

NIPOMO COMMUNITY SERVICES DISTRICT

JANUARY 14, 2013

1:00 P.M.

MEETING MINUTES

SUPPLEMENTAL WATER ALTERNATIVES EVALUATION COMMITTEE

APPOINTED COMMITTEE MEMBERS

MICHAEL K. NUNLEY, CHAIRMAN (NON-VOTING)
PETER V. SEVCIK, VICE CHAIRMAN (NON-VOTING)
DAN GARSON (VOTING)
DENNIS GRAUE (VOTING)
KATHIE MATSUYAMA (VOTING)
ROBERT MILLER (VOTING)
SAM SALTOUN (VOTING)
DAVE WATSON (VOTING)
DAN WOODSON (VOTING)

PRINCIPAL STAFF

MICHAEL S. LEBRUN, GENERAL MANAGER
LISA BOGNUDA, ASST GM/FINANCE DIRECTOR

MEETING LOCATION - District Board Room
148 S. Wilson Street, Nipomo, California

1. **CALL TO ORDER, FLAG SALUTE AND ROLL CALL**

Chairman Nunley called the Special Meeting of January 14, 2013, to order at 1:00 PM. and led the flag salute. At roll call, all Committee members were present except Members Watson and Matsuyama who arrived during Agenda Items 2 and 3, respectively.

2. **GENERAL MANAGER'S REPORT**

General Manager Michael LeBrun provided an update to the Committee on items relevant to their work. He had received a call from Rick Sweet with the City of Santa Maria about a person named Bezmarevich who was contacting Central Coast Water Authority (CCWA) member agencies and attempting to negotiate water transfers between the agencies and District via a direct delivery from CCWA facilities. The General Manager assured Mr. Sweet that only District staff or Committee members would be engaging CCWA members to discuss water supply alternatives on behalf of the District.

Member Miller asked if there was any update from the County on the District's grant or the letter they had said they would issue requesting an update on the District's Supplemental Water Project. General Manager LeBrun responded there had been no new communication with the County and there was no update on the water supply analysis being conducted by Supervisor Texiera, which had been discussed by Director Blair at a prior Board meeting.

3. **REVIEW DRAFT MINUTES FROM DECEMBER 19, 2012, COMMITTEE MEETING**

Chairman Nunley introduced the item and presented the edits requested by Dr. Bradley Newton and Member Graue. The Committee voted unanimously to approve the draft minutes as revised (see attachment).

4. **DISCUSS RANKING PROCESS**

Chairman Nunley introduced the item. The draft ranking matrix was projected onscreen and draft scores were filled in as the Committee walked through the items.

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Member Woodson noted he had received the draft ranking matrix as a pdf file and asked if it was available as a spreadsheet. Chairman Nunley said he had provided this to the Committee members and would make sure Member Woodson gets a copy of the spreadsheet.

Member Garson said he was pleased with the thoroughness of the information (rubric, ranking, and other documents). Chairman Nunley noted Member Saltoun had put the spreadsheet together and Member Saltoun gave Member Watson credit for presenting the concept.

Member Miller said the water quality criterion should consider differences between high-quality, low-salinity supplies and those that are potable but have high salinity. He compared salinity of water from the Santa Maria Groundwater Basin (ex. 1000 ppm TDS for discussion) to State Water (say 300 ppm TDS) and asked how those would be scored in the rubric. Chairman Nunley suggested changing the criterion to salinity and scoring based on concentrations. Member Garson asked if agricultural reuse is sensitive to salinity. Chairman Nunley responded that it depends on the crop. Member Garson noted that other chemicals could affect use of water from agricultural operations. Member Matsuyama mentioned nitrates would be an issue. Member Miller thought water quality could be a criterion focused on quality of finished water and that cost should address treatment requirements to reach quality objectives. He suggested 300-500 ppm could earn a high score, 500 to 750 would earn a medium score, and over 750 would earn a low score. Chairman Nunley said it was assumed all supplies would be treated to be safe for their intended uses. He had attempted to capture risk in the rubric, as well. Member Garson asked how chloramination would be addressed in the rubric. Chairman Nunley responded that supplies requiring disinfection (such as chloramination) could still earn a high score in the rubric. Member Garson suggested the Committee look at Oso Flaco as an alternative to discuss as an example of how to handle the scoring. Member Miller noted the treatment process for that supply would produce a very high quality water (with respect to salinity) in order to remove other contaminants of concern. Therefore, it could score very high as opposed to a groundwater option that produces a high-salinity water supply of 800 ppm which would receive a lower score. Member Watson asked if two categories (one for potable and one for recycled water) should be considered since water quality goals and treatment requirements could differ significantly. Member Miller noted he would prefer using the single category with a footnote to discuss how the quality is appropriate for the intended use. Member Graue said it would be important to identify the intended use. Member Saltoun said treated water quality could have a very narrow range of scores, whereas raw water quality could have a very wide range, therefore it is important to clarify this. He said he thinks the raw water quality should be considered. He also noted the District does not have the distribution system to deliver two different levels of quality and he thinks considering raw water quality would allow the Committee to more distinctly rank the alternatives. A new category would not be required if this approach was pursued. He noted there are not two different distribution systems to deliver different water quality to users.

Member Garson said he thought potable water should rank higher in water quality than nonpotable water (for example, water that is only useful for agriculture). Member Graue noted this could make the alternatives difficult to rank since use of nonpotable water could reduce demand for potable water. Chairman Nunley said he had tried to tie both the intended use and treatment requirements to the water quality criterion and discussed the scoring rubric. He noted that reverse osmosis may be required (per the guidance documents) to treat wastewater plant effluent for use by Phillips 66, but it should rank higher than Oso Flaco since no pesticides or hazardous chemicals are present. State Water would score very high because very little treatment is required and the water has low hardness and

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salinity. He said he assumes some discussion will be required to justify many of the scores assigned in the matrix. Member Garson noted this is an area where weighting the scores could be beneficial – for example, potable supplies could be weighted higher than nonpotable supplies.

Member Woodson said he sees court compliance as a “go/no-go” issue, not as a criterion for scoring. Members Garson and Matsuyama discussed the importance of bringing some recommendations to the Board even if they do not comply directly with the court stipulation. Conservation measures and graywater were discussed as examples.

Member Saltoun said some of the criterion that defined only two options for scoring (1 or 10) should be reconsidered since there may be “shades of gray” between the two extremes. For example, if a supply can only meet 990 AFY would it get a score of 1 for ability to deliver 1000 AFY? Member Miller said he agreed with that perspective and weighting could be applied to assign importance to some of the criteria such as court compliance.

