

SACRAMENTO GROUNDWATER AUTHORITY
REGULAR MEETING OF THE BOARD OF DIRECTORS

Thursday, August 11, 2016; 9:00 a.m.

5620 Birdcage Street, Suite 110

Citrus Heights, CA 95610

(916) 967-7692

Agenda

The Board will discuss all items on this agenda, and may take action on any of those items, including information items and continued items. The Board may also discuss other items that do not appear on this agenda, but will not act on those items unless action is urgent, and a resolution is passed by a two-thirds (2/3) vote declaring that the need for action arose after posting of this agenda.

The public shall have the opportunity to directly address the Board on any item of interest before or during the Board's consideration of that item. Public comment on items within the jurisdiction of the Board is welcomed, subject to reasonable time limitations for each speaker. Public documents relating to any open session item listed on this agenda that are distributed to all or a majority of the members of the Board of Directors less than 72 hours before the meeting are available for public inspection in the customer service area of the Authority's Administrative Office at the address listed above. In compliance with the Americans with Disabilities Act, if you have a disability and need a disability-related modification or accommodation to participate in this meeting, please contact the Executive Director of the Authority at (916) 967-7692. Requests must be made as early as possible, and at least one full business day before the start of the meeting.

1. CALL TO ORDER AND ROLL CALL

2. PUBLIC COMMENT: Members of the public who wish to address the Board may do so at this time. Please keep your comments to less than three minutes.

3. CONSENT CALENDAR

Minutes of June 9, 2016 meeting

Action: Approve Consent Calendar item

4. SECTION 218 AGREEMENT FOR THE FEDERAL SOCIAL SECURITY ACT

Information Presentation: John Woodling, Executive Director

Action: Adopt Resolution 2016-04 for the Section 218 Agreement for the Federal Social Security Act

5. GROUNDWATER MANAGEMENT PROGRAM UPDATE

Information Update: Rob Swartz, Manager of Technical Services

6. FINDING OF CONSISTENCY RELATIVE TO CONDITION PF-8 OF THE SACRAMENTO COUNTY ELVERTA SPECIFIC PLAN

Information Presentation: Rob Swartz, Manager of Technical Services

Action: Direct staff on the submission of a finding of consistency letter to the Sacramento County Planning Department

7. EXECUTIVE DIRECTOR'S REPORT

8. DIRECTORS' COMMENTS

ADJOURNMENT

Next SGA Board of Director's Meeting – October 13, 2016, 9:00 a.m., RWA/SGA office, 5620 Birdcage Street, Ste. 110, Citrus Heights

Sacramento Groundwater Authority Board Meeting
August 11, 2016

AGENDA ITEM 3: CONSENT CALENDAR

STAFF RECOMMENDATION:

Action: Approve minutes of June 9, 2016 meeting



1. CALL TO ORDER

Chair Sheehan called the meeting of the Board of Directors to order at 9:00 a.m. at the Regional Water Authority/Sacramento Groundwater Authority office. Individuals in attendance are listed below:

Board Members

Audie S. Foster, California American Water
John Wallace, Carmichael Water District
Caryl Sheehan, Citrus Heights Water District
Marcus Yasutake, City of Folsom
Noelle Mattock, City of Sacramento
Rich Allen, Del Paso Manor Water District
Randy Marx, Fair Oaks Water District
Craig Davis, Orange Vale Water Company
Paul Green, Rio Linda/Elverta Community Water District
Neil Schild, Sacramento Suburban Water District
Pam Tobin, San Juan Water District
Rink Sanford, Self-Supplied Industry

Staff Members

John Woodling, Rob Swartz, Nancy Marrier, Cecilia Partridge, Monica Garcia and Rob Donlan, legal counsel.

Others in Attendance

Dan York, Brian Hensley, Rob Roscoe, Vanessa Nishikawa, Ralph Felix, Shauna Lorange, Hilary Straus, Al Dains, Tom Gray, Jafar Faghieh, Robert Kunz, Mary Henrici, Debra Sedwick, Robert Matteoli, Ping Chen, Mike O'Hagan and Charles Duncan.

2. PUBLIC COMMENT

None.

3. CONSENT CALENDAR

The minutes of the April 14, 2016 meeting

Motion/Second/Carried (M/S/C) Mr. Schild moved, with a second by Mr. Foster, that the April 14, 2016 SGA Board minutes be approved. The motion carried by the unanimous voice vote of all directors present.

4. CONTRACT FOR PROFESSIONAL AUDITING SERVICES

On June 14, 2012, the SGA Board of Directors approved a contract with Richardson & Company for professional auditing services for a five-year term with a provision that requires the SGA Board to approve the contract annually. The Fiscal Year 2016 audit will be the fifth year that SGA may contract with Richardson & Company. Richardson & Company's initial bid was \$19,050 for the FY 16 audit; however, with the new GASB 68 implementation this year there will be an additional fee of approximately \$3,000.

M/S/C Mr. Schild moved, with a second by Mr. Wallace, to authorize the Executive Director to contract with Richardson and Company to provide for professional auditing services for SGA's fiscal year 2016 audit. The contract shall not exceed \$22,500 for the FY 2016 audit. The motion carried by the unanimous voice vote of all directors present.

5. FINAL CONTRACT BETWEEN THE BOARD OF ADMINISTRATION CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM (CalPERS) AND THE BOARD OF DIRECTORS SACRAMENTO GROUNDWAER AUTHORITY (SGA)

In early 2013, CalPERS' Office of Audit Services audited the Regional Water Authority (RWA). In July 2013, OAS issued a draft report finding that five out of six RWA employees work only part time for RWA on the basis that those employees also provide services to the Sacramento Groundwater Authority (SGA). The findings allowed SGA to apply for CalPERS membership. SGA submitted a new agency application to CalPERS on February 2, 2015. SGA has been informed by CalPERS that their membership is approved and they will begin making their own payments beginning in FY17.

The last step in this process is to adopt Resolution 2016-02 for Employer Paid Member Contributions (EPMC) to mirror RWA's contract that provides that employees pick up their share of retirement at 2% per year and goes from 7% to 0% so that by FY19, classic employees pay their 7% share of CalPERS contribution. Additionally, SGA needs to approve the final contract between CalPERS and SGA. The CalPERS contract will become effective July 1, 2016.

M/S/C Mr. Schild moved, with a second by Mr. Sanford, to approve Resolution 2016-02 for Employer Paid Member Contributions (EPMC) and approve Resolution 2016-03 to adopt the final Contract between the Board of Administration California Public Employee's Retirement System (CalPERS) and the Board of Directors Sacramento Groundwater Authority (SGA). The motion carried by the unanimous voice vote of all directors present.

6. GROUNDWATER MANAGEMENT PROGRAM UPDATE

Rob Swartz, Manager of Technical Services, presented an information update on groundwater management program activities, including groundwater elevation

monitoring and groundwater quality monitoring. He handed out updated hydrographs showing groundwater elevations in our region. He said that there is prevalence of hexavalent chromium throughout the region. There was a briefing from the Air Force Real Property Agency at the last Regional Contamination Issues Committee meeting and they have calculated that the background concentration is approximately 14 micrograms per liter around McClellan, which becomes the standard for their cleanup efforts. The process is not open to public comment so, there is not a lot more we can do at this time. They are only required to evaluate the effectiveness of their current remediation operations. The results that they have would indicate that their current remediation operations are effective. It will be awhile before there is another open review process. Staff continues to collect and monitor data and information about hexavalent chromium in the basin, but there is not a lot of action with respect to what is happening at McClellan. Staff is wrapping up the study on PCE contamination with some ongoing sampling with results expected in the next couple of months. Staff will continue to monitor a set of wells for groundwater elevations on a monthly basis. This will help establish the appropriate months to conduct semi-annual water level monitoring to track highs and lows in the groundwater basin. Traditionally the state monitors what they consider to be the high and the low water levels every year in April and October.

7. SUSTAINABLE GROUNDWATER MANAGEMENT AT (SGMA) IMPLEMENTATION UPDATE

John Woodling, Executive Director, gave an update on the Sustainable Groundwater Management (SGMA). The California Water Commission adopted emergency regulations for Groundwater Sustainability Plans (GSP) and Alternatives as presented by DWR on May 16, 2016. The regulations are effective June 1st. SGA provided comments to the CWC on two occasions to influence the outcome of the regulations. Overall, the regulations were substantially improved from the draft version originally released by DWR. DWR was responsive to most of the comments of SGA, RWA and ACWA.

The inclusion of “substantial compliance” as a regulatory standard was retained in the final regulations. This should help to ensure that SGA and its neighbors in the North American Subbasin need to complete only the technical work necessary to demonstrate sustainability of the groundwater basin, rather than the regulations serving as a checklist of sorts.

Over the next several months, DWR will develop two additional deliverables: 1) best management practices for groundwater sustainability, and 2) a report on water available for replenishment. Staff is participating on ACWA subcommittees to provide input on both of these issues.

Now that the regulations have been finalized, staff will be working with others from Placer and Sutter County portions of the subbasin to consider whether the preparation of an alternative to a GSP is feasible and advisable. Such a submittal would be due by the end of the calendar year. Staff will update the SGA board on the issue and proposed approach in August. Placer and Sutter County interests are

continuing to evaluate the development of groundwater sustainability agencies for the portions of the subbasin outside SGA's jurisdictional area. This must be accomplished by July of 2017.

In the section on alternatives, the law allowed for an alternative to a GSP that could be an existing Groundwater Management Plan, adjudication or an engineer or geologist report demonstrating that you have been sustainable over the course of the past ten years. One challenge is that the alternate needs to apply over the entire basin. There are three paths to compliance: 1) an alternative for the entire basin; 2) prepare a Groundwater Sustainability Plan with SGA coordinating agreements with the neighboring areas; 3) have one Groundwater Sustainability Plan for the entire North American Subbasin. Staff will continue to pursue the alternative idea or alternatively look at what we can do as SGA to tee up progress on the GSP. Staff will bring a recommendation to the SGA board at the August board meeting on moving forward.

Mr. Roscoe commented that the final regulations that DWR and the Water Commission adopted were superior to the first round of drafts and were due primarily to detailed comments from Mr. Woodling and him working through ACWA as chairman of the Groundwater Committee. Mr. Woodling will sit on a panel of an ACWA program for Region 2 and 4 for a program on GSA called the View from Above. Everyone is invited to the program that is scheduled for June 21st at the Sacramento Suburban Water District Antelope facility from 10:00 a.m. to 2:00 p.m.

Mr. Woodling said that everyone who created and supports SGA can take credit for where we are and what has been accomplished. We are much better off complying with the new law than other places in the state because we began this work in 1998. A lot of staff time is spent talking with agencies who are asking what they need to do. SGA has a reputation of managing groundwater successfully. Local agencies came together to manage groundwater on a regional basis collaboratively and take the actions to make it sustainable.

