

## ENVIRONMENT COMMITTEE AGENDA

February 18, 2021 – VIA Zoom

4:00P – 4:50P

Chair to call the meeting to order at 4:00 p.m.

1. Approval of the minutes from the meeting of 01.21.2021
2. WRIA 9 Salmon Habitat Plan Update (Water Resource Inventory Area 9; aka The Green/Duwamish and Central Puget Sound Watershed) (4:00 to 4:20 p.m.)

*Staff will present several projects identified in the Plan Update*

3. NPDES Program Update (National Pollutant Discharge Elimination System) (4:20 to 4:50 p.m.)

*Staff will provide an update for the ongoing NPDES Program*

## **DRAFT MINUTES – ENVIRONMENT COUNCIL COMMITTEE MEETING 01.21.2021**

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The meeting was called to order at 4:05 PM, Thursday, January 21, 2021, via Zoom, with the following in attendance:

### **Council Members**

Mayor Matt Pina (Chair)  
Luisa Bangs (Vice-Chair)  
JC Harris

### **City Staff**

Dan Brewer – Chief Operations Officer  
Brandon Carver – PW Director  
Loren Reinhold – SWM Utility Manager  
Scott Wilkins - Harbormaster  
Beth Anne Wroe – Finance Director  
Matthew Hutchins – Asst. City Attorney  
Tyler Beekley – SWM Civil Engineer II  
Jodi Grager – Admin. Asst.

### **Guests**

Councilmembers Traci Buxton, Matt Mahoney and Anthony Martinelli

### **AGENDA:**

1. Approval of 11.12.20 Minutes
2. 2021 Environment Committee Work Plan
3. SWM CIP Update

### **MEETING:**

1. Unanimous approval of the 11.12.20 minutes
2. During the review of the 2021 Environment Committee Work Plan (see Attachment #2) it was decided to move the NPDES Program Update to February and change the Poverty Bay Shellfish item from February to April. The Committee also briefly reviewed several items listed on the Work Plan. It is possible that additional topics may be added as necessary. The Southwest Suburban Sewer District will be submitting their Comprehensive Plan soon, it will be added to the Environment Committee schedule when received. During the discussion, the SWM Comprehensive Plan was mentioned as a resource. It can be found at: <https://www.desmoineswa.gov/523/Surface-Water-Comprehensive-Plan> . Another resource document mentioned was the 2020 Surface Water Management Program which is also found on the City's website: <https://www.desmoineswa.gov/308/Water-Quality-NPDES> . This report is listed as a Quick Link. It is hoped that the February NPDES presentation will be helpful in gaining a background regarding this complex issue. A question concerning septic systems was addressed. King County Department of Health is the appropriate agency for Septic System information. The 2021 Work Plan was approved as amended.

3. Tyler Beekley, SWM Civil Engineer, reviewed the 2021 SWM CIP Activities (Chart Attachment #3). He described last year as heavy in the design phase. The presentation highlighted these projects:

- Barnes Creek/KDM Road Culvert Replacement has been designated by the tribes as a fish obstruction. WSDOT is leading the design and the project cost will be shared amongst the involved agencies.
- 24<sup>th</sup> Ave Pipeline Replacement involves widening the roads and adding sidewalks. It is at 30% design and the City is optimistic about construction starting in 2022.
- Deepdene Plat Outfall Replacement has been impacted by COVID restrictions. Staff are gathering information for homeowners regarding the ownership and maintenance of this project. Progress has been made; City water no longer flows through this system.
- 8<sup>th</sup> Ave (264<sup>th</sup> to 265<sup>th</sup>) Pipe Project includes an ILA with Lakehaven Utility District and design is near completion. The consulting firm, Parametrix, is targeting mid March for seeking bids for construction.
- 6<sup>th</sup> Ave/239<sup>th</sup> Pipe Replacement is a project to increase capacity from the existing diameter of 12" upsizing to 18". Due to the recent storm causing the outfall to be washed out, the stairs in this location will need to be removed so that the new outfall can be situated. The stairs will be rebuilt. The consulting firm, Parametrix, is targeting mid March for seeking bids for construction.
- Soundview Drive/Redondo Beach Drive Pipe Upgrade involves public surface water traveling over private property. There are three main areas that require improvements of system hydraulics. The consulting firm, Parametrix, is targeting mid March for seeking bids for construction.
- N Fork McSorley Creek Diversion requires an annexation of two parcels that are still under King County ownership. This will be a land transfer to City ownership to allow for the surface water system to be re-routed to avoid private property.

The Committee found it encouraging to see potentially four of these projects under construction in 2021.

Meeting adjourned at 4:43 p.m.

