

Lower Puyallup River Executive Task Force Summary Notes

Meeting #4 – November 21, 2008 City of Tacoma, Central Wastewater Treatment Facility

Meeting Attendees

Organization	Representatives in Attendance	Unable to Attend
Pierce County Executive Office	Debby Hyde, Special Project Coordinator	
Pierce County Council		Calvin Goings, Councilmember
Pierce County Chamber of Commerce		David Graybill, CEO
Puyallup Tribe of Indians	Henry John, Councilmember Bill Sullivan, Director of Natural Resources	Rory LaDucer, Director of Public Safety Lisa Brautigam, Attorney
City of Tacoma	Mike Lonergan, Councilmember	
City of Fife	Steve Worthington, City Manager	Barry Johnson, Mayor
City of Puyallup	John Knutsen, Councilmember	
City of Orting	Ken Wolfe, Building Official	
City of Buckley	Pat Johnson, Mayor	
City of Sumner	Ted Hill, Associate City Engineer	Bill Pugh, Director of Public Works
Port of Tacoma	Robert Brenner, Port Staff	Ted Bottiger, Port Commissioner
WSDOT	John Wynands, Assistant Regional Administrator	JoAnn Schueler, Project Development Engineer
US Army Corps of Engineers	Kristen Kerns, Project Manager	Patty Robinson, Project Manager

Other Attendees:

Dan Sokol, Department of Ecology, Floodplain Management
 Lorin Reinelt, Pierce County Stormwater, Watershed Coordinator
 Steve Bailey, Pierce County Department of Emergency Management, Director
 Brynn Brady, Pierce County, Government Relations Coordinator
 Lou Dooley, Pierce County Department of Environmental Health, Project Coordinator
 Luke Meyers, Pierce County Department of Environmental Health, Project Coordinator

Meeting Purpose and Overview

Pierce County convened the fourth meeting of the Lower Puyallup River Executive Task Force in Tacoma, Washington on November 21, 2008. This meeting focused on reviewing and finalizing evaluation criteria and process, and beginning to examine overall principles for flood management in the Lower Puyallup River as well as guiding principles for each proposed element to be considered. Approximately 20 people attended the fourth meeting, held at the City of Tacoma's Central Wastewater Treatment Facility.

Lower Puyallup River Executive Task Force Summary Notes

Meeting Summary

Welcome

The meeting started at 9:35 am with Penny Mabie, meeting facilitator, welcoming the group.

Brief introductions

Penny Mabie welcomed meeting attendees and asked Task Force members to introduce themselves.

Review meeting agenda and ground rules

Penny reviewed the Task Force ground rules established at the first meeting, which are as follows:

- Start/end on time
- Silence cell phones
- Come prepared
- Listen respectfully
- Speak from interests, not positions
- Participate in the process

Review October 17 notes

Penny asked the group if they had an opportunity to review the draft notes from the previous meeting, and the group approved of the notes.

Review draft documents and action items

Penny reviewed the agenda and mentioned that the Puyallup Tribe presentation would be postponed. Penny asked participants to look over the handouts provided, which included the following:

- Hydrograph provided by Pierce County
- Draft bypass alternatives memo from Pierce County
- Evaluation process sheet
- Cost criteria matrix (blue)
- General criteria matrix (green)

Lorin Reinelt went over follow-up items assigned to Pierce County at the October 17 meeting. He shared a new flood guide produced by Pierce County. He mentioned that the county could provide additional copies as needed. Debby Hyde asked how the brochure was being distributed, and Lorin confirmed that it is being provided to residents of Pierce County.

Lorin reviewed the hydrograph handout, developed by an engineer to illustrate the 1996 flood in three parts. The graph shows the theoretical unregulated peak flow (without Mud Mountain Dam), the actual peak flow, and the Mud Mountain Dam inflow and outflow. The area under the two curves represents the storage capacity of the dam.

Dan Sokol asked what flood stage the hydrograph represents. Lorin stated that the 1996 flood was just shy of a 100-year event.

