## GREENFERRY WATER AND SEWER DISTRICT MINUTES OF THE REGULAR BOARD OF DIRECTORS MEETING December 17, 2024 3:30 PM, at the District Office and Via Zoom

Chairperson Carol Rassier opened the meeting at 3:30 pm.

## Additional Board in Attendance:

Vice Chairman, Dr. Bob Stiger Secretary Treasurer Ron Utz Member, Rex Grace Member Susan Sloyka

## Staff in Attendance:

John Austin, Manager Roger Glessner, Engineer Bob Kuchenski, Water Operator Ian Kuchenski, Water Operator Debbie Swensen, Accountant

## **Guests:**

Sierra Jordan and Mike Reynolds, Advisory Subcommittee Daniel Sturgis, Idaho Department of Water Resources Kent Lunders, Penny Jane Morgan, Anissa Gamble, Mike Gould

## **OLD BUSINESS**

The Board discussed Bayshore Estates and that the developer is interested in meeting again to discuss the Conditional Will Serve letter. Mr. Grace presented a draft of a letter for the Board to send to the developer. Mr. Austin stated the letter should be presented to the District's legal counsel, which the Board approved, and to notify the developer of this action. The Board then heard from Mr. Sturgis on the issue of the aquifer and the Reasonably Anticipated Future Needs for the water right issue. Mr. Glessner said the increase in the pumping capacity from the new pumps would allow additional hookups and no new water right is needed for that. Regarding the aguifer, Mr. Sturgis said a new model of the aquifer is underway He said the aquifer is at a higher level now than many times in the past, including the 1930s and 1970s when drought conditions impacted it. They are looking at growth trends and its impact on the aquifer and there is no concern about low water levels. He said in regards to the aquifer boundary issue is there are two studies: 1- The boundary adopted in 2002 and 2- in 2004 with the USGS to develop a boundary that is acceptable to both Idaho and Washington. It is the first boundary that the county uses for land use, and the county has shown a propensity to grandfather in uses that were previously approved. He cited Dalton Gardens as an example. Since the zoning on the Bayshore development has been in place for many years, that may be the case with it as well. He then said in 2011 they developed a Comprehensive Aquifer Management Plan (CAMP) to define the aquifer boundary and develop a plan to manage the aguifer. He was asked if he could assist the District as Well #1 is tested in January and he said he would help to monitor the impact of the drawdown from the test.

Action: Mr. Austin will send the letter to legal counsel and will inform the Bayshore developer of this action. Due Date: December 19, 2024

## CONSENT AGENDA

Dr. Stiger made a motion to approve the Consent Agenda. Mr. Utz seconded it.

Discussion ensued on the following issues:

- Water Operator Report (attached)
- Engineers Report (attached)
- Advisory Committee Report (attached)
- Financial Report, Invoice and Delinquent List Approval
- Approval of the Minutes of the November 25, 2024 meeting
- Action List, CIP Projects/Issues and Timelines For Action

The Board then took the following action:

**Action:** Mr. Bob and Ian Kuchenski will provide a log of the facilities that are being checked. **Due Date:** December 31, 2024

The Consent Agenda was then approved unanimously.

## OLD BUSINESS

The Board discussed the Well #1 Replacement Motor and the pump both of which are in the shop. The motor and pump will be installed and tested in the spring of 2025. The Board requested that Mr. Glessner will submit the Preliminary Engineering Report (PER) for the project for approval by DEQ.

Mr. Austin then updated the Board on the Well House Expansion now underway by Calm Water Construction.. He said the well house is dried in, and Calm Water poured the extension floor and is doing the interior work. The Board reiterated that Mr. Glessner will get the PER for the new piping in the wellhouse, once Well #1 is installed, tested and approved and the PER for the 10" line going to Kelly from the wellhouse.

**Action:** Mr. Glessner will prepare the PER for DEQ approval for the new piping from the Well #1 and Well #2 and also for the 10" line to Kelly. **Due Date:** March 1, 2025

Mr. Glessner recommends that the Board proceed in early 2025 with sealing the inside of the reservoir and refurbishing the exterior. He will solicit quotes for that project.

