
Appendix D

Rise Grass Valley Inc.
Idaho Maryland Mine Project
Nevada County, California

Well Mitigation Plan

~~February 2nd, 2021~~

May 11th, 2022

Summary

Policy 17.12 of the Nevada County General Plan provides for protection of domestic water wells from potential mining impacts. Policy 17.12 states:

In approving mining projects which according to expert opinion may threaten the existing quality or quantity of surface or subsurface water which supply adjacent homes and businesses:

- 1) *The County shall require the operator to guarantee a comparable supply of water to such homes or businesses through accessible forms of security or alternate sources of water.*
- 2) *Where water quantity and quality problems occur, an immediate water supply shall be provided by the operator until the source of the problem is determined.*
- 3) *The burden of proof shall be on the operator to show that the mining operation did not create the water problem.*
- 4) *If it is determined that the operator is at fault, impacted owners shall be compensated by the operator.*

Expert opinion has determined that there is no threat to water quality to domestic water wells from the Idaho-Maryland Mine Project.¹

The potential impact to the quantity of water available at domestic wells in the mine vicinity would be indicated by a decrease in the available water column in the well, caused by a drop in the elevation of the static groundwater level in the fractured bedrock in the well vicinity. One domestic water well located above the historic mine workings could be impacted, with the possibility for a ~40% reduction in the well water column, due to the groundwater drawdown from dewatering of the mine. Building in a 100% safety factor, an additional six domestic water wells could, at least theoretically, be impacted, with a reduction in those well's water column of ~7% – 12%. All potentially impacted wells are located in the E. Bennett Road area. Domestic water wells outside this area will not be impacted.¹

~~A monitoring program~~ The Groundwater Monitoring Plan Idaho-Maryland Mine Project (the "GMP") has been designed by qualified consultants and Rise proposes it be implemented prior to any dewatering efforts to provide ongoing proof that significant water level drawdowns are not occurring outside of the E. Bennett Area throughout the project's duration. The monitoring program is designed to ensure early warning of potential impacts to outside areas. If an impact to outside areas was projected during operations, pre-emptive action would be taken as necessary to ensure immediate water supply and compensation. ~~Such action~~

¹ EMKO Environmental, Inc. (2020). Groundwater Hydrology and Water Quality Analysis Report for the Idaho-Maryland Mine Project, Nevada County, California. El Dorado Hills, CA.

If the GMP predicts a potential impact to domestic water wells outside of the E. Bennett Road Area then the following measures will be taken.

- 1) The property owner will be contacted, and the company will request to inspect and test the well. Nearby properties which do not have well completion records, or a previous negative confirmation, will also be contacted to verify whether there is a well on the property.
- 2) The well will be inspected to determine the characteristics of the well, including well depth, casing and screen depth, static water level, pump depth, pump flowrate and pressure rating, well yield, and the treatment system. A water quality sample will be taken during the inspection.
- 3) The Performance Standard for the individual property will be determined based on the parameters in Table 1.
- 4) A hydraulic test will be conducted to obtain hydraulic-conductivity information.
- 5) Instrumentation will be installed to measure water level on a periodic basis (such as 1 or 4 hours) and pumping rates (to correlate water level with the wells use). Data from the instruments will be transmitted by telemetry.
- 6) An evaluation will be prepared to determine actions to be taken at certain drawdowns and/or reduction in well yield in order to maintain the performance standard for the property. This would include points where a different pump would be required, or additional holding capacity installed.
- 7) An evaluation would be made based on the geology of the area, wells in the vicinity of the property, property constraints, and current well characteristics (such as current well depth and potential for well yield to depth) whether the deepening of the well or the drilling of a new well would be an effective mitigation. The maximum drawdown required to require the implementation of well deepening or installation of a new well will be estimated.
- 8) If the well's purpose is entirely or partially for agricultural or extensive landscape irrigation, an evaluation of the feasibility to service this property with NID agricultural water (from nearby canals) will be conducted.
- 9) If deepening of wells or drilling of a new well would not be an effective mitigation, the extension of NID potable water service to the property will be evaluated and designed. The maximum drawdown to require the implementation of a connection to NID potable water service will be estimated.
- 10) The increase in cost of water supply from actions will be estimated. For example, the monthly cost of water supplied by NID or an increase in power consumption from water pumping.
- 11) All data collected and reports generated will be provided to the property owner and to Nevada County.
- 12) Action taken, based on the evaluations and monitoring, could include extension of NID potable water, the installation of holding tanks and/or replacement of a pump, lowering of well pumps or deepening of domestic water wells, or drilling of new wells, in all cases paid for by Rise. If a domestic well were to be deepened, water quality sampling of the well would be taken before and after deepening to ensure that similar water quality is present. If deepening of a well results in a negative change to water quality, Rise would arrange and fund the modification of the wells treatment system, by a qualified professional, as appropriate.
- 13) If the cost of water supply will be increased by actions taken under the Well Mitigation Plan the property owner will be reimbursed for as long as they own the property.

14) If water supply to a property is disrupted for an appreciable amount of time (greater than a day), a temporary water supply will immediately be provided to the property using water tanks and potable water will be delivered as necessary to provide water supply to the property during testing, maintenance, or construction.

Table 1 - Performance Standards

<u>Well Use</u>	<u>Units</u>	<u>Daily Water Supply (Gallons /Day)</u>	<u>Peak Water Demand (GPM)</u>
<u>Single Family Residential</u>	<u>per home</u>	<u>400</u>	<u>Determined based on Waster Supply Fixtures</u>
<u>Multi-Family Residential</u>	<u>per suite</u>	<u>630</u>	
<u>Commercial</u>	<u>per connection</u>	<u>950</u>	
<u>Industrial</u>	<u>per connection</u>	<u>4,200</u>	
<u>Crop or Pasture Irrigation</u>	<u>per acre</u>	<u>8,700</u>	

***See performance standards notes below**

NID Water Connection – E. Bennett Area

Rise will connect up to 30 properties in the E. Bennett area to the Nevada Irrigation District potable water system, if those property owners agree to allow the connection. Rise will construct an extension of the NID potable water system to 26 properties while 4 properties already have NID service available at their property line. These connections will be made before mine dewatering commences. The entire cost of this connection will be paid by Rise and include:

- 1) Engineering and Permitting
- 2) Construction of main water piping
- 3) Construction of service lateral piping
- 4) Installation of water meters at property line
- 5) Connection of water meters to house (If requested and authorized by property owner)
- 6) Closure of domestic water wells (If requested and authorized by property owner)
- 7) NID installation and capacity charges.

The value per property owner, including capacity charges, is estimated at ~\$85,000. Property owners will be consulted on design of service, lateral piping, meter locations, and connections to residences. Rise will provide for installation and capacity charges for 5/8" meters. The design and construction will be done to NID standards and approved by NID.

Rise will close property owners' wells, using certified well drillers and under Nevada County regulations, if requested by the landowner at the time of NID connection and service to their properties. It is unlikely that the reduction in water column of wells in the E. Bennett area will make these wells unusable. Therefore, property owners may decide to retain and continue using their water wells. Rise will not close domestic water wells in the future if property owners decline this closure at the time of NID potable water connection. If property owners decide to both retain their well and connect to the NID system, Rise will install a Double Check Valve (DCV), at the time of NID connection and service, in compliance with the

requirements of NID Water Service Regulations. Monthly fees for the DCV will be the responsibility of the property owner.

