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

INTERIM ORDER

AMENDING PROCEDURES FOR REVIEW OF APPLICATIONS TO APPROPRIATE OR CHANGE EXISTING RIGHTS FOR GROUNDWATER WITHIN THE AMARGOSA DESERT HYDROGRAPHIC BASIN (230), NYE COUNTY, NEVADA AND SETTING HEARING FOR COMMENT ON IMPLEMENTING APPLICATION PROCEDURES IN THE DEATH VALLEY REGIONAL FLOW SYSTEM

I. BACKGROUND OF DEVILS HOLE

WHEREAS, Devils Hole is located within the Amargosa Desert Hydrographic Basin and is further described as being located within the SW¼ SE¼ of Section 36, T.17S., R.50E., M.D.B.&M. within a detached unit of the Death Valley National Park and the boundaries of the Ash Meadows National Wildlife Refuge, Nye County, Nevada.

WHEREAS, Devils Hole, a geothermal pool, is the only natural habitat of the endangered Devils Hole pupfish.¹

WHEREAS, an administrative hearing was held on September 5–6, 2007,² where evidence and testimony was received regarding the potential impacts of regional pumping on existing water rights, particularly the federally reserved water right at Devils Hole.³ The federally reserved water right specifies a threshold water level at Devils Hole of 2.7 feet below the copper washer reference point.⁴ Information provided at the hearing showed the water level in Devils Hole was only 0.6 to 0.7 feet above the threshold level mandated by the U.S. District Court.⁵

WHEREAS, the State Engineer issued Order No. 1197A dated January 12, 2018, which restricted the appropriation and movement of water within the Amargosa Desert Hydrographic Basin near Devils Hole.

II. REGIONAL FLOW SYSTEM

WHEREAS, the Amargosa Desert Hydrographic Basin lies within a regional area with a significant distribution of carbonate rocks that transmit underflow of groundwater between surface

² Transcript and Exhibits, public administrative hearing, in the matter of protested Applications 69836, et seq., September 5–6, 2007, official records in the Office of the State Engineer.

\textbf{WHEREAS}, recharge to the regional aquifer is derived from precipitation within the subject basins, but primarily from the mountainous areas, and largely from groundwater underflow throughout the regional flow system.\footnote{Walker and Eakin, \textit{Reconnaissance Series Report 14} at 12-17 pp.; Rush, \textit{Reconnaissance Series Report 54} at 12-13 pp., official records of the Division of Water Resources.} The combined perennial yield for the regional area consisting of Mercury Valley (Hydrographic Basin 225), Rock Valley (Hydrographic Basin 226), Fortymile Canyon (Hydrographic Basin 227), Oasis Valley (Hydrographic Basin 228), Crater Flat (Hydrographic Basin 229), and Amargosa Desert is estimated to be 24,000 acre-feet annually.\footnote{Refer to Underground Active Reports for Hydrographic Basins 225 through 230, official records in the Division of Water Resources, available at \url{http://water.nv.gov/undergroundactive.aspx}.}

\section*{III. NUMERICAL GROUNDWATER FLOW MODEL}

\textbf{WHEREAS}, the United States Geological Survey developed a numerical groundwater flow model of the Death Valley Regional Flow System,\footnote{Halford, K.J., and Jackson, T.R., 2020, \textit{Groundwater characterization and effects of pumping in the Death Valley regional groundwater flow system, Nevada and California, with special reference to Devils Hole}, U.S. Geological Survey Professional Paper 1863, 178 p., (December 2, 2021, 1:40 p.m.) \url{https://doi.org/10.3133/pp1863}.} which includes Amargosa Desert, Devils Hole, and the surrounding area including tributary basins to Amargosa Desert Hydrographic Basin. This model incorporates available geologic and hydrologic data to provide the best available estimate of aquifer properties throughout the region. The model has been through peer review and is publicly available from the United States Geological Survey. The State Engineer finds that this model is currently the best available science and is suitable for evaluating potential groundwater level changes due to water rights changes.

\section*{IV. AUTHORITY AND NECESSITY}

\textbf{WHEREAS}, the State Engineer is empowered to make such reasonable rules and regulations as may be necessary for the proper and orderly execution of the powers conferred by law.\footnote{NRS 532.120.}
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."\textsuperscript{12}

WHEREAS, NRS 534.020 provides that all underground waters within the boundaries 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 533.0241, 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 groundwater or to change existing appropriations must be applied in a manner that is consistent and understandable to water right holders and their representatives.

WHEREAS, procedures established herein allow for efficient administration of groundwater rights in the Amargosa Desert on an interim basis while the State Engineer takes comment on the use of the numerical flow model to assist in evaluating water right applications within the entirety of the regional flow system.

WHEREAS, the intent is to provide the needed flexibility for water right holders without causing additional water level decline above what is predicted for the existing base right. Over time these procedures will result in a reduced potential for water level declines at Devils Hole due to groundwater use.

WHEREAS, these procedures do not restrict the State Engineer from adopting further management measures necessary to address water level impacts to Devils Hole or to address conflict with senior rights.

ORDER

NOW THEREFORE, IT IS HEREBY ORDERED, that Order No. 1197A is vacated

IT IS FURTHER ORDERED that any applications to appropriate additional underground water within Amargosa Desert will be denied, and applications that seek to change the points of diversion of existing underground rights within Amargosa Desert will be processed subject to NRS Chapters 533 and 534. Change applications will be evaluated by utilizing the USGS Death Valley Regional Flow System numerical groundwater model, to determine if there will be no net increase in water level decline at Devils Hole over a subsequent fifty-year period. The State Engineer, in his discretion, may conduct additional analysis and require additional information to assure that any application to change an existing right does not result in an increased impact to the water level at Devils Hole.

\textsuperscript{12} NRS 533.024(1)(c).
IT IS FURTHER ORDERED, applications for environmental permits filed pursuant to NRS 533.437 to 533.4377, are excluded from this Order.

IT IS FURTHER ORDERED, a public hearing will be held in the month of May 2022 to take public comment on the continued use of the USGS Death Valley Regional Flow System numerical groundwater model, whether the use of the model should be utilized within other hydrographic basins within the regional flow system, and further management considerations within the regional flow system.

Dated at Carson City, Nevada this 13th day of January, 2022.