AGENDA

**WRIA 15 Watershed Restoration and Enhancement**

**Project Workgroup Meeting**

May 21, 2020 | 11:00 a.m. to 4:00 p.m.

## **Location**

Webex

**Committee Chair**

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**Handouts**

Agenda

Water Rights Assessment

Project Inventory

Project Homework

**Participants:**

Stacy Vynne McKinstry (ECY); Austin Jennings (Pierce Co); Burt Clothier (PGG, consultant to ECY); Christian Berg (City of Bainbridge Island); Nate Daniels (GPC); Joel Massman (Keta Waters, consultant to Suquamish Tribe); Joel Purdy (KPUD); Jon Turk (Aspect, consultant to Skokomish Tribe); Nam Siu (DFW); Paul Pickett (Squaxin Island Tribe); Bob Montgomery (Anchor QEA, consultant to ECY); Sam Phillips (PGST); Alison O’Sullivan (Suquamish Tribe); Greg Rabourn (King Co); Brittany Gordon (DFW); John Covert (ECY); Chuck Hinds (Anderson Island Parks District); Susan Gulick (Sound Resolutions, consultant to ECY); Angela Pietschmann (Cascadia Consulting Group, consultant to ECY)

**Links to key documents:**

* [Water Rights Assessment](https://ecy.box.com/v/WRIA15WRAcquisitionsAssess)
* [Project Inventory](https://ecy.box.com/v/WRIA15ProjectInventory)
* [Project Homework](https://app.box.com/s/25amrq2ra473ze3cjz6hj40f50c88lgc)
* [Webmap with Project Locations](https://hdr.maps.arcgis.com/apps/webappviewer/index.html?id=d7d02dedb57241aa81dd7eb376c8625a)

# Project Updates

* Bob Montgomery shared a [sample project description](https://app.box.com/s/avwga2hen5m4ouqszroxfbuobpjy5zod) for the Kingston Recycled Water and Managed Aquifer Recharge Project as an example of the level of detail the consultants will go into for projects. The plan itself will not present this much detail (~1 paragraph per project in body of plan). Committee could include full description as an appendix.
	+ It is up to the committee to determine how much detail/research/justification is included for the projects put forward by committee in its plan. Including as much justification as possible for the offset number / NEB will be an advantage during review.
	+ Consider including (1) information on the proximity of the project to the projected permit exempt well growth; and (2) identifying the projected offset and net ecological benefit more clearly in the description.

# Update and Discussion on Water Rights Assessment

* Burt Clothier reviewed PGG’s work completed to date on the water rights assessment.
	+ PGG has created a web map layer to highlight individual water right locations.
	+ For the June committee meeting, PGG will work with GIS staff to (1) include enough information for each right on the web map so that committee members can easily get synopsis information for their review process; and (2) provide a table of water rights by subbasin and size of water right.
* PGG is seeking additional input from the workgroup/committee on which locations/rights should be on the ‘short-list.’ [Comments received prior to the workgroup meeting date](https://app.box.com/s/ukzf5kska6nknozctnfrq95widtrhd6a) on prioritization include:
	+ Sam Phillips – Gable Creek
	+ DFW / Squaxin – potential priority areas in South Sound
	+ Greg Rabourn – areas on Vashon/Maury
* Additional considerations from the working group:
	+ The nature of industrial water use can be fairly site-specific. Consider reaching out to Ecology’s Technical Resources for Engineering Efficiency (TREE) industrial assistance team on any industrial water rights. [Paul provided this information via the chat box: [*https://fortress.wa.gov/ecy/publications/summarypages/0304003.html*](https://fortress.wa.gov/ecy/publications/summarypages/0304003.html) *For more information or an initial site visit, contact: Dan Ferguson: P.E., 360-480-9543,* *Dan.Ferguson@ecy.wa.gov* *; Mike Lynch: 360-951-2787,* *Mike.Lynch@ecy.wa.gov**]*
	+ Consider adding a layer to the web map for sewer system service areas to determine whether usage is compatible with substitution by reclaimed water (e.g., water rights for irrigation/industrial use that could be provided with reclaimed water if local plant exists).
	+ Most certificates require the water user to submit monthly water use data (e.g., water levels, pumping meter readings) to Ecology annually. Could be an additional source of information for ‘short list’ rights.
	+ Consider contacting conservation districts as a way to screen some sites.

