



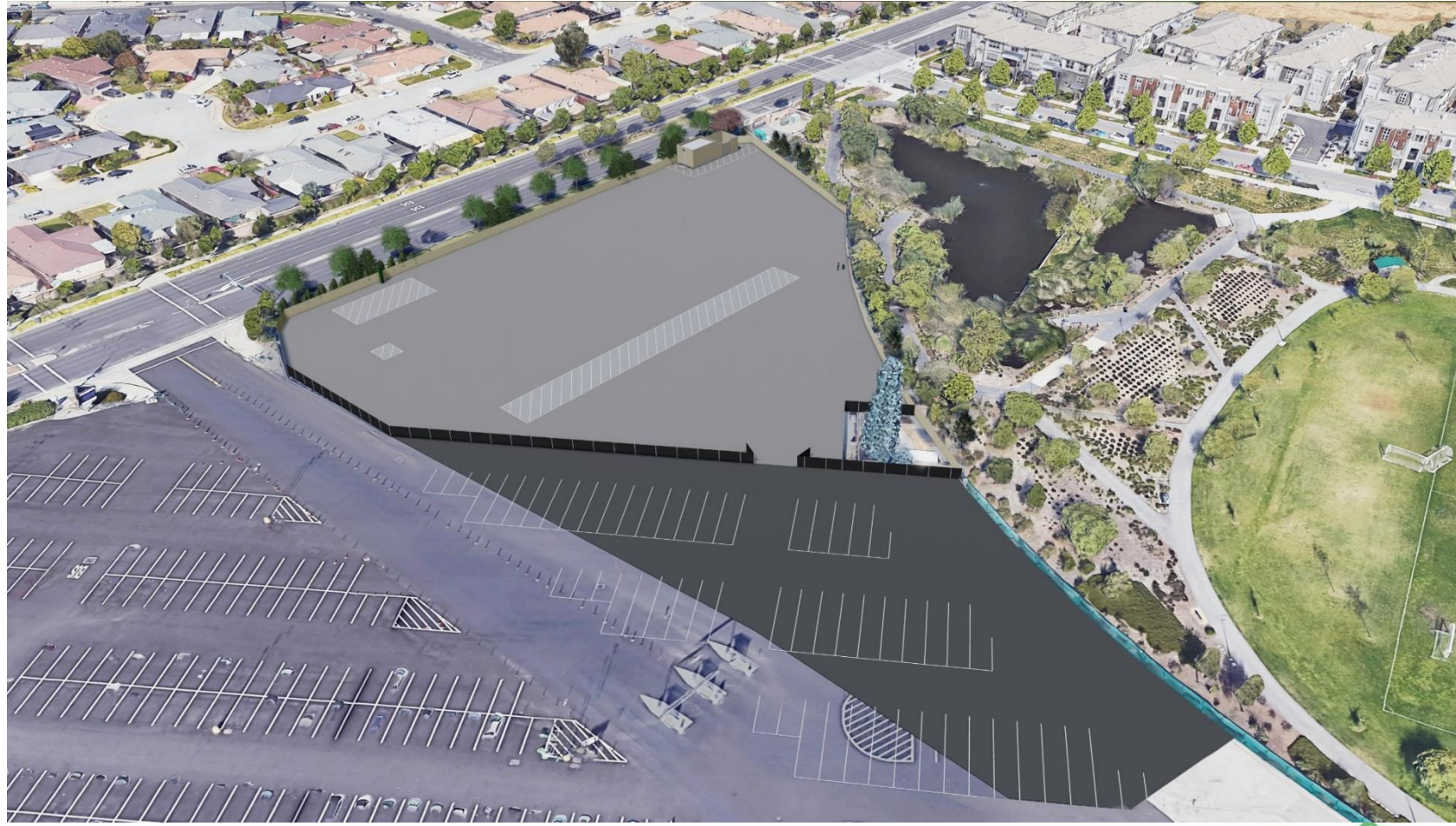
Underground Flow Equalization System Project

City Council Meeting
October 21, 2019



Overview of Topics

- Background & Project Overview
- Final EIR Comments
- Construction Monitoring
- Community Engagement
- City Council Approval

