



Tualatin Watershed Enhancement Collaborative Cedar Mill/North Johnson Creek Workplan

I. Opportunity Statement and Proposed Collaborative Approach

- **Action is needed:** Chronic flooding, erosion, bank instability, and other detrimental stormwater impacts within the Cedar Mill/North Johnson (CMNJ) Creeks watershed affect the entire community by adversely impacting property values, diminishing quality of life for residents, and reducing the ability of businesses to succeed. Though multiple agencies continue to address these challenges through system maintenance and improvement as well as targeted watershed enhancement projects, flooding, erosion, and bank instability continue to present significant problems in the basin.
- **Chart a more sustainable path:** Although complete elimination of flooding is likely impossible in this urbanized basin, opportunities exist to reduce the risks and impacts from increased flows in the basin and build a community that can continue to thrive amid changing stormwater dynamics.
- **Improve coordination and collaboration:** Multiple agencies, jurisdictions, and non-governmental organizations often propose programs or capital projects with different goals in mind. What has been lacking in the past is an effort to actively engage program and project management teams from various agencies to review each other's activities to see where coordination can occur, and to identify issues early in project development. Breaking down silos and requirements among agencies will result in a cultural shift for all. A key element of this plan is to develop a process that can be strengthened, refined and then replicated in other parts of the County.
- **Tualatin Watershed Enhancement Collaborative:** In June 2017, Oregon Governor Kate Brown designated the CMNJ Flood Remediation Collaborative as an Oregon Solutions project. Consistent with the Declaration of Cooperation signed at the close of that effort, a multi-disciplinary collaborative of six cooperating agencies and entities (including Washington County Department of Land Use & Transportation (LUT), Clean Water Services (CWS), and three key non-governmental partners) has formed to implement a coordinated, programmatic, watershed-based approach to prioritizing and implementing activities and capital projects that will help mitigate detrimental stormwater impacts in this basin. The Tualatin Watershed Enhancement Collaborative (TWEC) CMNJ Team members are identified in Section IV.

II. Intent and Goals

A. Big Picture – Intent and Approach

The Tualatin Watershed Enhancement Collaborative (TWEC) program seeks to collaboratively develop workable, effective activities and programmatic approaches to flooding and drainage-related problems within the Tualatin River Basin and is a continuation of the work begun with the Oregon Solutions Cedar Mill/North Johnson Flood Remediation Collaborative effort. The TWEC CMNJ Team (CMNJ Team) is a multi-disciplinary, multi-entity group formed to collaboratively address flooding, stormwater, and related issues in the Cedar Mill/North Johnson Creek area at the watershed scale.

The CMNJ Team works with a set of shared values that includes:

- Utilizing a comprehensive and coordinated watershed perspective
- Aiming to improve long-term economic and environmental resilience in the watershed and community
- Improving the financial security of area residents and businesses
- Creating an interconnected network of habitats to support healthy ecosystems and community well-being
- Improving and maintaining safe, effective, and efficient infrastructure systems

B. Goals

The TWEC CMNJ Team's overarching goals are to:

- Build a shared vision among cooperating partners and the public for a more resilient CMNJ watershed
- Develop a process among cooperating entities and key partners to coordinate activities including capital projects, in the interest of watershed and stream health.
- Develop decision-support tools that help establish a shared knowledge base from which the Team can identify, design, and prioritize potential actions
- Identify and implement a combination of coordinated programmatic, policy, and physical infrastructure actions that will help alleviate flood and stormwater resiliency challenges
- Coordinate investment in and implementation of those actions among cooperating entities and key partners, including capital project investments
- Continue on the previous collaborative effort to build an efficient, action-oriented coalition of government, private, and non-profit entities and partners that will invest staff and financial resources to accomplish this work and continue to function as new water management challenges arise in the basin

III. Objectives

The key work activities over the next three years have been grouped according to objectives the program is intended to meet.

Objective 1 activities begun in Fiscal Year 2019 will form the foundation for the three-year work effort. These are activities which can be implemented quickly and within existing technical and financial resources. The CMNJ Team has already begun the first four activities. Objective 1 activities are high value actions that can be largely completed with existing resources and/or within existing program structures.

Activities associated with Objectives 2 through 6 will be based on the outcomes of Objective 1 activities. Remaining activities are sequenced and coordinated activities that require additional analysis and/or scoping to determine effectiveness, budget, and relative priority. These activities will require participation by all nine CMNJ members. These activities include concurrent and sequenced, multi-objective tasks that further evaluate the CMNJ watershed issues and develop, evaluate, and recommend specific actions. They may require additional resources and modified program structures to complete.