**Updates on Other Work Underway with the Consultant Team**

* **Managed Aquifer Recharge (MAR) projects update:**
	+ Potential locations on Bainbridge Island.
		- Manzanita Creek looks promising: county-owned gravel pit with stream nearby and a drainage problem that needs to be fixed; may coincide to be a good project. Small offset potential.
		- Springbrook Creek (Johnson Farm) – not well developed yet. Farms using irrigation – possible source switch/infiltration.
	+ Port Orchard Airport needs a lot more exploration to determine if feasible. The primary water source is stormwater. It has a pond / pumping to infiltration area on Kitsap Public Works parcel.
	+ Asbury parcel –concern around source of water to infiltrate. Currently the parcel has a pond but not sure if there is additional water available to infiltrate.
* **KPUD stream augmentation projects**
	+ Joel Purdy provided an overview of a few stream augmentation projects for consideration.
		- To be feasible, systems must (1) be located near stream and (2) have access water rights.
		- On feasible sites, a well could be drilled as an additional point of withdrawal for well / water right, dedicated to stream augmentation.
		- Could change rate of augmentation based on rainfall / drought conditions (e.g., pump more in streams when dry; pump at or below pond in wet years) and adaptively manage.
		- Estimated operation and maintenance costs (not including running pipe) = $6,000/year for each site. Well drilling would cost between $30-100,000, depending on depth.
	+ Foster Pilot (Port Orchard) - effects of wells are felt differently on nearby streams versus distant streams. Pumping groundwater would have a very localized effect on streams. Could presumably spread out effect of pumping over broader area / time period.
		- Prime candidate for offset: drill a well totally dedicated to stream augmentation below sea level aquifer near the headwaters of stream. Impacts from pumping deeper wells (pumping 100 gpm) are spread over a larger area.
		- Inchoate rights can be used for stream augmentation but not to mitigate.
		- This project would require a new water right in a closed basin (not currently allowed). Could potentially include project in plan as “not feasible / legal now but a consideration for future if law changes.” Will need to work closely with John Covert and Ecology Water Resources Section Manager to make sure these projects are legal / appropriate before moving forward.
		- Recent presentation by Robinson Noble that was mentioned is available [here](https://cloud.robinson-noble.com/s/siJywz6WH5o5boE).

# Projects by Subbasin

The workgroup held in depth discussions on each of the subbasins. A summary of updates to research, newly identified projects, projects for further development, projects for further exploration, and any projects of concern were discussed by each subbasin. New comments are captured in the project inventory. Documents that were shared during the meeting are available in the [project resource file](https://app.box.com/s/c9m6p0j2jy3hz3orro8su83z59u7tghm).

