or elsewhere. Beyond that fundamental problem, Section 3 sets out considerations and factors the State Engineer *may* take into account when considering curtailment, but it makes no changes in existing regulations or practice. The Section also ignores the fact that aggrieved senior water rights holders already have tools at their disposal to challenge junior water rights that may be in conflict. Does the State Engineer suggest with Section 3 that he will make curtailment decisions pro-actively, outside the context of a call on the river? What is the trigger for considering curtailment? *See* proposed edits at Appendix B.

Page 9 / Sunset Provision. The Draft Order, as an interim measure, needs a sunset provision. *See* proposed language at Appendix B.

E. Conjunctive Management in Western States.

The term “conjunctive management” can describe a variety of water management tools, and the term continues to evolve as western states amend and update their water laws to address scientific evidence of hydrologically connected surface water and groundwater, water shortages, over-appropriation, and the uncertain impacts of climate change. At its most basic, conjunctive

management just refers to integrated management of groundwater and surface water that were previously administered as separate resources. This basic conjunctive management can operate under prior appropriation principles (first-in-time/first-in-right), as is the case in Colorado, where conjunctive management has been standard for decades. However, implementing such basic conjunctive management in a state like Nevada – where groundwater rights and surface water rights have been administered separately for over a century – would be disruptive, without carefully managing the transition. Executing conjunctive management presents difficult issues of law, property rights, hydrology, and economics. Inevitably, in times of shortage, senior surface water right holders will seek curtailment of junior groundwater rights, even though those groundwater rights were granted by the State Engineer based on availability of water in the aquifer at the time, without regard to potential impacts on surface water rights. Nevada needs additional legal authority, regulatory tools, and incentives for cooperation among water users to make a successful transition.

In a broader sense, conjunctive management refers to tools and strategies developed to supplement the prior appropriation doctrine to deal with disruption in water supplies, over-appropriation, changing water uses, and increasing water scarcity. Obviously, these are sources of conflict not just between surface water and groundwater rights holders, but between and among water users generally. A successful conjunctive management system rests on sound science that can determine hydrologic connections between surface and groundwater resources with reasonable accuracy. Conjunctive management tools work best where the underlying science is accessible to users and consensus exists on the means, methods, and results. The ultimate goal is to allocate scarce water among users as efficiently and equitably as possible, while recognizing existing vested and decreed property rights.

Appendix C to these comments contains examples of conjunctive management tools that may be considered by the State Engineer. These are short summaries. Obviously, whether these tools could be used to address issues in the Humboldt River Basin will require more thorough investigation of how these programs came to exist, what problems they were created to solve, and how they have worked in practice. And as the State Engineer considers tools, he must engage the stakeholders that will be most affected by such tools. The most basic and familiar conjunctive management tool is mitigation, which can take many forms, including seasonal or other time limits on use, or, as proposed in the Draft Order, replacement water, withdrawal of existing groundwater rights, or financial compensation. The examples in Appendix C also include basin water agreements based on the use of computer models, so-called “alternative transfer methods,” recharge of over-appropriated aquifers and use of aquifers to store excess water, water banking arrangements, and other voluntary arrangements among water users. Appendix C is not meant to be an exhaustive collection of tools, but rather an illustration of the kinds of tools others have employed to resolve and prevent conflicts among water users.

NGM strongly urges the State Engineer to investigate these and other conjunctive management tools before seeking to implement conjunctive management in Nevada. Some states, like Utah and Idaho, have recently implemented conjunctive management, and their experiences with various tools may assist the State Engineer in developing proposed legislation

and regulations, and in making a smoother transition from separate to conjunctive management of surface water and groundwater sources. Colorado has a much longer track record, and may be a source of more sophisticated conjunctive management tools that have evolved and have been tested over decades.

The USGS/DRI capture models are an important step in the right direction for Nevada, but the State Engineer must consider carefully how to employ the models, how to engage with the water community in introducing them into decision-making, and how to improve and update them as data accumulate about their accuracy and usability. Affected water users must acknowledge the models as reasonably accurate and fair; otherwise, they will be the source of disputes rather than the means of resolving disputes. As we have noted above, the State Engineer should publish the models and associated reports and studies as soon as possible, and then facilitate a review and comment process aimed at educating basin water users and getting buy-in to the use of the model. All those steps should occur before the State Engineer issues an order.

III. CONCLUSION

Despite its concerns with the legality of and the rationale for the Draft Order, NGM is prepared to work with the State Engineer and other stakeholders to implement conjunctive management of surface water and groundwater resources in Nevada. NGM appreciates the State Engineer's careful consideration of these comments as he decides on future actions related to the Draft Order, and conjunctive management more generally.

**IN THE OFFICE OF THE STATE ENGINEER
OF THE STATE OF NEVADA**

ORDER

#1329

**ESTABLISHING INTERIM PROCEDURES FOR MANAGING GROUNDWATER
APPROPRIATIONS TO PREVENT THE INCREASE OF CAPTURE AND CONFLICT
WITH RIGHTS DECREED PURSUANT TO THE HUMBOLDT RIVER
ADJUDICATION**

I.

OVERVIEW

WHEREAS, it is well established that the source of water to a pumping well originates from three primary sources; first from groundwater storage, then increasing over time from capture of streamflow (where present in a hydrographic system) and evapotranspiration.^{1,2} The terms “stream capture” or simply “capture,” as used in this Order, refer to a reduction in streamflow caused by groundwater pumping. Decades of groundwater pumping in the Humboldt River Region (Region) has led to increasing capture of the Humboldt River and its tributaries, resulting in growing conflict with rights of the Humboldt Decree.

WHEREAS, there are a range of actions or strategies that may be implemented by water users, whether in cooperation with the State Engineer or through other means, to mitigate or avoid conflict. Regional groundwater models currently in development by the United States Geological Survey (USGS) and Desert Research Institute (DRI) are an important tool that will be used to demonstrate the effectiveness of different management strategies and possible administrative actions. Public participation throughout the process of developing a long-term management strategy is an essential component for communication, transparency, and successful implementation. Through the State Engineer’s engagement with the community of water users within the Humboldt Region, several viable strategies have come under consideration, and include:

- Prohibition on pumping within a determined capture zone under certain thresholds of predicted seasonal water supply;
- Credit systems that account for non-use or for return flow from artificial recharge;

¹ Charles V. Theis, 1940, *The Source of Water Derived from Wells -Essential factors controlling the response of an aquifer to development*, Civil Engineering, v. 10, no. 5, p. 277-280.

² Barlow, P.M., and Leake, S.A., 2012, *Streamflow Depletion by Wells – Understanding and Managing the Effects of Groundwater Pumping on Streamflow*, U.S. Geological Survey Circular (Dec. 1, 2021, 1:06 p.m.) 1376, 84 p., <https://doi.org/10.3133/cir1376>

- Enhanced storage capacity, including aquifer storage and recovery that benefits the Humboldt River system;
- Use of conservation funds to enact measures that benefit the Humboldt River such as purchase of groundwater rights that are in immediate/frequent conflict with the Humboldt decree;
- Other private party agreements to resolve conflict; and/or
- Withdrawal or abandonment of existing committed rights.³

WHEREAS, the primary mechanism available to the State Engineer to unilaterally address conflict among water right holders is to order that withdrawals of groundwater be restricted to conform to priority rights per NRS 534.110(6). However, it is also well established that groundwater use in the Humboldt River Region is fundamental to the Region's culture, communities and economic vitality. Strict curtailment would be a draconian measure resulting in significant and lasting economic harm. It is further recognized that permitted groundwater use is a beneficial use. Additionally, a varying amount of the source of water to pumping wells originates from sources other than stream capture and this use is not in conflict with the Humboldt Decree. For these reasons, among others, strict curtailment is not a preferred option. Rather, implementation of a management framework based on the quantifiable impact of each groundwater well's capture of streamflow will more precisely address harm from any conflict with Humboldt decreed rights.

WHEREAS, the State Engineer recognizes that any comprehensive solution will require extensive outreach to those impacted by any future decisions and management strategies, including water right holders, tribal communities, water users, representatives of conservation and environmental interests, and other interests (collectively referred to as "stakeholders"). The State Engineer seeks to collaborate with stakeholders on the development of long-term management strategies, supported by groundwater models that are currently in development, to address conflict caused by stream capture without arbitrary curtailment or other administrative restrictions on groundwater use. The State Engineer anticipates that any future management framework shall consider active water replacement plans carried out by groundwater right holders, local water resource plans developed in accordance with NRS 278.0228, implementation of Water Conservation Plans pursuant to NRS 540.131, preferred uses of water in the interest of public

³ See generally, comments received from the draft interim order; notes from Working Group meetings, notes from Humboldt River Basin Water Authority meetings, official records of the Nevada Division of Water Resources.

welfare pursuant to NRS 534.120(2), and domestic well protections under NRS 533.024(b). It is also anticipated that any such framework will be supported by the use of the USGS and DRI models to demonstrate effectiveness in preventing conflict resulting from groundwater use within the Humboldt River Region.

WHEREAS, the State Engineer recognizes that under the current conditions there are substantial implications for the water users in the Humboldt River Region. The State Engineer also acknowledges and appreciates that the water users understand the issue and share in the desire to see an effective management strategy that addresses the issues relating to groundwater use that conflicts with senior decreed rights and the need for a defensible outcome. While the science that will be used to inform those long-term management strategies is being finalized, an interim protocol is necessary to avoid exacerbating existing problems. This Order establishes the management framework that the State Engineer is adopting for this period to avoid additional harm to water rights above what is already occurring.

II.

BACKGROUND OF THE HUMBOLDT RIVER REGION

WHEREAS, the Humboldt River Region is delineated by the topographic boundary of the Humboldt River watershed, extending over 11,000 square miles, including 34 hydrographic basins in eight Nevada counties. Hydrographic basins within the Humboldt River Region include Marys River Area (042), Starr Valley Area (043), North Fork Area (044), Lamoille Valley (045), South Fork Area (046), Huntington Valley (047), Dixie Creek-Tenmile Creek Area (048), Elko Segment (049), Susie Creek Area (050), Maggie Creek Area (051), Marys Creek Area (052), Pine Valley (053), Crescent Valley (054), Carico Lake Valley (055), Upper Reese River Valley (056), Antelope Valley (057), Middle Reese River Valley (058), Lower Reese River Valley (059), Whirlwind Valley (060), Boulder Flat (061), Rock Creek Valley (062), Willow Creek Valley (063), Clovers Area (064), Pumpernickel Valley (065), Kelly Creek Area (066), Little Humboldt Valley (067), Hardscrabble Area (068), Paradise Valley (069), Winnemucca Segment (070), Grass Valley (071), Imlay Area (072), Lovelock Valley (073), Lovelock Valley-Oreana Subarea (073A), and White Plains (074).

WHEREAS, the Bartlett Decree⁴ dated October 20, 1931, in the Sixth Judicial Court of the State of Nevada, establishes relative rights to the use of the waters of the Humboldt River and setting forth the dates of priority and duties of water for the decreed claims. The Bartlett Decree determined the waters of the stream system to be fully appropriated, and that in an average year there existed no surplus water for irrigation. Subsequent decrees, orders and writs made corrections to the Bartlett Decree, collectively forming the Humboldt River Adjudication, hereafter referred to as the "Humboldt Decree." This process was complete by 1938. The most senior decreed surface water right in the Humboldt River system has a priority date of 1861 and the most junior right has a priority date of 1921.⁵ The Humboldt Decree does not include the Little Humboldt River adjudication or Reese River vested claims.

WHEREAS, Humboldt River flow measured at the Palisade gage is the primary tool utilized for determining and scheduling delivery amounts of Humboldt River decreed rights.⁶ Deliveries are scheduled during the irrigation season based on the daily flow measurement at the gage.⁷ When daily flows at the Palisade gage are sufficient to deliver all decreed rights on the Humboldt River and its tributaries, all water rights irrespective of location above or below the gage are scheduled to receive their full duty of water. When flows are not sufficient to deliver all decreed rights, those rights with senior priority dates are served first. In practice, actual deliveries over the expanse of the Humboldt River Region may be different than exact scheduled deliveries due to a wide range of variables including water distribution and management practices and climatic variations that affect riparian evapotranspiration rates, streambank storage, and baseflow.

WHEREAS, during the 2012–2015 period the Humboldt River Region experienced one of the worst droughts since 1902.⁸ Annual flow at the Palisade gage for that 4-year period averaged 82,872 acre-feet, which is 30% of the historical average annual flow of 287,846 acre-feet for the

⁴ Bartlett Decree, incorporated as Section 1 into the Decree entered *In the Matter of the Determination of the Relative Rights of Claimants and Appropriators of the Waters of the Humboldt River Stream System and its Tributaries*, Case No. 2804, Sixth Judicial District Court of the State of Nevada, In and For the County of Humboldt (October 20, 1931).

⁵ *In the Matter of the Determination of the Relative Rights of Claimants and Appropriators of the Waters of the Humboldt River Stream System and Tributaries*, Case No. 2804, Sixth Judicial District Court of the State of Nevada, In and For the County of Humboldt (October 20, 1931).

⁶ Bartlett Decree, the decreed irrigation season begins March 15th downstream of Palisade and April 15th upstream of Palisade and ends on varying dates depending on location and culture.

⁷ United States Geological Survey (USGS) Gage 10322500, Humboldt River at Palisade.

⁸ Period of record for the Palisade gage begins in 1902.

period of record spanning 112 years.⁹ At the headwaters of the Humboldt River system during 2012–2015, upstream of any significant groundwater pumping, Lamoille Creek also experienced its lowest 4-year flow since at least 1944 when continuous flow measurements on Lamoille Creek started.¹⁰ By the end of the irrigation seasons in 2014 and 2015 the Humboldt River at Imlay was dry and water was unavailable to allocate to downstream surface water users in the Lovelock area. In the midst of the unprecedented drought, senior decreed water right holders alleged that junior groundwater appropriators were capturing surface flows of the Humboldt River and that groundwater use conflicted with the delivery of their surface water rights. In a writ petition filed in the 11th Judicial District Court for Pershing County in 2015, senior water right holders requested that the Court require the State Engineer to take action within his statutory authority to address the alleged conflict.¹¹

WHEREAS, nearly all groundwater uses within the Humboldt River Region are junior to decreed surface water rights in the Humboldt River and its tributaries. There are only four active groundwater permits having a priority date earlier than 1921, the date of the most junior Humboldt Decree right.¹² Groundwater development began to increase more substantially in the 1960s and has gradually increased in the decades since. Groundwater is now extensively relied upon for all manners of use, supporting communities and industry throughout the Region. Groundwater rights were approved in accordance with existing Nevada law over the years by the State Engineer based upon findings that unappropriated water was available and its use would not conflict with existing rights or the public interest.

WHEREAS, it is scientifically understood that groundwater pumping has the potential to capture streamflow when surface water and groundwater are hydraulically connected, either by inducing greater infiltration losses from the stream channel or by reducing the amount of

⁹ For water years between 1902–1906 and 1912–2019.

¹⁰ USGS Gage 10316500, Lamoille Creek Near Lamoille. Note that flow measurements also exist for a period between 1915 and 1923.

¹¹ *Petition for Writ of Mandamus, or in the Alternative, Writ of Prohibition*, In the Eleventh Judicial District Court of the State of Nevada In and For the County of Pershing, (Case No. CV 15-12019), *Pershing County Conservation District v. Jason King, P.E., State Engineer of the State of Nevada, Division of Water Resources, Department of Conservation and Natural Resources*.

¹² See Permit 1843, Certificate 139; Permit 2397, Certificate 399; Permit 3520, Certificate 995; and Permit 4589, Certificate 749, Nevada Division of Water Resources' Water Rights Database, official records of the Nevada Division of Water Resources, <http://water.nv.gov/hydrographicabstract.aspx>

groundwater that would otherwise discharge as baseflow to the stream.¹³ The potential for hydraulic connectivity and capture by itself does not necessarily demonstrate that conflict is occurring or will occur in the future, or that surface water deliveries cannot be met. However, because stream capture due to pumping necessarily reduces streamflow, any amount of capture in a fully appropriated river system when not in full priority will reduce surface water that would otherwise have been delivered to surface water right holders. In addition, with climate models forecasting a continuing pattern of increasing frequency and intensity of droughts and flood events,¹⁴ drought-accentuated natural losses from the river, combined with the likelihood for greater drawdown due to increased reliance on groundwater during drought, may increase the future potential for insufficient surface flow to fully serve decreed rights. The hydrologic connection between surface water and groundwater was not a consideration in the Humboldt Decree, but these long-term dynamics underscore the difficulty in developing and implementing conjunctive management strategies for future administration of groundwater and surface water in the Humboldt River Region.

III.

ACTIONS TAKEN SINCE THE 2012–2015 DROUGHT

WHEREAS, a basic tenet of prior appropriation is that if there is not enough water to serve all users then senior water right holders are entitled to water before junior right holders.¹⁵ During the drought period of 2012–2015 available data were insufficient to identify to what extent groundwater pumping was causing the inadequacy of water supply for Humboldt River senior decreed right holders and to what extent it was the result of natural low flow because of drought.

¹³ *Charles v. Theis*, 1940, *The Source of Water Derived from Wells—Essential factors controlling the response of an aquifer to development*, Civil Engineering, v. 10, no. 5, p. 277-280.

¹⁴ USGCRP, 2017, Climate Science Special Report: Fourth National Climate Assessment, Volume I [Wuebbles, D.J., D.W. Fahey, K.A. Hibbard, D.J. Dokken, B.C. Stewart, and T.K. Maycock (eds.)]. U.S. Global Change Research Program, Washington, DC, USA, 470 pp., See Chapter 8, page 237.

¹⁵ See NRS 534.110, providing for curtailment by priority. See also *Wilson v. Pahrump Fair Water, LLC*, 481 P.3d 853, 860 (2021) (“That some water rights must necessarily acquiesce to senior water rights is a natural consequence of the prior appropriation doctrine” quoting *Fox v. Skagit Cty.*, 372 P.3d 784, 796 (Wash. App. 2016)); *U.S. v. Orr Water Ditch Co.*, 600 F.3d 1152, 1158-59 (9th Cir. 2010) (“Surface water contributes to groundwater, and groundwater contributes to surface water...[Surface rights granted by decree] cannot be defeated by allocation of water to others—whether by allocation of surface water or groundwater.”).

Analysis of the data at the time indicated that curtailing junior groundwater pumping to protect senior decreed rights would result in a negligible addition to flow in the River and that such action would not likely be legally defensible without additional data and scientific analysis. However, such action would have had devastating and severe impacts to the communities and economies throughout the Region that rely on groundwater.¹⁶ Consequently, no curtailment was imposed.

WHEREAS, in the years since the end of the 2012–2015 drought, the State Engineer initiated several measures to improve the available data in the Region and thus provide an informed and sound basis to render decisions with regard to avoiding potential conflict. Among these measures:

1. All non-designated basins within the Region were designated pursuant to NRS 534.030;
2. Totalizing meter installation and reporting were required by State Engineer's Order 1251;
3. Field investigations were completed to verify installation and meter data;
4. The Nevada Division of Water Resources enhanced its database capacity to maintain and manage the pumping data in a publicly accessible manner;
5. The State Engineer established a policy requiring water rights for pit lake evaporation; and,
6. Applications to appropriate groundwater or to change the point of diversion (POD) of existing groundwater rights were denied if granting the application would conflict with existing senior rights due to stream capture.

WHEREAS, in 2016, the State Engineer assembled the Humboldt River Working Group¹⁷ to assist in developing draft regulations to resolve future conflict between surface and groundwater rights. The Working Group members included both surface water and groundwater users representing municipalities, agriculture, mining, and other community interests across the Humboldt River Region. Over the course of the next three years, the Working Group developed a conjunctive management approach whose objective was to protect senior water interests while at the same time maximizing beneficial use of surface water and groundwater. This effort culminated in a set of draft regulations that relied on a combination of mitigation plans and financial compensation to avoid future conflict. However, in the 2019 Legislative session, the statutory

¹⁶ Nevada Division of Water Resources, public presentations on the Humboldt River in Lovelock, Winnemucca, and Elko, February 12–13, 2015. Analysis available in the files of the Nevada Division of Water Resources.

¹⁷ The Humboldt River Working Group consists of representatives from key stakeholder and water user groups from within the Humboldt River Region with the common purpose to propose, negotiate, and provide feedback on conjunctive use management regulations.

revisions required to give the State Engineer the authority to implement the draft regulations were unsuccessful.¹⁸ Surface water users expressed no interest in financial mitigation in lieu of water. Groundwater users likewise expressed no interest in being assessed fees for capture that had yet to be quantified by best available science.¹⁹

WHEREAS, since 2016, the State Engineer has worked with the USGS and DRI to develop improved groundwater budgets at the basin scale and to develop numerical groundwater capture models for the Humboldt River Region. These peer-reviewed products are intended to serve as a basis for determining the effect of groundwater pumping on flows in the Humboldt River and its tributaries.²⁰ When published, and made publicly available, this model study will provide a consistent basis and a scientifically sound measure to evaluate different management strategies. These products will allow for the development of capture maps, which identify the relative potential for the capture of surface water flow at any given well location and the potential for the capture of surface water flow over different durations of time. This study will also serve as a foundation for review of the perennial yield²¹ values for the Region, first estimated from the early USGS Reconnaissance Series Reports and Water Resource Bulletins, which are the primary guidelines used by the State Engineer to determine the water budget for any particular basin.²²

WHEREAS, while the completion of the Humboldt River Region groundwater model study is expected in 2022, preliminary findings from that effort provide insight into the dynamics of stream capture by groundwater pumping. These findings indicate that there may be important non-linear, climate-driven behaviors that influence interactions between the surface water and

¹⁸ AB 51 (2019).

¹⁹ See *Minutes of the Meeting of the Assembly Committee on Natural Resources, Agriculture and Mining*, February 27, 2019, (Dec. 2, 2021, 1:08 p.m.)

<https://www.leg.state.nv.us/Session/80th2019/Minutes/Assembly/NRAM/Final/309.pdf>

²⁰ See *Nevada Water Science Center: Evaluation of Streamflow Depletion Related to Groundwater Withdrawal, Humboldt River Basin*, (December 2, 2021, 1:10 p.m.)

<https://nevada.usgs.gov/humboldtdepletion/index.html>

²¹ Perennial yield is defined as the maximum amount of groundwater that can be withdrawn each year over the long term without depleting the groundwater reservoir. Perennial yield is ultimately limited to the maximum amount of natural discharge that can be utilized for beneficial use. The perennial yield cannot be more than the natural recharge to a groundwater basin and in some cases is less. See Office of the State Engineer, *Water for Nevada, State of Nevada Water Planning Report No. 3*, p. 13, Oct. 1971.

