

TUMWATER CITY COUNCIL WORKSESSION
MINUTES OF VIRTUAL MEETING
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CONVENE: 6:00 p.m.

PRESENT: Mayor Debbie Sullivan and Councilmembers Peter Agabi, Michael Althausen, Joan Cathey, Angela Jefferson, Charlie Schneider, and Eileen Swarthout.

Excused: Councilmember Leatta Dahlhoff.

Staff: City Administrator Lisa Parks, Community Development Director Michael Matlock, Finance Director Troy Niemeyer, Fire Chief Brian Hurley, Police Chief Jon Weiks, Water Resources and Sustainability Director Dan Smith, Parks and Recreation Director Chuck Denney, and Communications Manager Ann Cook.

**DESCHUTES RIVER
FLOOD REDUCTION
STUDY REPORT:**

Director Smith reported the presentation culminates approximately one year of work in response to years of questioning both by the community and by the development community concerned about conditions in the Deschutes River valley between Henderson Boulevard and Brewery Park at Tumwater Falls. The Department of Ecology awarded a \$250,000 grant to the City to complete a hydrologic model of the Deschutes River and the flooding occurring frequently in that area. The study provides the community and the City with information on causes of the flooding, constraining issues, permitting requirements, and potential mitigation options to explore.

Director Smith introduced Meridith Greer with Greer Environmental Consulting. The study supports one of the Council's strategic goals to pursue targeted development opportunities especially near the brewery properties. Ms. Greer will present the findings of the study. Ms Greer helped lead the environmental teams and convened stakeholders to receive input from the local community, state agencies, and the tribes.

Ms. Greer's presentation included a broad overview featuring images and graphics.

Ms. Greer reported that much of the work stemmed from questions about the former Olympia Brewery site, current conditions, future redevelopment opportunities, redevelopment next to the Deschutes River, and how flooding might impact the site. The City of Tumwater received a one-time grant from the Department of Ecology for \$250,000. The work spanned from July 1, 2022 until June 30, 2023. The project site spanned upstream of Henderson Boulevard to below Tumwater Falls at Brewery Park at Tumwater Falls. Two major questions of the study was obtaining a better understanding of existing flood and erosion risks in the area and what type of mitigation would be possible to reduce the amount of flooding in the area. Some of the mitigation alternatives considered the costs and identifying permitting requirements.

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The project team was led by Stantec Consulting, a consultant leader in the industry that was instrumental in completing the project. City staff were involved in the project as well as several external stakeholders to ensure the process received broad feedback and input community-wide.

The first step identified existing flood and erosion risks. The consultant team created a 2D model of flooding to understand the flooding occurring at the site under a variety of storm events. The process involved inputting data into different models to create one model. The model includes aerial imagery provided by the Parks and Recreation Department. In January 2022, the City experienced a large storm event flooding the golf course and the surrounding area. City staff launched a drone and was able to take aerial images of the flooded areas. The images were used to match up to the model created by the consultant team. It was possible to match up locations in the models with the photos. The information verified the accuracy of the model by accurately depicting flooding and its affect on the golf course and the brewery site.

Ms. Greer played a short video of the model depicting actual flooding and the movement of water during flood events. The model produced a series of maps under various storm events during every two years, 10 years, 25 years, and 100 years. The model forecasted a two-year event occurring 50% of the time. A two-year event at the golf course and the brewery property would not impact the properties to the extent it would impact the ability to play golf. A 10-year event results in more water on the golf course and behind the brewery property although not too deep. However, as the size of the event is increased, more water in the river occurs causing more water on the golf course and more water behind the brewery. The 100-year event (a 1% chance occurring every year) results in floodwaters everywhere. The built environment such as the golf course and roads restrict the river. When storm events occur, the river overflows. The goal is to balance the natural environment with the built environment. The larger storm events make it much more difficult.

The second step of the modeling process after determining the flooding scenarios under various conditions included determining ways to reduce the amount of water on the golf course and the amount of water behind the brewery during storm events. In conjunction with the stakeholder group, many alternatives were considered with the consultant team reviewing 17 alternatives and running them through the model to determine if specific actions would be effective. Some alternatives not effective included lowering the height of the dam at Tumwater Falls. Six alternatives reflected some promise for significantly reducing flooding.

Ms. Greer reviewed the six alternatives under the 10-year, 25-year, and 100-year event scenarios. Some of the alternatives help control flooding from smaller events but are not effective for larger weather events because of the

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volume of water flowing through the Deschutes River. The forecast reflects that for the 100-year model, the region is forecasted to experience more precipitation and larger events because of climate change. Essentially, the alternatives would include benching, a flood channel, substation removal, or a combination of those options. The best option is the most expensive and includes benching and removal of the substation with good results in 10 - and 25-year events. However, the option is not as effective for a 100-year event with flooding occurring on the sites. The goal of the project was to explore different mitigation options, permitting requirements, and costs.