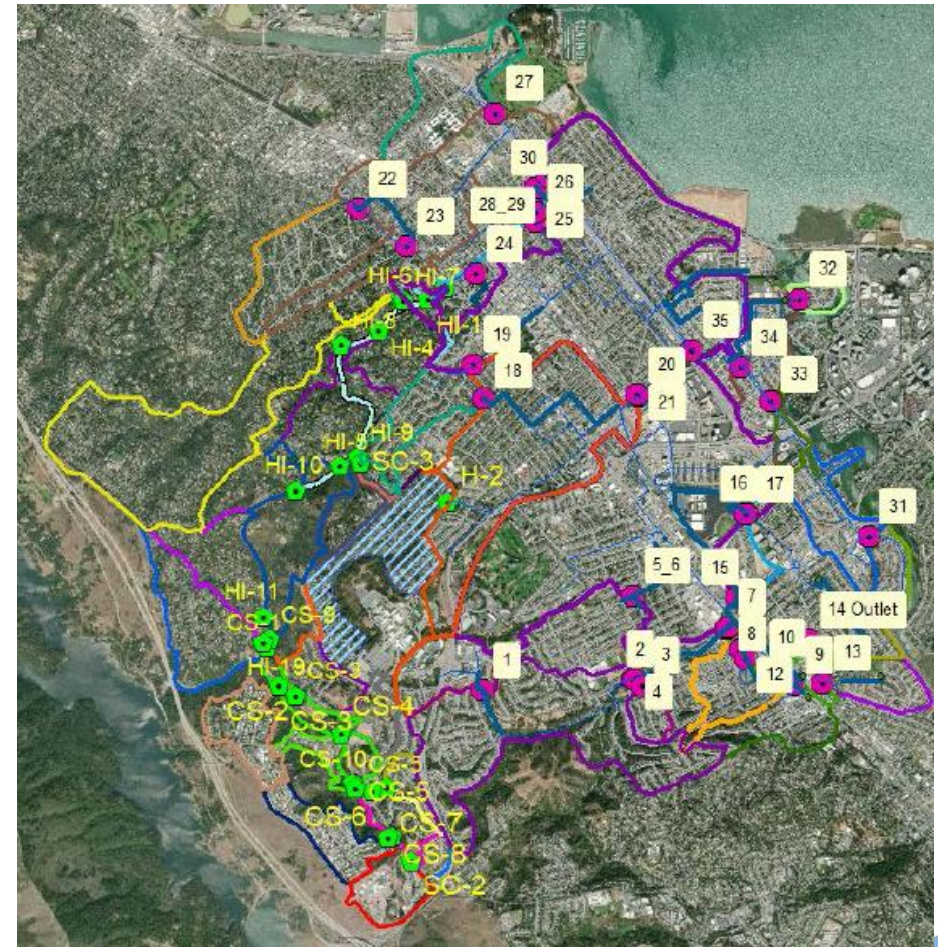


Finished UFES Site Layout



Project Purpose: Addressing the 2009 Cease & Desist Order (Assess and Assure Capacity)

- CDO requires elimination of SSOs
- CDO Provisions:
 - IV.B. Capacity Assessment:*
 - Complete flow measurements
 - Complete predictive modeling
 - Identify inflow/infiltration (I/I) areas
 - Identify capacity bottlenecks
 - V. Capacity Assurance:*
 - Address I/I
 - Address peak flow conveyance
 - Address peak flow storage



Flow Monitoring Locations

Evaluated and Validated Approach

| Document | I/I Evaluation & Model Update | Validated 78 MGD to WWTP w/ UFES |
|---|-------------------------------|----------------------------------|
| 2010 Hydraulic Assessment (RMC) | ✓ | |
| 2013 Flow Monitoring and I/I Study (V&A) | ✓ | |
| 2014 Integrated Wastewater Master Plan (Carollo) | | ✓ |
| 2015 Validation Study (CH2M) | | ✓ |
| 2015 Sewer Main Risk Assessment (Larry Walker) | ✓ | |
| 2016 Collection System Flow Study (ADS) | ✓ | |
| 2017 (Subbasin) I/I and Flow Study (West Yost) | ✓ | |
| 2017 CWP Final PEIR with Addenda No. 1 & 2 (CH2M) | ✓ | |
| 2018 Collection System Flow and I/I Study (ADS) | ✓ | |
| 2019 UFES Final EIR (Jacobs, previously CH2M) | | ✓ |

