



STATE OF WASHINGTON
DEPARTMENT OF HEALTH
NORTHWEST DRINKING WATER REGIONAL OPERATIONS
PO BOX 47800, M/S: K17-12, OLYMPIA WA 98504

September 21, 2023

DRIFTWOOD HEIGHT ASSOCIATION
RANDY BARRY, ASSOCIATION PRESIDENT
PRESIDENT@DRIFTWOODHEIGHTS.NET

MIKE CONA, ASSOCIATION OPERATIONS
OPERATIONS@DRIFTWOODHEIGHTS.NET

Subject: Driftwood Heights Association (ID#19948)
Island County
Routine Sanitary Survey

Dear Members of the Board and Sandra Bodamer:

This letter is in follow-up to my routine sanitary survey of your water system on September 14, 2023. Thanks to Mike Cona, Operations, Randy Barry, Association President, Ron Bodamer, King Water, and Fernando Pedroza, King Water Operator meeting with me.

The purpose of the sanitary survey is to inspect water system facilities, review operations & maintenance, and discuss ideas to help ensure the drinking water system will continue to be safe and reliable for years to come. These inspections are required by the drinking water regulations (WAC 246-290) every 3-5 years. We covered the eight EPA elements of a survey described in 40 CFR 142.16.

General conclusions. Thank you for being a proactive board! Continue to work with your engineer to design the necessary upgrades to the system. The booster pump station, old mains, and meters are showing signs of aging and need replacement. Continue to work on developing an asset management program and secure funding to make necessary upgrades.

2023 Sanitary Survey Issues

Enclosed is a copy of my Sanitary Survey Notes. They, along with this letter, reflect my understanding of your water system and highlight the key issues and specific recommendations (bold type in notes) we discussed during my visit. **Please, in the next 45 days, respond to this letter and recommendations.** If you disagree with them and/or are unable to take action within 45 days, please explain your intentions and provide a schedule for addressing the applicable findings. Thanks.

Significant Deficiencies – *Potential significant public health risks*

1. Replace the cap on the end of the tank-level device for the 40,000-gal reservoir. This uncapped pipe is a direct opening into the drinking water system.

Significant Findings – *Defects in your facilities or operations that need immediate attention.*
NONE

Observations – *To notify you of other violations of drinking water rules.*

1. The water system should maintain a minimum distribution disinfection residual of 0.2 mg/L in the distribution system.
2. All systems not required to create a Water System Plan (WSP) must develop and implement a Small Water System Management Program (SWSMP). A template is available on our website. <https://doh.wa.gov/community-and-environment/drinking-water/water-system-design-and-planning/small-water-system-management>
3. Develop and implement a Cross-Connection Control Program. The first step is to ensure the Association has the authority to implement it and then complete a cross-connection assessment to inventory potential hazards. <https://doh.wa.gov/community-and-environment/drinking-water/water-system-design-and-planning/cross-connection-control-backflow-prevention/cross-connection-control-small-water-systems>
4. Please note, that water systems need to develop and submit a Lead Service Line Inventory (LSI) by October 16, 2024. Please visit our website for additional guidance. <https://doh.wa.gov/community-and-environment/drinking-water/contaminants/lead/lead-and-copper-rule-revisions>
5. It is my understanding that past modifications were made without DOH approval to the booster pump station. These modifications are considered to be a change in the system design that requires DOH approval. I understand the Association is working with an engineer to make further upgrades. Continue to work with your engineer to design and submit for DOH approval before constructing or making any additional modifications.

Recommendations – *To improve your managerial, financial, or technical capacity.*

1. Develop an Asset Management Program to prioritize necessary upgrades and build financial reserves. Please review Chapter 3: Financial in our SWSMP guidance for additional resources. <https://doh.wa.gov/sites/default/files/legacy/Documents/Pubs/331-134.pdf>
2. Please update the WFI form. You can find this form on the Sentry Internet Database. <https://fortress.wa.gov/doh/eh/portal/odw/si/Disclaimer.aspx?Page=/portal/odw/si/findwatersystem.aspx>

The Drinking Water Regulations require that all Group A public water systems have a sanitary survey every 3-5 years. Regulations establishing a schedule of fees for sanitary surveys have been adopted (WAC 246-290-990). To receive credit for the survey, a sanitary survey fee must be paid. The total cost is \$459.00. An itemized invoice for this survey has been sent to the DOH primary contact on file for your water system. Please note DOH now accepts online payment for sanitary surveys. Review DOH Pub #331-688 for guidance.