Member Miller asked when the weighting criteria should be considered. Chairman Nunley suggested the Committee begin assigning raw scores and see the preliminary results first. He noted there are two adjustment areas for scores – the rubric and the weighting process.

Subcommittees began lead the scoring discussion for each alternative and variation, based on the draft rubric.

State Water – Member Saltoun discussed the variations listed on the matrix. He noted the major challenge with acquiring water from San Luis Obispo County is that the County can only deliver 4830 AFY through the existing conveyance system. The District would need to acquire water from existing County purveyors. Oceano only has 750 AF of State Water and would only have a limited amount of that total to sell to the District. It appears that the District could never acquire 1000, 3000, or 6300 AFY. He noted County State Water customers had received their full entitlement even when statewide deliveries were at 40% of Table A quantities because of their excess entitlement.

Acquiring water from Santa Barbara County is more expensive since the communities are farther along the pipeline. Member Saltoun noted that Carpinteria had offered to sell 1000 AFY for \$5000 AFY. CCWA had said that Montecito and Solvang may have water to sell (perhaps 1700 AFY of Table A water) but the District would need to send a formal letter to see if they would be interested in selling. He also said State Water has a long-term reliability of 60% which would result in 600 AFY out of 1000 AFY of Table A water. Therefore, the Committee may want to assign a score of 6 to the 1000 AFY Delivery criterion. Member Watson said it looked like the scores could be 10, 1, and 1 for 1000, 3000, and 6200 AFY supply potential criteria (respectively) and reliability would be addressed separately in the matrix. Member Saltoun responded that no State Water participant regularly received their full Table A allocation and if that concept was applied, the Santa Barbara Desalination variation could receive scores of 10 and 10 for 1000 and 3000 AFY deliveries based only on production capacity even though the City would never sell the water. Member Miller suggested assigning a rank of 2 or 3 to the Santa Barbara County variation for the 3000 AFY Supply Potential criteria. Member Graue asked if a parallel pipeline or more pumps could deliver San Luis Obispo County’s Table A water to the District and, therefore, could rank higher for delivery. Member Saltoun discussed the excess capacity study recently conducted by CCWA and the County of San Luis Obispo that identified some pipeline capacity that is currently “unused” by project participants. Chairman Nunley said he would look at contracting as a feasibility issue and supply potential as a physical availability, with reliability also considered separately instead of trying to address all

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these issues within the Supply Potential criterion. Members Graue and Matsuyama noted that San Luis Obispo County has over 25,000 AFY of Table A water, so the supply potential scores could be 10 for all delivery goals. Member Miller expressed concern about defining projects too broadly and not considering the real constraints associated with each project when scoring and ranking them. Members Matsuyama and Watson discussed availability of Oceano water and the recent vote by the community against a sale of State Water. Member Watson noted that the comments and analyses that will be included behind the matrix will be important for explaining the assumptions behind assigning scores. Member Miller thought it would be prudent to increase the scores for San Luis Obispo County State Water since the County has some excess capacity and may be developing a strategy to transfer that water. Members Matsuyama and Saltoun discussed the first rights of refusal by current State Water customers for State Water sales in San Luis Obispo and Santa Barbara County, as well as the need for all State Water customers within a County to agree to a sale involving another County.

Chairman Nunley said he would be sending a draft of Member Saltoun's State Water Alternative report and recommends putting the final evaluation in this format. He proposed putting the information from the powerpoint status report files into this format. Member Miller expressed support for this concept. Member Saltoun said he considered the general public as an audience when he drafted this first section of the subcommittee's report. He asked if the District could only go to other agencies to request Table A water or if CCWA could be approached to sell water. Chairman Nunley responded that CCWA has no Table A water itself – SLO County and Santa Barbara County Flood Control & Water Conservation District are contractors with the state for Table A water. DWR has no additional Table A water. CCWA has State Water subcontractors as member agencies – it does not have its own Table A water, any water transfers must be developed with individual agencies and not CCWA. Member Saltoun asked if water that is not Table A water could be purchased and delivered via the CCWA facilities. Chairman Nunley noted all Table A water was already contracted by DWR – the District would need to buy water from another State Water customer. Member Saltoun asked if the District could buy State Water from SLO and/or Santa Barbara County and then negotiate with CCWA to purchase pipeline capacity. Member Miller said he considered this approach when recommending the scores discussed earlier. Members Miller and Watson discussed the need to confirm the 3000-5000 AFY excess capacity with San Luis Obispo County before finalizing the scores for the Supply Potential criteria. Members Matsuyama and Saltoun discussed the need for any negotiation involving a purchase of State Water, relying on delivery via the CCWA pipeline, to negotiate with Santa Barbara County State Water subcontractors.

Member Watson discussed connecting to Oceano CSD as an approach that would not require negotiation with all the Santa Barbara County State Water customers. Member Watson suggested the Oceano CSD service connection could be a separate variation. Member Saltoun had assumed this option was included with the first variation. Chairman Nunley noted that a connection to Oceano CSD for the purpose of transferring State Water would require environmental review, the quantity for sale is less than their 750 AFY Table "A" water, and the community had recently voted against selling State Water (based on a law or ordinance recently passed by the voters). Member Matsuyama said the Supply Potential criteria should be well-defined in the evaluation report. She also noted that the State Water draft analysis could develop a water supply that is close to 3000 AFY, so the 3000 AFY Supply Potential could be ranked fairly high.

Graywater and conservation were not discussed.

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Agricultural and Industrial Reuse – Member Matsuyama said the Committee could not evaluate the quantity of agricultural tailwater water available. Member Graue noted only 320 AFY is available from Phillips 66 and Member Saltoun acknowledge the challenges with convincing their company to reduce groundwater pumping or take treated effluent. Member Graue noted it would not be feasible to collect and condense Phillips 66's evaporated water and reuse it. He thought scores of 1, 1, and 1 would appropriate for 1000, 3000, and 6200 AFY supply potential for the Phillips 66 reuse variation. The PXP variation was scored as 10, 1, and 1 for 1000, 3000, and 6200 AFY supply potential.