2016 & 2017 Subbasin Flow Monitoring and I/I Study Areas

Shoreview/
Parkside

Los Prados

Fiesta
Gardens

SM Village



Evaluating Cost Effectiveness of I/I Reduction and Capacity Assurance

Shoreview/Parkside
Pilot Study Area

UFES Project
Area

| | Shoreview/Parkside Pilot Study | UFES Project |
|------------------------|---|--|
| Construction Scope | Replace All Sewers in Area | Build 5.3 MG of Capacity |
| Flow Reduction to WWTP | Up to 1.2 MGD | 20 MGD |
| Construction Estimate | \$40 to \$60 million | ≈\$50 million |
| Status | <i>Rehabilitating Critical Defects (C & D Basin Sewer Rehabs)</i> | <i>Requesting Project Approvals</i> |



I/I Reduction Projects Currently in Construction

Shoreview/
Parkside

C Basin - Sewer Rehabilitation

Los Prados

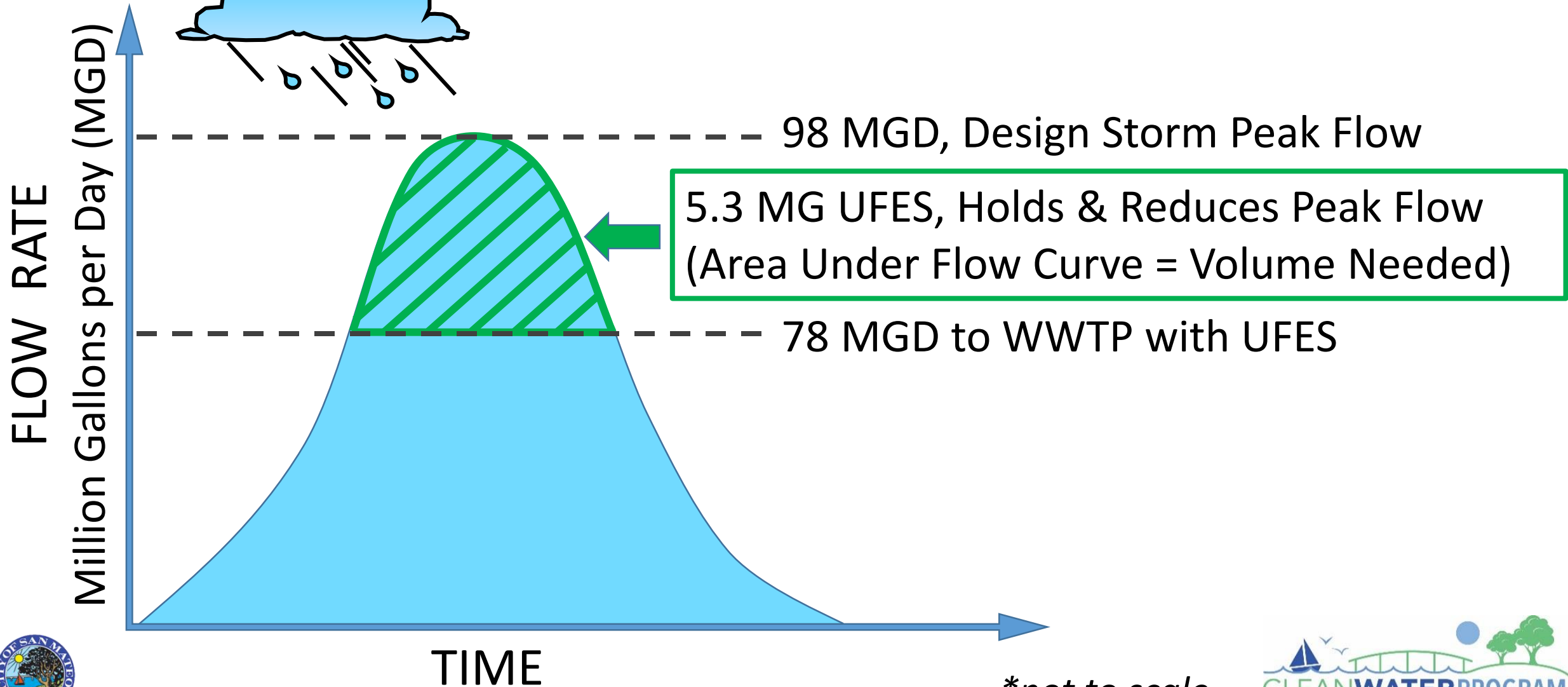
