



Community Technical Group Meeting 6 Summary

3/16/16

OVERVIEW

On Feb. 17, 2016, Pierce County Storm Water Management hosted the sixth Community Technical Group (CTG) meeting for the System Wide Improvement Framework (SWIF) planning process.

Topics for the Feb. 17 meeting included:

- Overview of SWIF interim risk reduction measures (IRRM) requirements
- Overview of Pierce County IRRM Program
- Discussion of risk assessment and prioritization

All presentations can be found at:

<https://www.co.pierce.wa.us/ArchiveCenter/ViewFile/Item/4410>

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.

COMMUNITY TECHNICAL GROUP BUSINESS

Penny asked if the CTG had any objections to finalizing the Meeting 5 Summary. The summary was previously emailed to the group for review. There were no emailed responses. No objections were raised and the summary draft was accepted as final. The summary is available on the SWIF webpage.

RISK ASSESSMENT AND PRIORITIZATION

Todd Essman, Pierce County Project Technical Lead, conducted an overview of how the County assesses risk, evaluates the results, and prioritizes results in an action plan. See slides 4-49 of the [Presentation](#) for details.

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

- A CTG member asked whether the County has considered using something like a rock barb to direct the flow of the river away from the levee.
 - Todd said that the County usually tries to put as little rock as possible into the river, but that rock barbs might work well in some areas.
 - Tony Fantello, Pierce County Project Sponsor, indicated that the County has considered using rock barbs or bendway weirs in the past, but the County tries to keep repairs within the existing footprint of the levee. Something like a rock barb would be considered new construction and would require a new permit.
- A CTG member asked how the County divides the levee sections for evaluation in the condition assessment.
 - Todd indicated that they divide the system into 1/10 of a mile segments to make inspection and damage locating easier. The crews also take photos to assist with damage assessments.
- A CTG member asked how often the County inspects the levees for condition assessment purposes and planning for future projects.

- Todd indicated that they conduct an annual inspection, usually sometime in winter when river flows are lowest. The County conducts additional assessments after major flood events and when river flows are high.
- A CTG member asked whether the condition assessment also includes an inspection of the vegetation on the slope of the levee.
 - Todd indicated that the County inspects for all of the US Army Corps of Engineers (USACE) criteria, including vegetation.
- A CTG member asked whether Surface Water Management (SWM) has ever had to request a budget adjustment.
 - Tony noted that during his time with the County, SWM has never had to request supplemental budget. SWM is required to have two years of operating expenses available at all times. After large flood events, SWM has had to dip into those funds.

INTERIM RISK REDUCTION MEASURE (IRRM) REQUIREMENTS

Sarah Motsenbocker, Pierce County Civil Engineer, provided an overview of the SWIF IRRM requirements. These requirements are outlined in the USACE Engineering and Construction Bulletin and include the following:

- Introduction
- Potential failure modes and inundation
- Populations at risk
- Environmental and economic considerations
- Interim risk reduction measures: structural and non-structural
- Risk communication plan
- Conclusion and recommendations

See slides 50-63 of the [Presentation](#) for details.

IRRM: STRUCTURAL & NON-STRUCTURAL

Sarah and Jill Bushnell, Pierce County Emergency Management, provided an overview of structural and non-structural IRRMs. In addition, Sarah led a discussion about prioritization factors. See slides 64-86 of the [Presentation](#) for details.

Structural

Sarah shared the structural IRRM components, which include: the annual maintenance program, increasing erosion protection at the levee toe, increasing resilience to overtopping, and evaluating internal drainage features.

Non-Structural

Sarah also shared the non-structural IRRM components, which include: comprehensive floodplain management, engineering investigations, risk communication plans, flood warning and emergency evacuation plans, flood emergency drills and exercises, and pre-positioning emergency supplies. Jill also shared specific non-structural IRRMs.

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

- A CTG member asked what the zone for the Federal Emergency Management Agency's (FEMA's) Community Rating System encompassed.

- Tony noted that Pierce County has received a rating of “2” through FEMA’s system, and that it applies to the whole County. This rating allows citizens to participate in flood insurance programs at discounted rates.
- A CTG member asked if the Pierce County Flood Risk Assessment is available online.
 - Todd noted that the Assessment is available online.
- A CTG member asked how many people have opted in to receive general information and updates through PCAlert.
 - Jill indicated that Emergency Management regularly conducts outreach to the community to encourage them to opt in. She will look into how many people have opted in.
- Doug Weber, USACE, asked whether the County was planning to develop contingency plans for specific high risk areas. IRRMs can be broad measures that look at risk for the whole system, but Doug suggested it might be a good idea to have contingency plans for specific high risk areas.
 - Tony indicated that the County has informal contingency plans in place for certain areas (e.g., Clear Creek).
 - Jill noted that they could describe the processes for notifying the individual cities to conduct door-to-door outreach and lead evacuation for specific situations. In addition, the County could describe the standard operating guidelines for flood events, followed by the PCAlert and PCWarn procedures, referencing the available templates.
 - Doug noted that there is no need to recreate existing procedures; instead, existing procedures can be referenced through a spreadsheet or some other appendix.

