

DRAFT

2015 South County Recycled Water Master Plan Update

City of Morgan Hill Council Meeting
March 2, 2016

Santa Clara Valley
Water District



Item # 11
AGENDA DATE: 03/02/16
PRESENTATION

Overview

- ❑ Water Supply – South County
- ❑ South County Recycled Water Master Plan
 - ✓ Draft - 2015 Master Plan Update
- ❑ Next Steps

Water Supply –Santa Clara County (South)

Groundwater = Primary Water Supply

South County Water Supply and Use (2005 – 2015)

WATER USE

Groundwater
94%

Other local and
recycled water
6%

SUPPLY

replenished from
imported water

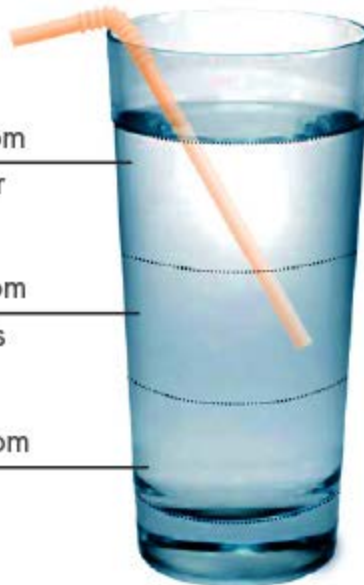
26%

replenished from
local reservoirs

33%

replenished from
local rainfall

41%



Recycled Water Benefits South County

- ❑ Update to 2004 Master Plan
- ❑ Further evaluate options for recycled water expansion
- ❑ Assess potable reuse options
- ❑ Perform a system reliability study

