



CITY OF
BAINBRIDGE ISLAND

UTILITY ADVISORY COMMITTEE
SPECIAL MEETING
WEDNESDAY, FEBRUARY 5, 2020
5:00-7:00 PM
CITY HALL
COUNCIL CONFERENCE ROOM
280 MADISON AVENUE NORTH
BAINBRIDGE ISLAND, WA 98110

AGENDA

1. CALL TO ORDER / ROLL CALL / ACCEPT OR MODIFY AGENDA /
CONFLICT OF INTEREST DISCLOSURE
5:00 PM

CO-CHAIR: TED JONES
CO-CHAIR ANDY MARON

MEMBERS: CHARLES AVERILL MARTIN PASTUCHA
SHEINA HUGHES EMILY SATO
NANCY NOLAN

LIAISON: RASHAM NASSAR

2. APPROVE JANUARY 8, 2020 MINUTES – 10 MIN.
3. UPDATE FROM PUBLIC WORKS – 5 MIN.
 - A. CAPITAL IMPROVEMENT PLAN REVIEW SCHEDULE
 - B. SEWER BASIN STUDY WORK PLAN
4. SMALL WATER SYSTEMS (CONTINUED DISCUSSION) – 95 MIN.
 - A. REVIEW AND DISCUSS POLICY MATRIX
 - B. EVALUATE APPROACHES FOR CERTAIN SMALL SYSTEMS
5. NEXT MEETING AGENDA PLANNING – 5 MIN.
6. ADJOURNMENT
7:00 PM



Minutes

Committee members present: Andy Maron (Co-Chair), Ted Jones (Co-Chair), Emily Sato, Sheina Hughes, Nancy Nolan, Martin Pastucha (attended via phone 5:00 pm—6:24 pm),

Absent: Charles Averill

CC Liaison: Rasham Nassar (Present 5:42-end)

Also present: Chris Wierzbicki, COBI Director of Public Works
Chuck Krumheuer, COBI Operations Manager
Steve Brown, Kitsap Public Health District
John Kiess, Environmental Health Director, Kitsap Public Health District

The meeting was called to order at 5:002PM by Andy Maron, Chair.

Minutes: The meeting minutes of December 11, 2019 were unanimously approved.

Public Comment: There was no public comment.

Small Water Systems Discussion (continued): Andy said that he, Ted & Chris had met to compile a list of questions regarding small water systems that the committee had had at the December meeting, hoping to get them answered today by today's guests from Kitsap Public Health District and COBI Operations.

- A)** John Kiess, Environmental Health Director of the Kitsap Public Health District, and the former Drinking Water Program Manager, said he would do his best to answer all of the committee's questions, and gave an informative talk on the history/structure of Kitsap County water systems, summarized as follows:

All public water supplies (and in some respects, private water systems) are governed and regulated by Kitsap County's Coordinated Water Systems Plan (CWSP). The CWSP was put together by a consortium of water systems, and establishes the ground rules for water service areas, how service areas are claimed, and obligations to serve in those service areas. It also defines roles & responsibilities for who manages these systems. For Group A systems, oversight is done by the WA State Dept. of Health in coordination with individual water system planning documents and requirements.

The CWSP outlines how buildout will occur in planned service areas, and defines roles & responsibilities of each organization involved. Group A water systems (15+ connections) are regulated by the State of WA DOH, while Group Bs (3-14 connections) are regulated by the Kitsap Public Health District. He mentioned that there is often confusion in the nature of Group B water systems, in that they may be public water systems in service, but not necessarily in ownership. There are 140+/- Group Bs on Bainbridge Island, and 850 Group B systems countywide. One or two connection systems are typically considered private wells. Technically, 2 connections used to be considered a Group B system (this changed in 2014), but Kitsap County has applied for waivers for 2-party private wells since 1991.