Minutes respectfully submitted by: Jodi Grager, Admin Asst



## Executive Summary

This document updates the 2005 Green/Duwamish and Central Puget Sound Watershed (WRIA 9), Making Our Watershed Fit for a King, Salmon Habitat Plan. The 2005 Plan served as the blueprint for salmon habitat recovery in WRIA 9 for 15 years. It is fitting that the Puget Sound Regional Council awarded the original 2005 Plan a Vision 2020 Award. Although the Plan Update reflects over a decade of new science regarding salmon conservation and recovery since the award, the core recovery strategies and underlying scientific framework remain largely valid today and continue to provide an important foundation for salmon recovery. The Plan Update – designed to be a stand-alone document – is intended to update, not replace the 2005 Plan. The two documents, along with the 2014 Duwamish Blueprint and the 2016 Re-green the Green, provide a science-based framework for identifying, prioritizing and implementing salmon recovery actions.

This document provides a status update for Green River Chinook salmon using the National Oceanic and Atmospheric Administration (NOAA) approved viable salmon population (VSP) criteria. Over 20 years have passed since the listing of the Puget Sound Chinook salmon evolutionarily significant unit (ESU) under the Endangered Species Act (ESA). Despite significant investments and large-scale restoration projects, Green River Chinook salmon remain listed

as Threatened. Population abundance, productivity, diversity and spatial distribution have not improved, and in some cases have continued to decline.

A Strategic Assessment Update summarizes new researching findings that address important data gaps identified in the 2005 Plan. New information related to habitat use and fish productivity; climate change; temperature; and contaminants supported a reassessment of functional linkages between priority stressors, habitat conditions, and VSP parameters. This information serves as the foundation for the other core elements the Plan Update.

Although the Plan Update maintains existing NOAA-approved VSP goals, it introduces new 10-year habitat goals (implementation targets) that represent continued progress towards the long-term necessary future conditions for achieving a viable salmon population as outlined in 2005 Plan. The numerical targets for key habitats serve as a benchmark for evaluating plan implementation over time and informing ongoing adaptive management.

The Plan Update outlines a portfolio of twelve recovery strategies – including embedded policies and programs – to address priority pressures; increase salmon abundance, productivity, and diversity; and build long-term population resiliency. Successful

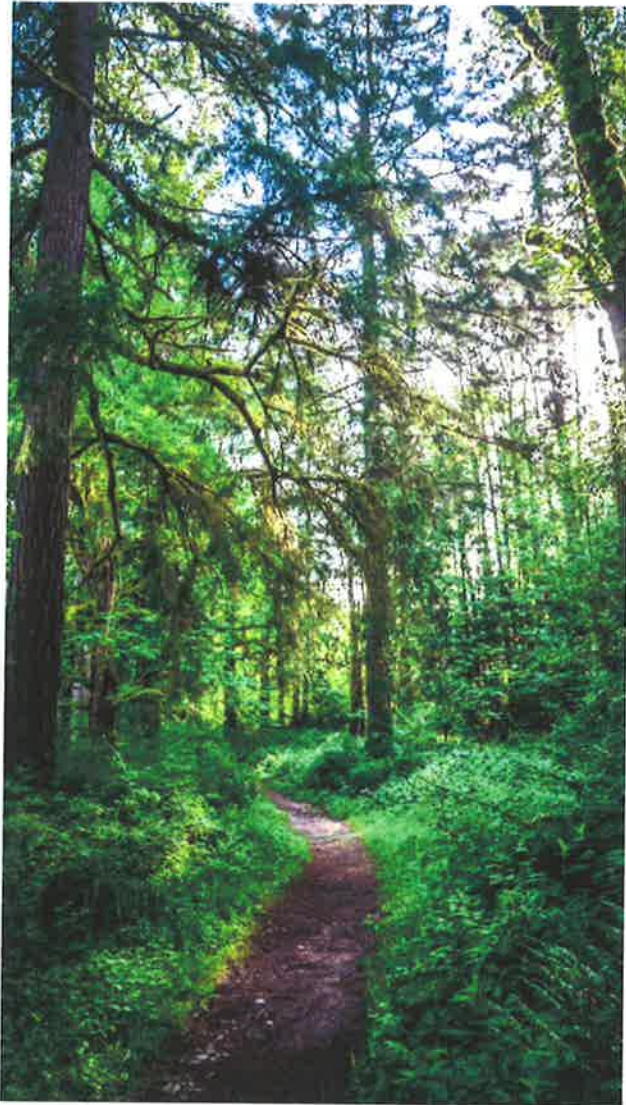


PHOTO: ELI BROWNELL

Green River Natural Area

implementation hinges on partner coordination and investment to ensure local land use planning, capital investment programs, and community outreach messaging are consistent with identified watershed priorities.

An updated list of capital projects was developed in partnership with ILA member jurisdictions, non-profit partners, state agencies, and others engaged in salmon recovery. The updated project list identifies 127 capital habitat projects across the five subwatersheds. Individual projects are ranked within their specific subwatershed – not across subwatersheds. Projects are tiered based on overall benefit towards recovery and to provide context for the level of financial need. Tier 1 projects have significant potential to advance recovery and substantively contribute to habitat goals. Tier 2 and Tier 3 have moderate and limited potential, respectively, to advance recovery and contribute to achieving habitat goals.

