



Community Technical Group Meeting 4 Summary

1/29/16

OVERVIEW

On Dec. 16, 2015, Pierce County Storm Water Management hosted the fourth Community Technical Group (CTG) meeting for the System Wide Improvement Framework (SWIF) planning process.

Topics for the Dec. 16 meeting included:

- Building understanding and providing input on different vegetation management concepts and how these fit into the SWIF Plan
- Building understanding of specifications for vegetation management, including definitions of hazard trees, mature trees and understory vegetation
- Finalizing proposed vegetation management goals, objectives and strategies

All presentations can be found at:

<https://www.co.pierce.wa.us/ArchiveCenter/ViewFile/Item/4182>

WELCOME AND INTRODUCTIONS

Meeting facilitator Penny Mabie welcomed everyone and led a round of introductions. She conducted an overview of the agenda, meeting handouts and ground rules. She also reminded the group that these meetings are an opportunity for the County to hear the perspectives of the organizations and agencies they represent.

- A CTG member asked about the process for the SWIF Plan and whether agencies besides the US Army Corps of Engineers (USACE) would be involved in environmental review and approval.
 - Rob Wenman, Pierce County Project Manager, indicated that the SWIF Plan would ultimately be submitted to, and accepted by, USACE. Other resource agencies are included in the CTG to provide their perspective, including the State Department of Ecology. The USACE's interpretation is that since they are accepting, not approving, the SWIF Plan, environmental review of the SWIF Plan itself is not needed. There will be additional environmental review of the SWIF Plan at the implementation stage.

COMMUNITY TECHNICAL GROUP BUSINESS

Penny asked if the CTG had any objections to finalizing the Meeting 2 and Meeting 3 Summaries. The summaries were previously emailed to the group for review. There were no emailed responses. No objections were raised and the summary drafts were accepted as final. They are available on the SWIF webpage.

LEVEE TOUR DISCUSSION

Pierce County staff led a tour of the levee system for CTG members on Dec. 3, 2015. Penny asked the group for observations of the tour.

- Several CTG members noted that there is a great deal of variation in vegetation and development near the levees along the river system, and in some cases there is development very near the levees.

- Rob indicated that one of the objectives for the tour was to introduce the concept of the five levee structure schematics shared at the previous meeting. The CTG members indicated that the tour was useful and showed these schematics in context.
- A CTG member noted that it was valuable to see how the river flow varies, and how the river channel can meander and move.

VEGETATION MANAGEMENT DEFINITIONS

Peter Hummel, Anchor QEA Landscape Architect, discussed vegetation management components and suggested recommendations, including hazard trees, mature trees, understory vegetation and replanting. See slides 5-39 of the [Presentation](#) for details.

Hazard Trees

Peter walked through what constitutes a hazard tree and suggested recommendations related to hazard trees, including:

- Training personnel with the appropriate qualifications to identify hazard trees
- Combining several existing hazard tree assessment forms to fit the needs of the County (i.e., Whatcom County Hazard Tree Assessment Form, International Society of Arboriculture (ISA) Basic Tree Assessment Form, and USACE Tree Checklist)
- Considering levee-specific targets and fish-related habitat needs

CTG members shared the following questions or comments and Pierce County staff provided answers where appropriate:

- A CTG member noted that it seems as if every tree is a hazard using these components.
 - Peter said that the County does not intend to do an inventory of every tree to determine if it is hazardous. Instead, these components outline under what circumstances a tree that has been identified as a potential hazard would need to be removed.
- A CTG member said that the risk associated with losing shading from a tree should be weighted equally with risk to the levee structure when determining if a tree is a hazard.
- A CTG member asked if the County is required by a code or regulation to assess and remove hazard trees.
 - Peter said that he does not know of a specific code or regulation that requires assessment of hazard trees. As the levee manager, the County is responsible for any trees that are posing imminent risk.
 - Tony Fantello, Pierce County Project Sponsor, noted that the County is looking to develop a series of guidelines about hazard trees to ensure best practices are followed. Tony indicated that it is the County's intention to keep as many trees as possible, but they will have to be more aggressive with thinning to maintain USACE inspectability standards.
 - Rob indicated that the County is trying to find a balance between risk, maintenance and habitat.
- A CTG member noted that restoring habitat needs to be a consideration so that habitat does not continue to diminish and endanger salmon species.
 - Rob indicated that the SWIF Plan is one component for managing the overall levee system, and that there are opportunities for enhancement through other programs (e.g., Habitat Conservation Plan(HCP)).
- A CTG member said that the levee tour focused on operations and maintenance and asked whether they could do another tour with a focus on vegetation management.