²² See, e.g. Hydrographic Area Summary for Marys River Area, (042), (December 2, 2021, 1:10 p.m.) https://nevada.usgs.gov/humboldtdepletion/HumboldtDepletionProposal_Public.pdf official records in the Nevada Division of Water Resources.

groundwater systems. These behaviors suggest that pumping-related capture of surface water tends to increase during wet years when excess water is available and decrease during dry years when the potential for conflict is greater.²³ Understanding these phenomena is necessary to accurately define both the timing and distribution of capture so that conflict attributable to groundwater pumping can be characterized and quantified. Long-term management strategy will rely on completion of the modeling effort and a process of public review and deliberation to determine best practices that satisfy legislative directives of prior appropriation, beneficial use and the public interest. Until then, the interim management practices described herein focus on statutorily available mechanisms for avoiding conflict due to increased capture caused by new appropriations or changes to existing groundwater permits.

WHEREAS, as of the date of this Order (Fall 2021) the Region is two years into a Severe to Extreme Drought.²⁴ Humboldt River flows for the summer of 2021 were running at or below 10th percentile flow levels,²⁵ very little decreed water was served during the 2021 irrigation season, and current Rye Patch Reservoir storage is approximately 7,000 acre-feet, which is 4% of the reservoir's capacity. This current condition highlights the difficult issues that face the water users in the Region, which are especially apparent during droughts like these.

IV.

AUTHORITY AND NECESSITY

WHEREAS, NRS 533.024(1)(c) directs the State Engineer "to consider the best available science in rendering decisions concerning the availability of surface and underground sources of water in Nevada."

WHEREAS, NRS 533.024(1) was amended in 2017 adding a new subsection declaring that it is the policy of Nevada "[t]o manage conjunctively the appropriation, use and administration of all waters of this State, regardless of the source of the water."²⁶

WHEREAS, NRS 532.120 authorizes the State Engineer to make such reasonable rules as

²³ Steven Jepsen, Kip Allander, and Kyle Davis, "Behavior and prediction of stream capture under varying streamflow conditions," presentation at Nevada Water Resources Association Annual Conference, Jan. 26, 2021, (Dec. 2, 2021 1:11 a.m.)

https://www.youtube.com/watch?v=2vLa1hesE_E

²⁴ U.S. Drought Monitor, Nevada Map, October 5, 2021, (Dec. 2, 2021, 1:12 p.m.)

https://droughtmonitor.unl.edu/data/pdf/20211005/20211005_nv_trd.pdf

²⁵ USGS gaging stations (10318500, 10321000, 10325000, 10327500, 10333000).

²⁶ NRS 533.024(1)(e).

may be necessary for the proper and orderly execution of the powers conferred by law.

WHEREAS, NRS 534.020 provides that all underground waters of the State belong to the public and are subject to all existing rights.

WHEREAS, NRS 533.370(2) requires that, in review of an application to appropriate water or to change water already appropriated, the State Engineer must consider whether there is unappropriated water in the source of supply, whether the uncommitted groundwater has been reserved pursuant to NRS 533.0241, whether the proposed use or change conflicts with existing rights or protectable interests in existing domestic wells, and whether it threatens to prove detrimental to the public interest.

WHEREAS, the State Engineer's procedures to evaluate applications to appropriate water or to change existing appropriations must be applied in a manner that is consistent and understandable to water right holders and their representatives.

WHEREAS, the State Engineer is responsible for establishing procedures to evaluate applications that provide clarity to water users about how to meet the needs of communities and local economies while avoiding conflict with senior decreed water rights.

WHEREAS, procedures established by this Order are intended to allow for efficient administration of groundwater rights, with provisions for in-stream replacement water and withdrawal or duty limitation of groundwater permits, when necessary. The intent is to provide needed flexibility for water right holders without increasing conflict by adding to any capture impacts above what is already occurring. In the short term, these procedures will make progress toward avoiding conflicts and preserving the availability of surface water in the Humboldt River Region to serve senior priority rights.

WHEREAS, during this interim period before the USGS and DRI models are published and while long-term strategies are being developed with involvement from the stakeholder community, the State Engineer may adopt further conjunctive management measures necessary to address capture impacts.

ORDER

NOW THEREFORE, IT IS HEREBY ORDERED, that in addition to those considerations required by NRS 533.370 and established by previous State Engineer's Orders discussed herein, the following procedures are being implemented by the State Engineer for the review of applications for groundwater rights in the Humboldt River Region:

1. Applications for groundwater rights will be reviewed for increases to stream capture,

and cannot increase conflict along the Humboldt River or its tributaries. Capture shall be determined by the State Engineer using established analytical or numerical methods along with any available knowledge of aquifer properties associated with the points of diversion. These rules apply to:

A. New appropriations of groundwater where annual capture is predicted to exceed 10% of duty for any year during 50 years of continual pumping.²⁷ Continual pumping is defined as the annualized duty amount requested under the application. Where there is a non-consumptive return flow component of the application, the annualized duty amount only applies to the consumptive portion.

B. Applications to change the point of diversion of existing rights that are predicted to result in an increase of net capture on the system or a tributary, defined as the difference between capture at the proposed POD and capture at the existing POD, and where annual capture at the proposed POD is predicted to exceed 10% of the permitted duty in any year during 50 years of continual pumping.

C. Temporary applications filed under NRS 533.345 to change the point of diversion of an existing groundwater right and applications for new groundwater appropriations filed under the provisions of NRS 533.371.

2. Capture shall be offset by not diverting an existing decreed right (in-stream replacement water), or by the withdrawal of an existing groundwater permit (meaning that the groundwater permit is no longer active, in part or in its entirety) so the resulting availability of streamflow is not less than it was prior to the appropriation or the change in the point of diversion.

A. In-stream replacement water or withdrawn groundwater rights shall be sufficient to equal or exceed the predicted annual capture amount if there is a reasonable probability that the replacement water will be available, in both time and quantity, as determined by the State Engineer. The State Engineer finds that "reasonable probability" would be an 80% probability threshold, which is established to ensure a replacement surface water right or a groundwater withdrawal right is of sufficient quantity and priority to reliably offset annual capture in 40 out of 50-years after an application is approved. In the case of replacement water, probabilities can be determined based on historical

²⁷ This threshold is considered to represent the range of certainty of the methods currently being used to calculate capture.

Humboldt River flow and diversion records. In the case of withdrawal of a groundwater right, probabilities can be determined based on analytical or numerical model predictions of recovered capture amounts.


- B. If in-stream replacement water is used to offset capture, then the following applies:
 - i. If a decreed water right is the source of replacement water, it shall be for a crop-type, duty amount, and priority date that is sufficient to equal or exceed the predicted total capture amount of the new appropriation over a 50-year period of use, as determined by the State Engineer.
 - ii. Replacement water shall have an existing place of use that can and will be stripped of use. Water use on areas of natural flooding and other areas where water cannot be physically removed from the land will not be considered for replacement water.
 - C. If withdrawal of an existing groundwater right is used to offset capture, whether withdrawn in its entirety or an adequate portion of the existing right, the predicted total capture amount of the withdrawn right shall be sufficient to equal or exceed the predicted total capture amount of the new appropriation over a 50-year period of use, as determined by the State Engineer.
 - D. Where a change application moves an existing POD capture source from the Humboldt River or a tributary to either an upstream reach or to a different tributary, offset will be required for capture impacts on the new reach or tributary as well as for net capture on the Humboldt River. If capture impacts occur on a new reach or tributary, the applicant will have to offset the entire amount of capture on the new reach or tributary.
 - E. If either temporary in-stream replacement water or temporary withdrawal of a groundwater permit is used to offset capture, the predicted capture offset amount of the replacement water or withdrawn right must equal or exceed the predicted 50-year total capture amount of the temporary application within 10 years of the application's approval, as determined by the State Engineer.
3. These procedures do not apply:
- A. to any application where pumping at the proposed POD results in capture less than 10% of the permitted duty every year during 50 years of continual pumping.
 - B. to change applications where capture at the proposed POD is less than or equal to capture at the existing POD.
 - C. to any application for groundwater where annual capture associated with pumping at

the proposed place of use does not exceed 5 acre-feet during a 50-year period of use.²⁸

D. to temporary applications to change PODs within an area designated by State Engineer order allowing for multiple PODs from a single representative POD for mining, milling, and dewatering operations.

4. Uncommon or unforeseeable circumstances will be treated on a case-by-case basis, as determined by the State Engineer, with the same overall objective of preventing additional stream capture.

5. This order is in effect until it is replaced by a subsequent order establishing long term management practices addressing conflict caused by capture to the satisfaction of the State Engineer, or it is superseded by another order or decision.


ADAM SULLIVAN, P.E.
State Engineer

Dated at Carson City, Nevada this

7th day of December, 2021.

²⁸ This exemption is equivalent to a capture rate of less than 0.01 cfs and would effectively exempt all domestic use, much stockwater use, and other pumping resulting in nominal capture.

1 CASE NO. _____
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5

6 IN THE ELEVENTH JUDICIAL DISTRICT COURT
7 OF THE STATE OF NEVADA, IN AND FOR THE COUNTY OF PERSHING
8

9 PERSHING COUNTY WATER
10 CONSERVATION DISTRICT,

11 Petitioner,

12 v.

13 ADAM SULLIVAN, P.E., State Engineer of
14 the State of Nevada, DIVISION OF
15 WATER RESOURCES, DEPARTMENT
16 OF CONSERVATION AND NATURAL
17 RESOURCES,

18 Respondent.

**PETITION FOR JUDICIAL REVIEW
OF ORDER #1329**

19 COMES NOW Petitioner, Pershing County Water Conservation District ("PCWCD" or
20 "District"), by and through Schroeder Law Offices, P.C. and its attorneys Laura A. Schroeder,
21 Therese A. Ure Stix, and Caitlin R. Skulan, and files this petition for judicial review of
22 Respondent Nevada State Engineer's Order #1329 ("Order 1329") dated December 7, 2021.

23 Petitioner PCWCD alleges as follows:

JURISDICTION AND PARTIES

24 1. PCWCD is an irrigation district in Lovelock Nevada, formed under Chapter 539
25 of the Nevada Revised Statutes. PCWCD is a quasi-municipal agency that is led by a Board of
26 Directors and its manager Ryan Collins. PCWCD owns, controls, and operates a water



1 conveyance system that provides water to approximately 100 constituents with approximately
2 37,506 acres of irrigated agricultural lands within the District boundaries. PCWCD operates
3 diversion structures and dams along the Humboldt River, as well as delivery infrastructure within
4 the District's boundaries.

5 2. Respondent, Nevada State Engineer ("State Engineer") is an agent of the State of
6 Nevada who together with the Office of the State Engineer, Division of Water Resources,
7 Department of Conservation and Natural Resources, regulates the use of waters of the State. The
8 State Engineer issued Order 1329 on December 7, 2021. *See* Exhibit 1.

9 3. This Court has jurisdiction to address the Petition for Judicial Review under NRS
10 533.450.

11 4. Jurisdiction is proper NRS 13.010 and NRS 13.020 because PCWCD's
12 boundaries are within Pershing County, and Order 1329 was entered, in part, as a response to a
13 proceeding before the Eleventh Judicial District Court.

14 5. Pursuant to NRS 533.450(3), a Notice of this Petition was served on the State
15 Engineer, and parties to the Eleventh Judicial District Court Proceeding, Case No. CV 15-12019
16 filed August 12, 2015.

17 VENUE

18 6. Venue is proper under NRS 533.450 (Petition for Judicial Review) as Order 1329
19 was issued "Establishing Interim Procedures for Managing Groundwater Appropriations to
20 Prevent the Increase of Capture and Conflict with Rights Decreed Pursuant to the Humboldt
21 River Adjudication," and PCWCD holds Humboldt River Decreed rights appurtenant to lands
22 within its boundaries lying within Pershing County. NRS 533.450.

23 7. Venue is proper under NRS 13.010 and NRS 13.020 as the contract was entered
24 in response to a proceeding before the Eleventh Judicial District Court in and for Pershing
25 County.

26 ///



1 **DECISION**

2 8. On August 12, 2015, PCWCD filed an action in this court against the State
3 Engineer under Case No. CV15-12019, under a Petition for Writ of Mandamus, or in the
4 Alternative, Writ of Prohibition ("Original Writ Petition").

5 9. Case CV15-12019 proceeded on PCWCD's Amended Petition for Writ of
6 Mandamus, or in the Alternative, Writ of Prohibition (Jan. 2, 2018) ("Amended Writ Petition"),
7 that concluded on or around October 19, 2020, when the State Engineer and PCWCD entered
8 into a Settlement Agreement and Mutual Release ("Settlement Agreement"). *See* Exhibit 2.

9 10. On October 20, 2020, and pursuant to the Settlement Agreement, PCWCD and
10 the State Engineer stipulated to the dismissal of Case CV15-12019, which Order of Dismissal
11 was entered and filed on November 20, 2020.

12 11. On December 7, 2021, the State Engineer issued Order 1329, establishing
13 regulations to prevent the increase in capture and conflict with the surface water rights decreed in
14 the Humboldt River Adjudication.

15 12. Order 1329 fails to include terms relating to the Settlement Agreement paragraph
16 2(c), which states:

17 Addressing Future Conflicts. The Order will set out a mechanism
18 to address future conflicts between valid existing groundwater uses
19 and decreed Humboldt River rights within the Humboldt River
20 Region. This will include articulating a basis upon which to make
21 determination, based upon the best available science, as to issuing
22 future orders that would restrict withdrawals to conform to priority
23 of rights, and the establishment of specific considerations that
24 would be reviewed by the State Engineer in determining whether
25 to invoke a curtailment order.

26 13. This petition for judicial review is filed with this Court under the authority of
NRS 533.450 on the grounds that PCWCD is aggrieved by Order 1329.

24 **GENERAL ALLEGATIONS**

25 14. On August 12, 2015, PCWCD filed Case CV15-12019, after years of drought
26 wherein the constituents received little to no water delivery pursuant to their decreed rights of



1 record while during the same irrigation season upstream groundwater appropriators continued to
2 pump their full delivery pursuant to their groundwater rights of record with the State Engineer
3 from the Humboldt River Basin.

4 15. On January 2, 2018, upon leave of the Court, PCWCD filed is Amended Writ
5 Petition to:

6 [R]equire the State Engineer to use all statutory available tools in
7 order to: 1) bring all over-appropriated groundwater basins
8 surrounding the Humboldt River back to their perennial annual
9 yield; 2) eliminate the cone of depression caused by over-
allocation of groundwater pumping causing interference with
surface water flows in the Humboldt River; and 3) regulate water
used for mining and milling pursuant to Nevada statutory code.

10 16. On June 14, 2018, upon bifurcation of the evidentiary hearing, PCWCD first
11 presented testimony and evidence on its Amended Writ Petition.

12 17. On October 23, 2018, the Court issued an Order to Answer Writ of Mandamus
13 (Exhibit 3) making the following findings:

14 A) PCWCD met its burden under a writ proceeding by showing that the State Engineer
15 has a legal duty to administer and regulate the waters of the Humboldt River Basin.

16 Order at 3.

17 B) PCWCD satisfied their initial burden in the writ proceedings of showing they had a
18 senior water right which the State Engineer failed to protect. Order at 4.

19 C) PCWCD has met its burden of showing that it has no other plain, speedy, or adequate
20 remedy at law. Order at 4.

21 18. The October 23, 2018, Order also required the State Engineer to Answer the
22 Amended Writ Petition and ordered that the matter proceed to a second evidentiary hearing for
23 the State Engineer to present evidence to support his Answer. Order at 6.

24 19. On February 4, 2019, the State Engineer filed his Answer to the Amended Writ
25 Petition.



1 20. Before the matter could proceed to the evidentiary hearing on the State Engineer's
2 Answer, the State Engineer and PCWCD requested additional time to engage in settlement
3 discussions.

4 21. Based on these settlement discussions, PCWCD and the State Engineer entered
5 into the Settlement Agreement and Mutual Release. Exhibit 2.

6 22. The relevant terms of the Settlement Agreement for purposes of the petition are
7 found at paragraphs two and three:

8 2. Forthcoming Administrative Order. The State Engineer is in the
9 process of developing an administrative draft order ("Order") that is
10 intended to provide clear procedures and standards for review of
groundwater applications within the Humboldt River Region as informed
by the Model. These procedures will provide the following:

11 a. New Groundwater Appropriations. The Order will set out specific
12 thresholds for capture for new groundwater appropriations, including
13 requirements to provide replacement water in a manner sufficient to
14 avoid conflict resulting from the application. The mitigation
requirements will be specific as to quantity, priority, and other
considerations of the State Engineer to assure that the replacement
water is sufficient to avoid conflict with existing rights.

15 b. Groundwater Change Applications. The Order will set out specific
16 thresholds for capture for applications to change existing groundwater
17 appropriations that consider the changes in capture, and resulting
18 potential for conflict, caused by a change in the point of diversion.
Where such a change results in an increase in capture the Order will
19 set out specific requirements to offset any increase in capture with
20 surface water replacement or relinquishment of groundwater rights.
Such requirements are intended to be specific and intended to assure
any change is sufficiently mitigated so as to not increase any resulting
capture and potential conflict.

21 c. Addressing Future Conflicts. The Order will set out a mechanism to
22 address future conflicts between valid existing groundwater uses and
23 decreed Humboldt River rights within the Humboldt River Region.
This will include articulating a basis upon which to make
24 determination, based upon the best available science, as to issuing
future orders that would restrict withdrawals to conform to priority of
rights, and the establishment of specific considerations that would be
25 reviewed by the State Engineer in determining whether to invoke a
curtailment order.

26 d. Notice. The Order will seek to notify all applicants of new rights, as
well as those applying for changes to existing rights, that approval of
the application does not constitute an exception to any long-term



1 conjunctive management plan determined to be necessary by the State
2 Engineer to prevent or avoid conflict so as to meet the needs of the
water users.

3 The Order will first be issued as a Draft Order and will be subject to a
4 public administrative process that will include taking comments from
interested parties and the general public on the Draft Order as well as a
5 public administrative hearing. A Final Order will be issued following the
public administrative hearing.

6 3. Issuance of the Administrative Order. The State Engineer hereby
7 agrees to issue the aforementioned Draft Order within ninety (90) days of
the Effective Date of this Agreement.

8 23. On November 20, 2020, based on the Settlement Agreement, litigation under
9 CV15-12019 was dismissed with prejudice.

10 24. On January 19, 2021, the State Engineer issued a "Notice of Hearing and
11 Proposed Interim Order" with a "Draft Interim Order" "Establishing procedures for review of
12 applications to appropriate groundwater in the Humboldt River Region with regard to the
13 potential for capture of and conflict with decreed rights to the waters of the Humboldt River and
14 tributaries." *See* Exhibit 4.

15 25. On February 8, 2021, PCWCD sent correspondence to the State Engineer
16 advising that the terms of the Settlement Agreement, and specifically Paragraph 2(c) were not
17 consistent with the Draft Interim Order. *See* Exhibit 5.

18 26. On February 22, 2021, after PCWCD expressed to the State Engineer its concern
19 that the Draft Interim Order failed to address current conflicts, PCWCD and the State Engineer
20 engaged in a virtual discussion to consider the issue in light of the Settlement Agreement.
21 PCWCD made it clear to the State Engineer that it was not waiving enforcement of the terms of
22 the settlement agreement by not immediately contesting this failure.

23 27. On April 2, 2021, a virtual public hearing was held to receive comments on the
24 Draft Interim Order, to which PCWCD attended and provided comments.
25
26



1 28. On April 14, 2021, PCWCD submitted comments to the Draft Interim Order
2 consistent with the Settlement Agreement specifically addressing the State Engineer's failure to
3 address regulation of existing and future conflicts. *See* Exhibit 6.

4 29. On August 30, 2021 and September 15, 2021, PCWCD contacted the State
5 Engineer requesting updates on the Draft Interim Order. *See* Exhibit 6.

6 30. On September 21, 2021, the State Engineer responded to PCWCD noting in part:
7 [A] complete immediate resolution will not be forthcoming
8 without the finalized model. Once again, the State Engineer
9 reiterates this fact. The published groundwater models, and
10 additional public input on long-term management strategies
11 supported by those models, are necessary for such strategies to be
12 effective and defensible into the future. That being said, the
13 forthcoming interim order will indeed be just that: an actual
14 interim order and not another "proposed" order. This forthcoming
15 interim order is intended to have tangible effects and will guide the
16 State Engineer's decision-making by providing more clarity and
17 certainty to all affected parties in the interim until the groundwater
18 models are published and the State Engineer can move to the next
19 phase of the administrative process. *Internal quotes omitted.*

20 31. On December 7, 2021, the State Engineer issued Order 1329 that once again
21 failed to address the terms of the Settlement Agreement paragraphs 2(c).

22 **PETITION FOR JUDICIAL REVIEW**

23 32. Petitioner re-alleges paragraphs 1-31 and incorporate the same herein by
24 reference.

25 33. PCWCD is aggrieved by the December 7, 2021, Order 1329 in one or more of the
26 following ways:

- a. Failing to include terms to address the Settlement Agreement, Paragraph 2(c);
- b. Failing to address and provide a procedure to address current and future conflicts between Humboldt River Decreed Rights and State Engineer issued groundwater rights;



- 1 c. Failing to provide a timeline for implementation of procedures to address
2 current and future conflicts between Humboldt River Decreed Rights and
3 State Engineer issued groundwater rights including issuance of future
4 orders; and
5 d. Failing to provide a timeline as to when a final order will be issued.
6 34. Order 1329 should be remanded in part to require the State Engineer to provide a
7 procedure to address current and future conflicts between Humboldt River Decreed Rights and
8 groundwater rights issued by the State Engineer including a timeline for implementation of the
9 procedure

10 **REQUEST FOR RELIEF**

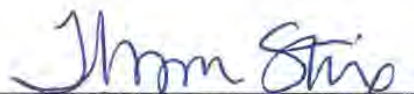
11 WHEREFORE, PCWCD requests the Court to:

- 12 1. Remand in part Order 1329 to the State Engineer with specific instruction to require
13 the State Engineer to provide a procedure to address current and future conflicts
14 between Humboldt River Decreed Rights and groundwater rights issued by the State
15 Engineer including a timeline for implementation of the procedure; and
16 2. For such other and further relief that this Court deems proper and just.

17 **AFFIRMATION**

18 This document does not contain the social security number of any person.
19

20 DATED this 5th day of January, 2022.

21 
22 SCHROEDER LAW OFFICES P.C.
23 Laura A. Schroeder, NSB #3595
24 Therese A. Stix, NSB #10255
25 Caitlin R. Skulan, NSB #15327
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IN THE OFFICE OF THE STATE ENGINEER
OF THE STATE OF NEVADA

ORDER

#1329

ESTABLISHING INTERIM PROCEDURES FOR MANAGING GROUNDWATER
APPROPRIATIONS TO PREVENT THE INCREASE OF CAPTURE AND CONFLICT
WITH RIGHTS DECREED PURSUANT TO THE HUMBOLDT RIVER
ADJUDICATION

I.

