
NOTICE OF STUDY SESSION OF THE UNIVERSITY CITY COUNCIL

Public Notice is hereby given that a Study Session of the City Council of University City will be held on **Monday, July 12, 2021, at 5:30 p.m.**, at City Hall, fifth floor, 6801 Delmar, University City, MO.

On March 20, 2020, City Manager Gregory Rose declared a State of Emergency for the City of University City due to the COVID-19 Pandemic. Due to the ongoing efforts to limit the spread of the COVID-19 virus, those who are not fully vaccinated are asked to wear face coverings. To provide for social distancing during Council meetings in-person public attendance will be limited to the first 25 people.

Citizen may also observe the Meeting via Live Stream on YouTube:

https://www.youtube.com/channel/UCyN1EJ_-Q22918E9EZimWoQ

AGENDA

Requested by the City Manager

1. Meeting called to order
2. Changes to Regular Agenda
3. US Army Corps of Engineers (River Des Peres) Update
4. Adjournment

Posted this 9th day July, 2021.

LaRette Reese
City Clerk

RIVER DES PERES, UNIVERSITY CITY, MO

General Reevaluation Report

Update to University City City Council Study Session

12 July 2021



US Army Corps
of Engineers®



Photo: University City, 2019. Inset: KSDK, 2019



Overview	TSP Recap	Public Meeting & Public Review	H&H Modeling	Refined TSP, possible LPP	Other Items
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AGENDA

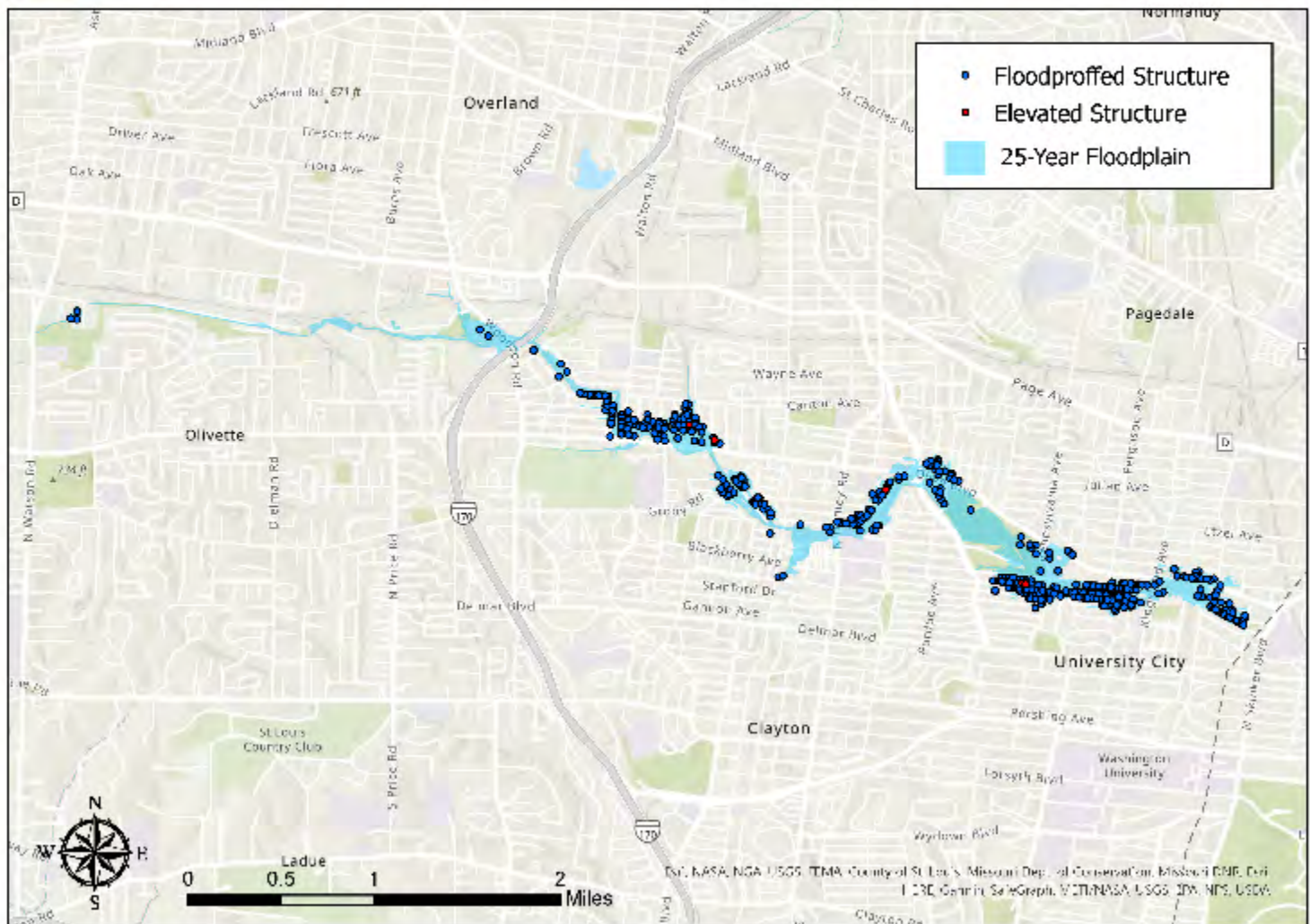
1. Recap of Tentatively Selected Plan (TSP)
2. Public Meeting & Public Review of Draft Report
3. H&H Modeling Baseline
4. Further refinement of TSP and decision on whether to pursue Locally Preferred Plan (LPP)
5. Other items (Floodproofing Survey, Lake Sherwood dam)
6. Discussion



