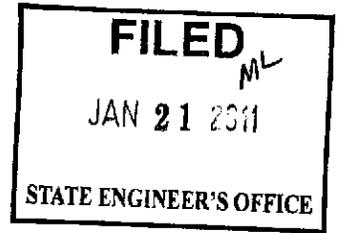


IN THE OFFICE OF THE STATE ENGINEER OF THE STATE OF NEVADA

IN THE MATTER OF APPLICATION NUMBER 80340  
FILED BY Spring Creek Utilities Company  
ON December 17, 20 10, TO APPROPRIATE THE  
WATERS OF permit #45920 at NE1/4 SE1/4 Sec.31, T33N, R57E



PROTEST



Comes now Ryan S. Shane and Tracy L. Shane

Printed or typed name of protestant

whose post office address is PO Box 8382, Spring Creek, NV 89815

Street No. or PO Box, City, State and ZIP Code

whose occupation is Natural Resource Manager and Professor, respectively and protests the granting

of Application Number 80340, filed on December 17, 20 10

by Spring Creek Utilities Company to appropriate the

waters of Underground Basin - 048 - Dixie Creek/Tenmile Creek area situated in Elko

Underground or name of stream, lake, spring or other source

County, State of Nevada, for the following reasons and on the following grounds, to wit:

As noted at NRS 533.024, "the legislature declares that it is the policy of this state to recognize the importance of domestic wells as appurtenances to private homes, to create a protective interest in such wells and to protect their supply of water from unreasonable adverse effects which are caused by municipal, quasi-municipal or industrial uses and which cannot reasonably be mitigated." The amount of water proposed for municipal use (2.5 cfs/589.765 mga) to provide additional water to the Spring Creek Association residents could potentially have an adverse affect on my existing well (log#49431). The proposed point of diversion will be up-gradient of and in the same aquifer as my domestic well. This proposed point of diversion, combined with the well proposed in Application 80123, is likely to have cumulative impacts to the shallow aquifer when both are pumped. The potential for these cumulative impacts has not been investigated by the Applicant. I believe the Spring Creek Utilities Company has other well location options that would be less likely to adversely impact groundwater intersected by my well. At the least, an in-depth hydrologic investigation is warranted.

THEREFORE the Protestant requests that the application be Denied OR Issued subject to mitigation recommendations attached

Denied, issued subject to prior rights, etc., as the case may be

and that an order be entered for such relief as the State Engineer deems just and proper

Signed Tracy L. Shane  
Agent or protestant

Printed or typed name, if agent  
Tracy L. Shane

Address 1020 Tobiano Rd OR PO Box 8382 (mailing)  
Street No. or PO Box

Spring Creek, NV 89815  
City, State and ZIP Code

775-738-3466  
Phone Number

State of Nevada  
County of Elko

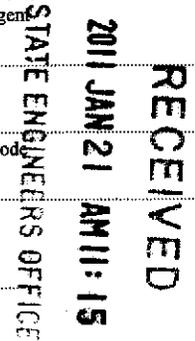
Subscribed and sworn to before me this 14th day of January, 20 11



Sequoyah Shoars  
Notary Public

State of Nevada

County of Elko



+ \$25 FILING FEE MUST ACCOMPANY PROTEST. PROTEST MUST BE FILED IN DUPLICATE.  
ALL COPIES MUST CONTAIN ORIGINAL SIGNATURE.

January 12, 2011

Dear Nevada Division of Water Resources - State Engineer,

We, the undersigned, owning property described as 1020 TOBIANO and 0000 AUSSIE HILL, SPRING CREEK, NV 89815, and with mailing address of PO BOX 8382, respectfully request review of Application Number 80340, filed by Spring Creek Utilities Company on December 10th, 2010, to appropriate the waters of NE ¼ SE ¼ section 31 T33N R57E.,M.D.M., situated in the County of Elko, State of Nevada.

