

Appendices

APPENDIX C. PUBLIC INVOLVEMENT AND PARTICIPATION

C.1. Stormwater Public Advisory Group Meetings





Stormwater Public Advisory Group

Proposed Agenda

Wednesday, October 14, 2020

12:00 PM – 1:30 PM

Remote Meeting (Click link below to join)



CITY OF BEND

[Join Microsoft Teams Meeting](#)

[Learn more about Teams](#) | [Meeting options](#)

- I. **Welcome and Introductions**, All, 12:00-12:05 PM
Objectives: Introductions. Review agenda, previous meeting summary, status updates.
- II. **Newport Avenue Stormwater and Corridor Improvements Updates**, Drew Wells, 12:05 -12:15 PM
Objectives: Project manager Drew Wells joins us to provide updates since the June meeting.
- III. **Infiltration Study Update Project**, 12:15 – 12:25 PM, David Buchanan
Objectives: Receive a status update on the infiltration study project recommended by PAG. Receive an introduction to and overview of the 60% draft. Discuss timeline for review.
- IV. **Adding Flexibility to Subdivisions—Changing Structures and Processes Updates**, 12:25 PM – 12:35 PM, Wendy Edde, Dustin Elmore, Pauline Hardie
Objectives: Receive an update on work conducted to work through the processes and changes needed to allow drainage flexibility. Receive updates on CDD efforts to increase housing type flexibility.
- V. **Stormwater Annual Report**, 12:35 PM – 12:45 PM, All
Objectives: Receive introduction and overview to the draft FY2019-20 annual report. Confirm review schedule. Provide any comments for incorporation into this year's submittal by or before 9 AM Monday October 26. (Continual improvement comments are always welcome)
- VI. **Demonstration Project Proposal: Hydroseed Improvements**, 12:45 PM – 1:00 PM, Sam Rossi
Objectives: Discuss and provide input on proposal to improve erosion and sediment control operations.
- VII. **Street Sweeping Efficiency Pilot Project**, 1:00 PM – 1:10 PM, Wendy Edde
Objectives: Receive short overview on efforts to increase effectiveness of our street sweeping program and initial results of a pilot effort to test out pre-notification with WaterSense software.
- VIII. **Public Education and Participation**, 1:10– 1:15 PM, Wendy
Objectives: Receive update on the Deschutes River Cleanup 2020 event, review the final psa of the 2020 grand prize winner, review and help encourage participation in the 2021 Clean Water Works Video Contest; discuss upcoming efforts with school program, outreach, etc.
- IX. **Roundtable Discussion and Updates**, All, 1:15-1:25 PM
Objective: Circle around the meeting attendees for updates, open discussion.

- X. **Meeting Summary and Effectiveness Check-ins, All, 1:25-1:30 PM**
Objective: Continual improvement of meeting effectiveness. Confirm action items; discuss next meeting date.

Stormwater Public Advisory Group

Meeting Summary

Wednesday October 14, 2020 12:00 PM – 1:30 PM

Held Remotely via Microsoft Teams



CITY OF BEND

Key Items Discussed:

