

## Scriber Creek Advisory Committee Meeting Summary

November 2, 2015, 5:00 p.m. – 7:00 p.m.  
19100 44<sup>th</sup> Avenue West, Lynnwood, WA 98046  
Lynnwood Civic Center

### Action Items

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	Action Items	Person Responsible
1.	Schedule the next Advisory Committee meeting after the preferred scenario is identified by the project team (January/February timeframe).	Triangle

### Welcome/Introductions

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The purpose of the meeting was to review the technical analysis results for the preliminary scenarios that were based on combinations of individual flood reduction alternatives developed by the Advisory Committee during Phase 1, discuss the preliminary scenarios in light of the draft criteria developed by the Advisory Committee during Phase 1, and provide a forum to answer questions and describe next steps.

### Attendees

Advisory Committee	Project Team	Other
<b>Nora Chin</b> , Homeowner <b>Dave Gilbertson</b> , Parks Board <b>David Plodwick</b> , Homeowner <b>Roz Smith</b> , Casa Del Rey <b>Eric Whitehead</b> , Casa Del Rey	<b>Robert Victor</b> , City of Lynnwood Project Manager <b>Jared Bond</b> , City of Lynnwood <b>Christina Avolio</b> , Herrera <b>Mark Ewbank</b> , Herrera <b>Mary Weber</b> , Louis Berger <b>Mike Giseburt</b> , Louis Berger <b>Cynthia Carlstad</b> , Triangle <b>Shanese Crosby</b> , Triangle	<b>Sarah Olson</b> , City of Lynnwood, Deputy Parks and Recreation Director

### Overview of Technical Work to Date and Timeline

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Mark Ewbank (Herrera) and Christina Avolio (Herrera) provided a high level overview of the work to-date. Highlights from the presentation include:

- Since the last Advisory Committee meeting, the project team has been gathering data to develop and refine the hydraulic model of the corridor. The hydraulic model will help the project team evaluate how different bundles, or “scenarios”, of project elements, will succeed in reducing flooding occurrences, flood elevations, etc.
- The project alternatives that were included in the Advisory Committee’s Final Recommendations Report were the basis for developing the flood reduction scenarios that were modeled by the project team. The project team developed three scenarios, each representing unique combinations of project solutions, most of which were discussed by the Advisory Committee in Phase 1, while some projects were added based on the technical team’s determination of what is needed in the

corridor for flooding occurrences to be reduced (*see the “Review Preliminary Flood Reduction Analysis Results” section for more detail*).

- The project team’s next step will be further evaluating the project elements that performed the best during the scenario modeling. The selected project elements will be evaluated for cost, regulatory requirements, permitting, sedimentation concerns, and other factors that need to be considered to evaluate feasibility. The additional information will lead to refined cost estimates for implementing projects throughout the entire corridor.
- The final step will be referencing all the information gathered to develop a corridor plan that outlines recommendations for which projects to implement, when to implement them, and how best to phase them over time.

## **Review Preliminary Flood Reduction Analysis Results**

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The project team developed three flood reduction scenarios based on the Phase 1 recommended project solutions and modeled the scenarios to see if they met the study objectives of:

1. Reducing flooding within the project corridor by increasing flood storage and improving flood conveyance.
2. Not increasing flow rates or flooding downstream of Scriber Lake.

For detail on which projects were included in each scenario see the “Overview of Scenarios Analyzed” Worksheet in **Appendix 1** and the Scenario maps in **Appendix 2**. Below is a short summary of each scenario:

