# Burnt Bridge Creek Partnership Operations and Maintenance Workgroup Meeting Summary – May 5, 2021



Please complete this **Doodle Poll** to find a time for the next Burnt Bridge Creek Partnership Meeting.

### Background

The Burnt Bridge Creek Partnership kicked off in February 2021 to develop a TMDL Alternative Restoration Plan for the Burnt Bridge Creek watershed, which is also known as a "Water Cleanup Plan." After the kickoff meeting, the City of Vancouver established implementation workgroups for different priorities in the watershed. The workgroups include Sewer Connection and Septic Systems, Urban Forestry and Greenways, Stormwater and Capital Improvements, Operations and Maintenance, and Public Education and Outreach.

# **Operations and Maintenance Workgroup**

The Burnt Bridge Creek Operations and Maintenance workgroup met on May 5, 2021 from 10:00 a.m. – 11:30 a.m. The purpose of this workgroup was to provide input on priorities for operations and maintenance in Burnt Bridge Creek to support development of the *Burnt Bridge Creek Water Cleanup Plan.* The objective of the first workgroup meeting was to review priority locations for water quality improvement from the *Burnt Bridge Creek Source Assessment*, and to begin outlining implementation priorities using the <u>Operations and Maintenance Worksheet</u>. Discussion topics included greenways and sensitive lands, erosion control, leaf management, and challenges related to the unhoused population and litter management. Stormwater maintenance including illicit discharge detection and elimination, televising, catch basin cleaning and street sweeping were also discussed.

As a next step, Ecology TMDL staff will have a meeting with the City of Vancouver's stormwater permit manager to learn more about the City's implementation of Municipal Stormwater Permit requirements. The <u>agenda</u> and <u>presentation</u> from the workgroup meeting is available online.

#### **Next steps**

The full Burnt Bridge Creek Partnership will meet in July 2021. The purpose of this meeting will be to review what was discussed at each of the Burnt Bridge Creek workgroups and to present some priorities for long-term implementation.

# Land use and land ownership

The Burnt Bridge Creek watershed is located in the City of Vancouver. The City of Vancouver is the primary jurisdiction in the watershed, and Clark County has some jurisdiction in northern portions of the watershed, mostly in Cold Creek. The Washington Department of Transportation (WSDOT) also has jurisdiction on state roads, which includes interstate 5 (I-5), Interstate 205 (I-205), and State Road 500 (SR 500). Only 11 percent of the land in Burnt Bridge Creek is publicly owned. Vancouver is the largest public landowner, owning 44 percent of the total public land. Clark County owns 10 percent of public land, and WSDOT owns 3 percent. The primary land use in the watershed is residential, with approximately 44 percent of the total watershed consisting of residential land uses. In total, approximately 89 percent of the watershed is privately owned.

The watershed can be divided into three parts, which includes the lower, middle, and upper watershed. The lower watershed is located between river miles 0 and 5. The lower watershed is 45 percent residential, 29 percent roads, and 7 percent commercial, manufacturing, and mining land uses. Vancouver, Clark County, and WSDOT have shared stormwater jurisdiction in the lower watershed. The middle watershed includes river miles 5 to 10. The middle watershed is 45 percent residential, 24 percent roads, and 15 percent commercial, manufacturing and mining. Most of the stormwater jurisdiction is the City of Vancouver, but there is some Clark County and WSDOT jurisdiction. The upper watershed is river miles 10 to 13. The upper watershed is 43 percent residential, 21 percent roads, and 11 percent commercial, manufacturing, and mining. City of Vancouver and Clark County share stormwater jurisdiction in the upper watershed.

# **NPDES Permits**

#### Western Washington Municipal Stormwater Permit

The Western Washington Municipal Stormwater Permit requires local governments to manage and control stormwater runoff so that it does not pollute downstream waters. In the Burnt Bridge Creek watershed, there are three municipal stormwater permittees. Clark County has a Phase 1 stormwater permit, which regulates discharges in the most highly populated areas of the state. The City of Vancouver has a Phase 2 permit, which is implemented in jurisdictions with over 10,000 residents. The Washington Department of Transportation also implements the municipal stormwater permit on state roads.

Stormwater program elements include stormwater planning, mapping and documentation, illicit discharge detection and elimination, operations and maintenance, runoff and flow controls for development, source control for existing development, structural stormwater controls, and public education and outreach.