8. EXECUTIVE DIRECTOR'S REPORT

Government Affairs Update – The deadline for legislation to move out of the house of origin was June 3, 2016. A summary of legislation being tracked by RWA is available at rwah2o.org. One bill of interest on groundwater is SB 1317 (Wolk). The bill would require well permitting agencies (such as Sacramento County) to have a process for well permit approval that considers whether a new well would impact the sustainability of groundwater in a medium or high priority basin under SGMA. RWA opposed the bill, arguing that the requirement was premature and burdensome in light of the SGMA requirements to develop a groundwater sustainability plan by 2022. The bill passed out of the Senate on a 21-17 vote.

Governor Brown issued Executive Order B-37-16 updating the state's drought emergency. In response, the State Water Resources Control Board adopted revised emergency regulation for water conservation that provided the option for local water suppliers to self-certify their water supplies over the next three years. If water

suppliers identify a potential shortage, the amount of that shortfall would become a mandatory conservation percentage to be enforced by the SWRCB.

Budget trailer bill legislation in 2015 removed the confidentiality of well log information. The public can now get access to well logs (with certain ownership information redacted). In light of this, the State Water Resources Control Board considered making the locations of public supply wells available on its Geotracker database. SGA staff coordinated ACWA Groundwater Committee input in a response.

SGA Outreach – SGA and RWA staff have been popular speakers at a number of venues of late. Our success in groundwater management is highly regarded throughout the state. Mr. Woodling gave an update on water issues to the Sacramento Valley Division of the California League of Cities on May 13, addressed the NCWA Water Leaders Course on May 27, and participated in the Groundwater Resources Association’s Contemporary Groundwater issues Council on May 26. Mr. Woodling will speak on SGMA implementation at a Law Seminars International conference on June 7, a GRA conference on June 8, and an ACWA Region 2 and 4 joint events on June 22. Mr. Woodling presided as chair of the ACWA Groundwater Committee at the Spring Conference on May 3, 2016. The meeting shattered unofficial attendance records, with over 160 people attending. The Groundwater Committee will next meet in September, in a San Joaquin Valley location to be determined.

RWA Anniversary – The Regional Water Authority was formed in 2001, and celebrates its 15th Anniversary this year. RWA will hold an event to commemorate the anniversary, and all SGA board members and agency staff are invited to attend the luncheon event on July 14th. Information is available at tinyurl.com/RWAanniv.

9. DIRECTORS’ COMMENTS

Mr. Yasutake said that on June 14th the City of Folsom is holding a public hearing for the 2015 Urban Water Management Plan.

Mr. Sanford asked if the emergency conservation regulations had been established for the year. Mr. Woodling clarified saying they established a new set of emergency regulations. The new regulations say that each agency should figure out what their shortage might be, assume three more dry years and assume the average demand that you had in 2013 and 2014 to determine any shortage you may have. That percentage shortage will be your new mandatory standard. There are restrictions on specific practices still in place. The Governor has ordered the Director of the State to come up with a permanent framework draft for water conservation.

Ms. Tobin said that San Juan Water District is concerned with the level of Folsom Lake, even though it is full now. San Juan Water District has been working with the Bureau of Reclamation who has also been working with the Wildlife, Fish and Game Department. The fisheries agencies are adamant about the flows that they want to see go out of Folsom Lake down the river for the fish. Both agencies are with the

Department of the Interior, which may necessitate trips to Washington D.C. There may be plenty of water at this time, however if we get into a regulated drought, customers who are replanting, reseeding, putting in new sod and trees will be right back where they were last year.

Mr. Wallace said that Carmichael Water District is contracting with Aerojet to provide water for Golden State Water. Last week they pulled a new pipeline segment under the river and anticipate providing water in August.

Mr. Schild reported from Sacramento Suburban Water District's last board meeting. A water shortage stage was set for 2016, which is a normal water supply. They are encouraging limited watering of 3 days per week.

Mr. Green reported that Rio Linda/Elverta Community Water District did the same thing as Sacramento Suburban Water District with their 3 day a week watering restrictions. Mary Henrici is retiring on a positive note with her many accomplishments including the ACWA Leadership Award that she received. He introduced Ralph Felix who is the new General Manager for their district.

Mr. Foster said that California American Water, as a regulated utility, will be going through the stress test functions. The California Public Utilities Commission gave two options, to either remain at current standards or run the stress test which leaves them at their current or higher conservation standards. The investor owned utilities are working with the California Public Utilities Commission to try and get further direction. California American Water is hoping they will be able to do the stress test and be in a position to call for voluntary conservation measures confirming that they have a reliable water supply for the next three years.

Mr. Marx said that Fair Oaks Water District Board Member Tom Tafoya resigned at their last board meeting. The position will not be filled at this time.

Adjournment

With no further business to come before the Board, Chair Sheehan adjourned the meeting at 9:54 a.m.

By:

Chairperson

Attest:

Nancy Marrier, Finance and Administrative Services Manager

AGENDA ITEM 4: SECTION 218 AGREEMENT FOR THE FEDERAL SOCIAL SECURITY ACT

BACKGROUND:

In early 2013, CalPERS' Office of Audit Services (OAS) audited the Regional Water Authority (RWA). In July 2013, OAS issued a draft report finding that five out of six RWA employees work only part time for RWA on the basis that those employees also provide services to the Sacramento Groundwater Authority (SGA). The findings required that SGA be recognized as an employer but also allowed SGA to apply for CalPERS membership. SGA submitted a new agency application to CalPERS on February 2, 2015 and the contract became effective July 1, 2016.

Given that the employees have been paying into Social Security through RWA, SGA needs to establish its own contract that mirrors RWA's contract. SGA has been advised that until a Section 218 agreement (agreement between state and federal government that ensures the SGA positions are covered for Social Security and Medicare) is approved by CalPERS and the Social Security Administration, SGA is not allowed to make Social Security payments. This process is anticipated to take 12 to 18 months to complete. Once the Section 218 agreement is in place, RWA can continue to function as the payer/agent for SGA and funds will be deposited with the Social Security Administration retroactive to July 1, 2016, that will ensure uninterrupted coverage. In the meantime, an agreement will be signed by the employees to deduct their portion of the social security payments from their paychecks and be placed into a designated account for the retroactive payment so that they are not responsible for keeping track of those funds on their own.

The attached resolution (SOC-40R) requests permission to conduct a referendum among all "eligible employees" for the Federal Social Security Act. Once the resolution is accepted by CalPERS, State and Federal laws require that not less than ninety days' notice will be given to the employees to vote on whether they want to participate or not. The vote will be by majority vote but the coverage will be given on an "all or none" basis. Once the employee voting has been completed, the application and agreement will be submitted to the Social Security Administration for their approval; this will take 6 to 12 months to complete. Once approved, the retroactive payment will be made and RWA will again function as the payer/agent for SGA.

STAFF RECOMMENDATION:

Information Presentation: John Woodling, Executive Director

Action: Adopt Resolution 2016-04 for the Section 218 Agreement for the Federal Social Security Act

RESOLUTION 2016-04

WHEREAS, Sacramento Groundwater Authority
(Official Name of Public Agency)

hereinafter designated as "Public Agency", desires to include services performed by its employees in positions covered by CALPERS
(Retirement System)

in the California State Social Security Agreement of March 9, 1951, providing for the coverage of public employees under the old age, survivors, disability and health insurance system established by the Federal Social Security Act, as amended; and

WHEREAS, State and Federal laws require, as a condition of such coverage, that a referendum first be authorized by the Board of Administration, Public Employees' Retirement System, and conducted among the "eligible employees" (as defined in Section 218(d)(3) of the Social Security Act) of the Public Agency; and

WHEREAS, it is necessary that the "Public Agency" now designate any classes of positions covered by said retirement system which it desires to exclude from coverage under said insurance system;

NOW, THEREFORE, BE IT RESOLVED, that the Board of Administration, Public Employees' Retirement System be, and hereby is requested to authorize the foregoing referendum; and

BE IT FURTHER RESOLVED, that upon receipt of authorization from the Board of Administration, a referendum shall be conducted in accordance with the requirements of Section 218(d) of the Social Security Act, and applicable State and Federal laws and regulations; that such referendum shall be held on the question of whether service in positions covered by said retirement system should be excluded from or included under an agreement under the insurance system established under the Social Security Act, as hereinbefore provided, with such coverage effective as to services performed on and after July 1, 2016; and
(Date)


BE IT FURTHER RESOLVED, that the following classes of positions covered by said retirement system of the "Public Agency" shall be excluded from coverage under said agreement:

1. All services excluded from coverage under the agreement by Section 218 of the Social Security Act; and
2. Services excluded by option of the Public Agency (Check only one; fill in part b. if checked):
 - a. No optional exclusions desired.
 - b. Service performed:

BE IT FURTHER RESOLVED, that not less than ninety days' notice of such referendum be given to all "eligible employees" as hereinabove provided; and that

John Woodling, Executive Director is hereby designated and
(Name and Title of Local Officer)

appointed to conduct such referendum on behalf of the "Public Agency" in accordance with law, regulations, and this resolution, including the giving of proper notice thereof to all such "eligible employees"; and

BE IT FURTHER RESOLVED, that with respect to eligible members thereof, the benefits and contributions of the said retirement system shall (not be modified in any way) ~~(be modified pursuant to provisions of Article 13, County Employees' Retirement Law of 1937)~~  ~~(be modified pursuant to the provisions of the Public Employees' Retirement Law); and~~

BE IT FURTHER RESOLVED, that the Public Agency will pay and reimburse the State at such time and in such amounts as may be determined by the State the approximate cost of any and all work and services relating to such referendum.

Presiding Officer

Sacramento Groundwater Authority
Official Name of Public Agency

Sacramento Groundwater Authority Board Meeting
August 11, 2016

AGENDA ITEM 5: GROUNDWATER MANAGEMENT PROGRAM UPDATE

BACKGROUND:

Staff will provide an update on groundwater management program activities, including groundwater elevation monitoring and groundwater quality issues.

STAFF RECOMMENDATION:

Information Update: Rob Swartz, Manager of Technical Services

**AGENDA ITEM 6: FINDING OF CONSISTENCY RELATIVE TO CONDITION PF-8 OF
THE SACRAMENTO COUNTY ELVERTA SPECIFIC PLAN**

BACKGROUND:

In April 1999, the Sacramento County Board of Supervisors adopted Board Resolution No. 99-0493 that resulted in an amendment to County Policy PF-8 specific to the Rio Linda and Elverta Community Plan area (see enclosed resolution and amended PF-8). As a result of PF-8, the Sacramento County Planning Department has indicated that it will look to SGA to reach a conclusion on the consistency of any proposed water supply for comprehensively planned development areas in Rio Linda and Elverta with the SGA groundwater management program.

One plan development area that is subject to the PF-8 requirement is known as the Elverta Specific Plan (ESP) area. In late April 2016, SGA staff was contacted by Sacramento County staff to review the Rio Linda/Elverta Community Water District Elverta Specific Plan Water Supply Strategy (see enclosed January 2016 strategy document) for consistency with the SGA groundwater management program. Staff will provide an overview of its understanding of the water supply strategy and will seek direction from the SGA Board in responding to Sacramento County's request for a finding of consistency.