The primary governing law for Group B water systems is the local drinking water ordinance passed by the Kitsap Public Health Board (comprising Kitsap County Commissioners, Mayors of all 4 Cities in the Health District), originally promulgated in 1991. A new, updated version was passed 2 years ago to address Group B water system noncompliance (monitoring, reporting, maintenance) and to update rules to be more effective and improve coordination. There had been higher levels of regulation in the past, but State enforcement funding dried up and the KPHD had to back off regulating Group B systems until this new ordinance, with built-in funding through annual operating fees, was passed.



KPHD has delegated authority from WA DOE to oversee all drinking water well construction in the County. The local drinking water ordinance requires that whenever you want to build or enlarge a house, the KPHD must review your water supply (from any source) to ensure it meets code requirements. This review mechanism ensures that KPHD has a pretty good idea of how many systems and wells exist in the County. There are roughly 18,000 private wells County-wide. New private wells have initial testing, minimum quantity regulations, but that's all. Group B systems have ongoing managerial requirements.

All of the data collected by KPHD through the ordinance requirements is forwarded to KPUD. KPUD acts as a designated data repository for all drinking water supplies in the County (wells drilled, etc.). E.g., if a water system wants to move a service area boundary line, they submit the request to KPHD for approval, and if approved, the boundary adjustment is then sent to KPUD, where they update the official GIS map to reflect the change.

In contrast to Group A water systems, Group Bs don't have a service area, they have a service design & have designated served properties. Any changes will require modifying the system design and obtaining approval. Systems usually hold spare connections in reserve. A system using less than 5000 gallons/day does not require a water right. Group B systems are not generally reviewed for fire flow because they are residential systems.

Under the CWSP, someone must get a denial of service from any adjacent public water system within ¼ mile before being able to build a new public water system.

Hirst Decision: the legislative fix requires that DOE works in all of the water resource inventory areas (WRIAs) to establish limitations on withdrawal, and to work with water resource inventory areas without approved plans to re-form committees to determine how exempt wells would be managed within their WRIA. Kitsap County is in WRIA 15, and did not have an approved plan. All WRIA without approved plans were automatically required to limit exempt wells to 950/gallons per day of withdrawal, and everyone drilling a new well must pay a fee to the agency issuing the building permit (part of which goes to DOE to pay for the new rules). The WRIA 15 committee has been meeting for the past 18 months. KPHD isn't required to be there, but participate (all cities must attend). Most of the discussion has been about trying to determine the impact of new exempt well withdrawals over groundwater levels. There is no enforcement or metering, but extensive data shows that exempt well withdrawal is less than 1/10th of 1% of total groundwater withdrawal. Groundwater is an issue, as growth vs. a finite resource is an issue, but exempt private wells are not the driver of this.

We have a pretty good idea of how many private wells exist in the County (18,000+/-), the inaccurate GPS maps notwithstanding. We calculate how many wells exist in the County in a number of ways, by counting houses and subtracting how many are served by public water systems, how many wells we know have been drilled, etc. And while there may be issues with groundwater in specific spots, so long as it keeps raining, we will not have an issue with groundwater long-term. Older wells are often hand-dug and shallow and are not tapping the aquifer. We typically require these wells to be decommissioned when we find them if they can't be approved for irrigation. KPHD has about 100 old wells decommissioned per year.

What records do you have on existing private wells? We have all of the original time-of-construction data for private wells drilled since 1991, the original pump tests, the original well log and some original water quality data. But there is no ongoing data after that, since we don't have oversight authority. In the 1970s, the DOE started required well drillers to keep well logs as well. Not all well drillers complied, but we have a pretty good idea of growth, and where wells were drilled. All new information obtained through people coming in for building permits, etc. are entered into the KPHD database.



As for public well data, KPHD has original time-of-approval information, as well as ongoing monitoring information for Group B wells, which is mostly water quality data. Group Bs aren't required to read meters (or have meters). So we don't know how much water is being used, but average residential use is about 150 gallons/day, so their use can be estimated. Design standards used to require 800 gallons/day per home per connection, but design standards have changed over time to more closely reflect actual usage. The old term "6-pack water system" for Group B systems was derived from 6x800 gal/day limit.