Lower Puyallup River Executive Task Force Summary Notes

Lorin reviewed the bypass study handout. He explained that this handout was completed by a Pierce County staff person to answer a question from the previous meeting, but that it has not been formally reviewed or approved. He explained that a bypass would need to be able to handle the 7,000 cubic feet per second (CFS) difference between the 41,000 CFS capacity of the river channel and the 48,000 CFS that would be present during a 100-year flood event. He explained that a bottom width of 400 feet would be required for the bypass option to the Hylebos, presented in the first alternative. The base width of the second alternative would be considerably narrower.

There was a question about whether the scenarios take into account sediment buildup. Lorin confirmed that sediment buildup could be an issue with this option and that dredging may be required. Bill Sullivan further raised the issue of environmental impacts of sediment transport. Lorin verified that sediment transport is an important issue to take into consideration.

Penny reminded Task Force members that this handout has not been technically analyzed and should not be misrepresented as a viable option beyond the Task Force discussions.

Steve Worthington asked whether the bypass option would help with recertifying the levee. Lorin said he was not sure, and clarified that those estimates are based on freeboard requirements and other issues. He said that this option may help increase freeboard by two feet.

Debby Hyde thanked Harold and Pierce County for researching a bypass channel and coming up with an additional alternative.

Kristen Kerns mentioned that this bypass option would need to be combined with another element to recertify the levee, as it would only result in one foot of freeboard in some areas.

Henry Johns mentioned that he is wary about the responsiveness of Pierce County to the concerns of the Puyallup Tribe. He pointed out that some concerns raised by the tribe were not sufficiently addressed by Pierce County until other stakeholders had also raised them.

Lorin discussed the issue of storage capacity in the middle part of the river and setback levees and went over statistics that Pierce County developed suggesting that if all setback levees were constructed, they would provide relief in the immediate areas plus about 15 percent of the capacity provided by Mud Mountain Dam.

Bill Sullivan mentioned that setback levees provide relief of sediment load, and that it might be worthwhile to look at putting setback levees in areas where the levees have a tendency to fail. Steve Worthington asked how setback levees relieve sediment load, and Bill explained that they dissipate the energy of the river, allowing it to dissipate the sediment load.

Review criteria

Penny went over the three criteria evaluation handouts, which were as follows:

- 1) General criteria matrix (looks at alternative packages)

Lower Puyallup River Executive Task Force Summary Notes

- 2) Cost criteria matrix (looks at elements)
- 3) Alternative evaluation process sheet

Penny explained that the group's task is to rank elements against each other, not perform a technical cost evaluation. Penny asked whether the four alternatives drafted during the previous meeting should be retained for the ranking. The group agreed that they should. Penny then asked the group to review the criteria for evaluation and make recommendations about revisions.

Bill suggested adding feasibility as a criterion to the general criteria matrix. John Knutsen asked Bill to clarify. Bill responded that dredging, for example, would be very difficult to execute. Mike Lonergan asked whether dredging in certain areas would be helpful at all. The group clarified that elements are non-specific about location at this time, and specific amounts and locations will be added at a later date. Lorin reminded the group that the technical analysis will look at cost, feasibility and effectiveness as criteria.

There was a discussion about silt benches. Bill mentioned that these benches are critical to salmon habitat. Lorin pointed out that they are also critical to protecting the levees.

Penny suggested that it would be helpful to add a footnote that says that each of the elements needs to be better defined and that locations are to be determined. Steve Bailey suggested also adding a "do no harm" statement that takes into account environmental impacts. He explained that having an overarching agreement with general principles can help shape the discussion. Mike suggested adding environmental costs to the cost matrix.

Henry pointed out that the Puyallup Tribe owns seven miles of the river and that whatever alternatives are selected need to be acceptable to the Tribe. He expressed concern regarding the county's level of commitment to setback levees, based on the analysis on potential setback levees presented by Lorin earlier in the meeting. Penny clarified that the information presented by the county is not meant to shed a negative or positive light on setback levees. Lorin mentioned that Pierce County is committed to setback levees as a definite part of the solution. Mike pointed out that most of the proposed elements will only fix a certain percentage of the problem, and will need to be combined with others to adequately remedy the problem.