1. Scenario 1, “Minimum Scenario”. This scenario was developed with the thought that the proposed bundle of alternatives would be the least complex with the lowest perceived cost to meet the project team’s objectives. It includes flood storage in the northern end of the study corridor, property acquisitions in the residential section of the corridor, replacing culverts in the southern end of the corridor, raising old 196<sup>th</sup> so it is protected, and removing the diversion vault which currently backs up flow.
2. Scenario 2, “Medium Scenario”. This scenario was developed with the intention of being a middle ground scenario between Scenario 1 and Scenario 3 in terms of investment and complexity. Scenario 2 differs from Scenario 1 in that it would add additional storage and would include replacing a number of culverts through the residential section of the corridor instead of property acquisitions. Replacing culverts would lead to a number of agencies involved in permitting the culvert replacements to ensure that the new culverts are “fish passable.” This bundle of alternatives also includes developing an off-channel wetland area on the Edmond School District property to provide flood storage.
3. Scenario 3, “Maximum Scenario”. This scenario builds off Scenario 2 and includes a number of additional projects that would further increase flood storage and conveyance throughout the corridor. The project team found that the additional projects added to Scenario 3 were significantly more costly without comparable flood reduction benefits. Therefore, the project team will not be moving this scenario forward.

The project team found that all three scenarios met the study objectives. For more information on the results and considerations of the scenario modeling results see “Synopsis of Scenario Modeling Results” in **Appendix 3**.

### **Questions & Comments**

During the review of the preliminary flood reduction analysis results, Committee members asked the following questions and made the following comments. Project team answers are in *italics*.

- What does “overtopping” mean?
  - *When a road “overtops” it means that water is on the road, most likely because the culvert is full.*
- For Scenario 2, is the trail enhancement at Scriber Lake Park just the eastern end of the trail? In its current state, the trail floods sometimes when it rains. Would there be an increase in trail flooding as a result of the proposed increased storage at the Lake?
  - *The locations of the trail enhancements which will effectively raise the elevation of the trail and allow more flood storage volume in Scriber Lake are indicated in pink on the map (see Appendix 2) and include just the eastern end of the trail. Some areas adjacent to the trail would also need to be raised slightly to tie in to higher ground because the trail does not fully cross the entire low area downstream of the lake. The models indicated about a 0.5ft (max) increase in lake water levels during a flooding event at Scriber Lake Park when accounting for the proposed increased storage. However, based on the models it is likely that the extra storage at Scriber Lake Park may not be necessary.*
    - One meeting attendee stated that they would hope that an increase in storage at Scriber Lake Park would not be necessary as it would increase flooding on the parts of the trail that are not enhanced.
- In Scriber Lake Park, the conceptual area for expanding lake storage shown on the map is on west side of lake – did the project team evaluate extending the lake so that it combines with the lagoons to the east?
  - *The elevation between the Lake and the lagoons is not compatible for additional storage. In extreme flood events, that area already stores a lot of water, so additional excavation would not significantly help with storage. The project team also took into account the Park Master Plan which outlines that the lake expansion/excavation area actually evaluated in the model was also identified in the plan as an area for expanded Lake access in the future.*
- What kind of materials would the berms be made of in the northern end of the corridor? Rocks and other large materials have been seen in the Creek along the school property, as well as through Casa Del Rey. Additional sedimentation in the Creek is a concern.
  - *Any flood control berm would be compacted, permitted, and designed to withstand flooding conditions and to meet all required geotechnical design considerations. The berms will be earthen berms, made of compacted gravel and soil and then vegetated. The berms will not be in contact with the creek (and higher velocity areas that are prone to scour) in normal conditions, only in a flooding situation. The permitting standards for flood control berms take into account and design for limited erosion.*
- What would need to occur for 188<sup>th</sup> St. SW to be protected at the 100-year level of service?
  - *The project team tried a number of different alternatives to increase the level of protection at 188<sup>th</sup> to a 100-year level. For example, they tried raising the wall higher but that led to Eunia Plaza flooding more frequently. They also examined replacing the culvert but that would eliminate the storage benefits. As a result, a 25-year level of service at 188<sup>th</sup> St was determined to most likely be the best level of service that could be achieved. 188<sup>th</sup> St currently floods during a 10-year storm event. Additionally, a 25-year level of service is the current standard for stormwater conveyance design. A 100-year level of service is considered above standard.*