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Recap of the Tentatively Selected Plan (TSP)

River Des Peres Nonstructural Alternative Map - Combination



Features:

- ~500 residential structures in 4% AEP (25-year) floodplain; most floodproofed, ~7 elevated
- Height of elevation/floodproofing: 1% AEP (100-yr)
- No acquisition (not cost-effective in comparison)

Level of risk reduction: 4% AEP (25-yr)

Total Cost: \$69M

Net Annual Benefits: **\$1.7M (1st – highest)**

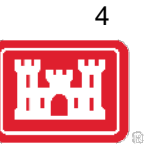
BCR: 1.67

To be refined in next steps of the study:

- Optimized flood risk level for benefits, eg flood event smaller than 25-year
- Participation rate
- Cultural resources impacts (historic structures)
- Floodproofing types
- Possible inclusion of Detention Basins 3 & 4



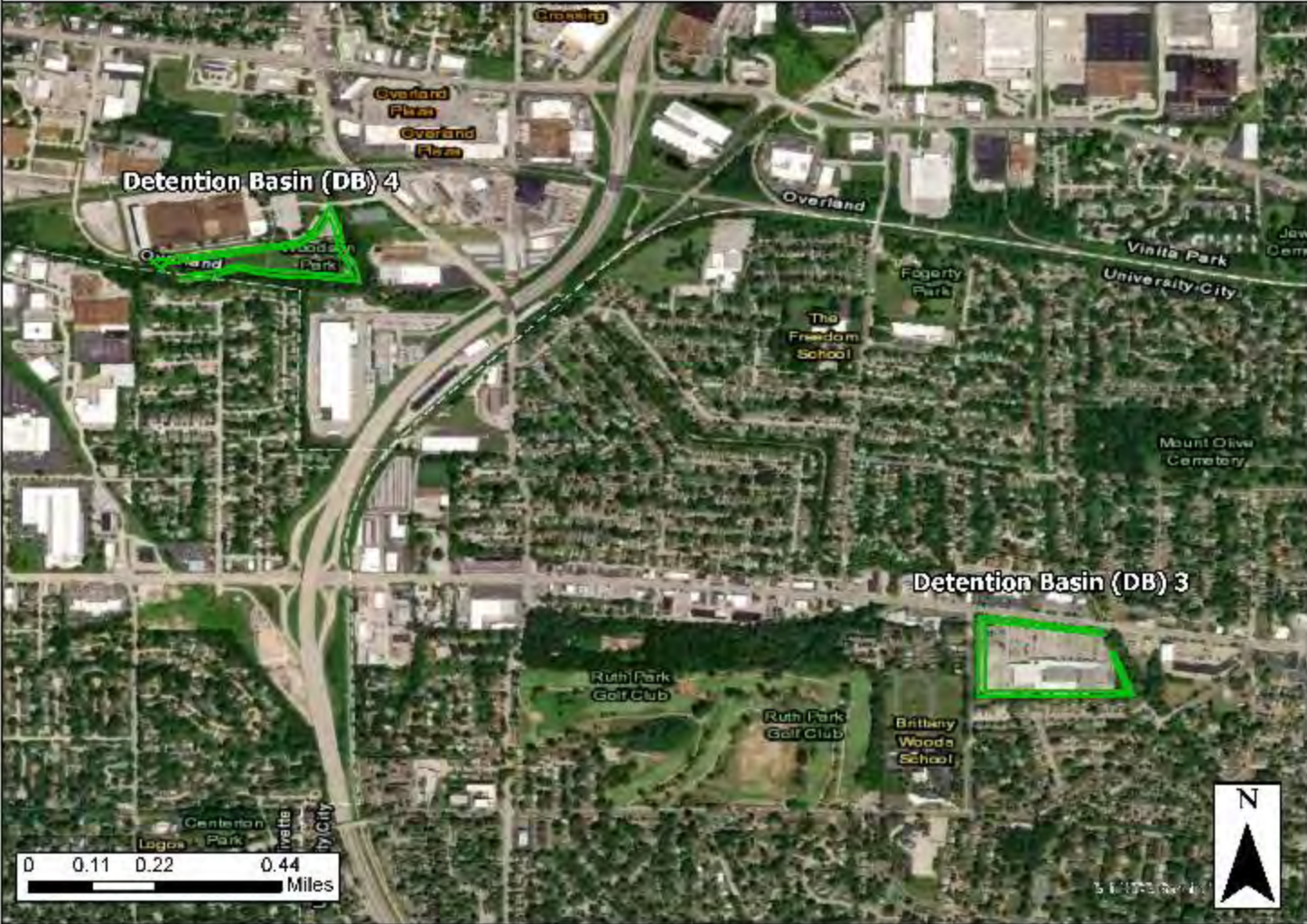
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Detention basins