- **Newport Avenue Stormwater and Corridor Improvements Updates**—This item was postponed until the next meeting due to a scheduling mix-up. The synergy project continues to move forward with several stormwater improvements planned for the system that outfalls at Mirror Pond between Harmon and Pageant Parks.
- **Infiltration Study Update Project.** David Buchanan provided an overview of the 60% report prepared by project consultants GSI and the Wallace Group. The consultant incorporated the results of the infiltration testing they conducted earlier in the summer and that gathered over the past decade plus since the original report into the report. The report provides the latest information on the best subsurface conditions for drainage through town, and includes GIS map updates for well locations and geological figures. The general pattern remains with tuff on the west side of town and more basalt east of the river. The project is useful both for system understanding when considering drainage and density flexibility options, and as a precursor for the next Stormwater Master Plan update. Jim Oberlander took interest in the infiltration study and mentioned addressing source control issues could also benefit from understanding the local geology.
- **Adding Flexibility to Subdivisions—Changing Structures and Processes Updates.** Pauline Hardier provided an overview of recent changes in development regulations. HB 2001 results in treating duplexes the same as single family residences, so lot sizes for duplexes are allowed to be 4,000 sq ft for standard density and 10,000 sq ft in low density zoning areas. More changes will develop to encourage duplexes, triplexes, town homes and cluster developments. Triplexes and fourplexes will both be able to be built on smaller lot sizes, with triplexes dropping down to 5,000 square feet. Parking reductions are also occurring, possibly down to 1/unit or less than 1 per unit per state mandated OAR and code. The City Council has allowed micro units of 400 sf or smaller in medium and higher use mixed use zones with reduced parking. For small dwelling units they are reducing development from 4,000 square feet and are reducing setbacks to 3 feet. For engineering, Dustin is working on staffing, training and large workloads in Community Development. Brad indicated that setbacks in the building code are 10 feet from the front and 5 feet sideyards; infiltration should not be within 10 feet of the building although conveyance can be.
- **Stormwater Annual Report.** Attendees received and overview of the draft and discussed the stormwater annual report. Any modifications should be provided by 9 AM Monday October 26, 2020.
- **Demonstration Project Proposal: Hydroseed Improvements.** Sam Rossi provided a brief presentation on potential hydroseed improvements for slope stabilization. Attendees did not have any comments.
- **Street Sweeping Efficiency.** Wendy provided a presentation on the street sweeping efficiency project tracking results. Advanced notification via email and text of street sweeping appears helpful for increasing efficiency with low cost. Jim indicated that having GPS on sweepers is very useful and the drivers could tag pot hole and storm drain marker needs as they work.

- **Public Education and Participation.** Attendees provided advice on public education and participation needs. Jim mentioned that dog wastes also carry medications and bacteria. He asked if anyone monitors the river for bacteria given the high river use. Bacteria has not been a problem to date. Wendy will have a presentation on ambient water quality at the next meeting.
- **Roundtable.** Tom Headley indicated the Columbia Street Project Design/Build is starting soon.

Key Decisions Made/Action Items

- City staff will continue to make progress on the Newport Corridor project and will provide additional updates to the Public Advisory Group at the next meeting.
- David Buchanan will work with the consultant team to finalize the Infiltration Study. Any PAG members who would like a copy of the full study will contact David.
- Annual report comments are due Monday October 26 at 9 AM.
- Wendy will contact members in December to schedule the next meeting.

Stormwater Public Advisory Group

Proposed Agenda

Thursday, January 21, 2021

10:30 AM – 12:00 PM

Remote Meeting ([Click link below to join](#))



CITY OF BEND

Microsoft Teams meeting

Join on your computer or mobile app

[Click here to join the meeting](#)

[Learn More](#) | [Meeting options](#)

- I. **Welcome and Introductions**, Wendy Edde, All, 10:30-10:35 AM (5 minutes)
Objectives: Introductions. Review agenda, previous meeting summary, status updates related to Annual Report and the Infiltration Report.
- II. **City View Unveiled—an Overview**, Dustin Elmore or designee (Community Development Dept., 10:35-11:00 AM (15-25 minutes)
Objectives: Receive updates on the new computer software system that went live in December, updating the City's development and code enforcement processes. Receive introduction to the City View Portal for tracking and entering pertinent information.
- III. **Newport Avenue Stormwater and Corridor Improvements Updates**, Drew Wells (Engineering Infrastructure Planning Dept.), 11:00 -11:10 AM (10 min)
Objectives: Project manager Drew Wells joins us to provide updates since the June meeting and answer any questions about the project.
- IV. **Ambient Water Quality Report Draft – Feedback on Layout**, Toni Pennington (ESA, Inc.), 11:10 AM – 11:30 AM, (10-20 minutes)
Objectives: Welcome ESA's Toni Pennington to provide an overview to the City's Ambient Water Quality Report preliminary draft of Deschutes River water quality as it enters, travels through, and leaves Bend; provide feedback on layout and graphics for public readability/understanding.
- V. **Meet and Greet: Oregon DEQ MS4 Stormwater Updates**, 11:30 AM – 11:50 AM, Ryan Johnson, MS4 Stormwater Specialist, DEQ (15-20 minutes)
Objectives: Meet Ryan Johnson, our stormwater permit writer for our piped system to the river (Municipal Separate Storm Sewer System (MS4)). Hear about the status of recent updates to similar stormwater permits around the state, and have a chance to engage with Ryan and the City with questions or desires for Bend's next permit, coming soon.
- VI. **Roundtable Discussion and Updates/Meeting Effectiveness Check-in**, All, 11:50-12:00 Noon (10 minutes)
Objective: Circle around the meeting attendees for updates, open discussion. Continual improvement of meeting effectiveness. Confirm action items; discuss next meeting date.