Driftwood Heights Association
September 21, 2023
Page 3

Your next sanitary survey is tentatively scheduled for 2028.

Helping you ensure a safe and reliable drinking water supply is our highest priority. Please contact me if you have any questions or concerns.

Sincerely,



Alexis Medina, EIT
Northwest Regional Engineering Staff
Office of Drinking Water
Washington State Department of Health
Alexis.Medina@doh.wa.gov
Cell: 564-200-2706

Enclosure

ECC: Aneta Hupfauer – Island County Health Department
Sandra Bodamer – King Water Company
Bethany Brunny – NWRO Sanitary Survey

STATE OF WASHINGTON
Department of Health
OFFICE OF DRINKING WATER
SANITARY SURVEY INSPECTION

INVOICE

DRIFTWOOD HEIGHTS ASSOCIATION
DRIFTWOOD HEIGHTS ASSOCIATION
370 N EAST CAMANO DR SUITE 5 PMB
219
CAMANO ISLAND, WA 98282-7279

WS ID: 19948
Invoice No: 53709
Invoice Date: 09/21/2023
Due Date: 11/05/2023

WS NAME: DRIFTWOOD HEIGHTS ASSOCIATION

SURVEY DATE: 09/14/2023

DESCRIPTION	QTY	COST	AMOUNT
Scheduling, Research, Prep	1.00	x \$102.00	\$102.00
Survey Documentation	2.00	x \$102.00	\$204.00
Survey Field Work	1.50	x \$102.00	\$153.00
		Total Amount Due	\$459.00

1. **Pay online** with a credit card, debit card, or electronic check (ACH) using the Environmental Health Payment System at <https://secureaccess.wa.gov/>.
2. For billing questions, please contact Northwest Drinking Water Regional Operations at (253) 395-6750.
3. This invoice is issued in accordance with WAC 246-290-990(3)(c)(iii).
4. For persons with disabilities, this document is available on request in other formats. To submit a request, please call 711 Washington Relay Service.
5. If paying by check:

Make checks payable to Department of Health, Federal ID #91-1444603.

Please return the bottom portion of this invoice with your check.

Invoice Number: 53709

INVOICE AMOUNT: \$459.00

Owner Number: 001579

WS Name: DRIFTWOOD HEIGHTS ASSOCIATION

Invoice Date: 09/21/2023

Invoice Due Date: 11/05/2023

Region: NW

WS ID: 19948

Reference: SANITARY SURVEY INSPECTION PERFORMED ON 09/14/2023

Please remit to:

**ACCOUNTS RECEIVABLE
DOH SANITARY SURVEY PROGRAM
PO BOX 1099
OLYMPIA, WA 98507-1099**



STATE OF WASHINGTON
DEPARTMENT OF HEALTH
NORTHWEST DRINKING WATER REGIONAL OPERATIONS
PO BOX 47800, M/S: K17-12, OLYMPIA WA 98504

SANITARY SURVEY SUMMARY

September 14, 2023

System: Driftwood Heights Association
Island County
ID#19948

Persons Attending: Mike Cona, Driftwood Heights Operations
Randy Barry, Association President
Fernando Pedroza, King Water Operator
Ron Bodamer, King Water
Alexis Medina, DOH

