APPENDICES

BLSMWC Preliminary Engineering Report - Water Prepared by: MC Engineering October 2016

APPENDIX A

American Community Survey



Rural Development October 1, 2016

855 Nordic Place Manteca, CA 95336-3774

Voice 916.425.4768 Fax 209.823.0248 TDD: 530.792.5848 SUBJECT: Interest Rates for Water and Waste Disposal Loans

Effective from **October 1, 2016 through December 31, 2016** interest rates for Water and Waste Disposal loans **approved on or after May 23, 2008** are as follows:

Poverty Line	decreased to	1.375%	. <\$50,306.00*
Intermediate	decreased to	1 .875%	\$50,307.00 - \$62,883.00*
Market	decreased to	2.375%	>\$62,883.00*

In order for USDA Rural Development loan financing to be written at the Poverty Line interest rate shown above, the MHI must be less than \$50,306.00 based on 2010 census data <u>AND</u> there must be a written and issued (water or wastewater system) **violation for a health standard from a governmental agency**. If the previously stated criteria cannot be met then the loan portion of USDA Rural Development financing will be written at the Intermediate Interest Rate level or Market Rate level.

/s/ FRANK J. RISSO Community Programs Specialist

* = MHI (Median Household Income) per 2010 Census Data

EXPIRATION DATE: December 31, 2016

USDA is an equal opportunity provider and employer.

If you wish to file a Civil Rights program complaint of discrimination, complete the USDA Program Discrimination Complaint Form, found online at http://www.ascr.usda.gov/complaint_filing_cust.html, or at any USDA office, or call (866) 632-9992 to request the form. You may also write a letter containing all of the information requested in the form. Send your completed complaint form or letter to us by mail at U.S. Department of Agriculture, Director, Office of Adjudication, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410, by fax (202) 690-7442 or email at program.intake@usda.gov.

APPENDIX B

CCWD and Board Resolution No. 2015-2017

AGREEMENT BETWEEN CALAVERAS COUNTY WATER DISTRICT AND BLUE LAKE SPRINGS MUTUAL WATER COMPANY FOR WHOLESALE TREATED WATER SERVICE

This AGREEM ENT ("Agreement") is made effective this <u>10/28/2015</u> by and between Calaveras County Water District, a California special district ("CCWD"), and Blue Lake Springs Mutual Water Company, a non-profit corporation and mutual water company ("Water Company"). This Agreement refers to CCWD and Water Company collectively as the "parties."

RECITALS

- A. CCWD provides water and wastewater services within its service area in Calaveras County, California, including communities in the Ebbetts Pass service area, such as Arnold, from water diverted from the Stanislaus River.
- B. The Water Company provides treated water service to the Blue Lake Springs subdivision in Arnold, California from locally owned and operated groundwater wells.
- C. The Water Company pu rchased water on an as-needed basis from CCWD since the beginning of the subdivision in the mid-1960s through 1986 to supplement its groundwater wells. During the severe drought years of '76 and '77, the Water Company developed an initial well field which substantially lost yield by 1985.
- D. By 1986, both the Water Company and CCWD u rgently needed to increase system capacity in the Ebbetts Pass service area to meet new water demands. The Water Company and CCWD reached an agreement (Resolution 86-52) to develop new wells at White Pines Lake and build a treatment plant in Blue Lake Springs that would meet part of the demand of the entire service area until a new treatment plant could be constructed in Avery. Half of the new infrastructure in Blue Lake Springs was paid for with a grant and the other half with a loan, both from the Northf ork Project Development Fund of CCWD. The loan obligation was half CCWD debt and half Water Company debt.
- E. CCWD completed construction and began operation of the Avery water treatment plant (Hunter's) by 1992, at which time CCWD moved fully to its surface water supply and no longer relied on supplemental ground water from the White Pines wells and Blue Lake Springs treatment plant. At the same time, the Water Company decided to remain independent of the new surface water facilities of CCWD and instead continued to rely solely on groundwater through the wells at White Pines.
- F. By mutual agreement in 1986 and application of CCWD Ordinance 87-2 which established a connection fee schedule for the purposes of funding certain improvements to the Ebbetts Pass Improvement District (EPID) 5, from 1987 to

1992, the Water Company collected capacity fees under CCWD Ordinance 87-2 for new connections to the Water Company and held the collected fees in a separate interest-bearing account. Between 1987 and 1992, the Water Company added 167 new connections. In 1992, CCWD and the Water Company reached a new agreement (Resolution 92-112) regarding final disbursement of capacity charges; CCWD and the Water Company agreed to use the capacity charges collected between 1987 and 1992 (approximately \$114,000) to pay off the remaining balance of the loan (approximately \$112,000) jointly incurred by the Water Company and CCWD to fund the infrastructure in Blue Lake Springs.

- G. The agreement from 1992 stated, "As of January 1,1992 BLSMWC shall have no further obligations to collect said fees and shall have no liability to CCWD for new connection fees u ntil such time as BLS shall be provided water on a regular, non-emergency basis by CCWD."
- H. The Water Company realized 1,320 connections to its system prior to 1987, 167 additional connections between 1987 and 1991, and 227 more connections since 1992.
- I. Since 1992, the Water Company has on several occasions obtained emergency water deliveries from CCWD to augment limited groundwater supplies for its customers.
- J. To enhance the continued sustainability of the Water Company's groundwater resources and reduce the need for future emergency assistance, both the Water Company and CCWD desire for the Water Company to have immediate and ongoing access to surface water from CCWD. This will create an effective conjunctive use program of surface and groundwater supplies that improves the Water Company's current and future water supply reliability.
- K. To this end, the Water Company now seeks to purchase surface water from CCWD on a long-term, wholesale basis to supplement its existing groundwater supplies on the terms set forth in this Agreement.

AGREEMENT

NOW, therefore, the parties mutually agree as follows:

1.Term of Agreement. This Agreement will become effective once fully executed by the Parties and will remain in effect for an initial term of 20 years. Unless otherwise amended or terminated as provided in this Agreement, this Agreement will automatically renew every ten years after the initial 20-year term and after each subsequent ten-year term. This Agreement may only be terminated by mutual, written agreement of the Parties.

2. CCWD To Provide Wholesale Treated Water Service to the Water Company.

- 2.1. Maximum Daily Capacity. CCWD will provide the Water Company with a maximum available capacity of 100,000 gallons per day (gpd) of treated water from May 1through September 30. I n furthera nce of the goal to maximize the longevity of the Water Company's groundwater supply, the Water Company may rely on CCWD for its entire demand, even if it exceeds 100,000 gpd, from October 1through April 30 as long as the capacity is available. Maxim um daily capacity is determined strictly on a daily basis and will not be averaged bi-monthly or annualized. The maximu m daily capacity will become available to the Water Company for each and every day of the year beginning on the date the Water Company makes the first capacity charge payment described in Section 3.1. That capacity then will be available to the Water Company for the duration of this Agreement.
- **2.2.** Capacity for Emergency Fire Services. The limit on maximum available capacity stated in Section 2.1 does not apply if a fire department uses water for emergency fire suppression via fire hyd rants within the subdivision. The Water Company will promptly notify CCWD of each such emergency.
- 2.3. Water Quality. All treated water delivered to the point of the Water Company's master meter(s) under this Agreement will meet all applicable government minimum water quality requirements for treated water for domestic use in accordance with CCWD's operating permit for the Ebbetts Pass drinking water system issued by the State Water Resources Control Board, Division of Drinking Water. CCWD will provide to Water Company a copy of CCWD's annual consumer confidence water quality report when it is available to facilitate Water Company's preparation of its own water quality report to its retail customers.
- 2.4. Backflow Protection. The Water Company will protect at all times CCWD's system from cross-contamination and cross-connections to untreated (unfiltered and/or undisinfected) raw well water by means of air gaps and/or reduced pressure backflow devices on the downstream side of each master meter or other appropriate locations as agreed by CCWD and the Water Company. Any identified backflow of water from the Water Company's raw wells into CCWD's system will be cause for immediate suspension of service to the Water Company until the backflow problem is corrected to the satisfaction of CCWD. All backflow devices will be annually tested and certified by the Water Company at its expense with documentation provided to CCWD.
- 2.5. Ownership, Maintenance, Operation, Repair and Replacement of CCWD's Facilities. CCWD will maintain ownership, possession, and access to all CCWD water service facilities and all facilities necessary to pump, treat, and deliver treated water to the Water Company's delivery points. CCWD also will be responsible for all actions for the operation, maintenance, repair, and replacement of all CCWD facilities in good working order and any facilities improvements, as necessary or useful for CCWD to perform all water delivery and other obligations under this Agreement.
- 2.6. Ownership, Maintenance, Operation, Repair and Replacement of Blue Lake Springs Mutual Water Company Facilities. The Water Company owns,

operates, and maintains its own water distribution system; CCWD has no obligation to service, operate, maintain, or make improvements to Water Company's water system downstream of the master meters. The Water Company will be responsible for all actions for the operation, maintenance, repair, and replacement of all Water Company facilities in good working order and any facilities improvements, as necessary or useful for the Water Company to perform all water delivery and other obligations under this Agreement.

- 2.7. Commitment to Conjunctive Use System. At all times during this Agreement, unless and until it obtains all of its water supply from CCWD pursuant to this Agreement, the Water Company will operate a conjunctive use system of surface water from CCWD and groundwater supplied from wells developed, operated and maintained by, and treated by the groundwater treatment plant operated and maintained by, the Water Company. Consistent with the historical relationship between CCWD and the Water Company, surface water from CCWD (up to 100,000 gpd) is intended to be supplemental to the amounts supplied by groundwater sources of the Water Company, which will continue to supply the balance of the Water Company's annual water use and maximum day water demands. From 2003 to 2014, the Water Company's annual water use has ranged from 45 to 75 million gallons and its maximum day demands have been 320,000 to 450,000-gpd. Through this commitment to a conjunctive use program, the Water Company will maximize the life and productivity of its wells to continue to provide a safe yield for its community.
- **2.8. Point of Delivery.** All water to be furnished under this Agreement will be delivered to the Water Company by CCWD at the following points of delivery: the existing CCWD four-inch metered connection, located at 470 Summit View Road and six-inch metered connection located at the corner of Moran Road and Linda Drive to the Water Company, subject to the limitations of use of the six-inch meter in Section 2.10.
- 2.9. Water Service Payments for Water Delivered to the CCWD Four-Inch Meter that Serves the Water Company. The Water Company will receive regular treated water through the existing CCWD four-inch meter. The Water Company will pay bi-monthly service charges according to CCWD's standard rate for a four-inch master meter. Payment is due to CCWD 30-days after the Water Company receives an invoice from CCWD.
- 2.10. Water Service Payments for Water Delivered to the CCWD Six-Inch Meter. CCWD's existing six-inch meter connection to the Water Company will remain in place to be utilized for fire service only. The Water Company will pay CCWD's base rate for a 5/8-inch meter to cover maintenance costs associated with the sixinch meter, but it will not receive any water service through the six-inch meter except as necessary to support fire response personnel responding to a fire emergency. The six-inch meter will be read and reported to CCWD at a minimum bi-monthly, corresponding to the regula r billing period. Unauthorized use of the 6-inch meter for any purpose other than fire suppression may result in its conversion to a standard service meter, subject to CCWD's standard base and usage rates for a 6-inch meter.
- 2.11. Suspension of Service for Nonpayment. Should the Water Company fail to

make timely payment for water service under this Agreement, CCWD may suspend water service to the Water Company until payment is made in full. Water service will resume upon full payment of the amount due for past water service. CCWD is also entitled to recover reasonable costs incurred directly as a result of the non-payment and suspension of service with the exception of attorneys fees.

- 2.12. Meter Reading and Reporting. Both CCWD meters serving the Water Company, the four-inch and six-inch meters, will be read on a daily basis by the Water Company on any day water is delivered through those meters. The Water Company will report the meter readings in writing to CCWD on at least a monthly basis.
- **2.13.** Changes to Water Service Rates. CCWD will comply with all applicable laws in making any changes to any of its rates applicable to the Water Company under this Agreement. In the interests of full transparency and building a stronger relationship between entities, prior to implementation of any such changes affecting the Water Company, CCWD and the Water Company will meet to share information and seek a common understanding of the issues affecting each entity.
- 2.14. Minimum Bi-Monthly Purchase by the Water Company. The Water Company is required to pay for a minimum average of 45,000 gpd, or approximately 2,737,500 gallons during each bi-monthly billing period, except as otherwise provided in this Section 2.14. In years where CCWD implements customer water use reduction requirements due to drought, the minimum bi-monthly purchase amount is reduced to an average of 40,000 gpd for each billing cycle while such water use restrictions are in effect. The Water Company will pay CCWD for at least the bi-monthly minimum amount even if the Water Company uses less than the applicable average over the two month billing period. In the unlikely event that CCWD does not have adequate capacity to deliver the bi-monthly minimum average the Water Company will only be required to pay for its actual use.

3. Payment of Capacity Charges to CCWD by Water Company.

3.1. Initial Capacity Charge Payment Required.

- **3.1.1. Amount.** The Water Company will make an initial capacity charge payment to CCWD of \$825,000 for buy-in of 100,000 gpd capacity into the Hu nters treatment plant, Meadowmont and Avery pump stations, and Reach 2 and 3 transmission lines. This amount represents the buy-in rate of \$625 for each of the 1,320 Water Company connections that existed prior to 1987. This rate is consistent with the buy-in portion of CCWD's current residential capacity charge for the Ebbetts Pass service area.
- **3.1.2. Timing.** The Water Company will make an initial buy-in payment of \$600,000 toward the one-time capacity charge stated in Section 3.1.1 within seven business days of the effective date of this Agreement. The Water Company will pay the remaining \$225,000 toward that capacity charge to CCWD no later than May 1, 2016.

3.2. Additional Capacity and Capacity Charges.

- **3.2.1. Complete Reliance on CCWD.** In the event the Water Company submits a written request to have its maximum daily demand available from CCWD on a wholesale basis, and CCWD has sufficient water supply available at the time of the request, the Water Company may purchase all of its water from CCWD by paying the total amount described in Section 3.2.3. CCWD will make the additional capacity needed to satisfy the Water Company's demand available within a reasonable amount of time after receipt of full payment of capacity fees. This may include implementing system improvements (plant expansion, etc.) to make that capacity available. If no system improvements are required to meet the Water Company's additional demand, the additional capacity will be available to the Water Company immediately upon payment of the total amount described in Section 3.2.3.
- **3.2.2. Incremental Additional Capacity.** At any time during the term of the Agreement, the Water Company may request additional capacity from CCWD beyond the 100,000 gpd maximum included in this Agreement but less than its maximum daily capacity demand. CCWD will consider the Water Company's request i n good faith but nothing in the Agreement obligates CCWD to provide additional, fractional capacity. Any capacity fees paid for incremental additional capacity would be credited against the number of total capacity fees the Water Company must pay prior to reliance on CCWD for all of its water demand as set forth in Section 3.2.3.
- **3.2.3.** Cost of Additional Capacity. Before the Water Company can rely on CCWD for all of its water demand, it must pay the total of the capacity charge then in effect for the Ebbetts Pass Service Area at the time of payment times 310.5 connections. For example, at the current capacity charge of \$7,028, the amount due would be \$7,028 times 310.5 for a total of \$2,182,194. 310.5 represents the number of connections added to the Water Company since 1992 (227) plus half of the connections added between 1987 and 1992 (83.5). If CCWD must expand plant capacity at the Hunters treatment plant at any time after the Water Company requests to rely on CCWD for its entire water demand, the Water Company will pay an additional 158 capacity fees as an advance payment toward potential new connections. The advance payment of 158 capacity fees towa rds plant expansion would be due at the time CCWD enters into a construction contract for the plant expansion. CCWD will provide the Water Company with reasonable advance notice prior to its letting of any such contract for construction of the plant expansion. If the Water Company has already added more than 158 connections between the effective date of this agreement and the date of payment for complete reliance on CCWD, then Water Company will pay for each of the connections added during that time instead of the 158. If any time after it makes the advance payment of additional capacity fees to CCWD towards the plant expansion, the Water Company realizes the addition of

new connections above and beyond the amount of connections paid to CCWD for its advance payment, the Water Company will pay to CCWD for each new connection added at the time it comes online at the capacity charge then in effect for the Ebbetts Pass Service Area.

- **3.2.4. Capacity Fees for New Connections.** Other than set forth in section 3.2.3, the Water Company has no obligation to pay capacity fees for new connections added after the effective date of this agreement.
- 4. Water Availability. The amount of water made available by CCWD to the Water Compa ny under this Agreement is subject to reduction, to the extent and for the period made necessary, by reason of water shortage, drought (as defined in this section), an emergency (as defined in this section) or by malfunctioning or rehabilitation of facilities in CCWD's water system. "Drought" as used in this section means a water shortage caused by lack of precipitation, as reflected in actions by CCWD implementing voluntary or mandatory water use reduction measures in accorda nce with CCWD's drought response plan. "Emergency" as used in this section means a sudden, non-d rought event, such as an earthquake, fire, failure of CCWD infrastructure, or other catastrophic event or natural disaster. The Water Company agrees that as part of this Agreement it, and its customers will be required to participate in any water use reduction measures implemented by CCWD or implement their own equivalent or stricter reduction measures.
- **5.** No Agreement To Take Over Service. The Water Company acknowledges that nothing in this Agreement requires or guarantees that CCWD will provide water service directly to the Water Company's customers. Should the Water Company want CCWD to provide direct service to its customers that will be the subject of a further written agreement and may require payment of additional fees and costs, to be determined at the time per CCWD's normal fee schedule at the time service is requested.
- 6. Water Rights Not Affected. This Agreement only contemplates the sale of water by CCWD to the Water Company; this Agreement does not contemplate the sale of any water rights currently held by CCWD to the Water Company. No sale of water pu rsuant to this Agreement shall confer any appropriative, groundwater, public trust or other right to water on the Water Company, or any other person or entity, directly or indirectly. Nothing in this Agreement shall act as a forfeiture, diminution or impairment of any rights of CCWD after the expiration of the Agreement, and shall in no way prejudice any of CCWD's rights. The Parties agree that no sale of water u nder this Agreement, nor the Agreement itself, is evidence of the availability of surplus water beyond the term of the Agreement, nor any evidence of lack of beneficial use of the water involved in the sale, and they shall not contend otherwise. The only rights granted to the Parties as a result of this Agreement are those expressly set forth herein.
- **7. Amendment.** This Agreement may only be amended by the mutual, written agreement of CCWD and the Water Company.
- 8. Wholesale Restriction. The Water Company will not sell water on a wholesale basis as

long as this agreement remains in effect. It is understood that Blue Lake Springs Mutual Water Company services only the Blue Lake Springs subdivision as is currently planned with a total of approximately 2,000 residential units at full buildout.

- **9. Entire Agreement.** This Agreement represents the sole and entire agreement of the parties with respect to the subject matter. It supersedes any prior written or oral agreements or communications between the Parties. It may not be modified except in a writing signed by the Parties.
- **10. No Assignment.** Neither party may assign this Agreement without the other party's prior written consent, which must not be unreasonably withheld. *A* party's entering into contracts with subcontractors is not considered an assignment.
- **11. Waiver.** If either party fails to require the other to perform any term of this Agreement, that failure does not prevent the party from later enforcing that term. If either party waives the other's breach of a term, that waiver is not treated as waiving a later breach of the term.
- **12.Successors and Representatives.** This Agreement binds and inures to the benefit of the parties and their respective successors and (where permitted) assignees.
- **13.Severability.** If any part of this Agreement is for any reason held to be unenforceable, the rest of it remains fully enforceable.
- **14. Headings.** Head ings are for convenience only and do not affect the interpretation of this agreement.
- **15. Interpretation of Agreement.** The parties acknowledge that each party and its attorney have reviewed, negotiated, and revised this Agreement and that the normal rule of construction to the effect that any ambiguities are to be resolved against the drafting party shall not be employed in the interpretation of this Agreement or any document executed and delivered by any party in connection with the transactions contemplated by this Agreement.
- **16. Cooperation.** Each party to this Agreement agrees to do all things that may be necessary, including, without limitation, the execution of all documents which may be required hereu nder, in order to implement and effectuate this Agreement.

17. Dispute Resolution.

- **17.1. Informal Meetings.** In the event of a dispute or controversy between the parties arising out of this Agreement, the respective staff of each party will hold an informal meeting or meetings to attempt to resolve the dispute or controversy.
- **17.2. Executive Meetings.** If staff is unable to resolve the matter informally, each party will designate an executive with the required authority to resolve the

dispute or controversy. The executives of each party will meet and confer in good faith to attempt to resolve the dispute or controversy. The executives of each party will continue to meet until one party or both parties reasonably determines the parties to be at an impasse. The meeting of the executives is a prerequisite to further mediation or litigation on any dispute or controversy between the parties.

- **17.3.** Non-Binding Mediation. If the matter is not resolved by meeting(s) of the executives, the Parties will proceed to non-binding mediation facilitated by a mutually agreed upon mediator. The Parties will share the cost of the mediator equally, but will bear their own costs and attorneys fees for mediation.
- **17.4.** Litigation. Should the Parties fail to reach a negotiated resolution of the disputed matter, either Party may bring an action in Calaveras County Superior Court. If the Party bringing the action has failed or refused to comply with the alternative dispute resolution mechanisms set forth in 17.1-17.3, and the Party defending against the action is the prevailing party, the defending Party will be entitled to recover its litigation costs and attorneys fees. Otherwise, the Parties bear their own litigation costs and attorneys fees.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the date first above written as follows:

Dated: October	2015	Calaveras County Water District
		By: Dave Eggerton, General Manager
Dated: October	2015	Blue Lake Springs Mutual Water Company By: Dave Hicks, General Manager

APPENDIX C

Technical Memorandum No. 1



Blue Lake Springs Mutual Water Company

Preliminary Engineering Report



FINAL METER INSTALLATION TECHNICAL MEMORANDUM NO. 1

JULY, 2016

Prepared By:



MC Engineering, Inc. 6917 Ohana Place Orangevale, CA 95662

Technical Memorandum

BLUE LAKE SPRINGS MUTUAL WATER COMPANY WATER METER INTSTALLATION COSTS USDA FUNDED PROJECT

METER PROJECT DESCRIPTION: As a part of the USDA Loan Project the BLSMWC will be designing and constructing new relocated water mains (prioritized), meters and boxes, pressure reducing valves (PRV) with boxes, and other miscellaneous appurtenances, such as hydrants, valves and an upgraded booster pump station. All project components will be designed and constructed per industry and manufacturer's standards, including standards already being utilized by the BLSMWC. There are approximately 100 meters and enclosures already installed within the BLSMWC. These existing meters include various configurations (representations) for each existing water service connection as noted in the following figures (Attachment A):

This Technical Memorandum (TM) will address only the meter installation portion of the USDA Loan Project. The meter installation program will include two general construction and installation conditions, as noted below:

Condition One (New Main Construction-860 Meters): Install new water meters and enclosures in areas where new water mains (high priority areas) are to be relocated and/or replaced. This new construction will also include a separate PRV (regulator) valve with box, to be maintained by the customer. It is assumed that all meters and enclosures will be owned and maintained by BLSMWC, and the PRV (regulator) and enclosure will be the owned and maintained by the customer.

Condition Two (Existing System-504 Meters Retrofits): Install and/or retrofit new meters and enclosures, and in some cases, install a separate PRV (regulator) with enclosure, in existing service areas not a part of the new relocated and/or replaced mains. In some cases, this new meter and enclosure construction/installation will include the addition of relocating and/or installing new PRVs (regulators) on the property owner's side of the service. Any PRV (regulator) will be owned and maintained by the customer.

It should be noted that prior to the implementation of this USDA design and construction project of the new water mains, meters, and regulators, the BLSMWC will have installed 350 new meters within already existing meter boxes.

ASSUMPTIONS: The following assumptions were applied to the various strategies for evaluation and estimating the cost for meter with enclosure and PRVs (regulator) with enclosure:

- Meter type and specification to be as per existing standards and specifications currently used by the BLSMWC (Attachment B).
- All single family connections will be 5/8-inch meters.
- All new meters will be Sensus brand iPERL, currently being installed by BLSMWC (Attachment C).

- There are currently 350 meters installed or to be installed within the next year by the BLSMWC operations staff. These are not included in the attached cost spread sheets. It also assumes that the existing regulators are adequate in those cases.
- There are a total of 1714 houses/customers in the BLSMWC service area. It is assumed that 350 meters and boxes will be installed prior to award for design and construction by the USDA.
- It is assumed that the proposed new construction of relocated mains will also consist of approximately 860 new meters/enclosure and PRVs (regulators)/enclosures. (Attachment D -New Meter Construction Standard)
- It is assumed that there will be approximately **504** new meter/box and regulator/box to be constructed in existing areas. (Attachment E- Retrofit Meter Standard)
- All new meters to be installed include, at a minimum, a 12"x17" meter box (*Carson 1419-12* type or equal) and if meter is located within driveways/traveled ways, a composite or concrete type box (*Christy B16* or equal w/ traffic rated lid), will be installed.
- A portion or all (min. 860) new meter installations to include the installation of a separate and detached regulator (*Wilkins, or equal*) with a 12"X17" box/enclosure (*Carson 1419-12* or equal) and if regulator is located within driveways a composite or concrete type box (*Christy B16* or equal w/ traffic rated lid), will be installed.
- The total cost estimate, as found within this report, for the meter/box and regulator/box in new main construction areas **does not** include the installation of the ¾ inch or 1-inch service line(s), service saddle, and corporation stop from the main to the property. These costs are to be included w/in the main replacement project cost estimates. Single service lines to be ¾-inch and doubles to be 1-inch, with a corporation stop in street.
- On existing services, a new meter box will be constructed, along with a new regulator and box, except in those cases where meters were installed by BLSMWC staff over the last four-years (4), or approximately 350 meters.
- It is also assumed that there are over 200 meter boxes already installed and useable for new meter construction within the existing service areas, not affected by the new main relocations.
- Where mains, services, meters/boxes, and regulators/boxes are installed in the new main relocation construction areas, it will be assumed that the new water service from the house to the meter/regulator point of connection will be the responsibility of the homeowner.
- In the existing areas, the BLSMWC and its contractor, will be responsible for making the connection from the new meter and regulator to the existing water service line.
- The BLSMWC and its contractor will be responsible for only the meter and regulator in areas where new relocated mains are to be constructed and will not be responsible for making the connection to the customer service line. It is important that close coordination between the property owner and/or contractor be maintained throughout the construction period to avoid disruption of water service. The BLSMWC will work closely with each home owner, affected by the relocated water service, and to provide each customer where this condition exists, a list of qualified licensed contractor(s) for the construction and connection from regulator to house.
- In some cases, driveways will be utilized for the construction of the new meters and appurtenances. This is due various possible site restrictions including rock, steep banks, utilities, and other obstructions, which limit and or prohibits the construction of meters between two parcels and/or lot lines.

DESCRIPTION OF METER INSTALLATION PROGRAM WITH VARIOUS SCENARIOS

To address all possible site considerations, a list of project conditions (see above) with alternatives and various scenarios, were developed. **Table 1** below includes all basic conditions, alternatives and various scenarios for each alternative. These meter construction scenarios include, as an option, the addition of customer PRVs with enclosures, driveway installation of new meters (exact quantity unknown), and **no** design and construction contingency costs.

TABLE 1

METER PROJECT CONDITIONS AND ALTERNATIVES

	Description of Project Conditions and Alternatives					
Alternative	Number of Meters	Total Meter Installation	Description of Condition			
1	860 New Construction 504 Existing Retrofit	1,364	 860 New Construction Meters/Enclosures 504 Existing Retrofit Meters/Enclosures 50 Driveway Installations Zero PRV Installations Utilization of 200 Existing Boxes 			
2	860 New Construction 504 Existing Retrofit	1,364	 860 New Construction Meters/Enclosures 504 Existing Retrofit Meters/Enclosures 200 Driveway Installations Zero PRV Installations Utilization of 200 Existing Boxes 			
3	860 New Construction 504 Existing Retrofit	1,364	 860 New Construction Meters/Enclosures 504 Existing Retrofit Meters/Enclosures 200 Driveway Installations 1,364 PRVs/Enclosures 			
4	860 New Construction 504 Existing Retrofit	1,364	 860 New Construction Meters/Enclosures 504 Existing Retrofit Meters/Enclosures 50 Driveway Installations 860 PRVs/Enclosures 			
5	860 New Construction 504 Existing Retrofit	1,364	 860 New Construction Meters/Enclosures 504 Existing Retrofit Meters/Enclosures 200 Driveway Installations 860 New Construction PRVs/Enclosures 			
6	860 New Construction 504 Existing Retrofit	1,364	 860 New Construction Meters/Enclosures 504 Existing Retrofit Meters/Enclosures 50 Driveway Installations 860 New Construction PRVs/Enclosures 			
7	860 New Construction 504 Existing Retrofit	1,364	 860 New Construction Meters/Enclosures 504 Existing Retrofit Meters/Enclosures 50 Driveway Installations Zero PRV Installations Utilization of 200 Existing Boxes 			

It should be noted that where new relocated mains are to be constructed, the contractor will install a new single or double service to the property line, which will include a new meter and box and a new PRV/regulator with box. It is assumed that the property owner will be responsible for connecting from the house to the new point of connection, at the homeowner's side of the PRV, in the new relocated water main areas.