The City of Vancouver's Municipal Stormwater Permit (MS4 Permit) covers approximately 70 percent or 13,030 acres of the Burnt Bridge Creek watershed. In addition to the MS4 permit, there are two Industrial NPDES Individual Permits, and eleven Industrial Stormwater General Permits in the watershed. At the time of the Source Assessment, there were approximately 90 construction stormwater general permits in the watershed.

#### Water quality priorities

The Burnt Bridge Creek Watershed is on the Washington State's Polluted Waters List (303d list) for bacteria, dissolved oxygen, temperature, and pH impairments. The following is a summary of impairments from the *Burnt Bridge Creek Source Assessment*. A full <u>summary of water quality</u> <u>impairments</u> from the *Burnt Bridge Creek Source Assessment* is available online.

#### Bacteria

Peterson Channel, Cold Creek, and Burton Channel are the top priorities for bacteria reduction, as well as river miles (RM) 8.4, 2.6, and 1.6. All of these areas have bacteria geometric means over 200 cfu/100ml during the dry season. This is almost double the state water quality standard for fecal coliform at the time of this study, which was a geometric mean of 100 cfu/100ml. All of these locations need bacteria reductions of over 75 percent to meet water quality standards.

The second priority is all areas that need bacteria reductions of over 75 percent in the wet or dry seasons to meet water quality standards. These include Peterson Channel in the wet and dry seasons, Burton Channel in the wet season, Cold Creek and river mile 8.4 in the dry season, and river miles 7, 4.3, 3.4, 2.6, and 1.6 in the wet season.

The third priority are all areas that have geometric means over 100 cfu/100ml. These include river miles 10.4, 8, 5.9, 5.2, and 3.4.

Overall, the middle and lower watershed are the highest priorities for bacteria reduction. The presence of dry season bacteria can indicate a direct source of bacteria from an illicit discharge or illicit connection, a sewer pipe that needs maintenance or repair, a failing septic system, or direct access of livestock or pets to the river. The presence of wet season bacteria may indicate that stormwater runoff is facilitating the movement of bacteria into surface water. Wet season bacteria may also indicate challenges with infiltration and inflow in the sewer system.

#### Temperature and Dissolved Oxygen

In the Burnt Bridge Creek Watershed, river mile (RM) 0 had the highest maximum water temperatures recorded in the *Source Assessment*, with 92 percent of days exceeding water quality criteria for temperature. The temperature water quality standard for the Burnt Bridge Creek watershed is 17.5 degrees Celsius to support salmonid spawning, rearing, and migration. In addition to RM 0, river miles (RM) 5.9 and 7.0 in the middle watershed had the most number of days above criteria, with RM 7 not meeting temperature standards 230 days out of the year, and RM 5.9 not meeting standards for 222 days. Sites with the most noncompliant days for dissolved oxygen are located in the upper watershed from RM 9.5 to 11.4, and in the middle watershed at river miles 7.0 and 5.9.

Increasing tree canopy in riparian areas provides important shade, which helps cool down Burnt Bridge Creek and its tributaries, by reducing the amount of sunlight that can warm up the river. Reducing warm water temperatures may also help improve dissolved oxygen levels in the watershed, as warm water can cause decreased dissolved oxygen. Increasing urban tree canopy in upland areas throughout the watershed also has the potential to help manage stormwater runoff and promote groundwater infiltration, to restore streamflow to the creek.

#### Shade deficit analysis

A shade deficit of the mainstem of Burnt Bridge Creek was completed in the *Burnt Bridge Creek Source Assessment* to identify priority locations for tree planting projects. Overall, the upper watershed located between RM 10 to 13 had the highest average shade deficits in the watershed, followed by the middle watershed located between RM 5 to 10. The following table summarizes results from the shade deficit analysis. More information is included in the *Burnt Bridge Creek Source Assessment* and in the meeting summary for the Urban Forestry and Greenways workgroup.

Portion of Watershed	Average shade deficit
Upper watershed: RM 10-13	62 percent
Middle watershed: RM 5-10	39 percent
Lower watershed: RM0-5	27 percent

#### Table 1. Average shade deficits in Burnt Bridge Creek watershed.

A shade deficit analysis was not completed for the Burnt Bridge Creek tributaries, which include Cold Creek, Peterson Channel, and Burton Channel. Completing a survey and analysis of these tributaries will be important to support future restoration.

