

Climate Change Advisory Committee Minutes September 15, 2021

Present: Committee members Steve Richard, Deborah Rudnick, David McCaughey, Jens Boemer, John Kydd, Lara Hansen, Julie Mathews, Derik Broekhoff

Council Liaison: Joe Deets, Kirsten Hytopolous

City staff: Ellen Schroer, Deputy City Manager and Maureen Whalen, City Hydrogeologist

Additional attendees: Jacquelyn Shaff from UW Capstone

5:34 pm: **Call meeting to Order**

Conflict of Interest: none

Approve July 28 minutes: John Kydd moved to approved, Steve Richard seconded, approved

Public Comment: no public, no comments

- I. GWP presentation:** Maureen Whalen presented on the COBI groundwater management plan kickoff. She will be presenting to council next Tuesday, the 21st, and hoping to include feedback from advisory committee. Presentation is included in meeting materials, reviewing the current state of our knowledge regarding what is known about our Island aquifers and water use. UAC feedback emphasized climate impacts on groundwater, and impacts. Maureen asked for feedback on some of the goals and we had some discussions around clarifying the role of the agricultural sector and looking at the challenges and actions.

We have three major aquifers under the island that vary in form and depth on the island. The Sea level Aquifer, the Glaciomarine Aquifer and the Fletcher Bay Aquifer. Closest to the surface is the Vashon (Perched) aquifer which is intermittent. 71% of our residents are served by 35 Group A wells, 5% by Group B and 24% by private wells.

The primary goals relevant to CAP are to

- Adopt a Groundwater Management Plan by 2023 that maintains the integrity of our islands surface and groundwater resources.
- Support an agricultural system that marries food production, soil carbon storage and ecosystem services into a climate change resilient form.

Strategies and actions for protecting recharge, diminishing runoff, incentivizing conservation, and identifying target actions that will, in light of climate change, maintain a healthy surplus of recharge over charge.

Discussion ensued about

- fire events that can cause a substantial draw upon stored reserves taking days if not weeks to replenish

- enhancing storage capacity and flow while reducing the nonrenewable power needed to do so.
- how we might map water usage on the island and on deeper aquifers used off island to anticipate future vulnerability.

Also discussed the need for what balancing discharge and recharge looks like in order to make policy decisions around water use. Lara emphasized the need to understand to measure and integrate climate change into the GWP so we can use this for making good policy decisions moving forward. John recommended looking to other cities for best practices that could help guide us forward, and suggested thinking of water as a “commons” rather than a resource. What are the rights of an aquifer, and what is equitable? In terms of looking forward, Maureen thinks we can use more recent guidance from IPCC and more recent groundwater data to better identify groundwater sensitivity and changes under climate change.

- 2. ARPA projects:** Council is looking for input from CCAC on the short list of projects. Discussion ensued as to the most useful way to rank the various programs and it was decided that numerical measures of value were less helpful than qualitative descriptions of value or lack thereof. The key reason noted was that qualitative comments allowed the council members to understand the “why” of the ranking through a climate lens. Joe and Kirsten noted that such comments would help to guide a good ARPA decision.

With that as focus, David led the discussion of the proposed projects and noted that our mandate was to focus upon these projects from a CAP perspective and not the overall political desirability of the project. As such the factors most relevant were GHG reduction, duration of said reduction, implementability, equity of implementation and whether the project had multiple benefits.

Water System Resiliency

There is no significant reduction of GHG’s from this. It does enhance climate resiliency by reducing vulnerability. This seeks to create backups and redundancies to better respond to greater demand. It does enhance climate resiliency. Plans are not yet made, and funding could be from the Water Utility

Winslow Water Tank Replacement

No GHG impact of significance. It does address enhancing climate resiliency and would enhance seismic protection, enhance capacity, and arguably enhance equity to the area served which includes diverse socioeconomic groups in Winslow area. A PWTF loan was secured for part of this. Housefires could create a large demand on water system so enhanced storage capacity has enhanced value.