Stormwater Public Advisory Group

Meeting Summary

Thursday January 21, 2021 (10:30 AM – 12:00 PM)

Held Remotely via Microsoft Teams



CITY OF BEND

Attendees:

Bronwen Mastro (Bend Park and Recreation District), Moey Newbold (Central Oregon Land Watch) Jim Oberlander (Citizen), Tom Headley (Century West), Todd Cleveland (Deschutes County), Chris Hart-Henderson (Heart Spring Design), Ryan Johnson (Oregon Department of Environmental Quality), Aaron Salvesen (Salvesen Homes), Joanne Richter (Upper Deschutes Watershed Council), Lawrence Klein (Wylder Solutions, LLC); Wendy Edde, Drexell Barnes, Jeff Buystedt, David Buchanan, Sam Rossi (City of Bend Utility Dept.); Dustin Elmore, Austin Somhegyi, Brad Mandal, Pauline Hardie (City of Bend Community Development Dept.); Brittany Barker, Drew Wells (City of Bend Engineering Infrastructure and Planning Dept.); Toni Pennington (ESA)

Key Items Discussed:

- **Welcome and Introductions** — Wendy Edde kicked off the meeting, introducing Drexell Barnes as the moderator and providing an overview of the agenda. Wendy also highlighted the meeting materials provided and the previous meeting summary.
- **City View Presentation** — Dustin Elmore and Austin Smhegyi provided a presentation on the new permit software system, City View, that went live in December 2020. Austin gave a brief overview on the City View Portal. This new software is used for entering property information, applying for permits, requesting inspections and filing code enforcement complaints such as stormwater illicit discharges. Austin also walked the group through an example Drainage Permit showing how to add contacts, upload plans and view permit fees.
- **Newport Avenue Stormwater and Corridor Improvements** — Drew Wells gave a project update on the Newport Corridor Improvements Project. Design is 90% completed and moving towards final with construction to begin in the spring. The project was awarded to Taylor Northwest utilizing a guaranteed maximum price procurement process. There are 5 segments within the project, all segments are expected to be completed over the next two years. This is a high priority project for the stormwater program and will include a large number of stormwater planters along with filter vaults. Drywells are also being used to reduce flows to the river where possible. The South Awbrey improvement study estimates are being refined and are coming in higher than anticipated. City staff will work to prioritize those improvements based on funding availability. Jim Oberlander provided his experience with filter vault systems and noted significantly higher O&M costs compared to some other BMPs.
- **Ambient Water Quality Report** — Toni Pennington provided a presentation on City's Ambient Water Quality Report (2018-2019) that ESA, Inc. is compiling using data collected by City staff. This report will remain in a draft format until the most recent monitoring data for 2020 can be added. The data is focused around DEQ's 303D list and includes maps

showing the monitoring locations. Toni noted that some sample sites have changed over time and technology improvements have helped refine the monitoring program. Toni is also working to incorporate flow data into the report. City staff are looking for ways to improve the report. The PAG was encouraged to review Lake Tahoe's website, as an example. Drexell liked how that program uses a simple A, B and C grading system to inform the public on the current water quality status. As part of her contract Toni, will also upload City data as part of the upcoming state's call for data for the Integrated Report, which provides an overview n water quality in surface waters throughout the state including a list of pollutants of concern.