COST ESTIMATE FOR PROJECT CONDITIONS

This section includes the project construction cost for each project conditions One and Two, as noted above. Please refer to **Attachment F** for the cost spreadsheets.

SUMMARY COST TABLE FOR CONSTRUCTION CONDITION WITH ALTERNATIVES AND VARIOUS SCENARIOS

Table 2 below presents a cost summary of the different condition alternatives.

Summary of Meter Installation/Replacement Project Total Number of **Description of Condition** Total PRV Cost Per Alternative Meter **Total Cost** Installation Meters Meter Installation 860 New Construction Meters/Enclosures 504 Existing Retrofit • 860 New Meters/Enclosures Construction 1 1,364 50 Driveway 0 \$781,396 \$573 504 Existing Installations Retrofit Zero PRV Installations • • Utilization of 200 **Existing Boxes** 860 New Construction Meters/Enclosures 504 Existing Retrofit 860 New Meters/Enclosures Construction 2 1,364 200 Driveway 0 \$868,488 \$637 504 Existing Installations Retrofit Zero PRV Installations Utilization of 200 • **Existing Boxes** • 860 New Construction Meters/Enclosures 504 860 New **Existing Retrofit** Construction 3 1,364 Meters/Enclosures 1,364 \$1,364,398 \$1,000 504 Existing 200 Driveway Retrofit Installations 1,364 PRVs/Enclosures •

TABLE 2 COST SUMMARY

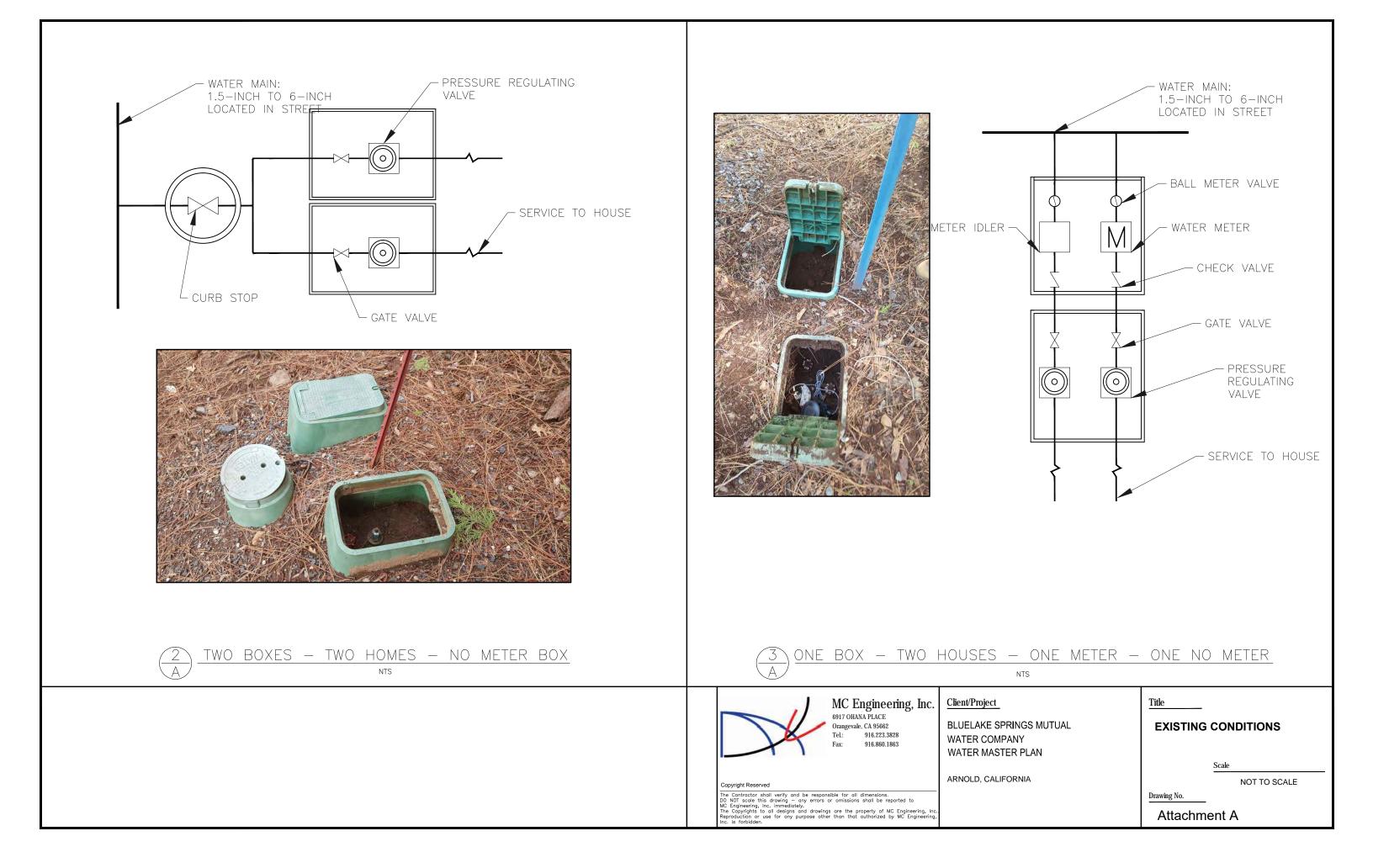
4	860 New Construction 504 Existing Retrofit	1,364	 860 New Construction Meters/Enclosures 504 Existing Retrofit Meters/Enclosures 50 Driveway Installations 860 PRVs/Enclosures 	1,364	\$1,237,931	\$908
5	860 New Construction 504 Existing Retrofit	1,364	 860 New Construction Meters/Enclosures 504 Existing Retrofit Meters/Enclosures 200 Driveway Installations 860 New Construction PRVs/Enclosures 	860	\$1,218,238	\$893
6	860 New Construction 504 Existing Retrofit	1,364	 860 New Construction Meters/Enclosures 504 Existing Retrofit Meters/Enclosures 50 Driveway Installations 860 New Construction PRVs/Enclosures 	860	\$1,091,771	\$800
7	860 New Construction 504 Existing Retrofit	1,364	 860 New Construction Meters/Enclosures 504 Existing Retrofit Meters/Enclosures 50 Driveway Installations Zero PRV Installations Utilization of 200 Existing Boxes 	860	\$1,036,371	\$760

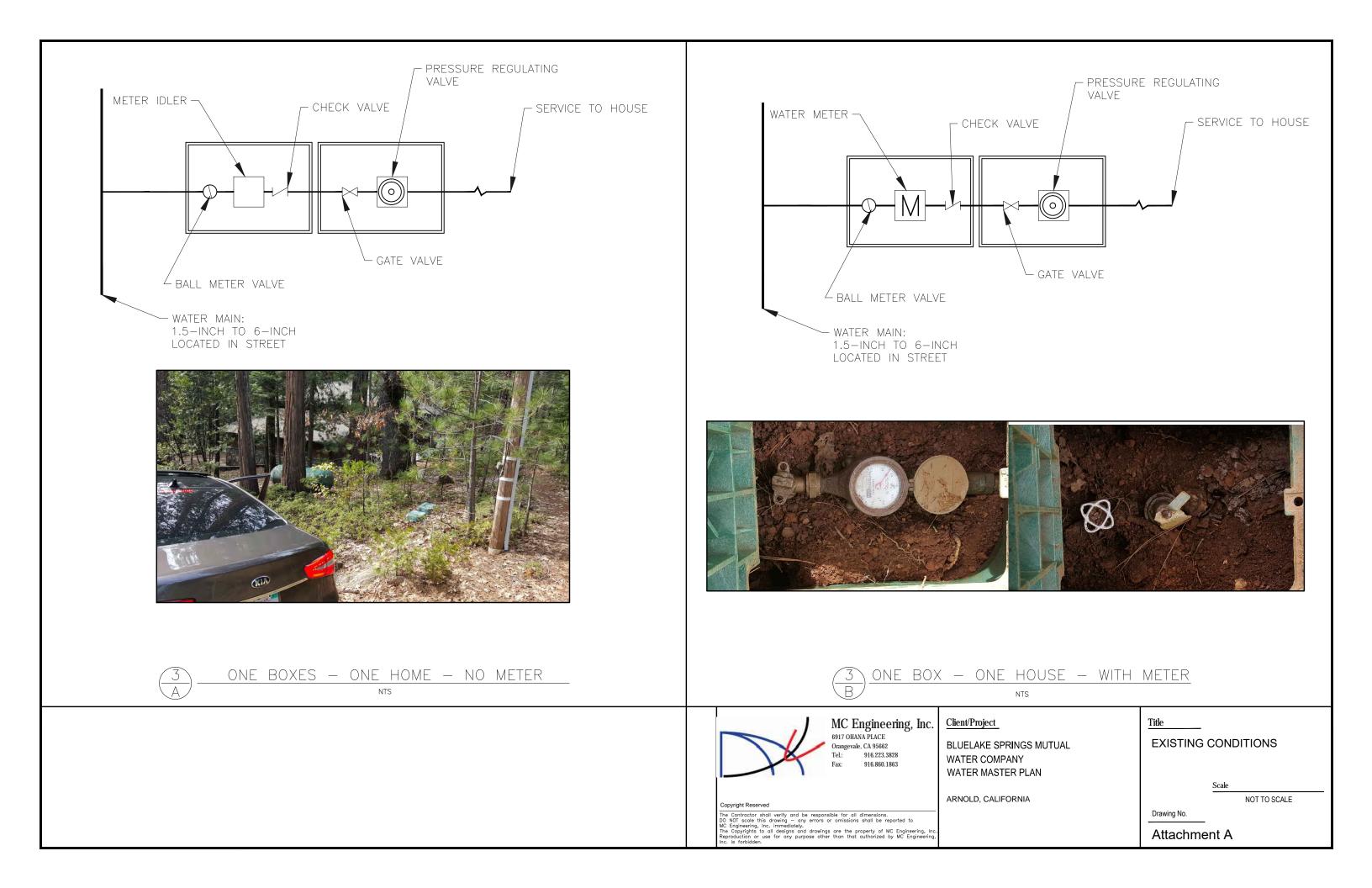
III. CONCLUSIONS AND RECOMMENDATIONS:

At this early point the application process and during the preparation of the Professional Engineers report (PERS), MC Engineering is recommending that the BLSMWC use **Alternative 3**, above. For budgeting purposes, this option assumes that there will be over 200 new water services, meters, and regulators constructed within the existing driveways, which require special construction specifications. This also assumes that new regulators will be installed in all new main construction areas and in existing areas, as described above. The total cost for **Alternative 3**, which does not include engineering and contingency, is **\$1,364,398**. Based on 1,364 meter installs, the cost per customer is approximately **\$1000**.

ATTACHMENT A

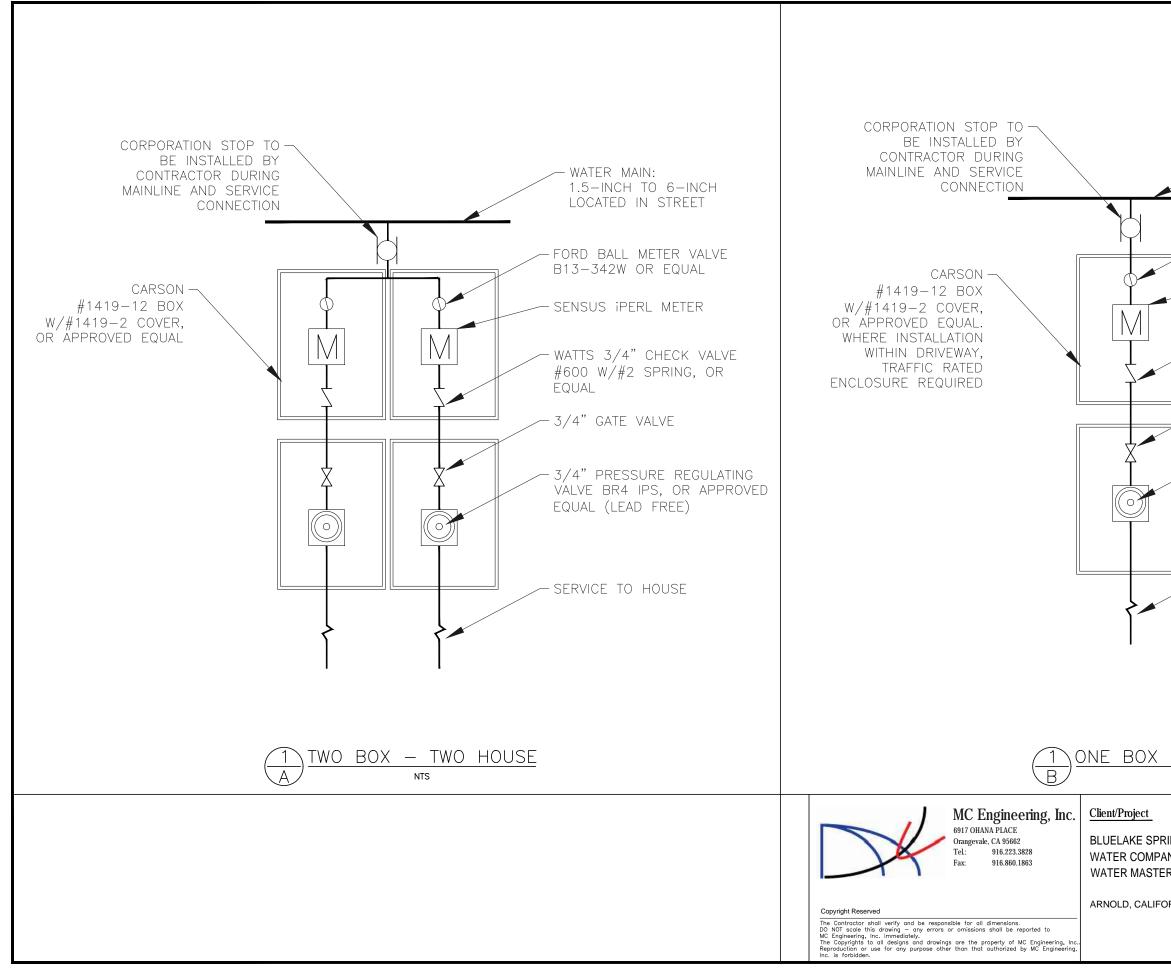
Existing Conditions





ATTACHMENT B

BLSMWC Installation Standard



	AIN: TO 6-INCH IN STREET
	METER VALVE OR EQUAL
SENSUS IPI	ERL METER
	"CHECK VALVE 2 SPRING, OR
3/4" GATE	VALVE
	SURE REGULATING IPS, OR APPROVED AD FREE)
SERVICE TO) HOUSE
– ONE HOUSE	
NTS	
PRINGS MUTUAL PANY ER PLAN FORNIA	Title BLSMWC NEW METER CONSTRUCTION STANDARD Scale NOT TO SCALE Drawing No.
	Attachment B

ATTACHMENT C

iPERL Meter Specification

Description

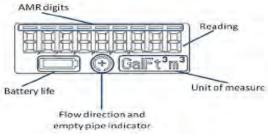
5/8" (DN 15mm), 3/4" (DN 20mm) and 1" (DN 25mm) Sizes

With no moving parts, the Sensus iPERL water management system is based on innovative electromagnetic flow measurement technology. The iPERL system family has an operating range as low as 0.03 gpm (0.007 m³/ hr) to 55 gpm.





Electronic Register LCD Display



Features

CONFORMANCE TO STANDARDS

The iPERL system far exceeds the most recent revision of ANSI/AWWA Standard C-700 and C-710 for accuracy and pressure loss requirements. All iPERL systems are NSF/ANSI Standard 61 Annex F and G compliant and tested to AWWA standards.

PERFORMANCE

The patented measurement technology of the iPERL system allows enhanced accuracy ranges at both low and high flows and perpetual accuracy over the life of the product and can be installed horizontally, vertically or diagonally.

CONSTRUCTION

The iPERL system is an integrated unit that incorporates an electronic register and measuring device encased in an external housing. The measuring device is comprised of a composite alloy flowtube with externally-threaded spud ends. Embedded in the flowtube are magnetic flow sensors. The all electronic, programmable register is hermetically sealed with a tempered glass cover. The iPERL system has a 20 year life cycle, along with a 20 year battery life guarantee.

ELECTRONIC REGISTER

The high resolution 9-digit hermetically sealed electronic register with LCD display was designed to eliminate dirt, lens fogging issues and moisture contamination in pit settings with built in tamper protection. The tempered glass register cover displays readings with the AMR digits highlighted. Direction of flow and units of measure are also easily readable on the register display. The iPERL register features; AMR resolution and unit of measure that are fully programmable, integral customer data logging compatible with UniPro software tools. The large, easy to read display also includes battery life, empty pipe and forward/reverse flow indicators.

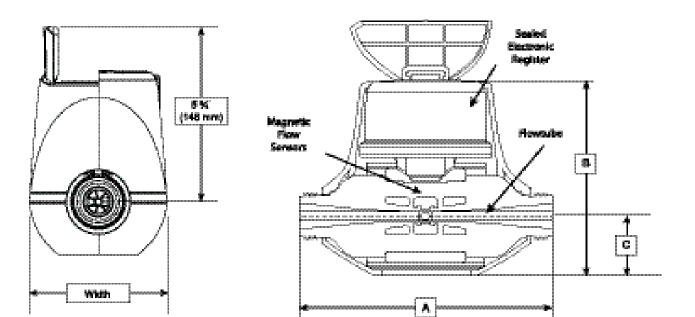
TAMPERPROOF FEATURES

The integrated construction of the iPERL system prevents removal of the register to obtain free water. The magnetic tamper and low field alarms will both indicate any attempt to tamper with the magnetic field of the iPERL system.

AMR / AMI SYSTEMS

iPERL systems are compatible with current Sensus AMR/AMI systems.





DIMENSIONS AND NET WEIGHTS

Size	A (lay length)	В	С	Spud Ends	NPSM Thread Size	Width	Net Weight
5/8"	7-1/2"	6-1/10"	1-3/4"	5/8"	3/4"	4-1/2"	3.1 lb.
(DN 15 mm)	(190 mm)	(155 mm)	(44 mm)	(15 mm)	(19 mm)	(114 mm)	(1.4 kg)
3/4"S (5/8" x 3/4")	7-1/2"	6-1/10"	1-3/4"	3/4"	1"	4-1/2"	3.1 lb.
(DN 20 mm)	(190 mm)	(155 mm)	(44 mm)	(20 mm)	(25 mm)	(114 mm)	(1.4 kg)
3/4"	9"	6-1/10"	1-3/4"	3/4"	1"	4-1/2"	3.2 lb.
(DN 20 mm)	(229 mm)	(155 mm)	(44 mm)	(20 mm)	(25 mm)	(114 mm)	(1.5 kg)
1"	10-3/4"	6-1/10"	1-3/4"	1"	1-1/4"	4-1/2"	3.3 lb.
(DN 25 mm)	(273 mm)	(155 mm)	(44 mm)	(25 mm)	(32 mm)	(114 mm)	(1.6 kg)

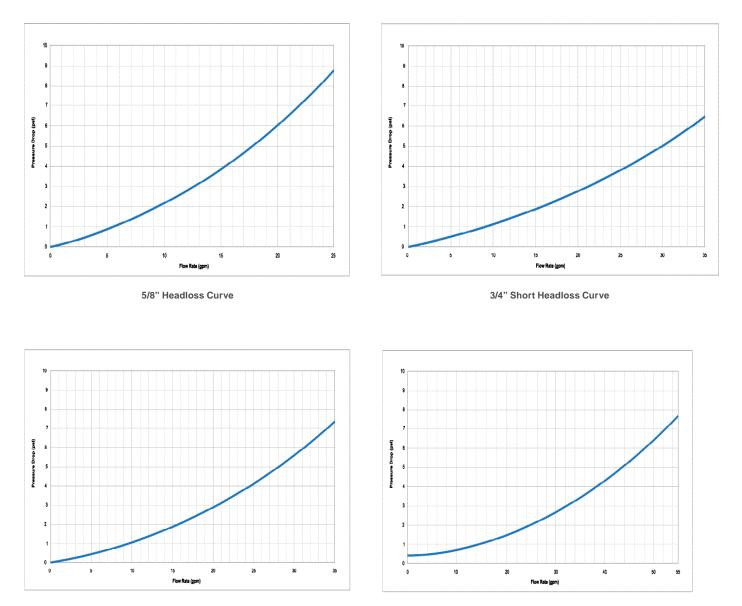
SPECIFICATIONS

SERVICE	Measurement of potable and reclaim water. Operating temperature range of 33 °F (0.56 °C) - 150 °F (65.6 °C)	MEASUREMENT TECHNOLOGY	Solid state electromagnetic flow
NORMAL OPERATING FLOW RANGE (±1.5%)	5/8" (DN 15mm) size: 0.18 to 25 gpm (0.04 to 5.7 m³/hr) 3/4" (DN 20mm) size: 0.18 to 35 gpm (0.04 to 8.0 m³/hr) 1" (DN 25mm) size: 0.4 to 55 gpm (0.09 to 12.5 m³/hr)	REGISTER	Hermetically sealed, 9-digit programmable electronic register AMR/AMI compatible iPERL system register programmable using the UniPro programming package
LOW FLOW RANGE (±3%)	5/8" (DN 15mm) size: >0.11 gpm (0.025 m³/hr) to <0.18 gpm (0.041 m³/hr) 3/4" (DN 20mm) size: >0.11 gpm (0.025 m³/hr) to <0.18 gpm (0.041 m³/hr)	MATERIALS	External housing – Thermal plastic Flowtube – Polyphenylene sulfide alloy Electrode – Silver/silver chloride Register cover – Tempered glass
STARTING FLOW	1" (DN 25mm) size: >0.3 gpm (0.068 m ³ /hr) to <0.4 gpm (0.09 m ³ /hr) 5/8" (DN 15mm) size: 0.03 gpm (0.007 m ³ h) 3/4" (DN 20mm) size: 0.03 gpm (0.007 m ³ h) 1" (DN 25mm) size: 0.11 gpm (0.025 m ³ h)	ALARM DEFAULTS	Alarm Duration – 90 days Leak Duration – 24 hours Datalog Interval – 1 hour Alarm Mask – All alarms reported History Mask – All event types reported
MAXIMUM OPERATING PRESSURE	200 psi (13.8 bar)		



WDS-10006-01 Page 3 of 3

HEADLOSS CURVES



3/4" Headloss Curve

1" Headloss Curve

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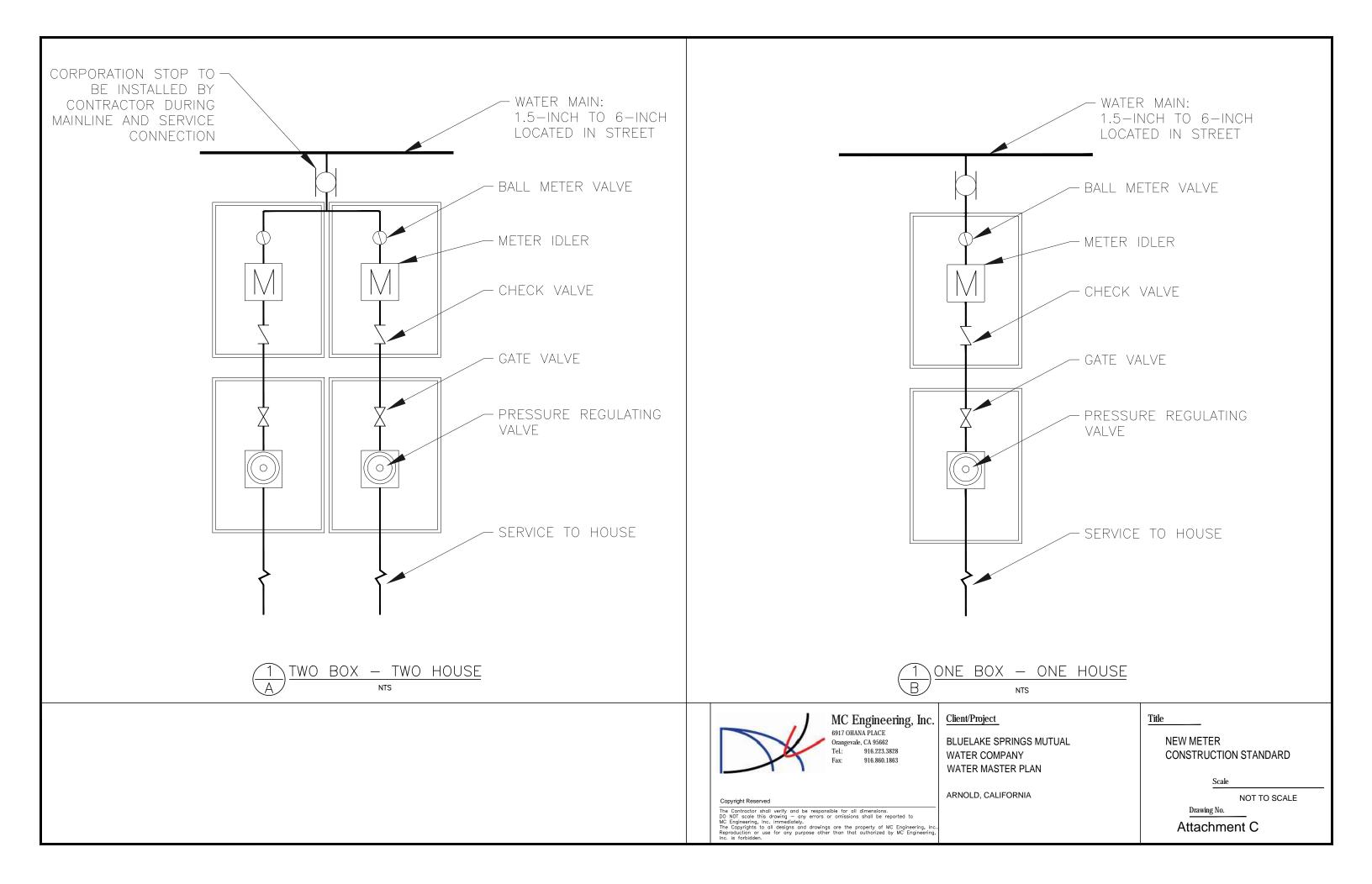
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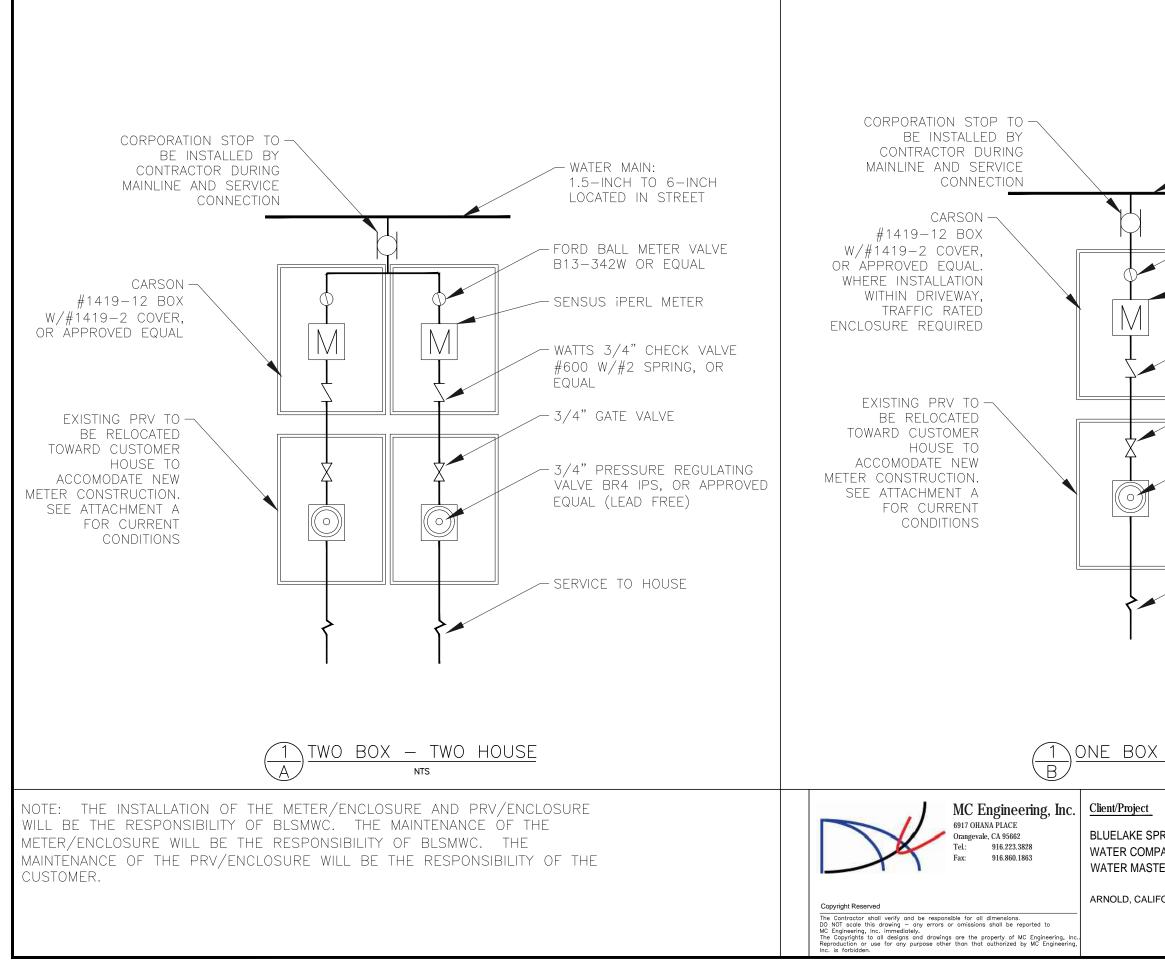
ATTACHMENT D