- Rob said that the County is hoping to wrap up the conversation about vegetation management at the next few meetings, and that there is not room in the schedule for another tour.
- A CTG member asked how the SWIF Plan relates to the HCP.
 - Rob shared that the HCP focuses on mitigation to offset incidental impacts that come from routine maintenance activities, restoration efforts, and the levee setback program. He noted that the Nested Goals Handout outlines how the Pierce County Surface Water Management Plans inter-relate. The HCP goals and objectives are not included in the document because they have not yet been determined.

Mature Trees and Understory Species

Peter reviewed the Vegetation Management Example Schematic Plan, which outlines the proposed plan for developing clusters of understory vegetation around mature trees. The plan allows for multi-story vegetation. He also reviewed the Vegetation Handout, which includes descriptions of what constitutes maturity for different tree and understory vegetation species. Peter also highlighted the advantage of conifers, since they are more shade tolerant. Conifers only make up 9 percent of the river system vegetation profile.

Peter shared recommendations for mature trees and understory vegetation, including:

- Recruiting an increased proportion of conifers
- Monitoring mature trees for hazardous tree characteristics
- Preserving mature trees as part of levee repairs, where possible
- Managing for regeneration of trees through understory development
- Managing for multi-layered understory canopy
- Managing invasive species to provide space for understory tree growth

CTG members shared the following questions or comments and Pierce County staff provided answers where appropriate:

- A CTG member asked if the trees in the Proposed Management Component Schematics (slides 24-25) were drawn to scale.
 - Peter indicated that there is no strict scale because the levee prism can vary greatly in height, but there is a proportionality to the height of the trees related to the height of the levee.
- A CTG member noted that it is important to recruit understory vegetation after mowing in order to manage invasive species.
 - Peter indicated that the County will account for that as well. There needs to be a plan in place to recruit mature trees.
- A CTG member indicated that an overstory is needed before conifers can be planted. They do not do well in isolation.
- A CTG member noted the importance of considering windthrow and how to prevent trees from getting blown over once they reach maturity.

Replanting

Peter reviewed current replanting methods. The County is required to replant after levee repairs as mitigation under the Puyallup River Vegetation Management Agreement, but the County employs these tactics along the whole system. Peter also suggested considerations for refining replanting methods, including:

- Toe stabilization through rock placement and the use of coir logs

- Maximizing availability of soil for roots (e.g., using sonotubes to give roots access to soil beneath riprap)
- Conifer planting
- Encouragement of natural colonization of native plants

CTG members shared the following questions or comments and Pierce County staff provided answers where appropriate:

- Todd Essman, Pierce County Project Technical Lead, noted that the brush layering example was a test project and not part of the County’s normal operating procedures. He also indicated that plant availability can limit what gets planted when repairs are completed.
- A CTG member said that King County has experimented with planting on soil benches, but the soil layer does not hold moisture. The thickness of the soil layer needs to be increased, or the rock layer needs to be filled with soil to increase moisture.
- A CTG member said that the sonotube method may not work on the Puyallup River. The waterway in the example does not have the same velocity.
 - Peter indicated that species that can withstand high velocity should be used. If the roots are under the rock layer, the trees may be able to handle the velocity.
- A CTG member suggested that silt benches and setback levees are the best option for vegetation growth.
 - Peter noted that silt benches offer great opportunities when they are available. These recommendations focus on other methods for planting when silt benches are not available.
- A CTG member suggested that natural colonization should be used whenever possible.