#### рΗ

Overall, most sites in the Burnt Bridge Creek watershed met standards for pH. River mile 0 had the most noncompliant days. Rivers miles 8.8, 8, 5.2, and Peterson Channel met criteria for pH. The minimum and maximum pH values measured were located in Burton Channel. In areas where the watershed is not meeting pH standards, Vancouver should prioritize implementation of construction stormwater inspections and erosion control BMPs to areas with pH exceedances. Additionally, efforts to reduce pollutant loading from stormwater and to increase riparian vegetation can also positively impact pH.

#### Vancouver Watershed Health Assessment

In addition to Ecology's water quality assessment, the City of Vancouver contracted with Herrera Environmental Consultants to complete the <u>Vancouver Watershed Health Assessment</u> in February 2019. This report confirmed that the most significant water quality decline from 2004-2007 and from 2011-2017 is located at river miles 8.4, 7.0, and 5.9, and at the confluence of Peterson Channel with Burnt Bridge Creek. This data is consistent with Ecology's *Source Assessment*, and confirms that the middle watershed is a top priority for implementation. Generally, pH has increased at all sites measured.

#### Notes from workgroup meeting on May 5, 2021

Ecology hosted the first Operations and Maintenance workgroup meeting on May 5, 2021. Brian Potter, Tim Esary, Tim Buck, Aron Rice, and Annette Griffy attended the workgroup on behalf of the City of Vancouver. Devan Rostorfer, Lawrence Sullivan, and Molly Gleason represented the Department of Ecology. The following are notes from the May meeting.

#### Background

The City of Vancouver's stormwater operations and maintenance (O&M) team employees 26 people. Activities completed by stormwater O&M staff include street sweeping in neighborhoods and on arterials, vactoring, flushing, and infrastructure televising. Keeping sweepers functional and on the road is one of the biggest challenges Vancouver's O&M program faces. Staff also complete annual facility maintenance, outfall inspections, and maintenance repairs.

Implementation of erosion control practices related to the construction stormwater permit is also completed through stormwater O&M staff. The O&M team is also responsible for all maintenance and stewardship on the Burnt Bridge Creek Greenway, including tree planting, mowing, irrigation, and invasive species management.

#### Urban forestry and greenways

The primary focus of Vancouver's Urban Forestry and Greenways maintenance crews are root zone management, spraying, and irrigation. All of the Vancouver maintenance staff are licensed herbicide applicators. Irrigation of plantings is completed using a truck that brings in water. There are some concerns about compacting soils when driving the irrigation truck in planting areas; however, Ecology's water resources staff denied a water rights permit to withdraw water off Burnt Bridge Creek for irrigation, therefore trucking in water for irrigation is the only option.

To reduce maintenance needs, Vancouver uses mulch in their site preparation for weed suppression. The use of mulch also helps promote water retention and reduces the need to spray herbicide. Once the mulch breaks down, Vancouver eventually introduces cover crop to planted areas. One future challenge in the river is that maintenance staff are starting to see more pennywort in the river, which is an invasive plant. Pennywort was observed in the middle watershed near Meadowbrook Park. Efforts to remove the vegetation have not been successful. Implementing early detection rapid response practices and collaborating with other organizations may help support invasive species management in Burnt Bridge Creek.

One challenge within the urban forestry program is completing long-term maintenance of trees planted on private property, specifically in overburdened communities. The City currently completes maintenance on private property plantings for five years. In year six, the private property owner is responsible for maintenance of the planting. Developing resources to support long-term maintenance is necessary to support survival and health of urban tree canopy.

More information on the Burnt Bridge Creek Greenway can be found in the Urban Forestry and Greenways summary.

#### **Stormwater O&M activities and locations**

The primary objective of the stormwater O&M team is to meet the terms and conditions of the stormwater permit. To meet those conditions, the City completes inspections on a significant number of assets and implements a wide array of operational BMPs. While the city does not prioritize specific geographic locations for implementation of O&M, the city focuses instead on completing maintenance on certain asset types. One opportunity to improve water quality may be to prioritize implementation of maintenance activities to geographic areas with known water quality issues. Prioritizing locations with low dissolved oxygen, high bacteria levels, and pH exceedances is a good first step to aligning O&M with water quality issues. Most of these areas are located in the middle and lower watershed, and in Peterson, Cold Creek, and Burton Channels, with the exception of dissolved oxygen challenges located in the upper watershed.

