

**Ed Hagan
Ground Water Bureau Chief
Idaho Department Environmental Quality
Boise, Idaho**

May 5, 2021

Dear Mr. Hagan,

We want you and the Board of Environmental Quality to know that this letter will be featured on our community website [SafeWaterPlease.com](https://www.SafeWaterPlease.com) to publicly document how Greensferry Stakeholders have tried everything in our power **to reason with the State of Idaho and with Kootenai County for protection of the Greenferry Water and Sewer District drinking water wells. **All we've ever asked for is equal protection of these wells under Panhandle Health District's 5-acre rule**, which properly disallows high-density septic tank farms to be sited over the Rathdrum Prairie Aquifer in North Idaho.**

As you know, the Bayshore Estates developer has begun work on a Level 2 Nutrient-Pathogen Evaluation for the 28 acres adjacent to two Greenferry Water and Sewer District wells which are completed in the Spokane Valley-Rathdrum Prairie Aquifer (SVRP), according to current data from the Idaho Department of Water Resources (IDWR).

Needless to say, Greensferry Stakeholders are much concerned about the ultimate interpretation of these studies since the results can be construed in many different ways, depending on evaluation parameters and information selected (or omitted). We assume that since the engineer conducting these studies is paid by the developer, he will ultimately find that millions of annual gallons of untreated wastewater from 57 septic systems draining through sandy soil into our SVRP water table will present a minimal pollution hazard to the Greenferry wells, as per his NPE Level 1 study. We also expect that this conclusion would be accompanied by a long list of disclaimers, as per his NPE Level 1 study.

As to your conjecture (February 12, 2021) that Greenferry wells may be somewhat protected by a confining layer because static water level is higher than ground water level, our recent studies confirm that many other wells completed in the SVRP Aquifer north of the River also have the same situation. In the case of these other wells with high static water levels, the issue is assigned to artesian pressure, not to a confining layer. Since Greenferry well logs confirm that the wells are drilled through fine sand and cobble typical of the SVRP Aquifer, we believe that DEQ's speculation of a confined aquifer is not germane to our situation.

In the matter of our petition for recategorization of a portion of the SVRP Aquifer at risk, Greensferry stakeholders were greatly disappointed by the February 11, 2021 Zoom meeting with the Board of Environmental Quality. We felt that DEQ staff used smoke and mirrors to direct the Board away from our recategorization request. Recategorization of our portion of the Aquifer at risk would absolutely provide Greenferry Water and Sewer District wells with the same regulatory care and deference granted to all other North Idaho public water systems drawing from the SVRP Aquifer.

The Greenferry Water and Sewer District is now making preparations to drill a **third well**. This expensive new investment will be **yet another public resource at high risk from the proposed Bayshore Estates 57 septic tank systems** necessary for the small city (2.5 residents per household = at least 1425 additional toilet flushers) proposed for 28 acres.

In the end, should our governing entities favor developer profits over public safety and allow a huge and endless quantity of untreated drain field effluent to jeopardize **three Greenferry water wells which meet the definition of a sensitive resource**, this travesty will be known far and wide across the state. This sellout will be seen to be a blatant official rejection of state and local proclamations on the sanctity of the SVRP Aquifer and Idaho ground water. Worst of all, it will be an egregious confirmation that **Idaho Law, especially the Ground Water Quality Rule, is impotent in the protection of the public health** when agencies and commissions are derelict in their duties.

For the record, we feel compelled to express our further concerns as follows:

During the February 11, 2021 discussion of our request for rulemaking, DEQ staff terrified the Board with dire warnings that the **entire SVRP Aquifer Boundary** would have to be reconfigured with possible horrendous political ramifications (affecting even Washington State) should Greensferry Stakeholders press on with the appeal to recategorize our tiny portion of the Aquifer at risk. This warning seems to us nonsensical.

We have searched the Ground Water Quality Rule but have found **no such stipulation for changing or disrupting the entire 320 mile SVRP Aquifer boundary** as pertaining to recategorization of a portion of the Aquifer. If such a stipulation does exist, we believe that the burden of **entire-boundary reconfiguration** would completely nullify the intent of the Ground Water Quality Rule, which clearly advocates **selective protection of specific areas of an aquifer at risk**. Could you please refer us to, or have your DEQ attorney provide the specific rule in the Code which makes such a stipulation?

We also wish to publically comment on conclusions drawn by the Board as specified in its Order Denying Petition for Initiation of Rulemaking, dated February 22, 2021.