VEGETATION MANAGEMENT CONCEPTS

Penny reviewed the Nested Goals and Objectives handout and noted that maintaining eligibility for the PL 84-99 program falls under the SWIF Plan.

Proposed Goal

Penny asked if there were any objections to using the proposed goal for the Vegetation Management Plan:

To provide for the riparian vegetation habitat requirements of the fish and wildlife resources in conjunction with the basic requirements entrusted to Pierce County of revetment (and levee) integrity and inspection, emergency revetment repairs, river channel capacity, and County road maintenance along tributary streams.

There were no objections and the group agreed to use the proposed goal.

Proposed Objectives

Penny asked if there were any objections to using the proposed objectives for the Vegetation Management Plan:

Risk – *Vegetation management will be performed in a manner to minimize risk to both habitat and flood risk reductions structures.*

Habitat – *Vegetation management will be performed in a manner that avoids or minimizes impacts upon fish and wildlife habitat.*

Maintenance – *A vegetation management strategy will be developed that is cost-effective and practical to implement.*

There were no objections and the group agreed to use the proposed objectives.

Proposed Strategy Deliverables

Penny reviewed the proposed strategy deliverables for the Vegetation Management Plan:

Vegetation Communities Mapping – *Vegetation communities along the river*
Risk Analysis – *The level of risk to structural integrity posed by vegetation and the river*
Levee Structure Schematics – *Typical levee structure scenarios*
Vegetation Inspection Standards – *Maintenance specifications for levee type*
Vegetation Risk Matrix – *Protocols to manage hazardous trees*
Planting Plan – *Replanting standards, specifications and protocols*
Invasive Species Management Plan – *A strategy for managing invasive species*

Penny asked the group if they had any suggestions or concerns about these strategies.

CTG members shared the following questions or comments and Pierce County staff provided answers where appropriate:

- A CTG member emphasized that all trees will be kept unless they pose a risk.
 - Rob indicated that the County only intends to remove trees for USACE inspectability requirements, and that they will focus on trees over 6 inches in diameter.
 - Charles Ifft, USACE CTG representative, noted that large trees do not usually pose a risk for visibility and inspectability.
- A CTG member asked for clarification about what types of trees pose a risk, and how the County can cultivate large trees if small trees pose problems for USACE requirements.
 - Peter referred to the Levee Maintenance Schematic Plan and noted that the plan centers around mature trees, allowing for smaller shrubs and saplings to grow around those mature trees. Smaller vegetation between those clusters would be removed.
- A CTG member asked if there would be encouragement for recruitment of saplings in the riparian management zone between existing clusters.
 - Peter noted that part of the discussion should include the proposed dimensional distance between clusters.
 - Rob said that the County intends to retain as many mature trees as possible while still meeting minimum USACE requirements. He also noted that maintenance efficiency must also be a consideration; it is very labor intensive to maintain inspection windows.
 - Penny added that the Proposed Levee Vegetation Maintenance Guidelines suggest that clusters should be 10 to 15 feet in diameter, and there should be 10 to 20 feet between clusters.
- A CTG member asked how the County intends to handle blackberry growth and other invasive species while maintaining a multi-story canopy.
 - Rob said that the multi-story canopy will be provided by the riverside buffer of vegetation, as well as the clusters. Invasives will be controlled through mowing between clusters.
 - Tony noted that planting could be used to choke out invasives. Herbicides could also be used if needed.
 - A CTG member said that herbicides should not be used on the waterward face.
- A CTG member asked how often vegetation would be mowed.