Fiesta
Gardens

SM Village

D Basin - Sewer Rehabilitation



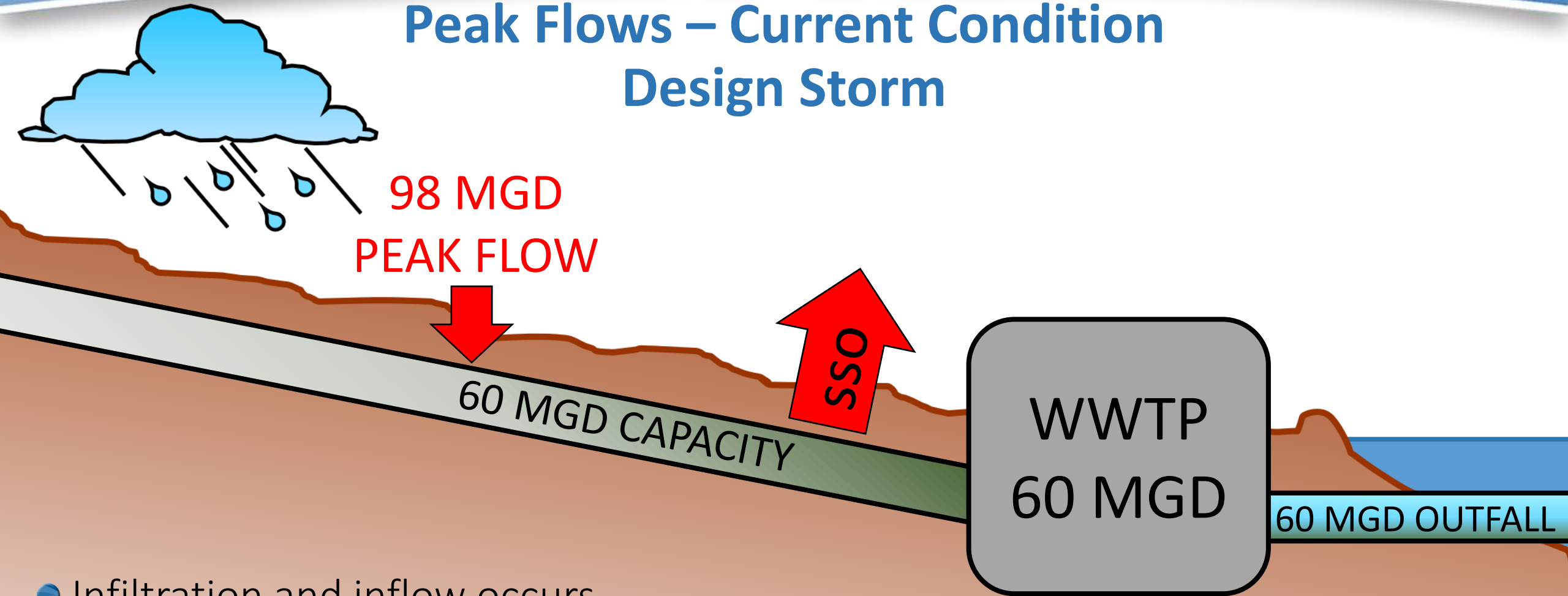
Flow Management with UFES



**not to scale*



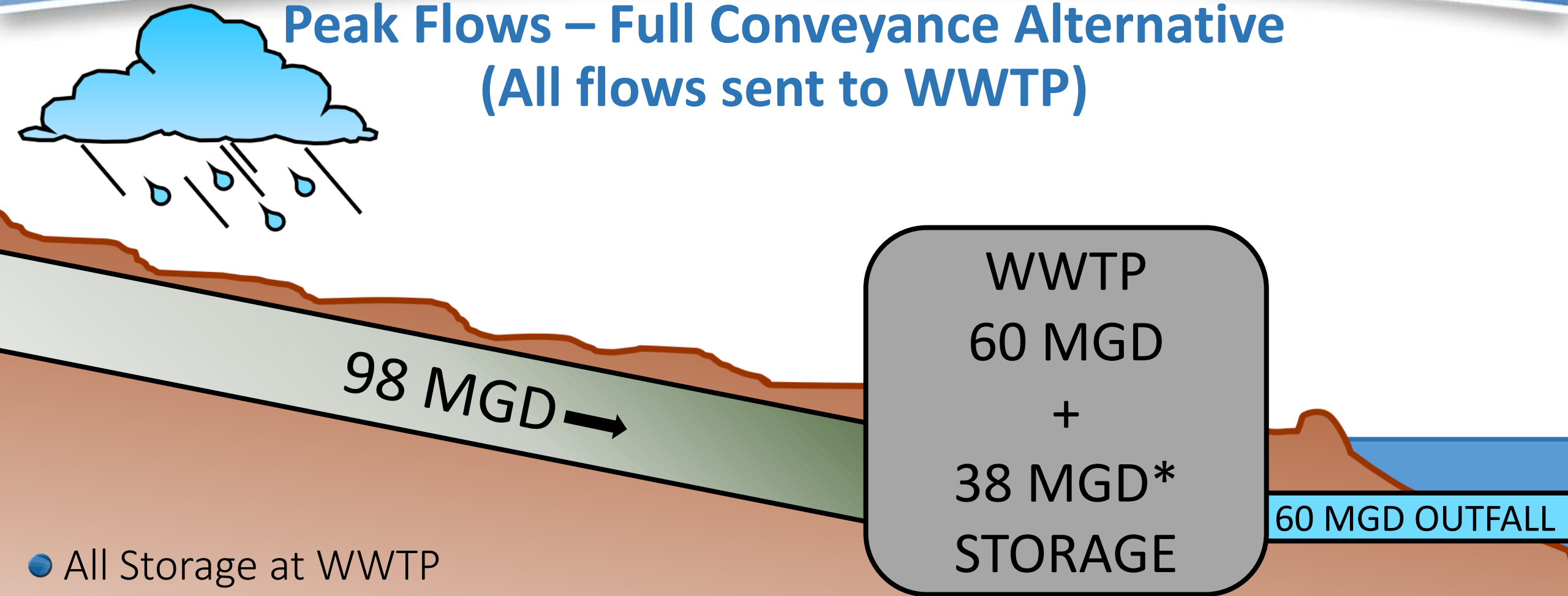
Peak Flows – Current Condition Design Storm



- Infiltration and inflow occurs
- Peak Wet Weather Flow (PWWF) to WWTP = 98 MGD
- Sanitary sewer overflows occur due to limited capacity