A. Objective 1: Implement Early Action Activities

1. Create Multi-Entity Capital Project Coordination Team

A Capital Project Coordination Team will be formed to integrate and coordinate capital projects between multiple entities. This work will begin with a team formed of Washington County LUT and CWS staff to evaluate and coordinate the proposed FY20 and subsequent Capital Improvement Plans of both entities and to establish a process and methodology that can be used with other entities as projects and initiatives supporting the CMNJ watershed are identified.

Washington County LUT and CWS will designate TWEC liaison positions within their organizations that will provide additional support for policy development and coordination of the activities identified in the workplan.

2. Evaluate FY19 and FY20 Resource Requirements

TWEC activities in January through June 2019 will lay the groundwork for the initial three-year workplan activities and prepare the team for a coordinated and funded FY20. These early action activities will define the estimated staff time, consultant resources, and other costs for the nine CMNJ Team members from January 2019 through FY20. CWS/LUT costs for FY19 will largely be staff time but FY20 costs will likely include both staff time and outside costs for surveying, data gathering, modeling, and small project construction. Small projects will be collaboratively selected based on factors such as:

- Ability to implement
- Beneficial outcome
- Stakeholder feedback collected to date

Ease of collecting required data to complete cost estimates

3. Create TWEC website

The existing CMNJ website (<http://cedarmillcreek.org>) will be updated and archived, and a new TWEC CMNJ website created. The archived CMNJ content will be available under a tab on the new TWEC website. Stakeholders will be notified when the new TWEC website goes live.

4. Create CMNJ Watershed Storymap

CMNJ Team members CWS, Willamette Partnership (WP), and The Wetlands Conservancy (TWC), assisted by Portland State University (PSU), are currently developing a web-based outreach tool called a “Storymap” that includes maps, narrative and graphics to communicate the history of some of the CMNJ issues. It will serve as a foundation for further community outreach.

5. Begin Process to Enroll In FEMA Community Rating System (CRS)

Washington County LUT is the entity that will enroll in the CRS program and lead administration. CRS participation can provide reduced premiums to property owners in urban unincorporated Washington County who must buy flood insurance. This process begins with a request from the senior elected official in the County, and then goes through a multi-year process that includes two visits from FEMA, tentatively scheduled in 2019 and 2020, before the CRS is applied to flood insurance rates. Based on the County's experience, the City of Beaverton will evaluate whether this program is useful for their residents, and make a recommendation to City leaders.

B. Objective 2: Develop and Implement Communications and Outreach Strategy

The CMNJ Team will refine and implement a comprehensive and multi-layered outreach program concurrent with the initial three-year effort that addresses the needs of the Team, elected officials, agency and member managers, businesses, property owners and associations, local advocacy groups, and ratepayers. Annual reports summarizing previous year's efforts and projecting next year's efforts will be prepared.

C. Objective 3: Develop Technical Assistance and Small Grant Programs

The CMNJ Team will identify and recommend refinements or coordination among the nine TWEC members' existing technical and financial programs in support of flooding and stormwater challenges. It will also identify and recommend implementation of new assistance or grant programs where they can be most effective within the CMNJ watershed.

D. Objective 4: Develop Collaborative Finance and Governance Structures

The CMNJ Team will explore and evaluate current and potential financial options and TWEC governance structures needed for TWEC to perform near-term projects and evolve into a long-term collaborative organization capable of program and/or capital project coordination and implementation. It will make recommendations to senior agency management for a long-term financing strategy to guide the formation of capital project recommendations for potential inclusion in the TWEC members' capital budgets.

E. Objective 5: Develop, Analyze, and Prioritize Capital Projects

This objective builds on the work begun in Objective 1.e to identify and characterize coordinated capital projects that optimize use of resources while meeting watershed enhancement goals. The CMNJ Team will identify, evaluate, screen, rank, and provide working budget estimates for these potential capital improvements projects that work together to improve conditions.

F. Objective 6: Finalize and Begin Implementation of Multi-Year Action Plan

The CMNJ Team will incorporate feedback from the community outreach and the results of the financing analysis to develop scenarios and then finalize the recommended capital program, including bundling of projects; sequence and timing; long-lead predecessor activities; member roles for successful implementation; policy needs; costs and associated financing; and cost-sharing among the Team's entities.