| **Project Name** | **Discussion** |
| --- | --- |
| **South Sound** |
| Pierce County parcel near Gig Harbor Golf Club, Artondale | * Paul Pickett did a site visit – looks good – what more can you do?
* Owned by Pierce County Surface Water Management; more flexibility in how to use for preservation.
 |
| Gig Harbor Golf Course Water Use Options Artondale | * Paul Pickett did a site visit – has potential. Creek runs through an open area that could be riparian.
* Potential for habitat enhancement and replacing direct surface withdrawal with groundwater well.
* Next step – gauge interest from golf club. Joel Purdy may be able to help facilitate a conversation with club owners.
* **Recommended for detailed development (possibly as an Artondale package).**
 |
| Artondale Creek Preservation | * Paul Pickett did a site visit – can’t tell from road.
* GPC interested in a potential acquisition / restoration project on this site.
 |
| Infiltrate County Owned Gravel Pit Near Port Orchard Airport | * Paul Pickett did a site visit – has potential. Talked to gravel pit operations manager. The gravel pit ponds catch and reuse runoff water. Shallow gravel surface layer; 50 feet of till underneath.
* The airport itself as has an unused area with drainage ditch by the edge of property. Consider a project to catch and store winter flows.
* **Recommended for detailed development.**
 |
| Floodplain enhancement on multiple sites (Filucy Bay) | * County property north of Long Branch. Signs indicate flood control. Austin can follow up with Pierce County Flood Manager; property was likely purchased by County through repetitive loss program.
* Paul Pickett did a site visit – has potential. Feeds the bay; hot spot for permit exempt well growth. Could use pond to hold water in winter; make an infiltration wetland; potential offset benefit.
* Need more information on how to quantify offset benefit of natural storage type projects. DFW wants to meet offset targets through projects that can be more reliably quantified for their streamflow benefit; sending a memo next week.
* **Recommended for further exploration.**
 |
| GPC Rocky Creek preserve + 360 Trails/Gateway Park | * Paul Pickett did a site visit – looks good, what more can you do?
* DFW / GPC would have concerns with putting BDAs in a functioning salmon stream (BDAs function better in headwater areas with no salmon where they wouldn’t impede passage).
 |
| Wastewater reclamation infiltration - City of Belfair | * Project straddles WRIA 14 and 15. Plant discharges into WRIA 15. Plant has a 20-year life; if capacity is reached in less than 20 years, could increase the amount of infiltration to add more water and increase capacity; if capacity is reached in more than 20 years, more hookups.
* Squaxin Island Tribe and Mason County interested in potential.
* Challenge will be to calculate the delta between total offset and what is required. The required portion cannot be included as an offset in plan.
* **Recommended for further exploration.**
 |
| Onsite Offset (Mason Co Stormwater Capture and Infiltration) | * John Covert and HDR going back and forth to develop a scope of work to evaluate this option; just about finalized. Once scope is finalized, it will go to Mason County for review. Then HDR will begin 2-3 weeks of analysis. We will incorporate WRIA 15 into the analysis as it is minimal additional effort above the work that they are doing for WRIA 14. We will share the work as it is developed.
 |
| **South Sound Islands** |
| Schoolhouse Creek Restoration | * The Anderson Island Parks District and Pierce County have been working on this Creek for many years.
* The County replaced two culverts in 2013. There are two remaining barriers on County road that the County is seeking funding from the fish barrier removal board for and one partial barrier on a private road.
* The Parks District has also been looking for funding to creek meandering and wetland restoration on a section of creek that was previously ditched and used for agriculture.
 |
| East Oro Bay Barrier Removal | * Anderson Island: earthen dam that impounds the top of the estuary in East Oro Bay. South Sound Salmon Enhancement Group has not reached out to the landowner in many years; at last check in, he was not interested in removing it. Potential in the future.
 |
| DFW Habitat Projects on McNeil (Dam removal) | * McNeil Island: WDFW is pursuing several projects. Potential dam removal. Nam and Doris Small (DFW) to connect next week on potential McNeil island projects and provide an update at next committee meeting.
 |
| **North Hood Canal** |
| Big Beef DNR Parcel | * Potential surface water storage and enhancing natural storage in wetlands. Sam has done some estimates of water storage to estimate pond volumes. Stream doesn’t appear to have salmon. The area is steep; total volume is about 75 acre-feet. Largest potential natural storage project in WRIA 15 (others are likely only a few acre feet).
* Wetland permitting challenges – if project doesn’t raise water level but retains for longer, likely not as big of an issue.
* DFW will have feasibility questions during the design process (e.g., How much buffer will be cleared to expand the volume of wetlands? What will be impacts to habitat?).
* **Recommended for detailed development.**
 |
| Big Beef Creek Restoration | * DFW interested in restoring wetlands, floodplain, and riparian along this ditched segment of upper Big Beef Creek. Opportunity for recharge to get streamflow benefits. Hotspot for growth.
* Acquisition likely needed. Property owner might be open to a selling; several parcels by same owner. Would like to have initial outreach.
* Potential wetland permitting challenges. Needs to enhance wetland function, not destroy by drowning.
* **Recommended for further exploration.**
 |
| Lake Symington Dam | * Potential for controlled release from dam.
* Landowners may have concerns about lake level in summer when they want to use recreationally.