**Action:** Mr. Glessner will solicit quotes for the reservoir sealing and refurbishment. **Due Date:** March 1, 2025

The Board then discussed the City of Dalton Gardens on their septic management program. Ms. Jordan stated the Advisory Committee can help to adapt the policy for the District if that Board wishes.

Action: The Board directed the Advisory Committee to review the Dalton policy for recommendations to the Board. Due Date: December 16, 2024

## ADJOURN

With no further business to come before the Board, the meeting adjourned at 6:18 pm.

Carol Rassier, Chairperson

John F. Austin, Manager

# 12/17/24 Greenferry Water System Report

#### A. Water Production/Consumption update.

2,179,000 gallons produced by the wells during November.\* This works out to 73,000 gallons per day or 186 gallons per day, per customer. (393 connections). \*The Highland reservoir was drained & filled multiple times at the end of October & early November.

2,337,000 gallons produced by the wells during November last year. This works out to 78,000 gallons per day or 199 gallons per day, per customer. (392 connections).

1,995,000 gallons produced by the wells during November 2 years ago. This works out to 67,000 gallons per day or 170 gallons per day, per customer. (393 connections).

3,543,000 gallons produced by the wells during November 3 years ago.\* This works out to 122,000 gallons per day or 311 gallons per day, per customer. (392 connections). \*Bella Ridge reservoir has been overflowing at times due to no automated controls.

2,280,000 gallons produced by the wells during November 4 years ago.\* This works out to 76,000 gallons per day or 217 gallons per day, per customer (350 connections). \*This is an estimate as the well meter registers had to be removed for painting the piping in the pump house. 26 of these connections are in Riverview Heights.

2,243,000 gallons produced by the wells during November 5 years ago. This works out to 75,000 gallons per day or 214 gallons per day, per customer. (350 connections)

#### B. General issues.

- 1. Highland Booster station check valves replaced.
- 2. Highland altitude valve repaired.
- 3. Shop inventory updated to include pump house.

#### Greenferry Water and Sewer District

December 9, 2024

#### Engineers report

#### Well 2 project:

Rc Worst has delivered the replacement motor that will be used in well 1. They have also received the 20 ft. section of 8" Galv drop pipe for well 2 and they are storing it at their yard.

I have asked for updated cost proposals from Rc Worst, A&H and Bigfoot for the testing, pump replacement and electrical for well 1.

#### Well 1 project:

I have nothing new on this project.

## Well house electric service upgrade project:

Completed

The generator will need the fuel spillage containment completed. The plan is to have the wellhouse building contractor complete this.

#### Pump House expansion:

The well house perimeter walls and roof framing are nearly complete. I have been asked to do a framing inspection later today. The contractor has ordered the metal for the roof and siding and expects it to be delivered mid this week.

The contractor is preparing for the final pour of floor concrete and expects to have it done by the end of this week.

Once the floor is poured the interior wall can be framed and interior insulated and sheeted.

#### **Highland Reservoir:**

I have nothing new to report on this project. I am waiting for the district to schedule a date to install the reservoir liner.

#### **Terraces easement Project:**

I have nothing new on this project.

#### **Existing Drain Field Project:**

I have nothing new on this project

## ADVISORY COMMITTEE MINUTES December 10, 2024, District Office 3:00 PM

### Attendance:

Manager John Austin, and Committee Members Sarah Loader, Mike Reynolds and Pat Bethke were in attendance. Dr. Bob Stiger, Board Member, was also present.

## **UPDATE ON PROJECTS**

## Sewer/Septic Management Program:

The City of Dalton Gardens' Sewer Management Plan document was reviewed and discussed by the Committee. The plan requires residential septic systems be pumped every five (5) years.