- Could additional storage be added further upstream to help with flooding occurrences at 188<sup>th</sup>?
  - *The study reach was previously determined to be the worst reach of Scriber Creek for flooding. For this study, there had to be geographic limits placed on where projects would be considered so that implementation could proceed efficiently. Areas further upstream are outside the scope of the study.*
- Is it possible to keep development upstream to a minimum to reduce flooding in this corridor? Can the City buy parcels for flood protection purposes?
  - *There are some cities that have “strategic acquisition funds” that are used for such purposes. The City of Lynnwood has not reserved these types of funds. In terms of future development, any area that will be developed must meet very stringent stormwater control standards. Most of the Scriber Creek watershed upstream of the corridor was developed before these more stringent stormwater requirements were in place. Some of the projections for this corridor account for redeveloping the upstream corridor which will require improvements to the stormwater systems. This area of the corridor will see benefits from redevelopment upstream. There will also be critical area setbacks implemented with many redevelopment projects.*
- Did the project team look at using the property by Jiffy Lube as storage, as was suggested by the Advisory Committee in Phase 1?
  - *Yes, but the parcel was screened out because of zoning and topography. It would be extremely expensive to obtain since it is commercially zoned on 99 and the topography would not allow for a significant amount of storage.*

## **Flood Reduction Scenarios & Advisory Committee Criteria**

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The Committee was asked to think about the three scenarios in light of the criteria that the Advisory Committee developed in Phase 1. The criteria included: community considerations, flood reduction performance, cost, ease of construction/implementation, ease of maintenance, and habitat improvements. Committee members brought up the following considerations, with project team responses indicated in *italics*.

### **Property Acquisitions**

- More information was requested on the potential property acquisitions under Scenario 1 such as:
  - How the properties would be chosen;
  - How many properties would have to be acquired;
  - How the properties not acquired would be affected;
  - How long the acquisition process would take and how that timeframe impacts when flood reduction is seen on the ground;
  - What happens with the lots after acquisition.
- One Committee member suggested that instead of property acquisitions, the houses could be built up so that in a flood event the water would not impact the house.
- At least one Committee member explicitly expressed a preference for upsizing the culverts instead of property acquisitions, with careful consideration to how the culvert replacements were sequenced to avoid downstream flooding.

### Maintenance Requirements

- Ease of maintenance is a high priority criterion for some members of the Committee, especially in light of how difficult it has been to obtain a permit to remove logs and other items that flow down the creek.
  - *The project team noted that the next step of the study will include analysis of operations and maintenance. In general, the scenarios are increasing water velocities where undersized culverts currently cause backwater. Many of these changes will reduce sedimentation problems.*

### Trail Corridor

- The Committee members present were split on the benefits of creating a trail through the residential area of the corridor. Some members were concerned about an increase of homeless camping in the area if a trail was put in. Other members expressed that if the trail is active, this would likely reduce this concern, and in general, a trail is usually seen as a neighborhood amenity, not a detractor.

### Parks

- There was some concern about changing the character of the 188<sup>th</sup> St Park and Scriber Lake Park. Additionally, there may be cost impacts for Scriber Lake Park if additional flooding occurs in the Park. It is uncertain if the Parks' budget would be increased to address the impacts of additional flooding.
- If there are changes to either of the Parks, it would be ideal if enhancements to the Parks be provided to help mitigate the changes.
- More information was requested on the proposed changes under Scenario 1 & 2 including:
  - The volume and acreage impact for added storage at Scriber Lake Park and the Park at 188<sup>th</sup>. In other words, the amount of park space lost to allow for storage.
  - A description of how each park will change based on the project elements.

### Other Concerns

- There was some concern with the storage facilities attracting mosquitos. Would it be possible for the storage facility at the School District property to be an underground facility?
  - *Most of the time these storage facilities would be dry. They will primarily be used during storm events and would be more of an "overtopping area" as opposed to a retention area.*

## Next Steps

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The project team will continue to work on the technical elements of the study including developing cost estimates for the scenarios, performing a cost benefit analysis, comparing the projects, determining permitting and regulatory requirements, among other considerations. Once a recommended scenario is put forward, the Advisory Committee will be reconvened, likely in January or February. In addition to discussing the recommended scenario and as follow up to this meeting, the next Committee meeting will provide members information on potential impacts to Scriber Lake Park and 188<sup>th</sup> Park, as well as more information on the potential for property acquisitions, as the information is available.