- **Oregon DEQ MS4 Stormwater Updates** — Ryan Johnson with Oregon DEQ provided an update on the National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) permit program. He discussed the City's existing permit extension and provided some insight into DEQ's re-issuance process.
- **Roundtable Updates/Meeting Effectiveness Check-in** — Brad Mandal expressed concern with stormwater management challenges given a proposed House Bill that could allow multi-family developments on smaller residential lots. Moey Newbold expressed support for the smaller lot sizes, while recognizing stormwater management may need to take a different approach in those areas. The City has completed the Infiltration Study presented at the October 2020 meeting. Wendy indicated a [Watershed wise](#) lot level gardening design and water conservation workshop series will be hosted by the Stormwater and Water Conservation programs in March, which will include CEUs for contractors. Lawrence Klein would like more frequent communication if possible. Overall PAG members expressed positive support for the information and presentations.

Key Decisions Made/Action Items

- Direct all City View questions or issues encountered to Dustin or Austin.
- Drew will be hosting a virtual open house for the Newport project at the end of February. City staff will pass that info along to the PAG. A sign-up for regular project updates is available on the EIPD [Newport Corridor Project](#) website page.
- PAG members to provide feedback on the Ambient Water Quality Report. Staff is looking for suggestions on how to simplify the report. Wendy and Toni will work to finalize the report and submit data to DEQ during the next call for data session. Jeff B. will update monitoring sites names and provide those names to Toni.
- Interested attendees should contact David Buchanan (dbuchanan@bendoregon.gov) for a copy of the Infiltration Study update (GSI, October 2020).
- Utility staff will send out a flyer on the joint stormwater/water conservation training series.
- A doodle poll will be sent out in March to find a suitable time for our next meeting.

[Link to Meeting Recoding](#)

Stormwater Public Advisory Group

Proposed Agenda

Thursday, April 22, 2021

1:00 PM –2:30 PM

Remote Meeting (Click link below to join)



CITY OF BEND

Microsoft Teams meeting

Join on your computer or mobile app

[Click here to join the meeting](#)

[Learn More](#) | [Meeting options](#)

- I. **Welcome and Introductions**, Wendy Edde, All, 1:00-1:05 PM (5 minutes)
Objectives: Introductions. Review agenda, previous meeting summary, status updates related to Annual Report and the Infiltration Report.

- II. **Fish, Roadways, and Next Steps**, 1:05 PM – 2:00 PM (50 minutes)
 - a. **Urban Stream Mortality Syndrome**, Eric Strecker (Terraphase Engineering), 1:05-1:25 PM
 - b. **Streets and Operations Rubberized Chip Seal Project Overview**, David Abbas, Transportation & Mobility Department Director, 1:25-1:45
 - c. **Discussion** 1:45-1:55*Objectives: Receive an overview of recent scientific sleuthing in the Pacific Northwest searching for the chemical in urban runoff impacting certain fish species; learn about 6PPD-quinone, it's impacts, what can help, what needs additional investigation. Next, receive an overview of a new-to-Bend chip seal product using recycled tires being contracted this summer—what it is, how its applied, where it is first being piloted, environmental and cost considerations. Discuss.*

- III. **BCD Initiative Vision for Franklin Update**, Moey Newbold, Stormwater Public Advisory Group Member; Director of Urban Planning, Central Oregon LandWatch, 1:55-2:05 PM (5 minutes)
Objectives: Receive an overview of murals bringing attention to a proposal for a synergy project on Franklin to address stormwater, ped/bike accessibility, and redevelopment of the Bend Central District.

- IV. **Utility Overview Outreach Videos: “Our Water System: A Journey Through Bend,”** Mary Packebush (Utility Communications), 2:00 -2:10 PM (10 minutes)
Objectives: Receive an introduction to the City’s Utility Educational Outreach program currently being refined and how it is being captured for online use. Provide input on breadth of use beyond school children.

