

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

IN THE MATTER OF APPLICATION 76354)
FILED TO APPROPRIATE THE PUBLIC)
WATERS OF AN UNDERGROUND SOURCE)
WITHIN THE BLACK MOUNTAINS AREA)
HYDROGRAPHIC BASIN (215), CLARK)
COUNTY, NEVADA.)

RULING
5899

GENERAL

I.

On October 5, 2007, Michael Rueth, Bluewater Diamond Mine filed Application 76354 indicating that he wanted to apply for the right to use ground water at the rate of 50 cubic feet per second (cfs) per well and to store 50,000 acre-feet annually (afa) of water to be used for power purposes. The application indicated the use is for "20 MW per well state of the art geothermal power plant sufficient to power 20,000 homes per well." The application indicates that the point of return of water to the stream would be Government Wash or Lake Mead.¹ By letter dated October 11, 2007, the Office of the State Engineer returned the application noting it was not clear whether Mr. Rueth was applying for cold water or geothermal water, that each well would require a separate application, that the power generation identified as EIE is not clear, that he had not filed a map prepared by a licensed water right surveyor and that since the application indicates there will be discharge of spent geothermal fluid that many other regulatory requirements from other agencies may be applicable.

On November 1, 2007, Mr. Rueth returned the application indicating he was applying for 50 cfs of ground water with 50,000 acre-feet to be stored in a reservoir for power generation with an estimated cost of the works of diversion being \$15,000 and it would only take two weeks to construct. By letter dated November 5, 2007, the application was returned a second time noting that the application indicates the water is to be used for power, but the map showed mining. The State Engineer asked for details on the proposed works of diversion and more detail of the actual project.

¹ File No. 76354, official records in the Office of the State Engineer.

On December 3, 2007, Mr. Rueth returned the application again applying for 50 cfs of ground water with 50,000 afa of storage. The application indicated in Item 5 that the water is to be diverted from a source "at the 200 foot level and allso [sic] a [sic] the 2000 foot level between the carbonate rock aquifer layers of limestone to super heated rock." Further description of the project under Item 12 indicates that the plan of operation is to drill and pump the well discharging the water to Lake Mead estimated for 10 years per well. The application indicates that:

1. these well [sic] if you can call then [sic] thet [sic] has to do with pumping gases throw [sic] U joints in superheated rock to produce power.
2. atom expansion [sic] and concentration of elements by heat, ect. [sic] hyperexpansion, [sic] inflation, heated electromagnitism, [sic] gravity push.
Dark energy receiver

By letter dated December 4, 2007, the second amended application was returned to Mr. Rueth noting that this is a very large diversion from a single well and requested that he apply for a diversion rate that was consistent with the proposed works of diversion. The State Engineer noted problems with the request for storing 50,000 afa, a cost of \$15,000, which appears to be a very low estimate for the complex works described in the application and that two weeks did not appear to be an adequate time to construct such complex works.

On December 6, 2007, Mr. Rueth filed a third amended application for 20 cfs of ground water and for the storage of 50,000 afa. This appears to be the exact same application as the second amended application, but with the change to 20 cfs. By letter dated December 11, 2007, the State Engineer once again returned the application noting the same issues as the December 4, 2007, letter that had not been adequately addressed.

On December 24, 2007, Mr. Reuth filed a fourth amended application for 20 cfs but now had changed the estimated cost of the works of diversion to \$100,000,000 and 2 years to construct. The proposed point of diversion is described as being located within the NW $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 26, T.20S., R.64E., M.D.B.&M., which is within the Black Mountains Area Hydrographic Basin. The remarks section of the application indicates that the:

Water will be use [sic] for its expansion of gas. But we plan to move to strate [sic] gas. As we fell [sic] water is slow by its fluid minerals content. In a geothromal [sic] plant, or in any form that uses gases heated by the earth to produce power by passins [sic] fluides [sic] throw [sic] a U joint. We may have both geothermol [sic] water well and or gas passed throw [sic] U joint heated by the earth heat wells.

The State Engineer decided to accept the application as filed on January 17, 2008, and sent the application for publication.

II.

The application was timely protested by the United States Department of Interior, National Park Service (NPS) on the grounds that the appropriation is located in the Black Mountains Area, which has an estimated recharge of 100 afa with an additional 1,200 afa entering the basin as subsurface flow from the Las Vegas Valley with discharge from the valley flowing to Lake Mead. The NPS alleges that the committed ground-water resources in 2002 was 10,216 afa; therefore, the withdrawal proposed by Application 76354 would exceed the recharge of the area resulting in water mining, which would reduce or eliminate the discharge from springs within the Lake Mead National Recreational Area. The NPS alleges that the ground-water withdrawal proposed by the application may affect ground-water flow paths and capture ground-water that naturally discharges at the Muddy River Springs. Additionally, that the proposed withdrawal is located in an area within the carbonate-rock province and the State Engineer pursuant to State Engineer's Order No. 1169 found that further hydrologic studies are required before any additional pending applications will be considered in the area.