STAFF RECOMMENDATION:

Information Presentation: John Woodling, Executive Director

Action: Direct staff on the submission of a finding of consistency letter to the Sacramento County Planning Department

RESOLUTION NO. 99-0493

**RESOLUTION OF THE BOARD OF SUPERVISORS
OF THE COUNTY OF SACRAMENTO AMENDING POLICY PF-8 OF THE RIO
LINDA AND ELVERTA COMMUNITY PLAN**

WHEREAS, the Board of Supervisors adopted the updated Rio Linda and Elverta Community Plan on June 3, 1998, including a Land Use Diagram and a Policy Plan, by Resolution No. 98-0683; and

WHEREAS, Policy PF-8 contained within the Policy Plan is a "water supply" policy that is modeled after General Plan Policy CO-20; and

WHEREAS, the Board of Supervisors initiated hearings to consider an amendment to Policy PF-8 by Resolution No. 99-0183, consistent with a Settlement Agreement approved by the Board in the matter of *Rio Linda/Elverta Community Water District v. County of Sacramento et al.*; and

WHEREAS, the proposed amendment adds clarity to Policy PF-8, recognizes that the affected groundwater basin is the entire North Area Groundwater Basin, and recognizes the role of the newly formed Sacramento North Area Groundwater Management Authority (SNAGMA) in implementing the policy, while maintaining consistency with General Plan Policy CO-20; and

WHEREAS, the Policy Planning Commission conducted public hearings and recommended approval of the proposed amendment to Policy PF-8 on April 14, 1999;

NOW, THEREFORE, BE IT RESOLVED that the Board of Supervisors does hereby approve the amendment to Policy PF-8 to read as follows:

"The County of Sacramento and the Cities of Citrus Heights, Folsom and Sacramento, through a Joint Powers Agreement, have established the Sacramento North Area Groundwater Management Authority ("SNAGMA") to implement a groundwater management program to protect the long-term sustainable yield of the groundwater basin underlying the North Area Basin. In the new growth area in eastern Elverta, and other comprehensively planned development areas, entitlements for urban development shall not be granted until the Board of Supervisors makes one of the following findings: (i) that an agreement between the developer and either the domestic water purveyor serving the area (the Rio Linda/Elverta Community Water District and/or Citizens Utilities Company) or the SNAGMA has been executed which (a) assures that arrangements are in place to deliver supplemental water supplies (i.e., surface water, reclaimed water, etc.) within the boundaries of the SNAGMA in quantities sufficient to prevent a long-

term net increase in groundwater pumping resulting from the proposed development and (b) assures that funding is made available to either the domestic water purveyor or the SNAGMA for all costs for delivery of such supplemental water supplies; or (ii) that an appropriate groundwater management program has been adopted by the Sacramento North Area Groundwater Management Authority ("SNAGMA") to protect the long-term sustainable yield of the groundwater basin underlying the area for which an entitlement is sought, and that water use resulting from such entitlement is subject to and consistent with such groundwater management program. The land use planning process may proceed, and specific plans and rezoning may be approved, prior to this finding being made by the Board of Supervisors."

On a motion by Supervisor Dickinson, Seconded by Supervisor Collin, the foregoing resolution was passed and adopted by the Board of Supervisors of the County of Sacramento, State of California, at a regular meeting thereof this 21st day of April, 1999, by the following vote, to wit:

AYES:	Supervisors:	Collin, Dickinson, Niello, Nottoli, Johnson
NOES:	Supervisors:	None
ABSENT:	Supervisors:	None
ABSTAIN:	Supervisors:	None



Muriel P. Johnson

CHAIRMAN OF THE BOARD OF SUPERVISORS
OF SACRAMENTO COUNTY, CALIFORNIA

Cindy H. Turner
CLERK OF THE
BOARD OF SUPERVISORS

FILED

APR 21 1999

BOARD OF SUPERVISORS

Cindy H. Turner
CLERK OF THE BOARD



Rio Linda / Elverta
Community Water District

Elverta Specific Plan Water Supply Strategy

Final



January 2016

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1. Introduction

This water supply strategy update addresses the Sacramento County’s PF-8 water supply requirements of the Elverta Specific Plan. This document once approved by the District’s Board of Directors will be incorporated in the next District Master Plan update.

The Elverta Specific Plan (ESP) is a proposed 1,756-acre development located in the north eastern side of the Rio Linda/Elverta Community Water District’s (District) service boundary (see Figure 1.1). The ESP owners provided

water demand projections and a supply plan approximately six years ago, but the owners put the development on hold and that water supply plan was never implemented. The landowners group is now moving forward with the project and has requested that the District provide a current water supply plan which incorporates the localized water plans, District’s Master Plan objectives, and changes in regional water supply. This report presents the current water supply strategy and infrastructure requirements for the ESP Development.

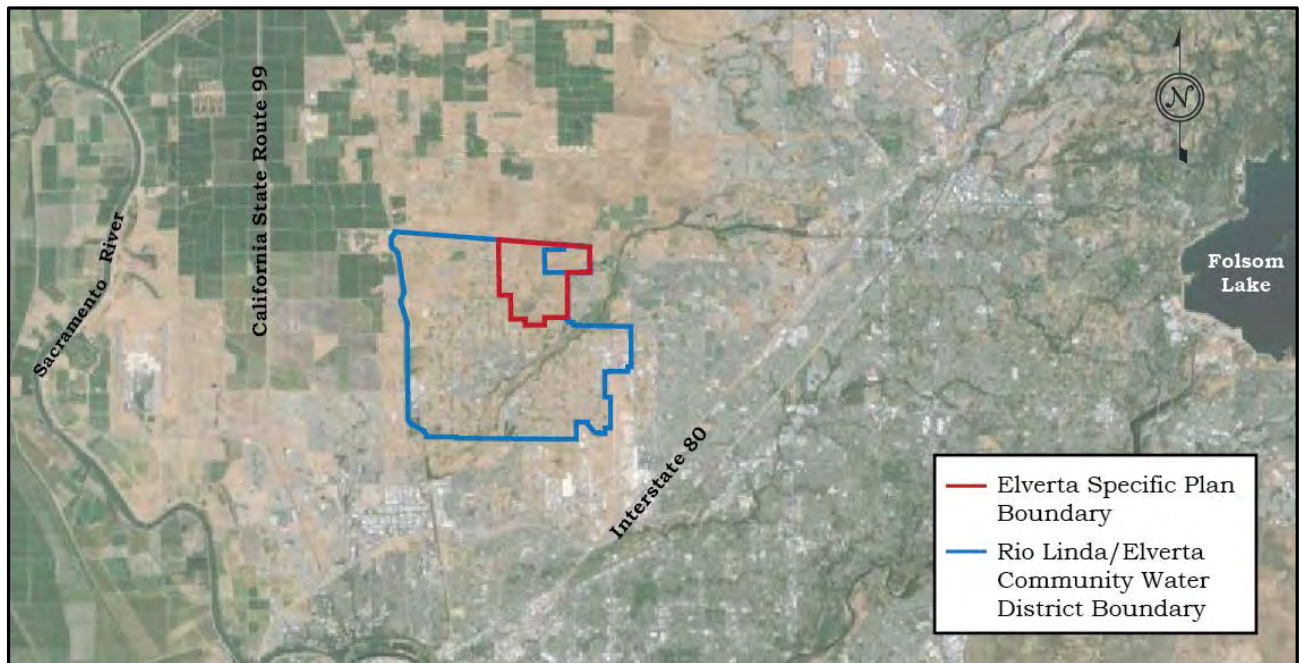


Figure 1.1 Elverta Specific Plan Area.

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2. Projected Demand

2.1 Annual Water Demands

The projected land use water demands and totals are shown in Table 2.1. The 6,425 units includes the ESP holding capacity with the approved density bonus and the updated Northborough density. The density bonuses allow developers to obtain more favorable local development requirements in exchange for offering to build more types of homes such as senior or low income. All land use information was provided by the developers in December 2015. Demand

and supply values will be updated upon final approval of land use plans and service area boundaries (see Appendix A for the last updated land use map). The industry standard for unaccounted water factor (10 percent) is added to the land use water demand total to determine the total water demand of 4,303 acre-feet per year (AFY). For the use of supply investigation, total water demands are rounded up to 5,000 acre-feet per year to account for above-average annual demands.

Table 2.1 Land Use Demand Projections

Land Use ID	Area (acres)	Dwelling Units	Unit Demand Factor (AF/DU or AF/ac)	Water Demand (AFY)
AR 1,5	237.74	216	1	216.0
AR 1	44.54	48	1	48.0
RD 1,2	10.98	19	1	19.0
RD 2	0	-	0.7	-
RD 3,4,5	717.6	3,339	0.6	2,003.4
RD 6,7	282.11	1,486	0.4	594.4
RD 10	5.7	46	0.3	13.8
RD 20	42.49	687	0.3	206.0
Commercial	17.5	--	2.5	43.8
Office / Professional	4.4	--	2.5	11.0
Parks	88.8	--	2.5	222.0
Schools	20.1	--	3.1	62.3
Drainage / Trails / Detention / Open Space (Irrigated)	51	--	1.3	63.8
Drainage / Trails / Detention / Open Space	163	--	0	0.0
Major Roads (irrigated)	39.4	--	2.5	98.5
Major Roads / Other	30.9	--	0	0.0
Total Residential	1,341	5,841	--	3,101
Residential Density Bonus	--	584	--	310
Total Non-Res	415	--	--	501
Subtotal:	1,756	6,425	--	3,912
Unaccounted Water (10%)	--	--	--	391
Total:	1,756	6,425	--	4,303

2.2 Initial Development Demands

The initial development phase demands are used to size the initial infrastructure required to serve development. Initial supply infrastructure will be installed to meet the first phase of demand projections. Supply infrastructure will be expanded beyond that time to match the pace of development growth. However, to eliminate redundancy and its associated higher ultimate cost, major supply infrastructure such as

pipelines or other elements will be sized for ultimate build out initially as determined by the District. For planning purposes, it is assumed the initial development demands will total 2,500 acre-feet per year, which are approximately the total demands for ESP Phase 1 and Northborough.

The projected monthly and total demands for the ESP initial development and build out are summarized in Tables 2.2 and 2.3.