Members expressed concerns with Dalton Gardens' "one-size-fits-all" type approach to septic pumping: Not all members have the same tank size or people using the system. Some may need more frequent pumping; some may need less. Some septic systems are closer to Greenferry Water and Sewer District's (GWSD – District) wells and the Aquifer than others potentially posing a greater risk to the groundwater. Others may be more concentrated to an area where lots are smaller. Pumping may create a financial burden for some. The Committee reviewed a septic system pumping chart suggesting pumping frequency based on one's septic tank size and number of users.

The Committee noted that a substantial portion of the Dalton Gardens' sewer plan addresses commercial properties which is not currently applicable to GWSD.

Various reasons supportive of a proactive approach to septic management and pumping were discussed including health and sanitation, water quality and safety, and aquifer and well protection.

Committee members expressed thoughts that some septic system users may not know how to properly use or care for their septic system in a way that promotes longevity, cost savings, health and sanitation, and groundwater protection. Educational materials for using and maintaining personal septic systems obtained from Panhandle Health, IDEQ, and EPA were brought to the meeting as some examples of materials the District could make available to septic system users through their website to encourage involvement from customer.

Committee members were informed the District was collecting data on septic systems of customers. Because some in the District may not have information on their septic system, Committee members suggested this information be made available to the septic system owners to encourage education and proper maintenance.

State regulations governing water and sewer districts were discussed and the Committee suggested the District consult an attorney for guidance on regulations

permitting a septic system management plan prior to implementing one.

In Mr. Tanner's absence, the Committee discussed ideas Mr. Tanner provided via email and shared in his recommendations for the Board to seek legal advice, review water and sewer codes, and consulting with entities such as Panhandle Health, IDEQ, staff, and others before developing a septic policy. Mr. Austin suggested the minutes include the information provided by Mr. Tanner.

The Committee reviewed and summarized their suggestions for the Board:

- 1. Education: Start by providing education to customers to encourage involvement in septic maintenance. Include a sewer/septic page on the GWSD website where educational materials and links can be included. Inform customers when the website is updated and their septic information is available (letter, email, invoice).
- 2. Consult: Work with an attorney versed in water/sewer and consult with other water/sewer entities prior to implementing septic management plans or policies.
- 3. Considerations: Consider policies for new construction and locations within the Aquifer boundary. Consider polices that take into account different areas of the District, their different needs and potential risks. Consider variations in pumping frequency depending on use and tank size.

## **Other Projects:**

Dr. Stiger shared information on IDEQ's online Source Water Assessment tool. Using the tool, the Committee accessed a delineation map showing expected source water flow near the District. Dr. Stiger stressed the importance of follow up with IDEQ to ensure our assessment gets updated and requested some assistance.

The Committee also discussed the timeline for funding the other projects, like the SWEP grant for meter replacement and the LID on Crystal Bay Road. Mr. Austin stated the priority for the January tax remittance is to finish the Well House expansion and replace the pump on Well 1. In addition, the Board would like to complete the piping upgrade in the Well House and the 10" line to Kelly. That should take most of the \$220,000 expected from the January tax remittance.

The Committee was then advised that the next meeting is January 14, 2025 at 3 pm.

The meeting adjourned at 5:09 pm.

Information from Mr. Tanner regarding a Septic Management System:

Steve advised the first thing the District should find out is the legality of adopting policy's for onsite septic system installation and management. Discussing this with the Districts, Board, their engineer, attorney, Panhandle Health (Jason Peppin), IDEQ's onsite sewage coordinator in Boise (Peter Adams <u>peter.adams@deq.idaho.gov</u> (208) 954-1438 would be critical before moving ahead on policy development.

