Oxnard Subbasin and Pleasant Valley Basin Facilitated Process

NOTES: Project Committee Meeting 3

Meeting Held: Oct. 8, 2020

Notes prepared by: Consensus Building Institute

Meeting in Brief

The Project Committee reviewed projects included in the GSP projections: Freeman Expansion (7500 AFY), fallowing (2200 AFY in Pleasant Valley Basin and 500 AFY in Oxnard Basin), and City of Oxnard AWPF recycled water (9100 AFY). The committee explored maximizing "feed water" to the AWPF via the Hueneme Canyon extraction wells–unlikely due to high levels of chloride that AWPF could not treat–and mining the Perch Aquifer–unlikely due to potential impacts on wetlands. The Committee concurred that the alternative of pulling tiled water is preferable, which Jared is already investigating.

New project ideas might include having M&I join the water market and the ASAP without the pipeline.

Action Items

- Kim by 10/ 21 will investigate how return flows were treated in the GSP tied to recycled water
- Kim by 10/ 21 will provide information on the approach to fallowing in GSPs: Cost; Contractual obligations; How fallowing fits within the Water Market
- John by 10/21 talk with colleagues about ASAP without pipeline and Forebay regulations
- Project Committee Members by 10/21 consider selection criteria that you would recommend to advance project deliberations
- Project Committee Members by 10/21 continue to populate the projects googlesheet with additional information gathered on new projects- Link
    - Jared → Recycled Water Tile Project
    - Thien → Oxnard Recycled Water Project
    - Alden→ Santa Paula Basin purchases

Next Meeting: 10/22/20

- Discuss how Met water/ Calleguas may factor into OPV project solutions
- Discuss how to factor optimization scenarios into project committee's work'
- Discuss updated information collected on projects
- New projects

Understanding Projects included in the GSP

Freeman Expansion

The anticipated water supply (7500afy – average) is accurate and was not factored into the GSP analysis.

Fallowing

The GSP assumed paying farmers to fallow land by resting fields on a temporary basis. Farmers would stall groundwater pumping; that water demand would be retired during the contractual period. The GSP assumed fallowing was strategically applied in particular areas. This was targeted to reduce pumping from the Lower Aquifer System.

Fallowing in GSP yielded these results in reduced pumping:

- 2200 AFY in Pleasant Valley
- 500 AFY in Oxnard

Future Fallowing Discussions Topics

If fallowing is to be proposed, the committee would need to consider the following:

- How to modify demand assumptions to incorporate fallowed lands
- How to calculate the pricing of fallowing
- How fallowing intersects with the water market
- Anticipating grower interest or willingness to fallow land

AWPF / Recycled Water

The GSP assumed the AWPF would produce 9100 AFY.

Expansion Costs

The cost of expanding the AWPF another 50% or 3500 AFY or 3.125MGD to a total of 7000 AFY would be $31 mil for design, build, etc. It would require the construction of a day tank. Thien has yet to do the operating costs.

If Oxnard was able to convert all its waste water into recycled water, AWPF would produce 9500 AFY so the GSP assumption is within that.

Recycled water ties back into redistribution. The model considered this. Kim will need to investigate how the recycled water was factored in to return flows.

Today, 7000 AFY is available from the recycled water plan. 2600 AFY is contracted. Oxnard is using some for ASR. The Committee would like to understand how much would be available for distribution.

Next Steps on Recycled Water

- Operating costs of expansion being explored with Ventura
- Identify available recycled water from the existing capacity after existing contracts and ASR (7000afy)
- Business plan – available after council workshop

New Project Ideas

- Explore M&I joining the water market, may not be this group
- ASAP without the pipeline

Recycled Water Tile Projects – Jared

Jared is working with a consultant to get high level benefits and costs for this effort.

Storm Water / AWPF – Thien

Oxnard completed the study a while back. The source of water would be year-round and does not require a lot of infrastructure. One is the "old industrial drain" shows Boron that AWPF cannot treat. However, AWPF can treat the other storm water.

Some of those drains flow into wetlands, which could be problematic or yield project opposition.

The technical memo did not evaluate costs or potential supply. Thien recommends expanding the other components before advancing storm water treatment.

Injection Barrier – John Lindquist

The injection barrier would optimize the basin by injecting a barrier to hold back sea water intrusion. It might yield 10-15,000 AFY. However, water is needed to provide the barrier. It will take several months to think this through.

John anticipates that the costs and amount of water might parallel the extraction barrier. However, the costs could be less because a treatment center would not be needed.

This is an alternative to the extraction barrier. The GMA recommended that United reconsider this option. The amount of water necessary for the injection could be significantly less than the optimization that the injection barrier yields.

City of Ventura Wastewater – Curtis

At this time, the City would not anticipate any wastewater to be used for other supply or purposes.

City of Camarillo Wastewater – Ian
Suggested to wait for Lucie.

Santa Paula Basin
Existing adjudication in that basin limits the options; however, Alden needs some more time to gather information.

Exploring Options to Maximize the AWPF

[Unlikely] Hueneme Canyon Extraction Wells
The water has high levels of chloride so AWFP couldn't treat that effectively.
Question for future consideration: Could the Hueneme field pump water for the injection barrier?

Marathon explored using storm water on its land. Calleaguas was concerned that constituents would be challenging within its permit limits.

Perch Aquifer – unlikely as feed
Would perch aquifer be preferable to the drainage (stormwater) as stock for recycled water plant? Mining the perch aquifer to feed AWPF would likely impact wetlands or raise environmental concerns.
The alternative is to pull water from the tiled water, which Jared is investigating.

Meeting Participants: Ian Prichard; Thien Ng; Pete Martinez; Curtis Hopkins; Kim Loeb; Jared Bouchard; Jurgen Gramckow; Martin Gramckow; Nathan Jacobsen; Maryam Bral; John Lindquist; Kathleen Riedel; Kirby Brill and Facilitators: Gina Bartlett and Ekow Edzie

Next Steps – Projects Committee

Phase One
Project Identification
Sept - Nov 2020

- ~~*Examine projects* in the GSP, submittals for GSP (not included) & United's proposals~~ -Complete
- ~~*Update project information* (if new info available)~~ --Complete
- *Identify additional* potential projects --In Progress
- ***Outline feasability*, timeline, rough cost estimate, potential water supply** -In Progress
- Establish *selection criteria* - *Next Up*
- *Identify multi-benefits* of projects: environmental, water quality, regional, etc. - Next Up
- Identify known *funding sources*

Phase Two
Preliminary Analysis
Nov 20 - Feb 21

- *Review preliminary analyses* available on current projects
- *Evaluate projects*: conduct fatal-flaw analysis and narrow set to advance
- *Model select project* (if sufficiently defined) *scenarios to* determine potential contribution to sustainability or water supply. Open discussion about the model's strengths, weaknesses & assumptions so all are on the same page

Phase Three
Feasibility & Cost-Benefit
Jan - April 2021

- *Further evaluate feasibility & cost - benefit analysis:* evaluate select projects / optimization measures based on standardized set of criteria
- *Develop standardized parameters for projects* to guide project selection and to facilitate effective evaluation by Core Group and public
- *Project vetting:* Begin discussing projects with broader community, explaining and soliciting support and identifying any concerns

Phase Four
Vetting & Implementation
March - Sept 2021

- *Funding:* Focus on joint fundraising efforts to increase chances of project success
- *Further project vetting:* For promising projects, request additional detail from project sponsors to conduct further vetting for consideration in future iterations of GSPs.
- *Implementation and governance:* Address governance questions & issues. Who is best to lead on project(s)