Table 2.2 ESP Initial Development Monthly Demands (2,500 acre-feet per year)

Month	Month Factor	Average Monthly Demand (AF)	Average Day (MGD)	Maximum Day (MGD)	Peak Hour (MGD)
January	0.47	97	1.0	1.1	1.6
February	0.43	89	1.0	1.1	1.7
March	0.54	113	1.2	1.3	1.9
April	0.71	147	1.6	1.7	2.6
May	1.16	242	2.5	2.7	4.1
June	1.58	329	3.6	3.8	5.7
July	1.86	387	4.1	4.3	6.5
August	1.78	372	3.9	4.2	6.3
September	1.41	293	3.2	3.4	5.1
October	0.99	206	2.2	2.3	3.5
November	0.57	119	1.3	1.4	2.1
December	0.50	104	1.1	1.2	1.8
Total:	--	2,500	--	--	--

Table 2.3 ESP Build Out Monthly Demands (5,000 acre-feet per year)

Month	Month Factor	Average Monthly Demand (AF)	Average Day (MGD)	Maximum Day (MGD)	Peak Hour (MGD)
January	0.47	194	2.0	2.2	3.3
February	0.43	178	2.1	2.2	3.3
March	0.54	226	2.4	2.5	3.8
April	0.71	295	3.2	3.4	5.1
May	1.16	484	5.1	5.4	8.2
June	1.58	658	7.2	7.7	11.5
July	1.86	773	8.1	8.7	13.0
August	1.78	743	7.8	8.4	12.5
September	1.41	587	6.4	6.8	10.2
October	0.99	413	4.3	4.6	7.0
November	0.57	239	2.6	2.8	4.2
December	0.50	209	2.2	2.3	3.5
Total:	--	5,000	--	--	--

2.3 Equivalent Dwelling Unit

Equivalent Dwelling Unit (EDU) demand values are required to determine infrastructure phasing needs. An EDU

and other respective design parameters are summarized in Table 2.4. The design parameters are based on the design criteria developed in the District’s Master Plan (2014).

Table 2.4 EDU Analysis

Parameter	Value	Units	Notes
ESP Total Demand	3,411	AFY	DU demand only
ESP Dwelling Units	6,425	DU	Maximum bonus density DU
Demand/DU	0.53	AF/DU	Average annual
10 Percent UAW	0.053	AF/DU	Average annual
Total Demand/DU, AFY	0.583	AF/DU	Average annual
Total Demand/DU, gpd	520	gpd/DU	Average annual
Avg Day in Max Month, gpd	967	gpd/EDU	1.86 factor from SRF Report monthly peaking factor analysis
Max Day, gpd	1,034	gpd/EDU	1.07 times max month average day
Peak hour, gpm	1.08	gpm/EDU	1.5 factor on max day based on SRF report
Storage Factors			Total Storage = three parameters added together
Peak Hour Storage	259	gal/EDU	Peak hour for 4 hours
Emergency Storage	258	gal/EDU	25 percent of max day
Fire Flow Storage	960,000	gallons	4,000 gpm for 4 hours

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3. Supply Strategy

The previous 2008 supply strategy was developed under different circumstances and requirements. Since that time, the region has increased regional supply management efforts through the Water Forum Agreement implementation, SGA and West Placer Groundwater Management Plans, and the RWA Integrated Regional Water Management Plan. The supply strategy is updated to support these regional supply planning efforts and goals.

3.1 Previous Supply Strategy

The ESP supply planning documents from previous efforts evaluated numerous supply sources and strategies to serve the development under the PF-8 requirements. PF-8 was conditioned on the Development by the County to ensure proper long-term groundwater management. The selected strategy included a mix of groundwater, surface water, and recycled water. The supply strategy proposed a conjunctive use of groundwater and surface water. New wells would be drilled to supply groundwater in the quantity required for the ESP's maximum day demand. The District would purchase surface water from the Sacramento Suburban Water District (SSWD) during the off peak seasons and serve both ESP and other District demands in quantities sufficient to offset the annual groundwater pumping volumes. SSWD would sell surface water from its contract with Placer County Water Agency (PCWA), treated at the San Juan Water District's surface water treatment plant, and delivered to the District through the existing and extended Cooperative Transmission Pipeline. The District

would also implement a recycled water program with the City of Roseville. The District would buy reclaimed water from Roseville and divert it from Dry Creek to serve the Cherry Island Golf Course and Gibson Ranch Park. These two parks would in turn cease groundwater pumping, providing a reduction in basin groundwater pumping.

As part of this updated Water Supply Analysis, the previous supply strategy was re-evaluated with respect to reliability, cost, and complexity. Both PCWA and SSWD staff indicated concern with the surface water reliability, as it is projected that SSWD will only receive supply from PCWA approximately six in ten years (based on inflow to Folsom Reservoir and other parameters). SSWD staff also indicated that PCWA may no longer have the available surface water rights to supply the District even during wet years. In addition, the draft supply agreement with SSWD indicated that the District would be the first customer eliminated in the event of supply shortages. Past planning efforts were halted before supply costs were developed. However, the draft supply agreement included high connection fees that were associated with numerous non-supply payments to address past legal, environmental, design, and construction issues between the District and SSWD concerning the Cooperative Transmission Pipeline. Delivering the supply to the District would require coordination between four agencies (RLECWD, SSWD, SJWD, and PCWA). The coordination between these agencies that is required to schedule supply

availability and treatment capacity is considered complex.

The City of Roseville staff was contacted regarding the recycled water supply strategy. The staff indicated that they now may not have excess recycled water supply to sell the District due to their potential needs within their city. The City of Roseville staff are re-evaluating their needs and are not prepared at this time to commit to any recycled water supply.

The previous supply strategy is not recommended due to the low water supply reliability and the associated high connection fees and supply costs.

No reclaimed water is available in this area of Sacramento County. Discussions with SRCSD should be conducted about the possibility of adding a scalping plant to enable the use of reclaimed water.

3.2 Recommended Supply Strategy

Alternative supply strategies were investigated with the goal to develop a supply strategy that maximizes supply reliability and minimizes long-term operational costs. Each potential supply partner was contacted to review supply opportunities and constraints. Supply alternatives were either eliminated or not investigated further based on these initial discussions. High potential supply options were identified and further investigated as the District developed its recommended water supply strategy. A supply strategy for the entire RLECWD service area was developed in the 2014 Master Plan. The Master Plan supply strategy supports the regional planning efforts to enhance conjunctive use abilities region-wide.

3.2.1 Regional Planning Efforts

The North American River Groundwater Basin is extensively managed through current management plans and regional planning efforts to increase conjunctive use. The basin is not adjudicated, but managed through regional cooperation. Multiple public agencies and governmental boundaries overlay the basin. The Sacramento Groundwater Authority (SGA) manages the basin portion within Sacramento County, known locally as the North Area Basin. SGA is a joint powers authority formed in 1998 as a result of the Sacramento Area Water Forum. SGA developed and actively maintains the Groundwater Management Plan and produces an annual Basin Management Report that provides an update on basin objectives and programs and results (SGA Basin Management Report – 2013 Update). SGA has developed the water accounting framework (SGA Water Accounting Framework Phase III Effort, June 2010) to facilitate conjunctive use strategies and partnerships within the basin. SGA also leads ongoing basin monitoring activities as the reporting agency for the California Statewide Groundwater Elevation Monitoring Program (CASGEM). SGA monitors groundwater elevations and quality throughout the basin through a network of 23 groundwater-sampling sites.

The Water Forum process is a regional multi-stakeholder process to help meet water needs through 2030 and also meet environmental flow requirements on the lower American River. Extensive groundwater modeling and analysis was conducted as part of the process. Results recommended a total safe sustainable yield for the North Basin of

131,000 acre-feet per year (AFY). The 2014 SGA Groundwater Management Plan estimates the average pumping over the last 13 years of approximately 99,500 AFY. The ESP groundwater supply is estimated at 5,000 AFY, well within the Water Forum sustainable yield.

Additional modeling and planning of the groundwater basin has been conducted since the Water Forum Agreement. The Regional Water Authority developed and updates the American River Basin Integrated Regional Water Management Plan (ARB IRWMP). The ARB IRWMP provides a framework for the region to implement the vision: “The American River Basin Region will responsibly manage water resources to provide for the lasting health of our community, economy, and environment”. The document contains numerous goals, principals, objectives, and strategies to meet the vision. Water Resources Strategy 2 calls for an increase of groundwater production to 550 mgd by 2030. The 2013 production capacity is approximately 400 mgd. The ESP wells (approximately 9 mgd) will help meet this goal and will support the other goals of conjunctive use opportunities for increased reliability.

The West Placer County Groundwater Management Plan (WPCGMP) was developed by Placer County Water Agency, City of Roseville, City of Lincoln, and California American Water. The plan covers the North American Groundwater Basin portion that is in west Placer County, which abuts the northern edge of RLECWD’s service area. Both the SGA GWP and the WPCGMP address the same groundwater basin, although the plans

cover two different political boundaries. Both the Water Forum and SGA participated in the WPCGMP, and each WPCGMP agency also is a member of the Water Forum, SGA, RWA, and/or the ARB IRWMP. The WPCGMP identifies the WFA estimated sustainable yield in Sacramento County at 131,000 AFY, Placer County at 95,000 AFY, and Sutter County at 175,000 AFY. Basin Management Objective 2 indicates groundwater use will result in basin level fluctuations, and the management goal is to maintain an acceptable “operating range.” The ESP supply wells are within the 131,000 AFY sustainable yield, and will also help conjunctive use strategies, supporting the goals of the WPCGMP.

The District investigated supply options through the SGA Groundwater Accounting Framework. The District solicited purchasing groundwater credits from City of Sacramento, SSWD, and Carmichael WD, no agreement with any of these Agencies could be made.

3.2.2 RLECWD Supply Strategy

The Master Plan recommended supply strategy supports the regional planning efforts to enhance conjunctive use abilities region-wide. To achieve this, the region needs to increase its groundwater production capacity and enhance surface water supply sources and volumes. Cooperative efforts amongst agencies throughout the region will involve conjunctive use strategies between groundwater pumpers, surface water users, and those with both supplies. RLECWD will continue to serve existing and new customers with groundwater. RLECWD will collaborate within the region to enhance conjunctive

use strategies. As part of this effort, RLECWD is participating in efforts to develop a new surface water treatment plant on the Sacramento River. The new treatment plant will increase regional supply reliability, and also afford RLECWD a potential supplemental supply for conjunctive use within its own service area. However, regardless of regional partner participation, RLECWD intends to construct a surface water treatment plant and obtain surface water supplies to enhance service to its customers as stated in its April 2014 Water Master Plan. RLECWD will continue to develop a surface water treatment plant project on two parallel efforts: one with other partners, and one with just RLECWD.

A new transmission loop is also included as part of the connection fee. This loop will enable the distribution of surface and groundwater throughout the District.

3.2.3 ESP Supply Strategy

Based on the evaluation of several water supply strategies, it is recommended that RLECWD serve the ESP Development with groundwater. New groundwater wells will be constructed in or near the ESP development area. The ESP distribution system will be connected to the existing RLECWD distribution system to increase system-wide reliability and operational efficiencies.

The District is currently completing a rate case study that sets a connection fee to fund supply, storage, and distribution associated with growth. Surface water facilities are included as a component of the connection fee. Once surface water is made available to the District, it will be used to supplement the groundwater and assist in the overall health of the regional groundwater management efforts.

4. Phases of Development

The infrastructure will be phased to match ESP growth. The initial infrastructure must be in place to provide supply before any new customers can be connected. Additional infrastructure will be added as necessary to match growth.