IV. CMNJ Team Membership and Process

A. Members

The **TWEC CMNJ Team** is responsible for maintaining core team functions and ensuring progress toward the goals outlined above. The CMNJ Team will consist of Cooperating Entities (publicly funded government entities) and Key Partners (non-governmental organizations) as outlined in the Declaration of Cooperation. Participation may evolve over time.

Current **Cooperating Entities** include:

- Clean Water Services (co-coordinating entity)
- Washington County Department of Land Use & Transportation (co-coordinating entity)
- Tualatin Hills Park & Recreation District (THPRD)
- Tualatin Soil and Water Conservation District (SWCD)
- City of Beaverton
- City of Portland

Current **Key Partners** in the CMNJ Team include:

- Tualatin River Watershed Council (TRWC)
- The Wetlands Conservancy (TWC)
- Willamette Partnership (WP)

The Objectives outlined above include development of a proposed long-term governance and finance structure for the collaborative CMNJ Team. Prior to finalizing that structure, in addition to the CMNJ Team, other standing and ad hoc subteams have been created including:

- A **Community Engagement/Technical Assistance Subteam** to develop and implement a communications and outreach strategy, as well as the website and Storymap, and to work with private property owners for localized actions.
- A **Finance and Governance Subteam** to guide and focus discussions on decision-making within the group, and lead efforts on meeting Objective 4. It will continue to work throughout the three-year period to recommend the necessary financing models and governance structures to address prioritized actions.
- One or more **ad hoc Technical Subteams** to be responsible for identifying the need for, acquiring, compiling and analyzing technical information needed to support progress toward all objectives. Membership will vary based on the geographical extent and the nature of the proposed actions.

B. Proposed CMNJ Team Process

This collaborative effort will allow all members to participate in problem identification and assessment, evaluation of actions, ranking and prioritization, and in deciding final team recommendations. All subteams will aim for a consensus-based decision process with all partners participating fully in decisions. Specifics on governance within the teams and within members' respective organizations will be developed under Objective 4.



Tualatin Watershed Enhancement Collaborative Cedar Mill/North Johnson Creek Workplan Objectives, Tasks, and Timelines

Objective 1.1: Multi-Entity Capital Project Coordination Tasks	Estimated Completion
Washington County LUT and CWS to form team to evaluation their FY20 CIPs	3/2019
Washington County LUT to create and fill liaison position to assist with policy and coordination of workplan activities	3/2019
CWS to create and fill liaison position to assist with policy and coordination of workplan activities	3/2019
Establish methodology for capital project implementation/coordination between LUT & CWS	4/2019

Objective 1.2: Work Scoping and Resource Definition for FY19 and FY20 Tasks	Estimated Completion
Prepare entity-specific workplans outlining activities and staffing needs to align with the overall CMNJ workplan. Share with stakeholders	1/2019
Cooperating entities approve and commit to staff assignments (which personnel and what percentage of their time) for remainder of FY19	1/2019
Cooperating entities approve mid-fiscal year requests for CMNJ Team activities for remainder of FY19	1/2019
Identify activities for Key Partners and assist in finding grant or other funding as needed to continue participation in FY19/FY20	2/2019
Select CMNJ Team activities and projects to be conducted in FY20 and develop general scope of work and estimated costs for FY20 efforts	4/2019
Develop preliminary cooperating entity FY20 budgets with input from CMNJ Team (LUT and CWS to be coordinated per Objective 1.e); summarize into a total CMNJ staffing plan and budget	4/2019
Generate draft prioritized list of FY20 capital and operating activities (Technical subcommittee). CMNJ Team screens and adopts, refers to entities' senior management for review. Generate request for FY20 budget additions.	4/2019
Continue scoping and budgeting efforts based on senior management feedback	5/2019
Adopt final staffing plan, establish scope of work for FY20 capital projects efforts, approve member budgets, approve consultant scope of work and begin consultant selection	7/2019 (beginning of FY20)

Objective 1.3: TWEC Website Tasks	Estimated Completion
Explore options for permanent website for CMNJ efforts	1/2019
Update text and features of original website and archive	1/2019
Upload workplan for public review (possibly on original website)	1/2019
Create new permanent website and post adopted workplan	3/2019
Upload initial information on the TWEC process after plan adoption; establish redirect from archived original site to new TWEC CMNJ website	3/2019
Maintain website and upload annual reports	Ongoing