The Monitoring and Adaptive Management Plan (MAMP) outlines monitoring priorities intended to help evaluate progress and inform strategic adaptation of the recovery strategies. The MAMP establishes a framework for (1) tracking implementation goals; (2) assessing project effectiveness; (3) evaluating habitat status and trends; (4) evaluating the population status of Green River Chinook salmon; and (4) prioritizing research and monitoring investments. This framework will guide data collection to support regular assessment of progress and allow the WRIA to reassess prioritization and sequencing of recovery actions.



Tier 1 Project: NS-15

# McSorley Creek Pocket Estuary and Feeder Bluff Restoration

Green / Duwamish & Central Puget Sound



PROJECT AREA MAP



■ Park
 ■ Public Lands
 — Incorp. Area Boundary

0 200 400 ft. N

LOCATION MAP



■ WRIA 9
 ■ Incorporated Area

0 5 10 Miles

## PROJECT FACTS

**Subwatershed:**  
Nearshore (NS)

**Drift cell:**  
Des Moines (KI - 8 - 3)

**Bankside jurisdiction:**  
Federal Way

**Project sponsor:**  
Des Moines

**Budget:**  
\$20,838,000

## PROJECT TYPE:



Acquisition



Enhancement/  
Planting



Monitoring &  
Assessment



Planning/  
Design



Restoration

## KEY HABITAT:



Nearshore  
Feeder Bluff



Nearshore  
Pocket Estuary

## PROJECT DESCRIPTION:

Restore historic pocket estuary, protect feeder bluffs, remove marine shoreline armoring and enhance low-impact recreational activities.

## Primary strategy

Protect, restore and enhance marine shorelines.

## Benefits:

- Improved forage fish spawning habitat
- Recreation opportunities
- Shoreline armor reduction

## Contribution to goals metrics:

- Marine riparian vegetation
- Shoreline armor

Project Area Map: Ortho2019KCNAT aerial photo Site photo: WDOE Shoreline Photo Viewer Images, 2020  
KCIT-DCE file: 2011\_10202L LPRE GIS file Q:\20009\WRIA9\_ProjectMaps.mxd KLINKAT

## Tier 2 Project: NS-13

# Massey Creek Pocket Estuary and Fish Passage Project

### PROJECT FACTS

**Subwatershed:**  
Nearshore (NS)

**Nearshore jurisdiction:**  
Nearshore KI - 8 - 2

**Bankside jurisdiction:**  
City of Des Moines

**Project sponsor:**  
City of Des Moines

**Budget:**  
\$3,000,000

### PROJECT TYPE:



Acquisition



Restoration

### KEY HABITAT:



Nearshore  
Pocket Estuary



Riparian



KCIT-DCE VC folder: 2010\_10202w\_NS-13.ai GIS file Q:\20009\WRIA9\_ProjectMaps.mxd

### PROJECT DESCRIPTION:

Acquire and restore the stream, create fish passage, remove the jetty and rock from the south bank, and create a pocket estuary.

## Tier 2 Project: NS-14

# Raab's Lagoon Acquisition and Restoration

### PROJECT FACTS

**Subwatershed:**  
Nearshore

**Nearshore jurisdiction:**  
Nearshore KI - 13 - 9

**Bankside jurisdiction:**  
King County

**Project sponsor:**  
King County

**Budget:**  
TBD

### PROJECT TYPE:



Acquisition



Restoration

### KEY HABITAT:



Nearshore  
Pocket Estuary



Riparian



KCIT-DCE VC folder: 2010\_10202w\_NS-14.ai GIS file Q:\20009\WRIA9\_ProjectMaps.mxd

### PROJECT DESCRIPTION:

Acquire vacant lots, restore riparian forest habitat and connectivity by removing the weir and bulkhead.

## WRIA 9 Proposed Project Form

This Proposed Project Form (PPF) is completed by the project sponsor and provides project information and estimated costs for a project for inclusion in the WRIA 9 Salmon Habitat Plan and biennial budget. Once the PPF and required maps are submitted, materials will be reviewed by the WRIA 9 Implementation and Technical Committee (ITC). Eligibility for inclusion and budget *does not* guarantee funding. WRIA 9 budgets are approved annually by the ITC and Watershed Ecosystem Forum (WEF). **Projects cannot be considered for WRIA 9 funding without this approved form. Deadline for submission is Friday, December 13, 2019.** When you are ready to submit, go to: <https://app.smartsheet.com/b/form/2aed68c62ecd4de5926f3e75d7d76980> to upload this form and other materials.