NID Water Charges – E. Bennett Area

Rise will pay for NID water charges for ongoing water supply for property owners who are currently using well water and decide to switch to NID potable water. This reimbursement would include monthly fixed service charges for a 5/8" connection and volumetric ~~service~~service charges for use of up to 400 gallons per day. Rise would reimburse this cost to property owners annually. Assuming the use of 400 gallons per day and current water rates, this reimbursement would be approximately \$870 per year per property owner.

Property owners of vacant land or who are currently supplied by NID would not be eligible for reimbursement of NID water charges. Existing NID customers will be confirmed through consultation with NID during the design process.

Reimbursement for water charges will continue until the sooner of the following occurs:

- 1) The property is sold by the owner after the NID connection is accomplished and paid for by Rise.
- 2) The property is annexed into the City of Grass Valley.

Figure 1 and Table ~~12~~ show properties in the E. Bennett area to be provided NID potable water service.

Figure 1 – Properties in E. Bennett Area to be serviced by NID potable water

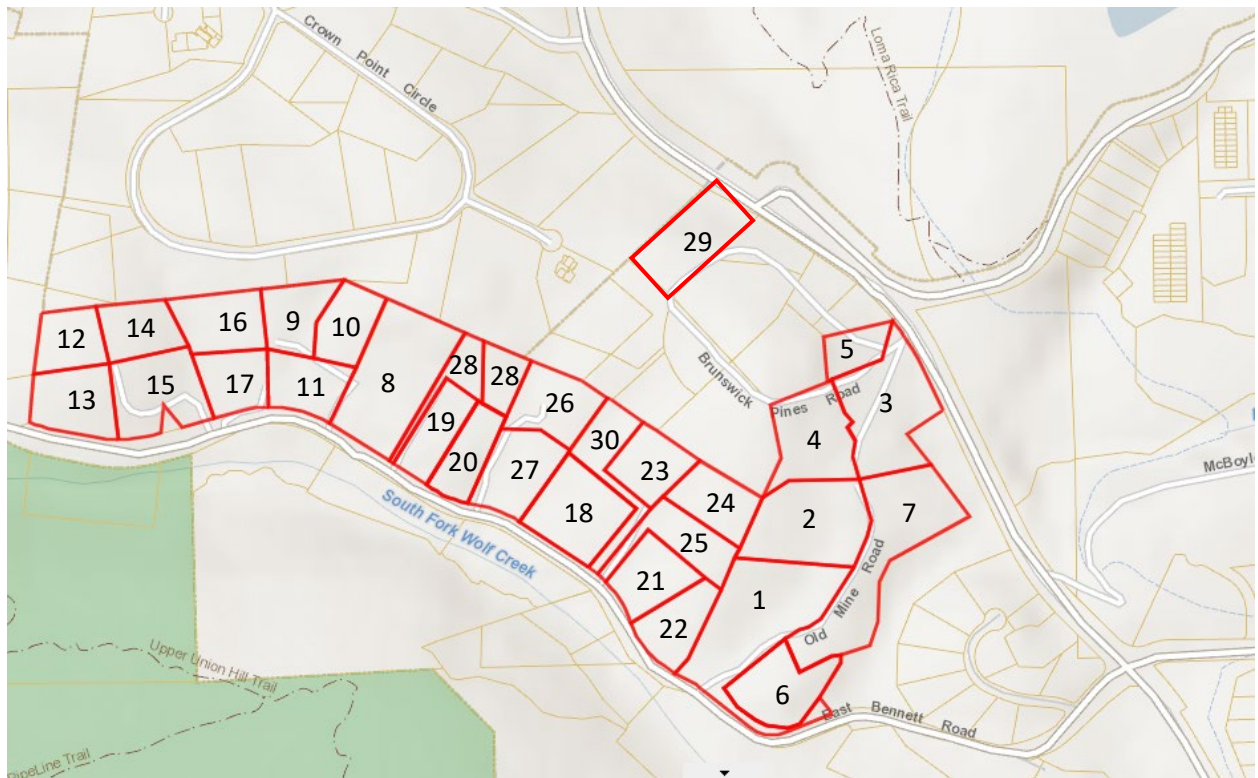


Table 12 – Properties in E. Bennett Area to be serviced by NID potable water

#	APN	Site Address	Notes
Eligible for NID water cost reimbursement			
1	009-581-016	12477 OLD MINE ROAD	
2	009-581-017	12401 OLD MINE ROAD	
3	009-581-018	12202 BET ROAD	Existing NID service at property line
4	009-581-019	12305 BET ROAD	Existing NID service at property line
5	009-581-020	11844 BRUNSWICK PINES ROAD	Existing NID service at property line. May be existing NID Customer
6	009-581-045	12368 EAST BENNETT ROAD	
7	009-581-053	12448 OLD MINE ROAD	
8	009-590-005	11918 EAST BENNETT ROAD	
9	009-590-006	11882 AMETHYST COURT	
10	009-590-007	12047 AMETHYST COURT	
11	009-590-008	11866 EAST BENNETT ROAD	
12	009-590-009	12052 CORDELL COURT	
13	009-590-010	12034 CORDELL COURT	
14	009-590-011	12051 CORDELL COURT	
15	009-590-012	11780 EAST BENNETT ROAD	
16	009-590-013	11828 EAST BENNETT ROAD	
17	009-590-014	11818 EAST BENNETT ROAD	
18	009-600-004	12110 EAST BENNETT ROAD	
19	009-600-008	11966 EAST BENNETT ROAD	
20	009-600-009	12000 EAST BENNETT ROAD	
21	009-600-010	12176 EAST BENNETT ROAD	
22	009-600-011	12228 EAST BENNETT ROAD	
23	009-600-013	14036 DIAMOND COURT	
24	009-600-014	14035 DIAMOND COURT	
25	009-600-015	14069 DIAMOND COURT	
26	009-600-016	13997 EMERALD COURT	
27	009-600-017	12040 EAST BENNETT ROAD	
28	009-600-018/019	11948 EAST BENNETT ROAD	
29	009-581-026	11693 BRUNSWICK PINES ROAD	Existing NID service at property line
Not Eligible for NID water cost reimbursement			
30	009-600-012	14070 DIAMOND COURT	Vacant

Performance Standard Notes and References

The single-family home unit demand factor of 0.36 acre-feet per year per connection is used by NID for projecting demands. (Page 18 of the NID 2020 Urban Water Management Plan). This is equivalent to 321 gallons per day. The performance standard for the Well Mitigation Plan is 400 gallons per day or approximately 25% more than NID's estimate of demand for a single-family home.

The multi-family home unit demand factor of 2.82 acre-feet per year per four-plex connection is used by NID for projecting demands. (Page 18 of the NID 2020 Urban Water Management Plan). This is equivalent to 630 gallons per day per suite. The performance standard for the Well Mitigation Plan is 630 gallons per day per suite of a multifamily home and equal to NID's estimate of demand for multi-family homes.