Penny asked the group to review the list of elements on the cost criteria matrix. There were no changes suggested. She then went over the list of costs and the distinction between short- and long-term costs. There was a question about whether short- and long-term costs were defined. Kristen mentioned that the US Army Corps of Engineers defines long-term as 50 years or more. Penny recommended using that definition and there were no objections.

Penny asked the group to rank the elements against one another for capital costs. Bill suggested that this activity was very difficult given the lack of information. Lorin recommended that "non-structural solutions" be considered a broad category, to include low impact development and floodplain buyout.

Lower Puyallup River Executive Task Force Summary Notes

Capital cost criteria scores were as follows:

Element				
Dredging	Enhancing existing levees	Setback levees	Non-structural	Channel
1 – 2 votes	1 – 1 vote	1 – 2 votes	2 – 1 vote	1-14 votes Avg: 1
2 – 5 votes	2 – 5 votes	2 – 2 vote	3 – 1 votes	
3 – 3 votes	3 – 3 votes	3 – 7 votes	4 – 5 votes	
4 – 3 votes	4 – 4 votes	4 – 4 votes	5 – 8 votes	
Avg: 2.53	Avg: 3.06	Avg: 2.92	Avg: 4.3	

1 = most cost, 5 = least cost

The group expressed some doubts and misunderstandings about the ranking process and validity of completing this exercise during the meeting. Debby asked whether the Task Force had already accomplished its task of identifying alternatives to turn over for professional review. Lorin agreed but stated that the capital costs of the high-flow bypass would allow it to fall out during this process. Mike questioned whether it would be prudent to assume that the exercise had eliminated the high-flow bypass alternative. Lorin pointed out that it was necessary for some alternatives to be removed from consideration, for example the building of another Mud Mountain Dam had already been taken off the table.

Penny pointed out that the exercise was meant to break down costs into something more measurable, since one category for cost would be too hard to assess. She acknowledged that the proposed exercise may have gone into too much detail. Steve Worthington pointed out that the collective expertise of the group would make the matrices a useful activity. John Wynands suggested that the SR 167 extension project could be compared to the high-flow bypass project in scale. The SR 167 extension cost around two billion dollars and the permitting process took 17 years; based on this information, the bypass element does not appear terribly feasible. He reiterated that there is no one solution, but there must be a combination of elements that is effective. He asked what the group's definition of success would be and how this might help frame the deliverable that is moved forward.

Debby agreed with Mike's comments. John agreed with John's remarks that multiple alternatives should be considered, and advised the group to beware of litigation.

Steve Worthington suggested that the group fill in the matrices and they be processed for the next meeting. Steve Bailey asked what the purpose of the exercise would be. Penny pointed out that the purpose of the group is to engage in a deliberative process that demonstrates that a meaningful discussion has taken place. Steve Bailey asked why the group could not simply state that they should move forward with Alternatives A and B and get on with it. He reiterated the state of urgency in Pierce County and the \$7 million+ damages that Pierce County currently confronts. He mentioned the need to adopt a land use policy that demonstrates the county's intent

Lower Puyallup River Executive Task Force Summary Notes

to move forward with a solution. Debby suggested that the committee recommend the five elements on the table to the technical team for further study. She asked if the Task Force is the group to which the study results will be brought back, and suggested this be included on the “parking lot” list.

Penny pointed out the goals listed on the meeting agenda, and asked whether the Task Force has met those goals as established in the work plan.

Lorin suggested that it would be valuable to take things off the table that won't work, and make sure that everything that potentially could work is on the table. He also mentioned that the group needs to figure out which components should comprise part of the solution, and what percent of the solution each element would make up. Bill also stated that location is a key issue. It needs to be determined what areas are available for setback, and what areas could potentially be dredged. He also suggested that the group ensure the solution meet political needs so that it will be practically implementable. John suggested the group identify the first place to start taking action.