 |
| Little Anderson Asbury Parcel (Newberry Woods Acquisitions) | * GPC has $4M acquisition project; likely some funding match from the Navy.
* GPC and HCSEG own several parcels in area.
* Streams run dry in summer; could add BDA component for NEB.
* Quantifying offset would be difficult; however, soil may be suitable for infiltration/storage.
* **Recommended for further exploration.**
 |
| **South Hood Canal** |
| All | * Skokomish Tribe will dig into details with project list in coming weeks. Interested in MAR projects.
 |
| **West Sound** |
| Reclaimed water facility and augmentation in Silverdale | * Central Kitsap Wastewater Treatment Plant currently discharging to sounds. Project among Poulsbo, Bangor, Central Kitsap, and Silverdale. Goal: zero discharge into Puget Sound. Plant capacity: 3.8M gallons/day.
* Project is already designed and planned. Could implement within 2-3 years of receiving funding. There are gaps in Newbury Hill where purple pipe is already installed. Potential project: how much funding would they need to get from downtown area to end of Newbury Hill road? Likely multiple million dollars ($3-8M).
* Could be a valuable project to get reclaimed water and allow for recharge; it would be expensive to get water to the end of the line, but it’s the largest opportunity for reclaimed water.
* Project has some customers lined up for irrigation (ball fields, schools) and a large hospital (Harrison Hospital) for dual pipes. No reclaimed water infiltration customers yet.
* **Recommend project for further development.**
 |
| All | * Suquamish Tribe prioritizes acquisition of 20+ acre parcels in headwater areas with wetlands. Support water for water projects to address potential low flow issues.
* Stacy discussed projects with WSPER. They provided a few name changes but had no major red flags on projects. Stacy will add comments to project inventory.
 |
| **Bainbridge Island** |
| Manzanita Project | * Owned by City of Bainbridge Island. Small stream piped under waste processing facility. Opportunity to divert to a gravel mine that the city owns. Some pits formed into wetland. Possibly some storage.
* DFW would have some issues with temp that would need to be considered. Need to look more into the geology.
* KPUD has water mains that could possibly be moved. Not likely conflict.
* **Recommended for further exploration.**
 |
| M&E Farm | * Historic Christmas tree farm. Master plan for the tree farm to turn into community orchard and park facilities.
* Interception ditch collects a lot of water and flows in the winter to Manzanita Creek. Opportunity to slow water down and look at wetland opportunities and storage near headwaters.
* Other public farmlands use shallow wells – potential offset (Morales Farm). Farm would use KPUD water; not sure what water offset would look like. Geology might be a challenge (underlying till).
* Potential candidate for surface water storage.
* **Recommended for further exploration.**
 |
| Johnson Creek Farm | * Pond systems – water is warm. Has a standpipe so water at surface comes out; could be decommissioned to let stream run on surface or replumbing to let the ponds drain better.
* Opportunity to increase flow into the mainstem.
* Old pump that is used for surface water extraction and managers of property interested in better set up for water use (deeper well or well on site).
* **Recommended for further exploration.**
 |
| Tertiary Treatment Facility - Winslow | * New project idea – tertiary treatment facility in Winslow with golf course upstream. Working to secure water right.
* **Recommended for further exploration.**
 |
| **Vashon/Maury** |
| Beall Creek Stream bypass + Beall Creek Mouth water right acquisition | * Water district 19 –largest water district on Vashon. Some of the wells have elevated arsenic.
* **Recommended for consideration under the water rights assessment.**
 |
| Protect Judd + Shinglemill Creek Headwaters | * Largest watersheds on Vashon. Lots of opportunity in the headquarters to raise the water table and flows. Year-round streams aren’t getting the fall flows that use to get.
* **Recommended for consideration under the water rights assessment.**
 |
| Misty Isle Farm | * South-central portion of Vashon Island. Expansive estate comprised of 525 acres. 6 water rights, property for sale. Acquisition project targets the western 280 acres for permanent protection that would preserve farmland, increase recreational opportunities, and protect ecological values. Headwaters for Fisher and Christiansen is also here. Coho streams with some chum.
* **Recommended for consideration under the water rights assessment.**
 |
| Protect Mileta Creek Headwaters | * Water rights and withdrawals happening. Does not flow all year. Would like to look at WR and unpermitted water withdrawals.
* **Recommended for consideration under the water rights assessment.**
 |

# Action Items and Next Steps

* For June committee meeting, PGG will work with GIS staff to (1) include enough information for each right on the web map so that committee members can easily get synopsis information for their review process; and (2) provide a table of water rights by subbasin and size of water right.
* Stacy to provide Chuck Hinds (Anderson Island Parks District) contact information.
* Stacy to presentation on Foster Pilot (Port Orchard) to Box.[done- see above]
* Stacy to post GPC project maps to Box. [done- see Project Resource folder]
* Stacy to add comments from WSPER to project inventory comments. [done]
* Nam and Doris Small (DFW) to connect next week on potential McNeil island projects and provide an update at next committee meeting. [meeting scheduled 5/27]
* Stacy will send out doodle poll for June and July meetings. Likely topics include: 1) review of water rights assessment; 2) review of detailed project descriptions and offset values; 3) discuss approaches to organizing the project list (discussion guide forthcoming).