City of Shoreline Salmon-Safe Conditions

PRE-CONDITION 1: ENSURE ENVIRONMENTAL REGULATORY COMPLIANCE

COMPLETED: The City of Shoreline shall provide a signed statement to Salmon-Safe stating that it is not in violation of national, state, or local environmental laws, or associated administrative rules or requirements as determined by a regulatory agency in an enforcement action.

PRE-CONDITION 2: COMMITMENT TO ADHERE TO SALMON-SAFE STANDARDS FOR EXPANSION OR REDEVELOPMENT

COMPLETED: The City of Shoreline shall provide a signed statement to Salmon-Safe confirming that it will develop a mechanism to ensure that all new, expanded, and redeveloped City facilities shall meet Salmon-Safe standards for urban development. This includes model permanent and construction-phase stormwater guidelines, or a comparable LEED standard related to stormwater performance. This also includes an agreement to avoid the use of uncoated zinc and copper for any new building cladding.

CONDITION 1: APPLY SALMON-SAFE MODEL STORMWATER GUIDELINES TO NEW, EXPANDED, OR REDEVELOPED CITY FACILITIES

EXISTING EFFORTS: The City of Shoreline has incorporated amendments to the Department of Ecology's Stormwater Manual for Western Washington in the City's Engineering Development Manual (EDM). These amendments effectively increase the stringency by which the City manages stormwater for all new developments, both City-owned and private development.

FUTURE ACTION

- Create a checklist based on Salmon-Safe's Model Stormwater Management Guidelines that incorporates Salmon-Safe guidelines for stormwater management. This checklist will supplement the EDM for City projects. Salmon-Safe has developed model stormwater management guidelines for urban development or redevelopment, which are more stringent than the Department of Ecology's manual and include a goal to restore the predevelopment hydrology at a given project site.

TIMELINE

- Create an EDM companion checklist for review by Salmon-Safe within three years (2022).
- Implement guidelines and procedures included in the checklist on new and redeveloped City facilities within five years (2024).

CONDITION 2: INCORPORATE GREEN STORMWATER INFRASTRUCTURE INTO THE STANDARD ROADWAY CROSS-SECTION TO IDENTIFY PREFERRED LOW IMPACT DEVELOPMENT TECHNIQUES FOR RIGHT-OF-WAYS

EXISTING EFFORTS: The City of Shoreline's Complete Streets Ordinance No. 755 requires all public streets to be designed, built, and operated to accommodate safe access for all users including pedestrians, bicyclists, motorists, and transit riders of all ages and abilities. The City has also completed pilot projects with vegetation in the amenity zone (i.e. the area between the sidewalk and the street which is often landscaped with grass or trees) to provide stormwater management benefits and urban habitat. Although the original Complete Streets concept is focused on facilitating multi-modal transportation, there is an opportunity for the City to incorporate green stormwater infrastructure elements into City standards for use in the right-of-way.

FUTURE ACTION

- Revise the City's Engineering Development Manual to reflect an expanded use of the right-of-way to include green stormwater infrastructure.
- Incorporate green stormwater infrastructure elements into all newly constructed sidewalks, as feasible.

TIMELINE

- **COMPLETED:** Revise the City's Engineering Development Manual within two years of certification (2021).

CONDITION 3: IMPROVE STORMWATER MANAGEMENT AT THE NORTH MAINTENANCE FACILITY

EXISTING EFFORTS: The stormwater management facilities and practices at the City's North Maintenance Facility do not appear to have been modified since the facility was acquired from King County in 2013 and did not meet Salmon-Safe standards at the time of review. Stormwater from the facility is collected in a series of catch basins, which then ultimately discharge untreated to Ballinger Creek. Galvanized metal parts, bark, sand, and gravel previously stored in the open have been covered to prevent contaminated runoff. Additional improvements planned for the North Maintenance Facility include the purchase and placement of a new modular building to house the Public Works Grounds Maintenance crew and relocating existing diesel and gasoline tanks and street sweeper solid waste and wastewater decanting away from the Facility, which is adjacent to Brugger's Bog Park and environmentally sensitive Ballinger Creek and wetland.

FUTURE ACTION

- **COMPLETED:** Improve material storage and handling practices at the site, including covering erodible and potentially turbidity-causing material (e.g. bark, sand, and gravel) and galvanized metal pipes and parts, by placing them under tarps in the short term.
- Take steps to ensure that the North Maintenance Facility is operated – and the proposed new facilities are designed and built – in alignment with Salmon-Safe guidelines.

TIMELINE

- Provide design documents for the first project of the permanent improvements to the North Maintenance property to Salmon-Safe for review as soon as they are available.