New Construction Standard



ATTACHMENT E

Retrofit Standard



	MAIN: h to 6—inch d in street
	L METER VALVE V OR EQUAL
SENSUS if	PERL METER
	4" CHECK VALVE ¥2 SPRING, OR
3/4" GATE	E VALVE
	SSURE REGULATING 4 IPS, OR APPROVED EAD FREE)
SERVICE T	O HOUSE
— ONE HOUSE nts	
	Title
PRINGS MUTUAL PANY TER PLAN	EXISTING RETROFIT CONSTRUCTION STANDARD
FORNIA	Scale NOT TO SCALE Drawing No. Attachment E

ATTACHMENT F

Project Condition Cost Estimates

	BLSMWC Meter Only Ins 50 Driveway Installati		·	<u>></u>	
Bid Item	Specification	Quantity Unit Price		t Price	Cost
		(EA.)	Materials	Installation	
	Scenario A1 - New				
	Single Service -		¢120		¢52.0
Meter SmartPoint AMR	5/8-inch Sensus iPERL Meter SmartPoint AMR	405	\$129		\$52,04
Fransceiver	Transceiver	405	\$156		\$63,1
Meter Box	Carson 1419-12 Meter box W/Lid	405	\$35		\$14,1
Meter Valve	Ford Ball Meter Valve B-13	405	\$67		\$27,1
victor varve	Tota Ball Meter Valve B-15	405	Φ 07		φ27,1.
Check Valve	Watts 3/4" Check Valve #600 with #2 spring	405	\$17		\$6,8
			φ17	¢175	
	Installation	405		\$175	\$70,8
					\$234,2
	Scenario A2 - New	Construction -			
	Single Service - One Home	- Driveway Insta	llation		
Meter	5/8-inch Sensus iPERL Meter	50	\$129		\$6,42
	SmartPoint AMR		T		
Fransceiver	Transceiver	50	\$156		\$7,80
Meter Box	Christy B16 Meter Box	50	\$75		\$3,75
PRV	Wilkins 70XL Pressure Reducing Valve	50	\$65		\$3,2
PRV Box	Christy B16 Meter Box	50	\$75		\$3,75
Meter Valve	Ford Ball Meter Valve B-13	50	\$67		\$3,35
Check Valve	Watta 2/4" Chaole Value #600 with #2 apring	50	¢17		¢o
Gate Valve	Watts 3/4" Check Valve #600 with #2 spring Gate Valve	50	\$17 \$15		\$8: \$7:
Sale valve	Installation	50	ψ15	\$600	\$30,00
					\$59,92
	Scenario A3 - New	Construction -			
	Double Se				
Motor	5/9 inch Conque iDEDI Motor	405	¢120		\$52.0
Meter	5/8-inch Sensus iPERL Meter SmartPoint AMR	405	\$129		\$52,04
Transceiver	Transceiver	203	\$166		\$33,69
Meter Box	Christy B16 Meter Box	405	\$75		\$30,3
Meter Valve	Ford Ball Meter Valve B-13	405	\$67		\$27,13
Check Valve	Watts 3/4" Check Valve #600 with #2 spring	405	\$17		\$6,88
	Installation	405		\$175	\$70,8
					\$221,0
	Scenario B1 - Exis	sting/Retrofit			
	Single Service -	One Home			
Meter	5/8-inch Sensus iPERL Meter	252	\$129		\$32,38
SmartPoint AMR	SmartPoint AMR				
Fransceiver	Transceiver	252	\$156		\$39,3
Meter Box	Carson 1419-12 Meter box W/Lid	52	\$35		\$1,82
Meter Valve	Ford Ball Meter Valve B-13	252	\$67		\$16,8
Check Valve	Watts 3/4" Check Valve #600 with #2 spring	252 252	\$17	\$175	\$4,2 \$44.1
	Installation	232		\$175	\$44,1
					\$138,7
	Scenario B2 - Exis				
	Double Se				
leter	5/8-inch Sensus iPERL Meter	252	\$129		\$32,3
martPoint AMR	SmartPoint AMR	10-			** *
ransceiver	Transceiver	126	\$166 \$25		\$20,9
Aeter Box	Carson 1419-12 Meter box W/Lid	252	\$35 \$67		\$8,8
Atter Valve	Ford Ball Meter Valve B-13 Watts 3/4" Check Valve #600 with #2 spring	252 252	\$67 \$17		\$16,8 \$4,2
Check Valve	Installation	252	\$1/	\$175	\$4,2 \$44,1
	III5UIIUU(JII	252		ψ175	\$127,3
		Sub-Total Cos	t - Soonaria A		\$127,3 \$515,2
		Sub-Total Cos			\$515,2 \$266,1
			Sub-Total Cost		\$781,3

BLSMWC Meter Only Installation Cost Analysis					
	200 Driveway Installa	ations wit	h No PRVs	5	
Bid Item	Specification	Quantity		Unit Price	
2.0 200	~F	(EA.)	Materials	Installation	Cost
	Scenario A1 - Nev	v Constructio	on -		
	Single Service	- One Home			
Meter	5/8-inch Sensus iPERL Meter	330	\$129		\$42,405
SmartPoint AMR	SmartPoint AMR				
Transceiver	Transceiver	330	\$156		\$51,480
Meter Box	Carson 1419-12 Meter box W/Lid	330	\$35		\$11,550
Meter Valve	Ford Ball Meter Valve B-13	330	\$67		\$22,110
	Watts 3/4" Check Valve #600 with #2				
Check Valve	spring	330	\$17		\$5,610
	Installation	330		\$175	\$57,750
	Instanation	550		\$175	
		~			\$190,905
	Scenario A2 - Nev				
	Single Service - One Home	e - Driveway	Installation	_	
Meter	5/8-inch Sensus iPERL Meter	200	\$129		\$25,700
	SmartPoint AMR				
Transceiver	Transceiver	200	\$156		\$31,200
Meter Box	Christy B16 Meter Box	200	\$75		\$15,000
PRV	Wilkins 70XL Pressure Reducing Valve	200	\$65		\$13,000
PRV Box	Christy B16 Meter Box	200	\$75		\$15,000
Meter Valve	Ford Ball Meter Valve B-13	200	\$67		\$13,400
	Watts 3/4" Check Valve #600 with #2				
Check Valve	spring	200	\$17		\$3,400
Gate Valve	Gate Valve	200	\$15		\$3,000
	Installation	200		\$600	\$120,000
					\$239,700
	Scenario A3 - Nev	v Constructio	on -		
	Double S	Service			
Meter	5/8-inch Sensus iPERL Meter	330	\$129		\$42,405
	SmartPoint AMR		Ψ>		¢. _ ,
Transceiver	Transceiver	115	\$166		\$19,090
Meter Box	Christy B16 Meter Box	330	\$75		\$24,750
Meter Valve	Ford Ball Meter Valve B-13	330	\$67		\$22,110
	Watts 3/4" Check Valve #600 with #2				1 7 -
Check Valve	spring	330	\$17		\$5,610
	Installation	330		\$175	\$57,750
					\$171,715
	Scenario B1 - Ex	xisting/Retrof	it		
	Single Service	0			
Meter	5/8-inch Sensus iPERL Meter	252	\$129		\$32,382
SmartPoint AMR	SmartPoint AMR	232	ψ127		ψ52,302
Transceiver	Transceiver	252	\$156		\$39,312
Meter Box	Carson 1419-12 Meter box W/Lid	52	\$35		\$1,820
Meter Valve	Ford Ball Meter Valve B-13	252	\$67		\$1,820
	Watts 3/4" Check Valve #600 with #2	232	ψ07		ψ10,004
		252	\$17		\$4,284
Check Valve	Ispring	/ / / /			
Check Valve	spring Installation	252	\$17	\$175	\$44,100

	Scenario B2 - Ex	isting/Retrofit			
	Double S	Service			
Meter	5/8-inch Sensus iPERL Meter	252	\$129		\$32,382
SmartPoint AMR	SmartPoint AMR				
Transceiver	Transceiver	126	\$166		\$20,916
Meter Box	Carson 1419-12 Meter box W/Lid	252	\$35		\$8,820
Meter Valve	Ford Ball Meter Valve B-13	252	\$67		\$16,884
	Watts 3/4" Check Valve #600 with #2				
Check Valve	spring	252	\$17		\$4,284
	Installation	252		\$175	\$44,100
					\$127,386
	S	Sub-Total Cost - S	Scenario 1		\$602,320
	S	Sub-Total Cost - S	Scenario 2		\$266,168
	Sub-Total Cost				\$868,488

	BLSMWC Meter and PR	V Installa	tion Cost A	Analysis	
	200 Driveway Install	lations - A	all new PR	Vs	
Bid Item	Specification	Quantity	Unit	Unit Price	
		(EA.)	Materials	Installation	
	Scenario A1 - N	ew Construct	tion -		
		ce - One Hom			
Meter	5/8-inch Sensus iPERL Meter	330	\$129		\$42,405
SmartPoint AMR	SmartPoint AMR				
Transceiver	Transceiver	330	\$156		\$51,480
Meter Box	Carson 1419-12 Meter box W/Lid	330	\$35		\$11,550
PRV	Wilkins 70XL Pressure Reducing Valve	330	\$120		\$39,600
PRV Box	Carson 1419-12 Meter box W/Lid	330	\$35		\$11,550
Meter Valve	Ford Ball Meter Valve B-13	330	\$67		\$22,110
	Watts 3/4" Check Valve #600 with #2				
Check Valve	spring	330	\$17		\$5,610
Gate Valve	Gate Valve	330	\$15		\$4,950
	Total	330		\$350	
	Totai	550		ψ550	\$115,500
					\$304,755
	Scenario A2 - N	ew Construct	tion -		
	Single Service - One Ho	me - Drivewa	y Installation		
Meter	5/8-inch Sensus iPERL Meter	200	\$129		\$25,700
	SmartPoint AMR				
Transceiver	Transceiver	200	\$156		\$31,200
Meter Box	Christy B16 Meter Box w/lid	200	\$75		\$15,000
PRV	Wilkins 70XL Pressure Reducing Valve	200	\$65		\$13,000
PRV Box	Christy B16 Meter Box	200	\$75		\$15,000
Meter Valve	Ford Ball Meter Valve B-13	200	\$67		\$13,400
	Watts 3/4" Check Valve #600 with #2				
Check Valve	spring	200	\$17		\$3,400
Gate Valve	Gate Valve	200	\$15		\$3,000
	Installation	200		\$1,200	\$240,000
			Scenario	Sub-total	\$359,700
	Scenario A3 - N	ew Construct	tion -		
	Double	e Service			
Meter	5/8-inch Sensus iPERL Meter	330	\$129		\$42,405
	SmartPoint AMR		¢>		¢,e
Transceiver	Transceiver	115	\$166		\$19,090
Meter Box	Christy B16 Meter Box	330	\$75		\$24,750
PRV	Wilkins 70XL Pressure Reducing Valve	330	\$65		\$21,450
PRV Box	Christy B16 Meter Box	330	\$75		\$24,750
Meter Valve	Ford Ball Meter Valve B-13	330	\$67		\$22,110
	Watts 3/4" Check Valve #600 with #2				,
Check Valve	spring	330	\$17		\$5,610
Gate Valve	Gate Valve	330	\$15		\$4,950
	Installation	330		\$350	\$115,500
					\$280,615
	Scenario B1 - 1	Existing/Retr	ofit		
		ce - One Hom			
Meter	5/8-inch Sensus iPERL Meter	252	\$129		\$32,382
SmartPoint AMR	SmartPoint AMR		+		
Transceiver	Transceiver	252	\$156		\$39,312

Meter Box	Carson 1419-12 Meter box W/Lid	252	\$35		\$8,820
PRV	Wilkins 70XL Pressure Reducing Valve	252	\$65		\$16,380
PRV Box	Carson 1419-12 Meter box W/Lid	252	\$35		\$8,820
Meter Valve	Ford Ball Meter Valve B-13	252	\$67		\$16,884
	Watts 3/4" Check Valve #600 with #2				
Check Valve	spring	252	\$17		\$4,284
Gate Valve	Gate Valve	252	\$15		\$3,780
	Installation	252		\$350	\$88,200
					\$218,862
	Scenario B2 - E	xisting/Retrofit	ţ		
	Double	Service			
Meter	5/8-inch Sensus iPERL Meter	252	\$129		\$32,382
SmartPoint AMR	SmartPoint AMR				
Transceiver	Transceiver	126	\$166		\$20,916
Meter Box	Carson 1419-12 Meter box W/Lid	252	\$35		\$8,820
PRV	Wilkins 70XL Pressure Reducing Valve	252	\$65		\$16,380
PRV Box	Carson 1419-12 Meter box W/Lid	252	\$35		\$8,820
Meter Valve	Ford Ball Meter Valve B-13	252	\$67		\$16,884
	Watts 3/4" Check Valve #600 with #2				
Check Valve	spring	252	\$17		\$4,284
Gate Valve	Gate Valve	252	\$15		\$3,780
	Installation	252		\$350	\$88,200
					\$200,466
		b-Total Cost -			\$945,070
	Su	b-Total Cost -			\$419,328
		Sub	Total Cost		\$1,364,398

Installation Installation Stemario A1 - New Construction - Single Service - One Home SmartPoint AMR SmartPoint AMR Single Service - One Home Transceiver Tansceiver 405 \$129 \$8 Meter Box Carson 1419-12 Meter box W/Lid 405 \$156 \$8 PRV Wilkins 70XL Pressure Reducing Valve 405 \$150 \$8 PRV Box Carson 1419-12 Meter box W/Lid 405 \$877 \$5 PRV Box Carson 1419-12 Meter box W/Lid 405 \$15 \$5 Meter Valve Ford Ball Meter Valve B-13 405 \$677 \$5 Gate Valve 405 \$15 \$5 \$5 Statallation 405 \$15 \$5		BLSMWC Meter and PRV	Installati	on Cost An	alysis		
Bit Hem Specification (EA.) Installation Co Scenario A1 - New Construction - Meter 548-inch Sensus IPERI. Meter 405 \$129 \$8 Meter 5/8-inch Sensus IPERI. Meter 405 \$156 \$8 Meter Box Carson 1419-12 Meter box WLid 405 \$315 \$\$ Meter Box Carson 1419-12 Meter box WLid 405 \$335 \$\$ PRV Wilkins 70XL Pressure Reducing Valve 405 \$567 \$\$ Check Valve Ford Ball Meter Valve B-13 405 \$667 \$\$ Check Valve Watts 3/4" Check Valve 7600 with #2 spring 405 \$15 \$\$ Gate Valve 405 \$15 \$\$ \$\$ \$\$ Steenario A2 - New Construction - Stage Service - One Hone - Driveway Installation Meter \$\$/8-inch Sensus iPERI. Meter \$0 \$15 \$\$ Stage Service - One Hone - Driveway Installation Transceiver \$0 \$15 \$\$		50 Driveway Installati	ions - All	new PRVs			
Scenario A1 - New Construction - Single Service - One Home Meter SimarPoint AMR SimarPoint AMR SimarPoint AMR SimarPoint AMR Transceiver 405 \$129 \$\$ Transceiver 405 \$120 \$\$ Meter Box Carson 1419-12 Meter box W/Lid 405 \$335 \$\$ PRV Wilkins 70XL Pressure Reducing Valve 405 \$120 \$\$ PRV Box Carson 1419-12 Meter box W/Lid 405 \$355 \$\$ Meter Valve Ford Ball Meter Valve B-13 405 \$677 \$\$ \$\$ Check Valve Watts 3/4" Check Valve 4000 with #2 spring 405 \$17 \$\$ Gate Valve Gate Valve 405 \$15 \$\$ \$\$ State Conce Home - Driveway Installation Transceiver 50 \$\$15 \$\$ Transceiver 50 \$\$15	Bid Item	Specification				Cost	
Single Service - One Home Meter 5/8-inch Sensus iPERL Meter 405 \$129 \$3 SmartPoint AMR SmartPoint AMR 405 \$156 \$8 Transceiver Transceiver 405 \$156 \$8 Meter Box Carson 1419-12 Meter box W/Lid 405 \$35 \$8 PRV Wilkins 70XL Pressure Reducing Valve 405 \$567 \$5 Meter Valve Ford Ball Meter Valve B-13 405 \$677 \$5 Check Valve Watts 3/4" Check Valve #600 with #2 spring 405 \$15 \$9 Gate Valve Gate Valve 405 \$15 \$9 State Valve 405 \$15 \$9 \$350 \$17 Gate Valve Gate Valve 405 \$15 \$9 \$350 \$17 State Service - One Hone - Driveway Installation 405 \$150 \$15 \$15 Meter So \$150 \$17 \$15 \$15 \$15 \$15 \$15 \$15 \$15 \$1			· · ·		Installation		
Meter 5% inch Sensus iPERL Meter 405 \$129 \$5 SmartPoint AMR SmartPoint AMR 405 \$156 \$1 Transceiver 405 \$156 \$1 \$1 Meter Box Carson 1419-12 Meter box W/Lid 405 \$152 \$5 PRV Wilkins 70XL Pressure Reducing Valve 405 \$120 \$5 Meter Valve Ford Ball Meter Valve B-13 405 \$57 \$5 Check Valve Watts 3/4" Check Valve #600 with #2 spring 405 \$17 \$3 Gate Valve Gate Valve 405 \$15 \$5 \$5 Scenario A2 - New Construction - Single Service - One Home - Driveway Installation Meter 5/8-inch Sensus iPERL Meter \$0 \$15 \$5 SmartPoint AMR \$15 \$5 Transceiver \$0 \$155 \$5 \$5 PRV Wilkins 70XL Pressure Reducing Valve \$50 \$575 \$5 PRV Rox Christy B16 Meter Box \$50 <td< td=""><td></td><td></td><td></td><td>n -</td><td></td><td></td></td<>				n -			
SmartPoint AMR SmartPoint AMR 405 \$156 \$17 Transceiver Transceiver 405 \$156 \$18 Meter Box Carson 1419-12 Meter box W/Lid 405 \$120 \$17 PRV Wilkins 70XL Pressure Reducing Valve 405 \$120 \$15 PRV Box Carson 1419-12 Meter box W/Lid 405 \$17 \$117 \$17 \$17 \$17 \$17 \$17 \$17 \$117 \$117 \$117 \$117 \$117 \$117 \$117 \$117 \$117 \$117 \$117 \$117 \$117 \$117 \$117 \$117 \$117 </td <td>Motor</td> <td></td> <td></td> <td>\$120</td> <td>1</td> <td>\$52,043</td>	Motor			\$120	1	\$52,043	
Transceiver Transceiver 405 \$156 \$3 Meter Dox Carson 1419-12 Meter box W/Lid 405 \$335 \$\$ PRV Wilkins 70XL Pressure Reducing Valve 405 \$\$120 \$\$ PRV Box Carson 1419-12 Meter box W/Lid 405 \$\$120 \$\$ PRV Box Carson 1419-12 Meter box W/Lid 405 \$\$15 \$\$ PRV Box Carson 1419-12 Meter box W/Lid 405 \$\$15 \$\$ Meter Valve Ford Ball Meter Valve B-13 405 \$\$17 \$\$ Gate Valve Gate Valve 405 \$\$15 \$\$ \$\$ Installation 405 \$\$15 \$\$ \$\$ \$\$ Stenario A2 - New Construction - Stenario A3 - New Construction - Stenario A3 \$\$ \$\$ \$\$ Meter 50 \$\$ \$\$ \$\$ \$\$			405	\$127		\$52,04.	
Meter Box Carson 1419-12 Meter box W/Lid 405 \$35 \$ PRV Wilkins 70XL Pressure Reducing Valve 405 \$120 \$ PRV Box Carson 1419-12 Meter box W/Lid 405 \$35 \$ Meter Valve Ford Ball Meter Valve B-13 405 \$677 \$ Check Valve Watts 34" Check Valve #600 with #2 spring 405 \$15 \$ Gate Valve Gate Valve 405 \$15 \$ \$ Stenario A2 - New Construction - SmartPoint AMR 50 \$75 \$ Transceiver Tansceiver 50 \$65 \$ \$ PRV Box Christy B16 Meter Box \$0 \$75 \$ \$ PRV Box Christy B16 Meter Box \$0 \$17			405	\$156		\$63,180	
PRV Wilkins 70XL Pressure Reducing Valve 405 \$120 \$5 PRV Box Carson 1419-12 Meter box W/Lid 405 \$335 \$5 Meter Valve Ford Ball Meter Valve B-13 405 \$17 \$5 Check Valve Watts 3/4" Check Valve #600 with #2 spring 405 \$17 \$5 Gate Valve Gate Valve 405 \$15 \$5 Scenario A2 - New Construction - Single Service - One Home - Driveway Installation Meter \$60 \$129 \$1 Scenario A2 - New Construction - Single Service - One Home - Driveway Installation Meter 5/8-inch Sensus iPERL Meter \$0 \$129 \$1 Seenario A2 - New Construction - Single Service - One Home - Driveway Installation Transceiver Transceiver \$0 \$156 \$2 Meter Box S0 \$375 \$2 \$2 PRV Wilkins 70XL Pressure Reducing Valve \$50 \$365 \$2 PRV Box Christy B16 Meter Box \$50 \$375 \$2 <tr< td=""><td></td><td></td><td></td><td></td><td></td><td>\$14,175</td></tr<>						\$14,175	
PRV Box Carson 1419-12 Meter box W/Lid 405 \$35 \$\$ Meter Valve Ford Ball Meter Valve B-13 405 \$67 \$\$ Check Valve Watts 3/4" Check Valve #600 with #2 spring 405 \$\$17 \$\$ Gate Valve Gate Valve 405 \$\$15 \$\$ \$\$ Installation 405 \$\$15 \$\$ \$\$ \$\$ Scenario A2 - New Construction - Single Service - One Home - Driveway Installation Meter 5/8-inch Sensus iPERI. Meter \$0 \$\$156 \$\$ SmartPoint AMR \$\$ \$\$ \$\$ \$\$ \$\$ Transceiver Transceiver \$\$ \$\$ \$\$ \$\$ \$\$ RV Box Christy B16 Meter Box \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ PRV Wilkins 70XI. Pressure Reducing Valve \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td></t<>							
Meter Valve Ford Ball Meter Valve B-13 405 \$67 \$5 Check Valve Watts 3/4" Check Valve #600 with #2 spring 405 \$17 5 Gate Valve Gate Valve 405 \$15 5 5 Installation 405 \$15 \$350 \$11 Single Service - One Home - Driveway Installation Meter 50 \$129 \$2 Single Service - One Home - Driveway Installation Meter 5/8-inch Sensus iPERL Meter 50 \$129 \$2 Meter SmartPoint AMR \$1 \$1 \$1 Transceiver Transceiver 50 \$156 \$2 PRV Wilkins 70XL Pressure Reducing Valve 50 \$75 \$2 Meter Valve Ford Ball Meter Valve B-13 50 \$67 \$2 Meter Valve Ford Ball Meter Valve B-13 50 \$17 \$3 Gate Valve Gate Valve \$30 \$17 \$3 Gate Valve Gate Valve \$30 \$1						\$48,600	
Check Valve Watts 3/4" Check Valve #600 with #2 spring 405 \$17 5 Gate Valve Gate Valve 405 \$15 \$5 \$5 Installation 405 \$15 \$5 \$5 Scenario A2 - New Construction - Sigle Service - One Home - Driveway Installation Meter 5/8-inch Sensus iPERL Meter \$0 \$129 \$5 SmartPoint AMR \$50 \$75 \$5 Transceiver Transceiver \$50 \$156 \$5 PRV Wilkins 70XL Pressure Reducing Valve \$50 \$75 \$5 PRV Wilkins 70XL Pressure Reducing Valve \$50 \$75 \$5 PRV Wilkins 70XL Pressure Reducing Valve \$50 \$75 \$5 PRV Wilkins 70XL Pressure Reducing Valve \$50 \$75 \$5 Meter Valve Ford Ball Meter Valve B-13 \$50 \$67 \$5 Check Valve Watts 3/4" Check Valve #600 with #2 spring \$0 \$11,200 \$1 Gate Valve Gate Va	PRV BOX	Carson 1419-12 Meter box W/Lid	405	\$33		\$14,175	
Check Valve Watts 3/4" Check Valve #600 with #2 spring 405 \$17 5 Gate Valve Gate Valve 405 \$15 \$5 Installation 405 \$15 \$5 Scenario A2 - New Construction - Sigle Service - One Home - Driveway Installation Meter \$0 \$129 \$5 Sigle Service - One Home - Driveway Installation Meter \$0 \$129 \$5 Sigle Service - One Home - Driveway Installation Meter \$0 \$129 \$5 Sigle Service - One Home - Driveway Installation Meter \$0 \$156 \$5 Transceiver \$50 \$156 \$5 PRV Wilkins 70XL Pressure Reducing Valve \$50 \$75 \$5 PRV Watts 3/4" Check Valve B-13 \$50 \$67 \$5 Installation \$50 \$17 \$1 Gate Valve \$60 \$17 \$1							
Gate Valve Gate Valve 405 \$15 \$530 \$11 Installation 405 \$15 \$350 \$11 Single Service - One Home - Driveway Installation Meter 5/8-inch Sensus iPERL Meter 50 \$129 \$129 \$129 \$115 \$						\$27,135	
Installation 405 \$330 \$11 Scenario A2 - New Construction - Single Service - One Home - Driveway Installation Meter 5/8-inch Sensus iPERL Meter 50 \$129 5 Transceiver Transceiver 50 \$156 5 Transceiver Transceiver 50 \$156 5 PRV Wilkins 70XL Pressure Reducing Valve 50 \$65 5 PRV Wilkins 70XL Pressure Reducing Valve 50 \$67 5 PRV Box Christy B16 Meter Box 50 \$75 5 Meter Valve Ford Ball Meter Valve B-13 50 \$67 5 Meter Valve Ford Ball Meter Valve B-13 50 \$17 5 Gate Valve Gate Valve 50 \$15 5 Scenario A3 - New Construction - SmartPoint AMR Transceiver 203 \$166 \$2 Meter 5/8-inch Sensus iPERL Meter 405 \$129 \$2 <td colspantpoin<="" td=""><td>Check Valve</td><td>Watts 3/4" Check Valve #600 with #2 spring</td><td>405</td><td>\$17</td><td></td><td>\$6,885</td></td>	<td>Check Valve</td> <td>Watts 3/4" Check Valve #600 with #2 spring</td> <td>405</td> <td>\$17</td> <td></td> <td>\$6,885</td>	Check Valve	Watts 3/4" Check Valve #600 with #2 spring	405	\$17		\$6,885
Single Service - One Home - Driveway Installation Meter 5/8-inch Sensus iPERL Meter 50 \$129 9 SmartPoint AMR 50 \$156 9 Transceiver Transceiver 50 \$156 9 Meter Box Christy B16 Meter Box 50 \$156 9 PRV Wilkins 70XL Pressure Reducing Valve 50 \$575 9 PRV Wilkins 70XL Pressure Reducing Valve 50 \$575 9 Meter Valve Ford Ball Meter Valve B-13 50 \$67 9 Christy B16 Meter Box 50 \$115 9 9 Check Valve Watts 3/4" Check Valve B-13 50 \$17 9 Gate Valve Gate Valve 50 \$115 9 Stenario A3 - New Construction - Duble Service Meter 5/8-inch Sensus iPERL Meter 405 \$129 \$2 Stenario A3 - New Construction - Duble Service Meter Box Christy B16 Meter	Gate Valve			\$15		\$6,075	
Scenario A2 - New Construction - Single Service - One Home - Driveway Installation Meter 5/8-inch Sensus iPERL Meter 50 \$129 9 SmartPoint AMR \$129 \$156		Installation	405		\$350	\$141,750	
Single Service - One Home - Driveway Installation Meter 5/8-inch Sensus iPERL Meter 50 \$129 9 SmartPoint AMR 50 \$156 9 Transceiver Transceiver 50 \$156 9 Meter Box Christy B16 Meter Box 50 \$75 9 PRV Wilkins 70XL Pressure Reducing Valve 50 \$65 9 PRV Box Christy B16 Meter Box 50 \$75 9 Meter Valve Ford Ball Meter Valve B-13 50 \$67 9 Meter Valve Watts 3/4" Check Valve #600 with #2 spring 50 \$17 9 Gate Valve Gate Valve 50 \$15 1 Installation 50 \$129 \$1 \$1,200 \$67 Scenario A3 - New Construction - Double Service Meter 5/8-inch Sensus iPERL Meter 405 \$129 \$1 Scenario A3 - New Construction - Double Service Meter 5/8-inch Sensus iPERL Meter 405 \$129 \$2 SmartPoi						\$374,018	
Meter 5/8-inch Sensus iPERL Meter 50 \$129 9 SmartPoint AMR		Scenario A2 - New	Construction	n -			
Meter 5/8-inch Sensus iPERL Meter 50 \$129 9 SmartPoint AMR		Single Service - One Home	- Drivewav I	nstallation			
SmartPoint AMR 50 \$156 59 Meter Box Christy B16 Meter Box 50 \$75 \$75 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
SmartPoint AMR 50 \$156 59 Meter Box Christy B16 Meter Box 50 \$75 5 5 PRV Wilkins 70XL Pressure Reducing Valve 50 \$65 5 5 PRV Wilkins 70XL Pressure Reducing Valve 50 \$65 5 5 PRV Box Christy B16 Meter Box 50 \$57 5 5 Meter Valve Ford Ball Meter Valve B-13 50 \$67 5 5 Check Valve Watts 3/4" Check Valve #600 with #2 spring 50 \$17 5 5 Gate Valve Gate Valve Gate Valve 50 \$15 5 5 Installation 50 \$120 \$1200 \$6 Outble Service Meter 5/8-inch Sensus iPERL Meter 405 \$129 \$2 Transceiver Transceiver 203 \$166 \$2 Transceiver Transceiver 203 \$166 \$2 PRV Wilkins 70XL Pressure Reducing Valve </td <td>Meter</td> <td>5/8-inch Sensus iPERL Meter</td> <td>50</td> <td>\$129</td> <td></td> <td>\$6,42</td>	Meter	5/8-inch Sensus iPERL Meter	50	\$129		\$6,42	
Meter Box Christy B16 Meter Box 50 \$75 5 5 PRV Wilkins 70XL Pressure Reducing Valve 50 \$65 5		SmartPoint AMR				· · · · ·	
PRVWilkins 70XL Pressure Reducing Valve50\$65 \le PRV BoxChristy B16 Meter Box50\$75 \le Meter ValveFord Ball Meter Valve B-13 50 \$67 \le Meter ValveWatts 3/4" Check Valve #600 with #2 spring 50 \$17 \le Gate ValveGate Valve 50 \$15 $=$ Scenario A3 - New Construction -Scenario A3 - New Construction -Scenario A3 - New Construction -Double ServiceMeter $5/8$ -inch Sensus iPERL Meter 405 \$129\$2SmartPoint AMRTransceiverTransceiver203\$166\$2PRVWilkins 70XL Pressure Reducing Valve 405 \$75\$3PRVWilkins 70XL Pressure Reducing Valve 405 \$67\$3Meter ValveFord Ball Meter Valve B-13 405 \$67\$3Meter ValveFord Ball Meter Valve B-13 405 \$67\$3Check ValveWatts 3/4" Check Valve #600 with #2 spring 405 \$17\$3Gate ValveGate Valve 405 \$15\$3\$3Check ValveGate Valve #600 with #2 spring 405 \$17\$3Gate ValveGate Valve 405 \$15\$3\$3Check ValveGate Valve 405 \$15\$3\$3Check ValveGate Valve 405 \$15\$3\$3Gate ValveGate Valve 405 \$15\$3	Transceiver	Transceiver	50	\$156		\$7,800	
PRV Box Christy B16 Meter Box 50 \$75 55 Meter Valve Ford Ball Meter Valve B-13 50 \$67 55 Check Valve Watts 3/4" Check Valve #600 with #2 spring 50 \$17 Gate Valve Gate Valve 50 \$15 Installation Scenario A3 - New Construction - Scenario A3 - New Construction - Double Service Meter 5/8-inch Sensus iPERL Meter 405 \$129 \$2 SmartPoint AMR Transceiver Transceiver 203 \$166 \$2 Meter Box Christy B16 Meter Box 405 \$75 \$3 PRV Wilkins 70XL Pressure Reducing Valve 405 \$65 \$3 PRV Wilkins 70XL Pressure Reducing Valve 405 \$67 \$3 Meter Valve Ford Ball Meter Valve B-13 405 \$67 \$3 Check Valve Watts 3/4" Check Valve #600 with #2 spring 405 \$17 \$3 Gate Valve Gate Valve 405 \$15 \$3 Check Valve Gate Valve #600 with #2 spring 405 \$15 \$3 Check Valve Gate Valve #600 with #2 spring 405 \$15	Meter Box	Christy B16 Meter Box	50	\$75		\$3,750	
Meter Valve Ford Ball Meter Valve B-13 50 \$67 50 Check Valve Watts 3/4" Check Valve #600 with #2 spring 50 \$17 50 \$17 Gate Valve Gate Valve 50 \$15 50 \$15 50 Installation 50 \$15 \$1200 \$67 \$	PRV	Wilkins 70XL Pressure Reducing Valve	50	\$65		\$3,250	
Check Valve Watts 3/4" Check Valve #600 with #2 spring 50 \$17 Gate Valve Gate Valve 50 \$15 Installation 50 \$120 \$6 Scenario A3 - New Construction - Double Service Meter 5/8-inch Sensus iPERL Meter 405 \$129 \$3 SmartPoint AMR	PRV Box	Christy B16 Meter Box	50	\$75		\$3,750	
Check Valve Watts 3/4" Check Valve #600 with #2 spring 50 \$17 Gate Valve Gate Valve 50 \$15 Installation 50 \$120 \$6 Scenario A3 - New Construction - Double Service Meter 5/8-inch Sensus iPERL Meter 405 \$129 \$3 SmartPoint AMR							
Gate Valve Gate Valve 50 \$15 Installation 50 \$15 Scenario A3 - New Construction - Double Service Meter 5/8-inch Sensus iPERL Meter 405 \$129 \$32 SmartPoint AMR 203 \$166 \$32 Transceiver 203 \$166 \$32 Meter Box Christy B16 Meter Box 405 \$75 \$32 PRV Wilkins 70XL Pressure Reducing Valve 405 \$65 \$32 PRV Box Christy B16 Meter Box 405 \$65 \$32 Output Ford Ball Meter Valve B-13 405 \$67 \$32 Check Valve Watts 3/4" Check Valve #600 with #2 spring 405 \$17 \$32 Gate Valve Gate Valve 405 \$15 \$32 Scenario B1 - Existing/Retrofit	Meter Valve	Ford Ball Meter Valve B-13	50	\$67		\$3,350	
Gate Valve Gate Valve 50 \$15 \$1,200 \$6 Installation 50 \$1,200 \$6 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td></td<>							
Installation50\$1,200\$6Scenario A3 - New Construction -Double ServiceMeter5/8-inch Sensus iPERL Meter405\$129\$2SmartPoint AMRTransceiver203\$166\$2Meter BoxChristy B16 Meter Box405\$75\$3PRVWilkins 70XL Pressure Reducing Valve405\$65\$3PRV BoxChristy B16 Meter Box405\$75\$3Meter ValveFord Ball Meter Valve B-13405\$67\$3Check ValveWatts 3/4" Check Valve #600 with #2 spring405\$17\$3Gate ValveGate Valve405\$15\$3Scenario B1 - Existing/RetrofitSingle Service - One Home		* *				\$850	
Scenario A3 - New Construction - Double Service Meter 5/8-inch Sensus iPERL Meter 405 \$129 \$3 SmartPoint AMR	Gate Valve				\$1.200	\$750 \$60,000	
Scenario A3 - New Construction - Double Service Meter 5/8-inch Sensus iPERL Meter 405 \$129 \$5 SmartPoint AMR 1 <td></td> <td>Instanation</td> <td>50</td> <td></td> <td>\$1,200</td> <td></td>		Instanation	50		\$1,200		
Double Service Meter 5/8-inch Sensus iPERL Meter 405 \$129 \$129 SmartPoint AMR 203 \$166 \$129 \$129 Transceiver Transceiver 203 \$166 \$129						\$89,925	
Meter 5/8-inch Sensus iPERL Meter 405 \$129 \$129 SmartPoint AMR 203 \$166 \$129 Transceiver Transceiver 203 \$166 \$129 Meter Box Christy B16 Meter Box 405 \$75 \$165 PRV Wilkins 70XL Pressure Reducing Valve 405 \$65 \$129 PRV Wilkins 70XL Pressure Reducing Valve 405 \$65 \$129 PRV Box Christy B16 Meter Box 405 \$575 \$15 Meter Valve Ford Ball Meter Valve B-13 405 \$67 \$15 Check Valve Watts 3/4" Check Valve #600 with #2 spring 405 \$17 9 Gate Valve Gate Valve 405 \$15 \$12 Installation 405 \$15 \$12 Scenario B1 - Existing/Retrofit Single Service - One Home		Scenario A3 - New	Construction	n -			
SmartPoint AMR203\$166\$1TransceiverTransceiver203\$166\$1Meter BoxChristy B16 Meter Box405\$75\$1PRVWilkins 70XL Pressure Reducing Valve405\$65\$1PRV BoxChristy B16 Meter Box405\$75\$1Meter ValveFord Ball Meter Valve B-13405\$67\$1Meter ValveFord Ball Meter Valve B-13405\$67\$1Check ValveWatts 3/4" Check Valve #600 with #2 spring405\$17\$2Gate ValveGate Valve405\$15\$5Scenario B1 - Existing/RetrofitSingle Service - One Home		Double Se	ervice				
SmartPoint AMR203\$166\$1Transceiver203\$166\$1Meter BoxChristy B16 Meter Box405\$75\$1PRVWilkins 70XL Pressure Reducing Valve405\$65\$1PRV BoxChristy B16 Meter Box405\$75\$1Meter ValveFord Ball Meter Valve B-13405\$67\$1Meter ValveFord Ball Meter Valve B-13405\$17\$1Check ValveWatts 3/4" Check Valve #600 with #2 spring405\$17\$2Gate ValveGate Valve405\$15\$1Scenario B1 - Existing/RetrofitSingle Service - One Home	Meter	5/8-inch Sensus iPERL Meter	405	\$129		\$52,043	
TransceiverTransceiver203\$166\$3Meter BoxChristy B16 Meter Box405\$75\$3PRVWilkins 70XL Pressure Reducing Valve405\$65\$3PRV BoxChristy B16 Meter Box405\$75\$3Meter ValveFord Ball Meter Valve B-13405\$67\$3Meter ValveFord Ball Meter Valve B-13405\$17\$3Check ValveWatts 3/4" Check Valve #600 with #2 spring405\$17\$3Gate ValveGate Valve405\$15\$3Scenario B1 - Existing/RetrofitSingle Service - One Home			105	Ψ12)		<i>402</i> ,040	
Meter BoxChristy B16 Meter Box405\$75\$3PRVWilkins 70XL Pressure Reducing Valve405\$65\$3PRV BoxChristy B16 Meter Box405\$75\$3Meter ValveFord Ball Meter Valve B-13405\$67\$3Check ValveWatts 3/4" Check Valve #600 with #2 spring405\$17\$3Gate ValveGate Valve405\$15\$14Scenario B1 - Existing/RetrofitSingle Service - One Home	Transceiver		203	\$166		\$33,698	
PRV Wilkins 70XL Pressure Reducing Valve 405 \$65 \$7 PRV Box Christy B16 Meter Box 405 \$75 \$3 Meter Valve Ford Ball Meter Valve B-13 405 \$67 \$3 Check Valve Watts 3/4" Check Valve #600 with #2 spring 405 \$17 \$5 Gate Valve Gate Valve 405 \$15 \$1 Installation 405 \$350 \$14 Scenario B1 - Existing/Retrofit						\$30,375	
PRV Box Christy B16 Meter Box 405 \$75 \$3 Meter Valve Ford Ball Meter Valve B-13 405 \$67 \$3 Check Valve Watts 3/4" Check Valve #600 with #2 spring 405 \$17 \$5 Gate Valve Gate Valve 405 \$17 \$5 Installation 405 \$15 \$5 Scenario B1 - Existing/Retrofit Single Service - One Home						\$26,325	
Check Valve Watts 3/4" Check Valve #600 with #2 spring 405 \$17 5 Gate Valve Gate Valve 405 \$15 5 Installation 405 \$350 \$14 Scenario B1 - Existing/Retrofit Single Service - One Home						\$30,375	
Gate Valve 405 \$15 55 Installation 405 \$15 \$350 Scenario B1 - Existing/Retrofit \$350 \$350	Meter Valve	Ford Ball Meter Valve B-13	405	\$67		\$27,135	
Gate Valve 405 \$15 55 Installation 405 \$15 \$350 Scenario B1 - Existing/Retrofit \$350 \$350							
Installation 405 \$350 \$14 \$350 \$350 \$350 \$350 \$350 Scenario B1 - Existing/Retrofit \$350 \$350 Single Service - One Home \$350 \$350						\$6,885	
\$3: Scenario B1 - Existing/Retrofit Single Service - One Home	Gate Valve			\$15	***	\$6,075	
Scenario B1 - Existing/Retrofit Single Service - One Home		Installation	405		\$350	\$141,750	
Single Service - One Home						\$354,661	
		Scenario B1 - Exi	sting/Retrofi	t			
Meter5/8-inch Sensus iPERL Meter252\$129\$3	Meter	5/8-inch Sensus iPERL Meter	252	\$129		\$32,382	