Santa Maria Waterline Intertie Project – Member Miller said the Committee is waiting for input from the City of Santa Maria on a varied daily delivery strategy in order to increase the annual delivery to the District. Chairman Nunley suggested the Committee consider the phased Waterline Intertie Project in conjunction with the full Waterline Intertie Project without separating them. Member Saltoun thought a possible scenario would be completion of one phase of the Waterline Intertie Project then development of an additional water supply, therefore it could be analyzed separately from the full Waterline Intertie Project. Member Matsuyama thought breaking out the Phase I project would be easier to describe and present to the public as a separate variation. Members Miller and Garson discussed analyzing and presenting Phase I as a separate variation when it is just the initial phase of the full Waterline Intertie Project. Phases 2 and 3 could not be separate projects since they cannot stand alone without Phase I. Members Saltoun and Garson thought a combination of recommendations could be presented to the public for implementation, including only Phase I for example. Member Matsuyama said the Committee must review Phase I as directed in the Bylaws. Members Matsuyama, Garson, and Miller discussed scoring the Phase I and full Waterline Intertie Project as 10, 10, and 10 for the 1000, 3000, and 6200 AFY Supply Potential since the water is available from the City of Santa Maria. Chairman Nunley noted that Phase I would not be able to meet 3000 and 6300 AFY deliveries and would therefore score very low for these criteria. Member Woodson discussed how the Waterline Intertie Project could have different cost/benefit ratios for each phase. Members Miller, Nunley, and Matsuyama suggesting separating the phased and full Waterline Intertie Project and filling out as much of both variations as possible, but not trying to complete all categories for both projects. Member Garson suggesting assigning a score of 10 to all Supply Potential categories for both the Phased and full Waterline Intertie Project variations since the "pool" of supply is available.

Recycled Wastewater from Municipal Facilities – Member Miller suggested assigning a 10, 7, and 1 to the 1000, 3000, and 6200 AFY Supply Potential categories for the South San Luis Obispo County Sanitation District supply variation since it can deliver 2250 AFY of recycled water. The Pismo Beach supply variation can deliver approximately 1500 AFY, therefore it could be scored as 10, 5, and 1, respectively, for the Supply Potential categories.

Local Groundwater – Member Garson noted that after the Committee learned local groundwater was not new water, they stopped analyzing the supply potential. Member Miller suggested assigning a score of 1 to all the Supply Potential categories. Member Graue asked the Committee members to review the analysis he has drafted for this category and noted that Dr. Newton had said there was much about the NMMA that is not known. He recommends that the Committee advocate the need for a proper aquifer management study and it had hurt the District's credibility not to have this information. Member Garson said he agrees more research is needed and it should be stated in their recommendations.

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Surface Water Supplies:

Oso Flaco Lake – Members Matsuyama, Graue, and Garson discussed supply potential and Member Garson suggested assigning a score of 1 to all supply potential categories.

Santa Maria River – Member Miller recommended assigning a score of 1 to all supply potential categories.

Lopez Reservoir – Member Watson said the original concept behind this variation was to exchange Lopez reservoir water for recycled water. The reservoir releases 4200 AFY to satisfy downstream uses such as groundwater recharge and environmental needs. Chairman Nunley suggested Lopez water may not be new water since it is already considered in the NCMA water budget. Member Miller said exchanging recycled water for Lopez water should be included as a recycled water alternative and not a “new” Lopez water supply. Chairman Nunley and Member Miller suggested eliminating this variation from the Surface Water analysis and addressing it only in the Recycled Wastewater from Municipal Facilities analysis as part of the discussion of usage.

Seawater Desalination – Committee members agreed to assign scores of 10 to all supply potential categories. Chairman Nunley suggested eliminating solar distillation as a variation and consider it as an approach for desalinating seawater. Members Graue and Matsuyama discussed leaving the variation as a separate variation. Member Graue mentioned discussing solar distillation with Black & Veatch and Jim Vickers at Separation Processes and they had not known of any commercial-scale systems. He had contacted Coldwell Banker in order to determine land cost for a couple of sections to help assign costs to this variation. The Committee agreed to assign scores of 10 to supply potential categories for solar distillation.

VSEP Variation – Member Graue suggested removing this variation since the technology is not appropriate for potable use.

Liquid/Liquid Extraction – Member Graue noted this process had been invented about 7 years ago by a researcher at MIT but none of the professionals he contacted had heard of this technology. He suggested removing it from the analysis for now.

Chairman Nunley suggested skipping the O&M and Capital Cost discussion today. He asked how the Committee wants to handle O&M and Capital Cost and what units to use for the analysis (\$/AFY or total capital cost in \$MM). He proposed looking at total capital cost (not bonding costs, etc.) on a \$MM basis and looking at O&M cost (including power and chemicals) on a \$/AFY basis. Member Graue noted that Separation Processes said they tailor their cost opinions to the requests of their client, but they typically develop a total \$/AFY number based on profit (if a private entity is developing the project), O&M costs, debt service, and other considerations. Chairman Nunley said he could provide an example table for use at the next meeting. Member Matsuyama suggested using the table to assign scores based on the range of costs. Chairman Nunley said he had anticipated this when he put the rubric together. Member Graue noted he had put together 10 different delivery strategies. Chairman Nunley and Member Saltoun discussed selecting the most inexpensive strategy or assigning a range of costs to reflect this. Member Graue said he has typical efficiency numbers for treating the different supply alternatives. Treating seawater results in an efficiency of 50% and treating brackish water with an efficiency of 85% according to Separation Processes.

The Committee next discussed reliability.

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State Water - Member Saltoun suggested the reliability for the San Luis Obispo County variation to deliver 2400 AFY (80% of 3000 AFY) would be very low since the Table A water is not available from an existing customer. The members discussed aspects of feasibility (permitting & contracts) that should be considered for State Water. Chairman Nunley noted the County had told the Committee members that adding a new customer to the State Water project could result in reopening the entire environmental process. He thinks the project ranks very low on feasibility due to the requirement that multiple entities approve the transfer. He also said the San Luis Obispo County supply variation would rank higher for reliability than the Santa Barbara County supply variation since San Luis Obispo County has excess Table A water. Member Watson thinks 5 years for low score, 1-2 year for moderate, and 1-year for high score on feasibility would be appropriate. Member Matsuyama asked if the Phase I project has permits and approvals. Vice Chair Sevcik said the environmental review covered Phase I through the full project and a future delivery of 6200 AFY. Member Matsuyama asked if reliability includes drought and earthquake risk considerations and noted the rubric should be written to include these. Member Garson said he would rank PXP low on reliability since it is a short-term (10-12 year solution) as opposed to State Water which has a long-term contractual obligation. He also discussed Oceano's interest in a short-term sale or transfer of State Water (less than 12 years) and this would rank low for reliability as well. Member Miller said he would look at State Water from San Luis Obispo County as having higher reliability than State Water from Santa Barbara County due to the County's excess entitlement.