- 1. The board could investigate whether they can adopt policies on sewage management like they have for cross connection control and water system construction, such as water lines booster pump stations, reservoirs, etc.
- 2. The sewage management policies might be written to require septic tanks within the District boundaries be pumped by a licensed pumper on a routine basis and report the results to the District by a certain time frame. Failure to report the results would result in shutting off the individuals water like is done under the cross connection policy.
- 3. Another sewage policy to consider would be to require any new lot construction in the 2005 USGS boundary of the Rathdrum Prairie Spokane Valley Aquifer to install enhanced onsite sewage treatment. This might be justified to protect the District wells, following along the reasoning to protect the aquifer from contamination, for the aquifer on the north side of the Spokane river. This was used by Panhandle Health District and now by Kootenai County to not allow any new septic systems on lots less than 5 acres unless the site is in a sewage management area. Such as Dalton Gardens and Athol.
- 4. Enhanced treatment might include the use of something like the Orenco AdvanTex system. <u>https://www.orenco.com/products/treatment-systems</u>
- 5. Requiring advanced treatment is just one idea and would need to be looked at carefully by the Districts engineer and Panhandle Health and IDEQ to determine the appropriate treatment.
- 6. If the District were to move ahead on a policy to require onsite wastewater advanced treatment, the policy would need to include a maintenance contract with a third-party entity. Enforcement would be in accordance to a District policy. I would think the District would also need to charge a free to administer the program.
- 7. The DEQ Technical Guidance Manual <u>https://www2.deq.idaho.gov/admin/LEIA/api/document/download/14470</u>, may be helpful to determine appropriate alternative onsite sewage treatment systems for the area over the RPSV Aquifer. Below is a section out of the manual that may apply. There are illustrations in the manual itself.
- 8. 4.8 Extended Treatment Package System

Revision: May 13, 2021 Installer registration permit: Complex Licensed professional engineer required: No 4.8.1 Description Manufactured and packaged mechanical treatment devices that provide additional biological treatment to septic tank effluent. Such units may use extended aeration, contact stabilization, rotating biological contact, trickling filters, or other approved methods to achieve enhanced treatment after primary clarification occurs in an appropriately sized septic tank. These systems provide secondary wastewater treatment capable of yielding high-quality effluent suitable for discharge in environmentally sensitive areas.

Property owners that install an ETPS unit must choose a service provider capable of meeting their OMM requirements. Verification of the chosen service provider must be submitted with the subsurface sewage disposal permit application ensuring that the OMM (effluent quality testing) will occur (IDAPA 58.01.03.005.04.k). Property owners that do not want to meet the OMM requirements must meet the requirements of section 4.8.2(2) or choose another alternative system that will meet the conditions required for subsurface sewage disposal permit issuance.

4.8.2 Approval Conditions

1. A service provider will be available to provide managed system OMM as described in section 1.9.1 and 1.9.2 (IDAPA 58.01.03.005.14). The OMM is to be performed by an approved service provider (IDAPA 58.01.03.006.06). Approval of the service provider will be made by the Director before permit issuance. Approvable entities may include, but are not limited to, the following:

a. Municipal wastewater treatment departments

b. Water or sewer districts

c. Licensed complex installer with a service provider certification

A service provider contract should be entered into between the property owner and the service provider, as a necessary condition for issuing an installation permit (IDAPA 58.01.03.005.04.k).

2. ETPSs may be used for properties without an approved service provider only under all of the following conditions:

a. The site is acceptable for a standard system. All separation distances from groundwater, surface water, and limiting layers must be met.

b. Enough land is available, and suitable, for two full-size drainfields. One complete full-size drainfield must be installed.

3. Final effluent disposal through subsurface discharge will meet the following criteria: a. Manufacturers seeking approval on ETPS units for reducing total suspended solids

(TSS) and carbonaceous biological oxygen demand (CBOD5) must submit

NSF/ANSI Standard 40 approvals, reports, and associated data or equivalent third-

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4-53

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4. 5. party standards. Manufacturers also seeking approval on the ETPS units for reduction

of total nitrogen (TN) must submit NSF Standard 245 approvals, reports, and associated data or equivalent third-party standards.

1) If an 85% reduction or better in CBOD5 and TSS can be achieved, the effluent may be discharged to a drainfield satisfying Section 4.21.5 "Drainfield Trenches" application rate criteria (Table 4-20) and vertical setback requirements (Table 4-19).

2) Otherwise, the effluent must be discharged to a standard drainfield, sized as

directed in IDAPA 58.01.03.008, and meet the required effective soil depth for standard drainfields as directed in IDAPA 58.01.03.008.02.