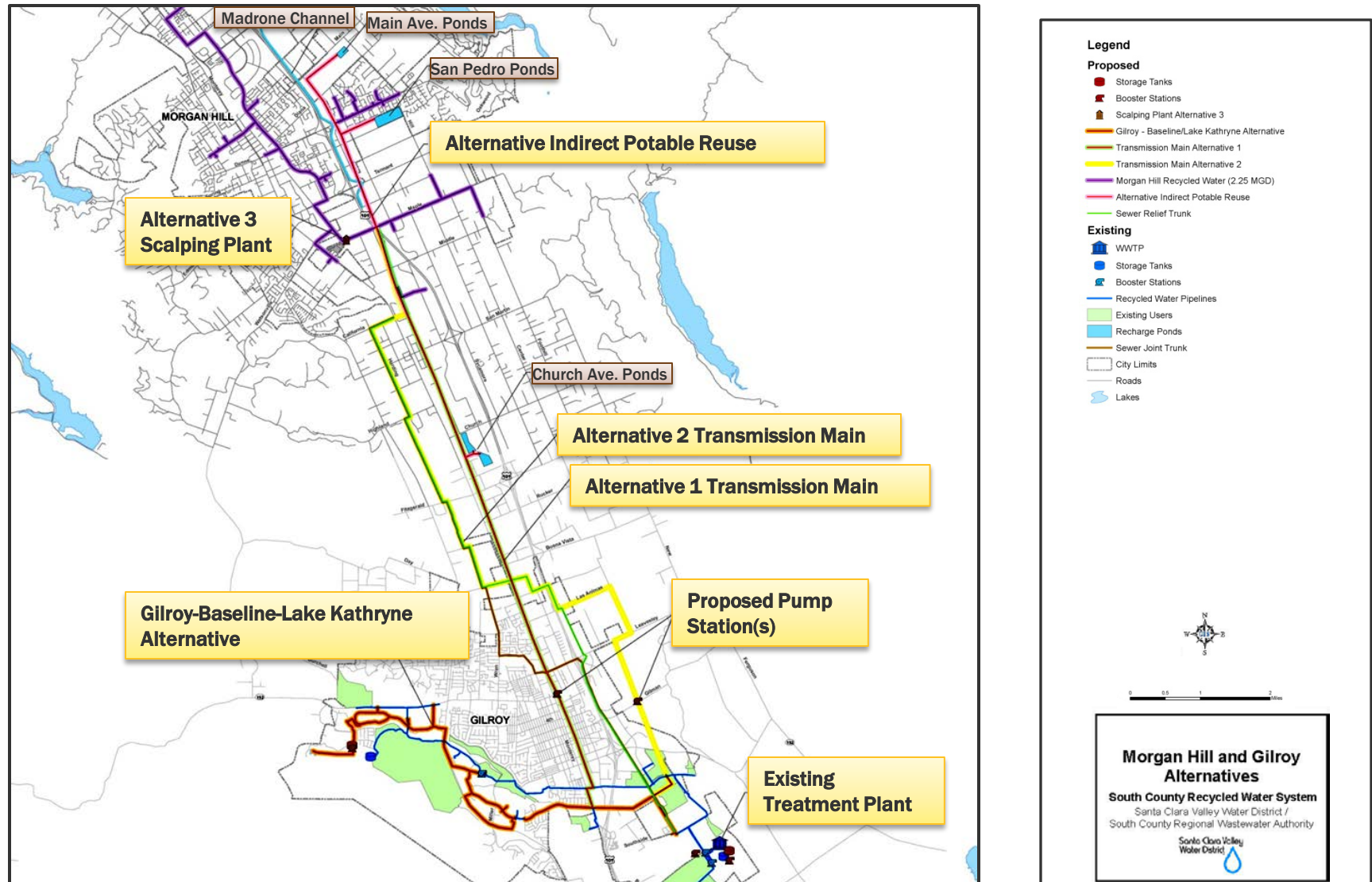


20 Year Horizon

City of Morgan Hill Alternatives

- ☐ Alternative 1 – MH High Speed Rail Transmission Main
- ☐ Alternative 2 – Joint Trunk Transmission Main
- ☐ Scalping Plant
- ☐ IPR