Vice Chair Sevcik noted that the State Water contracts will be renewed in 2035. The District's contract with Santa Maria is an 85-year contract with a clause to renegotiate the contract at 2035 and address new costs as a result of negotiations between State Water customers and the state. Member Watson does not view this as a reliability issue.

Members Miller and Garson said they think the seawater and recycled wastewater alternatives are very reliable.

Members Saltoun and Graue discussed the Santa Barbara desalination exchange option. They discussed the short-term nature of a water exchange of State Water for seawater desalination and that the City did not intend to sell their water.

Member Miller suggested modifying the reliability criteria to evaluate ability to regularly deliver 80% of design flows and removing the 3000 AFY requirement.

Agricultural and Industrial Reuse - Member Garson said he thinks the Phillips 66 variation could be considered reliable.

Various members discussed agricultural tailwater. While quantities are not known, Member Garson noted it does represent a steady supply of water.

Chairman Nunley said the Committee does not need to complete rankings for alternatives that have fatal flaws. Member Watson noted it was worthwhile to keep all the alternatives on the matrix even if some have fatal flaws.

Public Comment:

Ed Eby, Nipomo resident, said he does not think Phase I is a standalone alternative but is a phasing approach for implementing a waterline connection to Santa Maria. He noted the project will cost more for full delivery of 3000 AFY than \$26M due to phasing, but the full

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project cannot be implemented since the funding was voted down. Member Matsuyama noted the Committee's Bylaws require analyzing both the phased and full Waterline Intertie Project.

Mr. Eby felt the water quality criterion represented water treatment requirements and these could be incorporated in project cost. He thought water quality should address TDS and nitrates of the delivered water. For example, seawater desalination would produce very high quality water and water from Santa Maria could vary over the year.

Mr. Eby noted that a dual distribution system must be addressed in the cost of any option requiring delivery of differing water quality.

He also said Twitchell Reservoir should be considered in the Surface Water evaluation, noted the weighting factors still need to be assigned, and thought the capacity at Polonio Pass WTP was related to capacity of the disinfection system.

He also discussed the recent vote in Oceano against selling State Water. Member Graue asked if this vote was limited to water or if it affected their wastewater as well and Mr. Eby responded that it only applied to their State Water. Mr. Eby noted any cost for transferring water from Oceano to the District must include all costs to deliver that water into the Nipomo system, such as any pressure mitigation requirements and possibly a pipeline directly to the District's tanks. He did not understand the benefit of a phasing column since phasing was a delivery strategy, not an attribute in itself.

See the attached draft matrix for a summary of draft scores.

5. OVERVIEW OF DISTRICT'S 2010 UWMP DEMAND AND SUPPLY PROJECTIONS

The Committee voted unanimously to defer this item until a future meeting.

6. DISCUSS NEED FOR SPOKESPERSON TO PROVIDE UPDATE TO THE BOARD

The Committee voted unanimously to defer this item until a future meeting.

7. PRESENT REFERENCE DOCUMENTS FOR REVIEW AND ACCEPTANCE

The Committee voted unanimously to defer this item until a future meeting.

8. SET NEXT COMMITTEE MEETING DATE AND TIME

The Committee voted unanimously to schedule the next meeting for January 25 at 9:30 AM to 12:30 PM. There was no public comment.

9. ADJOURN

Chairman Nunley adjourned the meeting at 3:57 PM.

ATTACHMENTS

Revised December 19, 2012, Meeting Notes

Draft Matrix

NIPOMO COMMUNITY SERVICES DISTRICT

DECEMBER 19, 2012

1:00 P.M.

MEETING MINUTES

SUPPLEMENTAL WATER ALTERNATIVES EVALUATION COMMITTEE

APPOINTED COMMITTEE MEMBERS

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PRINCIPAL STAFF

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MEETING LOCATION - District Board Room
148 S. Wilson Street, Nipomo, California

1. CALL TO ORDER, FLAG SALUTE AND ROLL CALL

Chairman Nunley called the Special Meeting of December 19, 2012, to order at 1:00 PM. and led the flag salute. At roll call, all Committee members were present except Members Matsuyama and Watson who arrived during Agenda Item 2.

2. PRESENTATION BY DR. BRADLEY NEWTON

Chairman Nunley presented the item and introduced Dr. Newton, who responded to comments and questions from the Committee and the public.

Member Garson asked Dr. Newton to provide a brief overview of the health and status of the groundwater basin and to discuss studies that have been conducted in the past. Dr. Newton responded that documents had been produced representing a wide range of objectives and scientific quality (from scientific research documents such as those produced by USGS to planning documents). He discussed the development of the geology within the Santa Maria river watershed through natural deposition, riverine erosion, and other processes. He noted that various groundwater elevation records indicate water levels within the Nipomo Mesa Management Area (NMMA) of the basin are approximately 20 feet lower than were identified in the 1960's. Seawater intrusion is the most significant threat anticipated by the NMMA Technical Group (TG) – once contaminated by seawater, future use of groundwater (that portion of the aquifer) is limited without significant flushing or other mitigation measures. Contamination from the surface by nitrogen and other compounds related to agriculture could also occur.

Member Garson asked if health and status of the basin are debatable or are in dispute. Dr. Newton described the management area boundaries developed within the 2005 Court Stipulation, and the requirement that technical groups within each management submit reports summarizing groundwater data. These reports must be unanimously approved by all parties within a technical group and can be disputed but as of yet, none have been disputed in the past four years of submittal to the court.

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Member Garson asked if there was evidence that the groundwater basin volume has been in decline. Dr. Newton said records indicate that groundwater elevations have been in decline in some locations, and water volumes could have decreased in these areas but could be higher in others to offset that impact. The court recognized that areas of the groundwater basin can go through wet and dry cycles and the overall water volume has not been calculated. Cross sections have been prepared and the NMMA continues to develop cross sections using available well logs in order to determine groundwater flow. By quantifying flow and other parameters such as rainfall and usage for a series of years, the NMMA TG may be able to estimate the native safe yield.