Based on the group discussion, Penny listed the following as possible actions for the Task Force:

- Send list of elements to the technical evaluation team as a tool box
- Provide guiding criteria for success
- Take evaluation criteria away, score them, send in to Rachel to summarize and discuss next time
- Begin to define potential locations of various elements
- Determine what would be most reasonable place to start
- Build understanding and support for a set of elements
- Rank elements, not alternatives, and determine emphasis

Penny asked each group to speak about each of the elements and asked which guiding principles should be considered for each item (i.e. dredging).

Kristen suggested ranking the elements separately based on the criteria in order to determine how much each element should be considered within the different alternatives.

Henry agreed that this would be a good approach. He also mentioned that some elements may be more acceptable than others to each of the parties at the table and that acceptability should be taken into consideration as well.

Mike stated that all actions are not equal, that the issue is urgent, and if enough resources cannot be found in a timely way, then economically devastating land use issues will result. He suggested finding as many structural solutions as possible.

Kristen reminded the group that there is no silver bullet and that all flood control programs adopt a combination of approaches. She reiterated that the group should rank how much emphasis should be placed on each of the elements.

Lower Puyallup River Executive Task Force Summary Notes

Ted Hill suggested that different jurisdictions bring lists of what is amenable to their communities to the table and share them. At that point, this group should be ready to move its recommendations forward to the technical review group.

Dan suggested that non-structural approaches would be the most benign and least expensive, but need to be better defined and worked in with structural approaches.

Steve Worthington suggested a mosaic with the following elements: enhancing levees, setback levees, dredging and non-structural solutions. He asked whether strengthening existing levees would compare to setback levees in other locations. Steve Bailey mentioned that setback levees can be quite expensive and time consuming, because prices are set at pre-disaster levels and because buyouts are voluntary to property owners. Debby clarified that condemnation can be used by the county, but this has not been used for political reasons. Steve Bailey suggested that the group continue to meet and start looking at land use issues; it would be better economically if Pierce County comes up with its own land use policy rather than have the federal government impose policies on it.

Lorin suggested that developing issues related to political feasibility of each element would be useful information for Pierce County.

Criteria evaluation

Penny recommended developing an approach for moving forward to the technical group that would include the following:

- Which components deserve or need the most or least emphasis?
- What guiding principles / cautions should be considered?
- What specifics to each component can be developed?

Bill suggested that dredging should only occur in specific locations along the bottom portion of the river, and this should be captured in the guiding principles.

Kristen suggested determining guiding principles first. John suggested that details for each element are site specific by nature. Ted suggested each jurisdiction or Task Force member provide input on specifics, e.g., locations for potential setback levees. Mike suggested developing overarching principles in addition to principles for individual components.

The group drafted the following list of overarching principles to be taken into consideration for any alternative package approved by the Task Force:

Overarching Principles

- Economic vitality of the county
- Ecosystem function / most “natural” way to address flood control issue
- Public safety
- Long-term effectiveness

Lower Puyallup River Executive Task Force Summary Notes

The group then drafted the following list of guiding principles and cautions (to be explored by the technical review committee for each element under consideration):

Dredging – guiding principles / cautions:

- Avoid ecological disruption of immediate area
- Avoid downstream impacts – tsunamis / sediment load impacts
- Consider long-term maintenance
- Improve, not degrade, natural environment
- Consider three listed species under ESA
- Consider permitting concerns – the lower river / tidal estuary is the most sensitive place for juvenile salmon
- Weigh long-term costs – dredging is only funded once by the Federal Government, afterward only by local sponsors
- Coordinate with the Puyallup Tribe and other agencies (NMFS, NOAA, WDFW)
- Consider the stability of existing levee and utilities
- Anticipate impacts beyond the river, e.g., delta caving

Enhancing existing levees – guiding principles / cautions:

- Identify negative impacts
- Address Clarks Creek impacts
- Consider full cost, e.g., bridges, etc.
- Consider the need to widen levees
- Consider long-term effectiveness
- Consider techniques to change flow (example “doloos” used in Whatcom County)

Setback levees – guiding principles / cautions:

- Consider full costs, including land acquisition
- Consider / beware of hidden costs
- Size matters, i.e., cost / benefit
- Consider costs of maintaining infrastructure including transportation, utilities
- Quantify environmental benefits if possible
- Consider land use incentives, e.g., transfer of development rights (TDRs)