4.1 Initial Development Infrastructure Phasing Requirements

The initial infrastructure is planned to serve the initial development areas as shown in Figure 4.1. Table 4.1 lists the initial development infrastructure requirements that must be built prior to connecting customers. It is assumed some form of groundwater treatment will be required. Actual requirements will be determined after the well is drilled, pump tested, and the well's water quality is sampled. Initial development infrastructure is shown on Figure 4.1.

Figure 4.1 shows the transmission mains that will be needed to serve the initial phases of ESP. These initial developments are shown in red hatching on the figure. ESP will be connected to the District's existing system with two initial off-site main extensions. The first main extension will be from ESP to Dry Creek Road and Q Street. The second main extension will be from ESP in 16th Street to Q Street then east to 24th Street. The two main extensions will provide redundant connectivity from ESP to the District's water system. The second main extension will enable the District's newest well (Well 15) to provide water supply backup to the wells being drilled as part of ESP initial

infrastructure phase. The location of the wells, reservoir, and pump station are shown at a tentative location. The exact location will be based on the results of the hydrogeological study and the property available (See Figure 4.1).

Figure 4.2 shows the initial phase of the conceptual groundwater treatment plant (GWP) that is planned to be constructed as part of the initial development of ESP. The facility consists of drilling groundwater Wells 16 and 17 and equipping only Well 16 for this initial phase. It is planned that both wells will be located on the same property. The exact location will be based on the recommendations within the hydrogeological study to avoid treatment and minimize cross effect that each well may have on each other. Both wells are being drilled with the water quality sampled to determine the type, if any, of treatment that is required. Well 16 will pump through treatment if necessary and fill a new 3 MG reservoir to supply ESP as its source of supply during normal operations. There will be four booster pumps that will draw from the reservoir and pump into the distribution system to supply ESP's MDD and PHD for their initial development. The facility will be equipped with a generator that will be sized for the initial electrical load and provide power to the facility during utility power outages.

Table 4.1 Initial Development Infrastructure Requirements

Parameter	Capacity	Units	Notes
Groundwater Well	1,500 gpm	1	Assumes one well will produce 1,500 gpm.
Groundwater Treatment	1,500 gpm	1	Assumes treatment is required.
Booster Pumping Station	4,530 gpm	1	Sized for initial development peak hour.
Storage Tanks	3 MG	2	Assumes one 3-million gallon tank, construction would be phased within initial development.
Transmission Mains	12-inch 16-inch 24-inch	23,000 LF 23,500 LF 13,500 LF	Pipelines would be phased within initial development depending on actual location of individual development.

4.2 ESP Buildout Infrastructure Requirements

The full infrastructure requirements at buildout for ESP are shown on Figure 4.3. Once initial infrastructure is installed, the District will monitor the rate of new connections, demands, capacities, and water quality. The District will implement the remaining infrastructure requirements in a phased approach to meet the water demand as development occurs. Ultimate buildout infrastructure requirements are summarized in Table 4.2.

Figure 4.3 shows the ultimate build out of the groundwater supply system. This includes the equipping of Well 17, expanding treatment if necessary, increasing backup power, and expanding the capacity of the booster station to supply ESP to meet their ultimate MDD and PHD. ESP Build Out Infrastructure Requirements

Parameter	Capacity	Units	Notes
Groundwater Wells	1,500 gpm	4	4 wells with assumed 1,500 gpm capacity.
Groundwater Transmission	16-inch	5,000 LF	Assume 2,500 for wells 3 and 4 each to connection to transmission loop.
Groundwater Treatment	8.7 mgd	4	Max day demands, assume treatment at each well.
Booster Pumping Station	9,000 gpm	2	Peak hour demands, up to two stations depending on ultimate storage tank locations.
Storage Tanks	5.5 MG	4	Assume one 3-million gallon tank at well treatment site and remainder combined with other storage throughout District.
Transmission Mains	12-inch 16-inch 24-inch	30,500 LF 23,500 LF 13,500 LF	

4.3 Supplemental Supply Infrastructure Requirements

The supplemental surface water supply project will require 25 mgd capacity (14,500 AFY) for RLECWD conjunctive use needs (RLECWD Master Plan – 2015 Update). The project may be larger depending on participation of other partners. For the purposes of this study and apportioning costs, it is assumed the project will be for RLECWD only. The initial capacity of the Supplemental Water Project (SWP) will be 5 MGD with 5 MGD capacity increases up to an

ultimate capacity of 25 MGD. All new connections will pay a proportionate share to fund this program.

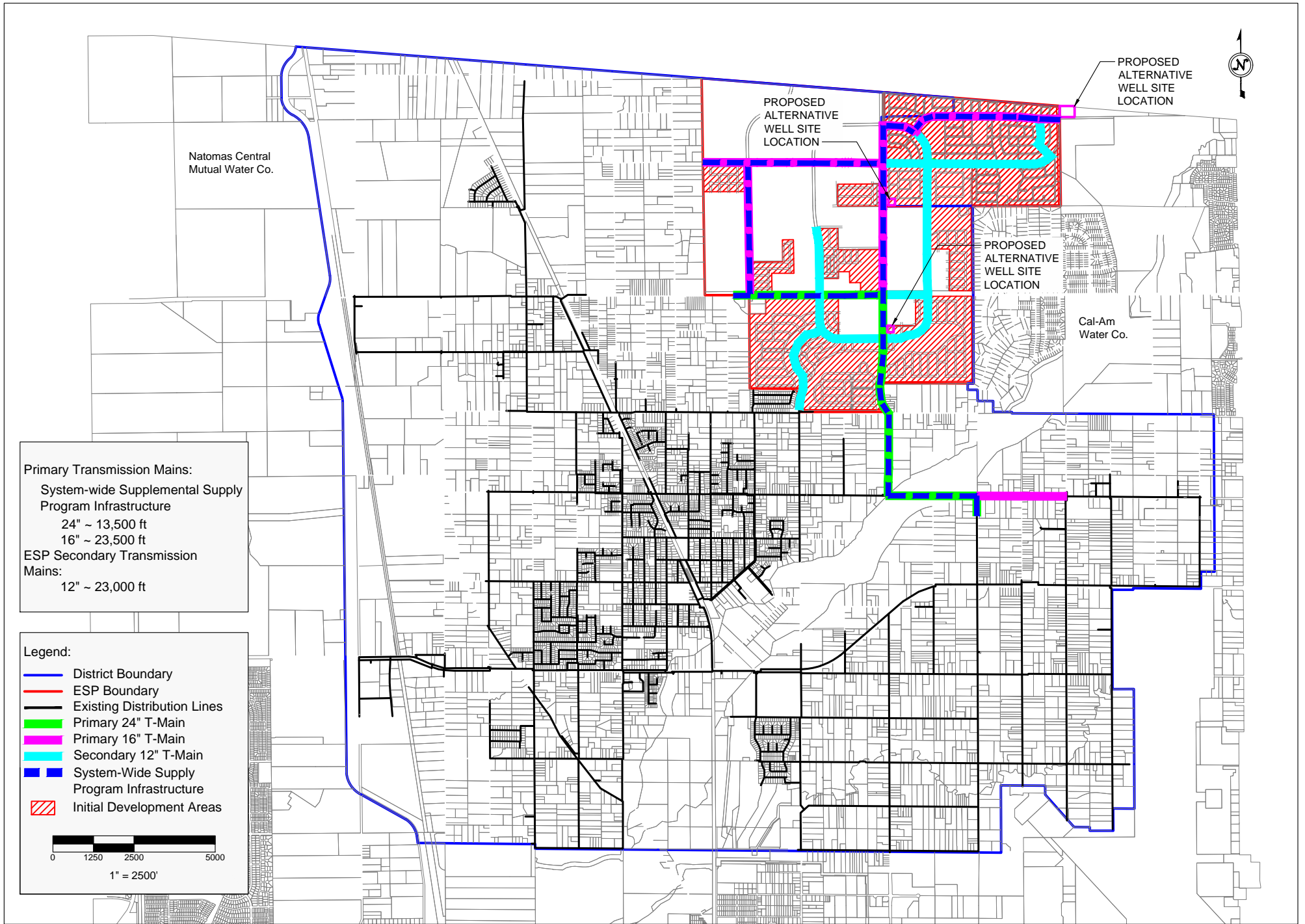
The program includes a service water treatment plant, raw water transmission main, and a transmission loop throughout the RLECWD service area. The SWP infrastructure requirements are summarized in Table 4.3. Figure 4.4 illustrates the supplemental supply project infrastructure. Locations shown are for illustrative purposes only; actual locations will be determined in the design phase.

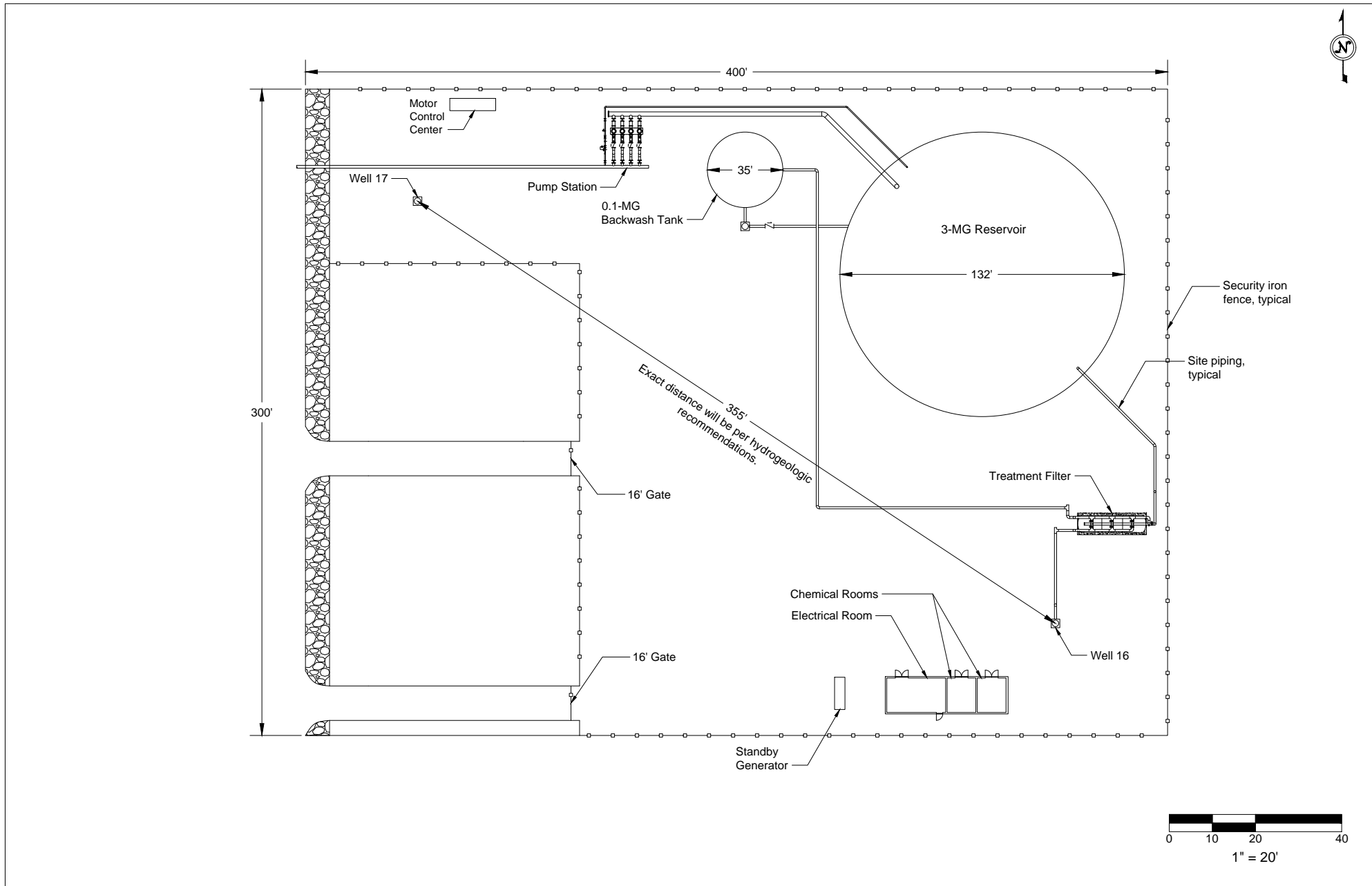
Table 4.2 Supplemental Supply Infrastructure Requirements