SmartPoint AMR	SmartPoint AMR			
Transceiver	Transceiver	252	\$156	\$39,312
Meter Box	Carson 1419-12 Meter box W/Lid	252	\$35	\$8,820
PRV	Wilkins 70XL Pressure Reducing Valve	252	\$65	\$16,380
PRV Box	Carson 1419-12 Meter box W/Lid	252	\$35	\$8,820
Meter Valve	Ford Ball Meter Valve B-13	252	\$67	\$16,884
Check Valve	Watts 3/4" Check Valve #600 with #2 spring	252	\$17	\$4,284
Gate Valve	Gate Valve	252	\$15	\$3,780
	Installation	252		\$350 \$88,200
				\$218,862
	Scenario B2 - Exis			
	Double Se			
Meter	5/8-inch Sensus iPERL Meter	252	\$129	\$32,382
SmartPoint AMR	SmartPoint AMR			
Transceiver	Transceiver	126	\$166	\$20,91
Meter Box	Carson 1419-12 Meter box W/Lid	252	\$35	\$8,820
PRV	Wilkins 70XL Pressure Reducing Valve	252	\$65	\$16,380
PRV Box	Carson 1419-12 Meter box W/Lid	252	\$35	\$8,820
Meter Valve	Ford Ball Meter Valve B-13	252	\$67	\$16,884
Check Valve	Watts 3/4" Check Valve #600 with #2 spring	252	\$17	\$4,284
Gate Valve	Gate Valve	252	\$15	\$3,780
	Installation	252		\$350 \$88,200
				\$200,460
		ub-Total Cost -		\$818,60
	Su	ub-Total Cost -		\$419,32
		Sub-	Total Cost	\$1,237,93

	BLSMWC Meter Only	Installati	on Cost Analy	sis	
	200 Driveway Installations -	No new P	RVs in Existin	ng Areas	
Bid Item	Specification	Quantity (EA.)	Unit Pr Materials		Cost
		, <i>,</i>		Installation	
	Scenario A1 - N				
Meter	5/8-inch Sensus iPERL Meter	ice - One Hon	ne \$129		\$42.405
	R SmartPoint AMR	330	\$129		\$42,405
Transceiver	Transceiver	330	\$156		\$51,480
Meter Box	Carson 1419-12 Meter box W/Lid	330	\$35		\$11,550
PRV	Wilkins 70XL Pressure Reducing Valve	330	\$120		\$39,600
PRV Box	Carson 1419-12 Meter box W/Lid	330	\$35		\$11,550
Meter Valve	Ford Ball Meter Valve B-13	330	\$67		\$22,110
Check Valve	Watts 3/4" Check Valve #600 with #2 spring	330	\$17		\$5,610
Gate Valve	Gate Valve	330	\$15		\$4,950
	Installation	330		\$350	\$115,500
					\$304,755
	Scenario A2 - I	New Construc	tion -		
	Single Service - One Ho				
Meter	5/8-inch Sensus iPERL Meter	200	\$129		\$25,700
Ivicici	SmartPoint AMR	200	\$129		\$25,700
Transceiver	Transceiver	200	\$156		\$31,200
Meter Box	Christy B16 Meter Box	200	\$75		\$15,000
PRV	Wilkins 70XL Pressure Reducing Valve	200	\$65		\$13,000
PRV Box	Christy B16 Meter Box	200	\$75		\$15,000
Meter Valve	Ford Ball Meter Valve B-13	200	\$67		\$13,400
		200	ψ07		\$15,100
Check Valve	Watts 3/4" Check Valve #600 with #2 spring	200	\$17		\$3,400
Gate Valve	Gate Valve	200	\$15		\$3,000
	Installation	200		\$1,200	\$240,000
					\$359,700
	Scenario A3 - I	New Construc	tion -		
	Doub	le Service			
Meter	5/8-inch Sensus iPERL Meter	330	\$129		\$42,405
Wieter	SmartPoint AMR	550	ψ129		ψτ2,τ05
Transceiver	Transceiver	115	\$166		\$19,090
Meter Box	Christy B16 Meter Box	330	\$75		\$24,750
PRV	Wilkins 70XL Pressure Reducing Valve	330	\$65		\$21,450
PRV Box	Christy B16 Meter Box	330	\$75		\$24,750
Meter Valve	Ford Ball Meter Valve B-13	330	\$67		\$22,110
Check Valve	Watts 3/4" Check Valve #600 with #2 spring	330	\$17		\$5,610
Gate Valve	Gate Valve	330	\$15		\$4,950
	Installation	330		\$350	\$115,500
					\$280,615
	Scenario B1 -	Existing/Retr	ofit		
	Single Serv	ice - One Hon	ne		
Meter	5/8-inch Sensus iPERL Meter	252	\$129		\$32,382
SmartPoint AM	R SmartPoint AMR				
Transceiver	Transceiver	252	\$156		\$39,312
Meter Box	Carson 1419-12 Meter box W/Lid	252	\$35		\$8,820

Meter Valve	Ford Ball Meter Valve B-13	252	\$67		\$16,884
Check Valve	Watts 3/4" Check Valve #600 with #2 spring	252	\$17		\$4,284
	Installation	252		\$175	\$44,100
					\$145,782
	Scenario B2 - I	Existing/Retrofit			
	Double	Service			
Meter	5/8-inch Sensus iPERL Meter	252	\$129		\$32,382
SmartPoint AM	IR SmartPoint AMR				
Transceiver	Transceiver	126	\$166		\$20,916
Meter Box	Carson 1419-12 Meter box W/Lid	252	\$35		\$8,820
Meter Valve	Ford Ball Meter Valve B-13	252	\$67		\$16,884
Check Valve	Watts 3/4" Check Valve #600 with #2 spring	252	\$17		\$4,284
	Installation	252		\$175	\$44,100
					\$127,386
		Sub-Total Cost	- Scenario 1		\$945,070
Sub-Total Cost - Scenario 2					\$273,168
Sub-Total Cost			b-Total Cost		\$1,218,238

	······································	tanation	Cost Analy	y 515	
50 Driveway	y Installations - No 1	new PRV	s in Existir	ng Areas	
Bid Item Sp	ecification	Quantity	Unit l	Price	Cost
		(EA.)	Materials	Installation	
	Scenario A1 - New	Construction	-		
	Single Service -	One Home			
Meter 5/8-inch Sensus iPE	RL Meter	405	\$129		\$52,043
SmartPoint AMR SmartPoint AMR					
Transceiver Transceiver		405	\$156		\$63,180
Meter Box Carson 1419-12 Met	ter box W/Lid	405	\$35		\$14,175
PRV Wilkins 70XL Press	ure Reducing Valve	405	\$120		\$48,600
PRV Box Carson 1419-12 Met	ter box W/Lid	405	\$35		\$14,175
Meter Valve Ford Ball Meter Val	ve B-13	405	\$67		\$27,135
Check Valve Watts 3/4" Check V	alve #600 with #2 spring	405	\$17		\$6,885
Gate Valve Gate Valve		405	\$15		\$6,075
Installation		405		\$350	
		405		\$550	\$141,750
					\$374,018
	Scenario A2 - New				
	Single Service - One Home -	Driveway Ir	nstallation		
Meter 5/8-inch Sensus iPE	RL Meter	50	\$129		\$6,425
SmartPoint AMR					
Transceiver Transceiver		50	\$156		\$7,800
Meter Box Christy B16 Meter B	Box	50	\$75		\$3,750
PRV Wilkins 70XL Press	ure Reducing Valve	50	\$65		\$3,250
PRV Box Christy B16 Meter B	Box	50	\$75		\$3,750
Meter Valve Ford Ball Meter Val	ve B-13	50	\$67		\$3,350
	alve #600 with #2 spring	50	\$17		\$850
Gate Valve Gate Valve		50	\$15	¢1.200	\$750
Installation		50		\$1,200	\$60,000
					\$89,925
	Scenario A3 - New				
	Double Se	rvice			
Meter 5/8-inch Sensus iPE	RL Meter	405	\$129		\$52,043
SmartPoint AMR					
Transceiver Transceiver		203	\$166		\$33,698
Meter Box Christy B16 Meter B	Box	405	\$75		\$30,375
PRV Wilkins 70XL Press	ure Reducing Valve	405	\$65		\$26,325
PRV Box Christy B16 Meter B	Box	405	\$75		\$30,375
Meter Valve Ford Ball Meter Val		405	\$67		\$27,135
	alve #600 with #2 spring	405	\$17		\$6,885
Gate Valve Gate Valve		405	\$15		\$6,075
Installation		405		\$350	\$141,750
					\$354,661
	Scenario B1 - Exis	ting/Retrofit			
	Single Service -	One Home			
Meter 5/8-inch Sensus iPE		252	\$129		\$32,382
SmartPoint AMR SmartPoint AMR					, ,
Transceiver Transceiver		252	\$156		\$39,312
Meter Box Carson 1419-12 Met	ter box W/Lid	252	\$35		\$8,820

Meter Valve	Ford Ball Meter Valve B-13	252	\$67		\$16,884
Check Valve	Watts 3/4" Check Valve #600 with #2 spring	252	\$17		\$4,284
	Installation	252		\$175	\$44,100
					\$145,782
	Scenario B2 - Ex	isting/Retrofit			
	Double S	ervice			
Meter	5/8-inch Sensus iPERL Meter	252	\$129		\$32,382
SmartPoint AMR	SmartPoint AMR				
Transceiver	Transceiver	126	\$166		\$20,916
Meter Box	Carson 1419-12 Meter box W/Lid	252	\$35		\$8,820
Meter Valve	Ford Ball Meter Valve B-13	252	\$67		\$16,884
Check Valve	Watts 3/4" Check Valve #600 with #2 spring	252	\$17		\$4,284
	Installation	252		\$175	\$44,100
					\$127,386
		Sub-Total Cost -	Scenario 1		\$818,603
Sub-Total Cost - Scenario 2					\$273,168
Sub-Total Cost					\$1,091,771

	BLSMWC Meter Only I	nstallatio	n Cost Ana	alysis	
50 Drivewa	y Installations - No new PRVs in	Existing	Areas - U	tilize 200	Existing Boxes
Bid Item	Specification	Quantity (EA.)	Unit I		Cost
			Materials	Installation	
	Scenario A1 - Nev				
	Single Service				\$52.042
Meter SmartPoint AMR	5/8-inch Sensus iPERL Meter	405	\$129		\$52,043
Transceiver	SmartPoint AMR Transceiver	405	¢150		¢ <i>c</i> 2 190
Meter Box	Carson 1419-12 Meter box W/Lid	405 405	\$156 \$35		\$63,180 \$14,175
PRV	Wilkins 70XL Pressure Reducing Valve	405	\$120		\$48,600
PRV Box	Carson 1419-12 Meter box W/Lid	405	\$35		\$14,175
Meter Valve	Ford Ball Meter Valve B-13	405	\$67		\$27,135
Check Valve	Watts 3/4" Check Valve #600 with #2 spring	405	\$17		\$6,885
Gate Valve	Gate Valve	405	\$15		\$6,075
	Installation	405		\$350	\$141,750
					\$374,018
	Scenario A2 - Nev	v Constmusti	on		\$371,010
	Single Service - One Hom				* *
Meter	5/8-inch Sensus iPERL Meter	50	\$129		\$6,425
	SmartPoint AMR		• • • • •		*= 000
Transceiver	Transceiver	50	\$156		\$7,800
Meter Box	Christy B16 Meter Box	50	\$75		\$3,750
PRV	Wilkins 70XL Pressure Reducing Valve	50	\$65		\$3,250
PRV Box	Christy B16 Meter Box	50	\$75		\$3,750
Meter Valve	Ford Ball Meter Valve B-13	50	\$67		\$3,350
Chaols Volvo	Watto 2/4" Choole Value #600 with #2 aming	50	¢17		¢950
Check Valve Gate Valve	Watts 3/4" Check Valve #600 with #2 spring Gate Valve	50	\$17 \$15		\$850 \$750
Gale Valve	Installation	50	\$13	\$1,200	\$60,000
	Instantion	50		\$1,200	\$89,925
	G				\$69,92J
	Scenario A3 - Nev		on -		
	Double	Service			
Meter	5/8-inch Sensus iPERL Meter	405	\$129		\$52,043
	SmartPoint AMR				
Transceiver	Transceiver	203	\$166		\$33,698
Meter Box	Christy B16 Meter Box	405	\$75		\$30,375
PRV	Wilkins 70XL Pressure Reducing Valve	405	\$65		\$26,325
PRV Box	Christy B16 Meter Box	405	\$75		\$30,375
Meter Valve	Ford Ball Meter Valve B-13	405	\$67		\$27,135
Check Valve	Watts 3/4" Check Valve #600 with #2 spring	405	\$17		\$6,885
Gate Valve	Gate Valve Installation	405 405	\$15	\$350	\$6,075 \$141,750
	11151411411011	403		\$ 3 50	\$141,750 \$354,661
		• .•	a .		\$334,001
	Scenario B1 - E				
	Single Service				
Meter	5/8-inch Sensus iPERL Meter	252	\$129		\$32,382
SmartPoint AMR	SmartPoint AMR				
Transceiver	Transceiver	252	\$156		\$39,312
Meter Box	Carson 1419-12 Meter box W/Lid	52	\$35		\$1,820

Meter Valve	Ford Ball Meter Valve B-13	52	\$67		\$3,484
Check Valve	Watts 3/4" Check Valve #600 with #2 spring	252	\$17		\$4,284
	Installation	52		\$175	\$9,100
					\$90,382
	Scenario B2 - Ex	kisting/Retro	fit		
	Double	Service			
Meter	5/8-inch Sensus iPERL Meter	252	\$129		\$32,382
SmartPoint AMR	SmartPoint AMR				
Transceiver	Transceiver	126	\$166		\$20,916
Meter Box	Carson 1419-12 Meter box W/Lid	252	\$35		\$8,820
Meter Valve	Ford Ball Meter Valve B-13	252	\$67		\$16,884
Check Valve	Watts 3/4" Check Valve #600 with #2 spring	252	\$17		\$4,284
	Installation	252		\$175	\$44,100
					\$127,386
	S	ub-Total Cos	st - Scenario 1		\$818,603
	S	ub-Total Cos	st - Scenario 2		\$217,768
		S	ub-Total Cost		\$1,036,371

APPENDIX D

BLSMWC Water Master Plan

Available Upon Request

APPENDIX E

Technical Memorandum No. 2



Blue Lake Springs Mutual Water Company



FINAL MAIN LINE TECHNICAL MEMORANDUM NO. 2

FOR THE PRELIMINARY ENGINEERING REPORT

AUGUST, 2016

Prepared By:



MC Engineering, Inc. 6917 Ohana Place Orangevale, CA 95662

Technical Memorandum No. 2 Blue Lake Springs Mutual Water Company Water System Replacement and Improvement Project

PROJECT DESCRIPTION

As a part of the USDA Loan Project, the Blue Lake Springs Mutual Water Company (BLSMWC) will be replacing various and deficient water mains based on a prioritized needs assessment, installing new meters, pressure regulators and boxes, and installing various new and upgraded water system appurtenances, including hydrants, pressure reducing valve stations and upgraded booster pump stations. All project components and appurtenances will be designed and constructed per industry and standards, including standards already being utilized by the BLSMWC.

Technical Memo No. 2 (TM No. 2) will ultimately become a part of the Preliminary Engineering Report (PER) being prepared by MC Engineering, Inc., in accordance with the guidelines provided by the United States Department of Agriculture (USDA) Rural Development Agency (RDA) to meet Code of Federal Regulations (CFR) Part 1780 as part of the funding application for proposed projects. The USDA guidelines require the analysis and discovery of implications of project related factors that include, but are not limited to the following: environmental impact(s), project sustainability, technical feasibility, water and energy efficiency, economic feasibility, life-cycle analysis, and the awareness and support of the general public. These factors and their implications will be discussed in the body of the PER.