**Projects competing for “ReGreen the Green” grant funding do not need to submit this form!**

|                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |
|-----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <b>Project Name</b> (a list of projects can be viewed <a href="#">here</a> )                        | <b>Massey Creek Pocket Estuary Restoration/Fish Passage</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |
| List any other known names of this project                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |
| <b>Salmon Habitat Plan project #</b> (or suggested policy or program alignment (e.g. fish passage)) | <b>NS-13</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
| <b>Project sponsor</b> (name/title/affiliation)                                                     | <b>City of Des Moines</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |
| <b>Location</b> - River or Stream mile; <u>Drift cell</u> ( a <u>map</u> is required)               | Massey Creek                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
| <b>Parcel # / Project Ownership</b>                                                                 | Parcel 2006601340 - City of Des Moines and Parcel 1722049005 (privately owned)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |
| <b>Type of Project</b> – You can select more than one project type.                                 | <input type="checkbox"/> Scoping/Reconnaissance <input type="checkbox"/> Planning/Design<br><input type="checkbox"/> Restoration <input type="checkbox"/> Education & Outreach<br><input type="checkbox"/> Acquisition <input type="checkbox"/> Monitoring & Assessment<br><input checked="" type="checkbox"/> Restoration & Acquisition <input checked="" type="checkbox"/> Enhancement/Planting<br><input checked="" type="checkbox"/> Other _____ Fish Passage _____                                                                                              |  |
| <b>WRIA 9 Subwatershed</b>                                                                          | <input checked="" type="checkbox"/> Nearshore <input type="checkbox"/> Lower Green <input type="checkbox"/> Upper Green<br><input type="checkbox"/> Duwamish <input type="checkbox"/> Middle Green                                                                                                                                                                                                                                                                                                                                                                   |  |
| <b>Jurisdiction</b>                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |
| <b>Key Habitats Impacted</b> – You can select more than one Key Habitat.                            | <input type="checkbox"/> Side channel <input checked="" type="checkbox"/> Nearshore – Pocket Estuary<br><input type="checkbox"/> Edge <input type="checkbox"/> Nearshore – Feeder Bluff<br><input checked="" type="checkbox"/> Floodplain <input type="checkbox"/> Upland<br><input type="checkbox"/> Tributary <input checked="" type="checkbox"/> Riparian<br><input type="checkbox"/> Duwamish Mudflat <input type="checkbox"/> Wetland<br><input type="checkbox"/> Duwamish Marsh <input type="checkbox"/> Backwater<br><input type="checkbox"/> Other ( _____ ) |  |

|                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                 |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Habitat Goals</b> – When possible, include a quantitative estimate of contribution to WRIA 9 <a href="#">habitat goal(s)</a> . Provide an estimate of <u>length/area</u> for the <u>all key habitats</u> selected above.        | Removal of 300 feet of southern rock lined stream bank and small jetty and 150 feet of jetty extending into the subtidal area. Removal of a 200-foot long box culvert (partial fish barrier). Restoration of 500 feet of stream and creation of pocket estuary. |
| <b>Project Scope</b> - The objectives of the project and the metrics that need to be met to achieve a satisfactory result.                                                                                                         | Improving riparian vegetation, removing armoring and fill, increasing nearshore habitat, enhancing pocket estuaries and stream mouths, fish barrier removal                                                                                                     |
| <b>Project Detail</b> – <ul style="list-style-type: none"> <li>Project footprint (length and acreage of treated area)</li> <li>Existing conditions</li> <li>Expected outcomes/potential improvements (estimate a range)</li> </ul> | Please see project description under NS-13. Project description is proposed to be amended by purchasing parcel 1722049005 allowing for the removal of the culvert on that property. The current structure may be removed or relocated.                          |
| <b>Project Assumptions</b> - Events and circumstances that are expected to occur during the project life-cycle for successful implementation and completion (e.g. we assume permits will take 8 months)                            | Project assumes that the land acquisition would occur first.                                                                                                                                                                                                    |
| <b>Risks and Constraints</b>                                                                                                                                                                                                       | There is a residential structure that needs to be removed or relocated                                                                                                                                                                                          |
| <b>Other Partners Involved</b>                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                 |
| <b>Associated Past or Future Projects</b> – Adjacent or functionally connected projects                                                                                                                                            |                                                                                                                                                                                                                                                                 |
| <b>Is this project listed in any other planning document?</b>                                                                                                                                                                      |                                                                                                                                                                                                                                                                 |
| <b>Project Urgency</b> - Why do this now?<br><i>For projects seeking funding in 2020 or 2021 ONLY</i>                                                                                                                              |                                                                                                                                                                                                                                                                 |