OVERVIEW

WHEREAS, it is well established that the source of water to a pumping well originates from three primary sources; first from groundwater storage, then increasing over time from capture of streamflow (where present in a hydrographic system) and evapotranspiration.^{1,2} The terms "stream capture" or simply "capture," as used in this Order, refer to a reduction in streamflow caused by groundwater pumping. Decades of groundwater pumping in the Humboldt River Region (Region) has led to increasing capture of the Humboldt River and its tributaries, resulting in growing conflict with rights of the Humboldt Decree.

WHEREAS, there are a range of actions or strategies that may be implemented by water users, whether in cooperation with the State Engineer or through other means, to mitigate or avoid conflict. Regional groundwater models currently in development by the United States Geological Survey (USGS) and Desert Research Institute (DRI) are an important tool that will be used to demonstrate the effectiveness of different management strategies and possible administrative actions. Public participation throughout the process of developing a long-term management strategy is an essential component for communication, transparency, and successful implementation. Through the State Engineer's engagement with the community of water users within the Humboldt Region, several viable strategies have come under consideration, and include:

- Prohibition on pumping within a determined capture zone under certain thresholds of predicted seasonal water supply;
- Credit systems that account for non-use or for return flow from artificial recharge;

¹ Charles V. Theis, 1940, *The Source of Water Derived from Wells -Essential factors controlling the response of an aquifer to development*, Civil Engineering, v. 10, no. 5, p. 277-280.

² Barlow, P.M., and Leake, S.A., 2012, *Streamflow Depletion by Wells – Understanding and Managing the Effects of Groundwater Pumping on Streamflow*, U.S. Geological Survey Circular (Dec. 1, 2021, 1:06 p.m.) 1376, 84 p., <https://doi.org/10.3133/cir1376>

- Enhanced storage capacity, including aquifer storage and recovery that benefits the Humboldt River system;
- Use of conservation funds to enact measures that benefit the Humboldt River such as purchase of groundwater rights that are in immediate/frequent conflict with the Humboldt decree;
- Other private party agreements to resolve conflict; and/or
- Withdrawal or abandonment of existing committed rights.³

WHEREAS, the primary mechanism available to the State Engineer to unilaterally address conflict among water right holders is to order that withdrawals of groundwater be restricted to conform to priority rights per NRS 534.110(6). However, it is also well established that groundwater use in the Humboldt River Region is fundamental to the Region's culture, communities and economic vitality. Strict curtailment would be a draconian measure resulting in significant and lasting economic harm. It is further recognized that permitted groundwater use is a beneficial use. Additionally, a varying amount of the source of water to pumping wells originates from sources other than stream capture and this use is not in conflict with the Humboldt Decree. For these reasons, among others, strict curtailment is not a preferred option. Rather, implementation of a management framework based on the quantifiable impact of each groundwater well's capture of streamflow will more precisely address harm from any conflict with Humboldt decreed rights.

WHEREAS, the State Engineer recognizes that any comprehensive solution will require extensive outreach to those impacted by any future decisions and management strategies, including water right holders, tribal communities, water users, representatives of conservation and environmental interests, and other interests (collectively referred to as "stakeholders"). The State Engineer seeks to collaborate with stakeholders on the development of long-term management strategies, supported by groundwater models that are currently in development, to address conflict caused by stream capture without arbitrary curtailment or other administrative restrictions on groundwater use. The State Engineer anticipates that any future management framework shall consider active water replacement plans carried out by groundwater right holders, local water resource plans developed in accordance with NRS 278.0228, implementation of Water Conservation Plans pursuant to NRS 540.131, preferred uses of water in the interest of public

³ See generally, comments received from the draft interim order; notes from Working Group meetings, notes from Humboldt River Basin Water Authority meetings, official records of the Nevada Division of Water Resources.

welfare pursuant to NRS 534.120(2), and domestic well protections under NRS 533.024(b). It is also anticipated that any such framework will be supported by the use of the USGS and DRI models to demonstrate effectiveness in preventing conflict resulting from groundwater use within the Humboldt River Region.

WHEREAS, the State Engineer recognizes that under the current conditions there are substantial implications for the water users in the Humboldt River Region. The State Engineer also acknowledges and appreciates that the water users understand the issue and share in the desire to see an effective management strategy that addresses the issues relating to groundwater use that conflicts with senior decreed rights and the need for a defensible outcome. While the science that will be used to inform those long-term management strategies is being finalized, an interim protocol is necessary to avoid exacerbating existing problems. This Order establishes the management framework that the State Engineer is adopting for this period to avoid additional harm to water rights above what is already occurring.

II.

BACKGROUND OF THE HUMBOLDT RIVER REGION

WHEREAS, the Humboldt River Region is delineated by the topographic boundary of the Humboldt River watershed, extending over 11,000 square miles, including 34 hydrographic basins in eight Nevada counties. Hydrographic basins within the Humboldt River Region include Marys River Area (042), Starr Valley Area (043), North Fork Area (044), Lamoille Valley (045), South Fork Area (046), Huntington Valley (047), Dixie Creek-Tenmile Creek Area (048), Elko Segment (049), Susie Creek Area (050), Maggie Creek Area (051), Marys Creek Area (052), Pine Valley (053), Crescent Valley (054), Carico Lake Valley (055), Upper Reese River Valley (056), Antelope Valley (057), Middle Reese River Valley (058), Lower Reese River Valley (059), Whirlwind Valley (060), Boulder Flat (061), Rock Creek Valley (062), Willow Creek Valley (063), Clovers Area (064), Pumpnickel Valley (065), Kelly Creek Area (066), Little Humboldt Valley (067), Hardscrabble Area (068), Paradise Valley (069), Winnemucca Segment (070), Grass Valley (071), Imlay Area (072), Lovelock Valley (073), Lovelock Valley-Oreana Subarea (073A), and White Plains (074).

WHEREAS, the Bartlett Decree⁴ dated October 20, 1931, in the Sixth Judicial Court of the State of Nevada, establishes relative rights to the use of the waters of the Humboldt River and setting forth the dates of priority and duties of water for the decreed claims. The Bartlett Decree determined the waters of the stream system to be fully appropriated, and that in an average year there existed no surplus water for irrigation. Subsequent decrees, orders and writs made corrections to the Bartlett Decree, collectively forming the Humboldt River Adjudication, hereafter referred to as the "Humboldt Decree." This process was complete by 1938. The most senior decreed surface water right in the Humboldt River system has a priority date of 1861 and the most junior right has a priority date of 1921.⁵ The Humboldt Decree does not include the Little Humboldt River adjudication or Reese River vested claims.

WHEREAS, Humboldt River flow measured at the Palisade gage is the primary tool utilized for determining and scheduling delivery amounts of Humboldt River decreed rights.⁶ Deliveries are scheduled during the irrigation season based on the daily flow measurement at the gage.⁷ When daily flows at the Palisade gage are sufficient to deliver all decreed rights on the Humboldt River and its tributaries, all water rights irrespective of location above or below the gage are scheduled to receive their full duty of water. When flows are not sufficient to deliver all decreed rights, those rights with senior priority dates are served first. In practice, actual deliveries over the expanse of the Humboldt River Region may be different than exact scheduled deliveries due to a wide range of variables including water distribution and management practices and climatic variations that affect riparian evapotranspiration rates, streambank storage, and baseflow.

WHEREAS, during the 2012–2015 period the Humboldt River Region experienced one of the worst droughts since 1902.⁸ Annual flow at the Palisade gage for that 4-year period averaged 82,872 acre-feet, which is 30% of the historical average annual flow of 287,846 acre-feet for the

⁴ Bartlett Decree, incorporated as Section I into the Decree entered *In the Matter of the Determination of the Relative Rights of Claimants and Appropriators of the Waters of the Humboldt River Stream System and its Tributaries*, Case No. 2804, Sixth Judicial District Court of the State of Nevada, In and For the County of Humboldt (October 20, 1931).

⁵ *In the Matter of the Determination of the Relative Rights of Claimants and Appropriators of the Waters of the Humboldt River Stream System and Tributaries*, Case No. 2804, Sixth Judicial District Court of the State of Nevada, In and For the County of Humboldt (October 20, 1931).

⁶ Bartlett Decree, the decreed irrigation season begins March 15th downstream of Palisade and April 15th upstream of Palisade and ends on varying dates depending on location and culture.

⁷ United States Geological Survey (USGS) Gage 10322500, Humboldt River at Palisade.

⁸ Period of record for the Palisade gage begins in 1902.

period of record spanning 112 years.⁹ At the headwaters of the Humboldt River system during 2012–2015, upstream of any significant groundwater pumping, Lamoille Creek also experienced its lowest 4-year flow since at least 1944 when continuous flow measurements on Lamoille Creek started.¹⁰ By the end of the irrigation seasons in 2014 and 2015 the Humboldt River at Imlay was dry and water was unavailable to allocate to downstream surface water users in the Lovelock area. In the midst of the unprecedented drought, senior decreed water right holders alleged that junior groundwater appropriators were capturing surface flows of the Humboldt River and that groundwater use conflicted with the delivery of their surface water rights. In a writ petition filed in the 11th Judicial District Court for Pershing County in 2015, senior water right holders requested that the Court require the State Engineer to take action within his statutory authority to address the alleged conflict.¹¹

WHEREAS, nearly all groundwater uses within the Humboldt River Region are junior to decreed surface water rights in the Humboldt River and its tributaries. There are only four active groundwater permits having a priority date earlier than 1921, the date of the most junior Humboldt Decree right.¹² Groundwater development began to increase more substantially in the 1960s and has gradually increased in the decades since. Groundwater is now extensively relied upon for all manners of use, supporting communities and industry throughout the Region. Groundwater rights were approved in accordance with existing Nevada law over the years by the State Engineer based upon findings that unappropriated water was available and its use would not conflict with existing rights or the public interest.

WHEREAS, it is scientifically understood that groundwater pumping has the potential to capture streamflow when surface water and groundwater are hydraulically connected, either by inducing greater infiltration losses from the stream channel or by reducing the amount of

⁹ For water years between 1902–1906 and 1912–2019.

¹⁰ USGS Gage 10316500, Lamoille Creek Near Lamoille. Note that flow measurements also exist for a period between 1915 and 1923.

¹¹ *Petition for Writ of Mandamus, or in the Alternative, Writ of Prohibition*, In the Eleventh Judicial District Court of the State of Nevada In and For the County of Pershing, (Case No. CV 15-12019), *Pershing County Conservation District v. Jason King, P.E., State Engineer of the State of Nevada, Division of Water Resources, Department of Conservation and Natural Resources*.

¹² See Permit 1843, Certificate 139; Permit 2397, Certificate 399; Permit 3520, Certificate 995; and Permit 4589, Certificate 749, Nevada Division of Water Resources' Water Rights Database, official records of the Nevada Division of Water Resources, <http://water.nv.gov/hydrographicabstract.aspx>

groundwater that would otherwise discharge as baseflow to the stream.¹³ The potential for hydraulic connectivity and capture by itself does not necessarily demonstrate that conflict is occurring or will occur in the future, or that surface water deliveries cannot be met. However, because stream capture due to pumping necessarily reduces streamflow, any amount of capture in a fully appropriated river system when not in full priority will reduce surface water that would otherwise have been delivered to surface water right holders. In addition, with climate models forecasting a continuing pattern of increasing frequency and intensity of droughts and flood events,¹⁴ drought-accentuated natural losses from the river, combined with the likelihood for greater drawdown due to increased reliance on groundwater during drought, may increase the future potential for insufficient surface flow to fully serve decreed rights. The hydrologic connection between surface water and groundwater was not a consideration in the Humboldt Decree, but these long-term dynamics underscore the difficulty in developing and implementing conjunctive management strategies for future administration of groundwater and surface water in the Humboldt River Region.

III.

ACTIONS TAKEN SINCE THE 2012–2015 DROUGHT

WHEREAS, a basic tenet of prior appropriation is that if there is not enough water to serve all users then senior water right holders are entitled to water before junior right holders.¹⁵ During the drought period of 2012–2015 available data were insufficient to identify to what extent groundwater pumping was causing the inadequacy of water supply for Humboldt River senior decreed right holders and to what extent it was the result of natural low flow because of drought.

¹³ *Charles v. Theis*, 1940, *The Source of Water Derived from Wells—Essential factors controlling the response of an aquifer to development*, Civil Engineering, v. 10, no. 5, p. 277-280.

¹⁴ USGCRP, 2017, Climate Science Special Report: Fourth National Climate Assessment, Volume I [Wuebbles, D.J., D.W. Fahey, K.A. Hibbard, D.J. Dokken, B.C. Stewart, and T.K. Maycock (eds.)]. U.S. Global Change Research Program, Washington, DC, USA, 470 pp., See Chapter 8, page 237.

¹⁵ See NRS 534.110, providing for curtailment by priority. See also *Wilson v. Pahrump Fair Water, LLC*, 481 P. 3d 853, 860 (2021) (“That some water rights must necessarily acquiesce to senior water rights is a natural consequence of the prior appropriation doctrine” quoting *Fox v. Skagit Cty.*, 372 P.3d 784, 796 (Wash. App. 2016)); *U.S. v. Orr Water Ditch Co.*, 600 F.3d 1152, 1158-59 (9th Cir. 2010) (“Surface water contributes to groundwater, and groundwater contributes to surface water...[Surface rights granted by decree] cannot be defeated by allocation of water to others—whether by allocation of surface water or groundwater.”).

Analysis of the data at the time indicated that curtailing junior groundwater pumping to protect senior decreed rights would result in a negligible addition to flow in the River and that such action would not likely be legally defensible without additional data and scientific analysis. However, such action would have had devastating and severe impacts to the communities and economies throughout the Region that rely on groundwater.¹⁶ Consequently, no curtailment was imposed.

WHEREAS, in the years since the end of the 2012–2015 drought, the State Engineer initiated several measures to improve the available data in the Region and thus provide an informed and sound basis to render decisions with regard to avoiding potential conflict. Among these measures:

1. All non-designated basins within the Region were designated pursuant to NRS 534.030;
2. Totalizing meter installation and reporting were required by State Engineer's Order 1251;
3. Field investigations were completed to verify installation and meter data;
4. The Nevada Division of Water Resources enhanced its database capacity to maintain and manage the pumping data in a publicly accessible manner;
5. The State Engineer established a policy requiring water rights for pit lake evaporation; and,
6. Applications to appropriate groundwater or to change the point of diversion (POD) of existing groundwater rights were denied if granting the application would conflict with existing senior rights due to stream capture.

WHEREAS, in 2016, the State Engineer assembled the Humboldt River Working Group¹⁷ to assist in developing draft regulations to resolve future conflict between surface and groundwater rights. The Working Group members included both surface water and groundwater users representing municipalities, agriculture, mining, and other community interests across the Humboldt River Region. Over the course of the next three years, the Working Group developed a conjunctive management approach whose objective was to protect senior water interests while at the same time maximizing beneficial use of surface water and groundwater. This effort culminated in a set of draft regulations that relied on a combination of mitigation plans and financial compensation to avoid future conflict. However, in the 2019 Legislative session, the statutory

¹⁶ Nevada Division of Water Resources, public presentations on the Humboldt River in Lovelock, Winnemucca, and Elko, February 12–13, 2015. Analysis available in the files of the Nevada Division of Water Resources.

¹⁷ The Humboldt River Working Group consists of representatives from key stakeholder and water user groups from within the Humboldt River Region with the common purpose to propose, negotiate, and provide feedback on conjunctive use management regulations.

revisions required to give the State Engineer the authority to implement the draft regulations were unsuccessful.¹⁸ Surface water users expressed no interest in financial mitigation in lieu of water. Groundwater users likewise expressed no interest in being assessed fees for capture that had yet to be quantified by best available science.¹⁹

WHEREAS, since 2016, the State Engineer has worked with the USGS and DRI to develop improved groundwater budgets at the basin scale and to develop numerical groundwater capture models for the Humboldt River Region. These peer-reviewed products are intended to serve as a basis for determining the effect of groundwater pumping on flows in the Humboldt River and its tributaries.²⁰ When published, and made publicly available, this model study will provide a consistent basis and a scientifically sound measure to evaluate different management strategies. These products will allow for the development of capture maps, which identify the relative potential for the capture of surface water flow at any given well location and the potential for the capture of surface water flow over different durations of time. This study will also serve as a foundation for review of the perennial yield²¹ values for the Region, first estimated from the early USGS Reconnaissance Series Reports and Water Resource Bulletins, which are the primary guidelines used by the State Engineer to determine the water budget for any particular basin.²²

WHEREAS, while the completion of the Humboldt River Region groundwater model study is expected in 2022, preliminary findings from that effort provide insight into the dynamics of stream capture by groundwater pumping. These findings indicate that there may be important non-linear, climate-driven behaviors that influence interactions between the surface water and

¹⁸ AB 51 (2019).

¹⁹ See *Minutes of the Meeting of the Assembly Committee on Natural Resources, Agriculture and Mining*, February 27, 2019, (Dec. 2, 2021, 1:08 p.m.)

<https://www.leg.state.nv.us/Session/80th2019/Minutes/Assembly/NRAM/Final/309.pdf>

²⁰ See *Nevada Water Science Center: Evaluation of Streamflow Depletion Related to Groundwater Withdrawal, Humboldt River Basin*, (December 2, 2021, 1:10 p.m.)

<https://nevada.usgs.gov/humboldtdepletion/index.html>

²¹ Perennial yield is defined as the maximum amount of groundwater that can be withdrawn each year over the long term without depleting the groundwater reservoir. Perennial yield is ultimately limited to the maximum amount of natural discharge that can be utilized for beneficial use. The perennial yield cannot be more than the natural recharge to a groundwater basin and in some cases is less. See Office of the State Engineer, *Water for Nevada, State of Nevada Water Planning Report No. 3*, p. 13, Oct. 1971.

²² See, e.g. Hydrographic Area Summary for Marys River Area, (042), (December 2, 2021, 1:10 p.m.) https://nevada.usgs.gov/humboldtdepletion/HumboldtDepletionProposal_Public.pdf official records in the Nevada Division of Water Resources.

groundwater systems. These behaviors suggest that pumping-related capture of surface water tends to increase during wet years when excess water is available and decrease during dry years when the potential for conflict is greater.²³ Understanding these phenomena is necessary to accurately define both the timing and distribution of capture so that conflict attributable to groundwater pumping can be characterized and quantified. Long-term management strategy will rely on completion of the modeling effort and a process of public review and deliberation to determine best practices that satisfy legislative directives of prior appropriation, beneficial use and the public interest. Until then, the interim management practices described herein focus on statutorily available mechanisms for avoiding conflict due to increased capture caused by new appropriations or changes to existing groundwater permits.

WHEREAS, as of the date of this Order (Fall 2021) the Region is two years into a Severe to Extreme Drought.²⁴ Humboldt River flows for the summer of 2021 were running at or below 10th percentile flow levels,²⁵ very little decreed water was served during the 2021 irrigation season, and current Rye Patch Reservoir storage is approximately 7,000 acre-feet, which is 4% of the reservoir's capacity. This current condition highlights the difficult issues that face the water users in the Region, which are especially apparent during droughts like these.

IV.

AUTHORITY AND NECESSITY

WHEREAS, NRS 533.024(1)(c) directs the State Engineer "to consider the best available science in rendering decisions concerning the availability of surface and underground sources of water in Nevada."

WHEREAS, NRS 533.024(1) was amended in 2017 adding a new subsection declaring that it is the policy of Nevada "[t]o manage conjunctively the appropriation, use and administration of all waters of this State, regardless of the source of the water."²⁶

WHEREAS, NRS 532.120 authorizes the State Engineer to make such reasonable rules as

²³ Steven Jepsen, Kip Allander, and Kyle Davis, "Behavior and prediction of stream capture under varying streamflow conditions," presentation at Nevada Water Resources Association Annual Conference, Jan. 26, 2021, (Dec. 2, 2021 1:11 a.m.)

https://www.youtube.com/watch?v=2vLa1hesE_E

²⁴ U.S. Drought Monitor, Nevada Map, October 5, 2021, (Dec. 2, 2021, 1:12 p.m.)

https://droughtmonitor.unl.edu/data/pdf/20211005/20211005_nv_lrd.pdf

²⁵ USGS gaging stations (10318500, 10321000, 10325000, 10327500, 10333000).

²⁶ NRS 533.024(1)(e).

may be necessary for the proper and orderly execution of the powers conferred by law.

WHEREAS, NRS 534.020 provides that all underground waters of the State belong to the public and are subject to all existing rights.

WHEREAS, NRS 533.370(2) requires that, in review of an application to appropriate water or to change water already appropriated, the State Engineer must consider whether there is unappropriated water in the source of supply, whether the uncommitted groundwater has been reserved pursuant to NRS 533.0241, whether the proposed use or change conflicts with existing rights or protectable interests in existing domestic wells, and whether it threatens to prove detrimental to the public interest.

WHEREAS, the State Engineer's procedures to evaluate applications to appropriate water or to change existing appropriations must be applied in a manner that is consistent and understandable to water right holders and their representatives.

WHEREAS, the State Engineer is responsible for establishing procedures to evaluate applications that provide clarity to water users about how to meet the needs of communities and local economies while avoiding conflict with senior decreed water rights.

WHEREAS, procedures established by this Order are intended to allow for efficient administration of groundwater rights, with provisions for in-stream replacement water and withdrawal or duty limitation of groundwater permits, when necessary. The intent is to provide needed flexibility for water right holders without increasing conflict by adding to any capture impacts above what is already occurring. In the short term, these procedures will make progress toward avoiding conflicts and preserving the availability of surface water in the Humboldt River Region to serve senior priority rights.

WHEREAS, during this interim period before the USGS and DRI models are published and while long-term strategies are being developed with involvement from the stakeholder community, the State Engineer may adopt further conjunctive management measures necessary to address capture impacts.

ORDER

NOW THEREFORE, IT IS HEREBY ORDERED, that in addition to those considerations required by NRS 533.370 and established by previous State Engineer's Orders discussed herein, the following procedures are being implemented by the State Engineer for the review of applications for groundwater rights in the Humboldt River Region:

1. Applications for groundwater rights will be reviewed for increases to stream capture,

and cannot increase conflict along the Humboldt River or its tributaries. Capture shall be determined by the State Engineer using established analytical or numerical methods along with any available knowledge of aquifer properties associated with the points of diversion. These rules apply to:

A. New appropriations of groundwater where annual capture is predicted to exceed 10% of duty for any year during 50 years of continual pumping.²⁷ Continual pumping is defined as the annualized duty amount requested under the application. Where there is a non-consumptive return flow component of the application, the annualized duty amount only applies to the consumptive portion.