The commercial unit demand factor of 1.06 acre-feet per year per connection is used by NID for projecting demands. (Page 18 of the NID 2020 Urban Water Management Plan). This is equivalent to 946 gallons per day per connection. There are industrial zoned properties in the project area that utilize wells (the East Bennett Industrial Area). The performance standard for the Well Mitigation Plan is 950 gallons per day per commercial unit connection and equal to NID's estimate of demand for industry

The industrial unit demand factor of 4.70 acre-feet per year per connection is used by NID for projecting demands. (Page 19 of the NID 2020 Urban Water Management Plan). This is equivalent to 4,194 gallons per day per connection. There are industrial zoned properties in the project area that utilize wells (the East Bennett Industrial Area). The performance standard for the Well Mitigation Plan is 4,200 gallons per day per industrial unit connection and equal to NID's estimate of demand for industry.

The maximum monthly irrigation for crops during a dry year is for Apple, Pear, Cherry, Plum, and Prune with 9.7 inches of irrigation in July (Page 346 of appendix to NID 2020 Agricultural Water Management Plan). This is equivalent to 8,700 gallons per day. The performance standard for the Well Mitigation Plan for crop and pasture irrigation is 8,700 gallons per day per and equal to NID's estimate of maximum demand for crop and pasture irrigation.

The peak water demand for the water supply (gallons per minute) will be determined based on the Water Supply Fixture Units (WSFU) at the property in accordance Appendix A or using the Peak Water Demand Calculator in Appendix M of the California Plumbing Code. A single-family home would typically require a water supply capable of approximately 10 gallons per minute. However, the instantaneous demand is dependant on the type and number of fixtures and must be determined on a case-by-case basis.

<https://www.iapmo.org/water-demand-calculator/>

ETc Table for Irrigation District Water Balances Zone 13 Monthly Evapotranspiration - Surface Irrigation Dry Year

	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	<u>Total</u>	<u>Max</u> <u>monthly</u>	<u>Max daily</u>
	<u>inches</u>														<u>gallons</u>
<u>Precipitation</u>	<u>4.7</u>	<u>7.7</u>	<u>2.0</u>	<u>1.6</u>	<u>0.8</u>	<u>0.4</u>	<u>0.0</u>	<u>0.2</u>	<u>0.0</u>	<u>1.6</u>	<u>2.9</u>	<u>0.5</u>	<u>22.2</u>	<u>7.7</u>	<u>6,910</u>
<u>Grass Reference ETo</u>	<u>1.2</u>	<u>1.5</u>	<u>3.1</u>	<u>4.7</u>	<u>6.8</u>	<u>7.6</u>	<u>9.0</u>	<u>7.2</u>	<u>6.0</u>	<u>4.1</u>	<u>1.8</u>	<u>1.3</u>	<u>54.2</u>	<u>9.0</u>	<u>8,040</u>
<u>Apple, Pear, Cherry, Plum and Prune</u>	<u>0.6</u>	<u>1.6</u>	<u>2.0</u>	<u>2.2</u>	<u>3.6</u>	<u>6.1</u>	<u>8.0</u>	<u>6.2</u>	<u>5.0</u>	<u>3.5</u>	<u>1.6</u>	<u>0.9</u>	<u>41.2</u>	<u>8.0</u>	<u>7,100</u>
<u>Apples, Plums, Cherries etc w/covercrop</u>	<u>1.3</u>	<u>1.6</u>	<u>3.3</u>	<u>4.4</u>	<u>6.4</u>	<u>8.1</u>	<u>9.7</u>	<u>7.7</u>	<u>6.4</u>	<u>3.9</u>	<u>2.0</u>	<u>1.4</u>	<u>56.2</u>	<u>9.7</u>	<u>8,700</u>
<u>Almonds</u>	<u>0.6</u>	<u>1.6</u>	<u>2.0</u>	<u>2.1</u>	<u>3.2</u>	<u>5.5</u>	<u>7.4</u>	<u>6.0</u>	<u>5.0</u>	<u>3.4</u>	<u>1.9</u>	<u>0.9</u>	<u>39.6</u>	<u>7.4</u>	<u>6,640</u>
<u>Almonds w/covercrop</u>	<u>1.2</u>	<u>1.6</u>	<u>3.0</u>	<u>3.8</u>	<u>5.5</u>	<u>6.9</u>	<u>8.9</u>	<u>7.1</u>	<u>5.8</u>	<u>3.8</u>	<u>2.0</u>	<u>1.3</u>	<u>50.8</u>	<u>8.9</u>	<u>7,920</u>
<u>Immature Almonds</u>	<u>0.6</u>	<u>1.6</u>	<u>1.9</u>	<u>1.9</u>	<u>2.3</u>	<u>4.2</u>	<u>5.2</u>	<u>4.3</u>	<u>3.7</u>	<u>2.5</u>	<u>1.8</u>	<u>0.9</u>	<u>30.8</u>	<u>5.2</u>	<u>4,660</u>
<u>Walnuts</u>	<u>0.6</u>	<u>1.6</u>	<u>1.9</u>	<u>2.3</u>	<u>3.2</u>	<u>5.5</u>	<u>8.9</u>	<u>7.2</u>	<u>5.7</u>	<u>3.5</u>	<u>1.9</u>	<u>0.9</u>	<u>43.2</u>	<u>8.9</u>	<u>7,920</u>
<u>Pistachio</u>	<u>0.6</u>	<u>1.6</u>	<u>1.7</u>	<u>2.2</u>	<u>2.6</u>	<u>5.1</u>	<u>8.5</u>	<u>7.2</u>	<u>5.8</u>	<u>3.6</u>	<u>1.9</u>	<u>0.9</u>	<u>41.7</u>	<u>8.5</u>	<u>7,590</u>
<u>Pistachio w/ covercrop</u>	<u>1.2</u>	<u>1.6</u>	<u>3.0</u>	<u>3.8</u>	<u>5.1</u>	<u>6.9</u>	<u>9.5</u>	<u>7.8</u>	<u>6.5</u>	<u>4.3</u>	<u>2.0</u>	<u>1.4</u>	<u>52.9</u>	<u>9.5</u>	<u>8,450</u>
<u>Immature Pistachio</u>	<u>0.6</u>	<u>1.6</u>	<u>1.7</u>	<u>1.8</u>	<u>1.7</u>	<u>3.6</u>	<u>5.7</u>	<u>4.9</u>	<u>3.9</u>	<u>2.6</u>	<u>1.7</u>	<u>0.9</u>	<u>30.7</u>	<u>5.7</u>	<u>5,050</u>
<u>Misc. Deciduous</u>	<u>0.6</u>	<u>1.6</u>	<u>1.7</u>	<u>2.0</u>	<u>2.4</u>	<u>4.9</u>	<u>7.7</u>	<u>6.3</u>	<u>5.2</u>	<u>3.5</u>	<u>1.7</u>	<u>0.9</u>	<u>38.3</u>	<u>7.7</u>	<u>6,880</u>
<u>Grain and Grain Hay</u>	<u>0.8</u>	<u>1.6</u>	<u>3.3</u>	<u>4.9</u>	<u>3.3</u>	<u>0.3</u>	<u>0.0</u>	<u>0.2</u>	<u>0.0</u>	<u>0.6</u>	<u>1.5</u>	<u>1.0</u>	<u>17.5</u>	<u>4.9</u>	<u>4,340</u>
<u>Rice</u>	<u>1.0</u>	<u>1.2</u>	<u>0.4</u>	<u>1.4</u>	<u>6.3</u>	<u>7.6</u>	<u>9.4</u>	<u>8.6</u>	<u>2.5</u>	<u>1.0</u>	<u>0.7</u>	<u>1.0</u>	<u>40.9</u>	<u>9.4</u>	<u>8,420</u>
<u>Corn and Grain Sorghum</u>	<u>0.6</u>	<u>1.6</u>	<u>1.8</u>	<u>1.9</u>	<u>3.1</u>	<u>7.1</u>	<u>8.9</u>	<u>6.3</u>	<u>0.8</u>	<u>0.6</u>	<u>1.5</u>	<u>0.9</u>	<u>35.1</u>	<u>8.9</u>	<u>7,990</u>
<u>Misc. field crops</u>	<u>0.6</u>	<u>1.6</u>	<u>1.8</u>	<u>1.9</u>	<u>3.0</u>	<u>6.8</u>	<u>8.1</u>	<u>2.6</u>	<u>0.0</u>	<u>0.6</u>	<u>1.5</u>	<u>0.9</u>	<u>29.3</u>	<u>8.1</u>	<u>7,220</u>
<u>Alfalfa Hay and Clover</u>	<u>1.2</u>	<u>1.6</u>	<u>3.2</u>	<u>5.0</u>	<u>6.1</u>	<u>6.7</u>	<u>7.4</u>	<u>6.4</u>	<u>5.0</u>	<u>2.1</u>	<u>1.9</u>	<u>1.4</u>	<u>48.0</u>	<u>7.4</u>	<u>6,640</u>
<u>Pasture and Misc. Grasses</u>	<u>0.6</u>	<u>1.6</u>	<u>2.7</u>	<u>4.2</u>	<u>6.4</u>	<u>7.1</u>	<u>8.3</u>	<u>6.7</u>	<u>5.4</u>	<u>3.4</u>	<u>1.8</u>	<u>0.9</u>	<u>49.0</u>	<u>8.3</u>	<u>7,400</u>
<u>Small Vegetables</u>	<u>1.0</u>	<u>1.6</u>	<u>3.0</u>	<u>1.7</u>	<u>0.6</u>	<u>0.3</u>	<u>0.0</u>	<u>1.1</u>	<u>1.3</u>	<u>1.6</u>	<u>1.8</u>	<u>1.3</u>	<u>15.3</u>	<u>3.0</u>	<u>2,680</u>
<u>Tomatoes and Peppers</u>	<u>0.6</u>	<u>1.6</u>	<u>2.0</u>	<u>2.0</u>	<u>4.2</u>	<u>7.5</u>	<u>7.6</u>	<u>0.7</u>	<u>0.0</u>	<u>0.6</u>	<u>1.5</u>	<u>0.9</u>	<u>29.1</u>	<u>7.6</u>	<u>6,740</u>
<u>Strawberries</u>	<u>0.6</u>	<u>1.6</u>	<u>1.8</u>	<u>1.9</u>	<u>3.0</u>	<u>6.8</u>	<u>8.1</u>	<u>2.6</u>	<u>0.0</u>	<u>0.6</u>	<u>1.5</u>	<u>0.9</u>	<u>29.3</u>	<u>8.1</u>	<u>7,220</u>
<u>Flowers, Nursery and Christmas Tree</u>	<u>0.6</u>	<u>1.6</u>	<u>1.7</u>	<u>2.0</u>	<u>2.4</u>	<u>4.9</u>	<u>7.7</u>	<u>6.3</u>	<u>5.2</u>	<u>3.5</u>	<u>1.7</u>	<u>0.9</u>	<u>38.3</u>	<u>7.7</u>	<u>6,880</u>
<u>Misc Subtropical</u>	<u>0.6</u>	<u>1.6</u>	<u>1.7</u>	<u>2.0</u>	<u>2.4</u>	<u>4.9</u>	<u>7.7</u>	<u>6.3</u>	<u>5.2</u>	<u>3.5</u>	<u>1.7</u>	<u>0.9</u>	<u>38.3</u>	<u>7.7</u>	<u>6,880</u>
<u>Grape Vines with 80% canopy</u>	<u>0.6</u>	<u>1.6</u>	<u>2.0</u>	<u>2.4</u>	<u>4.2</u>	<u>5.5</u>	<u>6.1</u>	<u>4.7</u>	<u>2.7</u>	<u>0.6</u>	<u>1.5</u>	<u>0.9</u>	<u>32.7</u>	<u>6.1</u>	<u>5,400</u>