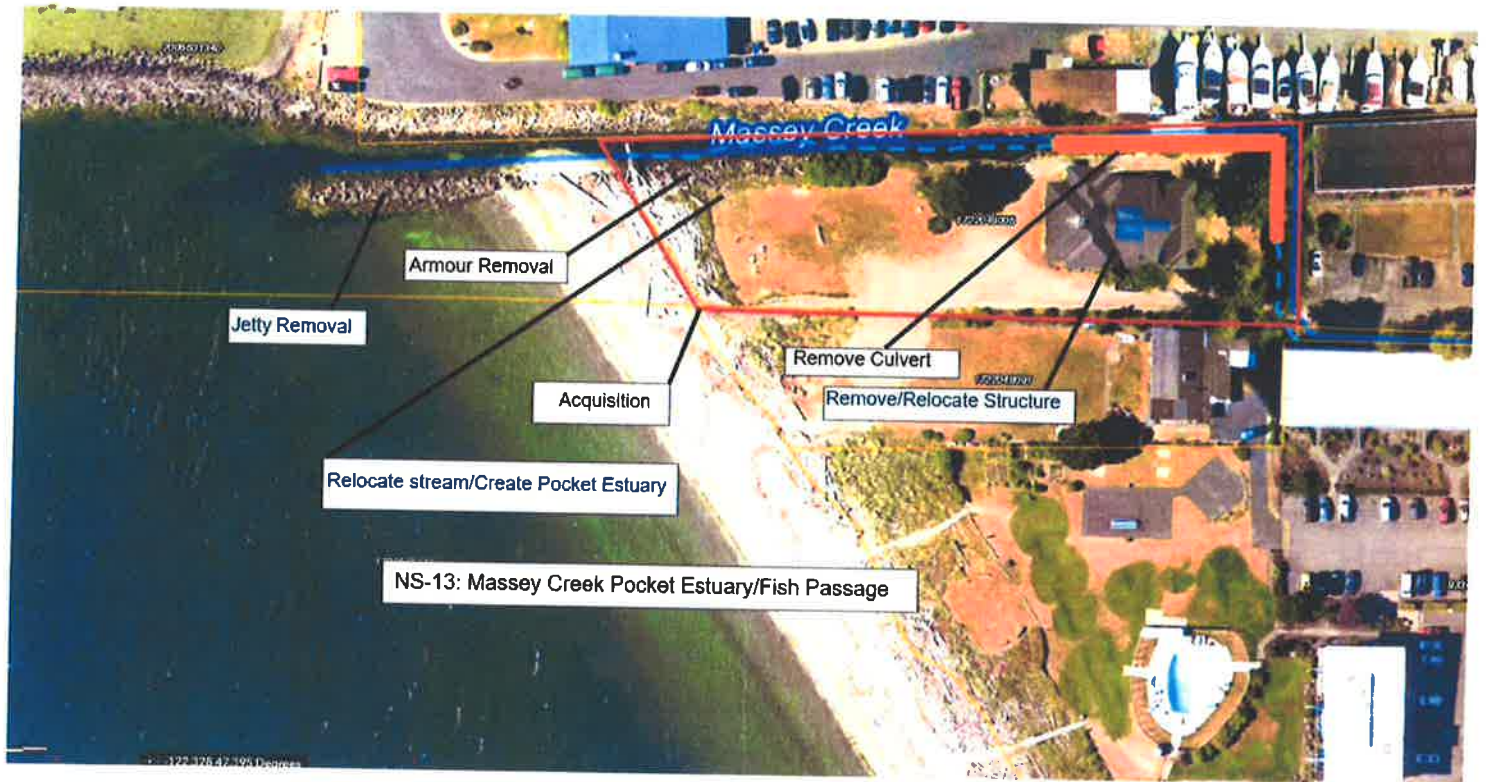
| Planning Level Cost Range and Milestone Schedule     |                                  | Funding estimate |
|------------------------------------------------------|----------------------------------|------------------|
| <b>TOTAL Cost Estimate</b> (scoping to completion)   | Total \$2,500,000 to \$3,000,000 |                  |
| <b>Proposed Project Start Date</b> (year and season) | 2022                             |                  |