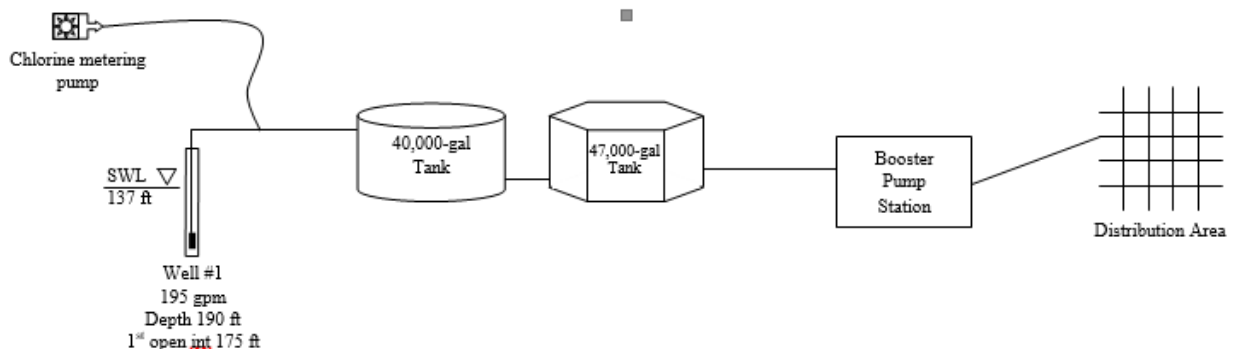
Purpose: Routine Sanitary Survey

General:

Driftwood Heights Association is located on the East side of Camano Island and serves 114 residential connections. Driftwood Heights is owned by a Homeowner's Association (HOA) and is governed by an elected board. Your water system is currently operated by King Water Company.

Your water system was last surveyed in May 2018 by Denis Mehinagic, DOH. No complaints on file. Your water system has a green operating permit. Driftwood Heights does not have a planning document, such as a Small Water System Management Program (SWSMP), on file with DOH.

SYSTEM DESCRIPTION:



The water system has a single well source with a submersible pump. The water is chlorinated with sodium hypochlorite before it is pumped to a 40,000 gallon reservoir and a 47,000 gallon reservoir. Water is pumped from the reservoir to a single pressure-distribution system by two booster pumps. The booster pumps are protected by one hydropneumatic pressure tank.

The distribution mains are 4 inch PVC, which is quite adequate for domestic water use, but does not meet the 6-inch requirement for full fire flow. The association has a 25 KW propane-fueled electrical power generator with sufficient capacity to supply the well pump and the distribution booster pumps.

Source:



(L) Well #1 & sample tap (Center) Well #1 with concrete structure protecting wellhead (R) Source meter



(Above) Pump house and reservoir site

The system has one well, Well #1 (AGA708). Well #1 is located next to the pump house. The well pumps directly to the round tank and is controlled by level controls in the tank. There is a source meter, sample tap, and screened vent. The well site is fenced. There is a house on the lot adjacent to the well site on the south side that falls partially within the 100' radius. Hawthorne Lane runs along the east side of the well site with another lot that falls partially within the 100' radius. The wells are located in an area currently classified as Low risk of seawater intrusion. The operator performs site visits 2x a week.

Driftwood Heights has a gravity feed intertie with Driftwood Heights #2. Intertie must be manually opened and tanks for both systems managed to avoid overflowing or emptying them due to difference in system head. But in an emergency, water can be made to flow either direction. The Association is working on cleaning up the intertie agreement with Driftwood Heights #2.

Treatment:

Disinfection Treatment –



(L) Sodium hypochlorite NSF (Center) Chlorine solution tank and feed pump (R) Chlorine injection point

Driftwood Heights is required to disinfect and **maintain a minimum detectable disinfection residual of 0.2 mg/L in the distribution system**. Sodium hypochlorite is injected prior to entry to the reservoir. Driftwood Heights can achieve a CT of 6 however the system is not required to meet a CT6. The operator collects residual at entry to distribution 2x a week. The chlorine solution is 12.5% chlorine diluted 1:10.

Reservoir:



(L) Reservoirs #2 and #1 (R) Reservoir #1



(L) Screened overflow on reservoir #1 (Center) Open end on tank level for reservoir #1 (R) Screened vent for reservoir #1



(L) Screened vent for reservoir #1 (Center) & (R) Electrical conduit for reservoir #1



(L) Vent for reservoir #1 (Center) Hatch for reservoir #1 (R) Bottom of hatch seal for reservoir #1



(L) Hatch seal for reservoir #1 (R) Hatch seal for reservoir #1



(L) Reservoir #2 (Center) Screened overflow for reservoir #2 (R) Closed hatch for reservoir #2



(L) Open hatch and water inlet for reservoir #2 (Center) & (R) Hatch seal for reservoir #2



(L) Vent for reservoir #2 (R) Screened vent for reservoir #2

Driftwood Heights has two reservoirs, one 40,000-gal circular concrete storage tank and 47,000-gal hexagonal concrete storage tank. The circular tank is the first tank filled directly by the well. It has a dedicated inlet and separate outlet that then feeds the hexagonal tank. The hexagonal tank has a dedicated inlet and separate outlet that then feeds the booster pumps. There is a bypass that allows one or both tanks to be bypassed. There is also an annual inspection of the tanks. Both tanks were cleaned this year and are scheduled to be cleaned every 5-7 years.