3) Additional drainfield-sizing reduction granted for use of gravelless trench products is not allowed.

b. TN reduction may be required for ETPS units located in an area of concern as determined through an NP evaluation. Permit-specific TN reduction levels will be determined through the NP evaluation. Results for TN are determined through the addition of TKN and nitrate-nitrite nitrogen (TN = TKN + [NO3+NO2-N]). TN reduction will be accepted as being met if the effluent exhibits a quantitative value obtained from laboratory analysis not to exceed the TN level stipulated on the subsurface sewage disposal permit.

Annual effluent monitoring for CBOD5, TSS, and TN (if seeking approval for TN reduction) is required for ETPS models listed under provisional use (Table 5-3), or as specified in permit conditions. For ETPS models listed under general use (Table 5-4), annual effluent monitoring is only required for properties that require treatment of TN to less than 27 mg/L. All ETPS models are subject to meet the applicable monitoring requirements in section 1.9.2 and reporting requirements of section 1.9.3. The ETPS will be preceded by an appropriately sized septic tank.

a. The septic tank may be either a separate septic tank, a volume integral with the system's package, or a combination of internal clarifier volume coupled with an external tank. If the ETPS is housed in a separate 3rd-party treatment tank, which is non-integral and non-proprietary to the ETPS unit, the treatment tank used must be an approved septic tank listed in TGM section 5.2.

b. The septic tank must provide the minimum tank capacity for residential facilities as specified in IDAPA 58.01.03.007.07.a, or for nonresidential facilities, a minimum of 2 days of hydraulic residence time (HRT) as stipulated in IDAPA 58.01.03.007.07.b. c. Timed dosing from the clarifier to the aerobic treatment unit is preferred and highly recommended to maintain a constant source of nutrients for the system's aerobic microbes.

4.8.3 ETPS Unit Design

Procedures relating to design are required by IDAPA 53.01.03 or may be required as permit

conditions, as appropriate, to ensure protection of public health and the environment.

1. All materials will be durable, corrosion resistant, and designed for the intended use.

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4-54

Technical Guidance Manual – August 2024

2. 3. 4. All electrical connections completed on site must comply with the National Fire Protection Association (NFPA) Standard NFPA 70, National Electrical Code, as required by the Idaho Division of Building Safety, Electrical Division.

Design for each specific application should be provided by a PE licensed in Idaho. Manufactured and packaged mechanical treatment devices will be required to prove that the specified equipment model meets the ETPS product approval policy outlined in section 1.4.2.2.

4.8.4 Construction Procedures relating to construction are required by IDAPA 58.01.03 or may be required as permit conditions, as appropriate, to ensure the protection of public health and the environment.

1. Installation

a. A licensed complex system installer must install an ETPS unit and all other portions of the septic system connected to the ETPS unit or that the ETPS unit discharges to (IDAPA 58.01.03.006.01.b).

b. A public works contractor may install an ETPS unit if they are under the direct supervision of a PE licensed in Idaho.

c. Licensed plumbers and electricians will be required to install specific devices and components for proper system operation. If the device requires any on-site fabrication or component assembly, a public works contractor should be used.

d. A sample port will be installed in the effluent line after the aerobic treatment unit. Figure 4-13 shows the placement of a sampling port after the ETPS unit, and Figure 4-14 shows the sample port and drainfield after the septic and treatment tank. Figure 4-13. Sampling port example.

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Figure 4-14. Sampling port and drainfield.

2. Within 30 days of completing the installation, the property owner must provide certification to the regulatory authority, from their manufacturer's representative, that the system has been installed and is operating in accordance with the manufacturer's recommendations (IDAPA 58.01.03.005.15).

a. A statement requiring the submission of the installation verification form described above will be written on the face of the subsurface sewage disposal permit.

b. The regulatory authority will not finalize the subsurface sewage disposal permit until the certification of proper installation and operation is received and includes information on the manufacturer, product, model number, and serial number of the ETPS unit installed.

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