**not to scale*

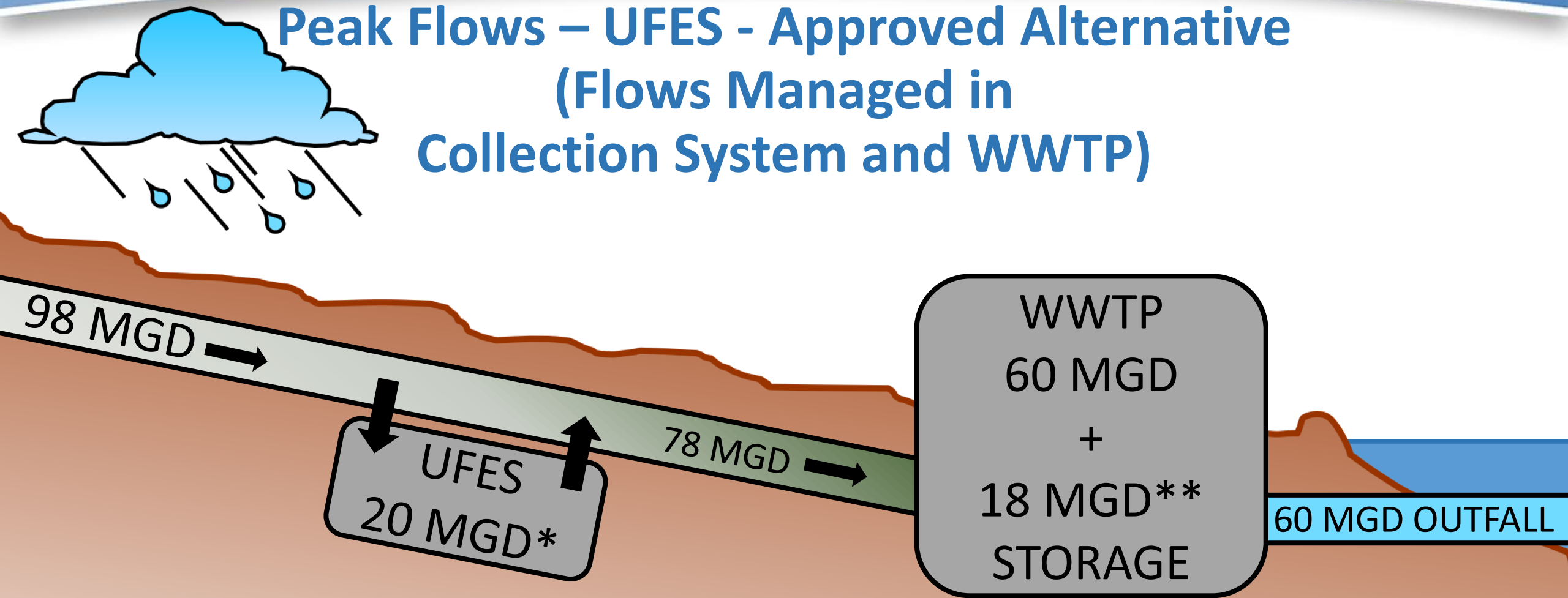
Peak Flows – Full Conveyance Alternative (All flows sent to WWTP)



- All Storage at WWTP
- Larger pipes & pump stations required
- More challenging due to WWTP site limitations & system wide construction
- *Note: 10 MG attenuates PWWF from 98 MGD to 60 MGD

**not to scale*

Peak Flows – UFES - Approved Alternative (Flows Managed in Collection System and WWTP)



- Improved System Wide Flow Management
- Peak Wet Weather Flow (PWWF) = 98 MGD
- *Holds 5.3 MG reducing PWWF from 98 MGD to 78 MGD
- **Holds 5.0 MG reducing PWWF from 78 MGD to 60 MGD

**not to scale*

DESIGN STORM SIZE



5-Year, 6-Hour Design Storm



Climate Change

Actions for City Council's Consideration

- **Final Environmental Impact Report (FEIR)** (includes Response to Comments on Draft EIR)
 - Statement of Overriding Considerations regarding the significant and unavoidable noise impact*
- **Site Plan and Architectural Review (SPAR)** application for the construction of new buildings or walls/fences over six feet in height
- **Special Use Permit (SUP)** to allow the use of the site for a public facility in the “A” Agricultural District



