Water Resources Committee
September 9, 2015

Summary Notes

Directors Present:	Sarah Palmer, Sandy Figuers Bill Stevens (alternate)	**Staff Present:**	Jill Duerig Kurt Arends Carol Mahoney Brad Ledesma Colleen Winey

President Palmer called the meeting to order at 2:30 p.m.

1. **Public Comment on Items Not on the Agenda**
   None.

2. **Update on Status of Lake A**

   Summary of Presentation
   Colleen Winey presented an update on the status of Lake A in the future Chain of Lakes. Lake A has been mined under surface mining permit SMP-23 currently held by CEMEX, Inc. The approved SMP-23 from 1987 needs to be modificied due to previously-unforeseen geologic conditions and environmental regulations. The most current proposed SMP-23 Amendment submitted to Alameda County by CEMEX indicates there will be no further mining in Lake A. Alameda County requires that when mining is complete reclamation must be started within one year. Another year is allowed for completion of reclamation. Due to the significance of changes to the SMP-23 Reclamation Plan in the proposed Amendment, a California Environmental Quality Act (CEQA) assessment will be required. A Notice of Preparation (NOP) has been issued for the project and a Draft Environmental Impact Report (EIR) is anticipated by the end of the year. The proposed SMP-23 Amendment is expected to be brought forward for approval in Spring 2016. This could allow for the completion and transfer of Lake A to Zone 7 as early as 2018.

   Comments, Questions and Discussion
   Director Palmer asked if the changes to the lakes' footprint will result in a similar surface area and volume mined. Staff stated that although the surface area is similar the depth of Lake B is considerably greater than that originally proposed by in the 1987 surface mining permit. Also, the proposed depth increase creates more dead-space in the lake because the locations and depths of the connecting conduits are not proposed for changes.

   Director Palmer then asked how much of Lake B recharges the groundwater basin. Staff replied the ability of Lake B to recharge the groundwater basin is significantly limited due to the fact that, once mining ceases, groundwater will take up most of the lake volume, leaving little room for increasing the pressure head by adding more water above the existing groundwater level.

   Director Palmer asked also about the coordination with Caltrans on the Highway 84 widening project and the conduit that is supposed to be installed by CEMEX between Lakes A, B, and C. Staff indicated that it is CEMEX's intent to coordinate with the highway project, wherever possible.

Director Figuers postulated that an outcrop of silty/sandy clays that he observed in the field during mining around the middle of Lake A, dipping to the east 15 degrees, may represent the boundary of the Main Basin. He also stated that he has photos of these layers that can be shared with staff upon request, and acknowledged that the geologic layers may no longer be exposed at the site. He asked if any consideration had been given to whether Lake A would contribute recharge to the main basin. Staff stated that at this time Lake A was considered largely a conveyance, since groundwater was high in this area and would take up a larger volume of lake storage. This is also why the Chain of Lakes Pipeline project was being considered to allow for connection from Lake A to the other lakes and the treatment plant, should the lake be turned over early to Zone 7.

Director Stevens asked if there are any limitation on operations in Lake A due to the slope repair. He further suggested that Zone 7 hire a geotechnical firm to peer review the work that was completed and review any limitations to operating the water levels. His concern was that water levels would need to be kept above a certain elevation to prevent slope instability. Staff indicated that water levels were required to be kept at higher elevations prior to the installation of the corrective action but would have to confirm whether these limitations outlasted the repair.

Director Stevens also asked if Lake A would provide any stormwater control benefits. Staff replied that flows in the Arroyo Del Valle are largely controlled by the dam, so stormwater capture in Lake A for flood protection purposes would not likely be of any benefit.

During public comments, Don Kahler asked whether Lake I is recharging into the lower aquifer. Staff indicated that Lake I does not recharge directly into the lower aquifer, but must first pass through the existing aquitard, and further explained that the aquifer where Lake I recharges is not the same as those from which our drinking water wells draw.