<u>Grape Vines with cover crop (80% canopy)</u>	<u>1.1</u>	<u>1.6</u>	<u>2.8</u>	<u>3.6</u>	<u>5.0</u>	<u>6.3</u>	<u>7.1</u>	<u>5.6</u>	<u>3.3</u>	<u>1.9</u>	<u>1.8</u>	<u>1.2</u>	<u>41.2</u>					<u>7.1</u>	<u>6,320</u>
<u>Immature Grapes Vines with 50% canopy</u>	<u>0.6</u>	<u>1.6</u>	<u>1.9</u>	<u>2.0</u>	<u>3.0</u>	<u>4.4</u>	<u>4.6</u>	<u>3.5</u>	<u>1.9</u>	<u>0.7</u>	<u>1.5</u>	<u>0.9</u>	<u>26.4</u>					<u>4.6</u>	<u>4,070</u>
<u>Cannabis</u>	<u>0.6</u>	<u>1.6</u>	<u>1.7</u>	<u>2.0</u>	<u>2.4</u>	<u>4.9</u>	<u>7.7</u>	<u>6.3</u>	<u>5.2</u>	<u>3.5</u>	<u>1.7</u>	<u>0.9</u>	<u>38.3</u>					<u>7.7</u>	<u>6,880</u>
<u>Idle</u>	<u>0.6</u>	<u>1.6</u>	<u>1.7</u>	<u>1.5</u>	<u>0.6</u>	<u>0.3</u>	<u>0.0</u>	<u>0.2</u>	<u>0.0</u>	<u>0.6</u>	<u>1.5</u>	<u>0.9</u>	<u>9.5</u>					<u>1.7</u>	<u>1,530</u>

Appendix E

Rise Grass Valley Inc.
Idaho Maryland Mine Project
Nevada County, California

Domestic Well Monitoring Program

July 28th, 2022

Summary

A number of property owners in the area surrounding the Idaho-Maryland Mine Project have expressed concerns about the Project's impact on their domestic wells.

A Groundwater Monitoring Plan (GMP) is required for the project under Mitigation Measure 4.8-2(a). As described on page 4.8-66 of the DEIR the measurements of water levels in the monitoring wells can be used to verify the groundwater drawdowns as dewatering progresses to provide sufficient time to predict adverse impacts to domestic wells before they occur so that appropriate mitigation measures can be implemented. Monitoring wells will be specifically designed and constructed for monitoring purposes. Use of monitoring wells is preferable to monitoring of domestic wells, because as discussed on pages 2-3 of the Groundwater Monitoring Plan (Appendix K.8 of the EIR), assessment of impacts of water-level changes in domestic wells because of uncertainties in the design, construction, and operating conditions in domestic wells. The monitoring wells will be representative of the surrounding domestic water wells because they will be constructed at representative locations and depths.