|                                                      |                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                |
|------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Projected Project End Date (year and season)</b>  |                                                                                                                                                                                                                                | 2023                                                                                                                                                                                                                                                                                                                                           |
| <b>Year(s) seeking funding – Any funding sources</b> |                                                                                                                                                                                                                                | <input type="checkbox"/> 2020 <input type="checkbox"/> 2021 <input checked="" type="checkbox"/> 2022 <input checked="" type="checkbox"/> 2023 <input type="checkbox"/> 2024 <input type="checkbox"/> 2025 <input type="checkbox"/> beyond 2025 ( <b>no need to complete table below if seeking funding beyond 2025, or timing is unknown</b> ) |
| 2020                                                 | <input type="checkbox"/> Scoping <input type="checkbox"/> Feasibility-30% <input type="checkbox"/> 30%-60% design <input type="checkbox"/> Final design <input type="checkbox"/> Construction                                  | \$                                                                                                                                                                                                                                                                                                                                             |
| 2021                                                 | <input type="checkbox"/> Scoping <input type="checkbox"/> Feasibility-30% <input type="checkbox"/> 30%-60% design <input type="checkbox"/> Final design <input type="checkbox"/> Construction                                  | \$                                                                                                                                                                                                                                                                                                                                             |
| 2022                                                 | <input checked="" type="checkbox"/> Scoping <input type="checkbox"/> Feasibility-30% <input type="checkbox"/> 30%-60% design <input type="checkbox"/> Final design <input type="checkbox"/> Construction                       | \$50,000                                                                                                                                                                                                                                                                                                                                       |
| 2023                                                 | <input type="checkbox"/> Scoping <input checked="" type="checkbox"/> Feasibility-30% <input checked="" type="checkbox"/> 30%-60% design <input checked="" type="checkbox"/> Final design <input type="checkbox"/> Construction | \$400,000                                                                                                                                                                                                                                                                                                                                      |
| 2024                                                 | <input type="checkbox"/> Scoping <input type="checkbox"/> Feasibility-30% <input type="checkbox"/> 30%-60% design <input type="checkbox"/> Final design <input checked="" type="checkbox"/> Construction                       | \$2,500,000                                                                                                                                                                                                                                                                                                                                    |
| 2025                                                 | <input type="checkbox"/> Scoping <input type="checkbox"/> Feasibility-30% <input type="checkbox"/> 30%-60% design <input type="checkbox"/> Final design <input type="checkbox"/> Construction                                  | \$                                                                                                                                                                                                                                                                                                                                             |
| 2025 +                                               | <input type="checkbox"/> Scoping <input type="checkbox"/> Feasibility-30% <input type="checkbox"/> 30%-60% design <input checked="" type="checkbox"/> Final design <input type="checkbox"/> Construction                       | \$                                                                                                                                                                                                                                                                                                                                             |
| <b>Secured Revenue Sources</b>                       |                                                                                                                                                                                                                                | \$                                                                                                                                                                                                                                                                                                                                             |
| <b>Proposed Revenue Sources</b>                      |                                                                                                                                                                                                                                | \$                                                                                                                                                                                                                                                                                                                                             |

|                                                                                                          |
|----------------------------------------------------------------------------------------------------------|
| <b>Other Project Notes</b><br>Construction costs include approximately \$1,000,000 for land acquisition. |
|----------------------------------------------------------------------------------------------------------|

**Ready to submit? Please go to:**  
<https://app.smartsheet.com/b/form/2aed68c62ecd4de5926f3e75d7d76980>  
 to complete your entry and upload this form.

**For more information, please contact:** Suzanna Smith, WRIA 9 Habitat Projects Coordinator  
[susmith@kingcounty.gov](mailto:susmith@kingcounty.gov) Office: (206) 477-4641



Tier 2 Project: NS-60

## Ellisport Creek Mouth Restoration

PROJECT FACTS

Subwatershed:  
Nearshore

Nearshore  
Jurisdiction:  
Nearshore KI - 13 - 4;  
KI - 13 - 5

Bankside  
Jurisdiction:  
King County

Project sponsor:  
King County

Budget:  
\$3,000,000

PROJECT TYPE:

Acquisition

Restoration

KEY HABITAT:

Nearshore  
Pocket Estuary

Riparian



PROJECT DESCRIPTION:  
Acquire and restore habitat at Ellisport Creek stream mouth, and allow for fish passage.

Tier 2 Project: NS-67

## Des Moines Creek Estuary Restoration

PROJECT FACTS

Subwatershed:  
Nearshore

Nearshore  
Jurisdiction:  
Nearshore KI - 8 - 2

Bankside  
Jurisdiction:  
City of Des Moines

Project sponsor:  
City of Des Moines

Budget:  
TBD

PROJECT TYPE:

Planning/  
Design

Restoration

KEY HABITAT:

Nearshore  
Pocket Estuary

Riparian



PROJECT DESCRIPTION:  
Remove approximately 500 feet of hard shoreline armor and pull back fill material to create a more natural shoreline and stream transition.

Table 3.