Some of the most challenging areas for Vancouver's O&M implementation are slow draining areas and areas with dry wells. One specific area is the Hearthwood neighborhood. This specific neighborhood has the majority of surface water infiltrated into perforated pipes and dry wells. The original assets are now reaching the end of their useful life, and while some fixes have been implemented, some assets and fixes are starting to fail. The area also has high infiltrating soils, so there may be a need to implement water quality treatment in certain areas to prevent pollutant loading to groundwater.

Vancouver can only maintain, sweep, flush and clean assets so much before replacement is needed. The long-term goal is to eventually complete a study of the Hearthwood neighborhood to develop a retrofit plan. The current focus however, is on risk mitigation and avoiding infrastructure failure.

#### **Balancing retrofits and maintenance**

One challenge going forward is balancing the implementation of new stormwater facility retrofits with creating more stormwater maintenance work in the City. While the city recognizes the benefits of stormwater retrofits, the City is also trying to manage the workload for maintenance staff. Every time a new stormwater BMP is implemented, maintenance needs are increased. To achieve this balance, Vancouver is focusing on implementing the right BMP, in the right place, for the right purpose. Incorporating anticipated maintenance needs into retrofit planning, may help the city better prepare for future stormwater O&M.

#### Coordination with sewer department for IDDE

The stormwater O&M team is separate from Vancouver's sewer O&M team, but both crews work from the same office and regularly coordinate. All of Vancouver O&M staff receive annual training on illicit discharge detection and elimination (IDDE). The primary way that cross connections and other infrastructure issues are identified is through the City's sewer televising program. Televising is primarily implemented through sewer O&M. If an issued is identified, the stormwater maintenance team works closely with the city's engineers and sewer department to address issues and correct cross connections. If there is a sewer backup issue or if an issue arises at the wastewater treatment plant that affects the stormwater system, then the sewer and stormwater maintenance teams coordinate more closely.

#### ERTS complaints and spill response

The O&M team are the first to respond to ERTS complaints and initiate appropriate notifications and response. The team also handles all spill response efforts and coordinates with Ecology's spill response program and City engineering staff. If a complaint or spill report is received, Vancouver's primary goal is containment, followed by cleaning up the spill, and completing the proper reporting, notification, and documentation of the issue. Creating centralized spill kits in areas with high probabilities for spills, such as the Vancouver's Farmers market or other areas with special events may help support better and quicker containment and cleanup of spills.

#### Leaf management

Another activity implemented by the O&M team is fall leaf management. Vancouver's O&M staff partner with the solid waste program to implement best practices for leaf management. The goal is to conduct outreach to neighborhoods in the fall to capture and contain as much leaf material as possible. Vancouver usually adds an extra shift for staff in the fall to increase staff capacity to provide leaf pickup services in problem areas. Vancouver's solid waste department provides a free leaf pickup coupon to help incentivize leaf containment, management, and disposal. Vancouver has adopted a city ordinance that does not allow leaves to be raked into the street, and highly discourages raking into the street to keep leaves out of the stormwater system. The key education and outreach message for leaf management is to encourage property owners to keep leaves contained and not in the street. Disposal or composting is encouraged. Prioritizing leaf cleanup outreach and implementation to areas with dissolved oxygen challenges, may help improve water quality by keeping leafs out of Burnt Bridge Creek, which can lower dissolved oxygen levels when decomposing.

#### Challenges

Another challenge Vancouver's O&M team has in the Burnt Bridge Creek watershed are challenges with encampments in the Greenway. Due to challenges with covid-19 and economic conditions, the City of Vancouver is not relocating any encampments, which has resulted in a significant number of non-permanent structures on public property. The City is now collaborating with social assistance programs and police through the Homeless Assistance and Response Team (HART), which recently hired an encampment coordinator to work with community members on implementing best practices for litter cleanup and sanitation.

Some of the encampments are located in areas that are not meeting water quality standards for bacteria, and others are located in close proximity to streams in riparian areas that have been planted with trees and restored. Efforts to reduce the impacts of encampments have been implemented in some areas, but there are still challenges. For example, Vancouver has established safe park areas, and has hosted RV pump out programs, provided handwashing, portable sanitation facilities, and dump out locations. Another new program is the "Talkin' Trash" program, which is managed by Share Vancouver. This program employs the unhoused population and drops off disposable bags for employees to clean up litter, which are picked up later. Progress made by this program is documented in the solid waste annual report.