To provide property owners additional assurance regarding impacts of mine dewatering, Rise proposes that monitoring of domestic water wells will be conducted upon request for property owners within or nearby the predicted 1-ft drawdown isopleth of the project. These 378 properties are listed in Table 1 and shown in Figure 1 below. Some of these properties do not have a domestic water well but to ensure that well owners are not excluded all owners will be contacted by the Company. Certain areas, including the City of Grass Valley, Loma Rica Industrial Area, Tim Burr Lane / Star Drive, Cedar Ridge, The Cedars, New Brunswick Court, and Brunswick Pines are known to be serviced by NID potable water as shown in Figure 2. Property owners in these areas will not be contacted.

The following measures will be taken for the Domestic Well Monitoring Program, and shall be included as a condition of approval for the Project:

- 1) Property owner's shown in Table 1 will be contacted at least three months prior to commencement of the required 12-month groundwater monitoring period and the company will request permission to inspect and install monitoring equipment at the well.
- 2) Property owners who respond and grant permission for well monitoring will be added to the Domestic Well Monitoring Program.
- 3) The well will be inspected to determine the characteristics of the well, including location, well depth, casing and screen depth, static water level, and well yield. A water quality sample will be taken during the inspection.
- 4) Instrumentation will be installed to measure water level on a periodic basis (such as 1 or 4 hours) and pumping rates (to correlate water level with the wells use). Data from the instruments will be transmitted by telemetry.

- 5) Water level data will be collected for at least 12 months prior to the commencement of mine dewatering and will continue throughout the period of initial mine dewatering (dewatering of the historic mine workings) and for at least the first 5 years of operations.
- 6) All data collected and reports generated will be provided to the property owner and to Nevada County.
- 7) All costs of well monitoring will be paid by the company and well monitoring equipment will remain the property of the company. A property owner may terminate well monitoring upon request and the company will remove any installed monitoring equipment.
- 8) For any well that is monitored under the Domestic Well Monitoring Program, monitoring results will be used to supplement the analysis from the Groundwater Monitoring Plan to determine whether an individual groundwater well is expected to be impacted or has been impacted by dewatering operations, using the threshold set forth in the Well Mitigation Plan.