This memo is a compilation of both past and present (updated) water distribution system operations data that has been evaluated and prioritized to assist in the development of a list of proposed projects to be funded by the USDA Rural Development for the USDA PERS and associated Loan Application and Funding Program. The BLSMWC may request funding from the USDA, for a portion of or all of the prioritized projects, attached hereto. Once a final project list is agreed to and approved by BLSMWC, the Environmental Documents can then be prepared in accordance with CEQA and NEPA Guidelines.

TM No.2, includes the following sections:

Section I Section II	New meter installation program alternatives and costs (TM No. 1) Water main and service relocation and replacement evaluation and related costs
Section III	Main-line pressure reducing station (PRV Station) replacements, upgrades, and costs
Section IV Section V Section VI	Hydrant(s) and valve replacements/upgrades and costs Booster pump station (PS) replacement/upgrades and costs Cost summary for fundable projects

- Section **VII** Total project cost estimates (planning, design, and construction)
- Section **VIII** Proposed project funding requirements and estimated debt service for recommended projects
- Section **IX** Proposed project schedule

PROJECT ASSUMPTIONS

The following assumptions were applied to the various strategies for evaluation and for estimating costs:

- All project estimates are preliminary and are subject to revision upon completion of a pre-design level report (10% design).
- All accumulated data and information includes input and analysis from the following sources:
 - o Office and field staff input
 - Historic and recent operational records and data
 - Data and information from the BLSMWC Water Master Plan by LS.
 - Updated unit price and lump sum cost estimates for similar projects acquired from local contractors
 - Project eligibility and input from the USDA
 - Meter installation data and costs from Golden State Flow Measurements
- Overall system-wide effects from new back-up water supply connection to CCWD and updated system-wide hydraulic modeling are not included within TM No. 2. If data and modeling results become available within the next 20 days, the information will be analyzed and projects modified, accordingly. The modeling results may indicate the need for revising pipe sizes, along with the addition and/or reduction of mainline PRV needs and locations.
- The project priority matrix and pipeline evaluation, as found within the Water Master Plan, has been revised and updated (see Section II) with an emphasis placed on USDA eligibility criteria
- Updated cost-estimates were applied to all proposed projects with estimates based on current bid prices from water system projects within the "Mother Lode" region
- The number of mainline valves, air-relief, water quality sampling stations, and blow-offs are only approximated at this planning level
- The booster pump station upgrade is only a rough estimate due to the lack of updated modeling results
- A portion of the main-line PRV Stations are assumed to be either nonoperational and/or un-safe for access and maintenance. The number and location of new and/or relocated PRV stations will be finalized upon completion of modeling and during the 10% design level.
- Water meter installation costs are approximate and are found within TM No 1. The final meter installation cost will be estimated more accurately during the 10% project design work.
- It is recommended that **Alternative No. 3 (\$1,325,511)** of TM No. 1 (Meter Installation Program) be used for project cost estimating. During the 10% design, and prior to final plans and specifications, a "parcel-by-parcel" evaluation will be completed for all new meters and upgraded meter installations.

- Fire hydrants and valves, were not identified in the Water Master Plan for pressure zone 13. Many were found to be old and deteriorated and replacement is highly recommended.
- Recent trending indicates that certain mains are experiencing high leakage due to old age and deterioration. These new areas were added to the project priority matrix evaluation (Section II). These mains were identified by leak reports and field staff input.
- Main line relocations are only at a preliminary level and some modifications and re-alignments may be required during the design phase. USDA allows for some deviation during the design phase of the project. Contingencies can be used for any design modifications.

SECTION I, New Meter Installation Program Alternatives and Costs (TM No. 1)

TM No. 1 (attached), includes various conditions and alternatives for a system-wide water meter installation program. This new meter installation program includes the following:

- Condition One (New Main Construction-860 Meters)
- Condition Two (Existing System-504 Meters Retrofits)

It is assumed that 350 meters will be installed prior to the start of construction of the proposed USDA project by District staff.

Whenever and wherever possible the new construction will include double services which will reduce the overall project costs. Details of double and single services can be found within TM No. 1. Other operational considerations were identified in the meter tech memo and included the addition of new individual PRV's/regulators and/or upgraded PRV's with new boxes for homeowners.

Alternate No. 5 (TM No.1)									
Alternate	No. of Meters	Total Conditions							
		Meters							
	(860) New Construction		 860 New Construction Meters/Enclosures 504 Existing Retrofit Meters/Enclosures 						
3	(504)	1,322	 200 Driveway Installations 						
	Existing		• 1364 New Construction PRVs/Enclosures						

TABLE IaAlternate No. 5 (TM No.1)

The total project cost for this Alternative is estimated at **\$1,325,511**, with the average cost per customer being **\$1,002**.

The BLSMWC and its contractor will be responsible for only the meter and regulator in areas where new relocated mains are to be constructed and will not be responsible for making the connection to the customer service line. It is important that close coordination between the property owner and/or contractor be maintained throughout the construction period to avoid disruption of water service. The BLSMWC will work closely with each home owner affected by the relocated water service and provide each customer, where this condition exists, with a list of qualified licensed contractor(s) for the construction and connection from the regulator to the house. During the 10% design stage of the project, close attention will be given to each property and site condition. The design engineer will work closely with the BLSMWC staff to help assure close coordination and customer satisfaction for new meter and/or regulator installations.

Water metering is the foundation of managing existing groundwater resources, enforcing these policies effectively, and helping to offset the need to expand the use of surface water. In addition, to be consistent with the State of California 2013 Water Action Plan and CUWCC BMP's, installation of water meters is critical. The proposed project is consistent with more recent mandates issued by the State Water Resources Control Board in response to the recent drought as well as various State Water Action Plan Activities including:

- Action 1 Make Conservation a California Way of Life
- Action 2 Increase Regional Self-reliance and Integrated Water Management across All Levels of Government
- Action 5 Manage and Prepare for Dry Periods
- Action 9 Increase Operational and Regulatory Efficiency

SECTION II, Water Main and Service Relocation and Replacement Evaluation and Related Costs

The BLSMWC's water distribution system currently contains 203,887 linear feet of mainline piping, four (4) pressure reducing stations, two (2) storage tanks, ninety (90) fire hydrants, 2024 parcels and service laterals (1714 active), and other appurtenances including isolation valves and blow-offs.

A majority of the mainline pipelines were installed over 40 years ago, of which there are 111,144 linear feet of 6 and 8 inch mains and 92,744 linear feet of 1.5 to 4 inch and smaller mains. These undersized mains have created water pressure problems and do not meet industry standards. Most are not able to convey adequate and necessary fire flows for their respective service area. Secondly, the California Public Utilities Commission, in General Order 103, requires that each water system be operated in a manner to assure minimum operating pressure at each house service connection is not less than 40 psi and no more than 125 psi. This General Order 103 also requires mains that are a minimum of 6-inches, primarily for public safety.

There are currently 2024 parcels, lots, and service laterals, of which 1714 of those are improved lots, and are currently active. The service laterals were originally installed with polybutylene tubing. The BLSMWC has been repairing services with polyethylene tubing. All services include a service box with shut-off valve and some services include pressure regulators to control high system pressures (refer to **TM No. 1**). The water system lacks the ability to closely monitor system leaks and excessive water use.

An updated conditional assessment matrix, prepared by MC Engineering, was prepared to provide more accurate and updated information regarding importance and need to replace and upgrade the existing main-line water distribution system pipes, including house services and other various components and appurtenances. The water distribution main-line evaluation and matrix included the evaluation criteria presented below in **TABLE IIa** to provide the BLSMWC with a method of prioritizing its most important health and safety needs within the distribution system in order to ultimately design and construct new and upgraded facilities. Additional importance was placed on pipe location, size, and condition.

Pipe	line Evaluation Criteria	
Criteria	Rating	Weighted Factor
	1=Best 5-Worst	(additional importance)
1. Pipe size (Q's/pressures/fire flows)	1 – 5	7
2. Pipe Age (Deterioration/leaks)	1 – 5	4
3. Pipe Type (OPTIONAL)	1 – 5	3
4. Leaks/Complaints (Leak pattern/complaints)	1 – 5	5
5. Mainline Location (Access/dependability)	1 – 5	7
6. Sys. Pressure (Modeling results)	1 – 5	3
7. Fire Coverage (Spacing/customers affected, flows)	1 - 5	2
The evaluation criteria have been a line condition, age, and overall reli		tance on the overall pipe

TABLE IIa

All water distribution system pipelines were re-assessed with significant input provided by the operational staff with consideration of more recent changes in the pipe condition and other trends not discussed within the 2014 Master Plan. It is important to note, that at the time of this technical memo preparation, a new and updated water modeling program has not yet been completed. It includes a system-wide calibration of the existing model, along with operational changes, including the more recent bifurcation of the water system. This bifurcation separated the existing water distribution system into two separate supply zones. One zone includes the Calaveras County Water District (CCWD) emergency inter-tie (emergency/backup) and the other includes the existing well supply zone. A new model run and pressure study, by LS, will evaluate each zone and hopefully provide the BLSMWC with a list of system upgrades or improvements that will take into consideration the separate supply points. These improvements, if any, can then been added to the project list prior to the submittal of the application and PER/Environmental Documents.

The project priority list, as presented within the Pre-application to the USDA, has been re-evaluated with the addition of the new matrix evaluation (above) along with a more detailed cost estimate for all pipeline projects, including and not limited to:

- Water mains
- Water services (single or double)
- Valves, PRV's, hydrants, blow-offs and other appurtenances
- Booster Pump Station

Detailed of pipeline construction cost estimates were provided by local-regional contractors. These estimates were based upon Prevailing and Davis-Bacon rates. The estimates were then applied to those segments of pipeline to be relocated and/or upgraded.

The following matrix evaluation was prepared with the most current data from the operational staff of the BLSMWC. Again, this evaluation <u>did not</u> include the most recent modeling run and its recommendations, but is considered a good approach to providing pipeline replacement recommendations for the proposed application for funding from the USDA.

TABLE IIb, below shows the main-line distribution system priority matrix, using ranking criteria as found in **TABLE IIa**, above.

													Ranking S Category an						
			Exi	isting Cond	itions						Pipe Size	Pipe Age 1 - 5	Leaks/ Complaints 1 - 5	Mainline Location/ Access 1 - 5	System Pressure ¹ 1 - 5	Fire Coverage 1 - 5		, v	ority Ranking parison
MP Project	Road	Existing Condition Description	From	То	Pressure Zone	Existing Pipe Size (inch)	Pipe Age	~New Pipe Length (Feet)	Customer Complaints (LS)	Staff Leak Markup	(WF = 7) 7	(WF = 4) 4	(WF = 5)	(WF = 7) 7	(WF = 3) 3	(WF = 2) 2	Rank	PER	Master Plan Priority
Wawona	Wawona Way	Backyard Mains Adjacent/Parallel to Road	Castlewood	End of Line	6/7	(2.5), (2), (1.5)	1962-1970	1928	8	Yes	5	5	5	5	0	3	121.0	High	High
Wawona	Castlewood	Backyard Mains Adjacent/Parallel to Road	Wawona	Seminole	6/7	(2.5), (2)	1962-1970	1972	4	Yes-Multiple	4.5	5	4	5	0	3	112.5	High	High
Wawona	Seminole	Backyard Mains Adjacent/Parallel to Road	Silverado	El Ranchero	6/7	(2), (1)	1962-1970	2673	5	No	5	5	2	5	0	4	108.0	High	High
Wawona	Meadow	Backyard Mains Adjacent/Parallel to Road	Brae Burn	Kiote Hills	6/7	(2), (1.5)	1962-1970	2805	3	No	5	5	2	5	0	4	108.0	High	High
Wawona	Cypress Point	Backyard Mains Adjacent/Parallel to Road	Brae Burn	End of Line	6/7	1.5	1962-1971	1052	0	No	5	5	0	5	0	0	90.0	Med	Low
Patricia	Gertrude	Backyard Mains Adjacent/Parallel to Road	Rainy	Patricia	4/5	(2.5), (2), (1.5)	1962-1970	2147	8	Yes, Multiple	5	5	5	5	0	4	123.0	High	High
Patricia	Patricia (E)	Backyard Mains Adjacent/Parallel to Road	Moran	Gertrude	4/5,2/3	(2), (1.5), (1)	1962-1970	2191	2	Yes	5	5	4	5	0	4	118.0	High	High
Patricia	Colleen	Backyard Mains Adjacent/Parallel to Road	Patricia	End of Line- Court	4/5	(2), (1.5)	1962-1970	964	4	No	5	5	2	5	0	4	108.0	High	Med
Patricia	Moran (S)	Backyard Mains Adjacent/Parallel to Road	Rainy	End of Line	2/3	1.5	1962-1970	2849	1	No	5	5	2	5	0	3	106.0	High	Med
Patricia	Patricia (W)	Backyard Mains Adjacent/Parallel to Road	Getrude	George Ann	4/5	(2.5), (2), (1.5)	1962-1970	1972	1	No	5	5	1	4	0	4	96.0	Med	High
Blue Lake Springs	Blue Lake Springs (N)	Backyard Mains Adjacent/Parallel to Road - 4" Pipe in the Street	Linda	Meadow Dr	1	2	1962-1970	2410	4-5	Yes	5	5	5	5	0	4	123.0	High	High
Blue Lake Springs	Blue Lake Springs (S)	Backyard Mains Adjacent/Parallel to Road	Meadow Ct	Moran	2/3	(2), (1.5)	1962-1970	1753	8	Yes	5	5	4	5	0	4	118.0	High	Med
Blue Lake Springs	Moran (M)	Backyard Mains Adjacent/Parallel to Road and in Street	Marilynn	Rainy	2/3	(2.5), (1.5), 1.5	1962-1970	3725	3	No	5	5	2	4	0	3	99.0	Med	Low
Blue Lake Springs	Moran (N)	Mains in Street	Hwy 4	Marilyn	1	(3), (2.5), (1.5)	1962-1970	3068	7	Yes	4	5	5	1	0	4	88.0	Med	Med
Blue Lake Springs	Linda	Backyard Mains Adjacent/Parallel to Road	Moran	Blue Lake Springs	1	2	1962-1970	745	2	No	3	5	1	5	0	4	89.0	Med	Low
San Ramon	San Ramon	Backyard Mains Adjacent/Parallel to Road	Wawona	Kiote Hills	6/7	(2), (1.5), (1)	1962-1970	1578	2	Yes	5	5	4	5	0	4	118.0	High	High
San Ramon	Kiote Hills	Backyard Mains Adjacent/Parallel to Road	Castlewood	Seminole	6/7	2	1962-1970	1841	5	No	5	5	3	5	0	4	113.0	High	Med
San Ramon	Baywood View	Backyard Mains Adjacent/Parallel to Road	Almaden	End of Line End of Boundary	6/7	(2.5), (2), (1.5)	1962-1970	1797	4	No	5	5	2	5	0	4	108.0	Med	Med
San Ramon	Almaden	Backyard Mains Adjacent/Parallel to Road	Seminole	Baywood view	6/7	(2)	1962-1970	438	1	No	5	5	1	5	0	4	103.0	Low	Low
San Ramon	North Sierra	Backyard Mains Adjacent/Parallel to Road	Castlewood	End of Line Dead End	6/7	(2.5)	1962-1970	657	2	Yes	3.5	5	2	5	0	4	97.5	Med	Low
San Ramon	Silverado	Backyard Mains Adjacent/Parallel to Road	North Sierra	Baywood view	6/7	(6), (2)	1962-1970	1534	0	No	3	5	1	5	0	4	89.0	Med	Low
	Notes: 1 [·] Pending	·		, , , , , , , , , , , , , , , , , , , ,		·					>=6-inch: 1 4-inch: 2 3-inch: 3 2-inch: 4 <=2-inch: 5	0-5 years: 1 5-10 years: 2 10-15 years: 3 15-20 years: 4 >20 years: 5	Number of Leak Reports/Complain ts/Recent Leak Information	Street: 1	<=80 psi: 1 <=120 psi: 3 >120 psi: 5	Covered: 1 Not Covered: 5			

													Ranking S Category an						
			Exi	sting Cond	litions						Pipe Size	Pipe Age	Leaks/ Complaints	Mainline Location/ Access	System Pressure ¹	Fire Coverage		-	ority Ranking parison
											1 - 5 (WF = 7)	1 - 5 (WF = 4)	1 - 5 (WF = 5)	1 - 5 (WF = 7)	1 - 5 (WF = 3)	1 - 5 (WF = 2)			
MP Project	Road	Existing Condition Description	From	То	Pressure Zone	Existing Pipe Size (inch)	Pipe Age	~New Pipe Length (Feet)	Customer Complaints (LS)	Staff Leak Markup	7	4	5	7	3	2	Rank	PER	Master Plan Priority
Rainy	Shirley	Backyard Mains Adjacent/Parallel to Road	Patrica	End of Line- Court	4/5	(1), (1.5)	1962-1970	833	5	No	5	5	3	5	0	4	113.0	High	Med
Rainy	Jearrilynn	Backyard Mains Adjacent/Parallel to Road	Jeannie	End of Line- Court	4/5	(1.5), (1)	1962-1970	1227	3	No	5	5	3	5	0	3	111.0	High	Med
Rainy	Rainy (W)	Backyard Mains Adjacent/Parallel to Road - 6" and 4" in Street	Michelle	Anna Lee	4/5	(2), (1.5)	1962-1970 1994-1999 (6")	1740	0	No	5	5	0	5	0	4	98.0	Med	Med
Rainy	Dianna	Backyard Mains Adjacent/Parallel to Road - 3" in Street	Rainy	End of Line- Court	2/3	(3)	1962-1970	1052	1	No	3	5	3	4	0	4	92.0	Med	Low
Rainy	Jeannie	Backyard Mains Adjacent/Parallel to Road	Jerrilynn	Shirly	4/5	(2.5),(1.5)	1962-1970	650	0	No	3	5	1	5	0	4	89.0	Med	Low
Rainy	Michele	Backyard Mains Adjacent/Parallel to Road	Rainy	Jeannie	4/5	-1.5	1962-1970	657	4	No	2	5	2	5	0	4	87.0	Med	Low
Rainy	Anna Lee (S)	1.5" and 2.0" mains in Street	Rainy	Diana	2/3	(2),(1.5)	1962-1970	1972	2	No	5	5	1	1	0	4	75.0	Low	Low
Rainy	Rainy (E)	4.0" mains in Street	Anna Lee	Moran	2/3	(4)	1962-1970	1400	3	No	2	5	2	1	0	4	59.0	Low	Low
Dean	Russell	2.0" mains in Street	Moran	End of Line End of Boundary	1	(2),(1.5)	1962-1970	3068	2	Yes-Multiple	5	5	4	1	0	4	90.0	Med	Low
Dean	Dean	4" and 2.5" mains in Street	Moran	Nola	1	(4), (2.5)	1962-1970	3068	7	2.5" Main High Leak Area	4	5	5	2	0	2	91.0	Med	Med
Dean	David Lee	2.0" mains in Street	Russel (N)	Russel (S)	1	(2)	1962-1970	1315	0	Yes-Multiple	5	5	4	1	0	4	90.0	Med	Low
Dean	Kuehn	2.5" mains in Street	Moran	End of Line- Court	1	(2.5)	1962-1970	701	3	No	5	5	2	1	0	4	80.0	Low	Low
Julia	Julia	2" Main in Street	Nola	Gloria	2/3	(2)	1962-1970	1534	4	2.5" Main High Leak Area	4	5	5	2	0	3	93.0	Med	Med
Julia	Helen	Backyard Mains Adjacent/Parallel to Road - 2.5" in Street	Moran	Marilyn	2/3	(2.5)	1962-1970	920	1	Yes	3	5	1	5	0	4	89.0	Med	Low
Julia	Anna Lee (N)	Mains in Street	Nola	Rainy	4/5	(1.5)	1962-1970	1972	4	No	5	5	2	1	0	4	80.0	Low	Med
Julia	Dawyn	2.0" mains in Street	Moran	Marilyn	2/3	(2)	1962-1970	964	4	Yes	5	5	2	1	0	4	80.0	Low	Low
Julia	Shannon	1.5" mains in Street	Nola	Julia		(1.5)	1962-1970	1753	1	No	5	5	1	1	0	4	75.0	Low	Low
Julia	Marilynn	3.0" and 2.0" mains in Street	Moran	Nola	2/3	(2),(3)	1962-1970	2367	4	No	4	5	2	1	0	4	73.0	Low	Low
	Notes:	, I		1		, , , , , , , , , , , , , , , , , , , ,		1		1	>=6-inch: 1 4-inch: 2 3-inch: 3 2-inch: 4 <=2-inch: 5	0-5 years: 1 5-10 years: 2 10-15 years: 3 15-20 years: 4 >20 years: 5	Number of Leak Reports/Compla ints/Recent Leak Information	Street: 1	<=80 psi: 1 <=120 psi: 3 >120 psi: 5	Covered: 1 Not Covered: 5			

The **FIGURE IIa**, is an example of a higher ranked existing main located in a backyard area making operation and maintenance very difficult. Most of these back-of-lot mains are undersized, with a diameter of 3-inches or less.

FIGURE IIa

Back-of-Lot Water Main



Based on **Attachment A**, project cost estimates (spreadsheet) were developed for each of the highest prioritized mainline water distribution projects from **TABLE IIb**, above. This cost estimate only includes pipelines, services, and associated valves, hydrants blow-offs, and air-relief valves. It <u>does not</u> include individual projects such as PRV stations, meters, booster pump, and hydrant and other appurtenances-please refer to **Sections III, IV, and V**, below.

Project **Options 1** and **2** were developed and are located within **TABLE IIc**, below. **Option 1** is list of the highest ranked pipelines requiring replacement. These pipelines had a score of over 85 and included all pipelines located within the back lots and having undersized mains. **Option 2** is a list those mainline pipelines that were designated for replacement over the next 10 years per the Master Plan.

		Pl	ER Funded Pr	oject Optio	ns		
MP Project	Road	PER Rank	Fundable Cost	PER	PER	Funding Optio	ons
10000				Ranking	Option 1	Option 2	Option 3
	Wawona Way	121.0	\$281,660	Tigh	\$281,660	\$281,660	
	Castlewood	112.5	\$288,740	High	\$288,740	\$288,740	
Wawona	Seminole	108.0	\$317,210	High	\$317,210	\$317,210	
	Meadow Currents Daint	108.0 90.0	\$377,275	Med	\$377,275 \$105,020	\$377,275	
	Cypress Point		\$105,020			\$105,020	-
	Gertrude	123.0	\$252,625	High	\$252,625	\$252,625	h
	Patricia (E)	118.0	\$303,048	High	\$303,048	\$303,048	
Patricia	Colleen	108.0	\$95,780	then	\$95,780	\$95,780	
	Moran (S)	106.0	\$268,253	High	\$268,253	\$268,253	
	Patricia (W)*	96.0	\$300,300	Med	\$300,300	\$300,300	
	Blue Lake Springs (N)	123.0	\$294,150	High	\$294,150	\$294,150	
	Blue Lake	118.0	\$197,775	High	\$197,775	\$197,775	
Blue Lake Springs	Springs (S) Moran (M)	99.0	\$458,375	Med	\$458,375	\$458,375	9
	Moran (N)	88.0	\$380,954	Med	\$380,954	\$380,954	
	Linda	89.0	\$94,025	Med	\$94,025	\$94,025	(a)
	San Ramon	118.0	\$213,060	High	\$213,060	\$213,060	
San Ramon	Kiote Hills	113.0	\$188,070	High	\$188,070	\$188,070	
	Baywood View	108.0	\$171,690	That	\$171,690	\$171,690	
	North Sierra	103.0	\$66,190	High	\$66,190	\$66,190	
	Silverado	97.5	\$201,380	Med	\$201,380	\$201,380	
	Almaden	89.0	\$50,260	Med	\$50,260	\$50,260	
			\$30,200			\$50,200	1
	Shirley	113.0	\$90,310	High	\$90,310	\$90,310	1
	Jearrilynn	111.0	\$134,590	High	\$134,590	\$134,590	
	Rainy (W)	98.0	\$182,100	Med	\$182,100	\$182,100	
Sec.	Dianna	92.0	\$110,240	Med	\$110,240	\$110,240	
Rainy	Jeannie	89.0	\$99,690	Med	\$99,690	\$99,690	
	Michele	87.0	\$71,990	Med	\$71,990	\$71,990	
	Anna Lee (S)	75.0	\$199,140	Low		\$199,140	
	Rainy (E)	59.0	\$137,400	Low		\$137,400	
	Russell	90.0	\$337,430	Med	\$337,430	\$337,430	
	David Lee	90.0	\$132,950	Med	\$132,950	\$132,950	
Dean	Dean	91.0	\$337,430	Med	\$337,430	\$337,430	1
	Kuehn	80.0	\$75,070	Low		\$75,070	
	Julia	93.0	\$167,679	Med	\$167,680	\$167,679	
	Helen	89.0	\$95,700	Med	\$95,700	\$95,700	
Julia	Anna Lee (N)	80.0	\$228,340	Low		\$228,340	0
Julia	Dawyn	80.0	\$129,780	Low		\$129,780	
	Shannon	75.0	\$164,310	Low		\$164,310	
	Marilynn	73.0	\$242,890	Low		\$242,890	· · · · · ·
Con	struction Co	st	\$7,842,879		\$6,665,950	\$7,842,879	1.00

TABLE IIc

SECTION III, Main-line Pressure Reducing Stations Replacements, Upgrades and Costs

The BLSMWC has 42 pressure reducing stations of various sizes and conditions located throughout the service area. There are nineteen (19) PRV Stations (PRVs) that are considered problematic and in some cases non-operational. BLSMWC staff provided MC Engineering with a list of those PRV Stations that require upgrades due to operational issues. Other considerations used in determining station condition was location, accessibility (confined space), and age. For the purposes of this report we have included all PRV's (1.5 inches and greater) that require replacement and/or upgrading. It is also understood that as a result of the pending modeling and pressure study, certain PRV's may not be needed and/or additional PRV's maybe required.

The following is a list of those PRV Stations that are recommended for replacement and or rehabilitation:

		PR	V Recommended R	leplacemen	t	
Туре	Functions (BLSMWC- MP	Functions (Staff)	Staff Comment	Associated Street	BLSMWC MP Project Name	Existing PRV Size
PRV	у	No	Turned Off-Broken Open	Patricia	Patricia	2-inch
PRV	у	No	Small Leak-P Gauge Broken	Michele	Rainy	1.5-inch
PRV	у	No	Broken Open	Dorothy	Rainy	1.5-inch
PRV	у	No	Bypass off-corroded- Broken open	Jerrilynn	Rainy	3-inch
PRV	у	No	Broken Open	Patricia	Patricia	1.5-inch
PRV	у	No	Old PRV	Del Rio Dr	Additional	1.5-inch
PRV	у	No	Very High Pressure - 285 PSI	Moran	Patricia	1.5-inch
PRV	У	No	PRV Broken Closed- Leaks when Main Break	Cypress Point	Additional	1.5-inch
PRV	У	No	(Check to make sure not just valve)	Castlewood	Wawona	3-inch
PRV	У	No	(Check to make sure not just valve)	Meadow	Wawona	2-inch
PRV	У	No	Check to see if refers to Valve	San Ramon	San Ramon	2-inch
PRV	у	No	Broken	Seminole	Wawona	2-inch
PRV	n	No	Broken Closed	Medinah	Additional	6-inch
PRV	n	No	Broken Open-Very Deep	South Sierra	Additional	6-inch
PRV	n	No	Broken Open	Cypress Point	Additional	6-inch
PRV	n	No	Broken Open	Hillcrest	Additional	6-inch
PRV	У	No	Old PRV, has leaked many times	Moran	Blue Lake Springs Drive	2-inch
PRV	у	No	Vault no drain full water after rain corroded	Del Rio Drive	Additional	6-inch
PRV	Not Shown	No	Not shown originally- added by Billy -not working	Castlewood	Wawona but not in MP list	2-inch

TABLE IIIa

FIGURE IIIa below shows an existing PRV station that is recommended for rehabilitation.

