Presentations for the

November 18, 2019

City Council Meeting
Proposed Partnership Agreement for Water Reuse

City Council
November 18, 2019
Agenda

1. Sustainability Goals
2. Palo Alto Recycled Water Overview
3. Proposed Partnership Agreement
4. Recommended Motion
Timeline of Public Engagement

- **UAC August 2018**
  - Phase 3 Business Plan

- **UAC October 2018**
  - Water Reuse Options

- **Council November 2018**
  - Water Reuse Options

- **Public Meeting April 2019**
  - Water Reuse Options
  - Preliminary Strategic Plan Results

- **UAC September 2019**
  - Strategic Plan
  - Potential Agreement

- **Council September 2019**
  - Study Session on Partnership Agreement and Northwest County Recycled Water Strategic Plan

- **Council November 2019**
  - Council Consideration of Partnership Agreement

- **Community Engagement Workshop October 2019**
  - Education of public on Partnership Agreement
Council-Approved Sustainability Implementation Plan

Water Goals

- Reduce inefficient water consumption
- ✔ Ensure adequate water supply from sustainable sources
- ✔ Protect and improve tree canopy, creeks, groundwater and the Bay

Water Initiatives

1. Maximize water efficiency
2. Use more non-traditional, non-potable water sources (e.g. graywater, stormwater, black water, etc.)
3. ✔ Explore water reuse within the RWQCP service area
4. Develop a City-wide Green Stormwater Infrastructure Plan
5. ✔ Reduce salinity of Palo Alto’s recycled water to increase use
Current Local Recycled Water Program

- Regional Water Quality Control Plant (RWQCP) treats wastewater for:
  - Palo Alto
  - Mountain View
  - Stanford University
  - Los Altos
  - Los Altos Hills
  - East Palo Alto Sanitary District

- ~5% of wastewater currently used to produce non-potable recycled water for Mountain View & Palo Alto
  - Landscape irrigation
  - Toilet flushing
Proposed Agreement Overview with Water Sources

*All agencies other than East Palo Alto have access to groundwater managed by Valley Water, the groundwater management agency for the county.
Proposed Agreement - Overview

- Enhanced Recycled Water for Now Potable Reuse
- Local Salt Removal Facility
- Palo Alto Mountain View
- Valley Water Potable Reuse in Santa Clara County
- SF Bay / Renzel Marsh

$20M Capital Cost
Valley Water pays $16M & $200k / year
Palo Alto / Mountain View pays $4M

13 years

Valley Water pays $1 Million / Year
### Potential Agreement - Terms

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td><strong>Parties</strong></td>
<td>Palo Alto, Mountain View, &amp; Valley Water</td>
</tr>
<tr>
<td><strong>Minimum Flow Delivery</strong></td>
<td>9 MGD</td>
</tr>
<tr>
<td><strong>Contract Term</strong></td>
<td>Up to 76 years</td>
</tr>
<tr>
<td><strong>Local Advanced Water</strong></td>
<td>• Owned &amp; operated by Palo Alto to provide local Recycled Water for Non Potable Reuse (NPR)</td>
</tr>
<tr>
<td><strong>Salt Removal Facility</strong></td>
<td>• To be located within the RWQCP site</td>
</tr>
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<td></td>
<td>• Valley Water to contribute $16M of the $20M project capital costs</td>
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<tr>
<td><strong>Regional Program</strong></td>
<td>• Potential Purified Water Facility managed by Valley Water at a location TBD</td>
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<tr>
<td></td>
<td>• Valley Water pays $200k/year up to 13 years or until facility startup</td>
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<tr>
<td></td>
<td>• Valley Water pays $1M/year for effluent, initiating when Regional Program Starts Up</td>
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</tbody>
</table>
Proposed Agreement - Timeline

- LOCAL PLANT (Recycled water)
  - Design & Construction: up to 13 years
  - Operation of Plant: minimum 30 years

- REGIONAL PROGRAM
  - Delivery of Effluent: 13 years to startup
    - 23 years Take water or lose option
  - Delivery of Potable or Non Potable Water: (at user's choice)
    - 76 years

- ALTERNATIVE WATER SUPPLY
  - Earliest Request: (Starting in 1 Year)
  - Earliest Delivery: (up to 16 years)

Termination
Proposed Agreement
Environmental Benefits

• Reduces county-wide reliance on imported water, surface water, and/or groundwater
• Replaces Tuolumne River water used for irrigation with recycled water
• Improves quality of recycled water in Palo Alto & Mountain View for irrigation
• Reduces concentration of salt applied to the soil and, ultimately, the groundwater
• Reduces RWQCP flow & pollutant loading discharged to San Francisco Bay
Recommended Motion

1. Approve the Addendum, together with the 2015 Environmental Impact Report for the City of Palo Alto Recycled Water Program, certified and adopted by the Council on September 28, 2015, as adequate and complete under the California Environmental Quality Act (CEQA) for the local salt removal plant; and

2. Approve and authorize the City Manager to execute the Agreement Between and Among Palo Alto, Mountain View, and the Santa Clara Valley Water District to Advance Resilient Water Reuse Programs in Santa Clara County.
Highway 101 Bicycle/Pedestrian Overpass and Adobe Creek Reach Trail
November 18, 2019
Project Overview

- Provides a year-round, accessible bicycle/pedestrian connection between residences/businesses west of Highway 101 and the walking/biking trails in the Baylands east of Highway 101.