Morgan Hill Alternative - Transmission Main



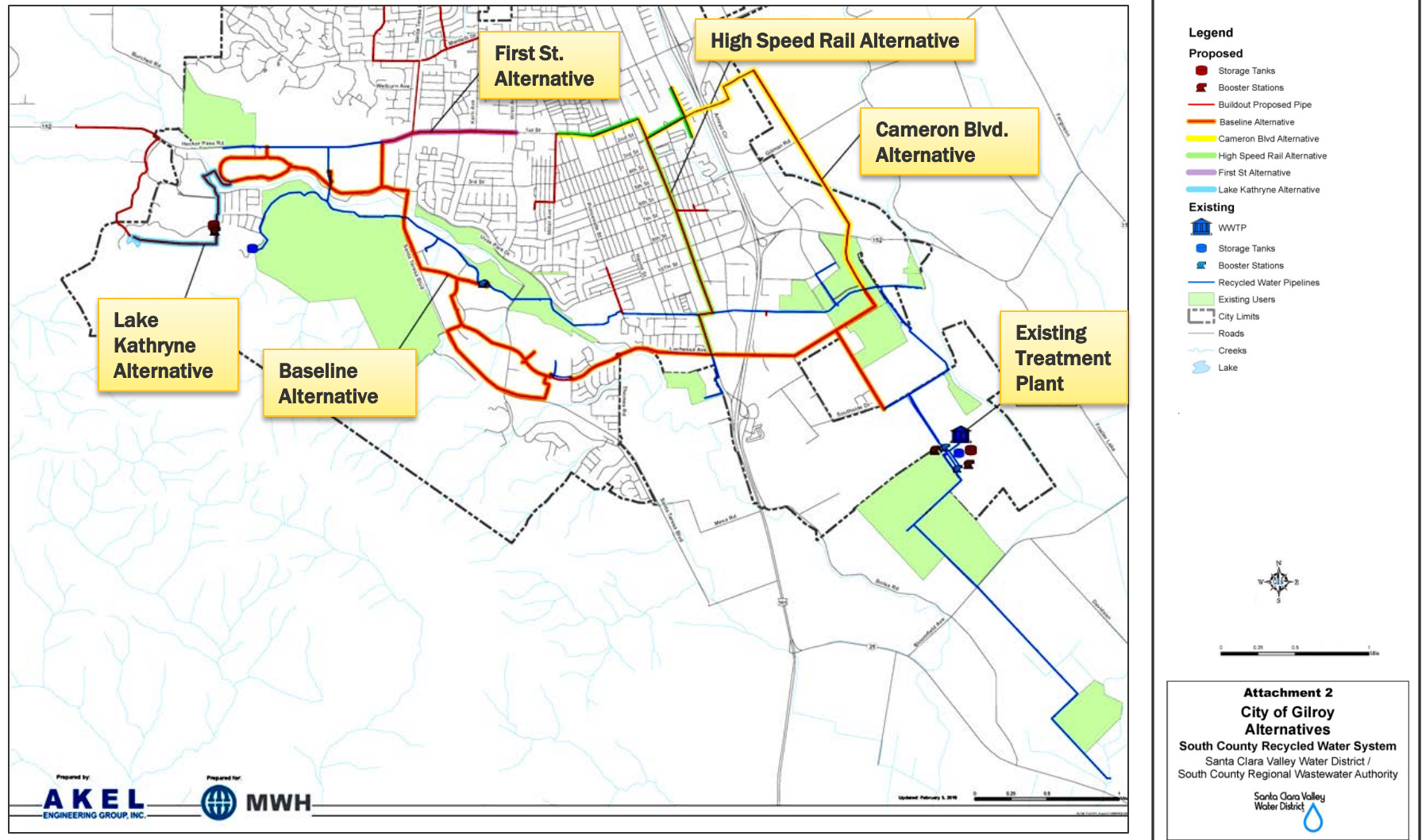
Alternative Evaluation – Morgan Hill

Alternative	Advantages	Disadvantages
Morgan Hill - Alternative 1 and 2 (Transmission Main)	<ul style="list-style-type: none">• Service to Morgan Hill• Dual use opportunity for NPR/IPR (up to 8.5 MGD).• Alternative 2: Potential for joint construction with Morgan Hill sanitary sewer project	<ul style="list-style-type: none">• Cost: [\$2,800-\$4,000]/acre-foot supply• Alternative 1: Land and easement acquisition tied to future railroad project
Scalping Plant Alternative	<ul style="list-style-type: none">• Service to Morgan Hill• Dual use opportunity for NPR/IPR (up to 2.5 MGD)	<ul style="list-style-type: none">• Cost: [\$7,400-\$8,000]/acre-foot supply• Inability to meet existing customer demands due to reduced WWTP influent during peak demand periods.• Inadequate flow in sewer collection system could create odor and clogging problems.• Resulting sludge loading and reduced flow could substantially change composition of WWTP influent potentially leading to compliance issues.

City of Gilroy Alternatives

- ☐ Baseline Alignment – *Refined 2004 Master Plan Recommendation*
- ☐ First Street Alignment
- ☐ Lake Kathryne Alignment
- ☐ High Speed Rail Alignment
- ☐ Cameron Boulevard Alignment

Map of Gilroy Alternatives



Evaluation Results

	Potential Annual Average Demand (acre-foot)	Market Assessment Average Score [1 to 25]	Cost * (Dollar / acre-foot)
Gilroy			
<input checked="" type="checkbox"/> Baseline Alignment (Recommended)	914	16	2,600
<input type="checkbox"/> First Street Alignment	79	13	---
<input checked="" type="checkbox"/> Lake Kathryne Alignment (Recommended)	766	22	2,200
<input type="checkbox"/> High Speed Rail Alignment	319	12	---
<input type="checkbox"/> Cameron Boulevard Alignment	319	12	---
Morgan Hill			
<input type="checkbox"/> Transmission Main + Distribution Main	[494 – 797]	[11 – 13]	[2,800 – 4,400]
<input type="checkbox"/> Scalping Plant (1 MGD) + Distribution Main	[378 - 494]	[11 – 13]	[7,400 – 8,000]

* Uninflated costs over a span of 30 years.

Next Steps

- ❑ Encourage Public feedback through April 15, 2016
- ❑ Finalize master plan update by June 30, 2016

Santa Clara Valley Water District
Recycled & Purified Water Unit

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Recycled Water Feasibility Evaluation

March 2, 2016