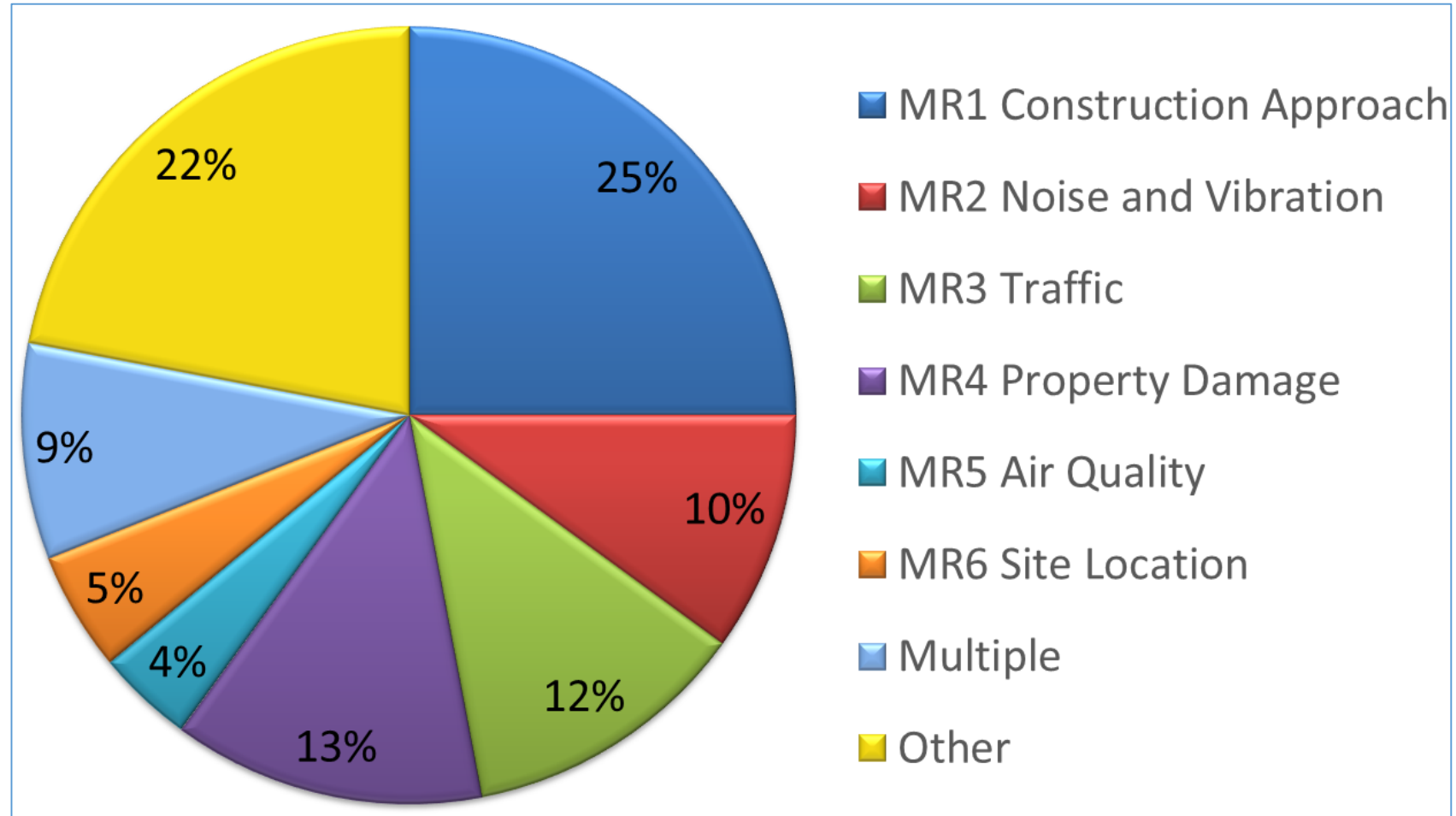
Proposed Project

- Location: southeast corner of the San Mateo County Event Center parking lot along Saratoga Drive
- Underground: concrete holding structure, pump station, diversion sewers and force main, and odor control equipment room
- At Grade: access hatches, emergency backup generator, electrical building and vents located at ground level



Summary of Comments on Draft EIR

- Over 500 comments received
- Responded to comments in Appendix F of FEIR
- ~80% followed common themes answered by master responses
- Master Responses found in two locations
 - Executive Summary
 - Appendix F