Member Watson asked if an opinion had been developed for the range of native safe yield. Dr. Newton responded that the NMMA TG had prepared a Key Well Index that reflects drought conditions in the late 80's/early 90's as well as the wet period in late 90's/early 2000's but may be less reliable in the earlier periods of the 70's and 80's since less data is available from that period. Over the past 5 years, the NCS D has developed a Groundwater Index (GWI) from 45 wells which behaves similarly to the Key Well Index (KWI). This indicates the Key Well Index is robust. Dr. Newton stated that there have been no catastrophic results of past groundwater usage but there is no detail regarding the location of the seawater/groundwater interface. Member Matsuyama asked if monitoring wells could be installed to identify this interface and Dr. Newton noted this would be very challenging and very costly. USGS and DWR had installed a series of sentinel wells close to the coastline from Pismo Beach through Guadalupe in the 1950's/60's to allow early recognition of seawater intrusion. Monitoring of a couple of the sentinel wells has indicated seawater intrusion. A well near Oceano had experienced seawater intrusion. In response, the Five Cities water agencies stopped pumping groundwater by importing Lopez and State Water. This stopped seawater intrusion and has allowed groundwater salts concentrations to recover.

Director Bob Blair asked about the Oceano Community Services District (OCSD) well that the OCSD had claimed was contaminated by surface water. Dr. Newton noted that well 30N02 was not the same well, and 30N02 had indicated seawater intrusion had occurred.

Member Graue asked if the KWI represented only part of the groundwater basin since the basin extends to Rancho Sisquoc. Dr. Newton responded that the KWI covers only the NMMA. Each management area collects its own data. Member Garson asked if the NMMA Technical Group looks at data from the other management area and Dr. Newton answered that they do. However, Santa Barbara County collects their data at a different time of year than the NMMA TG. This complicates the comparison of data, although the NMMA TG has found ways to interpret seasonal data for comparison purposes. NMMA data is not collected throughout the year, only a couple of times per year, and therefore it may not capture groundwater behavior during certain high rainfall periods or other short-term events.

Member Saltoun asked if the 20-foot groundwater elevation decline was limited to a small area or representative of the entire basin. Dr. Newton noted this only represented groundwater elevations in the NMMA. He said that DWR did not report the wells used to generate their contours so this interpretation is based on general groundwater levels from DWR contours and not individual wells. Member Saltoun asked if water from surrounding agricultural areas could flow into the cone of depression within the NMMA and Dr. Newton responded that it could. Member Saltoun further asked if a bypass or similar strategy was required to move water into the depressed area to prevent further depression of groundwater levels. Dr. Newton said that provided seawater intrusion did not occur, the impact of continuing to pump water from the depression could not be determined. However,

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the NMMA is connected to the other management areas and impacts in one will affect the others. Member Saltoun discussed the opinion among some in the community that there is no groundwater problem. Dr. Newton discussed the community's reliance on groundwater and hypothetically asked how the District would respond if seawater intrusion or another event reduces usage of groundwater. Member Saltoun asked if seawater could find a channel to contaminate groundwater without being observed in the sentinel wells and Dr. Newton indicated this could happen. However, there is no evidence of old channels that could allow seawater to flow preferentially into one part of the fresh groundwater basin. This presents a challenge since predicting where seawater intrusion could occur is more difficult than areas with old channels. Member Matsuyama asked if Blacklake Canyon could present an opportunity for seawater intrusion and Dr. Newton responded that it did not appear to present the right conditions due to presence of an underlying clay layer. This condition also results in various lakes holding surface and shallow groundwater.

Member Woodson asked if evidence of subsidence or reduced groundwater storage capacity had been observed. Dr. Newton and Member Woodson discussed observance of this in the western San Joaquin Valley. Dr. Newton had no knowledge of observances of this within the NMMA.

Member Watson asked what techniques could be effective for reducing seawater intrusion. He discussed regional water interties and recycled water among other concepts. Dr. Newton cited examples in the Los Angeles area (Orange County, Huntington Beach, and West Basin) where recycled water was injected to prevent seawater intrusion and noted this was very expensive and was an ongoing cost. Cooperation among groundwater users to manage the interface would be a cost-effective and beneficial solution. Challenges include the number of individuals who would need to agree to cooperate, who have different positions on the issues and have no desire or interest in cooperating or have pumping agreements that allow them to produce water without regard to current groundwater conditions. Member Watson also asked if surface percolation of recycled wastewater could prevent seawater intrusion. Dr. Newton said it would depend on the confining layers between the surface and the aquifer and this information would be necessary to determine if injection wells or percolation ponds could be effective. He noted that reducing extractions would have a more direct impact on reducing risk of seawater intrusion.

Member Garson noted that there would be benefit to developing a groundwater model to address some of the challenges being discussed and referenced the subcommittee meeting with Dr. Newton and the related discussion. Member Matsuyama added that she was surprised there had been multiple, competing models but not one definitive model developed in conjunction with the District's prior planning efforts. Dr. Newton responded that different questions require different models, and this is the reason multiple models had been developed and some did not agree. He also discussed the disparity between modeling and reality. He thinks a model could be constructed of the Santa Maria groundwater basin that would help plan to prevent seawater intrusion. He mentioned the major challenge in developing the model would be the initial data acquisition and organization. He also discussed the benefit to understanding the groundwater basin that would arise from the County's \$200,000 grant to study nutrient and salt issues.

Member Garson compared the \$26M cost to construct a water supply project to the hundreds of thousands that would be required to develop a groundwater model. Member Matsuyama noted the public was not convinced there was a seawater intrusion problem and this was critical to the public understanding and supporting the Board's actions to import water.

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Director Blair noted there may be areas with groundwater depressions but some other areas may have adequate water. He discussed the availability of water in the Summit Station area and also stated that an emergency connection was constructed on the Central Coast Water Authority's (CCWA's) pipeline for District use. He expressed surprise that some people who had been involved with District's water issues for a long time did not understand as much as he did.

Member Saltoun asked if developing a model would just show what the District has already seen in the KWI and other monitoring data. Dr. Newton responded this was correct and a numerical model can only replicate history. The challenge is using historical observations with model-based analysis to predict future conditions. There is no guarantee that future rainfall events, etc., will be similar to historical observations.

Chairman Nunley asked if a model is required to indicate there is a problem, if there was already evidence of seawater intrusion and formation of a depression. Dr. Newton said this was a management question, but from the technical perspective a model may not be able to predict seawater intrusion if it happens in a way not represented in the model. A model will help with management decisions but will not replace importation of water, if that is required to address the need for water.

Member Saltoun stated that a model would help with wellfield management but would not change what is observed today. Dr. Newton agreed and said wellfield management would be very beneficial and has been a focus of the NMMA TG.

