

**Handout 4.4-A, 4.6-A
080620 RWC Meeting**

From: D. Muirhead <doug.muirhead@stanfordalumni.org>
Sent: Wednesday, August 5, 2020 7:49 AM
To: Eva Marie Sans <ESans@valleywater.org>
Cc: David Tucker <Dtucker@valleywater.org>; Clerk of the Board <clerkoftheboard@valleywater.org>
Subject: comment Recycled Water Committee meeting August 6 Items #4.4 + #4.6

Dear Water District Recycled Water Committee,
comments for your meeting on Thursday, August 6:
4.4. Update on Countywide Water Reuse Master Plan
4.6. Update on South Santa Clara County Water Reuse Opportunities.
Thank you, Doug Muirhead, Morgan Hill

4.4 Countywide Water Reuse Master Plan
[key point]
Lack of engagement with public in plan development.

[comment]

- 1) You invest considerable effort from the Communications Team in trying to change the public perception of water reuse from Yuck to Yea. Yet you make no effort to involve the public in the discussion of planning for water reuse. Lots of talk of Project Partner and Executive Leadership Group meetings and reviews by (undefined) stakeholders but no public participation even if just Inform rather than Engage.
- 2) I really appreciate the visual and textual glossary.

4.6 Update on South Santa Clara County Water Reuse Opportunities.
[key points]
No cost offset for avoided purchase and/or lack of availability of imported water.
No mention of wastewater input allocation in the plans for expansion of SCRWA. Does Morgan Hill retain control of some wastewater for greywater and recycled water reuse?

[staff summary]

South County Reuse Options

Option 1 Imports of NPR+ from SBWR to a new Morgan Hill recycled water system

Risk Occurrence: Low; Risk Impact: Low Option 2 Delivers from a Morgan Hill satellite WWTP and AWPF

to San Pedro Ponds for GWR

Risk Occurrence: Very High; Risk Impact: Very High Option 3 Delivers from a Morgan Hill satellite WWTP and AWPF

to Anderson Reservoir for SWA

Risk Occurrence: Very High; Risk Impact: Very High Limitations for Option 2 + 3

A Morgan Hill satellite facility would increase solids loads to SCRWA, posing operational issues that may be substantial.

[comment]

1) What is the offset to Lifecycle cost from avoided purchase and/or impacts from lack of availability of imported water? During the previous drought, I argued that the "20th century model" for making decisions about recycled water was that paying as little as possible for water was the primary consideration.

(The 2020 Reuse Plan defers Rate Impacts to the next iteration of the document.) I then argued that we should replace that with a "21st century model" that is a choice between having expensive water and having no water.

The 2015 Master Plan analysis looked at capital costs (\$18M) and operation costs (\$1.5M) for a Morgan Hill scalping plant.

The 2020 Reuse Plan Potential Future South County Reuse Opportunities (Table 6-8) estimates using purified water from a satellite WWTP and AWPf in Morgan Hill for GWR has

Total Capital Cost: \$125M*

Total Annual O&M Cost: \$6.9M*

Unit Cost, 30-Year Lifecycle: \$6,300/AF*

Projected 2040 Yield: 1,900 AFY

and for SWA has

Total Capital Cost: \$145M*

Total Annual O&M Cost: \$7.4M*

Unit Cost, 30-Year Lifecycle: \$7,200/AF*

Projected 2040 Yield: 1,900 AFY

The 2015 Plan section on Value of Recycled Water Supply simply rated alternatives as low or high value. Dollar amounts were not provided to contrast costs.

The analysis did not value a drought-proof source of water. We were not shown a value for recharge to keep wells flowing. We were not shown the value of augmenting imported water (when available) or substituting for it (when not available); the District pays real money to import water from outside the County.

2) One 2020 Countywide Reuse Master Plan objective is to:

Determine source water availability and reuse benefits.

What troubles me is what appears to be a senior-water-rights/junior-water-rights view which gives SCRWA and Gilroy recycled water but prevents Morgan Hill from using its own effluent (both wastewater and greywater). For both local resiliency and local control, Morgan Hill must be allowed to retain some of our effluent. Note that the 1992 Joint Powers Agreement explicitly empowers Morgan Hill as a member agency to independently plan and/or construct its own wastewater and reclamation facilities.

The 2020 Reuse Plan SCRWA WWTP Flow Analysis (5.2.4 Figure 5-5) says

During the summer months, a portion of wastewater from Morgan Hill is needed to supply NPR in Gilroy. On average, 3 mgd of remaining effluent is available from SCRWA WWTP. If considering satellite treatment in Morgan Hill, only 2.1 mgd of Morgan Hill's wastewater

would be available on average, assuming some would be needed to supply NPR in Gilroy during the summer months.

This is then discounted with a Limitation for Option 2 + 3

A Morgan Hill satellite facility would increase solids loads to SCRWA, posing operational issues that may be substantial.

I have seen no mention of input allocation in the plans for expansion of SCRWA. I am concerned that we will be prevented from having an option for recycled water in Morgan Hill because the SCRWA expansion will have already occurred.

SCRWA Engineering Projects Report June 3, 2020

TREATMENT CAPACITY EXPANSION PROJECT

Status: Design development on schedule (July 2020)

100% design underway for plans and specifications

CEQA process (Dec 2020)

Documentation preparation underway for environmental clearance

Board Presentation (July 2020)

Board's approval to proceed with bid advertisement

Construction bid and award process (Dec 2020)

Bid advertisement, Board's approval of contract

PG&E service change process (Dec 2021)

Application submitted to utility to study system needs

BAAQMD permit to operate (Dec 2021)

Application in process for submittal to local air district

NPDES permit change (March 2022)

Adoption of new permit by State Water Board

New plant construction and commissioning (2021- 2025)

Compliance with NPDES Permit

Development of construction bid package is currently underway including: preparation of engineering design drawings and technical specifications, air permit application to Bay Area Air Quality Management District (BAAQMD), environmental CEQA documents, and formal notice to PG&E planning department to study system upgrades to accommodate added electrical load.

[history]

[2015 Master Plan] The Morgan Hill Scalping Plant alternative was not selected due to potential risks of impacting the SCRWA WWTP influent composition (potentially leading to compliance issues), the possibility of lowering flow rates at times to the degree that solids settle out in the sewer trunk line, and the inability to meet existing customer demands during peak periods.

THIS PAGE INTENTIONALLY LEFT BLANK