3. Status of Water Supply Evaluation Update

Summary of Presentation

Brad Ledesma provided a presentation outlining the preliminary results of the Water Supply Evaluation (WSE) update. Staff provided this same presentation to the Retailers in late June, and is waiting for their comments. The approach to the update focused on portfolios, scenarios/metrics, and preliminary results. Zone 7 staff worked with the retailers to develop a refined list of feasible water supply options, and then used the list to develop three portfolios to compare with the Current Plan (i.e., Delta Fix focused). Portfolio A included Desalination, Portfolio B included Indirect Potable Reuse, and Portfolio C included both Desalination and Indirect Potable Reuse. Unlike the analysis completed in 2011, which used one scenario and only three metrics, the update includes eight scenarios and eight metrics, providing a much more robust analysis to help future decision making. All of the scenarios and metrics were vetted with and developed with input from the Retailers. The results of the analysis indicated that the addition of desalination, indirect Potable Reuse, or both, appears to make Zone 7's system more resilient to declining reliability of the State Water Project and delays in the Delta Fix, but that the addition of these new supplies could increase costs by 20 to 60%. In light of these preliminary results, Zone 7 hired HDR to complete a preliminary feasibility review of potential recycled water and desalination options for the Tri-Valley area. Staff anticipates seeing a draft of HDR's review by the end of the week. Zone 7 staff will update the analysis and results based on the HDR paper and any comments provided by the Retailers.

Comments, Questions and Discussion

Director Palmer asked what level of treatment was being considered for the reuse and was curious about the treatment options. Staff replied that the concepts being evaluated were advanced treatment, for example: reverse osmosis, advanced oxidation and multiple barriers (e.g., environmental buffers) for providing potable water supply. Staff also indicated that both direct and indirect potable reuse (DPR, IPR, respectively) were being explored. Director Palmer asked also about the perception of using recycled water in the Valley. Staff indicated that further polling, research, discussions with the retailers, and other public discussions would occur before any large-scale decisions would be made. On this topic, Director Figuers pointed out that the information provided showed that, at the most, only 18% of the total water supply would be made up of IPR, but staff said this is fairly close to the total amount of water supply Zone 7 has lost in recent years from the State Water Project and other water supply contracts.

Director Figuers then asked about the development of metrics and statistical methods for the Zone 7 risk model used in the WSE. Staff provided some additional information on the development process and will follow up upon request if additional detail is needed off-line. Director Figuers noted that the weighting in the "report card" was largely linear, but that elements of the report card, like the occurrence of "Rare Shortages" were not, in fact, linear themselves. Staff indicated that the report card is still in progress and these things will be considered further as staff continue to refine the analysis. Director Figuers also asked about the treated water costs and indicated that he would like to see staff use the full weighted costs passed on to the retailers when comparing portfolios.

Director Stevens asked about our existing water savings this year and stated that we should be close to the health and safety numbers established for the Central Valley Project of 55 gallons per person per day. Staff replied that although our projected water demands are low, they are not likely as low as 55 gallons per person per day. Director Stevens also asked about energy consumptions and what percent of our annual costs this constitutes. Staff replied that energy makes up a very small percentage of our annual budget, but relates to providing a reliable supply of water.

Director Stevens then asked about how build-out was accounted for and if demands would be leveled off at that point instead of continuing to increase, noting that this would need to be a team effort with the cities and that these preliminary figures indicated clearly that the "Current Plan" may not be sufficient should the Valley not choose to explore IPR and desalination. This question led to a discussion of conservation and how demand has changed in the last couple of years. Staff clarified that the projected demand was based on build-out estimates through 2040.

Director Stevens also asked at what other venues this data would be presented and indicated that adding costs translated into the average homeowner bill would be useful for communication. Staff indicated that the WSE update would be presented to the Liaison Committee after it is refined further based on input from the retailers.