- V. **Stormwater Fee Structure Review/Update Project Status Update and Next Steps**, 2:10 PM – 2:20 PM, Wendy Edde, Mike Buettner (Utility Director), Dana Wilson (Utility Business Manager) (10 minutes)
Objectives: Continuing work on adding flexibility to stormwater drainage options, the City looks to kick off a stormwater fee and rate structure review in mid-summer with the new fiscal year. Meet Mike and Dana in their new roles for the City, and learn more about this project and the Stormwater Public Advisory Groups role in providing input.
- VI. **Roundtable Updates and Discussion/Meeting Effectiveness Check-in**, All, 2:20-2:30 Noon (10 minutes)
Objective: Circle around the meeting attendees for updates, open discussion. Continual improvement of meeting effectiveness. Confirm action items; discuss next meeting date.

Stormwater Public Advisory Group

Meeting Summary

Thursday April 22, 2021 (1:00 PM – 2:30 PM)

Held Remotely via Microsoft Teams



CITY OF BEND

Attendees:

Bronwen Mastro (Bend Park and Recreation District), Moey Newbold (Central Oregon Land Watch) Jim Oberlander (Citizen), Tom Headley (Century West), Todd Cleveland (Deschutes County), Chris Hart-Henderson (Heart Spring Design), Ryan Johnson (Oregon Department of Environmental Quality), Aaron Salvesson (Salvesson Homes); Joanne Richter (Upper Deschutes Watershed Council); Wendy Edde, Mary Packebush, David Buchanan, Sam Rossi, Dana Wilson, Michael Buettner (City of Bend Utility Dept.); Dustin Elmore, Brad Mandal, Pauline Hardie, Allison Platt (City of Bend Community Development Dept.); Brittany Barker, Drew Wells (City of Bend Engineering Infrastructure and Planning Dept.); David Abbas (City of Bend Transportation and Mobility Dept.); Eric Strecker (Terraphase); Brian Reis (HDR) (guest)

Key Items Discussed:

- **Welcome and Introductions** — Wendy Edde, Stormwater Program Manager, started the meeting by providing an overview of the agenda. General introductions were skipped to ensure meeting topics were addressed in the time allotted for the meeting, but Wendy briefly introduced the City's new Utility Director Mike Buettner and Utility Budget Manager Dana Wilson who will both be involved the upcoming stormwater rate structure work (described below).
- **Fish Health and Rubberized Roadways Discussion**
 - a. Eric Strecker, Principal Engineer, Terraphase and member of the Puget Sound Partnership's Science Panel began the discussion by presenting on the topic of Urban Stream Mortality Syndrome. A [Washingt State University/University of Washington led](#) study, published in December 2020, found coho salmon mortality linked to a pollutant known as 6PPD – Quinone. 6PPD—~~quinone~~ is a tire additive that slows the breakdown of tires. When 6PPD —~~Quinone~~ is oxidized, ~~becoming 6PPD-Quionone~~, it has been documented to be toxic to coho salmon and, to a lesser extent, steelhead and king salmon. The Deschutes River does not have documented coho salmon runs, however, it does provide habitat for steelhead, chinook salmon, sockeye salmon, and native redband trout. Worth noting are the relatively low concentrations that have been shown to impact rainbow trout (a close relative to steelhead and redband trout). Highlights from Mr. Strecker's presentation include:
 - An Oregon State University study [completed in 2000](#) found that the stormwater from highways became relatively non-toxic after [entering bioretention facilities and](#) coming into contact with soil. [The same study noted that the toxicity of 6PPD-Quinone was rapidly reduced by biofiltration through the Ecology mix.](#) That study as well as many others have found that there are mechanisms at the soil-level that remove, or buffer the toxicity of stormwater coming from highways. It is not yet clear the extent the removal efficiencies is influenced by the engineered

soil mixture used in the stormwater bioretention facilities designed to remove pollutants as opposed to soils in general.