The project ended on June 30, 2023 at a cost of \$270,000. The report is useable for the City to make development decisions or to share with developers or others who may questions about the sites. Other alternatives could be explored using the model. The study identified six alternatives that would provide some flood benefits. The City could elect to pursue one of the alternatives to conceptual design to determine if other benefits could be attained, such as providing habitat or walking trails.

Ms. Greer reviewed options the City could pursue as a next step, such as applying for more funding from a grant agency to design a project or implementing one of the alternatives.

Director Smith reported the model provided by Stantec was calibrated to existing conditions. The 2022 flood event provided some current data. The study provided some alternatives that could be pursued for mitigation. However, none of the alternatives solved the problem, as there will continue to be flooding in the Deschutes River valley and it will cost to mitigate by the City, a public agency, or a private developer.

Director Smith invited questions and comments.

Councilmember Althausen asked whether flooding challenges are recent as the area previously served as an industrial area producing products from the brewery. Director Smith explained that each of the warehouse buildings include floor drains. The brewery industry was able to handle flooding intermittently. With climate change as modeled, the region is experiencing some changing climatic events with anticipation that it will increase in the future. The brewery operated its business based on flooding events occurring periodically.

Councilmember Cathey asked whether the stakeholder group included any environmentalists who may have advocated for retaining the area as a wetland/estuary for promoting wildlife and vegetation. Director Smith said the Squaxin Island Tribe provided an environmental perspective as co-managers in the watershed. The tribe's interests lean more to reversion and habitat restoration. However, given the timeframe for the project, the outcome was quickly completed and included some technical expertise that

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could speak to various components of economic development, environmental restoration, and other perspectives. The study was not intended to produce a solution but to identify what mitigation of flooding could include and the cost. Advancing to the next level to identify a solution would involve a much broader stakeholder engagement process. The report provides interested parties information on the historic flooding and the conditions caused by flooding.

Councilmember Cathey asked about the involvement of the railroad. Director Smith said none of the alternatives included removal of the railroad as the railroad is considered part of the landscape throughout the study area.

Councilmember Swarthout inquired about any changes to the river by the brewery that changed the course of the river. Director Smith advised that staff has a video on the construction of the golf course. The former brewery armored the riverbank through the golf course and created the river channel as it exists today. However, rivers move naturally as the entire Deschutes River valley was created by the Deschutes River meandering back and forth between the two towering slopes on each side.

Councilmember Swarthout asked about any impacts to the E Street Extension project and potential impacts to the Comprehensive Plan that should be considered. Director Smith advised that those elements would be captured moving forward with the Comprehensive Plan process and the Street Extension project.

Councilmember Jefferson asked about the timing associated with the substation presence in the area and if flooding affects the substation. Director Smith said no information was available from Puget Sound Energy or the brewery regarding the affect of flooding on the substation. The substation serves as a constraining element along the river. As geography and modeling reflected, as floodwaters back up to the substation, it serves as a constraining factor and is why one of the alternatives was to remove the substation to open the floodplain enabling water to move freely. The substation has a greater affect on flooding than flooding has on the substation.

Councilmember Agabi mentioned the bridge on Henderson Boulevard crossing the Deschutes River. He asked whether any study has been completed on the bridge, as well as any study of the area between Pioneer Park and the golf course. Director Smith said the bridge does not likely serve as a constraint. The study did not evaluate the bridge. The railroad tracks serve as a constraint to the north with flooding occurring upstream of Henderson when the river overflows and followa low flow pathways to the north.

Ms. Greer explained that the study area included Henderson Boulevard.

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Another project underway is at Pioneer Park and the amount of erosion occurring at the park. The intent is to ensure the golf course remains open and reducing the number of days when golfing cannot occur. Allowing Pioneer Park to flood longer is one of the balancing acts the City has been contending with by working with the Parks and Recreation Department. The area of focus near the brewery was because much of the floodwater increases because of a narrow pinch point as it travels to the falls serving as a drain in a bathtub with water backing up above Henderson Boulevard. The intent is reducing pinch points in the areas where water is funneled through. Some benefits would likely occur upstream as well.

**MAYOR/CITY
ADMINISTRATOR'S
REPORT:**

City Administrator Parks reported on the upcoming Tumwater Fall Fest at the Brewery Park at Tumwater Falls on Saturday, September 30, 2023 from 10 a.m. to 4 p.m. with family activities and food vendors.

Tumwater Community Human Services Program funding applications are due to the City by noon on Wednesday, September 27, 2023. The City distributes approximately \$15,000 to local organizations in the Tumwater area that provide aid to Tumwater residents who may need assistance.

National Work Without Driving Challenge is from October 2 through October 8, 2023. The challenge is a national initiative to help raise awareness and understanding of elected officials and policymakers around the barriers for non-driving residents. City Administrator Parks invited the Council to contact Coordinator Jones Wood for more information.

Councilmember Swarthout announced an exhibit of paintings by local artists on display at the Tumwater Library.

ADJOURNMENT:

With there being no further business, Mayor Sullivan adjourned the meeting at 6:52 p.m.