Objective 1.4: CMNJ Watershed Storymap Tasks	Estimated Completion¹
Develop outline for Storymap	Completed
Acquire content based on outline	3QFY19
Identify interviewees and conduct interviews in collaboration with Portland State University	3QFY19
Develop draft Storymap	4QFY19
Finalize first draft of Storymap and present to the CMNJ Team	4QFY19
Post revised initial Storymap to CMNJ Watershed website	1QFY20
Update Storymap periodically, coincident with annual report preparation	2QFY21, 2QFY22, 2QFY23

Objective 1.5: Community Rating System (CRS) Tasks	Estimated Completion¹
Washington County staff begins coordination with FEMA	Completed
Identify existing and additional actions County and other parties could take to increase CRS rating, and include these in the Objective 6 action plan	2QFY20
Prepare for FEMA's Community Assistance Visit (e.g., audit of floodplain ordinance enforcement and projects proposed for contribution to CRS Rating)	4QFY20
Evaluate CRS enrollment process based on County lessons learned (City of Beaverton) and make recommendation to City officials.	4QFY20

Objective 2: Communication and Outreach Strategy Tasks	Estimated Completion¹
Continue previous outreach activities for CMNJ and ongoing activities by Key Partners. Evaluate potential or combined efforts	3QFY19
Define purposes of and audiences for TWEC outreach efforts	3QFY19
Develop full inventory of existing outreach, communications, and education efforts, and identify gaps	3QFY19
Update website to summarize work accomplished in 2018 and identify nature and timing of work to be done under this multi-year plan	3QFY19
Draft a detailed 3-year outreach and communication strategy, including goals, objectives, products, roles, and timelines	4QFY19
Continue implementation and adaptive management of outreach and communication strategy	4QFY22
Prepare annual reports and present updates to Board of County Commissioners, public	2QFY21, 2QFY22, 2QFY23

¹ For all the cooperating entities, Fiscal Year 2020 (FY20) is from July 1, 2019, through June 30, 2020. 1QFY20 is July-September 2019; 2QFY20 is October-December 2019; 3QFY20 is January-March 2020; 4QFY20 is April-June 2020.



Objective 3: Technical Assistance and Small Grant Program Tasks	Estimated Work Duration¹
Review non-structural program recommendations developed during the OS phase. Advance some recommendations per CMNJ Team’s capabilities by estimating cost and schedule to implement, noting organizational limitations, and update fact sheets. Goals: a) establish a CMNJ technical assistance program focused on flood-proofing; 2) establish a CMNJ technical assistance program focused on strategies other than flood-proofing.	2QFY19 – 4QFY19
Identify and catalog members’ private property technical assistance resources and capabilities. Explore applying successful programs such as Naturscaping, RainReady, Enhabit, Backyard Habitat, roof-smart rainwater harvesting; small TRWC grants, and other SWCD model programs within CMNJ and estimate degree to which these would mitigate known problems. Reach out to other watershed and housing stewardship organizations for potential assistance opportunities.	2QFY19 – 4QFY19
Identify and investigate any additional types of technical assistance programs not yet locally tested to advance candidates for potential application in CMNJ as pilot programs	4QFY19 – 2QFY20
Identify and catalog CMNJ Team members’ existing property owner financial assistance programs. Include scope and limitations of funding, who the audiences are and where programs can be applied. Consider these current financial elements while developing funding strategy in Objective 4.	2QFY19 – 3QFY19
Identify gaps and additional need for technical assistance, in type and extent; estimate financial resources required to fill gaps. Provide that information for funding strategy in Objective 4.	2QFY19 – 3QFY19
Develop a sustainable concept for a coordinating position or entity (“Watershed Concierge”) that could match individual property needs to available programs and resources. Develop a position description, prepare example decision and outreach tools, and test using the expanded website from Objective 2 to channel residents’ inquiries through this position to appropriate resources. Share with stakeholders.	4QFY19 – 2QFY20
Explore/initiate other non-structural, programmatic activities as necessary to minimize new problems or provide increased Implementability for future capital projects. These activities include easement inventory/acquisition; land acquisition; willing seller program; and greater floodplain protections from future development or redevelopment. Develop strategies for implementation of these activities that: a) incorporate into technical assistance/small grant/“Watershed Concierge” model; b) carry into analysis of funding in Objective 4; and c) incorporate into analysis of capital project prioritization and implementation in Objective 5. Share with stakeholders.	3QFY19 – 2QFY20
Implement technical assistance and administer small grants. These include grants from CMNJ Team cooperating entities to CMNJ Team key partners, as well as private property owners or other NGOs	Ongoing