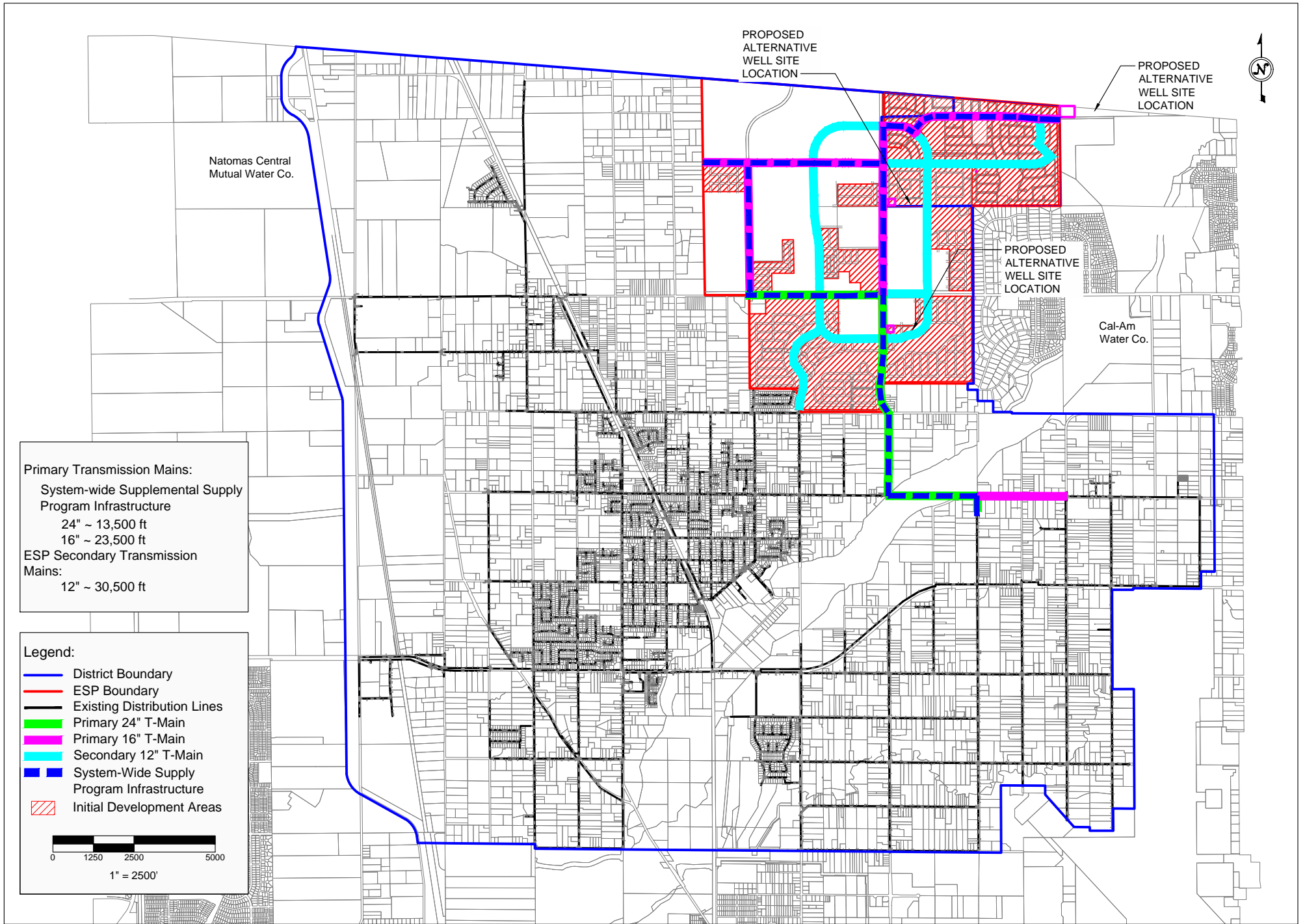
Parameter	Capacity	Units	Notes
<i>Surface Water Infrastructure</i>			
Raw Water Pumping Station	25 MGD	14,500 AFY	ultimate build out max day demand. Located at NCMWC Pritchard Lake Intake structure.
Raw Water Pipeline	36-inch, 32,000 LF		Sized for total 14,500 AFY District build out. Actual alignment selected will affect total length.
Raw Water Storage	50 MGal		Located at treatment plant site, number of cells to be determined during design.
Pre-Treatment Booster Pumping Station	25.2 MGD		Pump water from raw water ponds into treatment plant.
Surface Water Treatment Plant	25.2 MGD		Includes treatment and solids handling.
Treated Booster Pumping	25.2 MGD		Max day only, peak hour pumping met by distribution system booster pumping/storage sites.
<i>Distribution System Infrastructure</i>			
System Storage	13.5 MGal		Size and unit number to be determined. Located throughout District.
36-inch T-Main	6,000 LF		See figure for general location, actual locations and length determined in design.
24-inch T-Main	53,400 LF		
16-inch T-Main	31,000 LF		

5. Infrastructure Probable Costs

Tables 5.1 and 5.2 provide the probable costs for ESP's initial development phase and ultimate buildout, respectively. The ESP costs are compared to the full groundwater and supplemental supply infrastructure costs for the 14,500 AFY ultimate demand in Table 5.3 (from the RLECWD Master Plan – 2015 Update). The ESP financing plan will assign costs in a fee program to fund the construction of the necessary infrastructure.







Primary Transmission Mains:
 System-wide Supplemental Supply Program Infrastructure
 24" ~ 13,500 ft
 16" ~ 23,500 ft
 ESP Secondary Transmission Mains:
 12" ~ 30,500 ft

- Legend:
- District Boundary
 - ESP Boundary
 - Existing Distribution Lines
 - Primary 24" T-Main
 - Primary 16" T-Main
 - Secondary 12" T-Main
 - - - System-Wide Supply Program Infrastructure
 - / / / Initial Development Areas