B. Applications to change the point of diversion of existing rights that are predicted to result in an increase of net capture on the system or a tributary, defined as the difference between capture at the proposed POD and capture at the existing POD, and where annual capture at the proposed POD is predicted to exceed 10% of the permitted duty in any year during 50 years of continual pumping.

C. Temporary applications filed under NRS 533.345 to change the point of diversion of an existing groundwater right and applications for new groundwater appropriations filed under the provisions of NRS 533.371.

2. Capture shall be offset by not diverting an existing decreed right (in-stream replacement water), or by the withdrawal of an existing groundwater permit (meaning that the groundwater permit is no longer active, in part or in its entirety) so the resulting availability of streamflow is not less than it was prior to the appropriation or the change in the point of diversion.

A. In-stream replacement water or withdrawn groundwater rights shall be sufficient to equal or exceed the predicted annual capture amount if there is a reasonable probability that the replacement water will be available, in both time and quantity, as determined by the State Engineer. The State Engineer finds that "reasonable probability" would be an 80% probability threshold, which is established to ensure a replacement surface water right or a groundwater withdrawal right is of sufficient quantity and priority to reliably offset annual capture in 40 out of 50-years after an application is approved. In the case of replacement water, probabilities can be determined based on historical

²⁷ This threshold is considered to represent the range of certainty of the methods currently being used to calculate capture.

Humboldt River flow and diversion records. In the case of withdrawal of a groundwater right, probabilities can be determined based on analytical or numerical model predictions of recovered capture amounts.


- B. If in-stream replacement water is used to offset capture, then the following applies:
 - i. If a decreed water right is the source of replacement water, it shall be for a crop-type, duty amount, and priority date that is sufficient to equal or exceed the predicted total capture amount of the new appropriation over a 50-year period of use, as determined by the State Engineer.
 - ii. Replacement water shall have an existing place of use that can and will be stripped of use. Water use on areas of natural flooding and other areas where water cannot be physically removed from the land will not be considered for replacement water.
 - C. If withdrawal of an existing groundwater right is used to offset capture, whether withdrawn in its entirety or an adequate portion of the existing right, the predicted total capture amount of the withdrawn right shall be sufficient to equal or exceed the predicted total capture amount of the new appropriation over a 50-year period of use, as determined by the State Engineer.
 - D. Where a change application moves an existing POD capture source from the Humboldt River or a tributary to either an upstream reach or to a different tributary, offset will be required for capture impacts on the new reach or tributary as well as for net capture on the Humboldt River. If capture impacts occur on a new reach or tributary, the applicant will have to offset the entire amount of capture on the new reach or tributary.
 - E. If either temporary in-stream replacement water or temporary withdrawal of a groundwater permit is used to offset capture, the predicted capture offset amount of the replacement water or withdrawn right must equal or exceed the predicted 50-year total capture amount of the temporary application within 10 years of the application's approval, as determined by the State Engineer.
3. These procedures do not apply:
- A. to any application where pumping at the proposed POD results in capture less than 10% of the permitted duty every year during 50 years of continual pumping.
 - B. to change applications where capture at the proposed POD is less than or equal to capture at the existing POD.
 - C. to any application for groundwater where annual capture associated with pumping at

the proposed place of use does not exceed 5 acre-feet during a 50-year period of use.²⁸

D. to temporary applications to change PODs within an area designated by State Engineer order allowing for multiple PODs from a single representative POD for mining, milling, and dewatering operations.

4. Uncommon or unforeseeable circumstances will be treated on a case-by-case basis, as determined by the State Engineer, with the same overall objective of preventing additional stream capture.

5. This order is in effect until it is replaced by a subsequent order establishing long term management practices addressing conflict caused by capture to the satisfaction of the State Engineer, or it is superseded by another order or decision.


ADAM SULLIVAN, P.E.
State Engineer

Dated at Carson City, Nevada this

7th day of December, 2021

²⁸ This exemption is equivalent to a capture rate of less than 0.01 cfs and would effectively exempt all domestic use, much stockwater use, and other pumping resulting in nominal capture.

SETTLEMENT AGREEMENT AND MUTUAL RELEASE

This Settlement Agreement and Release ("Agreement") is hereby entered into and effective upon the date of the full execution of this Agreement ("Effective Date"), by and between Pershing County Water Conservation District ("PCWCD"), and Tim Wilson, P.E., as State Engineer, Department of Conservation and Natural Resources, State of Nevada ("State Engineer").

RECITALS

A. On August 12, 2015, PCWCD filed its original Petition for Writ of Mandamus, or in the Alternative, Writ of Prohibition in the Eleventh Judicial District Court of the State of Nevada in and for the County of Pershing ("the Court") in Case No. CV15-12019 ("the Dispute").

B. On January 2, 2018, after being granted leave to do so by the Court, PCWCD filed its First Amended Petition for Writ of Mandamus, or in the Alternative, Writ of Prohibition ("Amended Writ Petition").

C. On June 14, 2018, the Court held an evidentiary hearing on PCWCD's Amended Writ Petition, wherein the Court provided PCWCD with an opportunity to provide evidence to prove up the basis for its Amended Writ Petition.

D. On October 23, 2018, the Court issued its Order to Answer Writ of Mandamus, finding that PCWCD presented sufficient evidence to meet its initial burden that its Amended Writ Petition was proper and should go forward, and therefore requiring the State Engineer to Answer PCWCD's Amended Writ Petition to show why a writ should not issue, with an evidentiary hearing to follow.

E. On February 4, 2019, the State Engineer filed his Answer to PCWCD's Amended Writ Petition.

F. During a hearing before the Court on July 28, 2020, the Court ordered PCWCD to provide notice of the Dispute to holders of water rights in the Humboldt River Basin by mail as well as publish notice in newspapers of general circulation in the Humboldt River Basin by October 14, 2020. The Court also set an evidentiary hearing for March 22 through March 26, 2021, for the State Engineer to present evidence in opposition to PCWCD's Amended Writ Petition, as well as providing an opportunity for intervening parties to present supplemental evidence in opposition to PCWCD's Amended Writ Petition.

G. On October 12, 2020, pursuant to a stipulation submitted by the State Engineer and PCWCD, the Court entered its Order Staying Judicial Proceedings and All Currently Pending Matters, staying all proceedings in the Dispute for a period of 90 days so that the State Engineer and PCWCD could engage in settlement discussions.

H. While the Dispute has been proceeding in the Court, the State Engineer has undertaken the following endeavors in an effort to proactively manage the Humboldt River Region in an effort to balance the interests of the senior decreed rights of the Humboldt River with those groundwater uses in the region. These efforts include, but are not limited to:

- a. In 2016, in an effort to utilize the best available science to inform decisions relating to the appropriate management of the Humboldt River Basin, the State Engineer initiated work with the United States Geological Survey ("USGS") and the Desert Research Institute ("DRI") on a groundwater capture model ("the Model") for the Humboldt River Region to more accurately understand the relationships between groundwater and surface water, and to determine the effects of groundwater pumping on Humboldt River flows. The State Engineer retained USGS and DRI to develop a scientifically-sound calibrated numerical model and to develop improved groundwater budgets at the basin scale using modern methods to update estimates from early USGS Reconnaissance Series Reports and Water Resource Bulletins. The Model will be a science-based tool to determine to what extent groundwater withdrawals within the Humboldt River Region capture river flow, and to assist in determining effective measures to avoid conflict with deliveries of Humboldt River water.
- b. Recognition of the hydrologic connections between the Humboldt River and the tributary groundwater basins, in accordance with the Nevada Legislature's adoption of NRS 533.024(1)(e) declaring it the policy of the state to "manage conjunctively the appropriation, use and administration of all waters of [Nevada], regardless of the source of the water."
- c. Establishment of a policy relating to evaporative losses from pit lakes, including requirements that evaporative losses be accounted for through permanent relinquishment of groundwater rights and included within the basin groundwater budget.
- d. Continued communication and stakeholder outreach relating to the State Engineer's efforts within the Humboldt River Region to work toward data sharing and uniform management within the Humboldt River Region.
- e. Issuance of an order requiring the installation of totalizing meters and required reporting of water use, subsequent field verification of meter installation and data accuracy, and development of a database to manage and report groundwater pumping data.

I. Through negotiations, the State Engineer and PCWCD (together as "Parties" or separately as a "Party") have reached a compromise that will settle and resolve the Dispute.

NOW, THEREFORE, in consideration of the mutual promises and agreements herein and other good and valuable consideration, the receipt and sufficiency of which the Parties acknowledge, the Parties hereby agree to the following terms, conditions, and covenants:

TERMS OF SETTLEMENT

1. Recitals. The Recitals stated above are true and incorporated herein as though set forth in full.

2. Forthcoming Administrative Order. The State Engineer is in the process of developing an administrative draft order ("Order") that is intended to provide clear procedures and standards for review of groundwater applications within the Humboldt River Region as informed by the Model. These procedures will provide the following:

- a. New Groundwater Appropriations. The Order will set out specific thresholds for capture for new groundwater appropriations, including requirements to provide replacement water in a manner sufficient to avoid conflict resulting from the application. The mitigation requirements will be specific as to quantity, priority, and other considerations of the State Engineer to assure that the replacement water is sufficient to avoid conflict with existing rights.
- b. Groundwater Change Applications. The Order will set out specific thresholds for capture for applications to change existing groundwater appropriations that consider the changes in capture, and resulting potential for conflict, caused by a change in the point of diversion. Where such a change results in an increase in capture the Order will set out specific requirements to offset any increase in capture with surface water replacement or relinquishment of groundwater rights. Such requirements are intended to be specific and intended to assure any change is sufficiently mitigated so as to not increase any resulting capture and potential conflict.
- c. Addressing Future Conflicts. The Order will set out a mechanism to address future conflicts between valid existing groundwater uses and decreed Humboldt River rights within the Humboldt River Region. This will include articulating a basis upon which to make determination, based upon the best available science, as to issuing future orders that would restrict withdrawals to conform to priority of rights, and the establishment of specific considerations that would be reviewed by the State Engineer in determining whether to invoke a curtailment order.
- d. Notice. The Order will seek to notify all applicants of new rights, as well as those applying for changes to existing rights, that approval of the application does not constitute an exception to any long-term conjunctive management plan determined to be necessary by the State Engineer to prevent or avoid conflict so as to meet the needs of the water users.

The Order will first be issued as a Draft Order and will be subject to a public administrative process that will include taking comments from interested parties and the general public on the Draft Order as well as a public administrative hearing. A Final Order will be issued following the public administrative hearing.

3. Issuance of the Administrative Order. The State Engineer hereby agrees to issue the aforementioned Draft Order within ninety (90) days of the Effective Date of this Agreement.

4. Dismissal of PCWCD's Amended Writ Petition. In exchange for the State Engineer's agreement to issue the aforementioned Draft Order within the aforementioned time period, PCWCD agrees to dismiss its Amended Writ Petition with prejudice.

5. Full and Final Release. The Parties agree that this Agreement is intended to be a full and final compromise, release and settlement of all claims, demands, lawsuits, expenses, injuries, attorney fees, actions, suits, causes of action, known or unknown, suspected or unsuspected, against the other relating in any manner to the Dispute. Nothing herein shall be construed as a release of or otherwise affect the right of any party to enforce any right under this Agreement.

6. Dismissal of the Dispute. The Parties, through counsel, agree to fully execute the Stipulation and Order for Dismissal with Prejudice shown in Exhibit 1 hereto simultaneous with the execution of this Agreement.

7. Complete Agreement. The Parties understand and agree that this Agreement sets forth the full and complete agreement of the Parties, and that no statement or representation, other than those contained herein, have been made or relied upon by the Parties as an inducement for executing this Agreement. No part of this Agreement may be changed except in a writing executed by a duly authorized representative of each Party.

8. Representation by Counsel. All Parties to this agreement hereby represent and acknowledge that they have been represented by counsel regarding the terms of this Agreement and that their counsel have fully advised them with respect to the consequences associated with agreeing to its terms.

9. Litigation Attorneys' Fees. The Parties hereby acknowledge and agree to bear their own attorneys' fees and costs in connection with the Litigation and the preparation of this Agreement.

10. Miscellaneous:

a) Execution of Additional Documents: Each of the Parties hereto agrees to perform any and all acts and to execute and deliver any and all documents reasonably necessary to carry out the intent and the provisions of this Agreement.

b) Governing Law and Choice of Venue: This Agreement is executed and intended to be performed in the State of Nevada, and the laws of Nevada shall govern its interpretation and effect, and any dispute arising from this agreement shall be commenced before the First Judicial District Court, in and for Carson City, Nevada.

c) Severance: Should any term, part, portion or provision of this Agreement be decided or declared by the Courts to be, or otherwise found to be, illegal or in conflict with any law of the State of Nevada or the United States, or otherwise be rendered unenforceable or ineffectual, the validity of the remaining parts, terms, portions and provisions shall be deemed severable and shall not be affected thereby, providing such remaining parts, terms, portions or

provisions can be construed in substance to constitute the agreement that the parties intended to enter into in the first instance.

d) Successors and Assigns: This Agreement shall be binding and inure to the benefit of the Parties hereto, their predecessors, parents, subsidiary and affiliated business entities, all officers, directors, shareholders, members, agents, employees, attorneys, assigns, successors, heirs, executors, administrators and legal representatives of whatsoever kind or character in privity therewith.

e) Third-Party Beneficiary: This Agreement is for the benefit of the Parties, their successors and assigns only. No other third-party beneficiary rights are intended by this Agreement.

f) No Precedential Effect: Each of the parties hereto acknowledges and agrees that certain negotiated provisions of this Agreement were agreed as an accommodation to the Parties and may be unique to the facts and circumstances surrounding this particular relationship. By entering into this Agreement, it is not the intention of the State Engineer to establish any policy, procedure, course of dealing or plan of general application irrespective of any similarity in facts or circumstances involving such other person or party. This Agreement shall not be binding or controlling in any proceeding before the State Engineer or any court reviewing the State Engineer's decisions, other than to enforce the terms of this Agreement.

g) No Liability: This Agreement is a compromise and is not to be construed as an admission of liability on the part of any Party. Nothing in this agreement shall be construed as an admission against the interest of any Party.

h) Counterparts: This Agreement may be executed in counterparts, one or more of which may be facsimiles or color scanned copies but all of which shall constitute one and the same Agreement. Facsimile or scanned signatures of this Agreement shall be accepted by the Parties to this Agreement as valid and binding in lieu of original signatures.

IN WITNESS WHEREOF, this Agreement is executed as of:

SIGNATORIES

On Behalf of Nevada Division of Water Resources:


By: Tim Wilson, P.E. Date: 10/19, 2020
Tim Wilson, P.E.
State Engineer

By: James Bolotin, Esq. Date: 10/19, 2020
James Bolotin, Esq.
Senior Deputy Attorney General

On Behalf of Pershing County Water Conservation District:

By:  Date: 10/15, 2020
Ronnie Burrows
PCWCD President

By:  Date: 10-15, 2020
Ryan Collins
PCWCD Secretary/Manager

By:  Date: 10/15, 2020
Therese A. Ure Stix, Esq
Attorney for PCWCD

1 CASE NO. CV 15-12019

2 Pursuant to NRS 239B.030, the
3 undersigned hereby affirms this document
4 does not contain the social security number
5 of any person.

6 **IN THE ELEVENTH JUDICIAL DISTRICT COURT OF THE STATE OF NEVADA,**
7 **IN AND FOR THE COUNTY OF PERSHING**

8
9 **PERSHING COUNTY WATER
CONSERVATION DISTRICT,**

10 **Plaintiff,**

11 **vs.**

12 **JASON KING, P.E., STATE ENGINEER OF**
13 **THE NEVADA DIVISION OF WATER**
14 **RESOURCES, DEPARTMENT OF**
15 **CONSERVATION AND NATURAL**
16 **RESOURCES.**

17 **Defendant.**

18 **ORDER TO ANSWER WRIT OF**
19 **MANDAMUS**

20 THE ABOVE-ENTITLED MATTER came before the Court on June 14, 2018, for a
21 hearing on Plaintiff's *First Amended Petition for Writ of Mandamus, or in the Alternate Writ of*
22 *Prohibition*. Laura A. Schroeder and Therese A. Ure, attorneys at law, were present on behalf of
23 Plaintiff, the Pershing County Water District ("PCWCD"). James N. Bolotin, Deputy Attorney
24 General, and Tori N. Sundheim, Deputy Attorney General, were present on behalf of Defendant,
25 Jason King, the State Engineer ("State Engineer"), who was not present. The Court previously
26 bifurcated the briefing and argument on Plaintiff's Petition such that Plaintiff was required to
27 present its case, and if PCWCD was able to satisfy its initial burden then the Court would order
28 the State Engineer to respond and present his case.

1 **I. BACKGROUND**

2 "PCWCD is an irrigation district in Lovelock, Nevada that owns, controls, and operates a
3 water conveyance system that provides water to approximately 100 constituents holding
4 approximately 37,506 acres of irrigated agricultural lands within the District boundaries." Legal

1 Issues Brief at 1. PCWCD holds in trust senior water rights for its constituents for use of the
2 Humboldt River water. *Id.* at 2. In 2014 and 2015, PCWCD delivered 0% of its allocated water
3 to constituents. *Id.* PCWCD believed that the absence of water was due to the actions of the State
4 Engineer.

5 On January 4, 2018, Plaintiff filed a *First Amended Petition for Writ of Mandamus, or in*
6 *the Alternate, Writ of Prohibition*. The Writ was supported by the Affidavit of Bennie B.
7 Hodges. The central issue identified in the Petition is whether the Court should intervene to
8 require the State Engineer to "sustainably manage groundwater in the Humboldt River Basin
9 according to Nevada law." Writ at 4. The Writ seeks a Writ of Mandamus, or Prohibition in
10 order to (1) Bring all over-appropriated ground water basins surrounding the Humboldt River
11 back to their perennial annual yield; (2) Eliminate the cone of depression caused by over-
12 allocation of ground water pumping, causing interference with surface water flows in the
13 Humboldt River; and (3) Regulate water used for mining and milling pursuant to Nevada
14 Statutory Code." Writ at 1-2, 3, 21. In justification for the second portion of the request, the
15 Petition alleges that the State Engineer has failed to comply with numerous statutory duties, to
16 wit: State Engineer has violated his statutory duties (1) By allowing ground water allocation in
17 basins in which there is no unappropriated water; (2) By allowing ground water pumping that
18 conflicts with existing rights; (3) By allowing ground water pumping that is detrimental to the
19 public interest; (4) By finding that groundwater use for mining and milling is not appropriate,
20 and issuing permanent water rights; and (5) By allowing groundwater pumping in conflict with a
21 State issued court decree.

22 II. LEGAL STANDARD

23 A writ of mandamus is available to compel the performance of an act that the law
24 requires as a duty resulting from an office, trust, or station or to control an arbitrary or capricious
25 exercise of discretion. *See* NRS 34.160; *Int'l Game Tech., Inc. v. Second Judicial Dist. Court*,
26 124 Nev. 193, 197, 179 P.3d 556, 558 (2008). "Mandamus will not lie to control discretionary
27 action, unless discretion is manifestly abused or is exercised arbitrarily or capriciously." *Round*
28 *Hill Gen. Improvement Dist. v. Newman*, 97 Nev. 601, 603-04, 637 P.2d 534, 536 (1981)

(citation omitted). An exercise of discretion is considered arbitrary if it is "founded on prejudice or preference rather than on reason" and capricious if it is "contrary to the evidence or established rules of law." State v. Eighth Judicial Dist. Court (Armstrong), 127 Nev. 927, 931–32, 267 P.3d 777, 780 (2011) (quoting *Arbitrary and Capricious*, Black's Law Dictionary (9th ed. 2009)). Further, mandamus is an extraordinary remedy, and it is within the discretion of this Court to determine if a petition will be considered. See Smith v. Eighth Judicial Dist. Court, 107 Nev. 674, 677, 818 P.2d 849, 851 (1991). A writ of mandamus will not issue if the petitioner has a plain, speedy, and adequate remedy at law. See NRS 34.170; Int'l. Game Tech., 124 Nev. at 197, 179 P.3d at 558. Petitioner bears the burden of demonstrating that extraordinary relief is warranted. See Pan v. Eighth Judicial Dist. Court, 120 Nev. 222, 228, 88 P.3d 840, 844 (2004).

III. ANALYSIS

A. State Engineer has a Legal Duty to Administer Water Rights

The State Legislature has conferred upon the State Engineer the authority and duty to regulate groundwater and surface water rights in the State of Nevada. See NRS 532, NRS 533, and NRS 534. The State Engineer must consider several factors when determining whether to approve or deny applications for new appropriations of water. See e.g. NRS 533.370(2) and NRS 533.371. Specifically, NRS 534 which governs underground water and wells provides that the State Engineer may grant permits "so long as any protectable interests in existing domestic wells as set forth in NRS 533.024 and *the rights of holders of existing appropriations can be satisfied under such express conditions*." NRS 534.110(5) (emphasis added). Moreover, the Legislature has declared as the policy of the State "[t]o encourage the State Engineer to consider the best available science in rendering decisions concerning the available surface and underground sources of water in Nevada." NRS 533.024(1)(c).

As such, the Court finds that Plaintiff has met its burden under a writ proceeding by showing that the State Engineer has a legal duty to administer and regulate the waters of the Humboldt River Basin.

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1 **B. PCWCD has a Senior Water Right Which the State Engineer Failed to Protect**

2 Based upon the evidence presented at the hearing, the Court finds that PCWCD satisfied
3 their initial burden in the writ proceeding of showing they had a senior water right which the
4 State Engineer failed to protect.

5 First, PCWCD demonstrated that they had an adjudicated right to a certain amount of
6 water based upon the Bartlett and Edward Decrees. Based upon those decrees, the Humboldt
7 River has an established system of delivery. Bennie Hodges testified to the following:

8 the Palisade gauge is the most critical stream flow gauge in the entire Humboldt River
9 system, because the stream flow gauge in the entire Humboldt River system, because the
10 stream flow gauge in Palisade is what sets the priority of flow each and every day during
11 the irrigation season on the Humboldt system. It determines how much water all
12 constituents and landowners of the Humboldt River system are entitled for that day. ...
13 And then also the final gauge at Imlay, which is the gauge that our water is measure at
14 and we get our water distributed to.

15 The testimony of Dwight Smith, an expert in hydrogeology, added to and clarified the
16 testimony of Bennie Hodges. He testified that below the Palisade gauge there are 277,027 acre
17 feed of decreed rights, of which PCWCD is responsible for managing approximately 144,833
18 acre feet. As such, if the water rights arrive at Palisade, PCWCD is entitled, under their decree,
19 to receive approximately 144,833 acre feet.