Booster Pumps and Pressure Tank:



(L) Air compressor on hydropneumatic tank (Center) Electrical controls (R) PRV



(L)PRV and other valving for distribution (Center) & (R) Hydro-pneumatic tank



(L)Booster pumps (R) Propane tank for generator



(Above) On-site generator

There is a single pumped zone that is supplied by two booster pumps that operate in a lead/lag sequence that are set at 88/60 psi for lead pump and 80/65 psi for the lag pump at the treatment building. The lead pump will alternate. The booster pumps are protected by one hydropneumatic tank.

The association has a propane-fueled electrical power generator with sufficient capacity to supply the well pump and the distribution booster pumps.

Driftwood Heights has future plans to replace the older booster pump, install a VFD and hydropneumatic tank. Continue working with your engineer and design the necessary upgrades to the system.

Distribution:

The distribution mains mostly consist of 4-inch PVC, which is quite adequate for domestic water use, but does not meet the 6-inch requirement for full fire flow. One section of AC pipe remains in the distribution system. The distribution system is flushed 1x a year and valves are exercised during flushing alone.

All service connections have meters installed and meters are read twice a year. The distribution system leakage (DSL) in 2022 was 10.4%.

Driftwood Heights plans to replace distribution mains and increase one size to 6" to provide fire flow and replace meters. The Association should look into meters that can perform leak detection to aid in decreasing distribution system leakage.

The association has no knowledge of a Cross Connection Control program. **Driftwood Heights should develop and implement a CCC program.** The first step is to ensure the Association has the authority to implement it. Complete a cross-connection assessment to inventory potential hazards. Ensure the proper backflow prevention devices are installed and inspected annually.

Water Quality Monitoring and Reporting:

Nitrate and Arsenic:

Nitrate concentrations for well #1 were 1.48 mg/L when sampled in March 2023 which is below the MCL of 10 mg/L.

The arsenic concentration reported in March 2023 was 4.9 ppb, which is below the MCL of 10 ppb.

Iron and Manganese:

Iron and manganese raw water concentrations were less than 0.1 mg/L and 0.01 mg/L when sampled in 2016, which are below the secondary MCL of 0.3 mg/L and 0.05 mg/L, respectively.

Coliform Monitoring:

The system is required to collect one coliform sample every month. In the last 5 years, they have not had any confirmed, positive coliform samples. This system complies with the coliform program.

Disinfection By-Products (DBP):

Total trihalomethane (TTHM) and haloacetic acids (HAA5) have been less than half the MCL, 80 and 60 ppb, respectively for all the samples collected in 2020. Pheasant Farm Acres is on a standard every 3 year monitoring schedule for DBP.

Lead and Copper:

Pheasant Farm Acre's lead and copper results collected in 2021 were below the action levels. The next set of samples should be collected in this month, September 2024.

Please note, that all community and nontransient noncommunity must develop and submit and Lead Service Line Inventory by October 2024.

SYSTEM OPERATIONS AND MANAGEMENT:

DOH does not have a planning document on file for Driftwood Heights water system. All systems not required to create a Water System Plan (WSP) must develop and implement a Small Water System Management Program (SWSMP). A template is available on our website. Please ensure your planning document and all pertinent water system information is available and up to date.

Driftwood Heights last updated its Water Facilities Inventory (WFI) form on 12/10/2018. The WFI form needs to be updated annually.

OPERATOR CERTIFICATION:

This system is required to have WDS certified operator.

Name of Operator	Certification Number	Certifications	Mandatory Operator
Sandra Bodamer	013082	WTPO2, WDM2, CCS	<input checked="" type="checkbox"/>

WDS-Water Distribution Specialist; WDM-Water Distribution Manager; WTPO-Water Treatment Plant Operator, CCS-Cross Connection Specialist; If you have any questions or if this information is inaccurate, please contact Operator Certification at (800) 525-2536.