1. The Board of Environmental Quality stated in its order denying our petition that **“inclusion of those wells does not necessarily include the Bayshore Estates development, which, based on the Board’s understanding, is where Petitioners’ concerns derive.”**

But of course, the SVRP Aquifer area we are seeking to protect with rulemaking does indeed include the 28 acre Bayshore Estates land. This is clearly shown by an updated SVRP Aquifer boundary line from the U.S. Geological Survey (USGS) which DEQ showed to the Board in its February 11, 2021 power point presentation. (Page 22 of Rathdrum Prairie Aquifer Primer for the Board of Environmental Quality)

RPA/Greensferry



This 2005 USGS map shows the same updated boundary now confirmed by IDWR to include both our wells and the Bayshore Estates property. (See IDWR map at the end of this letter to you.) Ms. Jerri Henry of DEQ's State Drinking Water Division, who used this image in her power point message to the Board at our hearing, reiterated that the old 1978 EPA boundary, set in stone by both DEQ and Panhandle Health "many years ago" remains "static" for regulatory purposes. But such regulatory recalcitrance does not change the fact that this 2005 USGS line clearly includes both the Greensferry well area and the Bayshore Estates land as inseparable within the SVRP boundary. As you know, USGS is the premier mapping authority for the federal government. Equally important is the fact that DEQ currently labels territory inside this USGS boundary line as "areas in hydraulic connection with the aquifer." To a reasonable mind this would indicate that what contaminates ground water within the USGS Aquifer boundary area, i.e. Greensferry Water wells, also contaminates the SVRP Aquifer, which everyone knows is inextricably connected to this area.

Also especially pertinent is the 1992 informational map produced by Panhandle Health District and DEQ **which confirmed thirty years ago that Greenferry wells and the 28 acres do indeed lie within the SVRP Aquifer boundary.** That map was published and distributed with funding from the Environmental Protection Agency. We submitted a copy of this old DEQ map to the Board of Environmental Quality for our February 11, 2021 hearing, and we also discussed that map with you at the hearing. Your office certainly has a copy of the map and if you were to greatly magnify the area south of the River (in the Post Falls area) you can actually see in detail the 28 acres lying next to the Greenferry well area, **all clearly delineated within DEQ's very own dotted SVRP Aquifer boundary line.** It's remarkable how this historical DEQ map is nearly identical to the 2005 USGS image above and the new IDWR map below.

We hope that the USGS, IDWR and old DEQ boundary maps, which are available to you and the Board of Environmental Quality, clear up any misunderstanding as to the specific territory that needs to be recategorized in order to protect our community water system from the degradation of millions of annual gallons of untreated effluent. After all, this is a critical time when COVID-19 continues to be a confirmed threat within public wastewater systems.

2. The Board of Environmental Quality stated in its order denying our petition for initiation of rulemaking:

"The information required under IDAPA 58.01.11.350.02 was not presented in sufficient detail to request DEQ initiate a negotiated rulemaking to recategorize, or redefine, the aquifer boundaries."

Greensferry Stakeholders therefore request that DEQ provide petitioners with a detailed explanation of what **additional information** would be required by DEQ to adequately provide "sufficient details." We request that you specify how each of our answers is deficient so that we can work to obtain the missing information for future reference.

Below we list each of the requirements listed in **IDAPA 58.01.11.350.02** along with the answers we put into our petition.

a. Current category, if applicable.

We stated in our petition that DEQ categorizes Greenferry wells as **general resource**. This categorization has frequently defended by Gary Stevens in the Northern DEQ office and it was reiterated by DEQ officials during the petition hearing per DEQ's presentation by Ms. Henry.

In addition, our petition included information revealing that our wells are actually completed in the SVRP Aquifer and are therefore technically within the **sole source aquifer category**. This is confirmed by a July 7, 2020 letter from the Idaho Department of Water Resources which states:

"In 2005, the U.S. Geological Survey completed a detailed hydrogeological investigation of the SVRP Aquifer which included an update to the aquifer boundary. The 2005 USGS investigation extended the aquifer boundary to include areas south of the Spokane River, including the Greenferry wells. Additionally, IDWR is in the process of completing an updated investigation of the SVRP Aquifer boundary. This investigation also finds the Greenferry wells to be completed in the SVRP Aquifer."

What can we add to our explanation that there are currently two conflicting boundary designations from two conflicting state agencies?

b. Proposed category and an explanation of how one or more of the criteria in Subsection 350.01 are met.

In our petition we specifically asked for recategorization of our portion of aquifer at risk **to the level of sensitive resource aquifer**. We also listed the following three items directly from the Ground Water Rule itself that precisely explain why our public drinking water system needs and deserves sole source aquifer protection in regards to the proposed 57 new Bayshore Estates septic tanks adjacent to our wells:

i. An activity with the potential to degrade ground water quality is initiated (or in the Greenferry Water case, proposed), over an aquifer or portion of an aquifer which presently has no such activities (upon the now vacant 28 acres).

ii. The ground water in an aquifer or portion of an aquifer is currently being used for drinking water or another beneficial use which requires similar protection

iii. The ground water in an aquifer or portion of an aquifer has a projected future beneficial use of drinking water or another beneficial use which requires similar protection.