20 Second, PCWCD made a call on their senior water rights. Mr. Hodges testified that in
21 PCWCD noticed that the flows of water they were entitled to, based upon the system described
22 above, began to taper off in 2012 and 2013. Consequently, Mr. Hodges stated that in 2014 and
23 2015, PCWCD received no water because there was not enough water to release from Rye Patch.
24 Due to the lack of water, PCWCD met with the State Engineer to express their concerns about
25 the lack of water and requested that something be done. Additionally, PCWCD began opposing
26 new applications to appropriate water in the Humboldt River Basin.

27 Third, PCWCD showed that the State Engineer continued to grant applications, which
28 affected the senior water rights, after PCWCD made the call on the water. Mr. Smith's report and
testimony illustrate that several reports, which were in the possession of the State Engineer and
at times funded by the State Engineer, showed a connection between pumping groundwater and

1 the potential impacts to PCWCD's senior water rights. Specifically, one of the reports which Mr.
2 Smith analyzed stated:

3 The possibility of increased groundwater development is of major interest to almost
4 everyone in the basin. Water users in the Lovelock area have long been aware of the fact
5 that groundwater from Grass and Paradise Valleys discharges into the Humboldt River.
6 They have been concerned that groundwater development in these basins would decrease
7 the amount of seepage gain in the river, and thereby decrease the downstream supply of
8 surface water. Their concern, of course, has been justified. ... development of
9 groundwater from the aquifer may partly deplete the flow of the Humboldt River and thus
10 infringe on established downstream surface water rights.

11 PCWCD presented evidence that despite the State Engineer's knowledge of the
12 connection between groundwater pumping and the potential to deplete the Humboldt River, the
13 State Engineer continued to grant applications after PCWCD made a call on the water and failed
14 to take actions to inhibit or stop the interference with the senior water rights in the basin. *See Ex.*
15 *3A.*

16 The Court finds that the State Engineer cannot grant an application to appropriate water
17 that conflicts with existing rights. NRS 533.370(2). Indeed, "[a]ll appropriation of water in the
18 State of Nevada ... is subject to existing rights." NRS 533.030. Furthermore, where an
19 application "threatens to prove detrimental to the public interest, the State Engineer shall reject
20 the application and refuse to issue the requested permit." NRS 533.370. Black's Law Dictionary
21 defines "public interest" as is "[t]he general welfare of a populace considered as warranting
22 recognition and protection" or "[s]omething in which the public as a whole has a stake." *Public*
23 *Interest*, Black's Law Dictionary (10th ed. 2014). PCWCD presented evidence that the lack of
24 water in 2014 and 2015 had a detrimental effect on the agricultural production of Plaintiff's
25 constituents and argues that this fact shows the actions taken by the State Engineer to approve
26 new appropriations and to regulate existing wells was detrimental to the public interest.

27 Consequently, the Court finds PCWCD presented enough evidence to satisfy their initial
28 burden in this writ proceeding.

C. Plaintiff Has no Other Plain, Speedy, or Adequate Remedy at Law

The Court finds that PCWC has met its burden of showing that it has no other plain,
speedy, or adequate remedy at law. Plaintiff has met and conferred with the State Engineer and

1 filed individual protests against applications within the Humboldt River Basin, thereby making a
2 call on the water that the State Engineer had a duty to act upon. There is no adequate, speedy, or
3 plain remedy at law because a lawsuit against the State Engineer is not tenable.

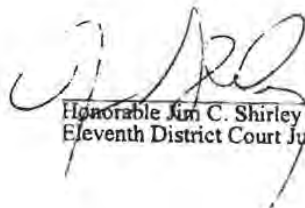
4 Based upon the findings of fact outlined above, the Court makes the following
5 conclusions of law and orders:

6 THE COURT CONCLUDES that Plaintiff presented enough evidence to meet its initial
7 burden of showing that their Petition for Writ of Mandamus, or in the Alternative, Writ of
8 Prohibition is proper and should go forward.

9 THE COURT HEREBY ORDERS the State Engineer to Answer Plaintiff's Writ of
10 Mandamus, showing cause why a writ should not issue, within 45 days of the date of this order.

11 THE COURT FURTHER ORDERS that an evidentiary hearing will be held at the
12 request of the State Engineer to present evidence to support his Answer.

13
14 DATED, this 25th day of October 2018.

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18 Honorable Jim C. Shirley
19 Eleventh District Court Judge
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STEVE SISOLAK
Governor

STATE OF NEVADA



BRADLEY CROWELL
Director

ADAM SULLIVAN, P.E.
Acting State Engineer

DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES
DIVISION OF WATER RESOURCES

901 South Stewart Street, Suite 2002
Carson City, Nevada 89701-5250
(775) 684-2800 • Fax (775) 684-2811
<http://water.nv.gov>

NOTICE OF HEARING ON PROPOSED INTERIM ORDER
WITHIN THE HUMBOLDT RIVER REGION

The Nevada Division of Water Resources will hold a public hearing on a proposed interim order within the Humboldt River Region. The hearing is open to the public and will convene at 9:30 a.m., Friday, April 2, 2021. Due to restrictions on the operation of the State of Nevada office buildings and limitations on public gatherings established under the state of emergency declared by Governor Sisolak on March 12, 2020, the Nevada Division of Water Resources will conduct the hearing through a video conference link.

WHO: Nevada Division of Water Resources

WHAT: Hearing on Proposed Interim Order

WHERE: Videoconference link, <https://call.lifesizecloud.com/7315362> and via telephone at (877) 422-8614, meeting code 7315362.
Pursuant to Governor Steve Sisolak's Emergency Directive 006 and as extended by Emergency Directive 21, section 37, there will be no physical location for this hearing. The hearing can be viewed or listened to live over the Internet or through the telephone. Any person planning to participate in the hearing must participate either by using the videoconference link or teleconference number.

WHEN: 9:30 a.m., Friday, April 2, 2021

WHY: The public hearing will be held to provide notice and to take public comment on the proposed interim order to establish procedures for the review of applications to appropriate groundwater in the Humboldt River Region with regard to the potential for capture of and conflict with decreed rights to the waters of the Humboldt River and tributaries, in Marys River Area (042), Starr Valley Area (043), North Fork Area (044), Lamoille Valley (045), South Fork Area (046), Huntington Valley (047), Dixie Creek-Tenmile Creek Area (048), Elko Segment (049), Susie Creek Area (050), Maggie Creek Area (051), Marys Creek Area (052), Pine Valley (053), Crescent Valley (054), Carico Lake Valley (055), Upper Reese River Valley (056), Antelope Valley (057), Middle Reese River Valley (058), Lower Reese River Valley (059), Whirlwind Valley (060), Boulder Flat (061), Rock Creek Valley

Notice of Hearing on Proposed Interim Order Within the Humboldt River Region
Page 2

(062), Willow Creek Valley (063), Clovers Area (064), Pumpnickel Valley (065), Kelly Creek Area (066), Little Humboldt Valley (067), Hardscrabble Area (068), Paradise Valley (069), Winnemucca Segment (070), Grass Valley (071), Imlay Area (072), Lovelock Valley (073), Lovelock Valley-Oreana Subarea (073A), and White Plains (074), located in Elko, White Pine, Eureka, Lander, Nye, Humboldt, Pershing, and Churchill counties.

COMMENT: Oral public comment will be accepted during the hearing; a sign-in sheet will be posted the week before the hearing and you can indicate whether you would like to make public comment. Written public comments will be accepted until Friday, April 9, 2021, and may be mailed to the Nevada Division of Water Resources at the above address.

The Nevada Division of Water Resources is pleased to make reasonable accommodations for members of the public who are disabled and wish to participate in the hearing. If special arrangements for the hearing are necessary, please call (775) 684-2800.

Notice of this hearing was provided via electronic means as follows:

To all persons on the NDWR e-mail list for the Humboldt River
Division of Water Resources website: <http://water.nv.gov>

And via publication in Lahontan Valley News (Churchill County), Battle Mountain Bugle (Lander County), Humboldt Sun (Humboldt County), Lovelock Review Miner (Pershing County), Elko Daily Free Press (Elko County), Ely Times/Eureka Sentinel (Eureka and White Pine Counties), and Tonopah Times- Bonanza & Goldfield News (Nye County).

And via e-mail to participants in *Pershing County Water District v. State Engineer*, Eleventh Judicial District, CV15-12019.

**IN THE OFFICE OF THE STATE ENGINEER
OF THE STATE OF NEVADA**

DRAFT INTERIM ORDER

**ESTABLISHING PROCEDURES FOR REVIEW OF APPLICATIONS TO
APPROPRIATE GROUNDWATER IN THE HUMBOLDT RIVER
REGION WITH REGARD TO THE POTENTIAL FOR CAPTURE OF
AND CONFLICT WITH DECREED RIGHTS TO THE WATERS OF THE
HUMBOLDT RIVER AND TRIBUTARIES**

I. BACKGROUND OF THE HUMBOLDT RIVER REGION

WHEREAS, the Humboldt River Region is delineated by the topographic boundary of the Humboldt River watershed, extending over 11,000 square miles, including 34 hydrographic basins in eight Counties. Hydrographic basins within the Humboldt River Region are Marys River Area (042), Starr Valley Area (043), North Fork Area (044), Lamoille Valley (045), South Fork Area (046), Huntington Valley (047), Dixie Creek-Tenmile Creek Area (048), Elko Segment (049), Susie Creek Area (050), Maggie Creek Area (051), Marys Creek Area (052), Pine Valley (053), Crescent Valley (054), Carico Lake Valley (055), Upper Reese River Valley (056), Antelope Valley (057), Middle Reese River Valley (058), Lower Reese River Valley (059), Whirlwind Valley (060), Boulder Flat (061), Rock Creek Valley (062), Willow Creek Valley (063), Clovers Area (064), Pumpnickel Valley (065), Kelly Creek Area (066), Little Humboldt Valley (067), Hardscrabble Area (068), Paradise Valley (069), Winnemucca Segment (070), Grass Valley (071), Imlay Area (072), Lovelock Valley (073), Lovelock Valley-Oreana Subarea (073A), and White Plains (074).

WHEREAS, the Bartlett Decree was filed on October 20, 1931, in the Sixth Judicial Court of the State of Nevada, establishing relative rights to the use of the waters of the Humboldt River and setting forth the dates of priority and duty of water for existing claims. The Bartlett Decree determined the waters of the stream system to be fully appropriated, and that in an average year there existed no surplus water for irrigation. Subsequent decrees, orders and writs made corrections to the Bartlett Decree, and collectively form the Humboldt River Adjudication. This process was complete by 1938. The most senior decreed surface water right in the Humboldt River system has a priority date of 1861 and the most junior right has a priority date of 1921.¹

WHEREAS, Humboldt River flow measured at the Palisade gage is the primary tool utilized for determining and scheduling delivery amounts of Humboldt River decreed rights.²

¹ *In the Matter of the Determination of the Relative Rights of Claimants and Appropriators of the Waters of the Humboldt River Stream System and Tributaries*, Case No. 2804, Sixth Judicial District Court of the State of Nevada, In and For the County of Humboldt (October 20, 1931).

² United States Geological Survey (USGS) Gage 10322500, Humboldt River at Palisade.

Deliveries are scheduled during the irrigation season based on the daily flow measurement at the gage.³ When daily flows at the Palisade gage are sufficient to deliver all decreed rights on the Humboldt River and its tributaries, all water rights irrespective of location above or below the gage are scheduled to receive their full duty of water. When flows are not sufficient to deliver all decreed rights, those rights with senior priority dates are served first. In practice, actual deliveries over the expanse of the Humboldt River Region may be different than exact scheduled deliveries due to a wide range of variables including water distribution and management practices, and climatic variations that affect riparian evapotranspiration rates, streambank storage, and baseflow. Figure 1 shows the ratio of actual deliveries to scheduled deliveries at the Imlay gage, which is the furthest downstream point of diversion.⁴ The ratio is generally higher in wet years and lower in dry years. Scheduled deliveries for the irrigation seasons were exceeded in all but six years since 1936.

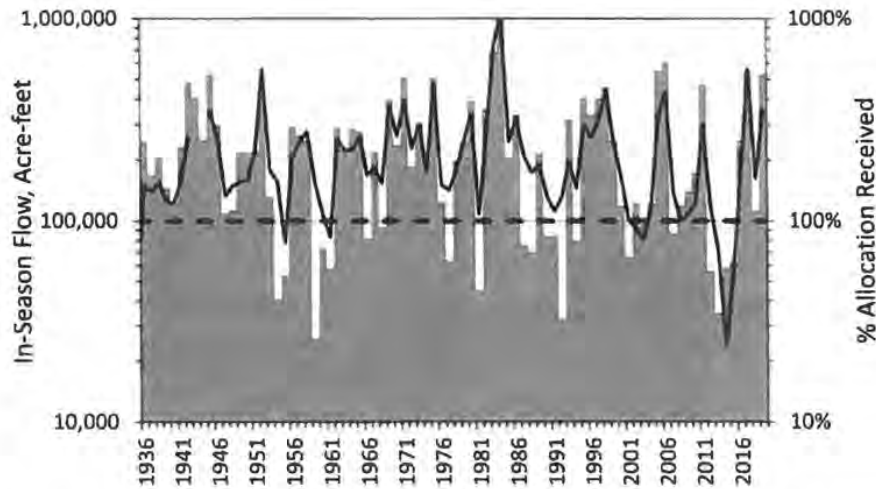


Figure 1. Humboldt River in-season flow volume (bars corresponding to left axis) at the Palisade gage and water delivery ratio of actual to scheduled (solid line corresponding to right axis) at Imlay from 1936 to 2019. Scheduled deliveries for the irrigation seasons that exceeded allocations occur when black line is above the 100% allocation line (dashed line corresponding to right axis). Conversely, years that did not meet allocations occur below the 100% allocation line (dashed line).⁵

³ Barlett Decree, the decreed irrigation season begins March 15th downstream of Palisade and April 15th upstream of Palisade, and ends on varying dates depending on location and culture.

⁴ USGS Gage 10333000, Humboldt River Near Imlay.

⁵ USGS Gage 10322500, Humboldt River at Palisade; Annual Tabulation of Delivery Records for the Humboldt River Decree, official records in the Office of the State Engineer.

WHEREAS, during the 2012-2015 period the Humboldt River Region experienced one of the worst droughts since 1902.⁶ Annual flow at the Palisade gage for that 4-year period averaged 82,871 acre-feet, which is 30% of the historical average annual flow of 287,846 acre-feet for the period of record spanning the 112 years.⁷ At the headwaters of the Humboldt River system during 2012-2015, upstream of any significant groundwater pumping, Lamoille Creek also experienced its lowest 4-year flow since at least 1944 when continuous flow measurements on Lamoille Creek started.⁸ By the end of the irrigation seasons in 2014 and 2015 the Humboldt River at Imlay was dry and water was unavailable to allocate to downstream surface water users in the Lovelock area. While this occurred during the unprecedented drought, decreed water right holders alleged that junior groundwater appropriators were capturing surface flows of the Humboldt River and that groundwater use conflicts with the senior surface water rights. In a writ filed in Pershing County District Court in 2015, Pershing County Water Conservation District requested that the Court require the State Engineer to take action within his statutory authority to address the alleged conflict.⁹

WHEREAS, nearly all groundwater vested claims and appropriations within the Humboldt River Region are junior to decreed surface water rights in the Humboldt River and its tributaries. The most senior groundwater permit has a priority date of 1912.¹⁰ Groundwater development began to increase more substantially in the 1960s and has gradually increased in the decades since. Groundwater is now extensively relied upon for all manners of use supporting communities and industry throughout the Region. Groundwater rights were approved over the years by the State Engineer upon findings that unappropriated water was available and its use would not conflict with existing rights or the public interest, given the best data available to the State Engineer at the time.

WHEREAS, it is scientifically understood that groundwater pumping has the potential to capture stream flow in a hydraulically connected system, either by inducing greater infiltration losses from the stream channel or by reducing the amount of groundwater that would otherwise discharge as baseflow to the stream.¹¹ Although this principle has factored into numerous State Engineer decisions, site-specific capture data is generally not available to accurately quantify potential conflict pursuant to Nevada Revised Statute (NRS) § 533.370.¹² The potential for hydraulic connectivity and capture by itself does not demonstrate that conflict is occurring or will

⁶ Period of record for the Palisade gage begins in 1902.

⁷ For water years between 1902-1906 and 1912-2019.

⁸ USGS Gage 10316500, Lamoille Creek Near Lamoille.

⁹ *Petition for Writ of Mandamus, or in the Alternative, Writ of Prohibition*, In the Eleventh Judicial District Court of the State of Nevada In and For the County of Pershing, (Case No. CV 15-12019), Pershing County Conservation District V. Jason King, P.E., State Engineer of the State of Nevada, Division of Water Resources, Department of Conservation and Natural Resources.

¹⁰ Nevada Division of Water Resources' Water Rights Database, official records in the Office of the State Engineer, available at <http://water.nv.gov/hydrographicabstract.aspx>.

¹¹ Charles V. Theis, 1940, *The Source of Water Derived from Wells -Essential factors controlling the response of an aquifer to development*, Civil Engineering, v. 10, no. 5, p. 277-280.

¹² See e.g., State Engineer's Ruling 55, Ruling 790, Ruling 2197, Ruling 2593, Ruling 4036.

occur in the future, unless it is shown that scheduled surface water deliveries cannot be met, and those unmet deliveries are caused by groundwater pumping.

WHEREAS, since the end of the 2012-2015 drought, all scheduled deliveries at Imlay were fully served through the 2020 irrigation season. However, with climate models forecasting a continuing pattern of increasing frequency and intensity of droughts and flood events,¹³ drought-accentuated natural losses from the river, combined with greater drawdown due to increased reliance on groundwater during drought, may increase the future potential for insufficient surface flow to fully serve decreed rights. Conversely, larger or more frequent flood events may episodically replenish the groundwater system, helping to offset any natural or pumping-induced depletion during drought periods. These long-term hydrologic uncertainties were not explicitly foreseen in the Barlett Decree and underscore the difficulty in developing and implementing management strategies for future administration of groundwater and surface water in the Humboldt River Region.

II. ACTIONS TAKEN SINCE THE DROUGHT

WHEREAS, a basic tenet of prior appropriation is that if there is not enough water to serve all users then senior right holders are entitled to water before junior right holders. This principle originated at a time when surface water was the only significant source of supply, but it has been preserved in water law to also apply to groundwater. NRS 534.110 provides that where groundwater supply is not adequate for the needs of all permittees and vested-right holders, the State Engineer may order that withdrawals be restricted to conform to priority rights. This is the regulatory mechanism established in statute for the State Engineer to address conflict due to inadequate supply of groundwater or unreasonable lowering of the water table. During the drought period of 2012-2015 there were insufficient data to identify to what extent groundwater pumping was causing the inadequacy of water supply for Humboldt River senior decreed right holders, and to what extent it was the result of natural low flow because of drought. Analysis of the data at the time indicated that curtailing junior groundwater pumping to protect senior decreed rights would result in a nominal addition to flow in the River, but would have had devastating and severe impacts to the communities and economies throughout the Region that rely on groundwater.¹⁴ Consequently, no curtailment was imposed.

WHEREAS, in the years since the end of the 2012-2015 drought, the State Engineer initiated several measures to improve the available data in the Region and thus provide a sound basis to render defensible decisions with regard to avoiding potential conflict. Among these measures: all non-designated basins within the Region were designated pursuant to NRS 534.030; totalizing meter installation and reporting were required by State Engineer's Order 1251; field

¹³ USGCRP, 2017, Climate Science Special Report: Fourth National Climate Assessment, Volume I [Wuebbles, D.J., D.W. Fahey, K.A. Hibbard, D.J. Dokken, B.C. Stewart, and T.K. Maycock (eds.)]. U.S. Global Change Research Program, Washington, DC, USA, 470 pp., See Chapter 8, page 237.

¹⁴ Nevada Division of Water Resources, public presentations on the Humboldt River in Lovelock, Winnemucca, and Elko, February 12-13, 2015.

investigations were completed to verify the meter data; the State Engineer enhanced its database capacity to maintain and manage the pumping data in a publicly accessible manner; the State Engineer established a policy requiring water rights for pit lake evaporation; and applications to appropriate groundwater or to change the point of diversion were denied if granting the application would result in an increase in capture that conflicts with existing rights.

WHEREAS, in 2016, the Humboldt Working Group was assembled to assist in developing draft regulations to resolve future conflict. The working group members included both surface water and groundwater users representing municipalities, agriculture, mining, and other community interests across the Humboldt River Region. Over the course of the next three years, the group developed a conjunctive management approach whose objective was to protect senior water rights while at the same time maximizing beneficial use of surface water and groundwater. This effort culminated in a set of draft regulations that relied on a combination of augmentation and mitigation through financial compensation to avoid future conflict. However, in the 2019 Legislative session, the supporting statutory revisions lacked unanimous support and failed. Surface water users expressed no interest in financial mitigation in lieu of water. Groundwater users express no interest in being assessed fees for capture that had yet to be quantified by best available science.

WHEREAS, in 2016, the State Engineer initiated work with the United States Geological Survey (USGS) and the Desert Research Institute (DRI) to develop improved groundwater budgets at the basin scale and to develop numerical groundwater capture models for the Humboldt River Region. These efforts are intended to serve as a basis for determining the effect of groundwater pumping on flows in the Humboldt River and its tributaries. This work will also serve to review the perennial yield values for the Region, first estimated from the early USGS Reconnaissance Series Reports and Water Resource Bulletins, which are the primary guideline used by the State Engineer to determine the availability of groundwater in any particular basin.

WHEREAS, while the completion of the Humboldt River Region groundwater model study is expected in 2021, preliminary findings from that effort provide insight into the dynamics of surface water capture by groundwater pumping. These findings indicate that there may be important non-linear, climate-driven behaviors that influence interactions between the surface water and groundwater systems. These behaviors suggest that pumping-related capture of surface water tends to increase during wet years when excess water is available and decrease during dry years when the potential for conflict is greater. Understanding these phenomena is necessary to accurately define both the timing and distribution of capture so that conflict attributable to groundwater pumping can be characterized and quantified. Long-term management will rely on completion of the modeling effort and a process of public review and deliberation to determine best practices that satisfy legislative directives of prior appropriation, beneficial use and the public interest. Until then, interim management described herein must focus on avoiding increased capture caused by new appropriations or changes to existing groundwater permits.

III. AUTHORITY AND NECESSITY

WHEREAS, NRS 533.024 directs the State Engineer “to consider the best available science in rendering decisions concerning the availability of surface and underground sources of water in Nevada.”¹⁵

WHEREAS, NRS 533.024 was amended in 2017 adding a new subsection declaring that it is the policy of Nevada “[t]o manage conjunctively the appropriation, use and administration of all waters of this State, regardless of the source of the water.”¹⁶

WHEREAS, NRS 534.020 provides that all underground waters of the State belong to the public and are subject to all existing rights.