What data does KPHD collect on existing Group B and Group A water systems? As previously mentioned, all the time-of-approval data and the ongoing monitoring data. KPHD was authorized to be the regulatory agent for WA DOH for Group B systems from the 1980s, so we have all of that data as well. Group As are monitored by the WA DOH. Group A water system monitoring is extensive with a ton of reporting requirements.

New private wells? We require them to meet quantity and quality standards at time of construction, but that's it. We do look to see if they can hook up to adjacent Group A systems, but in general, Group A systems serve areas with small lots, so it's generally not an issue. You are allowed to drill a well under State law and County code if you have more than an acre and can meet setback requirements without any exclusions. This is based on the septic code for new construction. You cannot create a new public water system if there is an existing public water system that can serve you within ¼ mile of the service area; however, this does not apply to private wells.

With regard to public water systems, if you're within the service area (Group As only, as Group Bs don't have service areas), you must connect to the existing water system, you cannot create a new water system within an existing service area.

In the case of North Bainbridge, which is the City's designated service area but has no infrastructure, someone can drill a well (1-2 connections), but can they create a new public water system in that area? No, because it's a designated service area. So if someone comes in and gets a denial of service within that area, the City then has the ownership right to manage the proposed system as a satellite system. You can't develop a public water system within someone else's service area. North Bainbridge is a historical anomaly, because nowadays the DOH will make you give up service area that you can't supply water to. If COBI then declines to manage the satellite system, one of the two remaining approved satellite system management entities (KPUD or NW Water Systems) will have to operate it. Every public water system created since June 1995 is required to have a state-approved satellite management agency (SMA). However, of the 850 Group B systems in the County, only 170 that fall under this requirement timeline. So many, many Group B systems are not required to be professionally managed. This brings up the issue of whether COBI wants to get into the business of managing satellite systems. This is a borrowed headache, because you get all of the problems, without the decision-making authority to solve them. Small Group A systems present the same challenges.

Chuck said that small systems typically have lots of expectations, but the SMA has to answer the WA DOH or KPHD to meet regulatory standards while the system owners might not be responsive. John said that it's very time-consuming and expensive for SMA entities unless you have economies of scale. John doesn't think that the development of new systems is worth worrying about, the bigger issue is what to do about failing Group B systems and managing the existing infrastructure patchwork of equipment.



B) Chuck Krumheuer then gave an overview of the City's history as an SMA:

What is the City's history of being an SMA? There are a lot of gaps, but I mostly found information in old water system plans. The City was an annexed island in 1991, according to the 1995 Beck Water System Plan, a Systems Advisory Committee had been created (that Andy was on) to study water systems policies. Then in 1993 City Council passed Resolution 93-03 establishing satellite water system policies. Also in 1993, the COBI-KPUD ILA states that one purpose of the Fletcher Bay water system sale was that "PUD desires to assist the City in becoming an SMA." The 1995 Beck Water System Plan has a section that outlines satellite management policies and procedures, but there is no record of COBI becoming an official SMA approved by the DOH. I have a general understanding, however, that somewhere between 1996-99 the City did actually provide some SMA services to about 24 systems. John Kiess said that back then the State didn't have a well-defined structure for the SMA program, so back around 1990-91 lots of people agreed that monitoring should happen. Then in 1995, the State decided what SMA rules should actually look like, all of the neighborly service agreements dissolved because of the new official requirements. Chuck said that the City did not have the resources to undertake the new SMA requirements, especially with a long list of competing City priorities.

John said the new Group B ordinance was written to prevent water systems being run into the ground by negligent owners.