While encampments may be one source of pollution in the watershed, many other sources of pollution are challenging to manage. Significant work is needed to address stormwater, sewer, septic systems, and other nonpoint sources of pollution, as well as pollution sources from encampments. Vancouver's O&M team plays a large role in providing many of the essential services that help prevent and reduce pollution from entering the Burnt Bridge Creek watershed.

# **DRAFT Implementation Actions**

Based on the discussion from the May workgroup meeting, the following implementation actions are recommended for Operations and Maintenance in Burnt Bridge Creek. These implementation actions are draft, and may be edited and refined as Ecology and Vancouver continue to discuss water quality priorities.

Table 2. Draft implementation actions for operations and maintenance.

OM1	Priority areas for operations and maintenance
OM1.1	Prioritize operations and maintenance activities to drainage areas contributing to
	bacteria water quality issues in the middle and lower watershed. This include
	Burton Channel, Cold Creek, and Peterson Channel, as well as river miles (RM)
	8.4, 2.6, and 1.6 for having dry season bacteria exceedances over 200 cfu/100ml.
	As a secondary priority, bacteria reductions of over 75 percent are needed to meet water quality standards in Peterson Channel in the wet and dry seasons, Burton
	Channel in the wet season, Cold Creek and river mile 8.4 in the dry season, and
	river miles 7, 4.3, 3.4, 2.6, and 1.6 in the wet season.
OM1.2	Prioritize infrastructure televising in areas with bacteria and nutrient pollution
	challenges to support IDDE efforts. This includes Burnt Bridge Creek tributaries
	and river miles 8.4, 7, 4, 3.4, 2.6, and 1.6 for bacteria, and river miles 5.9, 7, 9.5,
	and 11.4 for nutrients.

014.2	Driaritiza atract awaaping vactoring and implementation of arcsion control DMDs
OM1.3	Prioritize street sweeping, vactoring, and implementation of erosion control BMPs
	and the construction stormwater permit to areas with pH exceedances. This
	includes areas contributing to river mile 0 and Burton Channel. Properly dispose
	materials in decant facilities to prevent pollution.
OM1.4	Prioritize annual maintenance of stormwater facilities, outfall inspections, and
014 -	repairs to areas with known water quality issues.
OM1.5	Complete infrastructure assessment to understand age, condition, performance,
	and criticality of infrastructure. Identify which assets are reaching the end of their
OM1.6	useful life, and prioritize them for replacement. Incorporate proximity to surface water and known water quality issues into
0.1110	Vancouver's criticality matrix when prioritizing maintenance needs in the
	watershed. Consider if assets are connected to drainages that outfall to locations
	with water quality issues.
OM1.7	Prioritize retrofits and replacement of infrastructure that are reaching the end of
J	their useful life and present the greatest risk to water quality. In areas with a high
	density of assets reaching the end of their useful life, complete assessment to
	develop a retrofit and infrastructure replacement plan.
OM1.8	Document and create a database of neighborhoods, roads, and assets that have
	operations and maintenance challenges, including overflows, backflows, infiltration
	and inflow, poor drainage or standing water, cross connections, and other
	challenges to support prioritization of maintenance implementation.
OM1.9	Map and develop an inventory of operations and maintenance needs in locations
OWIT.9	contributing to priority areas for water quality improvement.
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OM2.1	Urban forestry and greenways Prioritize greenways and sensitive lands maintenance to areas that are not
	achieving the 85 percent plant survival target.
OM2.2	Prioritize root zone management, irrigation, and invasive species management to
	areas that have the highest shade deficits in Burnt Bridge Creek to support future
	site preparation and planting efforts.
OM2.3	When possible, avoid compacting soils within 50 feet of Burnt Bridge Creek when
	completing irrigation or maintenance in the greenway.
OM2.4	
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OM3	Stormwater
OM3.1	Complete televising and inspection to identify, inventory, and map infrastructure repair needs, focusing on identifying cracks, leaks or holes in pipes, presence of roots, and challenges with manholes. Document priority assets and geographic locations for O&M.
OM3.2	Prioritize stormwater operations and maintenance in geographic areas that are a priority for water quality. This includes areas and assets that are directly draining to locations with water quality exceedances.
OM3.3	Coordinate with sewer O&M staff to identify and eliminate cross connections. Develop financial assistance resources to support private landowners with removing cross connections and connecting to sewer. When necessary, utilize investigative monitoring, smoke testing, and dye testing to investigate challenge with infiltration and inflow, and illicit connections.
OM3.4	Create centralized spill kits in areas with a high probability of spills, such as the Vancouver Farmers Market or other areas with special events, to support quicker containment and cleanup of spills.
OM3.5	Prioritize leaf cleanup outreach and implementation to areas with dissolved oxygen challenges to help improve water quality by keeping leafs out of Burnt Bridge Creek, which can lower dissolved oxygen levels when decomposing. This includes river miles 5.9, 7, 9.5, and 11.4.
OM3.6	Provide support and resources for the Talkin' Trash program to support cleanup of encampment areas in Burnt Bridge Creek. When and where feasible, host RV pump out programs, provide dump out locations, and waste receptacles. Collaborate with community organizations to develop education and outreach related to sanitation.
OM3.8	Hire more operations and maintenance staff to support increasing maintenance needs as new stormwater retrofits are implemented in the Burnt Bridge Creek watershed.
OM3.9	Create a dedicated source of funding for infrastructure maintenance.
OM3.10	Account for lifecycle maintenance needs in project scoping, grant applications, funding requests, staffing plans, and municipal budgeting efforts.
OM3.11	Cleanup dog and wildlife waste in areas located within 200 feet of the stream.