CONDITION 4: IMPROVE INVENTORY OF STORMWATER INFRASTRUCTURE

EXISTING EFFORTS: The City has done a good job creating a GIS inventory of stormwater infrastructure, including hard structures, such as catch basins and manholes, and green stormwater infrastructure features, such as bioswales, rain gardens, and permeable pavement. However, it does not appear that this GIS layer includes data that would allow for calculations of the drainage areas being managed by various stormwater management techniques. The collection and analysis of such data is important for tracking improvements in stormwater management and prioritizing stormwater management projects.

FUTURE ACTION

- Incorporate a drainage area assessment into the existing GIS layer of stormwater infrastructure that would enable a demonstration of a reduction of watershed impacts over time, per one of the performance requirements of Standard U.1.1.

TIMELINE

- Update the existing GIS layer in the next *Surface Water Master Plan* update and submit it to Salmon-Safe for review as soon as it is available.

CONDITION 5: ASSESS WATER CONSERVATION EFFORTS

EXISTING EFFORTS: The City of Shoreline has done a good job reducing the amount of water used for irrigation, particularly in the Aurora corridor and in right-of-ways. The City has made large reductions in the amount of water being used for irrigation, resulting in significant cost savings.

FUTURE ACTION

- Continue an annual review and assessment of City efforts to conserve water and identify targets for additional water conservation in the Park system.
- Expand this annual review, assessment, and identification of targets for additional water conservation practices to include Public Works and Facility managed properties.
- Document existing water use trends across City properties, areas targeted for water use reduction and methods, and identification and explanation of areas where water use has significantly increased every two years, in conjunction with the City's biannual budget development process.

TIMELINE

- **COMPLETED:** Provide an assessment of water use and documented water savings associated with recent water conservation efforts for Parks Department properties, and a plan for implementing the expanded practice to Public Works and Facility properties within two years of certification (2021).

CONDITION 6: ADOPT SALMON-SAFE CONSTRUCTION STANDARDS

EXISTING EFFORTS: The City's Engineering Development Manual specifies elements to be included in the Stormwater Pollution Prevention Plan. The requirements are generally protective of water quality, but improvements are warranted.

FUTURE ACTION

- Develop a checklist for projects on City property to specifically state a goal of avoiding the discharge of sediments and other pollutants, and to provide a hierarchy of practices as a means to pursue the goal.

TIMELINE

- Create the companion checklist and provide to Salmon-Safe for review within three years (2022).
- Implement the guidelines and procedures included in the checklist on new and redeveloped City facilities within five years (2024).

CONDITION 7: IMPROVE WATER QUALITY MONITORING PROGRAM

EXISTING EFFORTS: The City has established a long-term water quality monitoring program at specific locations in Shoreline. Samples collected from these streams and lakes are measured for conventional parameters such as pH, temperature, and dissolved oxygen. However, these parameters are not measured frequently enough to provide a reliable basis for assessing changes in water quality over time.

The City conducted benthic invertebrate monitoring in several Shoreline streams in 2003 and 2007 to assess temporal changes in water quality and overall stream health. The 2003 results indicated that all sample sites were degraded. The 2007 results differed little from the reported 2003 results. The existing water quality parameters are insufficient for documenting the impacts from stormwater runoff, which is likely the most significant stressor to water quality within Shoreline streams.

FUTURE ACTION

- Re-establish the benthic invertebrate monitoring program to:
    - determine whether the significant capital investments the City made in the last ten years have improved stream health, and

    - provide a long-term foundation for monitoring potential future improvements in water quality citywide.
- Modify the water quality monitoring program to provide a solid base for long-term monitoring and better characterize the impact from stormwater runoff. Suggested changes include enhancing the water quality monitoring program to include the following, which should enable an analysis of the effectiveness of green stormwater infrastructure on stream water quality.
    - **Analytes**: include metals, particularly zinc, copper, and lead, which are often associated with stormwater runoff;
    - **Benthic invertebrate monitoring**: include sample collection methods, the qualifications of the personnel who will perform the sampling, taxonomic identifications, and data analysis;
    - **Sample locations**: include specific sampling locations that may receive significant amounts of runoff during storm events; and
    - **Timing**: include sampling events during both storm and non-storm events and conduct more frequent sampling using automated sampling systems for conventional and additional parameters, as feasible.
- Prepare or modify an existing Sampling and Analysis Plan for water quality monitoring. The Sampling and Analysis Plan should describe the study design, methods and analytes, and be developed through the next *Surface Water Master Plan* update.

TIMELINE

- Develop and submit scoping for the *Surface Water Master Plan* update for Salmon-Safe review when available (2021/2022).
- Develop and submit a Sampling and Analysis Plan for Salmon-Safe review during the *Surface Water Master Plan* update (2023/2024).

CONDITION 8: ASSESS SNOW REMOVAL AND ICE CONTROL PLAN

EXISTING EFFORTS: The City currently uses sodium chloride (salt) and liquid calcium chloride as part of its snow and ice control operations. The City's 2016 *Snow Removal and Ice Control Plan* is not fully in alignment with Salmon-Safe standards.

