Natural Resources Implementation Partner Workshop Notes

Workshop Date: February 13, 2018

Welcome and introductions

Josh Proudfoot welcomed attendees and thanked them for participating in the workshop. He invited attendees to introduce themselves:

- Peter Passarelli: Project manager for the CAP
  - Recapped project progress thus far
  - Outlined implementation partner workshops
  - Explained the purpose of the implementation partner workshops is to hear from technical experts about their experience and ideas for mitigation and adaptation strategies
- Daniel Newberry, Executive Director of Johnson Creek Watershed Council
  - Daniel has taken part in similar conversations in the past and can contribute a scientific perspective of what we can expect and what it might do to natural resources
- Terry Gibson, North Clackamas Urban Watershed Council (Mt Scott/Kellogg Creek)
  - Chair of MAPIT, Board Director of schoolyard farms
  - Interested in intersection of social and natural resource dynamics
- Chuck Eaton, Engineering Director for the of City of Milwaukie
  - Most concerned about storm water buffering and water quality treatment off of City infrastructure
- Vincent Alvarez, Chair of Citizen Advisory Board and CAPC member
  - Lived life as a low impact individual; wants to teach people that these things are achievable
- Ronelle Sears, Water and Streets Supervisor for the City of Milwaukie
- Shane Hart, Stormwater and Wastewater Supervisor for the City of Milwaukie
- Julian Lawrence, Landscape Maintenance for the City of Milwaukie
- Tonia Williamson, Natural Resources Coordinator for North Clackamas Parks and Recreation District
- Matt Glazewski, Public Policy Analyst at Clackamas County's Water Environment Services
  - Has worked as a climate science coordinator and teaches climate change science at PCC
  - Interested in wastewater/stormwater strategies and ideas where City/County could potentially come together and take advantage of economies of scale
- Rebecca Geisen, Director of the Regional Water Providers Consortium
  - Regional water provider perspective
  - Consortium has been very involved in climate change
  - Also work with the Portland water bureau and climate coordinator there
- Don Simenson, City of Milwaukie Water Quality Coordinator
- Josh Proudfoot, Good Company
- Emma Sagor, EnviroIssues

Key Discussion Points

- Switch of mountain snow to rain will increase back-ups in stormwater system.
- City has built massive detention systems that are designed to not release for 48 hours, but they are only designed for 10-year events.
- With higher sea levels and intense fresh water flooding, Columbia and Willamette could back up. Kellogg Creek could be part of Willamette and not recede for weeks.
- Shift view away from "100-year storms." Need to think in terms of antecedent conditions and rolling modeling approach. Systems often don't have enough time to recover.
- Milwaukie is on a water well system. Water has to be cleaned before it goes into the system.
    - Salt infiltration into the groundwater could contaminate drinking water sources.
    - Need to enhance CLEAN onsite infiltration to stop it before it even gets to the stormwater system. Most important in industrial areas.
    - More information is needed to understand regional recharge limits.
- Tree canopy can help with intercepting stormwater and provide cooling. Mature Douglas Fir trees can take a lot in intercept.
    - Several would like to see more street trees that are Evergreens.
    - The County is looking at what kinds of trees might be more resilient (cedars?).
    - Milwaukie can switch over to needle-leafed evergreens. They use less water in the summer.
    - Improving tree canopy is related to transportation planning and how the City structures street tree areas. Also tied to design standards and densification discussions (including residential infill).

Identified adaptation actions (listed in priority order by topic)

Blue font = will be characterized for adaptation benefit (we will be following up soon),
Green font = will be scaled for mitigation benefit

Stormwater Adaptation Actions			
Number of dots	**Action**	**Agencies/Resources Involved**	**Considerations for all actions**
5	Develop larger storage ("stormwater galleries under parking lots," "end of road network," and creek-side bank widening/storage) • Must consider infiltration/filtering as well	City of Milwaukie, Clackamas County	• Maintenance needs • Rate impacts • Public acceptance • Protecting groundwater quality • TMDL requirements • Impact of increased water temperature on infrastructure and processes
5	Develop new stormwater master plan • Public acceptance/buy-in important • Should consider up-stream impacts and partner with other municipalities	City of Milwaukie, Clackamas County, Watershed Councils, up-stream municipalities (Happy Valley, Portland Water Bureau, Multnomah County)	
4	Code adjustment to require clean, on-site filtration	DEQ, City of Milwaukie, Clackamas County, Metro	
1	Remove Kellogg Dam	City of Milwaukie, Clackamas County	
	Increase pervious pavement • Address parking lots, roadways, school yards, implement household incentives	City of Milwaukie	

Waste Water Adaptation Actions		
Number of dots	**Action**	**Agencies/Resources Involved**
3	Residential education (what goes down garbage disposals, toilets, etc.)	City of Milwaukie, Clackamas County
2	Improve integration between waste water system planning with solid waste system planning (consider revising code/regulations related to curbside food waste, garbage disposals, etc.)	City of Milwaukie, Clackamas County
2	Use stored stormwater to increase summer flows (if needed)	City of Milwaukie, Clackamas County
1	Strengthen industrial and restaurant waste water pre-treatment requirements	City of Milwaukie, Clackamas County
	Mitigate impacts of temperature increases (e.g. bacteria growth)	City of Milwaukie, Clackamas County

Drinking Water Adaptation Actions		
Number of dots	**Action**	**Agencies/Resources Involved**
5	Well-head protection • Introduce more monitoring facilities	City of Milwaukie, Oregon DEQ
4	Review water sourcing agreements • Determine need for a fire management plan for drinking water (Other communities losing their water and using Milwaukie wellfields)	City of Milwaukie, Clackamas River Watershed, Portland Water Bureau, Clackamas County
4	Develop a long-term potable re-use plan	Clackamas County
2	Gain more information about recharge area and limits	Regional Water Providers Consortium, regional counties

Tree Canopy Adaptation Actions			
Number of dots	**Action**	**Agencies/Resources Involved**	**Considerations for all actions**
4	Develop program with Tree Board (consolidated from below) • Increase canopy coverage • Integrate canopy planning with street planning efforts • Integrate canopy planning with building codes • Multi-family tree requirements • Mitigate development impacts (replacing mature trees with new plantings not sufficient) Strikethrough of these three elements below rolled into this action	City of Milwaukie, Metro	• Maintenance needs • Public education

~~3~~	~~Integrate canopy planning with street planning efforts~~	City of Milwaukie	
~~3~~	~~Select resilient species for new planting~~	City of Milwaukie	
~~3~~	~~Integrate canopy planning with building codes~~ ~~• Multi-family tree requirements~~	City of Milwaukie	
2	Educate the public about importance of tree canopy	City of Milwaukie	
1	Align and integrate canopy planning with habitat conservation goals	City, Metro, North Clackamas Parks and Recreation District	