Wastewater Beneficial Re-use

This would slightly increase GHG emissions but would enhance resiliency and also reduce our vulnerability to climate change effects. It would be a durable investment in terms of climate effects. Tertiary treatment reduces the multiple costs of runoff and septic failure, help with groundwater recharge, and allow for re use in irrigation. Future funding sources not identified

Wastewater Treatment Capacity Upgrades

No GHG impact of significance. It does enhance climate resiliency but not as much as Wastewater re-use. These upgrades are partly regulatory and also needed for capacity to handle greater intensity of precipitation events. Upgrades would reduce the likelihood of polluting runoff into the Sound. No funding noted but leveraged funding from Sewer Utility is likely.

McDonald Springbrook Culverts

No GHG impact of significance. It does enhance resiliency of species protection. This replacement of the deep culvert at the Head of the Bay (under Eagle Harbor Drive). Leveraged funding from Storm and Surface Water Utility noted in City Capital Improvement plan. No other funding source noted. Project appears to be shovel ready. Use of lower carbon concrete should be considered.

SpringBrook Fish Passage on New Brooklyn

No GHG impact of significance. It does enhance resiliency of species protection. Design is funded but not implementation. However, funding by Land Trust (with State funds) seems possible and should be noted. Use of lower carbon concrete should be considered.

Stormwater Non-Motorized Demonstration

Not enough data to comment reasonably

Sustainable Transportation Plan Set Aside

Scope of project is undetermined and subject to council review in November of 2021. The chief possible benefit is reduction of fossil fuel based transportation. Potential GHG reduction and resiliency enhancement possible but not determinable

Madison Avenue Sidewalk and Bike lanes to SR 305

Small reduction of GHG due to bicycle use. Enhances safety and thus a source of indirect resiliency increase. The project scope includes multiple necessary and desired improvements along the Madison Avenue corridor between Winslow Way and SR305, including sidewalk replacement, pavement replacement, separated bicycle lanes, sidewalk infill and sewer replacements. Leveraged funding from City Capital Improvement plan, General Fund, Sewer fund and possible federal grant funds noted

Biodigester

This would reduce GHG emissions. It does enhance climate resiliency. Preliminary estimates could put the cost at \$8.6-10.9 M. Note presentation from 3/17/21 for more details. Project scope is undetermined, but the benefits include reduced GHG from reduced hauling miles, renewable power from digester, soil from end product for gardening and diversion of waste stream from disposal.

Solar Panels on E Hubs

Positive GHG impact in the sense of enhanced capacity using renewable power but no direct GHG reduction. Enhanced resiliency due to peak heating and cooling demands from climate change. Addresses multiple problems. Project scope and location not determined, and design seems a work in progress but other sources of funding within locality may be possible. Equity benefits of possible cooling center for those without home cooling systems.

3. **Capstone Project.** Jacquelyn Schaff presented a proposal for surveying a group of island business owners about their view of climate change and acting on climate change as an individual and as a business owner. In the near terms the CCAC was asked to assist in identifying business owners who could be surveyed. The interviews would likely occur in January with follow up in 60 days to see what steps were taken.
4. **Climate Mitigation/Adaption Officer.** Ellen announced that Autumn Salamack has been hired as COBI's Climate Mitigation/Adaption Officer. She has extensive experience working for the State of Indiana, King County Metro, Kitsap County and the City of Shoreline. She will begin work on October 15th.
5. **Road Maps for EV.** Steve Richard reported on his preliminary work with maps and reflected upon cities in California that were further along and what we might do.
6. **REAC/CCAC** Lara reported about continuing work between the two committees. After their last call, she shared the updated sections of the Climate Lens tool on benefits and impacts related to equity to seek written responses to the proposed addition from REAC. After further discussion it was determined that she will present on the lens and the draft equity additions at their October 7th meeting.
7. **Sustainable Transportation Task Force.** Derik reported on the meeting and problems faced in measuring miles driven on island and the options for determining same by regional formula, local surveys or other methods. This is a work in progress.

Meeting Adjourned: 7:40 PM

Materials included in meeting packet

1. July Minutes
2. COBI American Rescue Plan Funding Projects
3. Ground Water Management Plan Presentation
4. Criteria for Prioritizing CAP Action
5. UW Capstone Proposal
6. UW Capstone Presentation
7. UW Capstone Flyer

Co-Chair

10/20/21