FUTURE ACTION

- Conduct an investigation into snow and ice control operational practices that take into consideration impacts on aquatic life, with the inclusion of information on best industry practices. The investigation will inform operational aspects of the 2022/23 update of the City *Snow Removal and Ice Control Plan* and will inform equipment choices in the proposed City Maintenance Facility where snow and ice operations are staged. For more information on recommended best industry practices and snow and ice removal activities, please reference the full Salmon-Safe report.

TIMELINE

- **COMPLETED:** Submit a draft update of the *Snow Removal and Ice Control Plan* to Salmon-Safe for review (2021).
- Submit the final *Snow Removal and Ice Control Plan* to Salmon-Safe, when available (2022/2023).

CONDITION 9: UPDATE THE INTEGRATED PEST MANAGEMENT PLAN

EXISTING EFFORTS: The City has a long-standing Pesticide-Free Parks program. However, the City's *Integrated Pest Management Plan* requires an update to be fully consistent with Salmon-Safe standards.

FUTURE ACTION

- Develop a pest management and pesticide use policy that encompasses all City properties. This policy or another document should outline fertilization practices. The City's desire to be largely pesticide-free should be documented in the policy, along with any allowable exceptions.

TIMELINE

- **COMPLETED:** Submit the pest management and pesticide use policy and fertilization practices document for Salmon-Safe review in conjunction with the next update of the *Parks Operations and Maintenance Standards Manual* (2021).

CONDITION 10: ENHANCE BIODIVERSITY IN PARKS WHEN CONVERTING TURF OR LANDSCAPED AREAS

EXISTING EFFORTS: The City of Shoreline has an extensive park system that provides a wide variety of ecological and human services. Periodically, Parks Department staff alter the landscaping at specific locations within parks to reduce maintenance costs (e.g., removing a landscaped bed) and/or to enhance the ecological functioning of an area that is otherwise underutilized. Another option to improve habitat in parks is via the concept of a "nature patch, which the City of Portland has implemented as part of their Salmon-Safe program. Learn more about nature patches at https://www.portlandoregon.gov/parks/article/664317.

FUTURE ACTION

- Look for opportunities to create nature patches within the parks system.
- Prepare a memorandum that identifies potential nature patch opportunities for each park.
- Although not required for certification, the City shall attempt to create nature patches as funds allow.

TIMELINE

- **COMPLETED:** Complete and submit a memorandum that identifies potential nature patch opportunities for Salmon-Safe review within two years (2021).

CONDITION 11: COMPLETE SUBSTANTIAL DESIGN OF STORMWATER MANAGEMENT PROJECTS WITH HABITAT RESTORATION ELEMENTS

EXISTING EFFORTS: The City of Shoreline has demonstrated a commitment to completing projects that improve stormwater management and habitat. Salmon-Safe applauds this commitment and would like to see it continue.

FUTURE ACTION

- Complete at least three stormwater management projects that also include habitat restoration features, such as the stormwater detention facility at Cromwell Park. The specific projects to be completed are at the discretion of the City, but five possible projects already underway or partially completed include the following:
    - **Hidden Lake Dam Removal:** includes restoration of Boeing Creek within the lake area and replacement of culverts crossing below NW Innis Arden Way;
    - **25th Avenue NE Flood Reduction Project**: includes habitat restoration elements at Brugger's Bog Park and Ballinger Creek;
    - **Ronald Bog**: a Sound Transit funded and implemented project that includes wetland restoration at Ronald Bog Park to replace wetlands affected by Sound Transit's Lynnwood Link light rail project;
    - **Brugger's Bog Park Expansion**: after completion of the City Maintenance Facility and after or coincidentally with the 25th Avenue NE Flood Reduction Project, expansion of the park into remnant North Maintenance Facility property may occur; and
    - **Ballinger Open Space Restoration**: environmental restoration project at Ballinger Open Space will remove invasive plants and install native vegetation.

TIMELINE

- Complete substantial design for three projects with habitat restoration and stormwater management elements within five years, assuming project funding is available (2024).
- Submit design documents to Salmon-Safe for review as soon as they are available.

CONDITION 12: INCORPORATE HABITAT AND FISH USE INFORMATION INTO SURFACE WATER MASTER PLAN

EXISTING EFFORTS: The City's 2018 *Surface Water Master Plan* discusses stream geomorphic and water quality characteristics. However, there is no mention of present or historic salmon use, habitat features supportive of salmon, impediments to salmon functioning, salmon restoration potential, or actions needed to protect existing and increase future salmon populations.

FUTURE ACTION

- Include a prioritized list of potential instream, riparian, and upland water management plus monitoring projects that benefit salmon in the next update of the Surface Water Master Plan.

TIMELINE

- Submit the *Surface Water Master Plan* update, with habitat and fish use information incorporated, to Salmon-Safe for review, when available (2023/2024).

Questions? Contact City of Shoreline staff for more information.

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