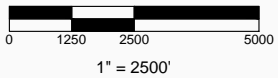


FIGURE 4.3

ELVERTA SPECIFIC PLAN FULL BUILD OUT INFRASTRUCTURE

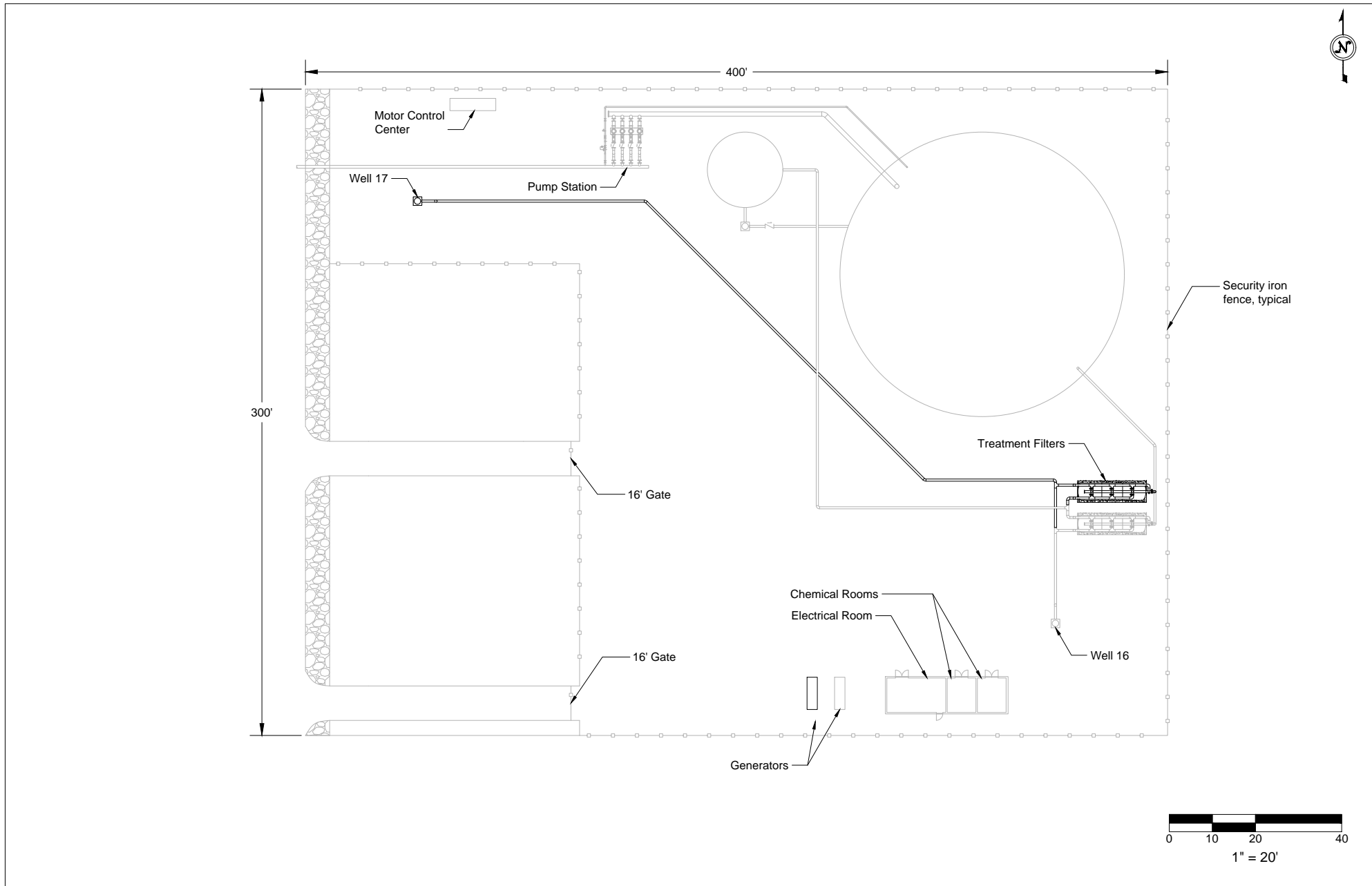
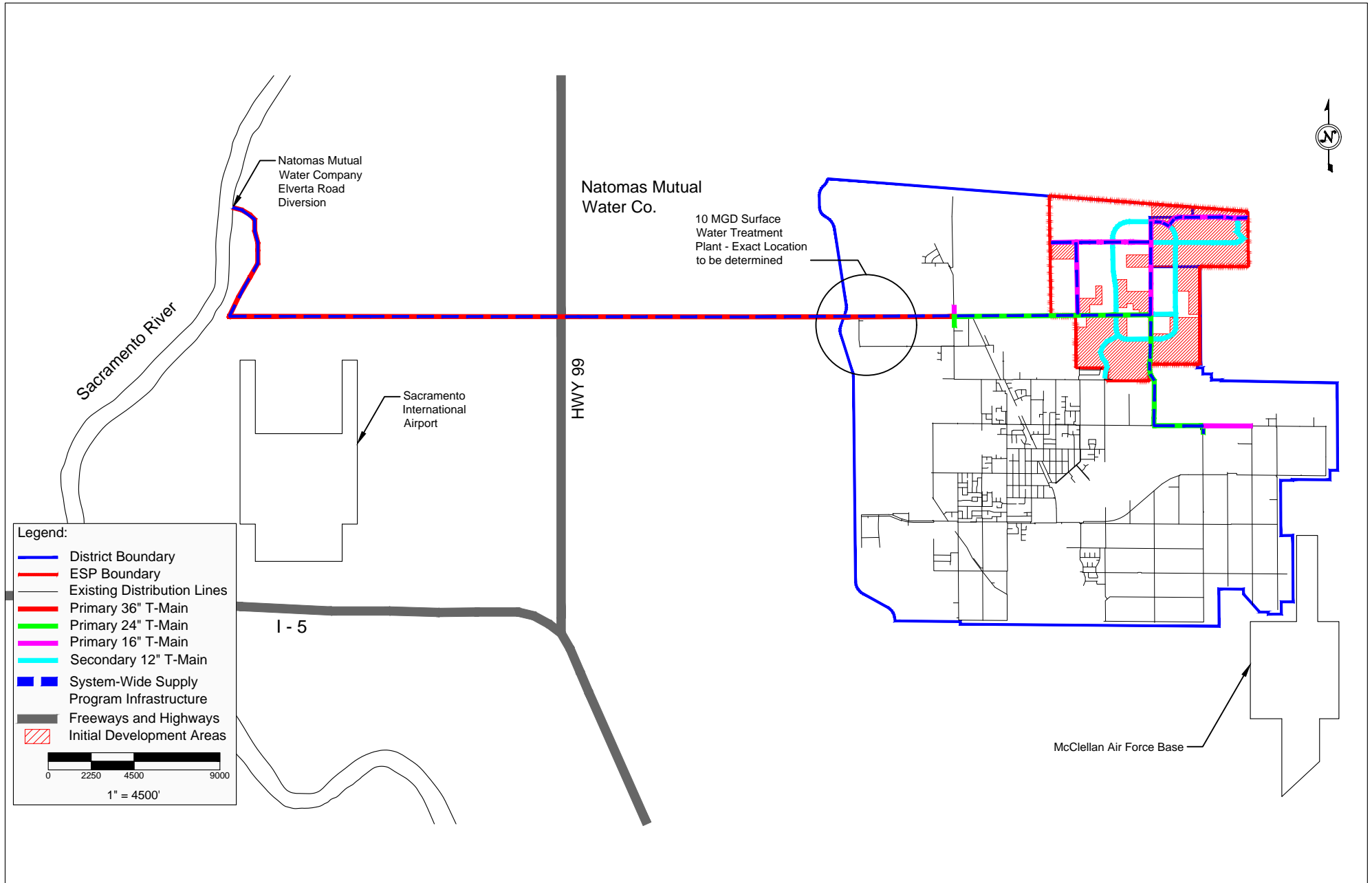


FIGURE 4.4

CONCEPTUAL ESP GROUNDWATER SUPPLY/TREATMENT FACILITY ULTIMATE BUILD OUT

JANUARY 2016



Legend:

- District Boundary
- ESP Boundary
- Existing Distribution Lines
- Primary 36" T-Main
- Primary 24" T-Main
- Primary 16" T-Main
- Secondary 12" T-Main
- System-Wide Supply Program Infrastructure
- Freeways and Highways
- Initial Development Areas

0 2250 4500 9000
1" = 4500'

Table 5.1 ESP Initial Development - Opinion of Probable Supply Infrastructure Costs

Item	Capacity	Unit Cost	Cost	Notes
Groundwater Well	1,500 gpm	\$2,000,000/well	\$2,000,000	Assumes one well will produce 1,500 gpm.
Groundwater Treatment	3,000 gpm	\$1,000/gpm	\$3,000,000	Assumes treatment is required.
Booster Pumping Station	4,530 gpm	\$600/gpm	\$2,718,000	Sized for initial development peak hour.
Storage Tanks	3.1 MG	\$1/gal	\$3,100,000	Construction could be phased within initial development.
12-inch Trans. Main	23,000 LF	\$150/ LF	\$3,450,000	Pipelines could be phased within initial development depending on actual location of individual development.
16-inch Trans. Main	23,500 LF	\$200/ LF	\$4,700,000	
24-inch Trans. Main	13,500 LF	\$310/ LF	\$4,185,000	
Subtotal:			\$23,153,000	
Contingency:			\$6,945,900	Construction contingency at 30 percent
Construction Total:			\$30,098,900	
Program Costs			\$6,320,769	Engineering, construction management, administration, permitting, CEQA, legal, right of way at 20 percent – assume 20 percent.
Total:			\$37,000,000	Rounded.

Table 5.2 ESP Ultimate Buildout - Opinion of Probable Supply Infrastructure Costs

Item	Capacity	Unit Cost	Cost	Notes
Groundwater Well	1,500 gpm	\$2,000,000/well	\$8,000,000	Assumes 4 wells each produce 1,500 gpm.
Water Transmission	10,000 LF	\$200/LF	\$2,000,000	Each well assume 2,500 LF to connect to loop.
Groundwater Treatment	6,000 gpm	\$1,000/gpm	\$6,000,000	Assumes treatment is required.
Booster Pumping Station	9,061 gpm	\$600/gpm	\$5,436,600	Sized for initial development peak hour.
Storage Tanks	5.3 MG	\$1/gal	\$5,300,000	Assumes one 3-million gallon tank, construction could be phased within initial development.
12-inch Trans. Main	30,500 LF	\$150/ LF	\$4,575,000	Pipelines could be phased within initial development depending on actual location of individual development.
16-inch Trans. Main	23,500 LF	\$200/ LF	\$4,700,000	
24-inch Trans. Main	13,500 LF	\$310/ LF	\$4,185,000	
		Subtotal:	\$40,196,000	
		Contingency:	\$12,058,980	Construction contingency at 30 percent
		Construction	\$52,255,580	
		Total:		
		Program Costs	\$10,973,700	Engineering, construction management, administration, permitting, CEQA, legal, right of way - assume 20 percent.
		Total:	\$63,500,000	Rounded.

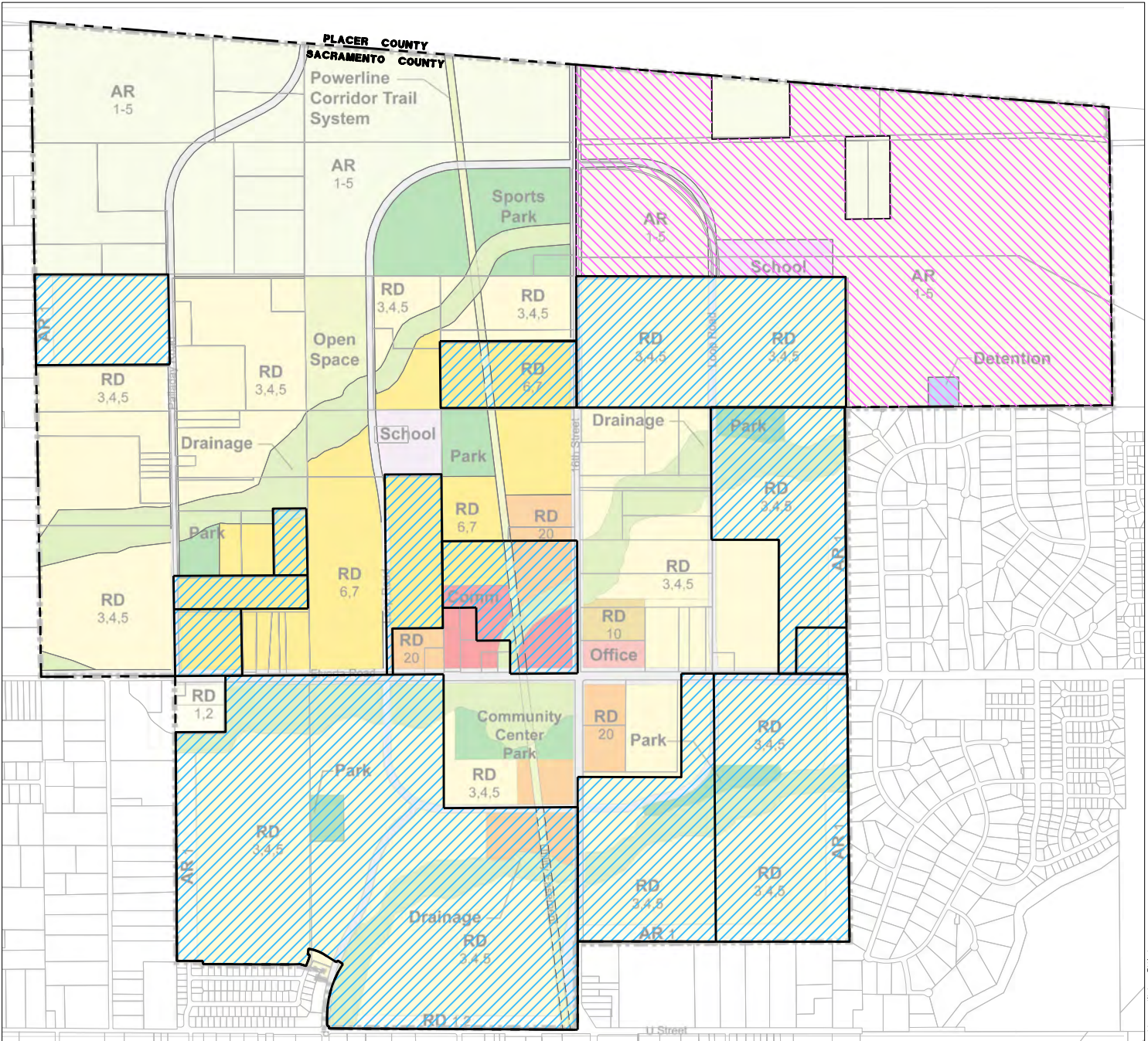
Table 5.3 Comparison of Supply Infrastructure Costs