- Current monitoring efforts are tracking 6PPD – quinone from tire wear and the associated “tire dust” that deposits on streets, entering surface water via stormwater drainage. Laboratory methods are still under development to detect and report 6PPD – Quinone.
 - There is evidence that points to 6PPD – quinone’s rapid biodegradation through hydrolysis (93% after 24 hours). There does not appear to be any evidence of bioaccumulation.
 - Additional research is needed to understand; how fast toxicity is reduced in receiving waters; if soil contact actually removes or neutralizes the pollutant; and what are the implications of recycled tires as an additive in paving mixes as rubberized chip seal is not used in Washington.
 - [There is little known about 6PPD-Quinone release from the use of tire-derived aggregate and crump tires in pavements and chip seals.](#)
 - Mr. Strecker recommended the City of Bend consider impacts to drinking water, human health, and other aquatic species.
- b. David Abbas, Transportation & Mobility Department Director, presented an overview of the City of Bend’s Streets and Operations Rubberized Chip Seal Project. David began by providing an overview of the City’s current methods and applications available to repair and protect the life of paved streets throughout the City. His overview provided an explanation of the cost/benefit of different approaches utilized by the City. This summer the City is adding another approach to improve pavement condition that is both cost effective and more environmentally-friendly. A chip seal product that includes recycled tires will be applied on streets east of highway 97 (near Pilot Butte) this summer with additional areas planned. This effort is estimated to remove approximately 3,600 tires from entering the landfill. David went on to explain that this product has been around for decades (used by Caltrans (California) and many other states) and has been used recently in Central Oregon by another municipality. Initial results from the regional application are very promising. David explained that the product replaces 20% of a mineral aggregate with an encapsulated recycled rubber additive. Due to the recent findings of 6PPD – quione related to tire wear and its impacts to salmonids, David explained that this product will not be applied in the City’s stormwater drainage to the Deschutes River (MS4) until more study can rule out ill effects.
- c. Wendy closed with a roundtable discussion to hear from the public. All public attendees were provided the opportunity to offer their input. Attendees appreciated the presentations and would like to learn more about how the product interacts with the environment in terms of removal and unintended consequences. Jim Oberlander asked about the potential for rubberized chip seal to catch fire (David A. assured there has not been an issue with chip seal); Moey Newbold was interested in Caltrans experience at altitude and appreciated the interdepartmental communication and use of best available science; Joanne Richter would be interested in seeing a monitoring plan and holding off on use in the MS4 area until more is known; Todd Cleveland is interested to learn more about how the chemical is attenuated or breaks down in the soil In general, the meeting attendees agreed that the City should wait to apply the rubberized chip seal product in areas that drain to the River, but are comfortable with this product being applied in other areas. This was mostly due to the fact that little is known of the potential impact to

Formatted: Font: (Default) +Body (Calibri)

aquatic species. The majority of attendees also expressed an interest in monitoring stormwater runoff from basins treated to understand more about how the chip seal product might breakdown and possible impacts to human health. Wendy indicated that the City promotes pretreatment by outfall location, and thus encourages bioretention in areas that drain to the river already. Drew Wells shared that the recent 14th street project within the area that drains to the river included 2 landscape swales on century; and the Newport project currently under construction will include 30 bioretention planter boxes varying in size along with 7 drywells that inject runoff that would otherwise drain to the river.