Member Saltoun asked if difference in gradients results in uncontrolled flow into the NMMA and if there is a danger associated with water quality contamination through neighboring agricultural activities. Dr. Newton said that in the early 1950's, Worts had identified a thick clay layer that caps the Paso Robles Formation, which is the primary water producing zone. On top of the layer is sediment and the Mesa. The water in the shallow zone around Oso Flaco Lake, which lies above the clay layer, has been contaminated by agricultural activities. The shallow water levels can rise over time and tiles are used in some places to protect crops from waterlogged conditions. The geographic limits of this confining layer condition around the Mesa are unknown. Some shallow water wells are very productive in certain areas of the Mesa, but they have significant water quality concerns.

Member Saltoun asked if there had been evidence of communication or estimate of flow between the shallow and deep zones. Dr. Newton noted that Santa Maria River flow from Twitchell Dam releases were part of the recharge of shallow water to the deeper zones and this can be observed when reviewing groundwater contours.

Public Comment:

Bob Hensier, Nipomo resident, asked if satellite imagery including infrared and other technologies could help assess groundwater conditions. Dr. Newton responded that long-wave ground penetrating radar can be used and discussed examples, but the presence of vegetation and other land cover in the Nipomo area would prevent its use on the Mesa.

Bob Blair, District Director, said he was elected because people do not believe what is being discussed today. He wants to find a better solution than the \$26M water project because people are upset.

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Ed Eby, Nipomo resident, was concerned about the amount of money and time required to collect the data needed for the modeling effort, in addition to the effort to develop the model. The time factor was a primary concern because of the risk of seawater intrusion.

General Manager Michael LeBrun said the Board focused the Committee's effort on evaluating water supply options since the groundwater situation is very complicated and modeling would not result in addressing the need for new water on the Mesa. He noted the Nipomo CSD is the only water purveyor in the Santa Maria Groundwater Basin that has not participated in a supplemental water project to reduce groundwater pumping – all others have participated in reservoir projects or similar solutions. The District is charged with delivering water to 4300 connections. They have limited ability to prevent future groundwater production across the Mesa since they only pump approximately 15% of the total production. The District has a "junior" right to pumping the water that is lower priority than the agricultural users and other overlying landowners. As the Mesa has been developed and groundwater extraction has increased by golf courses and urban users, the District has had very limited control over pumping. The District intends to import supplemental water and has specified the quantity and schedule, and it is valuable that the Committee understands the background of local groundwater issues but its purpose is to evaluate supply alternatives. The Board plans to consider releasing bids on February 13th in conjunction with the Committee's findings. The District had an opportunity 20 years ago to participate in State Water and the Board is concerned about missing the opportunity to participate in the Santa Maria project.

Dr. Newton noted there is an ongoing cost to maintain and run the model, in response to questions about the modeling effort.

John Sonksen, Nipomo resident, noted OCSD had written a letter denying the conclusion that saltwater intrusion had been observed in a well and asked if Dr. Newton had a response to this. Dr. Newton noted that sentinel well 30N02, which yielded evidence of seawater intrusion, was not the same well discussed in the OCSD letter. The sample from 30N02 was collected and analyzed properly according to the records. Member Matsuyama asked how often the well was sampled and Dr. Newton said he thought it was collected monthly. He noted the well information was submitted in the Northern Cities Management Area Technical Group report and the TG had concluded the event had occurred. Dr. Newton did not have an opinion on the well discussed in the letter from OCSD.

3. GENERAL MANAGER'S REPORT

General Manager Michael LeBrun provided an update to the Committee on items relevant to their work. The Board met on December 12th and received a status update on the Committee's work from Member Watson. They ratified Mr. Saltoun as a member to the Committee. District staff provided updated contact information for all the Committee members. The Board had heard in November that Supervisor Teixeira had been working on a supplemental water solution but the Board had not received an update on this. District staff has been keeping the Supervisor and the Supervisor's staff informed of Committee meetings and progress. The General Manager asked the Committee to please let staff know prior to the meeting day if hard copies of the Staff Report were desired.

Bob Blair, Director, said he and Supervisor Teixeira had met with ConocoPhillips and they would like to help the District with their water supply issues. Under Title 32, they need to reduce their carbon footprint. They also want to expand their refinery. They produce 3 to 4 acre-feet of water per year. They may be interested building a pipeline to bring water in from the South SLO County wastewater treatment plant. It is the only refinery he knows that

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relies on groundwater. He will provide an update after the holidays when he gets a chance to talk to the Supervisor.

4. REVIEW DRAFT MINUTES FROM DECEMBER 7, 2012, COMMITTEE MEETING

Chairman Nunley introduced the item. The Committee voted to approve the draft minutes with no changes.

5. DISCUSS SUBCOMMITTEE PROGRESS

Chairman Nunley introduced the item. He noted he will continue to add meeting minutes and information provided by the Committee to the powerpoint file after each meeting. Member Woodson asked if the February 25th date to finalize the report was in conflict with the District's release of bids. Chairman Nunley responded that releasing bids would not require a commitment to build the project by the District, but if the Committee could present their report in rough draft form on February 11th, this would inform the Board's decision whether or not to release the bids. Member Matsuyama asked if the Board's plan was to go to bid in the middle of February and the General Manager responded they would authorize bidding on February 13th knowing the Committee's final report would come after that. He thinks the timelines are well synchronized between the Board and the Committee.

Member Watson asked what the cost would be to go out to bid. The General Manager responded it would not be expensive relative to the design cost. Chairman Nunley noted this was not a separate contract authorization and there is no expenditure of new funds to release bids. Member Watson asked if the Board needed a report prior to releasing requests for bids. The General Manager said the Board would like the Committee's input. Member Miller noted each bidder would spend tens of thousands to prepare their bids and a request for bids should be taken seriously. Member Matsuyama asked if the District is prepared to release a request for bids now and if the Board is just waiting for the Committee. General Manager LeBrun noted the District would not be ready until February and the Committee's work is not causing a delay.

Chairman Nunley asked if Member Saltoun would fill Mr. Armstrong's seat on the subcommittees for desalination, agricultural/industrial reuse, and State Water. Member Matsuyama expressed support for this but would leave it up to Mr. Saltoun, and noted his input would be valuable for other subcommittees as well. Member Saltoun said he would serve wherever he would be best utilized. Member Graue said Member Saltoun had already been asked to participate in their subcommittee.