River Des Peres Detention Basin Alternative



Features:

- 2 locations: DB3 and DB4
- Dry detention for maximum storage during storms
- Recreation & naturalized features TBD

Level of risk reduction: 50% (2-yr) to 10% AEP (10-yr)

3.a. DB3 and DB4

Total Cost: \$43M

Net Annual Benefits: \$724,000 (3rd highest)

BCR: 1.33

3.b. DB4 only

Total Cost: \$9M

Net Annual Benefits: \$1.2M (2nd highest)

BCR: 2.98

Study risks/uncertainty:

- DB4 location in City of Overland; coordination needed
- DB3 location – Asian businesses, amenity
- Compatible recreation features
- Life safety risk – needs further study



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Public Meeting and Public Review of Draft Report

Public Meeting Monday, July 26, 6-8pm, Heman Park Community Center
(tentatively scheduled per facility availability)

- Opening Remarks from U City
- Presentation by USACE (to be recorded & posted online)
- Q&A
- Open House & comment cards
- *Preparation: News release, FAQ sheet, social media*



Image: University City

Public Review of Draft Report starting July 26, for 30 days

- U City will have 1 week to review the report
- Report will be posted on USACE project website
- Submit comments to ucityfloodrisk@usace.army.mil



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STUDY SCHEDULE (CURRENT)

Start date (funding received)	29 April 2020
Alternatives Milestone Meeting (AMM)	25 August 2020
Public Scoping Meeting	30 September 2020
Tentatively Selected Plan (TSP) Meeting	26 May 2021
Draft Report Released to the Public	July 2021
Public Meeting	July 2021
Agency Decision Milestone (ADM)	November 2021
Final Report Submitted for Approval	September 2022
Report Approval (Chief's Report)	April 2023

Push to
Feb 2022
if LPP
requested



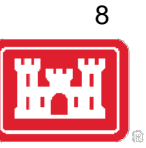
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H&H Modeling used as a Baseline

- High water mark data from 2008 flood surveyed and submitted by the Commission on Storm Water Issues
- Hydrology and Hydraulics (H&H) Engineer incorporated data into modeling
 - 2008 flood used as main calibration event
- Commission met 7/6/2021 and passed a motion to concur with updated modeling as baseline for the study



Image: University City, 2008



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Further refinement of the TSP & decision on Locally Preferred Plan

- Further refinement of the TSP is needed & will happen in July.
- Refinement may include a different proportion of nonstructural measures applied (eg more elevation than floodproofing), and the addition of Detention Basins 3 and/or 4 (DB3 and DB4).
 - Inclusion of DB4 depends on City of Overland (next slide)
- The type of nonstructural measure significantly impacts net benefits.
 - E.g. elevation only gives a negative net benefit