We own property in the area commonly referred to as Ruby Mountain Estates (subdivision). The subdivision is divided into 31 parcels, consisting of approximately 10 acres each, which, by covenant, cannot be further subdivided. The subdivision, located in the south one-half of section 23, Township 33 North, Range 56 East, MDB&M, is bordered on the north and east by property within the Spring Creek Association (Association); properties within the Association are serviced by Spring Creek Utilities Company. Ruby Mountain Estates has been in existence since the early 1970's and each parcel owner has a domestic well which provides the residents with all of their current household and property water. We wish to express our concern that the amount of water proposed for municipal use (2.5 cfs/589.765mga, especially when combined with Application #80123 for 2.0 cfs/471.81mga) to provide additional water to the Spring Creek Association residents will have an adverse affect on our existing wells. We believe the Spring Creek Utilities Company has other well location options within the 23.4 square mile Spring Creek Housing area which would be less likely to adversely impact groundwater intersected by our wells. These adverse impacts could require us to lower our pumps, deepen or re-drill our wells.

The hydrologic reasons for our concerns, and our proposed mitigation measures should the point of diversion change be approved, are attached.

We, the concerned Protestants signed below, respectfully request the Office of the State Engineer of the State of Nevada Division of Water Resources to deny the issuance of the application to change the point of diversion OR require adequate pre and post-construction hydrologic investigations to be performed in order to understand to the projected and realized impacts of Spring Creek Utilities' well pumping activities on our domestic well. We also request that all financial liabilities associated with the lowering of the water table and wells/well equipment reasonably associated with the applicants well pumping activities shall be required to be borne by the applicant As noted at NRS 533.024, "the legislature declares that it is the policy of this state to recognize the importance of domestic wells as appurtenances to private homes, to create a protective interest in such wells and to protect their supply of water from unreasonable adverse effects which are caused by municipal, quasi-municipal or industrial uses and which cannot reasonably be mitigated."

Thank you for your consideration and assistance.

Respectfully submitted this \_\_\_\_ day of January 2010.

Ryan S. Shane and Tracy L. Shane, Property and Domestic Well Owners

RECEIVED  
2011 JAN 21 AM 11:15  
STATE ENGINEERS OFFICE

### Hydrologic background and review

The proposed well, in the NE ¼ SE ¼ section 31 T33N R57E.,M.D.M., is within one quarter mile of the main stem of Butterfield Creek. The wells at Ruby Mountain Estates (south ½ section 23 T33N R56E) are also generally within one-half mile of the same stem of Butterfield Creek. The proposed well will be within 9,000 feet of the nearest domestic well in Ruby Mountain Estates and approximately 13,000 feet from our well (log#49431).

If we assume that the shallow groundwater gradient more or less mimics the surface drainage, the Ruby Mountain Estates wells are down-gradient of the proposed well. This well, if constructed, will have a permitted duty of 2.5 cfs, or 1,122 gpm.

Historical precipitation data are not available for the immediate vicinity of Ruby Mountain Estates, and an attempt to find data that would accurately reflect the precipitation received within the subdivision proved fruitless. Anecdotal evidence suggests that Butterfield Creek flowed through Ruby Mountain Estates annually between April and September through 1999. The observed lack of surface flow in Butterfield Creek in the subdivision through all but two years of the period 2000 – 2010 suggests that water levels in the shallow aquifer are in a general state of decline. It is highly likely that the same condition exists in the domestic wells that are owned by the property owners in Ruby Mountain Estates.

An existing well owned by Spring Creek Utilities Company is located down-gradient of the Ruby Mountain Estates wells, and is within the Butterfield Creek drainage. This well is in the NE ¼ NE ¼ section 22 T33N R56E, and is within one half mile of the nearest domestic well in Ruby Mountain Estates. The permitted duty on this well is 4 cfs, or 1795 gpm. We have not been able to locate any pumping records for this well, drilled in 1972, which has a total cased depth of 500 feet, and is screened from 160 to 500 feet. When the well was drilled and tested, it produced 470 gpm with 128 feet of drawdown from an original static water level of 38 feet below grade (for a pumping water level of 166' below grade).