## Marine Nearshore Subwatershed Tier 3 Projects

| Project No. | Project Name                                                             | Project Type                                                                                                           | Project Description                                                                                                                                                                                                                                                                                                                                                     | Sponsor                             | River mile and Bank side/Nearshore Jurisdiction | Primary Strategy (pick 1)                      | Jurisdiction        | Goal alignment                                                                                               |
|-------------|--------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|-------------------------------------------------|------------------------------------------------|---------------------|--------------------------------------------------------------------------------------------------------------|
| NS-2        | Myrtle Edwards Park Pocket Beach Shallow Water Habitat                   | <ul style="list-style-type: none"> <li>Planning/Design</li> <li>Restoration</li> <li>Scoping/Reconnaissance</li> </ul> | Remove shoreline armor and restore natural beach adjacent to a previously created pocket beach.                                                                                                                                                                                                                                                                         | Seattle Parks and Recreation        | Nearshore KI - 4 - 1 - NAD                      | Protect, restore and enhance marine shorelines | City of Seattle     | <ul style="list-style-type: none"> <li>Marine riparian vegetation</li> <li>Shoreline armor</li> </ul>        |
| NS-16       | Dash Point State Park Estuary Restoration and Water Quality Improvements | <ul style="list-style-type: none"> <li>Restoration</li> <li>Scoping/Reconnaissance</li> </ul>                          | Project will remove armoring to restore estuary and re-align creek to more sinuous route. Improve water quality in park through parking lot improvements, reduce erosion associated with stormwater runoff, crosswalk-treated pedestrian bridge replacement, and wetland enhancement.                                                                                   | Washington State Parks & Recreation | Nearshore KI - MA - 01A                         | Protect, restore and enhance marine shorelines | City of Federal Way | LG- Off-channel habitat                                                                                      |
| NS-22       | Smith Cove Shallow Water Rehabilitation                                  | Planning/Design                                                                                                        | Remove some level of shoreline armor and plant native vegetation along a stretch of barren riprap. The riprap leads to a protected sandy pocket beach that exists at all tidal elevations. There may be additional opportunity for nearshore restoration on adjacent Port property. The Port also has a marine habitat restoration pilot site adjacent to this project. | Seattle Parks and Recreation        | Nearshore KI - 3 - 2/3 - 3 - NAD, KI - 3 - 3    | Protect, restore and enhance marine shorelines | City of Seattle     | <ul style="list-style-type: none"> <li>Marine riparian vegetation</li> <li>Shoreline armor</li> </ul>        |
| NS-35       | Lower Shinglerelli Creek Habitat Restoration                             | Restoration                                                                                                            | Add LWD into stream reach west of Cedarhurst Road.                                                                                                                                                                                                                                                                                                                      | King County                         | Nearshore KI - TI - 4                           | Protect, restore and enhance marine shorelines | Vashon/Maury        | <ul style="list-style-type: none"> <li>Marine riparian vegetation</li> <li>Shoreline conservation</li> </ul> |

(Continued on next page)

## **Environment Committee Meeting 2/18/2021 NPDES Permit Update:**

### **Overview:**

Each year staff provides the Council Environment Committee with an update on the City's NPDES permit. The Permit is held and managed by the Surface Water Department. Each update entails a brief history of the permit, an explanation of the various requirements and how the City is meeting them, and future updates to the permit.

### **NPDES Program Summary and Background:**

NPDES is an acronym for the **N**ational **P**ollutant **D**ischarge **E**limination **S**ystem and is a permit program that was first introduced as part of the Federal Clean Water Act in 1972. The goal of the permit program is to control and regulate the discharge of point source pollution into the nation's water by issuing permits to dischargers. Drainage systems, like the City of Des Moines' drainage system, are considered dischargers.

Nationally, the NPDES program is administered by the Environmental Protection Agency. In some states, including Washington, the authority to administer the program has been delegated to the State. In Washington, this authority belongs to the Washington State Department of Ecology (Ecology).

Phase II of the NPDES program unfolded in 2007 and required that smaller communities also obtain permit coverage and develop stormwater management plans. The City of Des Moines is currently under the 2019-2024 Western Washington Phase II Permit.

### **NPDES Program Requirements:**

The current NPDES permit has many requirements aimed at preventing, reducing, and eliminating pollutants from both our creeks and the Puget Sound. These requirements are broken down into 8 main categories: stormwater planning, public education/outreach, public involvement/participation, mapping and documentation, illicit discharge detection/elimination, controlling runoff from construction sites, public operations/maintenance, and source control for existing development.

## 1. Stormwater Planning

- Coordination with SWM Comprehensive Plan
- Low Impact Development – ongoing requirement to make LID the preferred and commonly used approach
- Basin Planning
  - Phase 1 is due March 2022 (Receiving Water Assessment)
  - Phase 2 is due June 2022 (Receiving Water Prioritization)
  - Phase 3 is due March 2023 (Stormwater Management Action Plan)

## 2. Public Education/Outreach

This program is required to include an education and outreach program designed to reduce or eliminate behaviors and practices that cause or contribute to adverse stormwater impacts and encourage the public to participate in stewardship activities. The following list provides examples of ways we met this requirement in 2020:

- General Awareness Programs
  - Puget Sound Starts Here Ad Campaign
  - City Currents Articles
  - Carwash Kits
  - Highline Stormfest (Update scheduled for April)
- Behavior Change Programs
  - ECOSS Business Outreach (30 businesses served)
  - Dumpster Lid Outreach
- Stewardship Programs
  - Storm Drain Marker Volunteer
  - Adopt-A-Drain
  - Clean Up Events



**Photo 1.** Puget Sound Starts Here Logo.



**Photo 2.** Contents of the Storm Drain Marker Volunteer Kit.

## 3. Public Involvement/Participation

This program is required to provide ongoing opportunities for public involvement and participation in the development of the program management plan.

- Storm Water Management Program Updated Annually
- SWM Website Public Comment Invitation

#### 4. Mapping/Documentation

This section of the permit requires the ongoing Mapping and maintenance of the City's GIS database of stormwater assets.