4. Possible Rescheduling of Capital Improvement Program Projects

Summary of Presentation

Staff explained that, as part of the Cost of Service Study, the consultant had requested an option of deferred projects. As a result, staff developed a proposal and are providing the draft overview for discussion and direction from the committee. Staff then gave a presentation describing the projects recommended for deferral, re-scoping or other modifications from the Renewal/Replacement Strategy and the System-Wide Improvement Strategy of the Fiscal Year (FY) 2015/2016 Capital Improvement Program (CIP) for the timeframe covering FY15/16 to FY19/20 (the projects funded by water rates and the study period in the Cost of Service Study). The Expansion Strategy was not a part of this analysis as funding comes from connection fees rather than water rates. The recommended modifications decrease the cost expenditures in this five year window from $96,106,000 to $81,433,000. Although this deferral of costs of $14,673,000 allows time for Zone 7 to explore debt financing and moderate water rate increases, it does not remove the need for the projects that were deferred and not only increases operation & maintenance costs but also creates increased risk of failure; therefore, these project costs may actually increase in the future due to inflation. Deferrals and re-scoping largely centered on projects that would cause the least impact while meeting Zone 7's mission. Some present a temporary shift from proactive maintenance and construction costs to reactive maintenance (which is considerably higher) and deferred construction (which can be impacted by increased construction costs). No changes were recommended for the following programs: Buildings & Grounds, Groundwater Basin Management, Program Management, and Regulatory Compliance. Notable projects that were recommended for deferral include the following: Booster Pump Station (construction) from Transmission & Distribution, Reliability Intertie (construction) from Water Supply & Conveyance, projects associated with plant maintenance and upkeep from Water Treatment Facilities, and well maintenance and upkeep from Wells.

Comments, Questions and Discussion

Director Palmer asked specifics regarding individual projects such as the meaning of OSG (on site generation) and why a sodium hypochlorite tank would need to be covered by a structure. Staff responded and explained that the tanks would normally be covered to reduce degradation of the sodium hypochlorite itself due to heat and to the tanks (plastic based) due to degradation from ultraviolet light.

Director Figuers suggested that Zone 7 staff needs to explore abolishing the rate stabilization fund. Director Palmer responded that a discussion regarding this was more appropriate for debate at the Finance Committee since views differ widely.

Director Stevens asked if Operations and Maintenance staff were involved/informed of the project deferrals and re-scoping. Staff explained that the process in determining which projects would be deferred included several meetings with Engineering, Operations, Maintenance, Integrated Planning, and Finance to determine which projects could be deferred or re-scoped. Director Stevens asked for clarification on "line valves" to which staff explained that these were intended to help isolate sections of a pipeline for maintenance or repairs. Currently, if a leak occurred in a major line, some sections of our pipelines would have to take out of service many miles of pipeline to make the repair. This project adds additional valves a few at a time to make isolating any leaks less disruptive.

After the presentation, all three directors agreed with staff recommendations to provide the rescheduled CIP project costs to the Finance Committee for inclusion in the rate study.

5. Update on Well Ordinance Implementation

Summary

Kurt Arends provided brief update related to the Water Well Ordinance. Alameda County adopted a revised Well Ordinance in April of 2015 and Zone 7 signed an MOU with the County in June which delegated to Zone 7 the authority to administer the County Well Ordinance within Zone 7's service area. As part of administering the ordinance, staff is recommending that Zone 7 collect permit fees beginning on January 1, 2016.

Prior to the collection of permit fees, staff will be outreaching to the well drilling and consultant community. An informational meeting is scheduled for September 29. A letter will also be sent to the local cities, DSRSD and Cal Water regarding the well ordinance implementation. Each City has previously adopted a City Ordinance delegating well permitting authority; however, some may reference the old County Ordinance and may need to be updated. A meeting for the cities is planned for early October.

Staff will also be returning to the full Board in the fall to recommend adoption of special requirement areas, special boring permit requirements, special well construction requirements and an appeals process consistent with the MOU. In response to a Committee question about fees, it was explained that Zone 7 would be initially implementing the County fee schedule as shown on their web site (http://www.acgov.org/wells/fees.htm).

Comments, Questions and Discussion

There was no discussion beyond clarifications of timing and coordination with the county on fee implementation. The committee directed staff to proceed as described.

6. Verbal Reports

None.

7. Adjournment

The meeting was adjourned at approximately 4:07 p.m.