Alternatives	Level of Risk Reduction (% AEP)	Residual Risk (annual damage remaining)	Total Cost (incl. RE)	Net Annual Benefits (Benefits - costs)	BCR (annual benefits/costs)
3b - Detention Basin 4 (DB4)	50% (2-year) (filled by 10-yr, underwater by 100-yr)	\$ 4,079,000	\$ 8,476,000	\$ 1,201,000	2.98
6 - Nonstructural – FP & elevation	4% (25-year)	\$ 1,723,000	\$ 68,836,000	\$ 1,675,000	1.67
8 - DB4 + Nonstructural (elevation only) (25yr)	4% (25-year)	\$ 3,630,000	\$ 25,650,000	\$ 1,030,000	1.84

NED



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Coordination with the City of Overland re DB4

Site visit & Meeting held July 8

Benefits of DB4 to Overland:

- Reduced flooding in Overland (though most benefit of reduced flooding goes to University City)
- Cash payment when U City acquires the land/easement
- Overland no longer has to pay for O&M

Drawbacks of DB4 for Overland:

- Loss of existing park/amenities; new recreation features may not be possible

If Overland is not on board with DB4 plan, it won't be included in TSP/NED refinement or LPP



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Timeframe on decision to pursue LPP

- Information on refined TSP and LPP options submitted end of July/early August; follow up with Commission
- Decision point: Tentatively at August City Council meeting
- If an LPP is pursued, USACE team will submit waiver request to USACE HQ
 - Expected 6 months review/decision period
 - Should fit within the study timeframe
- Informal feedback – waiver likely to be approved if conditions met

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Other items

Floodproofing (& Elevation) Survey

- University City survey; USACE not involved
- Responses regarding participation in voluntary floodproofing and elevation of structures will help inform participation rate
- Response data by mid-October

Lake Sherwood dam

- Private lake and dam; not a USACE or state dam
- USACE may be able to assist with dam failure analysis at additional cost

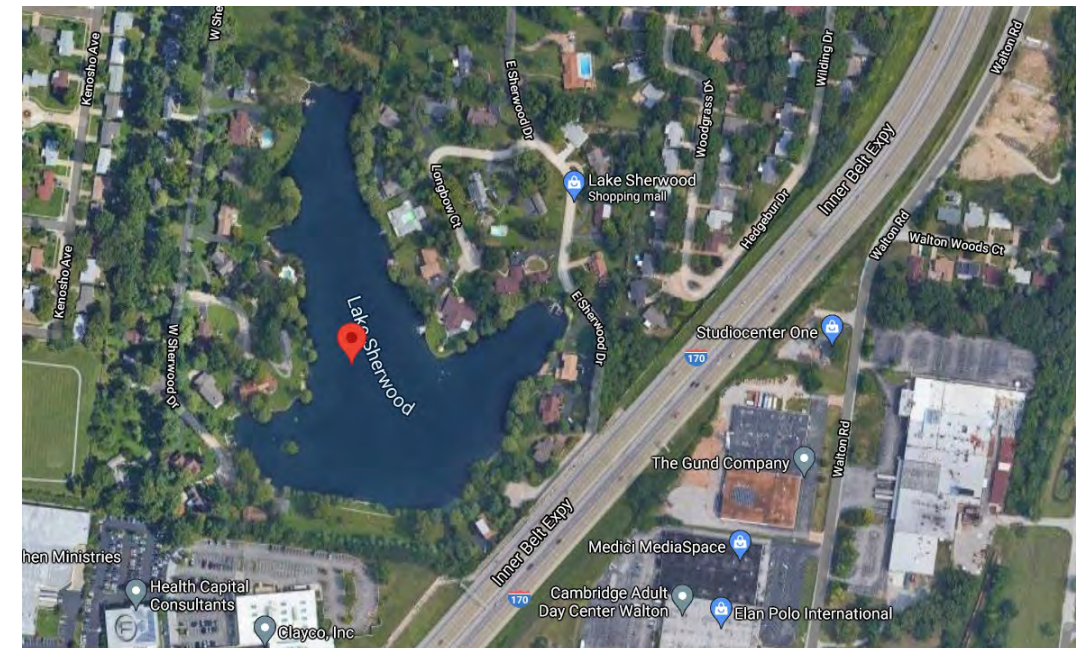


Image: Google Earth, 2021



Questions & Discussion



Photo: St. Louis Post Dispatch

Contact:

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1222 Spruce Street
St. Louis, MO 63103

Public comments may be directed to:
ucityfloodrisk@usace.army.mil

Project website:
<https://www.mvs.usace.army.mil/Missions/Programs-Project-Management/River-Des-Peres-University-City-General-Reevaluation-Report/>