Chuck said that as long as he's worked for COBI there have been no SMA activities undertaken by the City. The Casey Street system was not SMA, because the City took ownership of the system. It is within City service area, but not within the actual service area. Chuck said that KPUD operates some satellite systems within the City's service area.

Would it be preferable to take over the satellite systems as opposed to being an SMA? Chuck thinks it's important to go in and make sure equipment meets certain requirements before taking over a system. People are not interested in paying for upgrades and improvements until things are really bad. There are a number of small systems along Ferncliff that could theoretically be pieced together to expand the City's system, but no one is motivated to hook up.

John stated that people have no incentive to get connected to the City until the water stops running, and they have incorrect expectations of what water should cost. Development drives a lot of water system expansion but because of the way BI is developing, that won't happen anymore. Now it'll be system-failure driven with patchwork ULIDs.

Sheina asked, how do you get a developer to build infrastructure without a Master Plan that shows them what the infrastructure should be? John answered that where there are independent water systems, they are the ones who dictate what is built and connected to their systems. The City controls water system additions within their water system service area. The DOH has strict standards that must be met.

The Rockaway Beach well will need to be replaced someday, and the Bill Point system also needs work, but there's no plan in place currently as to how to address these issues.

Expansions going out to Fletcher Bay? How did the Grizdale system get into the City system? That was in 1995, so Chuck didn't have that information offhand.

Does the City want to expand its water system management? Then you implement a policy that says the City will take on systems where the owner doesn't want it anymore. Do you want to take on the aging infrastructure? The holdouts are people who didn't want to go over to the regulatory environment.



Group Bs now have to buy an annual operating permit, and now have annual monitoring requirements. The question is what the City's role should be towards all those scattered Group B systems.

As for Group As—like Bill Point, Meadowmeer, and Emerald Heights—what should the City's role be towards the larger systems? With Group As, there is State funding available that isn't available with Group Bs. Chuck reminded us that it's somewhat system-specific, some systems are geographically located in areas that are logically absorbed by KPUD, such as Emerald Heights. Topography also needs to be considered. Bainbridge Island is like a small county in some respects—COBI is responsible for four water systems; the rest are regulated either by KPHD or WA DOH. If a non-City system fails, it would go into receivership, in Kitsap County, that receiver is always KPUD. KPUD will step in but it ends up costing the ratepayers a ton of money. Bainbridge Island is unique because there are private entities operating within City limits. The condition of the various water systems can be guesstimated by looking at the age of the system—the older a water system is, the less likely it is working well. Much of the US's infrastructure is falling apart, and rate structures don't cover replacement, so this is a universal issue.

John said that KPHD would be happy to share its data on Group A systems on Bainbridge Island, etc., with the UAC.

Is the management of the Casey St. system a burden to Public Works? Chuck says that PW didn't get additional FTE, but it hasn't been a problem yet. However, the Casey Street system is at the end of its life, and will need eventual upgrading. But it's hard for a homeowner to spend \$60K-80K for system upgrades if the COBI water main gets extended so that they could hook up. Construction projects also put an additional burden on the PW staff.

Memorandum on Recommendations: We need to get this done, should we have an extra meeting in February? We will need to have to schedule special meetings over the next few months.

Meadowmeer Water System: Nancy reported that she's been talking with Ward Frost (manager of Meadowmeer water system), who left in October 2019. Then Meadowmeer Water got red-tagged for not chlorinating. They recently replaced all pipes except for Blue Pond Drive, and there are apparently more than adequate reserves. KPUD is very eager to acquire Meadowmeer because it's healthy, but Meadowmeer is situated such that COBI may want to manage/acquire it to aid in the build-out of the north island service area. This issue will be discussed in February.

Utility Tour Planning: The tour of the City's utility facilities is scheduled for Saturday, February 1st at 8:00 am.

PSE and Climate Change Committee: Feb 3rd, from 6-8 pm. PSE is bringing experts to talk about 7 different issues.

Adjournment: The meeting was adjourned at 7:05 pm.