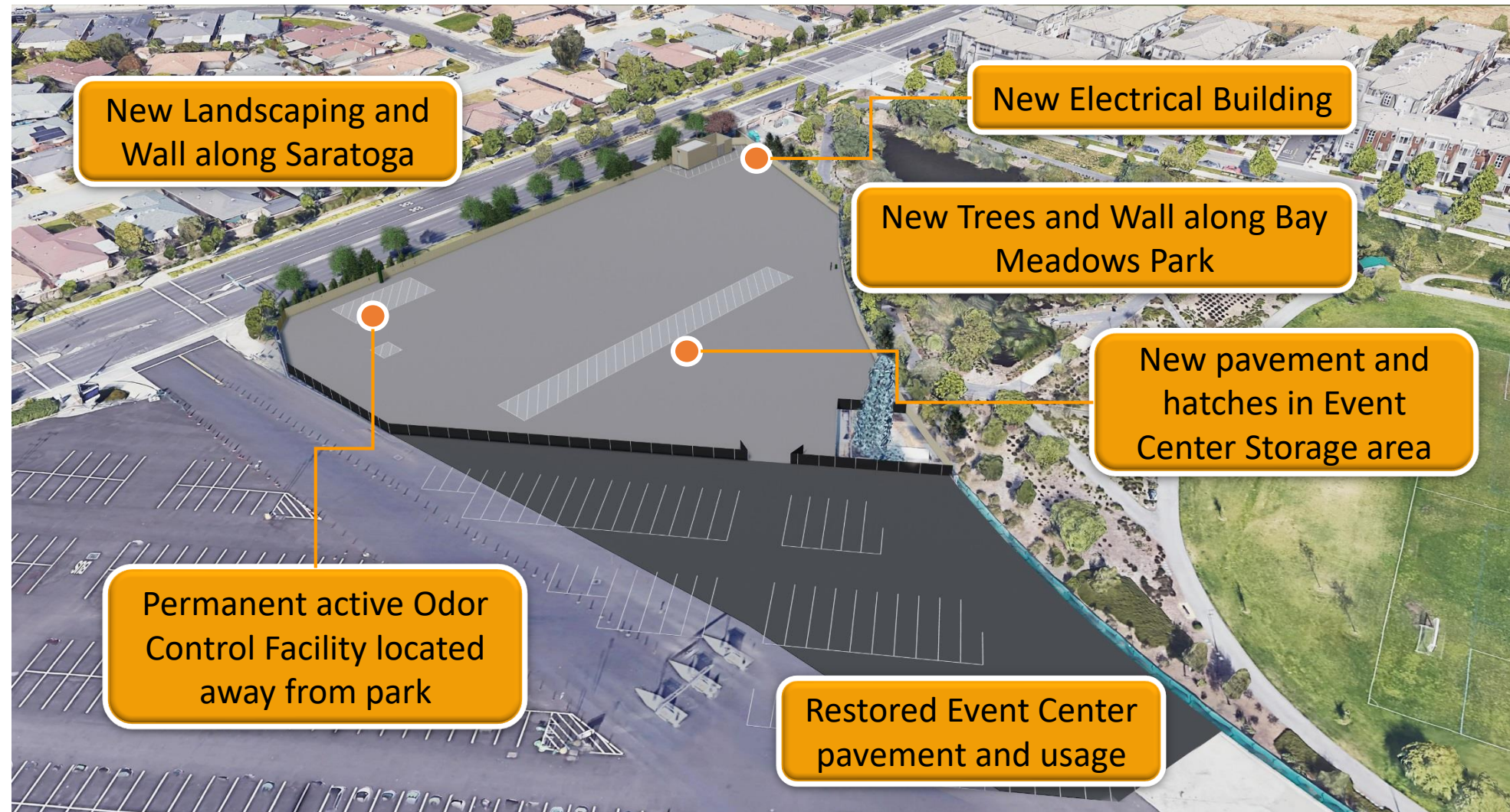


Monitoring and Minimizing Construction Impacts

- Noise
- Dust
- Settlement
- Vibration
- Traffic
- Pipeline Construction



Final UFES Site



Community Engagement

- Over 50 community engagements since 2016
- Planning Commission meeting April 9, 2019 – DEIR, SUP & SPAR Study Session
- Recent Community meeting on May 21, 2019 at Event Center (over 90 attendees)
- Planning Commission meeting August 27, 2019 – Study Session
- Planning Commission Hearing September 24, 2019
- Community engagement does not stop at the EIR



Request for City Council Approval

- Certification of the Final Environmental Impact Report;
- Adoption of the Statement of Overriding Considerations regarding the significant and unavoidable noise impact, based on the Findings for Approval;
- Approval of the Site Plan and Architectural Review (SPAR) application for the construction of new buildings or walls/fences over six feet in height;
- Approval of the Special Use Permit (SUP) to allow the use of the site for a public facility in the “A” Agricultural District, based on the Findings for Approval.





Please share methods to effectively communicate

Sign Up for Email Updates

info@cleanwaterprogramsanmateo.org

Visit the UFES Project Website

www.CleanWaterProgramSanMateo.org/UFES

Call the Clean Water Program

650-727-6870

Follow the City's Social Media