FIGURE IIIa

PRV Station/Vault



A cost estimate is provided below in **Table IIIb** for those PRV Stations requiring replacement/upgrading:

TABLE IIIb

		PRV Recommen	nded Repla	cement	Cost				
Туре	Existing PRV Size	MP Project Name	Associated Street	New PRV Size	Unit Price	Sub-total			
PRV	2-inch	Patricia	Patricia	6"		(ML Relocation)			
PRV	1.5-inch	Rainy	Michele	6"		(ML Relocation)			
PRV	1.5-inch	Rainy	Dorothy	6"		(ML Relocation)			
PRV	3-inch	Rainy	Jerrilynn	6"		(ML Relocation)			
PRV	1.5-inch	Patricia	Patricia	6"		(ML Relocation)			
PRV	1.5-inch	In-place/No relocate	Del Rio Dr	1.5"	\$10,000	\$10,000			
PRV	1.5-inch	Patricia	Moran	6"		(ML Relocation)			
PRV	1.5-inch	In-place/No relocate	Cypress Pt	1.5'	\$10,000				
PRV	3-inch	Wawona	Castlewood	6""		(ML Relocation)			
PRV	2-inch	Wawona	Meadow	6"		(ML Relocation)			
PRV	2-inch	San Ramon	San Ramon	6"		(ML Relocation)			
PRV	2-inch	Wawona	Seminole	6"		(ML Relocation)			
PRV	6-inch	In-place/No relocate	Medinah	6"	\$30,000	\$30,000			
PRV	6-inch	In-place/No relocate	South Sierra	6"	\$30,000	\$30,000			
PRV	6-inch	In-place/No relocate	Cypress Pt	6"	\$30,000	\$30,000			
PRV	6-inch	In-place/No relocate	Hillcrest	6"	\$30,000	\$30,000			
PRV	2-inch	Blue Lake Springs Dr	Moran	6"		(ML Relocation)			
PRV	6-inch	In-place/No relocate	Del Rio Dr	6"	\$30,000	\$30,000			
PRV	2-inch	Wawona but not in MP list	Castlewood	6"		(ML Relocation)			
Total Cost \$160,000									

SECTION IV, Hydrants and Valve Replacements/Upgrades and Costs

The BLSMWC has various types of hydrants throughout the service area. Some hydrants and valves are in an old and deteriorated state and are recommended for replacement. A majority of these hydrants are located within Pressure Zone 13. Many are over 50 years old and have been problematic, and in some cases non-operational and are leaking. Staff provided MC Engineering with a list of those hydrants, not located within those sections of pipeline prioritized for relocation/replacement. The following (TABLE IVa) is a list and location of those hydrants and valves that are recommended for replacement and or rehabilitation:

	Fire Hy	drant Re	commer	ded Repla	acement	
Associated Street	Existing Hydrant Size	Project Zone	Type- Age	Functional MP	Functional Staff	Staff Comment Condition
Cypress Pt	6"	ZONE 13	lowa-50	Yes	No	Hard to open/no GV/leak
Cypress Pt	6"	ZONE 13	lowa-50	Yes	No	Hard to open/no GV/leak
Cypress Pt	6"	ZONE 13	lowa-50	Yes	No	Hard to open/no GV/leak
Cypress Pt	6"	ZONE 13	lowa-50	Yes	No	Hard to open/no GV/leak
Cypress Pt	6"	ZONE 13	lowa-50	Yes	No	Hard to open/no GV/leak
Cypress Pt	6"	ZONE 13	lowa-50	Yes	No	Hard to open/no GV/leak
Cypress Pt	6"	ZONE 13	lowa-50	Yes	No	Hard to open/no GV/leak
Cypress Pt	6"	ZONE 13	lowa-50	Yes	No	Hard to open/no GV/leak
Cypress Pt	6"	ZONE 13	lowa-50	Yes	No	Hard to open/no GV/leak
So. Sierra View	6"	ZONE 13	lowa-50	Yes	No	Hard to open/no GV/leak
So. Sierra View	6"	ZONE 13	lowa-50	Yes	No	Hard to open/no GV/leak
So. Sierra View	6"	ZONE 13	lowa-50	Yes	No	Hard to open/no GV/leak
So. Sierra View	6"	ZONE 13	lowa-50	Yes	No	Hard to open/no GV/leak
So. Sierra View	6"	ZONE 13	lowa-50	Yes	No	Hard to open/no GV/leak
So. Sierra View	6"	ZONE 13	lowa-50	Yes	No	Hard to open/no GV/leak
Wawona Way	6"	ZONE 13	lowa-50	Yes	No	Hard to open/no GV/leak
Wawona Way	6"	ZONE 13	lowa-50	Yes	No	Hard to open/no GV/leak
Medinah Dr	6"	ZONE 13	lowa-50	Yes	No	Hard to open/no GV/leak
Medinah Dr	6"	ZONE 13	lowa-50	Yes	No	Hard to open/no GV/leak
Milbar Ct	6"	ZONE 13	lowa-50	Yes	No	Hard to open/no GV/leak
Belmont/Flamingo Wy	6"	ZONE 13	lowa-50	Yes	No	Hard to open/no GV/leak
Belmont/Flamingo Wy	6"	ZONE 13	lowa-50	Yes	No	Hard to open/no GV/leak
Belmont/Flamingo Wy	6"	ZONE 13	lowa-50	Yes	No	Hard to open/no GV/leak
Belmont/Flamingo Wy	6"	ZONE 13	lowa-50	Yes	No	Hard to open/no GV/leak
Belmont/Flamingo Wy	6"	ZONE 13	lowa-50	Yes	No	Hard to open/no GV/leak
Del Paso Lane	6"	ZONE 13	lowa-50	Yes	No	Hard to open/no GV/leak

TABLE IVa

FIGURES IVa and IVb, below, shows an existing leaking fire hydrant along with a location map of hydrants that are recommended for replacement, including the addition of new street gate valves.

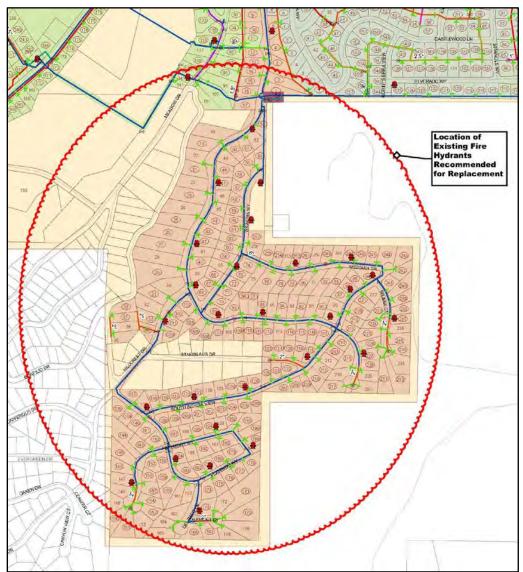
FIGURE IVa

Leaky Hydrant in Cypress Point Area



FIGURE IV

Hydrants to be replaced in Cypress Point Area



A cost estimate is to be provided below in **TABLE IVb** for those hydrants and valves requiring replacement/upgrading:

TABLE IVb

Гуре-Аge	Existing Hydrant Size	Project Name	Associated Street	New Size	Unit Price Sub-total
lowa-50	6"	ZONE 13	Cypress Pt	6"	\$5,800
lowa-50	6"	ZONE 13	Cypress Pt	6"	\$5,800
lowa-50	6"	ZONE 13	Cypress Pt	6"	\$5,800
lowa-50	6"	ZONE 13	Cypress Pt	6"	\$5,800
lowa-50	6"	ZONE 13	Cypress Pt	6"	\$5,800
lowa-50	6"	ZONE 13	Cypress Pt	6"	\$5,800
lowa-50	6"	ZONE 13	Cypress Pt	6"	\$5,800
lowa-50	6"	ZONE 13	Cypress Pt	6"	\$5,800
lowa-50	6"	ZONE 13	Cypress Pt	6"	\$5,800
lowa-50	6"	ZONE 13	So. Sierra View	6"	\$5,800
lowa-50	6"	ZONE 13	So. Sierra View	6"	\$5,800
lowa-50	6"	ZONE 13	So. Sierra View	6"	\$5,800
lowa-50	6"	ZONE 13	So. Sierra View	6"	\$5,800
lowa-50	6"	ZONE 13	So. Sierra View	6"	\$5,800
lowa-50	6"	ZONE 13	So. Sierra View	6"	\$5,800
lowa-50	6"	ZONE 13	Wawona Way	6"	\$5,800
lowa-50	6"	ZONE 13	Wawona Way	6"	\$5,800
lowa-50	6"	ZONE 13	Medinah Dr	6"	\$5,800
lowa-50	6"	ZONE 13	Medinah Dr	6'	\$5,800
lowa-50	6"	ZONE 13	Milbar Ct	6"	\$5,800
lowa-50	6"	ZONE 13	Belmont/Flamingo Wy	6"	\$5,800
lowa-50	6"	ZONE 13	Belmont/Flamingo Wy	6"	\$5,800
lowa-50	6"	ZONE 13	Belmont/Flamingo Wy	6"	\$5,800
lowa-50	6"	ZONE 13	Belmont/Flamingo Wy	6"	\$5,800
lowa-50	6"	ZONE 13	Belmont/Flamingo Wy	6"	\$5,800
lowa-50	6"	ZONE 13	Del Paso Lane	6"	\$5,800

Back-of-Lot Water Main

SECTION V, Booster Pump Station Replacement/Upgrades and Costs

The BLSMWC has various booster pump stations located throughout the service area. These booster pump stations are currently being evaluated as a part of the water system modeling program. It was recommended, by the staff, that the booster pump station located at Cypress Point Drive, be upgraded. This station is an old and deteriorated and for both safety and operational considerations and needs to be upgraded/replaced. This station, which is not being used on a regular basis, is used to boost/lift flows from Tank 4 to water storage Tank No. 6. This booster station will play an important role as a back-up and emergency conveyance system providing water to Tank No. 6. It should be noted that this pump station may be an integral part of the new bi-furcated system with the addition of CCWD surface water.

The **FIGURE Va** below, shows the existing booster pump that is recommended for rehabilitation.

FIGURE Va



Booster Pump Station - Cypress Point Drive

FIGURE Vb

Location of Cypress Point Booster Pump Station

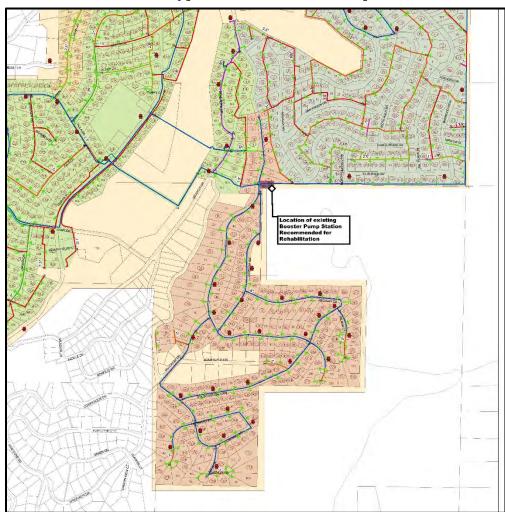


TABLE Va is a preliminary level cost-estimate for the new booster pump station.

TABLE Va

Booster Pump Station									
Item	Quant.	Unit	Material/ Labor						
Concrete Slab 6"	5	CY	\$3,200.00						
Building Modifications	1	LS	\$17,500.00						
Electrical Modifications	1	LS	\$10,000.00						
Fencing (8")	120	FT	\$3600.00						
Access/paving	600	SF	\$3000.00						
Yard Piping	1	LS	\$18,000.00						
Skid Mounted Booster Station/	1	LS	\$60,000.00						
PLC Control (30HP)									
	•	TOTAL	\$115,300.00						

SECTION VI, Cost Summary for Fundable Projects

This construction cost summary for project, for **Options 1** and **2**, does not include design, administration, and construction management costs.

) (1 /	
Item	Component	Description	Estimated Cost
1	Meter Installation	See Table I for Description	\$1,325,611
2	Mainline Replacement	See Table IIb for Description	\$6,665,950
3	PRV Station(s) Upgrade	See Table IIIb for Description	\$160,000
4	Fire Hydrants/valves	See Table IVb for Description	\$150,000
5	Booster PS Upgrades	See Table Va for Description	\$115,300

TABLE VIa

Total Construction Project Cost Estimate (Option 1)

Total Construction Project Cost Estimate (**Option 2**)

Total Cost for All Projects

\$8,416,861

Item	Component	Description	Estimated Cost
1	Meter Installation	See Table I for Description	\$1,325,611
2	Mainline Replacement	See Table IIb for Description	\$7,842,879
3	PRV Station(s) Upgrade	See Table IIIb for Description	\$160,000
4	Fire Hydrants/valves	See Table IVb for Description	\$150,000
5	Booster PS Upgrades	See Table Va for Description	\$115,300
		Total Cost for All Projects	\$9,593,790

SECTION VII, Total Project Cost Estimates

This section includes the total project cost estimates in the required USDA format. This total project cost estimate includes all engineering, planning, environmental, design, and construction management costs. Again, this total project cost estimate ifs for funding **Option 1** and **2**, as shown above.

TABLE VIIa

Total Project	Cost	Estimate	(O)	ption	1)	

USDA Total Cost S	Spreadsheet		
Option 1 Costs (From Table VIa)			
ltem	Subtotal	Total	
Miscellaneous Land and Environmental			
Property Purchase / Lease Agreements (Indirect Costs)		\$0	
Easement Acquisition / Right of Way / Water Rights		\$0	
Environmental Services		· · ·	
a- CEQA/NEPA Environmental Report	\$36,000		
b- Environmental Mitigation Contract (See Eng. Services)	\$0		
Total – Environmental Services	· · ·	\$36,000	(A)
Engineering Services (Indirect Costs)			
Basic Services:			
Preliminary Engineering Report (PER)	\$62,250		
Preliminary/Final Design Phase Services (8.0%)	\$673,341		
Bidding / Contract Award Phase Services	\$25,000		
Assistance with Environmental Permits	\$10,000		
As-Built Record Drawing	\$25,000		
Resident Project Rep (Resident Inspector 2.0%)	\$168,335.22		
Total – Engineering Services	¢:00,000.22	\$963,926	(B)
		····	
Additional Services (Indirect Costs)			
Permitting (Right-of-Way and Easements)	\$20,000		
Regulatory Compliance Reports (Construction Phase)	\$15,000		
Environmental Mitigation Services (Construction Phase)	\$30,000		
Easement Acquisition/ROW Services (Construction Phase)	\$15,000		
Surveying Services (Construction Phase)	\$25,000		
Operation & Maintenance Manuals	\$5,000		
Geotechnical Services	\$30,000		
Materials Testing Services (Construction Phase)	\$25,000		
Administration	\$50,000		
Total – Additional Services		\$215,000	(C)
Equipment/Materials (Direct Purchases)		\$0	
Construction Cost Estimate (Breakdown in Table VIa)		\$8,416,761	(D)
Subtotal (Without Contingencies)	(A+B+C+D)	\$9,631,687	
10% Contingency (Total Project) (A+B+C+D) * 10%		\$963,169	
Bond/Legal Counsel		\$0	
тот	AL PROJECT COST E	STIMATE:	\$10,594,856

TABLE VIIb

Total Project Cost Estimate	(Option	2)

USDA Total Cost S	preadsheet		
Option 2 Costs (From Table VIa)			
Item	Subtotal	Total	
Miscellaneous Land and Environmental			
Property Purchase / Lease Agreements (Indirect Costs)		\$0	
Easement Acquisition / Right of Way / Water Rights		\$0	
Environmental Services			
a- CEQA/NEPA Environmental Report	\$36,000		
b- Environmental Mitigation Contract (See Eng. Services)	\$0		
Total – Environmental Services	**	\$36,000	(A)
Engineering Services (Indirect Costs)			
Basic Services:			
Preliminary Engineering Report (PER)	\$62,250		
Preliminary/Final Design Phase Services (8.0%)	\$767,503		
Bidding / Contract Award Phase Services	\$25,000		
Assistance with Environmental Permits	\$10,000		
As-Built Record Drawing	\$25,000		
Resident Project Rep (Resident Inspector 2.0%)	\$191,875.80		
Total – Engineering Services	\$131,010.00	\$1,081,629	(B)
Total – Ligineering bervices		ψ1,001,023	(5)
Additional Services (Indirect Costs)			
Permitting (Right-of-Way and Easements)	\$20,000		
Regulatory Compliance Reports (Construction Phase)	\$15,000		
Environmental Mitigation Services (Construction Phase)	\$30,000		
Easement Acquisition/ROW Services (Construction Phase)	\$15,000		
Surveying Services (Construction Phase)	\$25,000		
Operation & Maintenance Manuals	\$5,000		
Geotechnical Services	\$30,000		
Materials Testing Services (Construction Phase)	\$25,000		
Administration	\$50,000		
Total – Additional Services	<i> </i>	\$215,000	(C)
Equipment/Materials (Direct Purchases)		\$0	
Construction Cost Estimate (Breakdown in Table VIa)		\$9,593,790	(D)
Subtotal (Without Contingencies)	(A+B+C+D)	\$10,926,419	
10% Contingency (Total Project) (A+B+C+D) * 10%		\$1,092,642	
Rond/Logal Councel		\$0	
Bond/Legal Counsel		<u>پ</u>	
TOTA	AL PROJECT COST E	ESTIMATE:	\$12,019,06

SECTION VIII, Proposed Project Funding Requirements and Estimated Debt Service for Recommended Projects

Upon agreement and approval of all fundable projects, MC Engineering will finalize the PER and the environmental documents for submittal to the USDA. Various processes must be followed and completed prior to the start of design and construction. The processes include the following:

- ✓ New project a funding application to be completed and submitted to the USDA (a new requirement)
- ✓ Environmental documents for recommended projects must be completed and a Notice of Determination filed with the State OPR Clearinghouse and Calaveras County

- ✓ A Letter of Conditions will be prepared by the USDA and approved by the BLSMWC. This document includes project conditions for the funding, design, construction, and operation of the project. The approval of Letter of Conditions includes a Notice of Intent and Request for Obligation of Funds.
- ✓ Funding documents must be completed and include, if necessary, ballots and/or other approvals necessary to provide the local funding for the loan amount as a condition within the USDA Letter of Conditions. Funding mechanisms must be approved by the BLSMWC's Legal Counsel with concurrence from the USDA.
- ✓ Interim financing may need to be provided by the BLSMWC, until such time the bids are opened and the project construction contract is approved and the Loan is closed, at which time the BLSMWC can request reimbursements for all planning and design costs.
- ✓ Adequate loan security must include, if possible, assignments of revenues, and assets
- ✓ Projects over \$5 million are to be reviewed by the Washington DC office
- ✓ Contingency of this project is based on a maximum value of 10%

Based on information provided within **Section VII**, the total eligible project cost varies based on various project funding Options, as per **TABLES VIIa** and **VIIb**, above. The current USDA interest rate is at 2.25% with a 40-year amortization. This is based on current median household income levels for the Arnold Greater Area (**see Attachment B**)

The BLSMWC is also required to maintain a yearly revenue stream/reserve equaling 10% of the annual debt repayment. This reserve account will be maintained for 10 years. This yearly reserve amount is required and will be a part of the Letter of Conditions for funding obligation(s).

Based on **TABLE VIIIa**, the combined requested loan and reserve amounts for the BLSMWC will range between **\$ 404,512** and **\$ 458,888** per year per parcel/customer including the required reserve account. This equates to an annual payment per parcel/customer ranging from **\$220** to **\$249** per year and based on 2024 parcels/customers.

As of the date of this TM, the BLSMWC board is requesting that **Option 2** be recommended for funding and included within the PER recommendations.

TABLE VIIIa

Cost Per Parcel Options

PERS FUNDING PROJECT OPTIONS	OPTION 1	OPTION 2	OPTION 3
Total Project Costs (See Tables VIIa and VIIb)	\$10,594,856	\$12,019,061	
Yearly Cost w/ USDA Loan (2.25 % i/40 years- or \$38.18/\$1000 borrowed)	\$404,512/yr	\$458,888/yr	
Yearly Reserve Fund (10%-USDA Loaned)	\$40,451/yr	\$45,889/yr	
Sub-total	\$444,963/yr	\$504,777/yr	
Cost/ Year per Parcel (\$/2024 parcels)	\$220/yr	\$249/yr	

SECTION IX, Proposed Project Schedule

This project schedule, shown below, is contingent upon various factors such as, review by USDA, financing approvals, agreement on Letter of Conditions, and other local concerns.

						BLSMWC USDA minary Project S				
ID	Task Name	Start	Finish	2nd Half		1st Half			2nd Half	
				Qtr 3	Qtr 4	Qtr 1		Qtr 2	Qtr 3	Qtr 4
1	Project Kick-off Meeting	Thu 2/25/16	Thu 2/25/16							
2	Data Collection	Fri 2/26/16	Thu 4/21/16							
3	Water System Evaluation/Project Priority Lis	Fri 4/22/16	Thu 6/16/16							
4	Cost Estimating/Alternative Evaluation	Fri 6/17/16	Thu 7/14/16							
5	Coordination Meeting/Workshop	Fri 7/15/16	Fri 7/15/16	7/15						
6	Prepare Draft PER w/ Recommendations	Mon 7/18/16	Fri 8/12/16							
7	Review Draft Report	Mon 8/15/16	Mon 8/15/16	8/15						
8	USDA Coodination/BLSMWC Presentations	Fri 7/15/16	Thu 9/22/16							
9	CEQA/NEPA Environmental Reports &	Fri 7/15/16	Thu 10/6/16							
	Coordination									
10	Final Report and Final Recommendations	Tue 8/16/16	Mon 9/12/16							
11	USDA Project Application	Mon 8/15/16	Fri 9/30/16							
12	BSSMWC Financing	Thu 9/15/16	Thu 12/15/16							
13	USDA Letter of Conditions	Tue 11/1/16	Mon 1/2/17			↓ 1/2				
14	Predesign	Tue 1/3/17	Mon 3/6/17			•	∎ _			
15	Surveying and Geotechnical	Mon 1/2/17	Fri 2/10/17							
16	Final Design	Mon 3/6/17	Fri 5/26/17					_ ا		
17	Bid Period	Mon 5/29/17	Thu 7/20/17							
18	Award	Mon 7/10/17	Fri 7/21/17						7/21	
19	Construction	Mon 7/24/17	Wed 10/31/18	3						

	Task		Project Summary	11	Inactive Milestone	\$	Manual Summary Rollup)
Proiect: BLSMWC PER Proiect Sch	Split		External Tasks		Inactive Summary	ii	Manual Summary	i
Date: Fri 7/8/16	Milestone	•	External Milestone	<u></u>	Manual Task		Start-only	C
	Summary	ii	Inactive Task		Duration-only		Finish-only	3
	•				Page 1			
Project: BLSMWC PER Project Sch Date: Fri 7/8/16	Split Milestone		External Tasks External Milestone	<pre></pre>	Inactive Summary Manual Task Duration-only	÷	Manual Summary Start-only	

1	st Half			2nd Ha	lf
	Qtr 1		Qtr 2		Qtr 3
	Deadline		•		
1	Progress		(
	Manual Progress	5	(

Attachment B - Median Household Income

	Median household income in the past 12 months (in 2010	+		Black or African	American Indian and Alaska Native		Native Hawaiian and Other Pacific	Some Other	Two or More	Hispanic or	Not Hispania
City/Place/CDP	inflation-adjusted dollars)	Total Population	White alone	American alone	alone	Asian alone	Islander alone	Race alone	Races	Latino	Latino
Armona CDP, California	\$43,609	4,156	2,058	99			13	1,597	240	2,784	1
Arnold CDP, California	\$55,625	3,843	3,590				3	60			
Aromas CDP, California	\$85,536	2,650	1,987	16			4	401	156		
Arroyo Grande city, California	\$58,725	17,252	14,710	156	125	595	14	856	796		
Artesia city, California	\$56,777	16,522	6,446	589	94		40	2,630	592		
Artois CDP, California	\$68,833	295	245	0	8		0	25	14	54	
Arvin city, California	\$32,949	19,304	10,247	192	240		6	7,655	809	1	
Ashland CDP, California	\$49,842	21,925	6,705	4,269	232	4,031	260	5,124	1,304	9,394	
Aspen Springs CDP, California	\$0	65	62	4,203	0		0	0	1,504	1	10
Atascadero city, California	\$65,479	28,310	24,457	585	295	685	57	1,205	1,026	4,429	23
Atherton town, California	\$223,611	6,914	5,565	75	233	911	45	95	216	268	
Atwater city, California	\$42,226	28,168	18,410	1,225	364	1,416	76	5,300	1,377	14,808	
Auberry CDP, California	\$70,917	2,369	2,048	1,223	105	24	2	5,500	1,377	309	
Auburn city, California	\$60,756	13,330	11,863	100			9				
Auburn Lake Trails CDP, California	\$83,668	3,426	3,190	6	129	240	5	405	584	1,331	
August CDP, California	\$30,469	8,390	3,190	224	28 183	36 358	20	45	116	208	
Avalon city, California	\$47,634	3,728	2,313					3,110	581	5,897	1
Avenal city, California	\$33,350	15,505	5,044	20	22	49	13	1,137	174	2,079	
Avery CDP, California	\$17,073	646	604	1,625	186	108	6	7,188	348	11,130	
Avilla Beach CDP, California	\$70,513	1,627			7	3	1	2	24	38	
Avocado Heights CDP, California	\$68,767	1,627	1,507 8,564	13	7	33	0	34	33	111	1
Azusa city, California	\$51,894	46,361		136	107	1,359	13	4,726	506	12,648	2
Baker CDP, California	\$37,019	735	26,715	1,499	562	4,054	87	11,270	2,174	31,328	15
Bakersfield city, California	\$53,997	347,483	302	1	5	10	14	380	23	502	
Baldwin Park city, California	\$50,346		197,349	28,368	5,102	21,432	478	77,686	17,068	158,205	189
Ballard CDP, California	\$98,889	75,390 467	33,119	913	674	10,696	85	27,079	2,824	60,403	14
Ballico CDP, California	\$73,000	407	432	3	1	2	0	12	17	46	
langor CDP, California	\$46,696	646	237	2	3	11	2	128	23	210	
anning city, California	\$38,979	29,603	543	5	17	4	1	18	58	47	
arstow city, California	\$45,166	29,603	19,164	2,165	641	1,549	39	4,604	1,441	12,181	17
ass Lake CDP, California	\$65,521	527	11,840	3,313	477	723	278	4,242	1,766	9,700	12
ay Point CDP, California	\$49,583		503	1	10	1	0	2	10	22	
ayview CDP (Contra Costa County), Californi	\$85,444	21,349	8,848	2,469	225	2,121	147	6,154	1,385	11,730	9
ayview CDP (Humboldt County), California		1,754	871	186	18	369	9	179	122	521	
ale AFB CDP, California	\$38,909	2,510	1,959	28	119	88	5	185	126	425	1
ar Creek CDP, California	\$46,071	1,319	949	117	32	45	8	50	118	191	
ar Valley CDP (Alpine County), California	\$11,161	290	156	4	2	14	0	93	21	170	
	\$54,000	121	119	0	0	1	0	0	1	1	
ar Valley CDP (Mariposa County), California	\$16,250	125	117	0	1	2	0	1	4	8	
ar Valley Springs CDP, California	\$82,266	5,172	4,776	74	46	57	3	89	127		
aumont city, California	\$66,121	36,877	23,163	2,276	544	2,845	83	6,058	1,908		
ckwourth CDP, California	\$87,564	432	402	0	11	2	1	7	9		
den CDP, California	\$12,500	22	20	0	0	0	0	0	2		
city, California	\$38,473	35,477	19,098	337	315	259	8	13,899	1,561		
a Vista CDP, California	\$68,482	2,781	2,559	16	41	30	6	43			
Canyon CDP, California	\$177,788	2,049	1,724	58	4	179	0	43	86		
flower city, California	\$50,565	76,616	32,337	10,760	731	8,865	615		74		
Gardens city, California	\$39,167	42,072	20,824	377	476	261		19,732	3,576	-	
nont city, California	\$99,913	25,835	17,455	423	72		37	18,787	1,310		
edere city, California	\$132,065	2,068	1,940	423		5,151	198	964	1,572		
cucie city, camornia	9152,005	2,000	1,540	3	0	58	7	18	42	72	

APPENDIX F

Current Operating Budget

BLUE LAKE SPRINGS MUTUAL WATER COMPANY REVIEWED FINANCIAL STATEMENTS AND SUPPLEMENTARY SCHEDULES DECEMBER 31, 2014 and 2013

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Sandra L. Vaughan, CPA Ebbetts Pass Accounting PO Box 130 Avery, CA 95224 (209) 795-1921

Blue Lake Springs Mutual Water Co. <u>Table of Contents</u> December 31, 2014

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Ebbetts Pass Accounting 4549 E Hwy 4, Avery, CA 95224

Sandra L. Vaughan, CPA Ebbetts Pass Accounting PO Box 130 Avery, CA 95224 (209) 795-1921

Independent Accountant's Review Report

Board of Directors Blue Lake Springs Mutual Water Co. Arnold, CA

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We have reviewed the accompanying balance sheets of Blue Lake Springs Mutual Water Co. (a corporation) as of December 31, 2014 and 2013 and the related statements of income and cash flows for the years then ended. A review includes primarily applying analytical procedures to management's financial data and making inquiries of Company management. A review is substantially less in scope than an audit, the objective of which is the expression of an opinion regarding the financial statements as a whole. Accordingly, we do not express such an opinion.

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America and for designing, implementing and maintaining internal control relevant to the preparation and fair presentation of the financial statements.

Our responsibility is to conduct the review in accordance with Statements on Standards for Accounting and Review Services issued by the American Institute of Certified Public Accountants. Those standards require us to perform procedures to obtain limited assurance that there are no material modifications that should be made to the financial statements. We believe that the results of our procedures provide a reasonable basis for our report.

Based on our review, with the exception of the matter described in the following paragraph, we are not aware of any material modifications that should be made to the accompanying financial statements in order for them to be in conformity with accounting principles generally accepted in the United States of America.

As disclosed in the financial statements Note A – Accounts Receivable - Accounting principles generally accepted in the United States of America require that the amount of interest charged on past due accounts be accrued. Management has informed us that the interest is recorded when received and not accrued.