IRRM Prioritization Factors

Sarah shared a matrix detailing IRRMs and factors used to prioritize those measures. The County sees reducing inundation and reducing or maintaining life safety risk as the top priority for prioritizing measures. Sarah asked for input from the group on whether any measures are missing from the matrix and whether there any factors that should be weighted higher than others. The County will use this information to determine appropriate projects to address the IRRMs.

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

- A CTG member noted that the most efficient measure to reduce risk is to move people out of floodplain properties by purchasing the property behind the levee. The member indicated that a plan should be developed to start setting back levees in a cost effective manner. Acquiring properties to develop setback levees should be included in this matrix. In addition, the County should work to modify zoning codes to prevent new developments from going in behind levees.
 - Sarah noted that these issues are addressed in the Flood Hazard Management Plan. The County seeks to control development in the 100-year floodplain.
- A CTG member asked about the timeframe for these “interim” measures and how that compares to the long-range plans included in the Flood Hazard Management Plan.
 - Tony said that the IRRMs cover a 20-year timeframe, whereas the Flood Hazard Management Plan will drive capital projects for the long-term.
 - Sarah noted that these may be interim measures, but they are also best management practices.
 - Jill noted that IRRMs are looking at ways to reduce risk until all levees meet USACE standards.

- Todd indicated that the County’s main focus is risk reduction through maintenance for the next 20 years.
- A CTG member noted that the County should focus on setting back levees in high inundation areas to discourage people from moving into those areas and safeguard against habitat loss and increase flood protection. The SWIF Plan should not be too narrow, so that it does not preclude the kinds of things that reduce the need for maintenance (e.g., setback levees).
 - Sarah noted that there will be several presentations about capital projects at the next meeting on Feb. 24.
 - Todd noted that the County did a study of the general migration of the river and used that to develop a prioritized list of 32 setback levee projects.
 - Tony indicated that the County now has very stringent floodplain regulations which prevent further development in the floodplain. This was not always the case, and the County is slowly acquiring these properties. These long-term plans are part of the Flood Hazard Management Plan and require grants and other funding. The SWIF Plan focuses on maintenance and operations.
 - Erick Thompson, Pierce County Environmental Biologist, noted that the Habitat Conservation Plan is going to guarantee the largest four of those 32 setback levee projects that provide the greatest habitat and risk reduction. Since the SWIF Plan is a maintenance and operations document, setback levees should not be included.
 - A CTG member asked whether the County was using the Conservation Futures Program to purchase floodplain areas.
 - Tony noted that the County has explored that, but that it would be a good question for the capital projects group at the next meeting.
- A CTG member asked how the cost was calculated for the matrix.
 - Sarah noted that the cost included in the matrix represents costs for what the County typically does in a year. In addition, the cost shown here only includes the County’s contribution to the cost, and not the total cost. Sarah indicated that the team would work to flesh out the data and clearly define what is included, as well as provide a description for each measure. Once that is available, the team will share the updated matrix with the group for comment.
 - A CTG member suggested adding an additional column to highlight year to year cost as well as total cost.
 - A CTG member noted that it is important to make sure that the Pierce County Council understands that these data only apply to short-term measures to meet requirements for the SWIF, and that other projects outside of the SWIF are needed to address other issues (e.g., habitat).
 - Charles Ifft, USACE, noted that USACE does not need the cost to be included in the matrix, so the County can take it out if necessary.

NEXT STEPS

Penny reminded the group that the next meeting will take place on Wednesday, Feb. 24. At that meeting, the group will learn about river capital projects.

PUBLIC COMMENT

There were no public comments.

ATTENDANCE

Community Technical Group Members

Russ Blount	City of Fife
J.C. Hungerford	City of Orting (Parametrix)
Steve Carstens	City of Puyallup
Martin Fox	Muckleshoot Indian Tribe
Hugh Taylor	Pierce County Council's Office
Jill Bushnell	Pierce County Emergency Management
Jessica Stone	Pierce County Parks and Recreation
Russ Ladley	Puyallup Tribe of Indians
Charles Ifft	US Army Corps of Engineers
Doug Weber	US Army Corps of Engineers
Jeffree Stewart	Washington Department of Ecology
Doug Wiedemeier	Washington Department of Fish and Wildlife

Pierce County

Todd Essman	Project Technical Lead
Tony Fantello	Project Sponsor
Erick Thompson	Environmental Biologist
Sarah Motsenbocker	Civil Engineer
Doug Thompson	Civil Engineer

EnviroIssues

Penny Mabie	Facilitator
Chelsea Ongaro	Notetaker