WHEREAS, NRS 533.370 requires that, in review of an application to appropriate water or to change water already appropriated, the State Engineer must consider whether there is unappropriated water in the source of supply, whether the uncommitted groundwater has been reserved pursuant to NRS 533.024, whether the proposed use or change conflicts with existing rights or protectable interests in existing domestic wells, and whether it threatens to prove detrimental to the public interest.

WHEREAS, the State Engineer’s procedures to evaluate applications to appropriate groundwater or to change existing appropriations must be applied in a manner that is consistent and understandable to water right holders and their representatives, and that provide clarity to water users about how to meet the needs of communities and local economies while avoiding conflict with senior decreed water rights.

WHEREAS, procedures established herein allow for efficient administration of groundwater rights, with provisions for in-stream replacement water and withdrawal of groundwater permits, when necessary. The intent is to provide the needed flexibility for water right holders without adding to any capture impacts above what is predicted for the existing base right. Over time these procedures will result in a reduction in total groundwater commitments, an increase in availability of surface water in the Humboldt River Region to serve senior priority rights, and a reduced potential for conflict between groundwater use and Humboldt River decreed rights.

WHEREAS, these procedures do not restrict the State Engineer from adopting further conjunctive management measures necessary to address capture impacts.

IV. ORDER

NOW THEREFORE, IT IS HEREBY ORDERED, that the following considerations will be implemented by the State Engineer for the review of applications for groundwater rights in the Humboldt River Region, in addition to those considerations required by NRS 533.370 and

¹⁵ NRS 533.024(1)(c).

¹⁶ NRS 533.024(1)(e).

established by previous State Engineer's Orders.¹⁷ As used herein, "capture" refers to modeled capture of surface water of the Humboldt River and its tributaries by groundwater pumping, as simulated by USGS and DRI groundwater models.

1. Applications for New Groundwater Appropriations

Applications for new appropriations of groundwater where capture, as a percentage of pumping rate, exceeds 10% after 50 years of continual pumping, may be considered if capture is offset by providing in-stream replacement water or withdrawing a portion of an existing groundwater right. Applications for new appropriations of groundwater where capture is less than 10% after 50-years of continual pumping may be evaluated without the requirement to offset capture.

A. If in-stream replacement is used to offset capture:

- i. Replacement water using a senior decreed water right shall be for a crop-type, duty amount, and priority date that is sufficient to equal or exceed the predicted cumulative capture amount of the new appropriation over a 50-year period of use, as determined by the State Engineer;¹⁸
- ii. Replacement water shall be sufficient to equal or exceed the predicted annual capture amount of the new appropriation during 80% of the years over a 50-year period, as determined by the State Engineer; and,
- iii. Replacement water shall be demonstrated to have an existing place of use that can and will be stripped of use. Water used in areas of flooding or other areas that cannot be isolated from the natural or man-caused application of that water will not be considered for replacement water.

B. If withdrawal of an existing groundwater right is used to offset capture:

- i. The amount of the withdrawn right shall be sufficient to equal or exceed the predicted cumulative capture amount of the new appropriation over a 50-year period of use, as determined by the State Engineer; and
- ii. The amount shall be sufficient to equal or exceed the predicted annual capture amount of the new appropriation during 90% of the years over a 50-year period, as determined by the State Engineer.

2. Applications to Change Existing Groundwater Appropriations

Applications to change the point of diversion (POD) of an existing groundwater right will be considered based on net capture, defined as the difference between capture at the

¹⁷ Nevada Division of Water Resources' Orders Database, official records in the Office of the State Engineer, available at <http://water.nv.gov/StateEngineersOrdersList.aspx>.

¹⁸ For the purposes of this draft interim order, the mechanism to be used by the State Engineer to make this determination will be demonstrated in public workshops and available for public review.

proposed POD and capture at the existing POD. Net capture is commonly described either in terms of a percentage of the pumping rate, or as a volume of captured water, after a specified period of continuous pumping.

Change applications where capture at the proposed POD is greater than capture at the existing POD may be considered if the net capture is offset by providing replacement water or withdrawing a portion of an existing groundwater right. Change applications where capture at the proposed POD is less than or equal to capture at the existing POD may be considered on their merits without the requirement to offset capture.

If either replacement water or withdrawn groundwater rights are used they shall be subject to the same conditions as for new appropriations (as described in Section 1) but the amount shall correspond to the net capture.

In instances where a change application moves an existing POD either to a new location that is upstream of its existing location or nearer to a different tributary, the reach-specific capture impacts to senior decreed water rights who divert their water from those reaches will be determinative irrespective of the net capture.

3. Addressing Future Conflict Between Existing Valid Groundwater Rights and Decreed Humboldt River Surface Water Rights

The principle statutory mechanism available to the State Engineer to address conflict among water users is curtailment of junior-priority water use pursuant to NRS 534.110. The State Engineer finds that the data currently available do not demonstrate that curtailment of junior rights could be implemented in a manner that would eliminate potential future conflict without unduly restricting valid existing groundwater rights.

This Order provides mechanisms to prevent the increased potential for conflict over time in an effort to avoid the severe and devastating potential effects of curtailment of groundwater rights that support communities and economies throughout the Region. However, the State Engineer is not precluded from ordering that withdrawals be restricted to conform to priority rights when necessary: if conflict due to inadequate water supply is determined to be imminent, and prevention or avoidance cannot be accomplished.

The State Engineer may consider the following factors before making any decision regarding curtailment pursuant to NRS 534.110:

- A. Statutory protections:
 - i. Domestic well protections under NRS 533.024(b).
 - ii. Preferred uses of water in the interest of public welfare per NRS 534.120(2).
- B. Hydrologic conditions:
 - i. Effectiveness of any curtailment to increase actual flow in the decreed source and thereby avoid conflict caused by non-delivery of senior rights.
 - ii. Drought conditions as measured by available snowpack data, runoff forecast for the season, prior years' condition and cumulative water deficit.
 - iii. Well location and potential for capture as demonstrated by USGS and DRI models

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- a. Capture as a percent of pumping rate within the time frame of potential conflict
- b. Hydraulic connectivity between a decreed surface water source and a specific well location and screen depth.
- iv. Storage in surface water reservoirs or aquifer storage and recovery projects and the capacity for this storage to meet scheduled deliveries.
- C. Active management measures:
 - i. Implementation of Water Conservation Plans developed in accordance with NRS 540.131.
 - ii. Active water replacement plans carried out by groundwater right holders.

ADAM SULLIVAN, P.E.
Acting State Engineer

Dated at Carson City, Nevada this

_____ day of _____

Laura A. Schroeder
Oregon, Idaho,
Nevada, Washington & Utah

Therese A. Ure Stix
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February 8, 2021

VIA U.S. MAIL & EMAIL

Deputy Attorney General James Bolotin
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100 North Carson Street
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jbolotin@ag.nv.gov

**RE: Amended Settlement Agreement & Proposed Order
Pershing County Water Conservation District v. State Engineer
Pershing County District Court, Case No. CV 15-12019**

Dear Mr. Bolotin:

We have reviewed the Draft Interim Order (Order) issued in response to our Settlement Agreement and Mutual Release ("Settlement") with our client, Pershing County Water Conservation District ("PCWCD").

PCWCD advises that the Settlement terms as set out at page 3, paragraph 2(c), are not consistent with the Order at page 8, paragraph 3. In good faith, rather than litigate what could be construed as a breach of the Settlement, PCWCD is willing to enter into an Amended Settlement Agreement as follows:

The State Engineer would withdraw the terms of the Order at page 8, paragraph 3, moving forward with the public process as agreed with the remainder of the Order. (PCWCD would continue to engage in final good faith with comments and approval of the same); and

Extend the timeline for the State Engineer to issue a Draft Order addressing the Settlement terms as set out at page 3, paragraph 2(c) to June 1, 2021.

If such an amendment to the Settlement Agreement would be acceptable as an alternative, PCWCD would, at the State Engineer's request, work with the State Engineer or its attorney in the interim on the language for a second draft Order that complies with the Settlement terms at page 3, paragraph 2(c).

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Deputy Attorney General James Bolotin
February 8, 2021
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All other terms of the Settlement Agreement would remain unchanged. We look forward to your response.

Very truly yours,
SCHROEDER LAW OFFICES, P.C.



Therese A. Ure Stix

JAU:tau

cc: Client

8901312/0215001364

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April 14, 2021

VIA U.S. MAIL

Division of Water Resources
c/o Micheline N. Fairbank, Esq.
Deputy Administrator
901 S. Steward St. 2002
Carson City, NV 89701

RE: Pershing County Water Conservation District
Comments to Proposed Interim Order within the Humboldt River Region

Dear Ms. Fairbank:

On behalf of the Pershing County Water Conservation District ("PCWCD" or "District"), Schroeder Law Offices submits the following comments regarding the Nevada Division of Water Resources' ("NDWR's") *Proposed Interim Order within the Humboldt River Region* ("Proposed Order").¹ PCWCD's comments and participation in the public hearing for the Proposed Order do not constitute a waiver of any claim to which PCWCD may be entitled under the settlement agreement entered into in *Pershing County Water Conservation District v. Tim Wilson*, Case No. CV5-12019 in the Eleventh Judicial District Court of the State of Nevada in and for the County of Pershing.

Comment 1: The Proposed Order provides incomplete and at times misleading facts. The last paragraph of Section I (Background of the Humboldt River) refers to scheduled deliveries and states that they have been fully served except at the end of the 2012-2015 drought. *Proposed Order*, p. 4. However, the scheduled deliveries are impacted in all years, due to capture that occurs up-stream of the Palisades gage, which impacts the flow rates upon which delivery scheduling is determined. Additionally, the portion of the river flows that are captured downstream of the Palisades gage are not serving decreed water rights on the river system, they are serving junior groundwater users. To the extent stream flow capture occurs on the system, the Decreed rights are not being fully served the amount that these rights are entitled. The only exception would be a year when the river flows are sufficient for deliveries to not be "on priority" and all Decree rights are being fully served for the entire irrigation season.

¹ PCWCD's comments to the Proposed Order were developed in conjunction with Consultant Dwight Smith of McGinley and Associates; and Consultant Bennie Hodges, formerly of PCWCD.

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Exhibit 6 Page 01

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Comment 2: The last paragraph of Section I also states that certain “long-term hydrologic uncertainties were not explicitly foreseen in the Bartlett Decree” citing this as the reason for difficulty developing and implementing management strategies for water use. *Id.* This statement is entirely irrelevant and incorrect. The 1931 Bartlett Decree understood that there would be “climatic variations” resulting in wet years and periods of drought. *See* Bartlett Decree, p. 28; *see also* Bartlett Decree, p. 242. Later additions to the Humboldt Decree also recognized hydrographic uncertainties that would require management by priority. *See* Humboldt River Water Distribution, Parts I & II. PCWCD agrees that no amount of forecasting can accurately predict future variability, however, this is the exact purpose for which the prior appropriation system was developed and implemented.

Comment 3: The explanatory clauses of the Proposed Order should be more fully developed to include a complete and accurate factual background for the Proposed Orders. The explanatory clauses should better set the stage for the management mechanisms provided in the Proposed Order and therefore aid in any challenges to the adopted Order and provide future interpretations of those mechanisms and their purposes. These clauses should include:

WHEREAS, in 1964, the Division of Water Resources Published “Humboldt River Water Distribution,” Part I (Problems) and Part II (Priority Tables) to address already existing distribution issues with Humboldt River Decree water rights.²

WHEREAS, while the completion of the Humboldt River Region groundwater model study is expected in 2021, preliminary findings from the effort, and thus the best available science to date, supports a determination that groundwater pumping captures Humboldt River surface water.³

WHEREAS, the preliminary findings from the effort also provide insight into the dynamics of surface water capture by groundwater pumping. These findings indicate that there may be additional non-linear, climate driven behaviors that influence interactions between the surface water and groundwater systems. Understanding these behaviors are necessary to accurately define both the timing and distribution of capture so that conflict attributable to groundwater pumping can be characterized and quantified. Long-term management will rely on completion of the modeling effort, a process of public review and deliberation to determine best practices that satisfy legislative directives of prior appropriation, beneficial use and public interest, and proposed legislation to develop better management directives and tools not contemplated prior to conjunctive management. Until then, interim management described herein will focus on avoiding

² Proposed to be inserted in Section I, after paragraph 2.

³ Proposed to be inserted in Section II in place of paragraph 5 and followed by graphics showing the same from Slides 111 and 112 of February 4, 2021 Humboldt River Region Modeling Update.

capture under the best available science and legislative directives and tools already in place.⁴

Comment 4: The last paragraph of Section II (Actions Taken Since the Drought) states that long-term management will rely on completion of the modeling effort, public review, and determination of best practices, but until then “interim management described herein must focus on avoiding increased capture caused by new appropriations and changes to existing groundwater permits.” *Proposed Order*, p. 5. This suggests that Section 3 of the Proposed Order should not be included and that NDWR does not intend to manage existing and future conflicts between existing junior groundwater withdrawals and senior decreed surface water rights until some unknown future time.

Comment 5: Further, the Proposed Order is not consistent with the presentation and summary NDWR provided on February 4, 2021 as part of the Humboldt River modeling update. The presentation discussed legacy effects of pre-existing permits (slides 112 and 114); goals to prevent, avoid, reduce, and mitigate conflicts due to capture (slide 113), and focused curtailment (slides 118 and 123). Yet, none of these mechanisms are contemplated in the Proposed Order.

Comment 6: NDWR’s threshold for new groundwater appropriations that require capture offsets is not sufficiently specific. The proposed threshold of 10% after 50 years of continual pumping fails to recognize large groundwater appropriations that would result in significant and impactful captures after 50 years, but that may still fall below the 10% threshold. As such, NDWR should provide an additional volumetric threshold and require that capture not exceed that volume or 10% after 50 years of continual pumping, whichever is less.

Comment 7: Alternatively, NDWR should consider other thresholds that are more equitable to different water users, especially small appropriators who may trigger mitigation of a couple acre-feet when large appropriators with significantly more impact avoid mitigation due to the blanket 10% threshold. For example, NDWR may consider a tiered volumetric or percentage approach that recognizes more tolerance for small appropriations and less for large appropriations. However, large appropriations should include multiple small appropriations that have a combined total duty to avoid users breaking up appropriations as a loophole to trigger mitigation.

Comment 8: “New appropriations” should be defined. Specifically, NDWR should clarify if “new appropriations” include “temporary” (traditional 1-year applications) and limited duration appropriations, such as those granted for mining and milling, and mine dewatering. PCWCD would encourage NDWR to include “temporary” and limited duration mining applications among “new appropriations” that could require replacement water pursuant to the order.

Comment 9: In addition to including limited duration mining applications as “new appropriations,” the analysis for new appropriations to require capture offset should be expanded. Limited duration mining appropriation may not include 50 years of continual

⁴ Revision of existing Section II, paragraph 5, proposed to follow the proceeding proposed paragraph.

pumping. However, the analysis for these appropriations should adequately consider the post-pumping implications as capture effects may not be experienced until pumping ceases.

Comment 10: The Proposed Order should clarify if the mitigation requirements stated will affect the current process for mitigating pit lake evaporation loss.

Comment 11: The term "priority date" should be clarified in paragraph 1.A.i of the Order. The inclusion of "priority date" in the features of in-stream replacement water as it relates to a new appropriation⁵ is unclear.

Comment 12: NDWR should require additional proof from applicants regarding the water provided for offset. For example, NDWR should require applicants to show that the existing groundwater rights proposed to offset new appropriations is "wet water." This will prevent the use of "paper" water rights as offset water, creating additional pressure on the Humboldt River Region water availability and resulting in greater impacts to senior surface water rights. PCWCD encourages NDWR to consider the factors outlined in Idaho for acquisitions of water to the Water Supply Bank and to utilize similar criteria for offset water.⁶

Comment 13: PCWCD urges NDWR to remove Section 3 of the Proposed Order in its entirety and develop the mechanisms for mitigating conflicts between existing groundwater rights and decreed surface water rights into a more robust and independent Interim Order. As drafted, Section 3 of the Proposed Order fails to adequately create any concrete mitigation strategies for conflicts between existing water rights.

Comment 14: The Proposed Order fails to address the mechanism NDWR will employ to regulate existing and future conflicts between Decreed Humboldt River surface water rights and "valid" groundwater rights. The Proposed Order claims that "data currently available do not demonstrate that curtailment of junior rights could be implemented in a manner that would eliminate potential future conflict without unduly restricting valid existing groundwater rights." While PCWCD understands that strict priority-based curtailment of Humboldt River Region groundwater rights will not have a linear effect on impacts to senior surface water rights, it does not agree with NDWR's assertion that curtailment will "unduly [restrict] *valid* existing groundwater rights."

Any determination that groundwater rights are *valid* under Nevada statutory law would require them to have been issued without injury or effect on senior water rights, including surface water rights. Further, the permits and certificates for ground water rights are issued with the condition that such rights of use are subject to existing rights. Additionally, NDWR is legislatively

⁵ This section is incorporated by reference into paragraph 2, *Application to Change Existing Groundwater Appropriations*. Presumably, an application to change an existing groundwater appropriation is where the inclusion of a superior priority date truly applies as any existing senior decreed water right forfeited as capture off-set water would always predate an application for a new appropriation absent an application for a vested water right.

⁶ The requirements for Acquisitions of Water for the Idaho Water Supply Bank (Rule 25) can be found at the following link at page 4: <https://adminrules.idaho.gov/rules/current/37/370203.pdf>.

mandated to manage groundwater and surface water rights conjunctively. As is clearly evident from the Proposed Order, previously issued groundwater rights continue to affect senior decreed surface water rights which is especially evident in certain years. Thus, the assertion that these groundwater rights are "valid" is in question. As such, it may be necessary for NDWR to review existing rights and validity in light of statutory requirements for issuance of water rights, the permit/certificate terms, and conjunctive management. In addition, a mechanism must be employed now to address these existing conflicts whether it be those tools already available to NDWR such as strict curtailment or a more technical solution.

Comment 15: NDWR's assertion that it "is not precluded from ordering that withdrawals be restricted to conform to priority rights when necessary: if conflict due to inadequate water supply is determined to be *imminent*" does not sufficiently protect senior decreed surface water rights. Nevada law prohibits the appropriation of groundwater that *conflicts with existing rights*. See NRS 533.370(2). Such conflicts are not limited to those that are "imminent." As NDWR stated in its order "a basic tenant of prior appropriation is that if there is not enough water to serve all users then senior right holders are entitled to water before junior right holders." *Proposed Order*, p. 4. As such, NDWR's qualification requiring junior conflicts with senior right holders be "imminent" prior to restricting withdrawals is not a condition precedent for NDWR's regulation as required by Nevada law.

Comment 16: The Proposed Order fails to provide a concrete mechanism by which NDWR will order withdrawal restrictions. PCWCD recognizes NDWR's hesitation for outright curtailment of groundwater that only influences decreed surface water rights in drought years or under certain hydrographic conditions that may change from year to year. However, it is already a customary practice in Nevada to "turn off" junior water users to facilitate delivery of water to senior water right holders. As such, the order should describe the concrete mechanisms NDWR will use to facilitate turning off water users that conflict with senior decreed surface water rights in low water years. The current language that NDWR "is not precluded from ordering that withdrawal be restricted" and those factors it "may consider" does not provide a specific enough process and system by which NDWR will ensure that such withdrawals that affect senior decreed surface water rights will be restricted. Given that NDWR has many years of measurements along the various stream segments at critical locations, it has at its disposal many optimal locations at which it could measure "affect." These measurements could act as the "yardstick" to allow calls on the Humboldt River by senior surface water users early in the season to be regulated by NDWR in the upper reaches to avoid a situation wherein the available water has already been appropriated upstream so as not to be available to fulfill the senior surface water users' call.

Comment 17: Additionally, the Proposed Order fails to address how NDWR will use those tools it has under Nevada statutes to address impacts to senior water users. These tools include: (1) designating over appropriated basins in the Humboldt River Region as critical management areas; (2) beginning forfeiture proceedings of unused water rights; (3) cancelling permits where applicant is not developing infrastructure and therein not proceeding in good faith as required by NRS 533.395; and (4) exploring the creation and designation of an additional hydrographic area

or designation area along the Humboldt River corridor to facilitate more targeted management within the area providing the most significant impacts.

Comment 18: Given the numerous delays and the fact that the groundwater capture model will always be “a work in progress,” such a fact, cannot preclude the development of clear mechanisms to manage existing conflicts between groundwater rights and decreed Humboldt River surface water rights. The State Engineer has succeeded in developing clear mechanisms for mitigating new appropriations and change applications that will rely on the groundwater capture model. The mechanisms for both of these future conflicts relies on a determination of “capture” which is defined in the Proposed Order as “modeled capture of surface water of the Humboldt River and its tributaries by groundwater pumping, *as is simulated by USGS and DRI groundwater models.*” Proposed Order, p. 7 (Emphasis added). As such, NDWR has demonstrated its ability to develop clear mechanisms to combat conflicts, even though “capture” or similar measurements are dependent on the “completion” of the groundwater capture model. Therefore, NDWR should act now to create a clear mechanism for combating the conflicts of more immediate concern to senior right holders, those that already exist. The incomplete model should not be used as an excuse to do nothing given the ongoing drought and the 2021 water budget. The incomplete model has collected much data that is available as a tool for regulation. This data should be used by NDWR to regulate junior groundwater withdrawals.

Comment 19: NDWR should consider alternative forms of water conservation and mitigation. Duty based curtailment is one example. Increased efficiency through use of sprinkler irrigation could result in curtailment of duty from 4 acre-feet to 3 acre-feet without “unduly restricting valid existing groundwater rights.” *Proposed Order*, p. 8.

Comment 20: Further, NDWR’s legislative mandate to conjunctively manage the state’s water resources, requires NDWR to consider reducing groundwater duties to conform to the Humboldt River Decree. For example, in recognizing the limited water resource, the Bartlett Decree limits the duty of Humboldt River water for harvest crops (cultivate crops and native or other grass lands sufficient to produce hay) to 3 acre-feet, meadow pasture to 1.5 acre-feet, and diversified pasture to .75 acre-foot. *See Bartlett Decree*, p. 52. Under conjunctive management, groundwater rights in the region should be similarly limited.

Comment 21: The Proposed Order should bar interbasin transfers to conserve the already stretched water resources within their respective basins and the Humboldt River Region.