The information included in the accompanying Schedules 1, 2 & 3 is presented only for supplementary analysis purposes. Such information has not been subjected to the inquiry and analytical procedures applied in the review of the basic financial statements, but were compiled from information that is the representation of management, without audit or review. Accordingly, we do not express an opinion or any other form of assurance on the supplementary information.

January 30, 2015

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Blue Lake Springs Mutual Water Company BALANCE SHEETS December 31, 2014 and 2013

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ASSETS

		2014		2013
CURRENT ASSETS Cash and Cash Equivalents (Schedule 1) Accounts Receivable Escrow Deposit - Well 4 Site Escrow Deposit - Well 5 Site Prepaid Expenses	\$	1,197,246 55,772 0 0 141	\$	1,255,715 58,676 206,900 3,000 127
Total Current Assets		1,253,160		1,524,417
PROPERTY AND EQUIPMENT (Schedule 2) Property, Plant and Equipment Accumulated Depreciation		7,453,139 (2,860,398)		6,785,178 (2,710,286)
Total Property and Equipment, Net		4,592,742		4,074,892
TOTAL ASSETS	<u>\$</u>	5,845,901	<u>\$</u>	5,599,309
LIABILITIES AND SHAREHOLDERS' E	QUITY			
CURRENT LIABILITIES Prepaid Water Fees Accounts Payable Total Current Liabilities	\$	4,601 92,975 97,576	\$	4,321 25,998 30,319
SHAREHOLDERS' EQUITY Capital Stock 2,025 shares \$1 Retained Earnings Net Income		2,025 5,566,967 179,334		2,024 5,158,996 407,970
Total Shareholders' Equity		5,748,326		5,568,991
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY	<u>\$</u>	5,845,901	<u>\$</u>	5,599,309

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See Accompanying Notes and Independent Accountant's Review Report

Blue Lake Springs Mutual Water Company INCOME STATEMENTS Twelve Months Ended December 31, 2014 and 2013

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	12 Months Ended Dec. 31, 2014	12 Months Ended Dec. 31, 2013		
Water Revenue Water Revenues Snowflake Lodge Water	\$	\$		
Total Revenue	1,327,462	1,254,509		
Gross Profit	1,327,462	1,254,509		
Operating Expenses General Expenses (Schedule 3) Source of Supply (Schedule 3) Water Treatment (Schedule 3) Transmission (Schedule 3) Distribution (Schedule 3) Pumping Expense (Schedule 3)	683,867 174,298 100,658 9,651 239,367 26,158	515,313 41,029 99,440 10,846 224,811 <u>26,201</u>		
Total Operating Expenses	1,233,999	917,639		
Operating Income	93,463	336,870		
Other Income Interest Earned Gain on Sale of Asset Credit Card Convenience Fee Meter Installation Hand Held Hose Fees Garden Watering Fees BLS Connection Fees Late Charge on Priors Penalties Restricted Connection Fees Transfer Fees Total Other Income	1,722 2,000 559 1,375 15,664 10,000 1,422 6,182 13,850 19,971 13,125 85,871	2,235 0 200 528 14,790 16,281 500 1,922 13,163 6,631 14,850 71,100		
Net Income	<u>\$ 179,334</u>	<u>\$ 407,970</u>		

Blue Lake Springs Mutual Water Company STATEMENTS OF CASH FLOWS Twelve Months Ended December 31, 2014 and 2013

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	 onths Ended nber 31, 2014	•= ••	Ionths Ended mber 31, 2013
CASH FLOWS FROM OPERATING ACTIVITIES Net Income Adjustments to reconcile Net Income to net Cash:	\$ 179,334	\$	407,970
Depreciation	164,609		160,891
(Increase) Decrease in: Accounts Receivable Prepaid Expenses Increase (Decrease) in:	2,904 (14)		(8,056) (83)
Accounts Payable	 67,257		25,813
Total Adjustments	 234,755		178,565
Net Cash Provided By (Used In) Operating Activities	414,089		586,535
CASH FLOWS FROM INVESTING ACTIVITIES Escrow Deposit -Well 5 Site Escrow Deposit -Well 4 Site Construction in Progress Proceeds - Sale of Asset Sale of Property, Plant and Equipment Purchase of Property, Plant and Equipment	 3,000 206,900 (103,313) (2,000) (14,496) (562,649)		(3,000) (206,900) (213,741) 0 (172,740)
Net Cash Provided By (Used In) Investing Activities	(472,557)		(596,381)
CASH FLOWS FROM FINANCING ACTIVITIES Capital Stock Additional Share Issued	 (1)		0
Net Cash Provided By (Used In) Financing Activities	 0		0
NET INCREASE (DECREASE) IN CASH	(58,468)		(9,846)
CASH AT BEGINNING OF PERIOD	 1,255,715		1,265,559
CASH AT END OF PERIOD	\$ 1,197,246	<u>\$</u>	1,255,715
SUPPLEMENTAL DISCLOSURE State Income Taxes Paid	\$ 800	\$	800

Note A - Summary of Significant Accounting Policies

This summary of significant accounting policies of Blue Lake Springs Mutual Water Company (The Company) is presented to assist in understanding the Company's financial statements.

Nature of Operations

1.

Blue Lake Springs Mutual Water Company, a California corporation, operates as a mutual water company whose objectives and purposes are to develop, distribute, supply and deliver water for domestic use to shareholders only; said shareholders shall be owners of lots or parcels of land lying within the area situated in Calaveras County, California commonly known as the Blue Lake Springs subdivision.

Basis of Accounting

The Company maintains its records on an accrual basis of accounting for both income tax and financial reporting purposes.

Budgetary Accounting

The Company adopts a budget annually which is approved by the Board of Directors.

Cash and Cash Equivalents

For purposes of the statement of cash flows, the Company considers all short-term investments with a maturity of three months or less to be cash equivalents.

Use of Estimates

Management uses estimates and assumptions in preparing financial statements. Those estimates and assumptions affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities and the reported revenues and expenses. Actual results could differ from these estimates.

Note A – Summary of Significant Accounting Policies (Continued)

Accounts Receivable

Accounts receivable are recorded at face value. There is no allowance for doubtful accounts recorded because management has the ability to lien the property if necessary. Accounts must be current in the event of transfer of title. Accounts receivable are made up of the following components:

	2014	2013
Water Receivable – Current Water Receivable - Prior Special Assessments Receivable	\$12,000 41,772 <u>2,000</u>	\$17,587 39,089 <u>2,000</u>
Total Accounts Receivable	\$55,772	\$58,676

Interest charges on past due water is not accrued and not included in receivables but rather is recorded when received as interest income. This is a departure from generally accepted accounting principles. Interest income if accrued for 2014 would be \$6,182.26 and for 2013 would be \$2,805.89. The total year to date December 31, 2014 interest receivable if accrued would be \$14,423.07.

Inventory

The Company does not maintain inventory.

Depreciation

The Company's depreciable assets are being depreciated using the straight line method based on estimated useful lives of 5 to 50 years.

Note B - Property, Plant & Equipment

Property, Plant and Equipment are recorded at cost. For more detail see Schedule 2.

Note C – Income Taxes

The Company was granted federal tax exempt status under Section 501(C) 12 of the Internal Revenue Code in a determination letter dated April 15, 1968. The Company files a corporate income tax return to the state of California. The state assesses tax on non-member income and has a minimum franchise tax fee of \$800 per year. The Company's income tax returns may be subject to examination from the IRS and State of California generally for three years after filing for IRS and four years after filing for State of California.

Note D - Shareholders' Equity

The Company is authorized to issue 3,000 shares. Capital stock issued is 2,025 shares @ \$1 par value. One additional share was issued in 2014. Shareholders in the Company shall be limited to owners of not less than one lot at Blue Lake Springs. A lot held as community property shall qualify for one share. Each shareholder is entitled to one vote for each share held. All delinquent charges must be paid as a condition to transfer said shares.

Note E – Rents

The Company had a rental agreement with Blue Lake Springs Homeowners' Association. The agreement stated that the Company's rent was \$600 month. The Company was notified to vacate the premises. The Company negotiated a new lease with Rabobank commencing June 1, 2014 for a two year term ending May 31, 2016 at \$992 per month for the first twelve months then increasing to \$1,021.76 per month in June 2015, with an option to renew. The Company paid Blue Lake Springs Homeowners' Association \$2700 and paid Rabobank \$6,944 in 2014. Rents paid to Blue Lake Springs Homeowners' Association for 2013 was \$3600.

Note F – Retirement Plan

The Company offers retirement benefits to employees who become vested after one year of employment. A contribution of 7% of salary is funded annually to each eligible employee into their individual retirement accounts at the Board's discretion. Employees are allowed to choose if all, part or none of it be funded into the retirement plan but instead take as compensation. For 2013, contributions of \$5,628.98 were funded in January 2014. For 2014, \$14,476.57 will be contributed in January 2015.

Note G - Additions/Replacements - Water System

The 2014 and 2013 budgeted amounts for additions/replacement were as follows:

	<u>2014</u>	<u>2013</u>
Water System Additions/Replacement	\$195,836	\$215,349

The Company did not have any infrastructure improvement costs in 2014 and 2013 due to concerns from previous years about having to purchase water from CCWD in the summer months and at an unknown cost. The State Water Resources Control Board (SWRCB) formerly the California Department of Public Health (CDPH) has informed the Company that they need to have an additional source of supply equal to their current well's output on its most demanding day.

See Accompanying Independent Accountant's Review Report

Note G – Additions/Replacements – Water System (Continued)

Two wells have been drilled which are estimated to produce 50 gallons per minute each, considerably under the current source's output. Additional wells or an additional source will be needed to comply with SWRCB. A Water Master Plan is being drafted by Luhdorff & Scalmanini, an engineering firm, to facilitate expansion and improvements as well as growth in the future. Additionally, it will be necessary in 2015 to repair, replace and/or restore/ maintain the major components of the system.

Note H – Governing Board

The Board of Directors consisted of seven directors, each elected to a three year term. As of December 31, 2014 the members of the Board of Directors were as follows:

Director	Title	<u>Term Expires</u>
Robert JP Maginnis Dave Owen Sharon Tobias Tom Schneider Steve Alberts George Paul	President Vice-President Secretary Treasurer Director Director	2015 2015 2017 2016 2016 2016
Paul Penney	Director	2017

Note I – Risk

The Company is exposed to various risks of loss related to theft of, damage to and destruction of assets, errors and omissions, injuries to employees and natural disasters. The Company is covered by the following types of insurance:

Coverage	<u>Limit of Liability</u>
Commercial General Liability	\$1,000,000 /3,000,000
Excess/Umbrella Liability	3,000,000
Personal Injury	1,000,000
Legal and Water Damage	1,000,000
Fire Damage / Legal Liability	1,000,000
Small Tools/Equipment	47,740
Crime Coverage	100,000 / 250,000
Robbery/Safe Burglary	5,000
Management Liability	3,000,000
Workers' Compensation	1,000,000
Property Damage Liability	2,488,484
Automobile Liability	1,000,000

See Accompanying Independent Accountant's Review Report

Note I – Risk (Continued)

The Company works off of wells jointly owned with Calaveras County Water District (CCWD). Due to the state (SWRCB) requirements, more property will need to be acquired and more wells will need to be drilled to ensure adequate water supply to the shareholders. In 2013, the Board approved a 6% increase in shareholder fees and an increase of 2% in 2014. As mentioned in Note G, further infrastructure improvements have been suspended until a secondary source of water has been added. Monies are being held in reserve in the event that the current wells cannot supply the demand. As an alternate to drilling for more groundwater, the Company is looking into purchasing water from CCWD and another surface water source on a non-emergency basis. Once the supply issue is solved, the Company plans to continue with the infrastructure improvements and the impact on the Company and its' shareholders has not been determined.

In April 2014, the Board approved a Drought Action Plan that is still in effect. This limits the water used on a daily basis and conforms with the State mandated water conservation.

Note J – Subsequent Events

The Company has evaluated the period after the balance sheet date up through January 30, 2015, which is the date that the financial statements are issued, and determined that there were no subsequent events or transactions that required recognition or disclosure in the financial statements.

SUPPLEMENTARY SCHEDULES

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Blue Lake Springs Mutual Water Company SCHEDULE 1 - Cash & Cash Equivalents (Compiled) December 31, 2014 and 2013

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ASSETS

	2014		2013	
Cash & Cash Equivalents				
Rabobank (Savings)	\$ 95	243 \$	144,914	
Rabobank (Checking)	75	376	75,376	
El Dorado Savings Bank	250	127	249,754	
Bank of Stockton	75	570	17,073	
Umpqua Bank	192	,651	42,525	
Mother Lode Bank	38	546	95,128	
Wells Fargo Bank	20	347	240,275	
Wells Fargo	19	899	0	
Oak Valley Community Bank	240	537	240,263	
Cash in Bank	139	243	87,580	
US Bank - Checking	10	000	10,000	
US Bank - Savings	33	634	33,350	
Petty Cash		25	25	
Interest Maximizer	2.	100	15,046	
EFTPS-BofA	3	951	4,406	
Total Cash & Cash Equivalents	<u>\$</u> 1,197.	<u>246 </u> \$	1,255,715	

See Independent Accountant's Review Report

Blue Lake Springs Mutual Water Company SCHEDULE 2 - Property, Plant And Equipment (Compiled) December 31, 2013 and 2014

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	12/31/2013	Additions	Deletions	12/31/2014
PROPERTY Land	\$ 17,764	455,000		\$ 472,764
Total Property	17,764	455,000		472,764
CONSTRUCTION IN PROGRESS	213,741	378,378	275,064	317,055
PLANT AND EQUIPMENT, At Cost				
Water System Additions	4,847,105			4,847,105
Donated Systems	407,649			407,649
Trucks	147,793		14,497	133,296
Office Equipment	30,820	1,072		31,892
Buildings and Streets	41,211			41,211
Treatment Plant	362,805	7,555		370,360
Wells and Equipment	249,969	108,265		358,234
Transmissions and Storage	410,866	5,895		416,760
Fuel Storage	22,824	·		22,824
Radio	14,674	960		15,634
Miscellaneous Equipment	10,768			10,768
Pump Station	737			737
Software	6,453	399		6,852
Total Plant and Equipment	6,553,673	124,146	14,497	6,663,321
Total Property, Plant and				
Equipment	6,785,178	957,523	289,561	7,453,140
Accumulated Depreciation	(2,710,286)	(164,609)	14,497	(2,860,398)
Total Property, Plant and Equipment, Net of Depreciation	\$ 4,074,892			\$ 4,592,742

Blue Lake Springs Mutual Water Company SCHEDULE 3 - General Expenses, Source of Supply Water Treatment, Transmission, Distribution and Pumping (Compiled) Twelve Months Ended December 31, 2014 and 2013

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	12 Months Ended Dec. 31, 2014		12 Months Ended Dec. 31, 2013	
GENERAL EXPENSES				
Payroll	\$	116,553	\$	100,709
Webmaster & Website		1,374		198
Consulting		129,080		63,972
Employee Recognition		1,075		993
Credit Card Charges		1,118		601
Drought Management		2,162		0
Liability Insurance Water Company Salary		17,800 76,282		18,561 56,739
Miscellanous		2,115		2,812
Travel & Mileage		1,216		1,993
Property & Franchise Tax		2,190		800
Office Supplies		5,832		4,977
Office Expense		5,245		0
Office Maintenance		699		0
Meetings & Membership		10,338		7,313
Postage		580		285
Health Insurance		106,835		115,516
Telephone		11,481		8,036
Other Benefits - Retirement/Sickleave		20,478		18,105
Payroll Taxes Depreciation		29,235 13,864		22,634 4,177
Legal		46,106		29,179
Accounting		4,400		4,315
Medical Reimbursement		15,136		12,408
Vehicle Repairs		621		578
Tools & Work Equipment		2.843		4,709
Radios (Communications)		466		0
Rent		9,644		3,600
Billing, Accounting, Collections		1,523		1,495
Vac, Holiday, Sick (Wage Adj)		2,616		0
Vehicle Operation (Fuel, Oil)		10,979		16,036
Project Wages		11,087		281
Office Equipment Repair		0		125
Permits Assoc. Memberships, Periodicals		239 1,964		585 1,197
Education/Inservice Training		1,964		2,898
Worker's Comp Insurance		14,132		4,436
State Water System Fees		4,798		5,052
		4,100		0,002
	<u>\$</u>	683,867	\$	515,313
Source of Supply				
Operation & Supplies	\$	5,105	\$	(44)
Repairs & Maintenance		0	•	12
New Well - CCWD Site		0		12,952
New Well - EPG		44,185		0
New Well - VUSD		8,580		0
New Well - Webb		64,673		0
New - Church, Cur		33,479		0
CCWD Wholesale		482		16,152
Equipment Rental Water Testing		1,336 2,332		24 1,384
Payroll		2,332 14,126		1,364
r ayron		14,120		10,048
	\$	174,298	\$	41,029

Blue Lake Springs Mutual Water Company SCHEDULE 3 - General Expenses, Source of Supply Water Treatment, Transmission, Distribution and Pumping (Compiled) Twelve Months Ended December 31, 2014 and 2013

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	12 Months Ended Dec. 31, 2014		12 Months Ended Dec. 31, 2013	
Water Treatment Operation & Supplies Repairs & Maintenance Monitoring Equipment Rental Snow Removal Water Testing Chemicals Generating Sludge Removal Pump Controls Payroll	\$	2,668 10,740 529 800 140 998 9,236 1,319 1,430 847 71,953	\$	2,265 8,092 1,125 939 0 546 16,698 3,522 1,520 1,141 63,593
	<u>\$</u>	100,658	<u>\$</u>	99,440
Transmission Repairs & Maintenance Depreciation Payroll	 \$	0 9,651 0 9,651	\$	4 10,761 <u>80</u> 10,846
DISTRIBUTION O & M of Tanks & Sites O & M of Mains & Accessories O & M of Service & Meters O & M of Hydrants & Accessories Leak Detection Equipment Rental Water Testing Monitoring Depreciation O & M of PRV Stations Customer's Premises Service Payroll	\$	7,594 9,609 5,899 0 65 3,138 14,621 141,094 1,345 6 55,603	\$	12,117 11,938 9,628 603 22 0 2,815 1 145,952 86 0 41,648
PUMPING 6/7-O & M of Pumping Equip WP-Power CP-Power 6/7-Power Tank 4 - Power TP-Power Payroll	<u>\$</u>	239,367 116 11,600 356 319 119 13,439 209	\$	224,811 0 11,313 383 322 0 14,119 65
	<u>\$</u>	26,158	\$	26,201

BLUE LAKE SPRINGS MUTUAL WATER COMPANY REVIEWED FINANCIAL STATEMENTS AND SUPPLEMENTARY SCHEDULES DECEMBER 31, 2015 and 2014

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Sandra L. Vaughan, CPA Ebbetts Pass Accounting PO Box 130 Avery, CA 95224 (209) 795-1921

Blue Lake Springs Mutual Water Co. <u>Table of Contents</u> December 31, 2015

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Schedule 2 – Property, Plant and Equipment
Schedule 3 – General Expenses, Source of Supply Expenses, Water Treatment, Transmission, Distribution,

Ebbetts Pass Accounting 4549 E Hwy 4, Avery, CA 95224

And Pumping Expenses.....12-13

Sandra L. Vaughan, CPA Ebbetts Pass Accounting PO Box 130 Avery, CA 95224 (209) 795-1921

Independent Accountant's Review Report

Board of Directors Blue Lake Springs Mutual Water Co. Arnold, CA

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We have reviewed the accompanying financial statements of Blue Lake Springs Mutual Water Co. (a corporation), which comprise the balance sheets as of December 31, 2015 and 2014 and the related statements of income, changes in shareholders' equity and cash flows for the years then ended and the related notes to the financial statements. A review includes primarily applying analytical procedures to management's financial data and making inquiries of Company management. A review is substantially less in scope than an audit, the objective of which is the expression of an opinion regarding the financial statements as a whole. Accordingly, we do not express such an opinion.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation and maintainance of internal control relevant to the preparation and fair presentation of the financial statements that are free from material misstatement whether due to fraud or error.

Accountant's Responsibility

Our responsibility is to conduct the review in accordance with Statements on Standards for Accounting and Review Services promulgated by the Accounting and Review Services Committee of the American Institute of Certified Public Accountants. Those standards require us to perform procedures to obtain limited assurance as a basis for reporting whether we are aware of any material modifications that should be made to the financial statements for them to be in accordance with accounting principles generally accepted in the United States of America. We believe that the results of our procedures provide a reasonable basis for our report.

Accountant's Conclusion

Based on our review, with the exception of the matter described in the following paragraph, we are not aware of any material modifications that should be made to the accompanying financial statements in order for them to be in conformity with accounting principles generally accepted in the United States of America.

Known Departure From Accounting Principles Generally Accepted in the United States of America

As disclosed in the financial statements Note A – Accounts Receivable - Accounting principles generally accepted in the United States of America require that the amount of interest charged on past due accounts be accrued. Management has informed us that the interest is recorded when received for 2014 and properly accrued in 2015.

Supplementary Information

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The supplementary information included in the accompanying Schedules 1, 2 & 3 is presented only for supplementary analysis purposes. Such information has not been subjected to the inquiry and analytical procedures applied in the review of the basic financial statements, but were compiled from information that is the representation of management, without audit or review. Accordingly, we do not express an opinion or any other form of assurance on the supplementary information.

Ebbetts Pass Accounting February 1, 2016

Blue Lake Springs Mutual Water Company BALANCE SHEETS December 31, 2015 and 2014

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ASSETS

	2015		2014	
CURRENT ASSETS Cash and Cash Equivalents (Schedule 1) Accounts Receivable Prepaid Expenses	\$	889,069 101,569 0	\$	1,197,246 55,772 141
Total Current Assets		990,638		1,253,160
PROPERTY AND EQUIPMENT (Schedule 2) Property, Plant and Equipment Accumulated Depreciation		7,568,435 (3,001,001)		7,453,139 (2,860,398)
Total Property and Equipment, Net		4,567,434		4,592,742
INTANGIBLE ASSETS Water Right (CCWD Capacity Chrg) Accumulated Amortization		825,000 (4,583)		0 0
Total Intangible Assets, Net		820,417		0
TOTAL ASSETS	\$	6,378,489	<u>\$</u>	5,845,901
LIABILITIES AND SHAREHOLDERS	EQUITY			
CURRENT LIABILITIES Prepaid Water Fees Accrued Vacation Payable Accounts Payable Total Current Liabilities	\$	6,918 22,360 238,619 267,896	\$	4,601 2,616 90,359 97,576
SHAREHOLDERS' EQUITY Capital Stock 2,025 shares \$1 Retained Earnings Net Income Total Shareholders' Equity		2,025 5,786,712 321,855 6,110,593		2,025 5,566,967 179,334 5,748,326
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY	\$	6,378,489	<u>\$</u>	5,845,901

Blue Lake Springs Mutual Water Company INCOME STATEMENTS Twelve Months Ended December 31, 2015 and 2014

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	12 Months Ended Dec. 31, 2015	12 Months Ended Dec. 31, 2014	
Water Revenue Water Revenues Snowflake Lodge Water	\$	\$	
Total Revenue	1,348,586	1,327,462	
Gross Profit	1,348,586	1,327,462	
Operating Expenses General Expenses (Schedule 3) Source of Supply (Schedule 3) Water Treatment (Schedule 3) Transmission (Schedule 3) Distribution (Schedule 3) Pumping Expense (Schedule 3)	592,122 153,853 101,244 12,027 218,833 21,497	683,867 174,298 100,658 9,651 239,367 26,158	
Total Operating Expenses	1,099,578	1,233,999	
Operating Income	249,008	93,463	
Other Income Interest Earned Liens Drought Gain on Sale of Asset Credit Card Convenience Fee Meter Installation Hand Held Hose Fees Garden Watering Fees BLS Connection Fees Late Charge on Priors Miscellaneous Income Penalties Restricted Connection Fees Transfer Fees	11,233 3,140 2,400 0 637 9,627 4,756 3,790 0 4,714 4,328 14,873 0 13,350	1,722 0 2,000 559 1,375 15,664 10,000 1,422 6,182 0 13,850 19,971 13,125	
Total Other Income	72,847	85,871	
Net Income	\$ 321,855	<u>\$ 179,334</u>	

Blue Lake Springs Mutual Water Company STATEMENTS OF CASH FLOWS Twelve Months Ended December 31, 2015 and 2014

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	12 Months Ended December 31, 2015			
CASH FLOWS FROM OPERATING ACTIVITIES	\$	321,855	\$	179,334
Adjustments to reconcile Net Income to net Cash: Depreciation Amortization		176,298 4,583		164,609 0
(Increase) Decrease in: Accounts Receivable Prepaid Expenses Accrued Vacation Payable		(45,797) 2,458 19,744		2,904 265 2,616
Advances Paid Increase (Decrease) in:		500		(500)
Accounts Payable Total Adjustments		147,760 305,546		<u>64,861</u> 234,755
Net Cash Provided By (Used In) Operating Activities		627,402		414,089
CASH FLOWS FROM INVESTING ACTIVITIES Escrow Deposit -Well 5 Site Escrow Deposit -Well 4 Site Construction in Progress Proceeds - Sale of Asset Purchase Intangible Assets Disposal of Property, Plant and Equipment Purchase of Property, Plant and Equipment		0 0 131,579 0 (825,000) (35,695) (246,874)		3,000 206,900 (103,313) (2,000) 0 (14,496) (562,649)
Net Cash Provided By (Used In) Investing Activities		(975,990)		(472,557)
CASH FLOWS FROM FINANCING ACTIVITIES Capital Stock Additional Share Issued Prior Period Adjustment		0 40,412		(1) 0
Net Cash Provided By (Used In) Financing Activities		40,412	 .	(1)
NET INCREASE (DECREASE) IN CASH		(308,177)		(58,469)
CASH AT BEGINNING OF PERIOD		1,197,246	.	1,255,715
CASH AT END OF PERIOD	\$	889,069	\$	1,197,246
SUPPLEMENTAL DISCLOSURE State Income Taxes Paid	\$	800	\$	800

See Accompanying Notes and Independent Accountant's Review Report

Note A - Summary of Significant Accounting Policies

This summary of significant accounting policies of Blue Lake Springs Mutual Water Company (The Company) is presented to assist in understanding the Company's financial statements.

Nature of Operations

Blue Lake Springs Mutual Water Company, a California corporation, operates as a mutual water company whose objectives and purposes are to develop, distribute, supply and deliver water for domestic use to shareholders only; said shareholders shall be owners of lots or parcels of land lying within the area situated in Calaveras County, California commonly known as the Blue Lake Springs subdivision.

Basis of Accounting

The Company maintains its records on an accrual basis of accounting for both income tax and financial reporting purposes.

Budgetary Accounting

The Company adopts a budget annually which is approved by the Board of Directors.

Cash and Cash Equivalents

For purposes of the statement of cash flows, the Company considers all short-term investments with a maturity of three months or less to be cash equivalents.

Use of Estimates

Management uses estimates and assumptions in preparing financial statements. Those estimates and assumptions affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities and the reported revenues and expenses. Actual results could differ from these estimates.

Note A – Summary of Significant Accounting Policies (Continued)

Accounts Receivable

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Accounts receivable are recorded at face value. There is no allowance for doubtful accounts recorded because management has the ability to lien the property if necessary. Accounts must be current in the event of transfer of title. Accounts receivable are made up of the following components:

	2015	2014
Water Receivable – Current	\$ 1,629	\$12,000
Water Receivable - Prior	47,584	41,772
Interest Receivable	50,356	
Special Assessments Receivable	2,000	<u>2,000</u>
Total Accounts Receivable	\$101,569	\$55,772

In 2014, interest charges on past due water was not accrued and not included in receivables but rather was recorded when received as interest income. This is a departure from generally accepted accounting principles. In 2015, interest income of \$9,943.83 is accrued and included in receivables. A prior period adjustment of \$40,411.71 has been recorded to adjust total interest receivable to \$50,355.54.

Inventory

The Company does not maintain inventory.

Depreciation

The Company's depreciable assets are being depreciated using the straight line method based on estimated useful lives of 5 to 50 years.

Intangible Assets

Intangible assets subject to amortization include a water right purchased from Calaveras County Water District (CCWD). It is being amortized over 30 years which is the original term plus a 10 year renewal.

Note B – Property, Plant & Equipment

Property, Plant and Equipment are recorded at cost. For more detail see Schedule 2.

Note C – Income Taxes

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The Company was granted federal tax exempt status under Section 501(C) 12 of the Internal Revenue Code in a determination letter dated April 15, 1968. The Company files a corporate income tax return to the state of California. The state assesses tax on non-member income and has a minimum franchise tax fee of \$800 per year. The Company's income tax returns may be subject to examination from the IRS and State of California generally for three years after filing for IRS and four years after filing for State of California.

Note D – Shareholders' Equity

The Company is authorized to issue 3,000 shares. Capital stock issued is 2,025 shares @ \$1 par value. One additional share was issued in 2014. Shareholders in the Company shall be limited to owners of not less than one lot at Blue Lake Springs. A lot held as community property shall qualify for one share. Each shareholder is entitled to one vote for each share held, provided the shareholder is a member in good standing. All delinquent charges must be paid as a condition to transfer said shares.