- **BCD Initiative Vision for Franklin Underpass** — Moey Newbold, Director of Urban Planning for Central Oregon LandWatch, provided an update on the Franklin Underpass visioning project. The goal of that project is to improve the Franklin corridor and east-to-west travel. Moey has been working with a local engineer, Jim Lord of Ashley Vance, and noted that a synergy project has been identified; they have also worked with an artist to create a mural. Moey proposed working with the City to combine the Franklin Underpass project to include improved mobility, a small memorial garden, with the drainage improvement project being planned by the City in the same area. Moey proposed collaboration to implement a similar framework to that of the improvements made to the 3rd Street Underpass that added green infrastructure (i.e. bioretention) to mitigate downstream flooding. Allison Platt, Senior Planner with the Growth Management Division, mentioned that a Feasibility Study is in the queue to understand how to implement the \$12 million under the Transportation Bond projects. Sinclair Burr, Principal Engineer with Engineering Infrastructure Planning Department, will be leading this effort and is the contact to coordinate with for this synergy project.
- **Utility Overview Outreach Videos: “Our Water System: A Journey Through Bend”** — Mary Packebush from Utility Communications provided an introduction of the City’s Utility Educational Outreach Program. A draft web platform is being constructed to serve the community and Mary would like to know if the PAG has any input on how the platform should be used. Generally, the focus has been on youth education, but Mary expressed an interest in understanding if the PAG could identify other target audiences that may find the subject matter valuable. Mary requested that all feedback be sent to her by mid-May.
- **Stormwater Fee Structure Review Project Update** — Wendy provided an update on the Stormwater Fee Rate Study. The study is being planned for the new fiscal year starting in July 2021 in coordination with FCS consultants. Topics that come out of that effort will be coming back to the PAG for review and input. Additional considerations are currently being included in the scope of the study. Please send Wendy any input on additional items. The initial scope is under review and will be shared with the PAG in future meetings.
- **Newport Avenue Stormwater and Corridor Improvements** — Drew Wells, Project Engineer, gave a project update on the Newport Corridor Improvements Project. Construction has started on segment 1 of 5 nearest Pageant Park. The South Awbrey Butte project is now a separate CIP and is slated for construction in 2023.
- **Roundtable Updates/Meeting Effectiveness Check-in** — Brad Mandal, Building Official, mentioned that the House Bill Committee will be presenting to Council regarding the House Bill that will allow smaller lots. Brittany Barker, Principal Engineer, shared that the Stormwater Master Plan is being planned to start in 2022. Wendy indicated that the timing

should work well as it will allow drafting the City's Integrated Stormwater Management Plan (focused on water quality protection) beforehand, which will also be brought before the PAG for input.

Key Decisions Made/Action Items

- The Public Advisory Group members supported the City's approach that due to the recent findings of 6PPD – Quinone related to tire wear and its impacts to salmonids, that rubberized chip seal will not be applied in the City's stormwater drainage to the Deschutes River [or Tumalo Creek](#) (MS4) until more study can rule out ill effects.
- The City will continue to track monitoring studies being conducted elsewhere for 6PPD-quinone, and will look into the possibility of setting up a monitoring study in Bend to learn more about rubberized chip seal and 6PPD-quinone.
- Moey Newbold will reach out to Sinclair Burr with regards to synergy ideas for the Franklin Underpass improvements project.
- PAG members have been asked to review the following "Our Water System: A Journey Through Bend" webpage for online educational lessons and provide comments and feedback directly to Mary Packebush (mpackebush@bendoregon.gov) by May 15, 2021. <https://www.bendoregon.gov/government/departments/utilities/6th-8th-grade-lessons>
- The stormwater fee structure scope will be shared with the PAG in future meetings.
- For additional meeting effectiveness or other input as a result of today's meeting, please email Wendy your thoughts.

Meeting Summary

Total Number of Participants 24
Meeting Title Stormwater Public Advisory Group Meeting

Meeting Start Time "4/22/2021, 12:55:31 PM"

Meeting End Time "4/22/2021, 2:40:19 PM"