# DRAFT Milestones, targets, and timelines for operations and

### maintenance

Note: Milestones and targets will be developed in collaboration with Vancouver staff.

Table 3. Draft milestones, targets, and timelines for implementation.

Milestones and targets	Target Date
Stormwater facility maintenance	TBD
IDDE	TBD
Source Control	TBD
Greenways and sensitive lands	TBD
Complete a formal effectiveness monitoring study at priority areas for	2031
water quality after implementation occurs to measure how implementation	
has impacted water quality	

# **DRAFT Criteria to measure progress** *Table 4. Draft criteria to measure progress*

Criteria to measure progress	Reporting timeline
Number of facilities inspected / maintained	Annual
Number of assets inspected / maintained	Annual
Number of catch basins cleaned	Annual
Miles of infrastructure televised	Annual
Miles of infrastructure deficient	Annual
Number of deficient assets	Annual
Number of assets at the end of remaining useful life	Annual
Number of maintenance repairs completed	Annual
Number of site visits and technical assistance visits completed in	Annual
response to ERTS complaints	
Number of construction stormwater inspections completed	Annual
Miles of street sweeping complete	Annual
Acres of invasive species treatments and removal	Annual
Acres of maintenance on tree plantings completed	Annual
Acres of greenway and sensitive lands maintained	Annual
Pounds of sediment removed from watershed through catch basin	Annual
cleaning and street sweeping	
Number of homes participating in leaf removal program	Annual
Number of outfalls screened	Annual

# **DRAFT Funding and partnerships for implementation** Table 5. Funding and partnerships for implementation.

Funding Sources	City of Vancouver's Stormwater Utility
Implementation	Sewer Department, Clark County Clean Water Division,
Partners	Washington Department of Transportation, Talkin' Trash,
	Homeless Assistance and Response Team, Volunteers, Private
	Landowners

# Timeline for Burnt Bridge Creek Water Cleanup Plan

Table 6. Timeline for Burnt Bridge Creek Water Cleanup Plan.

#### COMPLETE

- October 2020: Burnt Bridge Creek Source Assessment published.
- February 2021: Burnt Bridge Creek Partnership kicked off.
- March 2021: Implementation workgroups assigned
  - Stormwater and capital improvements
    - Operations and maintenance
  - Urban forestry and greenways
  - Sewer connection and septic systems
  - Public education and outreach
  - Other TBD: SEH America, local water use, and monitoring
- April-May 2021: Implementation workgroups.
- June 2021: Submit completed worksheets to Ecology.

#### **NEXT STEPS**

- July 2021: Full Burnt Bridge Creek Partnership meeting.
- Summer 2021: External partnership meeting Lower Columbia Estuary Partnership, Watershed Alliance of Southwest Washington, Washington Department of Transportation, DOT, Clark County Clean Water Division, Clark County Public Health, Clark Conservation District, Lower Columbia Fish Recovery Board, Clark Regional Wastewater District, Washington Department of Fish and Wildlife, Environmental Protection Agency.
- Fall 2021: Public Webinar.
- January 2022: Internal Draft (City of Vancouver, Ecology, and Environmental Protection Agency).
- Spring 2022: External Draft Burnt Bridge Creek Water Cleanup Plan.
- Summer 2022: Publish Burnt Bridge Creek Water Cleanup Plan.