Figure 1 – Properties Eligible for Domestic Well Monitoring

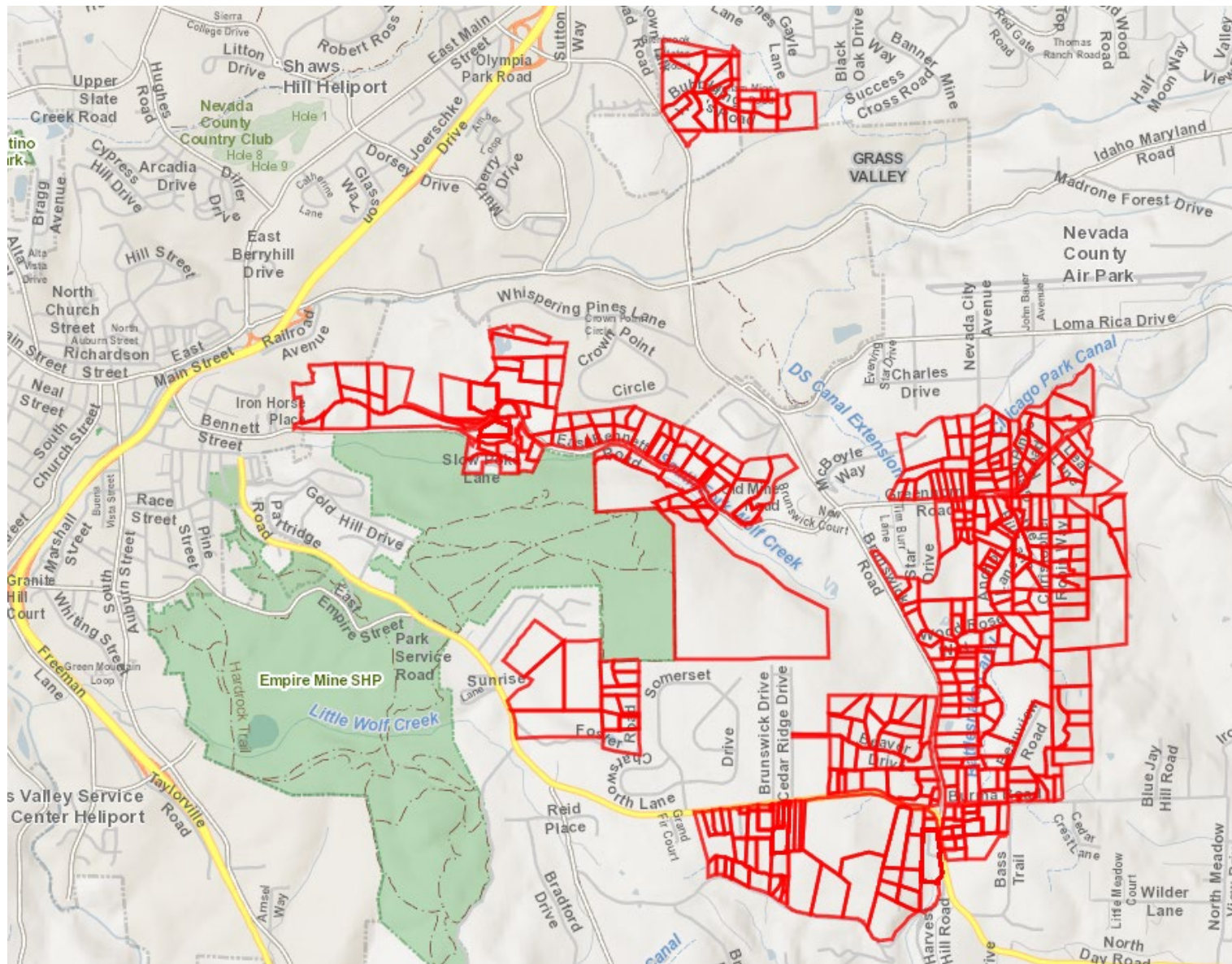


Figure 2 – Areas known to be supplied by NID Potable Water

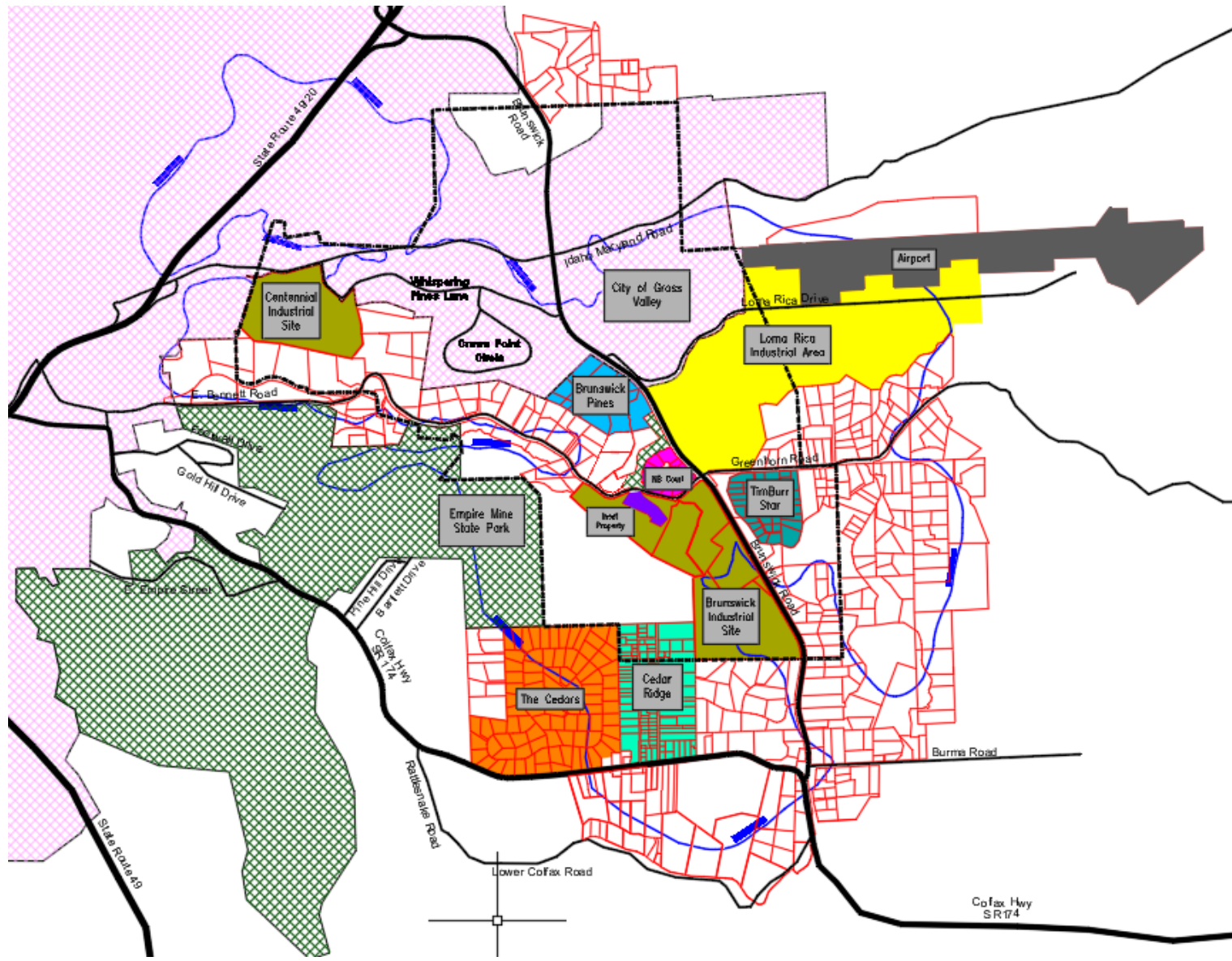


Table 1 – Properties Eligible for Domestic Well Monitoring

APN	Site Address
006-391-005	12803 MCBOYLE WAY
006-391-006	13935 DOWNWIND COURT
006-391-007	13993 DOWNWIND COURT
006-391-008	14020 DOWNWIND COURT
006-391-009	13936 DOWNWIND COURT
006-391-012	12966 GREENHORN ROAD
006-391-013	12990 GREENHORN ROAD
006-391-014	13010 GREENHORN ROAD
006-391-015	13034 GREENHORN ROAD
006-391-016	13058 GREENHORN ROAD
006-391-022	12920 GREENHORN ROAD
006-391-023	12890 GREENHORN ROAD
006-391-025	13072 GREENHORN ROAD
006-391-032	12894 GREENHORN ROAD
006-391-033	12900 GREENHORN ROAD
006-441-008	13352 LOWER ANCHOR LANE
006-441-009	14149 CHRISTOPHER ROBIN WAY
006-441-010	13289 LOWER ANCHOR LANE
006-441-011	14095 CHRISTOPHER ROBIN WAY
006-441-012	14107 CHRISTOPHER ROBIN WAY
006-441-013	14027 CHRISTOPHER ROBIN WAY
006-441-014	13186 OMEGA COURT
006-441-015	13173 OMEGA COURT
006-441-016	13883 CHRISTOPHER ROBIN WAY
006-441-017	13831 CHRISTOPHER ROBIN WAY
006-441-018	13793 CHRISTOPHER ROBIN WAY
006-441-020	12748 THE HOLLOW
006-441-021	13224 OMEGA COURT
006-441-022	13217 OMEGA COURT
006-441-023	13907 CHRISTOPHER ROBIN WAY
006-441-033	12440 THE HOLLOW
006-461-038	13420 WOOD ROSE WAY
006-461-040	10996 SUNDOWN PLACE
006-461-041	11026 SUNDOWN PLACE
006-461-042	11030 SUNDOWN PLACE
006-461-043	11102 SUNDOWN PLACE
006-461-047	11202 SUNDOWN PLACE
006-471-001	12904 BRUNSWICK ROAD
006-471-003	12942 BRUNSWICK ROAD
006-471-004	12972 BRUNSWICK ROAD

006-471-005	15033 TOWLE LANE
006-471-006	12628 TOWLE COURT
006-471-007	12635 TOWLE COURT
006-471-008	12629 TOWLE COURT
006-471-009	13018 BRUNSWICK ROAD
006-471-010	13064 BRUNSWICK ROAD
006-471-011	11026 BEAUVIEW ROAD
006-471-012	14911 TOWLE LANE
006-471-013	12606 TOWLE COURT
006-481-001	13110 BRUNSWICK ROAD
006-481-002	13148 BRUNSWICK ROAD
006-481-003	13152 BRUNSWICK ROAD
006-481-004	13192 BRUNSWICK ROAD
006-481-005	12524 BURMA ROAD
006-481-006	12552 BURMA ROAD
006-481-007	12590 BURMA ROAD
006-481-008	12666 BURMA ROAD
006-481-009	11316 BEAUVIEW ROAD
006-481-010	11306 BEAUVIEW ROAD
006-481-011	11246 BEAUVIEW ROAD
006-481-012	11124 BEAUVIEW ROAD
006-481-013	11147 BEAUVIEW ROAD
006-481-014	11311 BEAUVIEW ROAD
006-481-015	11321 BEAUVIEW ROAD
006-481-016	12728 BURMA ROAD
006-481-017	12764 BURMA ROAD
006-481-018	12832 BURMA OAKS ROAD
006-481-019	12856 BURMA OAKS ROAD
006-481-020	12886 BURMA OAKS ROAD
006-481-021	13207 BURMA OAKS ROAD
006-700-040	14285 HOLLYDALE ROAD
006-700-071	12604 BRUNSWICK ROAD
006-700-072	12608 BRUNSWICK ROAD
006-720-033	12967 GREENHORN ROAD
006-720-034	13009 GREENHORN ROAD
006-720-035	13023 GREENHORN ROAD
006-720-036	13049 GREENHORN ROAD
006-720-037	13015 GREENHORN ROAD
006-720-038	14240 HOLLYDALE ROAD
006-720-039	14254 HOLLYDALE ROAD
006-720-040	13030 HOLLY BRANCH COURT
006-720-041	13025 HOLLY BRANCH COURT
006-720-042	13033 HOLLY BRANCH COURT