Meeting Id 80a19b96-6576-4e0b-8b9b-5a43088ca80d

Full Name	Join Time	Leave Time	Duration	Email	Role
Participant ID (UPN)					
Wendy Edde	"4/22/2021, 12:55:31 PM"		"4/22/2021, 2:39:23 PM"		1h 43m
wedde@bendoregon.gov	Organizer				
David Buchanan	"4/22/2021, 12:56:47 PM"		"4/22/2021, 2:39:19 PM"		1h 42m
dbuchanan@bendoregon.gov	Presenter				
Eric Strecker	"4/22/2021, 12:57:49 PM"		"4/22/2021, 2:39:20 PM"		1h 41m
eric.strecker@terraphase.com	Presenter				
Tom Headley - Century West Engineering (Guest)	"4/22/2021, 12:57:49 PM"		"4/22/2021, 2:40:19 PM"		1h 42m
"4/22/2021, 2:40:19 PM"	Presenter				
"Reis, Brian"	"4/22/2021, 12:57:50 PM"		"4/22/2021, 2:33:02 PM"		1h 35m
BREIS@hdrinc.com	Presenter				
Mary Packebush	"4/22/2021, 12:58:07 PM"		"4/22/2021, 2:39:36 PM"		1h 41m
mpackebush@bendoregon.gov	Presenter				
Chris Hart-Henderson (Guest)	"4/22/2021, 12:58:25 PM"		"4/22/2021, 2:39:17 PM"		1h 40m
"4/22/2021, 2:39:17 PM"	Presenter				
David Abbas	"4/22/2021, 12:58:59 PM"		"4/22/2021, 2:13:16 PM"		1h 14m
dabbas@bendoregon.gov	Presenter				
" ""Aaron (Guest)""	"4/22/2021, 12:59:07 PM"		"4/22/2021, 2:39:21 PM"		1h 40m
"4/22/2021, 2:39:21 PM"	Presenter				
Todd Cleveland	"4/22/2021, 12:59:14 PM"		"4/22/2021, 2:39:18 PM"		1h 40m
Todd.Cleveland_deschutes.org#EXT#@CDD481.onmicrosoft.com	Presenter				
Brad Mandal	"4/22/2021, 1:00:02 PM"	"4/22/2021, 2:39:21 PM"			1h 39m
bmandal@bendoregon.gov	Presenter				
Dana Wilson	"4/22/2021, 1:00:17 PM"	"4/22/2021, 2:13:46 PM"			1h 13m
dwilson@bendoregon.gov	Presenter				
Michael Buettner	"4/22/2021, 1:00:51 PM"	"4/22/2021, 2:01:06 PM"			1h
mbuettner@bendoregon.gov	Presenter				
Sam Rossi	"4/22/2021, 1:00:58 PM"	"4/22/2021, 2:39:28 PM"			1h 38m
srossi@bendoregon.gov	Presenter				
Bronwen Mastro	"4/22/2021, 1:01:06 PM"	"4/22/2021, 2:29:49 PM"			1h 28m
bronwenm@bendparksandrec.org	Presenter				
" ""Moey (she/her) (Guest)""	"4/22/2021, 1:01:20 PM"	"4/22/2021, 2:39:26 PM"			1h 38m
"4/22/2021, 2:39:26 PM"	Presenter				
Jim O	"4/22/2021, 1:01:28 PM"	"4/22/2021, 2:39:20 PM"			1h 37m
					Presenter
JOHNSON Ryan A * DEQ	"4/22/2021, 1:01:29 PM"	"4/22/2021, 2:39:22 PM"			1h 37m
Ryan.A.Johnson@deq.state.or.us	Presenter				
Joanne Richter (Guest)	"4/22/2021, 1:02:26 PM"	"4/22/2021, 2:22:12 PM"			1h 19m
	Presenter				

Brittany Barker "4/22/2021, 1:02:51 PM" "4/22/2021, 2:39:26 PM" 1h 36m
bbarker@bendoregon.gov Presenter
Pauline Hardie "4/22/2021, 1:03:06 PM" "4/22/2021, 2:33:04 PM" 1h 29m
phardie@bendoregon.gov Presenter
Allison Platt "4/22/2021, 1:13:08 PM" "4/22/2021, 2:32:51 PM" 1h 19m
aplatt@bendoregon.gov Presenter
Dustin Elmore "4/22/2021, 1:14:02 PM" "4/22/2021, 2:38:54 PM" 1h 24m
delmore@bendoregon.gov Presenter
Drew Wells "4/22/2021, 1:56:31 PM" "4/22/2021, 2:39:12 PM" 42m 40s
awells@bendoregon.gov Presenter