Comment 22: NDWR should consider working with interested parties such as PCWCD to draft jointly sponsored legislation for the 2023 legislature. This proposed legislation would provide legally defensible opportunities to regulate groundwater uses and pumping. This would allow the state to have clear and separate regulatory tools to require curtailment for individual groundwater rights that are conflicting with senior surface water rights, based on manner of use and proximity to the river or tributaries. Curtailment could then be enforced on the river corridor wells, while still protecting municipal, industrial, and domestic water sources. The proposed legislation could also include a capture reduction credit system for projects or transfers that make

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a notable reduction to river capture. For example, 50% of reduction could be applied as a credit that could be leased or sold to provide incentives for lower-value wells near to the river to cease pumping and provide an easier mechanism for offsetting impacts. Lastly, the legislation could include a system to penalize, monetarily or otherwise, unused water rights.

We thank you for considering PCWCD's comments during the development of the Proposed Order. Please contact our office at (775)786-8800 if you have any questions.

Very truly yours,
SCHROEDER LAW OFFICES, P.C.

A handwritten signature in black ink, appearing to read "Laura A. Schroeder".

Laura A. Schroeder
Therese A. Ure Stix

LAS:crs

cc: Client

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TAMI RAE SPERO
DIST. COURT CLERK

1 PAUL G. TAGGART, ESQ.
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7
8 IN THE SIXTH JUDICIAL DISTRICT COURT OF THE STATE OF NEVADA
9 IN AND FOR THE COUNTY OF HUMBOLDT

* * *

10 BUTTONPOINT limited partnership,

11 Petitioners,

12 vs.

13 ADAM SULLIVAN, P.E., Nevada State
14 Engineer, DIVISION OF WATER
RESOURCES, DEPARTMENT OF
15 CONSERVATION AND NATURAL
RESOURCES,

16 Respondent.

CASE NO.: CV0022919
DEPT. NO.: 2

17
18 **PETITION FOR JUDICIAL REVIEW**

19 COMES NOW, Petitioners, BUTTONPOINT limited partnership (hereinafter "Petitioners"),
20 by and through their attorney of record, PAUL G. TAGGART, ESQ. and TIMOTHY D. O'CONNOR,
21 ESQ. of the law firm of TAGGART & TAGGART, LTD., and hereby petitions the Court to reverse or
22 remand his Order 1329, attached hereto as Ex 1.

23 This Petition for Judicial Review as well as Notice of Appeal is filed pursuant to NRS 533.450.
24 The State Engineer's findings of fact and conclusions of law in Order 1329 will injuriously affect
25 Petitioners because Order 1329 is vague and overbroad, is unclear as to its regulation on existing change
26 applications for water rights, is unclear as to its approach to determining 'capture,' and makes findings
27 of conflict unsupported by evidence. Petitioners have water rights which will be affected by Order
28 1329, and request judicial review of the Order.

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NGM0214

JURISDICTIONAL STATEMENT

Pursuant to NRS 533.450(1), rulings of the State Engineer are subject to judicial review “in the proper court of the county in which the matters affected or a portion thereof are situated.” The real property to which the water at issue in this appeal is appurtenant lies within Humboldt County. Therefore, the Sixth Judicial District Court of the State of Nevada in and for Humboldt County is the proper venue for judicial review of Order 1329.

REQUEST FOR REVIEW

The State Engineer’s Order 1329 attempts to set new regulations for the movement of water rights along the Humboldt River. However, Order 1329 leaves the regulations vague and overbroad, leaving Petitioners without an understanding of how the regulations would be implemented, if at all, to Petitioner’s existing change applications and future applications. Order 1329 simply states that “the State Engineer using established analytical or numerical methods along with any available knowledge of aquifer properties associated with the points of diversion” but Petitioners do not know what the methods are, how they will be implemented, and what considerations the State Engineer will have regarding “[u]ncommon or unforeseeable circumstances will be treated on a case-by-case basis” as stated in Order 1329.

Additionally, the State Engineer made improper findings of conflict in Order 1329. Order 1329 states without evidence or reasoning that “[d]ecades of groundwater pumping... has led to increasing capture of the Humboldt River and its tributaries, resulting in growing conflict with rights of the Humboldt Decree.” Order 1329 fails to identify the source of the ‘conflict,’ which rights are ‘conflicted’ with, and whether the chosen remedy would adequately address the conflict. Order 1329 carries no discussion of how the State Engineer determined a ‘conflict’ to exist, nor does it address what portion of the water shortage is occurring from pumping, and what portion is climate-driven. The Order admits the State Engineer’s “Humboldt River Region groundwater model study is expected in 2022, preliminary findings from that effort provide insight into the dynamics of stream capture by groundwater pumping. *These findings indicate that there may be important non-linear, climate-driven behaviors that influence*” Humboldt River system. Without adequate evidence on the effects on climate and pumping, the State Engineer has not relied on substantial evidence to determine that the groundwater pumping has resulted “in growing conflict with

rights of the Humboldt Decree.”

Finally, the State Engineer’s Order 1329 should be overturned because it does not comply with the State Engineer’s settlement agreement in earlier litigation, making the decision necessarily arbitrary and capricious. In 2015, the Pershing County Water Conservation District (“PCWCD”) initiated an action calling for regulation on the Humboldt River due to a lack of water in the system. Petitioners were party to that action. On November 20, 2020, the Court dismissed PCWCD’s action pursuant to a filed situation that was approved by the Court. The stipulation required that the State Engineer, among other items, would develop an administrative order for “groundwater applications within the Humboldt River Region *as informed by the Model*.”¹ The Model is not complete, yet the State Engineer was bound to produce a Draft Order reliant on the Model by February 2021 by the terms of the settlement agreement.² Order 1329 admits that it does not employ the Model, yet attempts to set regulations for the Humboldt River anyway – long after the settled upon timeframe.

CONCLUSION

For the reasons explained above, and others that may be discovered during the pendency of this appeal, Petitioners respectfully request this Court to grant their Petition for Judicial Review and reverse or remand Order 1329.

AFFIRMATION Pursuant to NRS 239B.030

¹ Exhibit 1 at 3.


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The Undersigned does hereby affirm that the preceding document does not contain the social security number of any persons.

DATED this 5 day of January, 2022.

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By: 
PAUL G. TAGGART, ESQ.
Nevada State Bar No. 6136
TIMOTHY D O'CONNOR, ESQ.
Nevada State Bar No. 14098
Attorneys for Petitioners

CERTIFICATE OF SERVICE

Pursuant to NRCP 5(b) and NRS 533.450, I hereby certify that I am an employee of TAGGART & TAGGART, LTD., and that on this date I served, or caused to be served, a true and correct copy of this Petition for Judicial Review, as follows:

☐ By **U.S. CERTIFIED, RETURN RECEIPT POSTAL SERVICE:** I deposited for mailing in the United States Mail, with postage prepaid, an envelope containing the above-identified document, at Carson City, Nevada, in the ordinary course of business, addressed as follows:

☒ By **HAND DELIVERY**, via:

☐ Reno-Carson Messenger Service

☒ Interoffice-type messenger

☐ other type of delivery service: _____

by placing a true and correct copy of the above-identified document in an envelope addressed as follows:

Adam Sullivan, P.E.
Nevada Division of Water Resources
901 South Stewart Street, Suite 2002
Carson City, Nevada 89701

DATED this 6 day of January, 2022.



Employee of TAGGART & TAGGART, LTD.

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EXHIBIT 1

EXHIBIT 1

IN THE OFFICE OF THE STATE ENGINEER
OF THE STATE OF NEVADA

ORDER

#1329

ESTABLISHING INTERIM PROCEDURES FOR MANAGING GROUNDWATER
APPROPRIATIONS TO PREVENT THE INCREASE OF CAPTURE AND CONFLICT
WITH RIGHTS DECREED PURSUANT TO THE HUMBOLDT RIVER
ADJUDICATION

I.

OVERVIEW

WHEREAS, it is well established that the source of water to a pumping well originates from three primary sources; first from groundwater storage, then increasing over time from capture of streamflow (where present in a hydrographic system) and evapotranspiration.^{1,2} The terms “stream capture” or simply “capture,” as used in this Order, refer to a reduction in streamflow caused by groundwater pumping. Decades of groundwater pumping in the Humboldt River Region (Region) has led to increasing capture of the Humboldt River and its tributaries, resulting in growing conflict with rights of the Humboldt Decree.

WHEREAS, there are a range of actions or strategies that may be implemented by water users, whether in cooperation with the State Engineer or through other means, to mitigate or avoid conflict. Regional groundwater models currently in development by the United States Geological Survey (USGS) and Desert Research Institute (DRI) are an important tool that will be used to demonstrate the effectiveness of different management strategies and possible administrative actions. Public participation throughout the process of developing a long-term management strategy is an essential component for communication, transparency, and successful implementation. Through the State Engineer’s engagement with the community of water users within the Humboldt Region, several viable strategies have come under consideration, and include:

- Prohibition on pumping within a determined capture zone under certain thresholds of predicted seasonal water supply;
- Credit systems that account for non-use or for return flow from artificial recharge;

¹ Charles V. Theis, 1940, *The Source of Water Derived from Wells -Essential factors controlling the response of an aquifer to development*, Civil Engineering, v. 10, no. 5, p. 277-280.

² Barlow, P.M., and Leake, S.A., 2012, *Streamflow Depletion by Wells – Understanding and Managing the Effects of Groundwater Pumping on Streamflow*, U.S. Geological Survey Circular (Dec. 1, 2021, 1:06 p.m.) 1376, 84 p., <https://doi.org/10.3133/cir1376>

- Enhanced storage capacity, including aquifer storage and recovery that benefits the Humboldt River system;
- Use of conservation funds to enact measures that benefit the Humboldt River such as purchase of groundwater rights that are in immediate/frequent conflict with the Humboldt decree;
- Other private party agreements to resolve conflict; and/or
- Withdrawal or abandonment of existing committed rights.³

WHEREAS, the primary mechanism available to the State Engineer to unilaterally address conflict among water right holders is to order that withdrawals of groundwater be restricted to conform to priority rights per NRS 534.110(6). However, it is also well established that groundwater use in the Humboldt River Region is fundamental to the Region's culture, communities and economic vitality. Strict curtailment would be a draconian measure resulting in significant and lasting economic harm. It is further recognized that permitted groundwater use is a beneficial use. Additionally, a varying amount of the source of water to pumping wells originates from sources other than stream capture and this use is not in conflict with the Humboldt Decree. For these reasons, among others, strict curtailment is not a preferred option. Rather, implementation of a management framework based on the quantifiable impact of each groundwater well's capture of streamflow will more precisely address harm from any conflict with Humboldt decreed rights.

WHEREAS, the State Engineer recognizes that any comprehensive solution will require extensive outreach to those impacted by any future decisions and management strategies, including water right holders, tribal communities, water users, representatives of conservation and environmental interests, and other interests (collectively referred to as "stakeholders"). The State Engineer seeks to collaborate with stakeholders on the development of long-term management strategies, supported by groundwater models that are currently in development, to address conflict caused by stream capture without arbitrary curtailment or other administrative restrictions on groundwater use. The State Engineer anticipates that any future management framework shall consider active water replacement plans carried out by groundwater right holders, local water resource plans developed in accordance with NRS 278.0228, implementation of Water Conservation Plans pursuant to NRS 540.131, preferred uses of water in the interest of public

³ See generally, comments received from the draft interim order; notes from Working Group meetings, notes from Humboldt River Basin Water Authority meetings, official records of the Nevada Division of Water Resources.

welfare pursuant to NRS 534.120(2), and domestic well protections under NRS 533.024(b). It is also anticipated that any such framework will be supported by the use of the USGS and DRI models to demonstrate effectiveness in preventing conflict resulting from groundwater use within the Humboldt River Region.

WHEREAS, the State Engineer recognizes that under the current conditions there are substantial implications for the water users in the Humboldt River Region. The State Engineer also acknowledges and appreciates that the water users understand the issue and share in the desire to see an effective management strategy that addresses the issues relating to groundwater use that conflicts with senior decreed rights and the need for a defensible outcome. While the science that will be used to inform those long-term management strategies is being finalized, an interim protocol is necessary to avoid exacerbating existing problems. This Order establishes the management framework that the State Engineer is adopting for this period to avoid additional harm to water rights above what is already occurring.

II.

BACKGROUND OF THE HUMBOLDT RIVER REGION

WHEREAS, the Humboldt River Region is delineated by the topographic boundary of the Humboldt River watershed, extending over 11,000 square miles, including 34 hydrographic basins in eight Nevada counties. Hydrographic basins within the Humboldt River Region include Marys River Area (042), Starr Valley Area (043), North Fork Area (044), Lamoille Valley (045), South Fork Area (046), Huntington Valley (047), Dixie Creek-Tenmile Creek Area (048), Elko Segment (049), Susie Creek Area (050), Maggie Creek Area (051), Marys Creek Area (052), Pine Valley (053), Crescent Valley (054), Carico Lake Valley (055), Upper Reese River Valley (056), Antelope Valley (057), Middle Reese River Valley (058), Lower Reese River Valley (059), Whirlwind Valley (060), Boulder Flat (061), Rock Creek Valley (062), Willow Creek Valley (063), Clovers Area (064), Pumpnickel Valley (065), Kelly Creek Area (066), Little Humboldt Valley (067), Hardscrabble Area (068), Paradise Valley (069), Winnemucca Segment (070), Grass Valley (071), Imlay Area (072), Lovelock Valley (073), Lovelock Valley-Oreana Subarea (073A), and White Plains (074).

WHEREAS, the Bartlett Decree⁴ dated October 20, 1931, in the Sixth Judicial Court of the State of Nevada, establishes relative rights to the use of the waters of the Humboldt River and setting forth the dates of priority and duties of water for the decreed claims. The Bartlett Decree determined the waters of the stream system to be fully appropriated, and that in an average year there existed no surplus water for irrigation. Subsequent decrees, orders and writs made corrections to the Bartlett Decree, collectively forming the Humboldt River Adjudication, hereafter referred to as the "Humboldt Decree." This process was complete by 1938. The most senior decreed surface water right in the Humboldt River system has a priority date of 1861 and the most junior right has a priority date of 1921.⁵ The Humboldt Decree does not include the Little Humboldt River adjudication or Reese River vested claims.

WHEREAS, Humboldt River flow measured at the Palisade gage is the primary tool utilized for determining and scheduling delivery amounts of Humboldt River decreed rights.⁶ Deliveries are scheduled during the irrigation season based on the daily flow measurement at the gage.⁷ When daily flows at the Palisade gage are sufficient to deliver all decreed rights on the Humboldt River and its tributaries, all water rights irrespective of location above or below the gage are scheduled to receive their full duty of water. When flows are not sufficient to deliver all decreed rights, those rights with senior priority dates are served first. In practice, actual deliveries over the expanse of the Humboldt River Region may be different than exact scheduled deliveries due to a wide range of variables including water distribution and management practices and climatic variations that affect riparian evapotranspiration rates, streambank storage, and baseflow.

WHEREAS, during the 2012–2015 period the Humboldt River Region experienced one of the worst droughts since 1902.⁸ Annual flow at the Palisade gage for that 4-year period averaged 82,872 acre-feet, which is 30% of the historical average annual flow of 287,846 acre-feet for the

⁴ Bartlett Decree, incorporated as Section 1 into the Decree entered *In the Matter of the Determination of the Relative Rights of Claimants and Appropriators of the Waters of the Humboldt River Stream System and its Tributaries*, Case No. 2804, Sixth Judicial District Court of the State of Nevada, In and For the County of Humboldt (October 20, 1931).

⁵ *In the Matter of the Determination of the Relative Rights of Claimants and Appropriators of the Waters of the Humboldt River Stream System and Tributaries*, Case No. 2804, Sixth Judicial District Court of the State of Nevada, In and For the County of Humboldt (October 20, 1931).

⁶ Bartlett Decree, the decreed irrigation season begins March 15th downstream of Palisade and April 15th upstream of Palisade and ends on varying dates depending on location and culture.

⁷ United States Geological Survey (USGS) Gage 10322500, Humboldt River at Palisade.

⁸ Period of record for the Palisade gage begins in 1902.

period of record spanning 112 years.⁹ At the headwaters of the Humboldt River system during 2012–2015, upstream of any significant groundwater pumping, Lamoille Creek also experienced its lowest 4-year flow since at least 1944 when continuous flow measurements on Lamoille Creek started.¹⁰ By the end of the irrigation seasons in 2014 and 2015 the Humboldt River at Imlay was dry and water was unavailable to allocate to downstream surface water users in the Lovelock area. In the midst of the unprecedented drought, senior decreed water right holders alleged that junior groundwater appropriators were capturing surface flows of the Humboldt River and that groundwater use conflicted with the delivery of their surface water rights. In a writ petition filed in the 11th Judicial District Court for Pershing County in 2015, senior water right holders requested that the Court require the State Engineer to take action within his statutory authority to address the alleged conflict.¹¹

WHEREAS, nearly all groundwater uses within the Humboldt River Region are junior to decreed surface water rights in the Humboldt River and its tributaries. There are only four active groundwater permits having a priority date earlier than 1921, the date of the most junior Humboldt Decree right.¹² Groundwater development began to increase more substantially in the 1960s and has gradually increased in the decades since. Groundwater is now extensively relied upon for all manners of use, supporting communities and industry throughout the Region. Groundwater rights were approved in accordance with existing Nevada law over the years by the State Engineer based upon findings that unappropriated water was available and its use would not conflict with existing rights or the public interest.

WHEREAS, it is scientifically understood that groundwater pumping has the potential to capture streamflow when surface water and groundwater are hydraulically connected, either by inducing greater infiltration losses from the stream channel or by reducing the amount of

⁹ For water years between 1902–1906 and 1912–2019.

¹⁰ USGS Gage 10316500, Lamoille Creek Near Lamoille. Note that flow measurements also exist for a period between 1915 and 1923.

¹¹ *Petition for Writ of Mandamus, or in the Alternative, Writ of Prohibition*, In the Eleventh Judicial District Court of the State of Nevada In and For the County of Pershing, (Case No. CV 15-12019), *Pershing County Conservation District v. Jason King, P.E., State Engineer of the State of Nevada, Division of Water Resources, Department of Conservation and Natural Resources*.

¹² See Permit 1843, Certificate 139; Permit 2397, Certificate 399; Permit 3520, Certificate 995; and Permit 4589, Certificate 749, Nevada Division of Water Resources' Water Rights Database, official records of the Nevada Division of Water Resources, <http://water.nv.gov/hydrographicabstract.aspx>

groundwater that would otherwise discharge as baseflow to the stream.¹³ The potential for hydraulic connectivity and capture by itself does not necessarily demonstrate that conflict is occurring or will occur in the future, or that surface water deliveries cannot be met. However, because stream capture due to pumping necessarily reduces streamflow, any amount of capture in a fully appropriated river system when not in full priority will reduce surface water that would otherwise have been delivered to surface water right holders. In addition, with climate models forecasting a continuing pattern of increasing frequency and intensity of droughts and flood events,¹⁴ drought-accentuated natural losses from the river, combined with the likelihood for greater drawdown due to increased reliance on groundwater during drought, may increase the future potential for insufficient surface flow to fully serve decreed rights. The hydrologic connection between surface water and groundwater was not a consideration in the Humboldt Decree, but these long-term dynamics underscore the difficulty in developing and implementing conjunctive management strategies for future administration of groundwater and surface water in the Humboldt River Region.

III.

ACTIONS TAKEN SINCE THE 2012–2015 DROUGHT

WHEREAS, a basic tenet of prior appropriation is that if there is not enough water to serve all users then senior water right holders are entitled to water before junior right holders.¹⁵ During the drought period of 2012–2015 available data were insufficient to identify to what extent groundwater pumping was causing the inadequacy of water supply for Humboldt River senior decreed right holders and to what extent it was the result of natural low flow because of drought.

¹³ *Charles v. Theis*, 1940, *The Source of Water Derived from Wells—Essential factors controlling the response of an aquifer to development*, Civil Engineering, v. 10, no. 5, p. 277-280.

¹⁴ USGCRP, 2017, Climate Science Special Report: Fourth National Climate Assessment, Volume I [Wuebbles, D.J., D.W. Fahey, K.A. Hibbard, D.J. Dokken, B.C. Stewart, and T.K. Maycock (eds.)]. U.S. Global Change Research Program, Washington, DC, USA, 470 pp., See Chapter 8, page 237.

¹⁵ See NRS 534.110, providing for curtailment by priority. See also *Wilson v. Pahrump Fair Water, LLC*, 481 P.3d 853, 860 (2021) (“That some water rights must necessarily acquiesce to senior water rights is a natural consequence of the prior appropriation doctrine” quoting *Fox v. Skagit Cty.*, 372 P.3d 784, 796 (Wash. App. 2016)); *U.S. v. Orr Water Ditch Co.*, 600 F.3d 1152, 1158-59 (9th Cir. 2010) (“Surface water contributes to groundwater, and groundwater contributes to surface water...[Surface rights granted by decree] cannot be defeated by allocation of water to others—whether by allocation of surface water or groundwater.”).

Analysis of the data at the time indicated that curtailing junior groundwater pumping to protect senior decreed rights would result in a negligible addition to flow in the River and that such action would not likely be legally defensible without additional data and scientific analysis. However, such action would have had devastating and severe impacts to the communities and economies throughout the Region that rely on groundwater.¹⁶ Consequently, no curtailment was imposed.

WHEREAS, in the years since the end of the 2012–2015 drought, the State Engineer initiated several measures to improve the available data in the Region and thus provide an informed and sound basis to render decisions with regard to avoiding potential conflict. Among these measures:

1. All non-designated basins within the Region were designated pursuant to NRS 534.030;
2. Totalizing meter installation and reporting were required by State Engineer's Order 1251;
3. Field investigations were completed to verify installation and meter data;
4. The Nevada Division of Water Resources enhanced its database capacity to maintain and manage the pumping data in a publicly accessible manner;
5. The State Engineer established a policy requiring water rights for pit lake evaporation; and,
6. Applications to appropriate groundwater or to change the point of diversion (POD) of existing groundwater rights were denied if granting the application would conflict with existing senior rights due to stream capture.

WHEREAS, in 2016, the State Engineer assembled the Humboldt River Working Group¹⁷ to assist in developing draft regulations to resolve future conflict between surface and groundwater rights. The Working Group members included both surface water and groundwater users representing municipalities, agriculture, mining, and other community interests across the Humboldt River Region. Over the course of the next three years, the Working Group developed a conjunctive management approach whose objective was to protect senior water interests while at the same time maximizing beneficial use of surface water and groundwater. This effort culminated in a set of draft regulations that relied on a combination of mitigation plans and financial compensation to avoid future conflict. However, in the 2019 Legislative session, the statutory

¹⁶ Nevada Division of Water Resources, public presentations on the Humboldt River in Lovelock, Winnemucca, and Elko, February 12–13, 2015. Analysis available in the files of the Nevada Division of Water Resources.