006-720-043	14278 HOLLYDALE ROAD
006-790-001	13103 GREENHORN ROAD
006-790-002	14277 HOLLYDALE ROAD
006-790-003	13139 GREENHORN ROAD
006-790-005	13140 LOWER ANCHOR LANE
006-790-008	14440 ANCHOR LANE
006-790-017	14458 ANCHOR LANE
006-790-020	14384 ANCHOR LANE
006-790-021	14232 ANCHOR LANE
006-790-022	13203 GREENHORN ROAD
006-790-023	14327 LITTLE HILL LANE
006-790-025	14592 LITTLE HILL LANE
006-790-026	14551 LITTLE HILL LANE
006-790-027	14554 LITTLE HILL LANE
006-790-030	14471 ANCHOR LANE
006-790-032	14325 ANCHOR LANE
006-790-034	14550 ANCHOR LANE
006-790-036	14395 LITTLE HILL LANE
006-790-037	14451 LITTLE HILL LANE
006-790-038	14581 ANCHOR LANE
006-790-039	14619 ANCHOR LANE
006-790-040	14528 LITTLE HILL LANE
006-790-041	14478 LITTLE HILL LANE
006-790-042	14349 ANCHOR LANE
006-790-043	14367 ANCHOR LANE
006-790-045	14346 ANCHOR LANE
006-790-046	13193 LOWER ANCHOR LANE
006-790-047	13231 LOWER ANCHOR LANE
006-790-048	14285 ANCHOR LANE
006-790-050	14330 ANCHOR LANE
006-790-051	14418 ANCHOR LANE
006-790-053	14482 ANCHOR LANE
006-800-001	12616 BRUNSWICK ROAD
006-800-002	12684 BRUNSWICK ROAD
006-800-003	12730 BRUNSWICK ROAD
006-800-005	14744 TOWLE LANE
006-800-006	14794 TOWLE LANE
006-800-007	14793 TOWLE LANE
006-800-008	14749 TOWLE LANE
006-800-009	14719 TOWLE LANE
006-800-010	14689 TOWLE LANE
006-800-011	12980 WOOD ROSE WAY
006-800-016	13183 WOOD ROSE WAY

006-800-017	13320 WOOD ROSE WAY
006-800-018	13326 WOOD ROSE WAY
006-800-022	12768 BRUNSWICK ROAD
006-800-023	14712 TOWLE LANE
006-800-024	12999 WOOD ROSE WAY
006-800-026	13041 WOOD ROSE WAY
006-800-027	13052 WOOD ROSE WAY
006-800-028	13034 WOOD ROSE WAY
006-800-029	13018 WOOD ROSE WAY
006-800-030	13120 WOOD ROSE WAY
006-800-031	13129 WOOD ROSE WAY
006-800-032	13171 WOOD ROSE WAY
006-800-033	13259 WOOD ROSE WAY
006-800-034	10830 LANTANA LANE
006-800-035	10856 LANTANA LANE
006-820-004	14093 GLENN PINES ROAD
006-820-005	14138 GLENN PINES ROAD
006-820-006	13399 NEVADA CITY AVENUE
006-820-007	13966 LIQUIDAMBAR LANE
006-820-008	14006 LIQUIDAMBAR LANE
006-820-009	14054 LIQUIDAMBAR LANE
006-820-010	14096 LIQUIDAMBAR LANE
006-820-011	14130 LIQUIDAMBAR LANE
006-820-012	14168 LIQUIDAMBAR LANE
006-820-013	13198 GREENHORN ROAD
006-820-014	14137 LIQUIDAMBAR LANE
006-820-015	14107 LIQUIDAMBAR LANE
006-820-016	14087 LIQUIDAMBAR LANE
006-820-017	14119 LIQUIDAMBAR LANE
006-820-019	14076 GLENN PINES ROAD
006-820-020	14046 GLENN PINES ROAD
006-820-022	13935 GLENN PINES ROAD
006-820-023	13448 GREENHORN ROAD
006-820-024	13530 GREENHORN ROAD
006-820-029	13549 GREENHORN ROAD
006-820-030	13505 GREENHORN ROAD
006-820-034	13413 GREENHORN ROAD
006-820-035	13315 GREENHORN ROAD
006-820-036	13226 GREENHORN ROAD
006-820-037	13227 GREENHORN ROAD
006-820-039	13203 GREENHORN ROAD
006-820-042	13974 GLENN PINES ROAD
006-820-043	13955 GLENN PINES ROAD

006-820-045	14108 YAMA WAY
006-820-046	12681 LEAF LANE
006-820-047	12719 LEAF LANE
006-820-048	12757 LEAF LANE
006-820-049	12975 LEAF LANE
006-820-052	14065 GLENN PINES ROAD
006-820-053	14023 GLENN PINES ROAD
006-820-056	13564 GREENHORN ROAD
006-820-057	13949 LIQUIDAMBAR LANE
006-820-059	14027 LIQUIDAMBAR LANE
006-830-068	12469 THE HOLLOW
006-890-001	12933 ELK LANE
006-890-002	12955 ELK LANE
006-890-003	12966 MINK COURT
006-890-004	12940 MINK COURT
006-890-005	12951 MINK COURT
006-890-006	12702 BEAVER DRIVE
006-890-007	12372 BEAVER DRIVE
006-890-008	12436 BEAVER DRIVE
006-890-009	13010 MINK COURT
006-890-010	12975 MINK COURT
006-890-011	12540 BEAVER DRIVE
006-890-012	12640 BEAVER DRIVE
006-890-013	12353 BEAVER DRIVE
006-890-014	12405 BEAVER DRIVE
006-890-015	12467 BEAVER DRIVE
006-890-016	12545 BEAVER DRIVE
006-890-017	12645 BEAVER DRIVE
006-890-018	12998 STATE HIGHWAY 174
006-890-019	13024 STATE HIGHWAY 174
006-890-020	13064 STATE HIGHWAY 174
006-890-021	13136 STATE HIGHWAY 174
006-890-022	13194 STATE HIGHWAY 174
006-890-023	13177 BRUNSWICK ROAD
006-890-024	13215 BRUNSWICK ROAD
006-890-025	13253 BRUNSWICK ROAD
006-890-026	13270 STATE HIGHWAY 174
006-920-013	13634 VINCENT COURT
006-920-014	13636 VINCENT COURT
009-320-001	11431 EAST BENNETT ROAD
009-320-003	11889 SLOW POKE LANE
009-320-012	11497 EAST BENNETT ROAD
009-320-013	11343 LAVA ROCK AVENUE

009-320-024	11273 LAVA ROCK AVENUE
009-320-025	11773 SLOW POKE LANE
009-320-027	11565 EAST BENNETT ROAD
009-320-028	11613 EAST BENNETT ROAD
009-320-029	11527 EAST BENNETT ROAD
009-320-030	10423 EAST BENNETT ROAD
009-320-031	11337 EAST BENNETT ROAD
009-320-032	11317 EAST BENNETT ROAD
009-320-033	11269 EAST BENNETT ROAD
009-320-035	11752 EAST BENNETT ROAD
009-560-004	10662 EAST BENNETT ROAD
009-560-005	10780 EAST BENNETT ROAD
009-560-010	10966 EAST BENNETT ROAD
009-560-013	11612 EAST BENNETT ROAD
009-560-014	11542 EAST BENNETT ROAD
009-560-016	11452 EAST BENNETT ROAD
009-560-018	N/A
009-560-019	N/A
009-560-029	N/A
009-560-030	N/A
009-560-032	N/A
009-560-033	N/A
009-560-034	N/A
009-560-035	N/A
009-560-037	N/A
009-560-038	N/A
009-560-039	N/A
009-560-045	11454 EAST BENNETT ROAD
009-560-046	11336 EAST BENNETT ROAD
009-560-047	11352 EAST BENNETT ROAD
009-581-016	12477 OLD MINE ROAD
009-581-017	12401 OLD MINE ROAD
009-581-045	12504 OLD MINE ROAD
009-581-053	12448 OLD MINE ROAD
009-590-005	11918 EAST BENNETT ROAD
009-590-006	11882 AMETHYST COURT
009-590-007	12047 AMETHYST COURT
009-590-008	11866 EAST BENNETT ROAD
009-590-009	12052 CORDELL COURT
009-590-010	12034 CORDELL COURT
009-590-011	12051 CORDELL COURT
009-590-012	11780 EAST BENNETT ROAD
009-590-013	11828 EAST BENNETT ROAD