The conclusions of the NPS protest assert that there is no water available for appropriation because the committed resources exceed the estimated ground-water recharge, the approval and development of the water applied for would impair the water rights of the United States, the public interest would not be served by granting the application because the nationally important water resources and water-related resources of the Lake Mead National Recreational Area would be diminished or impaired and the application is located in a hydrographic area that requires further study before additional permits may be issued. On March 28, 2008, Mr. Rueth was notified of the filing of the formal protest.

FINDINGS OF FACT

I.

Nevada Revised Statute § 533.365(3) provides that it is within the State Engineer's discretion to determine whether a public administrative hearing is necessary to address the merits of a protest to an application to appropriate the public waters of the state of Nevada.

II.

In 2001, the State Engineer held hearings addressing water right applications that had been filed in Coyote Springs Valley in southern Nevada for extremely large quantities of water. These

applications are in a regional flow system that is commonly known as the carbonate-rock aquifer province, which may have flows from the far northern part of eastern Nevada, down the east central side of Nevada all the way to Lake Mead and Death Valley. As a result of those hearings, and also because of the many other applications that had been filed for quantities of water far in excess of the established perennial yields in basins in southern Nevada, the State Engineer in March 2002 issued State Engineer's Order No. 1169. Pursuant to that order, the State Engineer held all applications for water from the carbonate-rock aquifer province in several basins in southern Nevada, including the Black Mountains Area Hydrographic Basin, in abeyance while a study was conducted that required pumping of 50 percent of the water already appropriated for a minimum of 2 years. The State Engineer finds that to date, that pumping study has not been completed. The State Engineer finds Nevada Revised Statute § 533.368 provides the authority for ordering such a study prior to acting on an application.

The State Engineer finds there are five applications in the Black Mountains Area Hydrographic Basin that are senior in priority to Application 76354 filed for more than 41,000 acre-feet of water. The State Engineer finds that at present there are 7,216 afa of existing ground-water rights in the Black Mountains Area Hydrographic. The State Engineer finds the estimated perennial yield of the Black Mountains Area Hydrographic Basin is 1,300 afa.

The State Engineer finds he cannot conceive of there ever being sufficient unappropriated water available to grant Application 76354.

III.

Michael Rueth frequently telephones the Office of the State Engineer in an attempt to argue that the State Engineer should grant Application 76354. He argues that, the President of the United States, in Executive Order No. 13212 "directed the Secretary of the Interior to determine ways to reduce delays in geothermal procession [sic]."² A copy of Executive Order No. 13212 was provided by the Applicant and that order is addressed to executive agencies of the Federal Government and indicates that those agencies, to the extent consistent with applicable law, are to take appropriate actions to expedite projects that will increase the production, transmission and conservation of energy. The State Engineer finds Executive Order No. 13212 in no way invalidates Nevada Water Law.

² Letter received May 12, 2008, File No. 76354, official records in the Office of the State Engineer.

IV.

The Applicant also argues that he has a federal reserved right for mining. The State Engineer finds the Applicant has not provided a single citation to case law that has established a federal reserved right that would be for the use of a private citizen for geothermal mining and the State Engineer is not aware of any such type of reserved right and does not believe such a right exists.

V.

The Applicant argues that there is an aquifer under the carbonate-rock aquifer and that there is a huge quantity of water under Lake Mead and he wants to use a portion of that water. In May 2008, the Applicant was informed that he could provide the State Engineer with a scientific report to support his allegation as to the “new water source” and the State Engineer would be glad to review it, but to date no scientific report has been provided. The State Engineer finds water “under Lake Mead” exists, but the Applicant has provided no information as to the presence of geothermal fluids or any other occurrence other than naturally occurring ground water stored in bedrock. The State Engineer finds any ground water under this part of Lake Mead would be within the Black Mountains Hydrographic Area, which is included under the provisions of State Engineer’s Order No. 1169 for which prior applications are being held in abeyance until additional study is completed.

CONCLUSIONS

I.

The State Engineer has jurisdiction over the parties and the subject matter of this action and determination.³

II.

The State Engineer is prohibited by law from granting an application to appropriate the public waters where:⁴

- 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 existing domestic wells as set forth in NRS § 533.024; or
- D. the proposed use or change threatens to prove detrimental to the public interest.

³ NRS chapters 533 and 534.

⁴ NRS § 533.370(5).

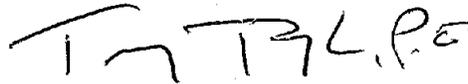
III.

The State Engineer concludes that with the water already appropriated and the senior pending applications for water in this hydrographic basin that it is inconceivable that water will ever be available in the quantity applied for under Application 76354. The State Engineer concludes there is no independent scientific report to support the Applicant's allegations of the water source "under Lake Mead" being a different source of water than that which naturally occurs in bedrock below the water table.

RULING

Application 76354 is hereby denied as there is no water available in the quantity applied for considering existing rights and pending applications being held in abeyance under State Engineer's Order No. 1169. No ruling is made on the merits of the protest.

Respectfully submitted,



TRACY TAYLOR, P.E.
State Engineer

TT/jm

Dated this 21st day of

October, 2008.