State Water - Chairman Nunley provided a review of items added to the State Water progress report. Member Matsuyama asked for a definition of chloramination in the report.

Director Blair stated that the City of Santa Maria removes chloramines from their State Water with carbon filters.

Member Garson asked if there was an emergency connection to the CCWA pipeline. Chairman Nunley stated it was his understanding there was no connection. Director Blair said there was a concrete bunker where the connection was constructed. Former General Manager Doug Jones had led the effort to construct this connection and the District had paid for it. They were the only community who did this, according to Director Blair. General Manager LeBrun noted there were many challenges (not just physical) to connecting to the CCWA pipeline and there were no agreements in place for this. Member Garson clarified that even if there is a connection, it cannot be used. Chairman Nunley said he would talk to CCWA to determine the location of this connection.

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Demand Management (Conservation/Graywater) – Chairman Nunley said the subcommittee will be meeting with Ron Munds, City of San Luis Obispo Conservation Manager, tomorrow. Member Matsuyama will provide her slides before Christmas and will provide her report to the Chairman to incorporate in the presentation.

Agricultural/Industrial Reuse - Member Matsuyama provided a written agricultural/industrial reuse report including completion of their agricultural tailwater analysis to be included in the overall progress report. The subcommittee had concluded agricultural tailwater would not meet the District's objectives. Member Saltoun noted that not all of the 220 AFY from Phillips 66 would be available for use, maybe 85% or so. Member Miller asked if the refinery's use of recycled water had been included in this analysis or another section. Chairman Nunley noted this was included in the Recycled Wastewater from Municipal Facilities report.

Santa Maria Waterline Intertie Project – Member Miller noted the City of Santa Maria was looking at a nighttime/daytime varied flow in their hydraulic model to determine if this would be acceptable. It would increase total Phase I delivery. Member Garson asked to explain what the City's issues or concerns would be with varying delivery. Member Miller said the City had some reservations related to operational concerns but he noted the volume requested by the District was small relative to their overall demands, in his opinion, and Chairman Nunley said the City would want constant deliveries all the time ideally. Varying the deliveries throughout the day would allow the District to ramp up initial deliveries more quickly since they could deliver more water than planned in the Phase I capital cost. Chairman Nunley noted capital costs would be the same but the \$/AFY would be lower if varied deliveries were acceptable to the City.

Recycled Wastewater from Municipal Facilities - Member Garson asked if there are pipelines between Oceano and the District distribution system. Director Blair said there was a pipeline from the refinery and it could possibly be sliplined. Members Watson and Miller noted the use of this pipeline alignment had been addressed in the various recycled water studies for the Five Cities agencies. Member Miller asked for a placeholder for the quantity of water that could be used by Phillips 66. Member Watson noted Phillips 66 future water needs should be requested. Chairman Nunley said he would contact Phillips 66 to request this information. Member Miller noted it would be approximately \$4000/AF to treat and deliver water from SSLOCSD WWTF to the refinery based on the SSLOCSD Recycled Water study. He said Pismo WWTF effluent would also need to have similar treatment if that water was used by the refinery. Member Miller asked the Chairman to acquire any information on the capacity of the Phillips 66 outfall. Member Graue noted the outfall can be buried during some times of the year. Members Saltoun and Miller said the current discharge limit is permit-based but Member Miller was curious about the actual physical capacity, including how adding pumps could increase capacity. Chairman Nunley noted that discharging reverse osmosis brine through the outfall could be viewed favorably by regulatory agencies. Member Matsuyama said the outfall was 2500 feet long and 16 feet deep according to her notes and was rated for 300 gpm. Chairman Nunley will request this information and will send a copy of the email to the subcommittee.

Member Garson asked if the presence of an existing pipeline would reduce delivery cost to the Phillips 66 refinery. Member Miller noted the estimates from the Pismo Beach and SSLOCSD studies included the pipeline cost to deliver water to the refinery. If an existing pipeline could be rehabilitated or reused, it could reduce cost from estimates quoted in the study. Member Miller noted he could look into the possible cost reduction if a pipeline is reused or rehabilitated. Member Saltoun said the condition of the pipeline would be a

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significant factor in determining rehabilitation costs. Director Blair said he thought it would be cheaper to build a pipeline from Oceano than from Santa Maria.

Local Groundwater – Member Graue noted the subcommittee is working on a revision to this progress report. He said using the Dana wells instead of the Blacklake wells could help reduce the gradient. Member Miller stated some of the recommendations from the Committee should be provided to the Board even if they do not result in importing new water. Director Blair noted there was a new well site near the Santa Maria River. General Manager LeBrun said there was a well site near Riverside Road that was given by the County to the District. Their water resources attorney said they could not produce water from this location since they did not have the right to pump water from a different management area such as where this well is located. Member Graue added that he thought he had seen this opinion in the Boyle Constraints Analysis.

Member Garson asked if the Dana wells had the same issue. General Manager LeBrun responded that the Dana wells were pump-tested over 20 years ago and were very small (in the neighborhood of 300 gpm total). It would not resolve the overall problem since the wells are not in a high-producing water zone.

Member Matsuyama asked if the District still has only 3 agricultural customers. General Manager LeBrun responded there had been no change in the number of agricultural customers.

Member Saltoun asked if there were water quality issues related to different wells in the NMMA. The General Manager responded there were water quality differences among the wells.

Member Graue asked if the Dana wells should be redrilled horizontally to produce more water and General Manager LeBrun responded it was his understanding that this would not significantly increase production since the wells are not located over a productive zone of the aquifer.

Member Graue will provide the updated report to the Chairman. The subcommittee is planning to meet later this week to work on their report.

Seawater – Chairman Nunley noted the Seawater subcommittee would be participating in a conference call with San Diego County Water Authority to discuss the Carlsbad desalter. Member Graue had met with Black & Veatch to request cost information on desalination projects. Chairman Nunley noted that Member Graue would be talking with Separation Processes, as well.

