Agenda
Guadalupe River Project – Tasman Dr. to I880

• Project Background
• Recently Discovered Problem
• Interim & Permanent Solutions
• Next steps

• Guided Table Discussions
Guadalupe River Background
Guadalupe Watershed

- Upper Watershed Reservoirs
- Tributaries
- Upper Guadalupe River
- Downtown Guadalupe River
- Lower Guadalupe River
Lower Guadalupe River Project

• Completed 2004
• 100-Year flood protection
• Levees and Floodwalls
• Bridge Improvements
What is 100-Year?

1% probability of occurrence in a given year
• 1 in 100 chance
• 26% chance over life of 30-year mortgage

Why 100-Year?

• FEMA National Flood Insurance Program Maps
  Note: Does not eliminate all flood risk!
Recently Discovered Problem
Maintenance & Monitoring

- Annual maintenance
- High-water mark collection
- Hydraulic model calibration

25-year – 10,800cfs
100-year – 18,300cfs
Causes

- High vegetation growth
- Permit Restrictions
- Mitigation Planting
Typical Section: Montague Expressway to Tasman Drive
Facing Downstream to Tasman Drive

Current Condition

Design Condition
Typical Section: Trimble Road to Montague Expressway
Facing Downstream to Montague Expressway

Current Condition

Design Condition
Typical Section: I-880 to Trimble Road
Facing Downstream to Trimble Road

Current Condition

Design Condition
Interim Solutions
Preparations for This Winter

**Sediment Removal**
Sediment removed from side channels to return to design condition

**Lexington Operations**
Operate Reservoir for Flood Risk Reduction

**Vegetation Removal**
Trees cleared from levees and 15 feet from levee toe

**Storm Preparedness**
Valley Water Field Information Teams (FIT), City Coordination, and Emergency Action Plans
Valley Water Flood Watch
valleywater.org/floodready

• Monitor stream gage levels
• Sandbag distribution sites
• Flood safety advice
Permanent Solutions
Conceptual Alternatives

Inboard Floodwalls – up to 6 feet
Conceptual Alternatives

Outboard Floodwalls – up to 6 feet
Conceptual Alternatives

Replace Levee with Floodwall
Conceptual Alternatives
Raise Levees—up to 6 feet
Conceptual Alternatives

Widen River Channel/Setback Levee
Conceptual Alternatives
Bypass Channels
Conceptual Alternatives

Off-Stream Detention
Conceptual Alternatives
Raise or Re-Operate Dams
Planning Study Timeline

- **Start**
  - March – May 2019
    - **Conceptual Alternatives**
      - Identify Design Options
      - Initial Cost Estimate
      - Project Objectives
  - **Problem Definition**
    - Gather Information
    - Define Problem
    - Refine Objectives
  - June – September 2019
Best meets Project Objectives

Staff-Recommended Alternative
Best meets Project Objectives

October 2019 – March 2020

Feasible Alternatives
Refine Design
Refine Cost Estimate
NFP Analysis

April – June 2020
Start CEQA and other permits

June 2020

Board of Directors Approval
Proceed to Design Phase
Construction Phase

30%, 60%, 90%, Final Design

Design Phase

Summer 2020 – Spring 2022

All environmental permits approved

Spring 2022 – Spring 2024

Construction Phase

End
Guadalupe River Planning Project

Next Steps:

Project team will gather all the information from this meeting and use it to guide the alternatives analysis.

Public Meeting #2
Staff will present feasible alternatives

Public Meeting #3
Staff will present recommended alternative

Planning Study Report and Board Approval