



## **COUNCIL COMMITTEE REPORT**

### **COMMITTEE ON OPEN SPACE, ENVIRONMENT AND SUSTAINABILITY**

**Date:** May 26, 2016

**Agenda Item #:** 4

**Agenda Item:** Update on the Onion Creek floodplain and flood mitigation study.

**Vote** No vote was taken.

**Sponsors/Department:** Watershed Protection Department

**Presenters:** Kevin Shunk, Floodplain Administrator, Watershed Protection Department, and Joe Pantalione, Director, Watershed Protection Department.

#### **Summary of Discussion**

- Kevin Shunk, Floodplain Administrator with the Watershed Protection Department (WPD) explained the study was initiated following the 2013 Halloween Flood.
- Mr. Shunk explained that the floodplain study piece will look at updated hydrology for Onion Creek and Rinard Creek. The study will update hydraulics and mapping for all of Onion Creek from the Travis-Hays line down to the Colorado River. The product of this portion of the study will be new regulatory maps and information for the City of Austin, but it will also include 11 FEMA flood insurance rate map panels.
- The flood mitigation portion of the study is looking at flood hazard solutions between I-35 and Slaughter Creek. It is becoming clear that the most feasible alternative is most likely going to be a combination of multiple tools.
- Mr. Shunk explained that this study will build on previous work. Previous studies include the 1997 Onion Creek Flood Control Study, the 2006 US Army Corps of Engineers Onion Creek Interim Feasibility Study, and the 2013 US Army Corps of Engineers Hays County Interim Feasibility Study.
- The floodplain models and maps are expected in June of 2016, with the Preliminary Engineering Evaluation and FEMA letter of map revision submittal happening September of 2016. Schedule adjustments are expected due to the Flood Mitigation Task Force's recommendation to expand the study to include more regional detention ponds. Adding that to the scope of work will likely delay the schedule.

- Phase 1 of the study is complete, which includes finished flood elevation and high water mark surveys. Hydraulic surveying of stream cross sections is also complete. The hydrology update is nearing completion. The final hydraulic models are being prepared.
- Mr. Shunk also discussed some of the options in the feasibility-level analysis, which was completed in March. These options included the Centex West regional detention option, floodwalls, channel clearing, channel benching, and buyouts.
- The next steps are finishing the floodplain mapping study, coordinating with other municipalities, coordinating with the Onion Creek neighborhood, refining potential mitigation alternatives, and developing recommendations for flood mitigation.
- Chair Pool asked whether stormwater is ever trapped on the opposite side of floodwalls, and how the floodwalls might affect animal migration patterns. Mr. Shunk replied that this is a problem that typically requires reconstructing storm drain systems within the neighborhood. Mr. Shunk did not know about the effects on animal migration patterns, but he noted that such considerations would be a part of a final analysis of the options.
- Mayor Pro Tem Tovo asked for more information about the pilot program in the South Lamar area, where additional restrictions were placed on development because of the cumulative effect of infill and redevelopment. She stressed that this conversation is critical going forward as more infill tools are developed and changes to the Land Development Code are considered. Mr. Shunk replied that this pilot program is ongoing and WPD is seeing some good results from it. The results likely will not increase regulations, as the regulations are already there, but will address those regulations more on a micro-scale. Some of the CodeNEXT regulations may come into play as well.
- Council Member Zimmerman asked for details about how the Centex regional detention option might work, given that it is outside the City of Austin jurisdiction. Mr. Shunk replied that it would require collaboration with both Centex and the property owners.
- Council Member Zimmerman also expressed an interest in the channel clearing option, which he saw as potentially more economical because the maintenance of channels is part of current operations. Mr. Shunk and Mr. Pantaloni explained that WPD has two crews devoted to maintaining the flow line in waterways. The type of clearing under consideration is different from this maintenance—it is getting outside of the creek area into the floodplain bench.

### **Speakers**

None.

### **Direction**

None.

### **Recommendation**

There was no recommendation to the full Council.