Non-structural approach – guiding principles / cautions:

- Dialogue about all consequences of regulations and mandates
- Evaluate which non-structural issues should be considered by Pierce County Water Programs, and which should be handled elsewhere due to political complexities
- Include the following non-structural options in the analysis:
 - Land use

Lower Puyallup River Executive Task Force Summary Notes

- Low impact development
- Flood plain buyouts

The following questions and comments were heard regarding guiding principles and cautions concerning non-structural approaches:

Bill pointed out that setback levees provide a wall to protect surrounding areas, but floodplain buyouts do not; associated costs should be considered. Debby asked how these items can be quantified to move forward to the technical group, as they are difficult to quantify and the Task Force lacks expertise. Steve Bailey expressed concern that the water division might become overburdened with political concerns. Lorin mentioned that the technical review team will include a land use planner and other resources with political expertise.

Ken pointed out that a non-structural approach would be a secondary phase to any of the other components. Steve Bailey cautioned that there are not many options, and a near-term start on the political conversation is of utmost importance. Debby suggested that the scope of the Task Force be expanded to provide input into the next phase of the project. Steve suggested that, from a public safety standpoint, there is definite urgency and that land use issues could be the best immediate way forward to prevent extreme events.

John pointed out that the consultant who works on the technical review cannot work in a vacuum and must be connected to the situation on the ground, including political pitfalls. He suggested that the consultant report back to this group for feedback on such matters.

Bill brought up the issue that opportunities for setback levees are lost when building continues in floodplain areas. He pointed out that the tribe has lost at least half a dozen catalogued sites to development.

Ted suggested that more local input be contributed by Task Force members.

Debby mentioned that land use related political challenges among jurisdictions would be of more concern than financial issues. John mentioned the possibility of agreement about development within a certain distance from the river, and brought up the issue of flood displacement and insurance complications. Dan mentioned that flood insurance for locations that are not federally fundable can be acquired from other sources.

Kristen clarified that the Corps will not entertain an alternative that would induce flooding in one area while relieving it in another area. Lorin mentioned that current development along the river may preclude future opportunities to improve flood protection.

Ted mentioned that the adoption of stricter National Pollutant Discharge Elimination System and stormwater compliance requirements should be taken into consideration. Mike asked if, from the standpoint of the Corps, low impact development measures would make any difference toward recertifying the levees. Kristen replied that the Corps would take land use measures into consideration as they reduce the flood risk; the three feet of freeboard is not the only factor that

Lower Puyallup River Executive Task Force Summary Notes

will be taken into consideration. Dan mentioned that low impact development benefits those buying flood insurance as it lowers premiums.

Penny brought up the issue of federal sponsorship versus local sponsorship, and mentioned that it would be on the next meeting's agenda.

Bypass Channel – guiding principles / cautions

- Consider high construction costs
- Determine the environmental process and timeframe for completion
- Consider problem of widening the Hylebos given that it is a Superfund site
- Consider strength of marinas and piers
- Factor in maintenance dredging
- Consider that the benefit to cost ratio is extremely low
- Do not consider as a standalone measure (won't recertify the levee)

Ken mentioned that he could not identify any examples where the Federal Emergency Management Agency has allowed credit for a bypass structure. Debby suggested that in the Phase I analysis, the Corps' methodology breaks out costs but does not include enough types of costs.

After some deliberation the group agreed to remove bypass Alternative A (Hylebos option) from the list but to carry forward Alternative B (parallel alignment) for the time being.

Agenda topics for next meeting:

- Discuss final package for technical team
- Discuss local vs. federal sponsorship
- Consider future role of Task Force

Next meeting

It was agreed that the group would try to schedule another meeting before the end of the year, possibly on December 19, from 9:30 a.m. to 12:30 p.m. Rachel Patterson will follow up with scheduling. Pending availability, the next meeting will be held at the same location (City of Tacoma Transmission Conference Room).

Public comment

Penny opened up the discussion to the public. No public comments were heard.

Adjourn

The meeting was adjourned at 12:35 p.m.