Ranking – Chairman Nunley presented the updated ranking information. Member Watson asked if compliance with the court order and also the total volume should be considered. Member Miller noted that the draft definition of reliability in a prior Staff Report had included total volume that could be reliably produced. Chairman Nunley said the bylaws require the Committee only look at alternatives that comply with the court order. He directed the Committee to review the summary ranking table prepared by Member Watson which had been provided in the updated progress report. Chairman Nunley will email the file in Excel format to the Committee members as requested by Member Miller. Member Garson asked how this table would be completed. Member Watson said he had envisioned a numerical ranking would be applied, and the columns could be arranged to prioritize the more important ranking criteria from left to right. Various members discussed how weighting could be applied. Member Miller suggested the summary table could be shown with and without

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ranking criteria – two different ways. Members and Matsuyama discussed including “compliance with the court order” as part of the feasibility criterion. Member Watson noted that another way to use this column would be to identify that some alternatives may not directly meet the court order, but could still be useful to the Board. Various members discussed how this criterion could be applied relative to feasibility. Member Garson supported including the “compliance with court order” column separately from feasibility.

Member Saltoun suggested that the court may allow the District to use a different alternative if it meets the quantities required in the stipulation.

General Manager LeBrun said the Court and Board would likely consider any alternative that meets the requirements of the stipulation (“new” or imported water, delivery of 2500 AFY, and other provisions) even if it is not the Santa Maria Waterline Intertie Project.

Chairman Nunley noted the Committee could produce both the ranking and a “white paper” or discussion of recommendations that may not directly address the Court stipulation. Member Saltoun said he thought the court may be amenable to other water supply alternatives that meet the required quantity of imported water even if they are not the Santa Maria Waterline Intertie Project.

Member Watson said it may be possible to organize several of the criteria to address the District’s “long-term” concerns in addition to the need to import water on a short-term basis.

Member Garson noted it may be beneficial to take two of the alternatives to walk through the analysis in order to better consider an appropriate weighting approach.

Member Saltoun said there could be a row of weighting factors across the top of the table and a column across the right that multiplies the ranking by the weight and provides a total for each alternative.

Member Miller suggested that the Chairman or Member Saltoun come back with a spreadsheet with this functionality.

Various members expressed support for an upcoming meeting that would walk through the numerical ranking process.

Member Matsuyama noted that definitions of the criteria were needed to help with the ranking.

Member Garson suggested the next meeting focus on walking through the numerical ranking process with less emphasis on the other typical agenda items.

Member Miller said the Chairman could draft a scoring rubric and send to the Committee for consideration.

Public Comment:

Bob Blair, Director, noted that Oso Flaco does not have adequate water quality and Santa Maria River water is needed to percolate into the groundwater basin so these supplies may not be appropriate. He said OCSD has State Water available and would bring back more information on this. He noted a heat source is needed for desalination and Phillips 66 has a heat source. He thinks it should be looked at since they must comply with Title 32 and they may be willing to fund part of a project.

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Member Miller said the progress report should be updated to reflect conclusions such as these.

Member Saltoun noted that there are other ways to desalinate water without a heat source. Member Graue said there is an optimal temperature for membrane desalination processes.

The Committee voted (with Member Saltoun abstaining) to accept Member Saltoun in place of Member Armstrong on the subcommittee for State Water, Seawater, and Agricultural/Industrial Reuse. All members then voted unanimously to approve a second motion to direct the Chairman to bring back a written description of ranking criteria and range of scoring and incorporate input from Committee members into a revised ranking worksheet for consideration at the next meeting.

6. DISCUSS NEED FOR SPOKESPERSON TO PROVIDE UPDATE TO THE BOARD

Chairman Nunley presented the item. There was no public comment. The Committee had no action on this item.

7. PRESENT REFERENCE DOCUMENTS FOR REVIEW AND ACCEPTANCE

Chairman Nunley presented this item. There was no public comment. The Committee had no action on this item.

8. SET NEXT COMMITTEE MEETING DATE AND TIME

The Committee voted unanimously to schedule the next meeting for January 14 at 1:00 PM. There was no public comment.

9. ADJOURN

Chairman Nunley adjourned the meeting at 4:06 PM.

DRAFT - SUPPLEMENTAL WATER ALTERNATIVES EVALUATION COMMITTEE RANKING MATRIX - DRAFT																	DATE: 1/24/2013		SHOW RANKINGS	
MAJOR ALTERNATIVES	VARIATIONS	CRITERIA															FINAL SCORE	RANK		
		SUPPLY POTENTIAL			COST CONSIDERATIONS		COURT COMPLIANCE	CRITICAL MILESTONES FOR DELIVERY			RELIABILITY	PHASING	QUALITY	FEAS-ABILITY	SUSTAIN-ABILITY	PUBLIC SUPPORT			RAW SCORES	
		1,000 AFY	3,000 AFY	6,200 AFY	CAPITAL	O&M		1,000 BY 2015	3,000 BY 2020	6,200 (Future)										
		6.67%	6.67%	6.67%	6.67%	6.67%	6.67%	6.67%	6.67%	6.67%	6.67%	6.67%	6.67%	6.67%	6.67%	6.67%	100.0%			
SW	State Water Project	01-SW	Acquire Unused or Excess Table A Allocation from SLO County	10	10	1						8						29		
		02-SW	Acquire Unused or Excess Table A Allocation from SB County	10	8	1						5						24		
		03-SW	Reactivate Desal Plant in SB / Exchange for SWP Supplies	10	10	1						1						22		
C	Demand Management / Conservation / Graywater	04-C	Conservation Programs (Current and Future)																	
		05-C	Graywater Programs																	
AIR	Agricultural and Industrial Reuse	06-AIR	Agricultural Tailwater Reuse									1						1		
		07-AIR	Phillips 66 Refinery Process Water Reuse	3	1	1						8						13		
		08-AIR	Phillips 66 Refinery Thermal Waste Recapture	1	1	1						1						4		
		09-AIR	PXP Arroyo Grande Production Wastewater Reuse	9	1	1						1						12		
SM	Santa Maria Waterline Intertie Project	10-SM	Phase I only	10	10	10						10						40		
		10A-SM	Full Project	10	10	10						10						40		
RWW	Recycled Water Supplies	11-RWW	Acquire Supply from South SLO County Sanitary District	10	7	1						10						28		
		12-RWW	Acquire Supply from Pismo Beach	10	5	1						10						26		
LG	Local Groundwater	13-LG	Local Shallow Aquifer	1	1	1												3		
		14-LG	Dana Wells	1	1	1												3		
		15-LG	Riverside Wells	1	1	1												3		
SFW	Surface Water	16-SFW	Oso Flaco Lake	1	1	1												3		
		17-SFW	Santa Maria River	1	1	1												3		
SEA	Seawater / Brackish / Other Desalination Options	19-SEA	Seawater Desalination Project	10	10	10						10						40		
		20-SEA	Solar Distillation of Seawater	10	10	10						10						40		