- Rob noted that, at a minimum, the levees would need to be mowed prior to the USACE biannual inspection.
 - Peter also noted that whenever mowing occurs, planting opportunities arise.
- A CTG member asked if any of these proposed maintenance guidelines are problematic from the USACE perspective.
 - Charles indicated that grass is the USACE standard and provides for the best functioning levee. Modifications to this standard increase risk, but the County accepts that risk for the environmental benefit. Since vegetation is not currently part of the interim policy criteria, these guidelines do not pose a problem.
- A CTG member asked if allowances could be made during mowing for mature tree recruitment, especially shade tolerant conifers.
 - Tony suggested that shade tolerant conifers could be flagged along with noxious weeds that spread through mowing. The County's biologists would need to work with maintenance crews to retain young conifers and manage noxious weeds.
- A CTG member asked how the County would mitigate for decreased shade when trees are removed.
 - Rob said that the County would replant as mitigation under the Puyallup River Vegetation Management Agreement.
 - A CTG member indicated that replanting does not provide short-term mitigation for the decrease in shade.
 - Tony noted that replanting is currently the only mitigation as far as maintenance and operation under the SWIF Plan, but the issue could be discussed as part of the HCP. In order to mitigate for shade, the County would need to be able to adequately assess the impact.
 - Rob emphasized that there are very few instances where hazard trees have to be removed.
 - Penny noted the request to address the mitigation for loss of shade in the HCP.
- A CTG member indicated that habitat should be balanced with flood protection considerations.
- A CTG member asked whether acquisition of setback levees would be covered under the SWIF Plan.
 - Rob said that would fall under the HCP.
- A CTG member suggested that some of these maintenance practices may exacerbate issues with retaining vegetation and create more hazard trees (e.g., the overhanging vegetation buffer along the river may be too exposed to windthrow). A best practice for maintenance would be to do succession planting and create a multi-layered understory.
- A CTG member noted that the amount of trees that would need to be removed has varied in discussions. The group needs a better understanding of vegetation quantities in order to develop suggestions.
- A CTG member suggested that the tension between the loss of habitat and the effects on salmon and the goals of vegetation management are larger than the SWIF process. This conversation should be happening elsewhere in the policy structure; the Sustainability 2020 Plan might be the appropriate place.
- A CTG member asked how the General Investigation (GI) Study fits into this process.
 - Rob said that the County would bring in someone to talk about the GI Study at a later date.
- A CTG member noted that the issue of solar exposure continues to come up and that should be considered in vegetation management recommendations.

Penny noted that many of these suggestions are already included in the Proposed Levee Vegetation Maintenance Guidelines. She asked the CTG to review the Guidelines closely and provide suggestions, as well as indicating anything that might be missing prior to the next meeting. At the next meeting, the group will have a discussion about these suggestions and finalize the Proposed Strategy Deliverables.

NEXT STEPS

Penny reminded the group that the next meeting will take place on Wednesday, Jan. 20. At that meeting, the group will wrap up the discussion on vegetation management and begin discussing risk. On Jan. 27, the Department of Emergency Management will do a presentation on interim risk reduction measures.

Penny asked the CTG if they found the handouts helpful; the group indicated that they were. She also asked if the CTG had any suggestions about process. A CTG member indicated that it would be helpful for the County to clarify the objectives for each meeting by sharing how the information and more clearly articulating the expected outcomes of each meeting.

PUBLIC COMMENT

There were no public comments.

ATTENDANCE

Community Technical Group Members

Chrissy Cooley	Agricultural Round Table
J.C. Hungerford	City of Orting (Parametrix)
Steve Carstens	City of Puyallup
Martin Fox	Muckleshoot Indian Tribe
David Molenaar	National Oceanic and Atmospheric Administration
Ryan Mello	Pierce Conservation District
Hugh Taylor	Pierce County Council's Office
Jill Bushnell	Pierce County Emergency Management
Bill Sullivan	Puyallup Tribe of Indians
Russ Ladley	Puyallup Tribe of Indians
Charles Ifft	US Army Corps of Engineers
Kimball Ohsiek	US Army Corps of Engineers (alternate for Charles Ifft)
Jeffree Stewart	Washington Department of Ecology
Doug Wiedemeier	Washington Department of Fish and Wildlife

Pierce County

Rob Wenman	Project Manager
Todd Essman	Project Technical Lead
Tony Fantello	Project Sponsor
Erick Thompson	Environmental Biologist

Anchor QEA

Peter Hummel	Landscape Architect
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EnviroIssues

Penny Mabie	Facilitator
Chelsea Ongaro	Notetaker

Hackney Interests

Clint Hackney	Tribal Liaison
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