Objective 4: Finance and Governance Structures Tasks	Estimated Work Duration¹
Conduct inventory describing entities active in water and watershed management in the basin; outline roles, gaps, opportunities, and funding and capacity needs	3QFY19
Propose collaborative governance structure for CMNJ Team, including host entity, team structure and composition, decision and institutional review processes, and capacity and resource needs	4QFY19
CMNJ Team, then individual entities, review, recommend changes, revise, and adopt governance structure	1QFY20



Objective 4: Finance and Governance Structures Tasks	Estimated Work Duration¹
Develop strategy to evaluate the need for and potential scope of additional funding programs, to meet the private property technical assistance needs identified in Objective 3. Include rationale for additional resources, identify funding sources, scope, specific corrective approaches or actions, and targeted goals for implementation.	4QFY19 – 1QFY20
Summarize estimated (not fully confirmed) financial needs for candidate structural (capital) projects at varying levels of improvement and under several schedule scenarios. Determine annual funding requirements under various scenarios. Update the comparative spending chart prepared earlier to reflect list of candidate needs.	4QFY19 – 2QFY20
Compare needs and current resources. For CWS, perform rate analyses as needed to identify new user rate structures to match the various scenarios. For all members, explore other funding sources or structures.	1QFY20 – 3QFY20
Develop, evaluate, and rank options for financial model (for 2 or more scenarios) for long-term support of CMNJ program; propose selected option(s) to CMNJ Team members’ boards for approval	2QFY20 - 3QFY20
CMNJ Team, then individual entities, review and revise financial model and present preferred financing strategy	3QFY20
Approval/adoption of governance and financial structure, with plan for adaptive management. Prepare Financing Plan. Share with stakeholders.	4QFY20
Implementation of early action items and work already in progress; adjust Financing Plan to reflect updated project costs and funding opportunities; adapt Financing Plan as needed as team develops new projects and programs, and as additional organizations outside the TWEC conduct work within the CMNJ watershed	Ongoing

Objective 5: Capital Project Prioritization Tasks	Estimated Work Duration²
Refine existing shared vision of a future resilient watershed, identifying goals and a vision of success	3QFY19
Develop project evaluation, prioritization criteria	4QFY19
Gather and analyze physical, hydrologic, water quality, and other existing data to adequately define the type, cause, geographic location and scope, etc. of flood and stormwater management problems in the basin	3QFY19 – 4QFY19
Perform gap analysis and prioritize, define, and schedule the acquisition of data as needed to test adequacy and effectiveness of proposed capital projects to address the identified problems	4QFY19 – 1QFY20
Acquire missing data and assemble for analysis, including constructing appropriate hydrologic/hydraulic models	1QFY20 – 3QFY20
Use existing and acquired data and associated models to characterize the type, cause, geographic location and scope of flood and stormwater management problems in the basin	3QFY20 – 1QFY21
At the planning level, quantify cost to implement proposed capital projects	4QFY20 – 2QFY21
Analyze potential/proposed capital projects for flood management and watershed enhancement benefits	4QFY20 – 2QFY21
Evaluate, screen, rank, and recommend stand-alone projects as precursors to the combination and prioritization in Objective 6. Provide summary for sharing with stakeholders.	1QFY21 – 2QFY21



Objective 6: Multi-Year Action Plan Tasks	Estimated Work Duration²
Develop a shared vision of a future resilient watershed, identifying goals and a vision of success	3QFY19
Coordinating with interim products from Objective 5, conduct a facilitated decision process to identify and evaluate “bundles” of project and programmatic approaches that could be combined to meet desired outcomes at the watershed scale. Each bundle includes multiple activities and projects with associated costs, sequence, and benefits.	1QFY20 - 2QFY21
Using a consensus-based process, prioritize activities and projects within bundles; prioritize bundles	1QFY21 – 2QFY21
Develop several implementation scenarios reflective of financing options from Objective 4 and lay out sequences of bundles and their respective activities and projects to conform to each scenario, generating annual budget streams to match and describing associated risks	2QFY21
Facilitate partner and stakeholder feedback on scenarios and associated costs and risks	3QFY21
Draft a 3- to 5-year Implementation Plan to implement the optimal set of programs and projects, with a plan for adaptive management of the plan to continue through Years 5 through 10 as needed to accomplish the goals	2QFY21 – 3QFY21
Final review and adoption of action plan and associated Capital Improvement Plan(s), as appropriate	4QFY21
Implementation of early action items and work already in progress; adjust Financing Plan to reflect updated project costs and funding opportunities; adapt Implementation Plan as needed as team develops new projects and programs, and as additional organizations outside the TWEC conduct work within the CMNJ watershed	Ongoing