- Engineering Technician Position filled
- New requirement of mapping outfalls (73 mapped in 2020)

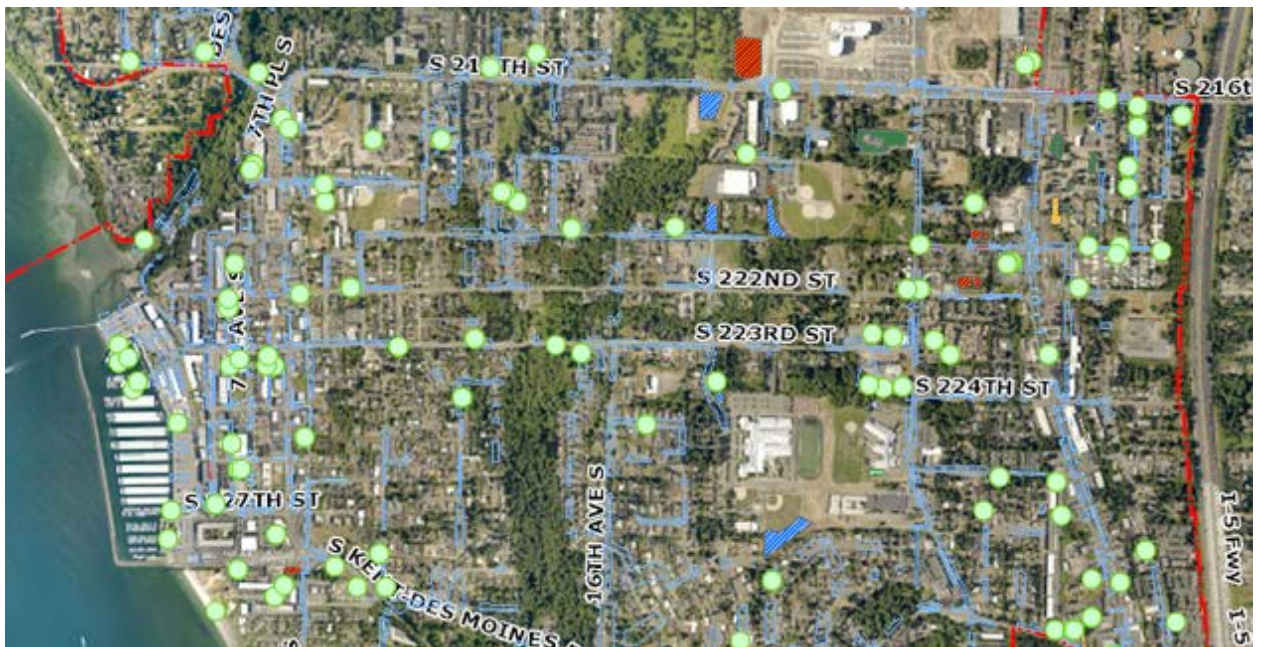
#### 5. Illicit Discharge Detection/Elimination

The program is required to include an ongoing program designed to prevent, detect, characterize, trace and eliminate illicit connections and illicit discharges into the municipal stormwater system. The following list provides examples of ways we met this requirement in 2020:

- Citywide map updates/improvements
- Spill Response Tracking/Investigation (51 Spills Reported)
- Field Screening Program (10.7% this year)
- King County Local Source Control Inspections (17 businesses served)
- Staff Training



**Photo 3.** Example of an Illicit Discharge in Woodmont Creek.



**Photo 4.** Screenshot of Our Illicit Discharge Tracking Software, CityWorks.

## 6. Controlling Runoff from Construction Sites

The program is required to implement and enforce a program to reduce pollutants in stormwater runoff from new development, redevelopment and construction site activities. The following list provides examples of ways we met this requirement in 2020:

- Plan Review process (151 projects reviewed, 22% decrease from 2019)
- Inspection process (330 construction inspections, 36% increase from 2019)
- Enforcement Actions (17 enforcement actions taken, 81% decrease from 2019)



**Photo 5.** Construction Site Needing Enforcement Measures.

## 7. Public Operations/Maintenance

The program is required to implement an operations and maintenance (O&M) program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations. The following list provides examples of ways we met this requirement in 2020:

- Stormwater Facility Inspections/Maintenance
  - o 222 Total
- Catchbasin Inspections/Maintenance
  - o 5,101 Total
- SWPPP for City Maintenance/Storage Facilities
- Facility Inspections/Ipad Integration
- Cityworks Inspection Tracking



**Photo 6.** A SWM Public Works Maintenance Member Inspecting a Stormwater Facility

## **8. Source Control for Existing Development**

As part of the new 5-year NPDES permit cycle. Source Control was added as a new permit section. The following list provides an overview of the new requirements:

- By August 1, 2022 the City shall adopt and make effective an ordinance requiring application of source control BMPs for pollutant generating sources associated with existing land uses and activities.
- By August 1, 2022 the City shall establish an inventory that identifies publicly and privately owned sites that have the potential to generate pollutants to the City's surface water system.
- By January 1, 2023 the City shall implement an inspection program for these sites and will be required to inspect 20% of the listed sites each year.