What did we miss that these three official items do not cover regarding our desperate need for recategorization?

c. An explanation of why the categorization or recategorization is being proposed

We explained in our petition that we propose recategorization because the State of Idaho is authorized by the Idaho Comprehensive State Water Plan and the Rathdrum Prairie Comprehensive Aquifer Management Plan and by numerous statutes, including the Environmental Protection and Health Act Title 39 and the Ground Water Quality Rule 58.01.11, to take whatever steps necessary to ensure crucial protection of ground water within Idaho State boundaries. We noted that the IDWR has authority over both the Idaho Comprehensive State Water Plan and the Rathdrum Prairie Comprehensive Aquifer Management Plan (CAMP). We stated that IDWR's latest SVRP boundary updates confirm that the shallow Greensferry Water and Sewer District wells are completed within the SVRP Aquifer. We explained how preposterous and unreasonable are the assertions by DEQ Northern Region and by Panhandle Health District 1 that they cannot deviate from irrelevant 1978 aquifer boundary lines while the Idaho Department of Water Resources and the Water Resource Board have been using updated USGS boundary data for at least a decade in order to implement numerous water quality initiatives, including the Idaho Comprehensive State Water Plan and the Rathdrum Prairie

Comprehensive Aquifer Management Plan (CAMP). We explained that Idaho clean water statutes and legislative mandates empower the Board to grant the Greenferry community the highest levels of water protection under state law.

We think that these answers are more than sufficient as to why we need and deserve recategorization. What more could we add?

d. Location, description and areal extent

To answer this requirement we added a number of maps to our petition, including a detailed Aquifer Atlas map from *Rathdrum Prairie Aquifer: Comprehensive Aquifer Management Plan*, published by the Idaho Water Resources Board in July 2011. This document contains a map on page 16 showing that the Greenferry well area south of the Spokane River is included within the SVRP Aquifer boundary.

Please describe what more is needed for location and areal extent? Might that be legal description, aerial pictures, etc.?

e. General location and description of existing and projected future ground water beneficial uses.

Our entire petition was dedicated to the description of our general location and we emphasized how important our ground water is to a rural community dependent upon Greenferry well water and how this water will be critically needed for a very long time by increasing populations.

What do we need to add to this item?

f. Documentation of the existing ground water quality

We answered that Greenferry well water quality is annually reported by the District as **generally compliant with public water safety standards**, although many people with service connections report intermittent episodes of very high level of chlorine taste in the water.

Would a submission of annual Greenferry well assessment reports better fulfill this requirement?

g. Documentation of aquifer characteristics, where available, including, but not limited to:

i. Depth to ground water

The two well logs submitted with our petition show the ground water levels at 245 feet in one well and 250 feet in the other.

ii. Thickness of the water bearing section

We answered that according to the well logs, the thickness of the water bearing section is 125 feet for the 1989 well and 90 feet for the 2001 well.

iii. Direction and rate of ground water flow

We answered that we received information from IDWR that the direction and flow of the water reaching Greensferry wells is moving to the north and northwest and continues in that general direction. This means that Bayshore Estates septic water lying to the south could be carried northward towards the wells, especially as more and more water is pumped from the wells.

What sort of documentation would be necessary to better answer this question to DEQ's satisfaction?

iv. Known recharge and discharge areas

We answered that IDWR reports that the recharge sources for Greenferry wells include: rainfall, the Spokane River, septic fluids from older residential neighborhoods in the area and Cedar Creek which drains from the hills to the south.

What sort of documentation would be necessary to better answer this question to DEQ's satisfaction?