¹⁷ The Humboldt River Working Group consists of representatives from key stakeholder and water user groups from within the Humboldt River Region with the common purpose to propose, negotiate, and provide feedback on conjunctive use management regulations.

revisions required to give the State Engineer the authority to implement the draft regulations were unsuccessful.¹⁸ Surface water users expressed no interest in financial mitigation in lieu of water. Groundwater users likewise expressed no interest in being assessed fees for capture that had yet to be quantified by best available science.¹⁹

WHEREAS, since 2016, the State Engineer has worked with the USGS and DRI to develop improved groundwater budgets at the basin scale and to develop numerical groundwater capture models for the Humboldt River Region. These peer-reviewed products are intended to serve as a basis for determining the effect of groundwater pumping on flows in the Humboldt River and its tributaries.²⁰ When published, and made publicly available, this model study will provide a consistent basis and a scientifically sound measure to evaluate different management strategies. These products will allow for the development of capture maps, which identify the relative potential for the capture of surface water flow at any given well location and the potential for the capture of surface water flow over different durations of time. This study will also serve as a foundation for review of the perennial yield²¹ values for the Region, first estimated from the early USGS Reconnaissance Series Reports and Water Resource Bulletins, which are the primary guidelines used by the State Engineer to determine the water budget for any particular basin.²²

WHEREAS, while the completion of the Humboldt River Region groundwater model study is expected in 2022, preliminary findings from that effort provide insight into the dynamics of stream capture by groundwater pumping. These findings indicate that there may be important non-linear, climate-driven behaviors that influence interactions between the surface water and

¹⁸ AB 51 (2019).

¹⁹ See *Minutes of the Meeting of the Assembly Committee on Natural Resources, Agriculture and Mining*, February 27, 2019, (Dec. 2, 2021, 1:08 p.m.)

<https://www.leg.state.nv.us/Session/80th2019/Minutes/Assembly/NRAM/Final/309.pdf>

²⁰ See *Nevada Water Science Center: Evaluation of Streamflow Depletion Related to Groundwater Withdrawal, Humboldt River Basin*, (December 2, 2021, 1:10 p.m.)

<https://nevada.usgs.gov/humboldtdepletion/index.html>

²¹ Perennial yield is defined as the maximum amount of groundwater that can be withdrawn each year over the long term without depleting the groundwater reservoir. Perennial yield is ultimately limited to the maximum amount of natural discharge that can be utilized for beneficial use. The perennial yield cannot be more than the natural recharge to a groundwater basin and in some cases is less. See Office of the State Engineer, *Water for Nevada, State of Nevada Water Planning Report No. 3*, p. 13, Oct. 1971.

²² See, e.g. Hydrographic Area Summary for Marys River Area, (042), (December 2, 2021, 1:10 p.m.) https://nevada.usgs.gov/humboldtdepletion/HumboldtDepletionProposal_Public.pdf official records in the Nevada Division of Water Resources.

groundwater systems. These behaviors suggest that pumping-related capture of surface water tends to increase during wet years when excess water is available and decrease during dry years when the potential for conflict is greater.²³ Understanding these phenomena is necessary to accurately define both the timing and distribution of capture so that conflict attributable to groundwater pumping can be characterized and quantified. Long-term management strategy will rely on completion of the modeling effort and a process of public review and deliberation to determine best practices that satisfy legislative directives of prior appropriation, beneficial use and the public interest. Until then, the interim management practices described herein focus on statutorily available mechanisms for avoiding conflict due to increased capture caused by new appropriations or changes to existing groundwater permits.

WHEREAS, as of the date of this Order (Fall 2021) the Region is two years into a Severe to Extreme Drought.²⁴ Humboldt River flows for the summer of 2021 were running at or below 10th percentile flow levels,²⁵ very little decreed water was served during the 2021 irrigation season, and current Rye Patch Reservoir storage is approximately 7,000 acre-feet, which is 4% of the reservoir's capacity. This current condition highlights the difficult issues that face the water users in the Region, which are especially apparent during droughts like these.

IV.

AUTHORITY AND NECESSITY

WHEREAS, NRS 533.024(1)(c) directs the State Engineer "to consider the best available science in rendering decisions concerning the availability of surface and underground sources of water in Nevada."

WHEREAS, NRS 533.024(1) was amended in 2017 adding a new subsection declaring that it is the policy of Nevada "[t]o manage conjunctively the appropriation, use and administration of all waters of this State, regardless of the source of the water."²⁶

WHEREAS, NRS 532.120 authorizes the State Engineer to make such reasonable rules as

²³ Steven Jepsen, Kip Allander, and Kyle Davis, "Behavior and prediction of stream capture under varying streamflow conditions," presentation at Nevada Water Resources Association Annual Conference, Jan. 26, 2021, (Dec. 2, 2021 1:11 a.m.)

https://www.youtube.com/watch?v=2vLa1hesE_E

²⁴ U.S. Drought Monitor, Nevada Map, October 5, 2021, (Dec. 2, 2021, 1:12 p.m.)

https://droughtmonitor.unl.edu/data/pdf/20211005/20211005_nv_trd.pdf

²⁵ USGS gaging stations (10318500, 10321000, 10325000, 10327500, 10333000).

²⁶ NRS 533.024(1)(e).

may be necessary for the proper and orderly execution of the powers conferred by law.

WHEREAS, NRS 534.020 provides that all underground waters of the State belong to the public and are subject to all existing rights.

WHEREAS, NRS 533.370(2) requires that, in review of an application to appropriate water or to change water already appropriated, the State Engineer must consider whether there is unappropriated water in the source of supply, whether the uncommitted groundwater has been reserved pursuant to NRS 533.0241, whether the proposed use or change conflicts with existing rights or protectable interests in existing domestic wells, and whether it threatens to prove detrimental to the public interest.

WHEREAS, the State Engineer's procedures to evaluate applications to appropriate water or to change existing appropriations must be applied in a manner that is consistent and understandable to water right holders and their representatives.

WHEREAS, the State Engineer is responsible for establishing procedures to evaluate applications that provide clarity to water users about how to meet the needs of communities and local economies while avoiding conflict with senior decreed water rights.

WHEREAS, procedures established by this Order are intended to allow for efficient administration of groundwater rights, with provisions for in-stream replacement water and withdrawal or duty limitation of groundwater permits, when necessary. The intent is to provide needed flexibility for water right holders without increasing conflict by adding to any capture impacts above what is already occurring. In the short term, these procedures will make progress toward avoiding conflicts and preserving the availability of surface water in the Humboldt River Region to serve senior priority rights.

WHEREAS, during this interim period before the USGS and DRI models are published and while long-term strategies are being developed with involvement from the stakeholder community, the State Engineer may adopt further conjunctive management measures necessary to address capture impacts.

ORDER

NOW THEREFORE, IT IS HEREBY ORDERED, that in addition to those considerations required by NRS 533.370 and established by previous State Engineer's Orders discussed herein, the following procedures are being implemented by the State Engineer for the review of applications for groundwater rights in the Humboldt River Region:

1. Applications for groundwater rights will be reviewed for increases to stream capture,

and cannot increase conflict along the Humboldt River or its tributaries. Capture shall be determined by the State Engineer using established analytical or numerical methods along with any available knowledge of aquifer properties associated with the points of diversion. These rules apply to:

A. New appropriations of groundwater where annual capture is predicted to exceed 10% of duty for any year during 50 years of continual pumping.²⁷ Continual pumping is defined as the annualized duty amount requested under the application. Where there is a non-consumptive return flow component of the application, the annualized duty amount only applies to the consumptive portion.

B. Applications to change the point of diversion of existing rights that are predicted to result in an increase of net capture on the system or a tributary, defined as the difference between capture at the proposed POD and capture at the existing POD, and where annual capture at the proposed POD is predicted to exceed 10% of the permitted duty in any year during 50 years of continual pumping.

C. Temporary applications filed under NRS 533.345 to change the point of diversion of an existing groundwater right and applications for new groundwater appropriations filed under the provisions of NRS 533.371.

2. Capture shall be offset by not diverting an existing decreed right (in-stream replacement water), or by the withdrawal of an existing groundwater permit (meaning that the groundwater permit is no longer active, in part or in its entirety) so the resulting availability of streamflow is not less than it was prior to the appropriation or the change in the point of diversion.

A. In-stream replacement water or withdrawn groundwater rights shall be sufficient to equal or exceed the predicted annual capture amount if there is a reasonable probability that the replacement water will be available, in both time and quantity, as determined by the State Engineer. The State Engineer finds that "reasonable probability" would be an 80% probability threshold, which is established to ensure a replacement surface water right or a groundwater withdrawal right is of sufficient quantity and priority to reliably offset annual capture in 40 out of 50-years after an application is approved. In the case of replacement water, probabilities can be determined based on historical

²⁷ This threshold is considered to represent the range of certainty of the methods currently being used to calculate capture.

Humboldt River flow and diversion records. In the case of withdrawal of a groundwater right, probabilities can be determined based on analytical or numerical model predictions of recovered capture amounts.

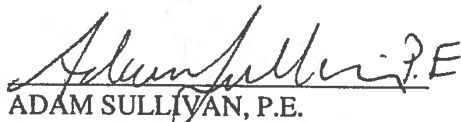
- B. If in-stream replacement water is used to offset capture, then the following applies:
 - i. If a decreed water right is the source of replacement water, it shall be for a crop-type, duty amount, and priority date that is sufficient to equal or exceed the predicted total capture amount of the new appropriation over a 50-year period of use, as determined by the State Engineer.
 - ii. Replacement water shall have an existing place of use that can and will be stripped of use. Water use on areas of natural flooding and other areas where water cannot be physically removed from the land will not be considered for replacement water.
 - C. If withdrawal of an existing groundwater right is used to offset capture, whether withdrawn in its entirety or an adequate portion of the existing right, the predicted total capture amount of the withdrawn right shall be sufficient to equal or exceed the predicted total capture amount of the new appropriation over a 50-year period of use, as determined by the State Engineer.
 - D. Where a change application moves an existing POD capture source from the Humboldt River or a tributary to either an upstream reach or to a different tributary, offset will be required for capture impacts on the new reach or tributary as well as for net capture on the Humboldt River. If capture impacts occur on a new reach or tributary, the applicant will have to offset the entire amount of capture on the new reach or tributary.
 - E. If either temporary in-stream replacement water or temporary withdrawal of a groundwater permit is used to offset capture, the predicted capture offset amount of the replacement water or withdrawn right must equal or exceed the predicted 50-year total capture amount of the temporary application within 10 years of the application's approval, as determined by the State Engineer.
3. These procedures do not apply:
- A. to any application where pumping at the proposed POD results in capture less than 10% of the permitted duty every year during 50 years of continual pumping.
 - B. to change applications where capture at the proposed POD is less than or equal to capture at the existing POD.
 - C. to any application for groundwater where annual capture associated with pumping at

the proposed place of use does not exceed 5 acre-feet during a 50-year period of use.²⁸

D. to temporary applications to change PODs within an area designated by State Engineer order allowing for multiple PODs from a single representative POD for mining, milling, and dewatering operations.

4. Uncommon or unforeseeable circumstances will be treated on a case-by-case basis, as determined by the State Engineer, with the same overall objective of preventing additional stream capture.

5. This order is in effect until it is replaced by a subsequent order establishing long term management practices addressing conflict caused by capture to the satisfaction of the State Engineer, or it is superseded by another order or decision.


ADAM SULLIVAN, P.E.
State Engineer

Dated at Carson City, Nevada this

7th day of December, 2021.

²⁸ This exemption is equivalent to a capture rate of less than 0.01 cfs and would effectively exempt all domestic use, much stockwater use, and other pumping resulting in nominal capture.

EXHIBIT 2

EXHIBIT 2

SETTLEMENT AGREEMENT AND MUTUAL RELEASE

This Settlement Agreement and Release ("Agreement") is hereby entered into and effective upon the date of the full execution of this Agreement ("Effective Date"), by and between Pershing County Water Conservation District ("PCWCD"), and Tim Wilson, P.E., as State Engineer, Department of Conservation and Natural Resources, State of Nevada ("State Engineer").

RECITALS

A. On August 12, 2015, PCWCD filed its original Petition for Writ of Mandamus, or in the Alternative, Writ of Prohibition in the Eleventh Judicial District Court of the State of Nevada in and for the County of Pershing ("the Court") in Case No. CV15-12019 ("the Dispute").

B. On January 2, 2018, after being granted leave to do so by the Court, PCWCD filed its First Amended Petition for Writ of Mandamus, or in the Alternative, Writ of Prohibition ("Amended Writ Petition").

C. On June 14, 2018, the Court held an evidentiary hearing on PCWCD's Amended Writ Petition, wherein the Court provided PCWCD with an opportunity to provide evidence to prove up the basis for its Amended Writ Petition.

D. On October 23, 2018, the Court issued its Order to Answer Writ of Mandamus, finding that PCWCD presented sufficient evidence to meet its initial burden that its Amended Writ Petition was proper and should go forward, and therefore requiring the State Engineer to Answer PCWCD's Amended Writ Petition to show why a writ should not issue, with an evidentiary hearing to follow.

E. On February 4, 2019, the State Engineer filed his Answer to PCWCD's Amended Writ Petition.

F. During a hearing before the Court on July 28, 2020, the Court ordered PCWCD to provide notice of the Dispute to holders of water rights in the Humboldt River Basin by mail as well as publish notice in newspapers of general circulation in the Humboldt River Basin by October 14, 2020. The Court also set an evidentiary hearing for March 22 through March 26, 2021, for the State Engineer to present evidence in opposition to PCWCD's Amended Writ Petition, as well as providing an opportunity for intervening parties to present supplemental evidence in opposition to PCWCD's Amended Writ Petition.

G. On October 12, 2020, pursuant to a stipulation submitted by the State Engineer and PCWCD, the Court entered its Order Staying Judicial Proceedings and All Currently Pending Matters, staying all proceedings in the Dispute for a period of 90 days so that the State Engineer and PCWCD could engage in settlement discussions.

H. While the Dispute has been proceeding in the Court, the State Engineer has undertaken the following endeavors in an effort to proactively manage the Humboldt River Region in an effort to balance the interests of the senior decreed rights of the Humboldt River with those groundwater uses in the region. These efforts include, but are not limited to:

- a. In 2016, in an effort to utilize the best available science to inform decisions relating to the appropriate management of the Humboldt River Basin, the State Engineer initiated work with the United States Geological Survey ("USGS") and the Desert Research Institute ("DRI") on a groundwater capture model ("the Model") for the Humboldt River Region to more accurately understand the relationships between groundwater and surface water, and to determine the effects of groundwater pumping on Humboldt River flows. The State Engineer retained USGS and DRI to develop a scientifically-sound calibrated numerical model and to develop improved groundwater budgets at the basin scale using modern methods to update estimates from early USGS Reconnaissance Series Reports and Water Resource Bulletins. The Model will be a science-based tool to determine to what extent groundwater withdrawals within the Humboldt River Region capture river flow, and to assist in determining effective measures to avoid conflict with deliveries of Humboldt River water.
- b. Recognition of the hydrologic connections between the Humboldt River and the tributary groundwater basins, in accordance with the Nevada Legislature's adoption of NRS 533.024(1)(e) declaring it the policy of the state to "manage conjunctively the appropriation, use and administration of all waters of [Nevada], regardless of the source of the water."
- c. Establishment of a policy relating to evaporative losses from pit lakes, including requirements that evaporative losses be accounted for through permanent relinquishment of groundwater rights and included within the basin groundwater budget.
- d. Continued communication and stakeholder outreach relating to the State Engineer's efforts within the Humboldt River Region to work toward data sharing and uniform management within the Humboldt River Region.
- e. Issuance of an order requiring the installation of totalizing meters and required reporting of water use, subsequent field verification of meter installation and data accuracy, and development of a database to manage and report groundwater pumping data.

1. Through negotiations, the State Engineer and PCWCD (together as "Parties" or separately as a "Party") have reached a compromise that will settle and resolve the Dispute.

NOW, THEREFORE, in consideration of the mutual promises and agreements herein and other good and valuable consideration, the receipt and sufficiency of which the Parties acknowledge, the Parties hereby agree to the following terms, conditions, and covenants:

TERMS OF SETTLEMENT

1. Recitals. The Recitals stated above are true and incorporated herein as though set forth in full.

2. Forthcoming Administrative Order. The State Engineer is in the process of developing an administrative draft order ("Order") that is intended to provide clear procedures and standards for review of groundwater applications within the Humboldt River Region as informed by the Model. These procedures will provide the following:

- a. New Groundwater Appropriations. The Order will set out specific thresholds for capture for new groundwater appropriations, including requirements to provide replacement water in a manner sufficient to avoid conflict resulting from the application. The mitigation requirements will be specific as to quantity, priority, and other considerations of the State Engineer to assure that the replacement water is sufficient to avoid conflict with existing rights.
- b. Groundwater Change Applications. The Order will set out specific thresholds for capture for applications to change existing groundwater appropriations that consider the changes in capture, and resulting potential for conflict, caused by a change in the point of diversion. Where such a change results in an increase in capture the Order will set out specific requirements to offset any increase in capture with surface water replacement or relinquishment of groundwater rights. Such requirements are intended to be specific and intended to assure any change is sufficiently mitigated so as to not increase any resulting capture and potential conflict.
- c. Addressing Future Conflicts. The Order will set out a mechanism to address future conflicts between valid existing groundwater uses and decreed Humboldt River rights within the Humboldt River Region. This will include articulating a basis upon which to make determination, based upon the best available science, as to issuing future orders that would restrict withdrawals to conform to priority of rights, and the establishment of specific considerations that would be reviewed by the State Engineer in determining whether to invoke a curtailment order.
- d. Notice. The Order will seek to notify all applicants of new rights, as well as those applying for changes to existing rights, that approval of the application does not constitute an exception to any long-term conjunctive management plan determined to be necessary by the State Engineer to prevent or avoid conflict so as to meet the needs of the water users.

The Order will first be issued as a Draft Order and will be subject to a public administrative process that will include taking comments from interested parties and the general public on the Draft Order as well as a public administrative hearing. A Final Order will be issued following the public administrative hearing.

3. Issuance of the Administrative Order. The State Engineer hereby agrees to issue the aforementioned Draft Order within ninety (90) days of the Effective Date of this Agreement.

4. Dismissal of PCWCD's Amended Writ Petition. In exchange for the State Engineer's agreement to issue the aforementioned Draft Order within the aforementioned time period, PCWCD agrees to dismiss its Amended Writ Petition with prejudice.

5. Full and Final Release. The Parties agree that this Agreement is intended to be a full and final compromise, release and settlement of all claims, demands, lawsuits, expenses, injuries, attorney fees, actions, suits, causes of action, known or unknown, suspected or unsuspected, against the other relating in any manner to the Dispute. Nothing herein shall be construed as a release of or otherwise affect the right of any party to enforce any right under this Agreement.

6. Dismissal of the Dispute. The Parties, through counsel, agree to fully execute the Stipulation and Order for Dismissal with Prejudice shown in Exhibit 1 hereto simultaneous with the execution of this Agreement.

7. Complete Agreement. The Parties understand and agree that this Agreement sets forth the full and complete agreement of the Parties, and that no statement or representation, other than those contained herein, have been made or relied upon by the Parties as an inducement for executing this Agreement. No part of this Agreement may be changed except in a writing executed by a duly authorized representative of each Party.

8. Representation by Counsel. All Parties to this agreement hereby represent and acknowledge that they have been represented by counsel regarding the terms of this Agreement and that their counsel have fully advised them with respect to the consequences associated with agreeing to its terms.

9. Litigation Attorneys' Fees. The Parties hereby acknowledge and agree to bear their own attorneys' fees and costs in connection with the Litigation and the preparation of this Agreement.

10. Miscellaneous:

a) Execution of Additional Documents: Each of the Parties hereto agrees to perform any and all acts and to execute and deliver any and all documents reasonably necessary to carry out the intent and the provisions of this Agreement.

b) Governing Law and Choice of Venue: This Agreement is executed and intended to be performed in the State of Nevada, and the laws of Nevada shall govern its interpretation and effect, and any dispute arising from this agreement shall be commenced before the First Judicial District Court, in and for Carson City, Nevada.

c) Severance: Should any term, part, portion or provision of this Agreement be decided or declared by the Courts to be, or otherwise found to be, illegal or in conflict with any law of the State of Nevada or the United States, or otherwise be rendered unenforceable or ineffectual, the validity of the remaining parts, terms, portions and provisions shall be deemed severable and shall not be affected thereby, providing such remaining parts, terms, portions or

provisions can be construed in substance to constitute the agreement that the parties intended to enter into in the first instance.

d) Successors and Assigns: This Agreement shall be binding and inure to the benefit of the Parties hereto, their predecessors, parents, subsidiary and affiliated business entities, all officers, directors, shareholders, members, agents, employees, attorneys, assigns, successors, heirs, executors, administrators and legal representatives of whatsoever kind or character in privity therewith.

e) Third-Party Beneficiary: This Agreement is for the benefit of the Parties, their successors and assigns only. No other third-party beneficiary rights are intended by this Agreement.

f) No Precedential Effect: Each of the parties hereto acknowledges and agrees that certain negotiated provisions of this Agreement were agreed as an accommodation to the Parties and may be unique to the facts and circumstances surrounding this particular relationship. By entering into this Agreement, it is not the intention of the State Engineer to establish any policy, procedure, course of dealing or plan of general application irrespective of any similarity in facts or circumstances involving such other person or party. This Agreement shall not be binding or controlling in any proceeding before the State Engineer or any court reviewing the State Engineer's decisions, other than to enforce the terms of this Agreement.

g) No Liability: This Agreement is a compromise and is not to be construed as an admission of liability on the part of any Party. Nothing in this agreement shall be construed as an admission against the interest of any Party.

h) Counterparts: This Agreement may be executed in counterparts, one or more of which may be facsimiles or color scanned copies but all of which shall constitute one and the same Agreement. Facsimile or scanned signatures of this Agreement shall be accepted by the Parties to this Agreement as valid and binding in lieu of original signatures.

IN WITNESS WHEREOF, this Agreement is executed as of:

SIGNATORIES

On Behalf of Nevada Division of Water Resources:

By: Tim Wilson, P.E.
Tim Wilson, P.E.
State Engineer

Date: 10/19, 2020


By: James Bolotin
James Bolotin, Esq.
Senior Deputy Attorney General

Date: 10/19, 2020

On Behalf of Pershing County Water Conservation District:

By:  Date: 10/15, 2020
Ronnie Burrows
PCWCD President

By:  Date: 10-15-, 2020
Ryan Collins
PCWCD Secretary/Manager

By:  Date: 10/15, 2020
Therese A. Ure Stix, Esq
Attorney for PCWCD