Current groundwater monitoring points in the vicinity of the proposed well and Ruby Mountain Estates are located as follows:

1. Up-gradient, in Stoffer Creek drainage, NW ¼ NW ¼ section 30 T33N R57E.
2. Down-gradient, in the drainage of a tributary to Tenmile Creek, either SE ¼ SE ¼ section 14 T33N R56E or SW ¼ SW ¼ section 13 T33N R56E (map from Spring Creek Utilities Company suggests the monitor point is on the section line).
3. An additional groundwater monitor point is also in the drainage of a tributary to Tenmile Creek in SW ¼ SW ¼ section 13 T33N R56E.

As residents of Ruby Mountain Estates, we have a profound interest in the effects the proposed well will have on our domestic wells, which have total depths ranging from as little as 90 feet to 177 feet (averaging 124 feet). Static water levels, as indicated on Nevada Well Driller's Logs, vary from 8 feet below grade to 81 feet (averaging 36 feet). The oldest well in the subdivision was drilled in 1980, and the most recent in 2006; the bulk of the wells were drilled in the mid-1990s.

The lack of groundwater monitoring equates to the lack of known hydrological baseline information needed to determine groundwater aquifer depths, restrictive strata depths, groundwater residence times, and other information required to predict impacts of proposed pumping activities.

Proposed mitigation measures in the event that Application 80340 is approved by the State Engineer

In light of the foregoing, as residents of Ruby Mountain Estates, we have good reasons to be concerned that if the point of diversion change requested by Spring Creek Utilities Company under application 80340 is approved, our domestic wells will be adversely impacted.

In the event that application 80340 is approved by the State Engineer, in the interest of mitigating our concerns, we propose that Spring Creek Utilities Company agree to the following:

- Install multi-point piezometers in the following locations to provide reasonable data to determine the down-gradient drawdown associated with pumping the proposed well, as well as up-gradient impacts from the existing well.:
  - NE ¼ section 25 T33N R56E
  - SW ¼ section 25 T33N R56E
  - NE ¼ section 26 T33N R56E
  - SW ¼ section 30 T33N R57E
  - NW ¼ section 31 T33N R57E
- Piezometers should be installed to measure heads at 50, 100, 200, and 500 feet below grade at each location. In addition, agreements should be made with several domestic well owners in both Ruby Mountain and Lipparelli Estates for installation of pressure transducers in private domestic wells for additional piezometric data collection. It is strongly suggested that dataloggers be installed on all transducers so that accurate, systematic data can be collected.
- Transducers should be installed in the new wells to record pumping water levels. In addition, records of pumping cycles, including duration and average pumping rate during each cycle, should be maintained.
- Data collection should be done by a third-party that is knowledgeable in groundwater monitoring methods, and the data provided to Spring Creek Utilities Co, Nevada Division of Water Resource-State Engineer, and domestic well owners.
- Spring Creek Utilities Co should agree to pay the costs of this third-party's services. Reporting of data from piezometers and pumping wells should be at least on a quarterly basis, with readings taken on a frequency that captures hydrologic phenomena that interests all parties.
- In the event that the data suggest that private domestic wells will be adversely impacted by the proposed wells, Spring Creek Utilities Co must be held financially responsible for any mitigation measures, including:
  - Costs associated with lowering of domestic pumps;
  - Costs associated with purchase and installation of new pumping equipment required to maintain the viability of domestic wells;
  - Costs associated with deepening or replacement of domestic wells to ensure their continued viability; and
  - Spring Creek Utilities Co must supply potable water to all persons while their domestic wells are inoperable due to lowering of pumping equipment or deepening of those wells.