v. Geology of the area

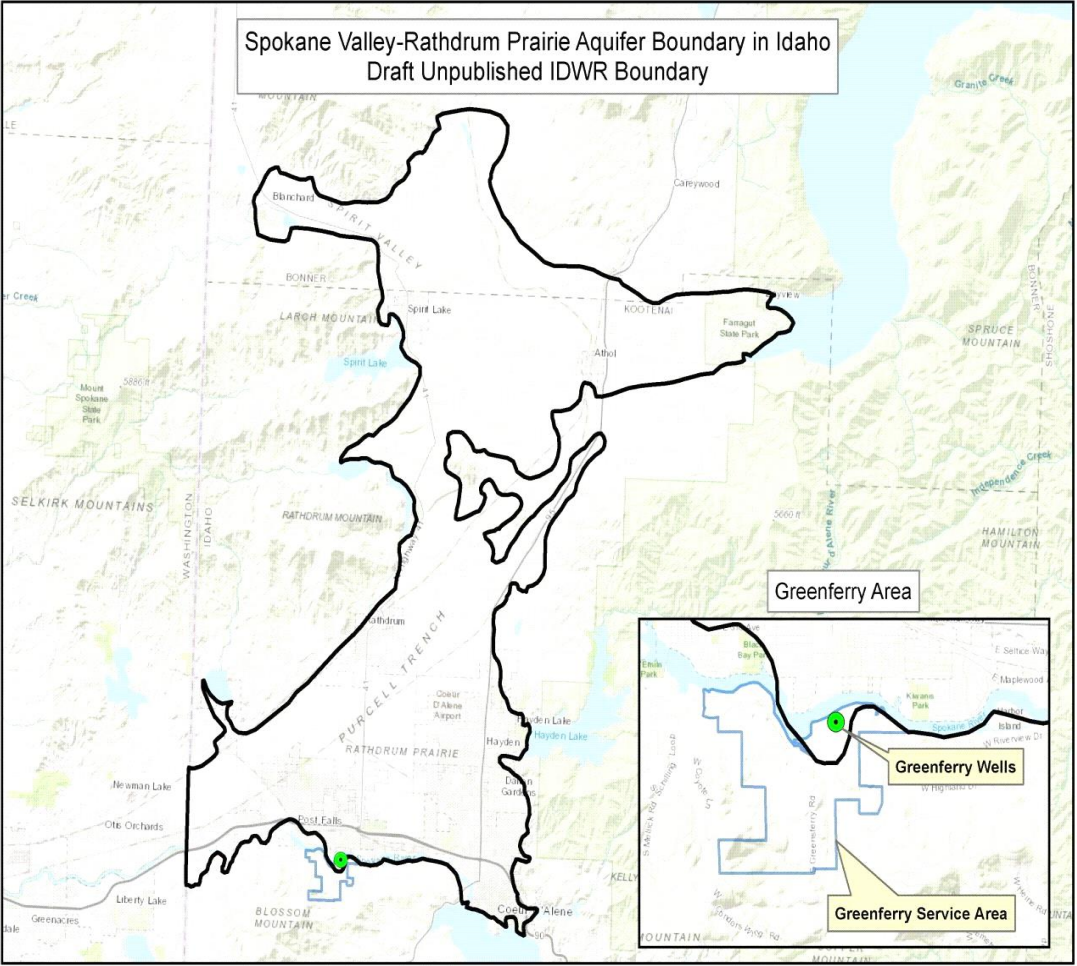
We answered that IDWR currently reports the geology of the area to be the same as the sandy gravel and pebbles similar to other SVRP areas north of the Spokane River. This geology is also reported in the two Greenferry well logs.

The Level 1 NPE study completed by the Bayshore Estates Developer has numerous geological maps included with that report. Would inclusion of that technical geological data better fulfill this requirement?

h. Identification of any proposed standards, for specified constituents, which would be stricter or less strict than the ground water quality standards in Section 200, or any standards to be applied in addition to those in Section 200; and a rationale for the proposed standards.

This is the only item that we did not fully address because we did not think it applicable to our request for recategorization to sensitive resource status. If this is applicable to our situation, please guide us to provide what is needed here, as this verbiage seems vague and unclear.

We noted in our petition that hydrogeologist Daniel Sturgis with the Idaho Department of Water Resources is an invaluable source of technical information as to where the updated SVRP Aquifer boundary actually lies on the south end, per latitude and longitude. Mr. Sturgis has confirmed to the Greenferry Water Board that the updated boundary lies approximately 1000 feet south of Riverview Drive which is south of the 28 acres lying north of Riverview Drive. Of course Stakeholders would need professional help from qualified agencies to provide maps and actual coordinates for an accurate recategorization of the Aquifer area surrounding our wells as seen in the IDWR map below. You will note that this map is similar in boundary lines to the USGS on page 22 used by DEQ in its power point presentation on February 11, 2021.



Last question: During the Board of Environmental Quality discussion on February 11, 2021, DEQ officials mentioned a lack of sub-surface information received from petitioners. Could you be specific on what additional subsurface information is required so that we can collect it to DEQ’s satisfaction?

Thank you!

Dave Shults and Jane Morgan

cc: Idaho Board of Environmental Quality

Gary Stevens, DEQ

Matthew Plaisted, DEQ

Eric Ketner, Panhandle Health District 1

Daniel Sturgis, Idaho Department of Water Resources