- Completes Adobe Creek Reach Trail that provides direct access from East Meadow Drive to West Bayshore Road and the overcrossing.
## Project Background and Timeline

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
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</thead>
<tbody>
<tr>
<td>November 2011:</td>
<td>Council approved Feasibility Study</td>
</tr>
<tr>
<td>June 2012:</td>
<td>Council approved preliminary design contract</td>
</tr>
<tr>
<td>December 2014:</td>
<td>Design Competition</td>
</tr>
<tr>
<td>December 2015:</td>
<td>Council decided to reset design process</td>
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<tr>
<td>May 2016:</td>
<td>Council approved design contract</td>
</tr>
<tr>
<td>November 2017:</td>
<td>Council approved Site and Design/adopted CEQA</td>
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<tr>
<td>December 2017:</td>
<td>Caltrans approved NEPA</td>
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<tr>
<td>February thru August 2019:</td>
<td>Caltrans approved design, Right-of-Way certification, encroachment permit, Authorization to Proceed (E-76)</td>
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<tr>
<td>August 2019:</td>
<td>Invitation for bids</td>
</tr>
<tr>
<td>November 2019:</td>
<td>Council award of construction contracts</td>
</tr>
<tr>
<td>January 2020-June 2021:</td>
<td>Anticipated construction duration</td>
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Key Project Elements

A  PRINCIPAL SPAN STRUCTURES
B  WEST APPROACH STRUCTURE
C  EAST APPROACH STRUCTURE
D  ADOBE CREEK BRIDGE
E  WESTERN APPROACH ACCESS
F  BAYLANDS OVERLOOK
G  BAYTRAIL CONNECTION
H  ADOBE CREEK TRAIL
## Project Budget

<table>
<thead>
<tr>
<th>Hwy 101 Ped/Bike:</th>
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<tbody>
<tr>
<td>Design</td>
<td>$3,485,942</td>
</tr>
<tr>
<td>Construction</td>
<td>$16,923,404</td>
</tr>
<tr>
<td>Salaries &amp; Benefits</td>
<td>$2,689,392</td>
</tr>
<tr>
<td><strong>Total Project Budget</strong></td>
<td><strong>$23,098,738</strong></td>
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- **Total Project Cost (without salaries and benefits) is $20.4 million**

<table>
<thead>
<tr>
<th>Outside Funding:</th>
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<tbody>
<tr>
<td>Santa Clara County</td>
<td>$4,000,000</td>
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<tr>
<td>One Bay Area Grant</td>
<td>$4,350,000</td>
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<tr>
<td>Google</td>
<td>$1,000,000</td>
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<tr>
<td><strong>Total Outside Funding</strong></td>
<td><strong>$9,350,000</strong></td>
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**City of Palo Alto**
Comparison to East Palo Alto Crossing

<table>
<thead>
<tr>
<th></th>
<th>Clarke Avenue Crossing</th>
<th>Palo Alto Ped/Bike Bridge</th>
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<tbody>
<tr>
<td>Design</td>
<td>$1,132,702</td>
<td>$3,485,942</td>
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<tr>
<td>Construction</td>
<td>$11,677,473</td>
<td>$16,923,404</td>
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<tr>
<td>Salaries &amp; Benefits</td>
<td>N/A</td>
<td>$2,689,392</td>
</tr>
<tr>
<td>Total Project Budget</td>
<td>$12,910,175</td>
<td>$23,098,738</td>
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- Palo Alto key project differences:
  - EPA cost does not include staff salaries and benefits
  - Bridge is about 22% longer and spans both frontage roads
  - Longer design duration
  - Environmental constraints (e.g. Baylands, Adobe creek)
  - Complex design and additional testing requirements
  - Additional/enhanced project elements (including 140 ft bridge over Adobe Creek, overlook, retaining walls, lighting, etc.)
  - Current market conditions and cost escalation
Recommendation

1. Approve construction contract and contingency.
2. Approve construction management contract.
3. Approve grant agreement with the County of Santa Clara.
4. Approve a budget amendment in the Capital Improvement Fund.
Highway 101 Bicycle/Pedestrian Overpass and Adobe Creek Reach Trail
November 18, 2019