	ESP Phase 1	ESP Ultimate Buildout	Full District Buildout
Annual Demand	2,500 AFY	5,000 AFY	14,500 AFY
Total Cost	\$37,000,000	\$63,500,000	\$351,000,000




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Appendix A. ESP Land Use Plan Map

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LEGEND

-  PHASE 1 PROPERTIES
-  NORTHBOROUGH
-  REMAINDER

Elverta SPA

MACKAY & SOMPS
 ENGINEERS PLANNERS SURVEYORS
 1552 Eureka Road, Suite 100, Roseville, CA 95661 (916) 773-1189

Date: 12/16/15
 Job No: 7501-30

12-16-2015 08:26:29 escrow P:\7501\Exhibits\Bacabone Impact\Elverta-Bacabone-Water-PHI.dwg P:\7501\PLAN\Elverta-Specific Plan 2014 Approved LUP.dwg [3] P:\7501\master_plans_Msris\P-Ult-ELV-SPA.dwg [4] P:\7501\Logo\NA\0885-VA\0885-C30-DTM.dwg [5] P:\7501\PLAN\Elverta-Adj.dwg

Sacramento Groundwater Authority Board Meeting
August 11, 2016

AGENDA ITEM 7: EXECUTIVE DIRECTOR'S REPORT

AUGUST 11, 2016

TO: SACRAMENTO GROUNDWATER AUTHORITY BOARD

FROM: JOHN WOODLING

RE: EXECUTIVE DIRECTOR'S REPORT

a. Government Affairs Update – The legislature was on recess during the month of July. A summary of legislation being tracked by RWA is available at rwah2o.org. SB 1317 (Wolk), which would have required well permitting agencies (such as Sacramento County) to have a process for well permit approval that considers whether a new well would impact the sustainability of groundwater, died in committee in the Assembly. RWA opposed the bill (attached), arguing that the requirement was premature and burdensome in light of the SGMA requirements to develop a groundwater sustainability plan by 2022.

Governor Brown issued Executive Order B-37-16 updating the state's drought emergency. In response, the State Water Resources Control Board adopted revised emergency regulation for water conservation that provide the option for local water suppliers to self-certify their water supplies over the next three years. If water suppliers identify a potential shortage, the amount of that shortfall would become a mandatory conservation percentage to be enforced by the SWRCB. All Sacramento County water suppliers have certified an adequate water supply so that no mandatory conservation is required. A number of agencies are requiring voluntary water conservation standards.

The State Water Resources Control Board is in the process of developing a maximum contaminant level (MCL) for 1,2,3-trichloropropane (TCP). Existing data for the Sacramento Region has not indicated the widespread presence of the compound; however, the proposed standard (50 parts per trillion) is lower than the detection level of some of the past monitoring efforts.

b. SGA Outreach – SGA and RWA staff have been popular speakers at a number of venues of late. Our success in groundwater management is highly regarded throughout the state. Most notably, Mr. Woodling was invited to speak on the successes of our region's conjunctive use program at the National Water Resources Association's Western Water Seminar on August 4, 2016 (attached).

The ACWA Groundwater Committee will next meet on September 14, in a San Joaquin Valley location to be determined.

c. SGMA Implementation – SGA staff continues to lead in implementation of SGMA. Staff attended a meeting of the Practitioner Advisory Panel to advise DWR on

development of the Best Management Practices and the Water Available for Replenishment report. Within the North American Subbasin, we continue to meet with other entities from the basin. SGA staff met with DWR staff to discuss the potential for an “alternative” to a Groundwater Sustainability Plan (GSP), which would need to be submitted by the end of the calendar year. The prospects are not promising, however staff are continuing to evaluate the potential cost and opportunity for success of this approach.

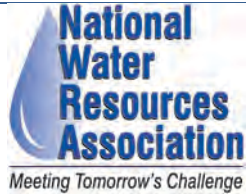
National Water Resources Association

2016 Western Water Seminar

(7-26-16)

August 3 - 5, 2016

**Sun Valley Resort
Sun Valley, Idaho**



2016 Western Water Seminar

Sun Valley, Idaho

Tuesday, August 2, 2016

12:00 pm – 5:00 pm **Columbine** State Executives Meeting – *Sponsored by Intertape Polymer Group*

Wednesday, August 3, 2016

8:00 am **Trail Creek** NWRA Memorial Golf Tournament

1:30 pm – 3:30 pm **Continental** **Western Water Law Seminar: Emerging Water Law Issues 2016**

- David Filippi, Partner, Stoel Rives LLP
- William A. Hritsco, Partner, Davis, Warren & Hritsco
- Andre Monette, Partner, Best Best and Krieger

1:30 pm – 2:15 pm **Limelight C** **Public Affairs Track:**
 2:15 pm – 3:30 pm **Public Affairs Workgroup Inaugural Meeting**
Workshop: The Power of Public Affairs: Key Components and Case Studies

1:30 pm – 2:30 pm **Lupine** **Budget and Finance Committee Meeting**

2:30 pm – 3:30 pm **Camas** **Policy Development Committee Meeting**

Caucus Meetings

3:30 pm – 4:30 pm **Camas** • Groundwater Caucus
Limelight C • Irrigation Caucus
Continental • Municipal Caucus
Lodge • Professional Services Caucus
Board Rm

4:00 pm – 6:00 pm **Limelight A** **Registration**

4:30 pm – 5:30 pm **Lupine** **Strategic Planning Committee Meeting**

4:30 pm – 6:00 pm **Sawtooth** **Hydro Permitting Roundtable**

- Chuck Sensiba, Partner, Van Ness Feldman

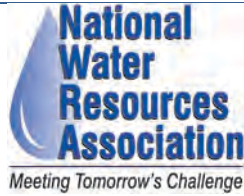
Title Transfer Roundtable

4:30 pm – 6:00 pm **Ram** • James Hess, Chief of Staff, U.S. Bureau of Reclamation
 • Kiel Weaver, Staff Director, House Subcommittee on Water, Power and Oceans (via telephone)

4:30 pm – 6:00 pm **Camas** **Columbia River Treaty Roundtable**

- Richard Agnew, Chairman, Van Ness Feldman

6:00 pm – 7:00 pm **Limelight Terrace** **Welcome Reception**

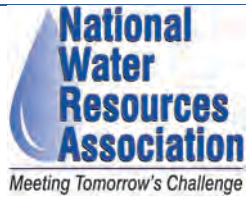


2016 Western Water Seminar

Sun Valley, Idaho

Thursday, August 4, 2016

7:00 am – 3:00 pm	Limelight A	Registration
8:00 am – 9:00 am	Continental	<p>General Session: Municipal Caucus Coffee and Pastries ~ Welcome, Tage Flint, Chair</p> <ul style="list-style-type: none"> • Deven Upadhyay, Group Manager, Water Resource Management, Metropolitan Water District of Southern California • Bryan R. Phinney, P.E., D.W.R.E., Wyoming Region Manager, Keller Associates
9:00 am – 10:00 am	Limelight B	<p>General Session: Innovations in Groundwater Management</p> <p>Moderator – A.J. Olsen, Groundwater Task Force Co-Chair, NWRA</p> <ul style="list-style-type: none"> • Scott Bedke, Speaker of the House, Idaho House of Representatives • John Woodling, Executive Director, Regional Water Authority (CA)
10:00 am – 10:30 am	Limelight A	Break
10:30 am – 12:00 pm	Limelight B	<p>General Session: Federal Affairs Update, Task Force Business Meetings, Break Out Sessions</p> <p>Special Guest – Dionne Thompson, Deputy Commissioner, External and Intergovernmental Affairs, U.S. Bureau of Reclamation</p> <ul style="list-style-type: none"> • Army Corps Task Force – U.S. Army Corps of Engineers Headquarters, Division & District Regulatory Concerns • Environment Task Force – Endangered Species Act Administration Update • Groundwater Task Force – Protecting the Role of the States • Water Power Task Force – Emerging Energy Issues • Water Quality Task Force – Waters of the United States • Water Supply Task Force – Water Supply Legislation and Regulation
12:00 pm – 1:30 pm		Lunch on Own
1:30 pm – 2:00 pm	Limelight B	<p>Special Presentation by NWRA Summer Interns – Finance White Paper</p> <p>Moderator – Ian Lyle, Director of Federal Affairs, NWRA</p> <ul style="list-style-type: none"> • Peter Levish and Kaycee Royer
2:00 pm – 3:00 pm	Limelight B	<p>General Session: Investing in Water Projects, Sponsored by Professional Services Caucus</p> <p>Moderator – Blaine Dwyer, NWRA Professional Services Caucus, Chair</p> <ul style="list-style-type: none"> • Bech Bruun, Chairman, Texas Water Development Board “The Texas Water Development Board SWIFT program and its role in implementing the Texas State Water Plan”
3:00 pm – 3:30 pm	Limelight A	Break – <i>Sponsored by Colorado River Energy Distributors Association</i>
3:30 pm – 4:30 pm	Limelight B	<p>General Session: Ethics Training for Water Professionals</p> <ul style="list-style-type: none"> • Gordon Wells, Division Manager, Freese and Nichols, Inc.
4:45 pm	Limelight C	NWRA Board Meeting
6:30 pm – 10:30 pm	Limelight B	<p>Western BBQ ~ Silent Auction ~ Golf Tournament Awards</p> <ul style="list-style-type: none"> • Master of Ceremonies – Dave Reynolds, Association of California Water Agencies



2016 Western Water Seminar

Sun Valley, Idaho

Friday, August 5, 2016

7:00 am –
10:00 am

Limelight A Registration

**General Session: Irrigation Caucus Coffee and Pastries ~ Welcome, Tom Davis, Chair
FDA Food Safety Modernization Act (FSMA)**

8:00 am –
9:00 am

Continental

- Melissa Partyka, Ph.D. Candidate, University of California, Davis, Western Institute for Food Safety and Security
- Kate Woods, Vice President, Northwest Horticultural Council

9:00 am –
10:00 am

Limelight B

General Session: Risk and Liability Issues of Urbanization and Canal Encroachments

- Darrell Child, Executive Vice President, Olympus Insurance Agency
- Steve Cain, Facilities and Lands Manager, Provo River Water Users Association
- Andrew J. Waldera, Principal, Sawtooth Law Offices, PLLC

10:00 am –
10:30 am

Limelight A

Break – *Sponsored by Olympus Insurance Agency*

10:30 am –
12:00 pm

Limelight B

General Session: Emerging Water Markets

Moderator – Tim Quinn, Executive Director, Association of California Water Agencies

- Don Kraus General Manager, Central Nebraska Public Power and Irrigation District
- Lyndon Vogt, General Manager, Central Platte Natural Resources District

10:30 am –
1:00 pm

Continental

Policy Development Committee Meeting Follow Up

Sacramento Groundwater Authority Board Meeting
August 11, 2016

AGENDA ITEM 8: DIRECTORS' COMMENTS