009-590-014	11818 EAST BENNETT ROAD
009-600-004	12108 EAST BENNETT ROAD
009-600-008	11966 EAST BENNETT ROAD
009-600-009	12002 EAST BENNETT ROAD
009-600-010	12176 EAST BENNETT ROAD
009-600-011	12228 EAST BENNETT ROAD
009-600-012	14070 DIAMOND COURT
009-600-013	14036 DIAMOND COURT
009-600-014	14035 DIAMOND COURT
009-600-015	14069 DIAMOND COURT
009-600-016	13997 EMERALD COURT
009-600-017	12040 EAST BENNETT ROAD
009-600-018	11948 EAST BENNETT ROAD
009-600-019	11948 EAST BENNETT ROAD
009-600-024	11753 EAST BENNETT ROAD
009-600-026	12093 EAST BENNETT ROAD
009-600-027	12161 EAST BENNETT ROAD
009-600-028	12261 EAST BENNETT ROAD
009-600-029	12261 EAST BENNETT ROAD
009-600-030	12195 EAST BENNETT ROAD
009-600-031	12233 EAST BENNETT ROAD
009-600-032	N/A
009-600-033	11903 EAST BENNETT ROAD
009-630-008	10879 BARTLETT DRIVE
009-630-040	N/A
009-640-001	12716 FOSTER ROAD
009-640-002	12782 FOSTER ROAD
009-640-003	12764 FOSTER ROAD
009-640-005	12802 FOSTER ROAD
009-640-006	12866 FOSTER ROAD
009-640-007	12852 FOSTER ROAD
009-640-008	12870 FOSTER ROAD
009-640-009	12904 FOSTER ROAD
009-640-010	12960 FOSTER ROAD
009-640-019	11690 STATE HIGHWAY 174
009-640-020	11782 STATE HIGHWAY 174
009-640-028	11744 STATE HIGHWAY 174
009-680-051	N/A
009-680-052	N/A
012-010-004	11922 LOWER COLFAX ROAD
012-010-032	13460 NOEL LANE
012-010-034	11946 LOWER COLFAX ROAD
012-010-035	11938 LOWER COLFAX ROAD

012-010-036	13376 NOEL LANE
012-010-037	13377 NOEL LANE
012-010-038	13434 NOEL LANE
012-010-039	13435 NOEL LANE
012-010-042	13189 NOEL LANE
012-010-047	11900 LOWER COLFAX ROAD
012-010-048	11910 LOWER COLFAX ROAD
012-010-057	13196 NOEL LANE
012-010-059	13299 NOEL LANE
012-010-060	13071 STATE HIGHWAY 174
012-010-061	12018 LOWER COLFAX ROAD
012-010-062	12114 LOWER COLFAX ROAD
012-010-063	12218 LOWER COLFAX ROAD
012-010-066	12795 STATE HIGHWAY 174
012-010-067	12817 STATE HIGHWAY 174
012-010-068	12851 STATE HIGHWAY 174
012-010-069	12873 STATE HIGHWAY 174
012-010-070	12887 STATE HIGHWAY 174
012-010-071	12837 STATE HIGHWAY 174
012-020-003	12535 STATE HIGHWAY 174
012-020-005	12621 STATE HIGHWAY 174
012-020-007	13240 IRISH ACRES CIRCLE
012-020-009	12757 STATE HIGHWAY 174
012-020-010	12779 STATE HIGHWAY 174
012-020-011	13270 IRISH ACRES CIRCLE
012-020-017	11856 LOWER COLFAX ROAD
012-020-018	11810 LOWER COLFAX ROAD
012-020-019	11740 LOWER COLFAX ROAD
012-020-030	12685 STATE HIGHWAY 174
012-020-032	12647 STATE HIGHWAY 174
012-020-036	13350 HOBART LANE
012-020-037	13322 HOBART LANE
012-020-038	13288 HOBART LANE
012-020-041	12719 STATE HIGHWAY 174
012-020-042	12573 STATE HIGHWAY 174
012-020-043	12555 STATE HIGHWAY 174
012-020-044	11718 LOWER COLFAX ROAD
012-020-045	11696 LOWER COLFAX ROAD
012-040-004	12637 BURMA ROAD
012-040-005	12689 BURMA ROAD
012-040-015	13460 STATE HIGHWAY 174
012-040-019	13383 STATE HIGHWAY 174
012-040-020	13345 STATE HIGHWAY 174

012-040-024	12577 CEDAR CREST COURT
012-040-029	12615 CEDAR CREST COURT
012-040-030	12599 CEDAR CREST COURT
012-040-033	13420 STATE HIGHWAY 174
012-040-034	12560 LOS CEDROS LANE
012-040-035	12509 BURMA ROAD
012-040-036	12588 CEDAR CREST COURT
012-040-037	13328 BRUNSWICK ROAD
012-040-038	13458 STATE HIGHWAY 174
012-040-039	12567 LOS CEDROS LANE
012-040-060	13255 BRUNSWICK ROAD
012-040-065	13623 LAWS RANCH CROSS ROAD
012-040-067	13453 STATE HIGHWAY 174
012-040-082	13332 BASS TRAIL
035-430-021	10728 GLENBROOK ESTATES COURT
035-460-004	12125 CRYSTAL SPRINGS ROAD
035-460-017	N/A
035-460-018	12134 CRYSTAL SPRINGS ROAD
035-550-001	10833 BUBBLING WELLS ROAD
035-550-002	10871 BUBBLING WELLS ROAD
035-550-008	10682 BUBBLING WELLS ROAD
035-550-010	10750 BUBBLING WELLS ROAD
035-550-011	10706 BUBBLING WELLS ROAD
035-550-012	10826 BUBBLING WELLS ROAD
035-550-013	12178 BOREHAM MINE ROAD
035-550-014	10794 BUBBLING WELLS ROAD
035-550-016	10651 BUBBLING WELLS ROAD
035-550-017	10923 BUBBLING WELLS ROAD
035-550-018	10938 BUBBLING WELLS ROAD
035-550-019	10985 BUBBLING WELLS ROAD
035-550-020	11000 BUBBLING WELLS ROAD
035-550-021	11052 BUBBLING WELLS ROAD
035-550-022	11068 BUBBLING WELLS ROAD
035-550-023	10730 GLENBROOK ESTATES COURT
035-550-024	10763 BUBBLING WELLS ROAD
035-550-025	10741 BUBBLING WELLS ROAD
035-550-026	UNKNOWN ADDRESS