Note E - Rents

The Company has a rental agreement with Rabobank beginning June 1,2014 for a two year term ending May 31, 2016 at \$992 per month for the first twelve months then increasing to \$1,021.76 per month in June 2015, with the option to rent on a month to month basis thereafter. The Company paid Rabobank \$12,112.32 in 2015 and \$6,944 in 2014.

Note F – Retirement Plan

The Company offers retirement benefits to employees who become vested after one year of employment. A contribution of 7% of salary is funded annually to each eligible employee into their individual retirement accounts at the Board's discretion. Employees are allowed to choose if all, part or none of it be funded into the retirement plan but instead take as compensation. For 2014, contributions of \$14,476.57 were funded in January 2015. For 2015, \$21,430.95 was contributed in January 2016.

Note G – Additions/Replacements – Water System

The State Water Resources Control Board (SWRCB) formerly the California Department of Public Health (CDPH) has informed the Company that they need to have an additional source of supply equal to their current well's output on its most demanding day. Several test wells were drilled in 2014 and only two were suitable for development. Of those two, one is being built and the other is on hold. A Water Master Plan was completed by Luhdorff & Scalmanini, an engineering firm, to facilitate expansion and improvements as well as growth in the future. Additions and repairs were made to the Treatment Plant with a new roof, chlorinator and anlyzer. Two meters were installed at Wells 2 and 3.

Note H – Risk

The Company is exposed to various risks of loss related to theft of, damage to and destruction of assets, errors and omissions, injuries to employees and natural disasters. The Company carries various insurance policies for these risks.

Concentration of credit risk for cash deposits at banks are insured by the Federal Deposit Insurance Company (FDIC) up to \$250,000. At December 31, 2015 the Company had approximately \$79,425 in excess of insured limits held at Rabobank.

The Company works off of wells jointly owned with Calaveras County Water District (CCWD). In 2014, the Board approved a 6% increase in shareholder fees and an increase of 2% in 2015. Private and government loans are being considered for infrastructure improvements laid out in the completed Master Plan. Monies are being held in reserve in the event that the current wells cannot supply the demand. As an alternate to drilling for more groundwater, the Company has entered into an agreement dated October 28, 2015 with CCWD that will make an initial capacity charge payment for buy-in of 100,000 gpd capacity into the Hunters treatment plant, Meadowmont and Avery pump stations, and Reach 2 and 3 transmission lines. It will remain in effect for an initial term of twenty years with an automatic renewal every ten years thereafter. The agreement has a path for purchasing 100% of the Company's demand from CCWD.

In April 2014, the Board approved a Drought Action Plan that is still in effect. This limits the water used on a daily basis and conforms with the State's mandated water conservation.

Note I – Subsequent Events

The Company has evaluated the period after the balance sheet date up through February 1, 2016 which is the date that the financial statements are available to be issued, and determined that there were no subsequent events or transactions that require recognition or disclosure in the financial statements. SUPPLEMENTARY SCHEDULES

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Blue Lake Springs Mutual Water Company SCHEDULE 1 - Cash & Cash Equivalents (Compiled) December 31, 2015 and 2014

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ASSETS

	2015		2014	
Cash & Cash Equivalents				
Rabobank (Savings)	\$	95,426	\$	95,243
Rabobank (Checking)		232,460		75,376
El Dorado Savings Bank		130,455		250,127
Bank of Stockton		50,010		75,570
Umpqua Bank		4,309		192,651
Mother Lode Bank		28,976		38,546
Wells Fargo Bank		75,400		20,347
Wells Fargo		50,000		19,899
Oak Valley Community Bank		5,707		240,537
Cash in Bank		135,344		139,243
US Bank - Checking		10,000		10,000
US Bank - Savings		40,015		33,634
Petty Cash		25		25
Interest Maximizer		30,152		2,100
EFTPS-BofA		790	-	3,951
Total Cash & Cash Equivalents	<u>\$</u>	889,069	<u>\$</u>	1,197,246

Blue Lake Springs Mutual Water Company SCHEDULE 2 - Property, Plant And Equipment (Compiled) December 31, 2014 and 2015

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	12/31/2014	Additions	Deletions	12/31/2015
PROPERTY Land	\$ 472,764	147,664		\$ 620,428
Total Property	472,764	147,664		620,428
CONSTRUCTION IN PROGRESS	317,055	30,900	162,481	185,475
PLANT AND EQUIPMENT, At Cost				
Water System Additions	4,847,105	-	-	4,847,105
Donated Systems	407,649	-	-	407,649
Trucks	133,296	14,232	35,695	111,833
Office Equipment	31,892	2,226	-	34,118
Buildings and Streets	41,211	· _	-	41,211
Treatment Plant	370,360	34,751	-	405,111
Wells and Equipment	358,234	7,600	-	365,834
Transmissions and Storage	416,760	37,460	-	454,220
Fuel Storage	22,824	-	-	22,824
Radio	15,634	21,247	-	36,881
Miscellaneous Equipment	10,768	799	-	11,567
Pump Station	737	-	-	737
Software	6,852	16,592	-	23,444
Total Plant and Equipment	6,663,321	134,906	35,695	6,762,533
Total Property, Plant and				
Equipment	7,453,140	313,471	198,176	7,568,435
Accumulated Depreciation	(2,860,398)	176,298	35,695	(3,001,001)
Total Property, Plant and Equipment, Net of Depreciation	\$ 4,592,742			\$ 4,567,434

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Blue Lake Springs Mutual Water Company SCHEDULE 3 - General Expenses, Source of Supply Water Treatment, Transmission, Distribution and Pumping (Compiled) Twelve Months Ended December 31, 2015 and 2014

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	12 Months Ended Dec. 31, 2015		12 Months Ended Dec. 31, 2014	
GENERAL EXPENSES Payroll Webmaster & Website Outside Services Consulting Employee Recognition Credit Card Charges Drought Management Liability Insurance	S	132,403 1,346 8,712 3,889 1,074 888 2,362	\$	116,553 1,374 0 129,080 1,075 1,118 2,162
Liability Insurance Water Company Salary Miscellanous Travel & Mileage Property & Franchise Tax Office Supplies Office Expense Office Maintenance Meetings & Membership Postage		13,396 82,066 5,211 747 1,098 4,636 10,402 0 6,251 1,164		17,800 76,282 2,115 1,216 2,190 5,832 5,832 5,245 699 10,338 580
Health Insurance Telephone Other Benefits - Retirement/Sickleave Payroll Taxes Depreciation Legal Accounting Medical Reimbursement Vehicle Repairs Tools & Work Equipment		93,554 9,096 25,149 29,030 17,876 38,008 4,460 11,417 221 1,575		106,835 11,481 20,478 29,235 13,864 46,106 4,400 15,136 621 2,843
Radios (Communications) Rent Billing, Accounting, Collections Vac, Holiday, Sick (Wage Adj) Vehicle Operation (Fuel, Oil) Project Wages Office Equipment Repair Permits Assoc. Memberships, Periodicals Education/Inservice Training		520 12,112 5,664 19,744 9,872 3,804 373 1,483 680 1,802		466 9,644 1,523 2,616 10,979 11,087 0 239 1,964 1,761
Worker's Comp Insurance State Water System Fees	 \$	19,752 10,291 592,122	 \$	14,132 <u>4,798</u> 683,867
Source of Supply Amortization Operation & Supplies Repairs & Maintenance New Well - EPG New Well - VUSD New Well - Webb New - Church, Cur New Wells Lux Surface Water:UWPA CCWD Wholesale Water Surface Water-Legal New Wells:Legal Equipment Rental Snow Removal Water Testing Miscellaneous Payroll	\$	4,583 5,961 1,647 0 0 92,147 1,493 19,613 10,408 3,120 30 0 31 1,070 983 12,767	\$	0 5,105 0 44,185 8,580 64,673 33,479 0 0 482 0 0 482 0 0 1,336 0 2,332 0 14,126
	<u>\$</u>	153,853	\$	174,298

See Independent Accountant's Review Report

Blue Lake Springs Mutual Water Company SCHEDULE 3 - General Expenses, Source of Supply Water Treatment, Transmission, Distribution and Pumping (Compiled) Twelve Months Ended December 31, 2015 and 2014

•

		ths Ended 31, 2015		onths Ended c. 31, 2014
Water Treatment Operation & Supplies Repairs & Maintenance Monitoring Equipment Rental Snow Removal Water Testing Chemicals Generating Sludge Removal Pump Controls Payroll	\$	1,698 8,331 495 851 233 1,033 10,729 1,025 840 0 76,010	\$	2,668 10,740 529 800 140 998 9,236 1,319 1,430 847 71,953
	\$	101,244	<u>\$</u>	100,658
Transmission Depreciation Payroll	\$	11,980 <u>47</u> 12,027	 S	9,651 9,651
DISTRIBUTION Expenses:Distribution:Legal O & M of Tanks & Sites O & M of Mains & Accessories O & M of Service & Meters O & M of Hydrants & Accessories Equipment Rental Water Testing Monitoring Depreciation O & M of PRV Stations Customer's Premises Service Payroll	\$\$	563 6,162 2,352 11,261 124 40 5,567 0 146,442 0 306 46,016 218,833	\$	0 7,594 9,609 5,899 395 65 3,138 14,621 141,094 1,345 6 55,603 239,367
PUMPING CP-O & M of Pumping Equip 6/7-O & M of Pumping Equip WP-Power CP-Power 6/7-Power Tank 4 - Power TP-Power Payroll	\$	82 83 8,973 337 251 148 10,830 793 21,497	\$	0 116 11,600 356 319 119 13,439 209 26,158

BLUE LAKE SPRINGS MUTUAL WATER COMPANY 2015 BUDGET

OPERATING INCOME & EXPENSE

INCOME DETAIL:

Residence / Lot Fees	510,497
Prorata	300
Interest/Priors	4,000
Handheld Hose Water Fees	15,000
Metered Water Fees	10,000
Water Meters	1,400
Snowflake Lodge Water	2,500
New Connections - Non-Restricted	1,000
Transfer Fees	10,000
Miscellaneous	500
Interest Income (Operating)	500
Penalties	14,000
TOTAL OPERATING INCOME	569,697

NON-OPERATING INCOME DETAIL:

Gain on Sale of Vehicle	5,000
Employee Contribution to Health Insurance	4,000
Carry Over Capital from 2014	235,203
TOTAL NON-OPERATING INCOME	244,203

TOTAL OPERATING INCOME	813,900
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EXPENSE DETAIL:	
Salaries & Taxes	392,400
Benefits (insurance & IRA)	150,200
Property / Liability Insurance	27,225
Workers Comp Insurance	17,000
Power (wells, treatment plant & system pumps)	40,000
Monitoring	2,500
CCWD Water Purchase	0
Water Test (State requirements)	8,000
Operating Supplies	7,475
Chemicals / Treatment	6,000
Standby Power Generation (fuel and maintenance)	2,000
Telephone / Communications	9,200
Vehicle / Operating	10,500
Vehicle / Maintenance	1,000
Vehicle Purchase	15,000
System Maintenance	54,500
Legal, Contractual, Professional Services	25,000
Meeting & Membership	8,500
Drought	1500
Postage	500
Office Rental	14,500
Income Tax	900
Depreciation / Amoritization	5,000
Miscellaneous	5,000
Education & Training	3,000
Office Equipment Repairs	500
State Water System Fees	6,500
TOTAL OPERATING EXPENSES	813,900

NET OPERATIONS

0

EXPANSION & IMPROVEMENTS INCOME & EXPENSE

INCOME DETAIL:	
Residence / Lot Fees	840,375
Funding for Expansion & Emprovements	533,225
Carry Over Capital Improvement Account	228,500
Subtotal	1,602,100
OTHER INCOME (RESTRICTED):	
Interest Income (E. & I. Funds)	1,400
New Connections - Restricted	13,500
Capital Improvement Account	0
Special Assessment (unpaid prior 1994 balance)	0
Subtotal	14,900
TOTAL E. & I. INCOME	1,617,000

EXPENSE DETAIL:

Salaries / Project Manager & Assistant	45,000
Monitoring	30,000
Power	20,000
Source of Supply	7,500
Water Treatment	5,000
Distribution	12,000
Legal	25,000
Engineering / Consulting	35,000
Relocation - New Office (491 BLS Dr.)	75,000
New Wells	961,200
Other Well Sites	70,000
Capital Improvement Reserve	156,300
Depreciation	175,000
TOTAL E. & I. EXPENSES	1,617,000

NET OPERATIONS

BLUE LAKE SPRINGS MUTUAL WATER COMPANY 2014 BUDGET

OPERATING INCOME & EXPENSE

INCOME DETAIL:

Residence / Lot Fees	790,803
Prorata	300
Interest/Priors	2,500
Handheld Hose Water Fees	14,500
Metered Water Fees	15,000
Water Meters	1,000
Snowflake Lodge Water	2,600
New Connections - Non-Restricted	1,500
Transfer Fees	10,000
Miscellaneous	1,000
Interest Income (Operating)	500
Penalties	13,500
TOTAL OPERATING INCOME	853,203

EXPENSE DETAIL:

Salaries & Benefits	516,055
Property / Liability Insurance	24,713
Workers Comp Insurance	15,549
Power (wells, treatment plant & system pumps)	31,000
Monitoring	7,000
CCWD Water Purchase	20,000
Water Test (State requirements)	6,000
Operating Supplies	6,500
Chemicals / Treatment	14,886
Standby Power Generation (fuel and maintenance)	2,600
Telephone / Communications	7,500
Vehicle / Operating	10,500
Vehicle / Maintenance	1,800
System Maintenance	46,000
Legal, Contractual, Professional Services	20,000
Meeting & Membership	9,300
Postage	500
Office Rental	10,500
Income Tax	900
Depreciation / Amoritization	80,000
Miscellaneous	5,400
Education & Training	3,000
Office Equipment Repairs	500
State Water System Fees	13,000
TOTAL OPERATING EXPENSES	853,203

NET OPERATIONS0

EXPANSION & IMPROVEMENTS INCOME & EXPENSES

INCOME DETAIL:	
Residence / Lot Fees	536,373
Funding for Expansion & Emprovements	195,836
Depreciation - Expansion & Improvements	185,623
Subtotal	917,832
OTHER INCOME (RESTRICTED):	
Interest Income (E. & I. Funds)	1,600
New Connections - Restricted	34,431
Capital Improvement Account	218,337
Special Assessment (unpaid prior 1994 balance)	2,000
== Subtotal	256,368
TOTAL E. & I. INCOME	1,174,200

EXPENSE DETAIL:

Salaries / Project Manager & Assistant	45,000
Monitoring	20,000
Power	44,000
Water Testing (State requirements)	1,000
Standby Power Generation	2,200
System Maintenance	245,000
Legal, Engineering, Professional Services	269,000
Property Tax	6,000
New Wells	542,000
TOTAL E. & I. EXPENSES	1,174,200

NET OPERATIONS

0

BLUE LAKE SPRINGS MUTUAL WATER COMPANY 2013 BUDGET

OPERATING INCOME & EXPENSE

INCOME DETAIL:

Residence / Lot Fees	1,252,053
Prorata	300
Interest/Priors	4,000
Handheld Hose Water Fees	14,416
Sprinkling System Fees "meters connected & billed"	15,135
Sprinkling System Meters	600
Snowflake Lodge Water	2,500
New Connections - Non-Restricted	500
Transfer Fees	7,000
Miscellaneous	1,000
Interest Income (Operating)	800
Penalties	15,000
TOTAL OPERATING INCOME	1,313,304

EXPENSE DETAIL:	
Salaries & Benefits	438,845
Property / Liability Insurance	24,922
Workers Comp Insurance	15,889
Power (wells, treatment plant & system pumps)	31,000
Monitoring	60,000
Water Test (State requirements)	10,000
Operating Supplies	8,000
Chemicals / Treatment	19,000
Standby Power Generation (fue) and maintenance)	500
Telephone / Communications	5,500
Vehicle / Operating	10,000
Vehicle / Maintenance	3,000
System Maintenance	45,000
Legal	88,000
Contractual / Professional Services	124,000
Meeting & Membership	15,000
Postage	1,000
Office Rental	4,800
income Tax	1,000
Depreciation / Amoritization	173,000
Miscellaneous	6,000
Education & Training	1,000
Office Equip. Repairs	500
State Water System Fees	12,000
Sub Total	1,097,956
Capital Improvement Account	215,348
TOTAL OPERATING EXPENSES	1,313,304
NET OPERATIONS	0

NON-OPERATING INCOME & EXPENSES

OTHER INCOME (RESTRICTED):

Interest Income (Emg / Exp & Impr Funds)	2,000
New Connections - Restricted	11,977
Depreciation / Amoritization	173,000
Capital Improvement Account	215,348
Special Assessment (unpaid prior 1994 balance)	2,000
TOTAL NON-OPERATING INCOME	404,325

OTHER EXPENSES:

Capital Improvements (Wells, Infrastructure)	404,325
TOTAL NON-OPERATING EXPENSES	404,325
1	
NET NON-OPERATIONS	0

APPENDIX G

BLSMWC By-Laws

BYLAWS

of the

BLUE LAKE SPRINGS MUTUAL WATER COMPANY

PREAMBLE: <u>OBJECTS AND PURPOSES</u>

The objects and purposes of the Blue Lake Springs Mutual Water Company, a corporation, hereinafter referred to as the "Company", shall be to develop, distribute, supply and deliver water for domestic use to the land area situated in Calaveras County, California, described as follows:

Units 1 through 5 and 7 through 13, which includes facilities owned by the Blue Lake Springs Homeowners' Association, as shown on the maps of Blue Lake Springs as recorded in the Calaveras County Recorder's Office, hereinafter referred to as Blue Lake Springs.

The Company shall be authorized to do whatever may be deemed necessary, conducive, incidental or advisable to accomplish and promote said objects or purposes, including, but not limited to:

a) Constructing, leasing, maintaining and operating water system facilities at Blue Lake Springs;

b) Acquiring, owning, leasing, or developing water, rights or water bearing lands;

c) Paying all taxes, utilities, charges, assessments and other levies upon property owned or managed by the Company;

d) Making and collecting charges and assessments by which to further the foregoing objects and purposes;

and to any other act or thing in any way connected with the foregoing objects and purposes of the Company.

ARTICLE I

NAME AND PRINCIPLE OFFICE

- Section 1: <u>NAME</u>. The name of the Corporation is and shall be "Blue Lake Springs Mutual Water Company", and for convenience, shall be referred to hereinafter as "Company" or "Corporation".
- Section 2: <u>PRINCIPLE OFFICE.</u> The principle office of the business shall be located within the town of Arnold, in the County of Calaveras, in the State of California.

ARTICLE II

DIRECTORS

- Section 1: <u>NUMBER.</u> Directors shall serve without compensation and the authorized number of Directors of the Company shall be seven (7), which may be changed by a Bylaw duly enacted by the shareholders, as provided in these Bylaws.
- Section 2: <u>OUALIFICATIONS.</u> Directors shall be shareholders in good standing in the Company.
- Section 3: <u>POWERS.</u> All corporate powers (subject to limitation of the Articles and to the provisions of law requiring action to be authorized or approved by the shareholders) shall be exercised by or under the authority of, and the business affairs of this Corporation shall be controlled by its Board of Directors; and, subject to the same limitations, the Board shall also have power:

a) To appoint and remove all officers, prescribed their duties, fix their compensation, and require from them security for faithful performance of service, if deemed necessary;

b) To make rules and regulations not inconsistent with the Articles of Incorporation and the Preamble of these Bylaws, for the guidance of the officers and management of the affairs of the Company;

c) To make rules and regulations for the appointment and terms of the officers or members of any subcommittees of the Board of Directors which might be appointed by them;

d) To hire Watermaster(s) and management employees necessary to operate the system and to conduct the affairs of the Company under the direction of the Board of Directors;

e) To indemnify and hold harmless the Directors and officers of the Water Company from any claim, lawsuit, or civil judgment arising out of or in the course and scope of their official duties.

Section 4: <u>DUTIES.</u> The Board of Directors shall:

a) Adopt and use a corporate seal consisting of a circle setting forth on its circumference the name of the Corporation and showing the State of Incorporation;

b) Authorize the issuance of certificates for shares upon such terms as may be lawful and in such form as it shall prescribe, but which will state all matters required by law and which shall be signed and authenticated as required by law.

Section 5: <u>ELECTION AND TERM OF OFFICE.</u> The Directors shall be elected at each annual meeting of regular shareholders or at any special meeting of the shareholders held in lieu of the annual meeting. All Directors shall hold office until their respective successors are elected, except in the case of the resignation, death, disability or removal of a Director.

The term of office of a Director shall be three years and the expiration of terms shall be on a staggered basis so that not more than three Directors will be elected in any one year. Initially (1976), to implement this change, the number of Directors to be elected shall be two for three years and two for two years. Determination of the terms of those elected shall be by lot.

The Board of Directors shall at least 60 days before each annual meeting of the shareholders, or special meeting in lieu of the annual meeting, appoint a Nominations Chairman who shall no later than 45 days prior to said annual meeting, notify all of the shareholders of his appointment and invite candidates to submit their names and qualifications as Directors.

The Nominations Chairman shall publish and distribute the names of the candidates which he has received by mail, to the membership no sooner than 15 days nor later than 10 days prior to the meeting at which the election is to be held, and proxies shall be mailed at this time.

Nominations may also be made from the floor at the time of the annual meeting, provided that the written or oral consent of the nominee is obtained prior to the ballots being cast.

At the annual meeting, or at any special meeting in lieu of the annual meeting, the election of Directors shall be by ballot, and each shareholder shall be furnished a ballot. Each shareholder shall be entitled to one vote for each share owned, and the persons receiving the highest number of votes shall be elected to fill the vacancies in office for the ensuing three-year term. Voting shall not be cumulative.

Section 6: <u>MEETINGS OF THE BOARD OF DIRECTORS.</u> Special meetings of the Board may be called at any time by the president, or if he be absent or be unable to or refuse to act, by any vice-president or by any two Directors, upon due notice in writing given to each Director in the manner prescribed by law. Such meetings may be held at the principle office of the Company or at any place which shall be designated from time to time by resolution of the Board or by written consent of all members of the Board.

Regular meetings shall be held without a call.

A schedule of regular meetings shall be posted at the place of business of the Company.

- Section 7: <u>OUORUM.</u> A majority of the authorized number of Directors shall be necessary to constitute a quorum of the Board of Directors for the transaction of business; no business shall be transacted, or motion or resolution passed except by an affirmative vote of a majority of the Board of Directors.
- Section 8: <u>VACANCIES.</u> A vacancy on the Board of Directors exists in case of the happening of any of the following events:
 - a) The death, resignation or removal of any Director;
 - b) The authorized number of Directors is increased;

c) At any annual, regular or special meeting of shareholders at which any Director is elected the shareholders fail to elect the full authorized number of Directors to be voted at that meeting.

A reduction of authorized number of Directors does not remove any Director prior to the expiration of his term of office.

The Board of Directors may declare vacant the office of a Director if any of the following cases exist:

a) If he is declared of unsound mind by an order of the Court, or finally convicted of a felony;

b) If within thirty days after notice of his election he does not accept the office either in writing or by attending a meeting of the Board of Directors, and fulfill such other requirements or qualifications as these Bylaws specify;

c) If any Director fails to carry out his assigned tasks as indicated by the entire Board, the Board may consider him for dismissal;

d) If any Director fails to attend three consecutive meetings, said Director shall be considered for dismissal by the Board of Directors;

e) The entire Board of Directors, or any individual Director, may be removed from office by a vote of members holding a majority of the outstanding shares entitled to vote at an election of Directors, subject to the limitations contained in Section 810 of Corporations Code, State of California.

Any vacancy occurring on the Board of Directors may be filled by vote of a majority of the remaining Directors, though they are less than a quorum of the Board, or by a sole remaining Director. A Director so chosen must be a shareholder in the Company and shall serve out the unexpired term of his predecessor at which time he may stand for election for another full term.

The shareholders may elect a Director at any time to fill any vacancy not filled by the Directors subject to the above rules of tenure. If the Board of Directors accepts the resignation of a Director tendered to take effect at a future time, the Board or the shareholders may elect a successor to take office when the resignation becomes effective.

ARTICLE III

OFFICERS

- Section 1: <u>ELECTION.</u> The officers of this Company shall be president, a vice-president, a secretary and a treasurer, or a secretary-treasurer, who shall be chosen by the Board of Directors. Any two or more officers excepting that of president and secretary, may be held by the same person. In addition, the Board of Directors, at their discretion, may appoint one or more additional vice-presidents, one or more assistant secretaries, and one or more assistant treasurers, and such other officers as the business of the Company might require. Each of said officers shall serve without compensation until he shall resign, or be removed or become disqualified, or until his successor shall be elected.
- Section 2: <u>PRESIDENT.</u> Subject to such powers, if any, as may be delegated by the Board of Directors to any committee, or general manager, the president shall be chief executive officer, and, subject to the control of the Board of Directors, shall have general supervision and direction of the business and affairs of the Company, unless the Board of Directors shall choose to appoint a general manager and shall delegate such general supervision and direction of the business to the general manager. The president shall:

a) Preside at all meetings of the Board of Directors and at all meetings of the shareholders;

b) Call all meetings of the Board of Directors;

c) Employ and discharge, subject to the approval of the Board, unless such power be delegated to a general manager, such agents and employees as the business of the Company shall from time to time require, and prescribe their duties, terms of employment and compensation;

d) Exercise such other powers and performs such other duties as may be prescribed by the Board of Directors.

Section 3: <u>VICE-PRESIDENT.</u> In the absence or incapacity of the president, the vice-president shall perform the duties of the president, and shall also perform such other duties as may be prescribed for him by the Board of Directors.

Section 4: <u>SECRETARY.</u> The secretary shall:

a) Keep a book of minutes at the principle office of the Company or such other place as the Board of Directors shall order of all meetings of the Directors and shareholders in the form and manner required by law;

b) Keep at the principle office of the Company a share register or a duplicate share register showing the details required by law, and also all other books of the Company, excepting books of account;

c) Keep at the principle office, open to inspection by shareholders at all reasonable times, the original or a certified copy of the Bylaws of the Company as amended or otherwise altered to date;

d) Keep the corporate seal and affix it to all papers and documents required;

e) Attend to the giving and service of all notices of the Company required by law or these Bylaws to be given;

f) Attend to such correspondence as may be assigned to him and perform all other duties incidental to his office or prescribed by the Board of Directors or by the law.

Section 5: <u>TREASURER.</u> The treasurer shall:

a) Keep and maintain, open to inspection by any shareholder at all reasonable times, adequate and correct accounts of the properties and business transactions of the Company, which shall include all matters required by law;

b) Have the care and custody of the funds and valuables of the Company and deposit same in the name of, and to the credit of, the Company with such depositories as the Board of Directors may designate;

c) Disburse the funds of the Company as he may be ordered by the Board, taking proper vouchers for such disbursements;

d) Render to the president and to the Board of Directors, whenever they may require it, an account of all his transactions as treasurer, and a financial statement in form satisfactory to them, showing the condition of the Company;

e) Have such other powers and perform such other duties as may be prescribed by the Board of Directors.

ARTICLE IV

RECORDS AND REPORT

- Section 1: <u>RECORD DATE AND CLOSING OF SHAREHOLDER BOOKS.</u> The record date for establishing shareholder's identities shall be ten days prior to the date of any meeting of the shareholders. Only shareholders of record with the Company on that date are entitled to notice of and to vote at the meeting, or to have or exercise any other rights of a shareholder for the occasion. Between the record date and the meeting date, the books of the Company may be closed by the Board of Directors against transfer of shares.
- Section 2: INSPECTION OF COMPANY RECORDS. The shareholder register or duplicate shareholder's register, the books of account, and the minutes of meetings of shareholders, the Board of Directors, and any executive or appointive committee must be opened for inspection at the request of any shareholder or the holder of a voting trust certificate, at any reasonable time, and must be exhibited at any shareholder's meeting. The inspection may be made by the shareholder in person, or by his attorney or agent, and the right of inspection includes the right to make extracts from the records.
- Section 3: <u>ANNUAL REPORT.</u> The Board of Directors shall distribute an annual report to the shareholders not later than 120 days after the close of the calendar year and it shall contain the matters set forth in Sections 3007 to 3011 inclusive, of the Corporation Code of the State of California.

ARTICLE V

MEETINGS OF SHAREHOLDERS

- Section 1: <u>ANNUAL.</u> The annual meeting of shareholders shall be held on the first Saturday in the month of June in each year. However, if this day should fall on a legal holiday, the meeting shall be held at the same place the next succeeding Saturday that is not a legal holiday.
- Section 2: <u>BUSINESS OF ANNUAL MEETING.</u> At the annual meeting, Directors shall be elected, reports of the officers of the Company shall be considered, and any other business may be transacted that is within the powers of the shareholders.
- Section 3: <u>RULES OF ORDER.</u> All business at the annual meeting of shareholders shall be conducted in accordance with Robert's Rules of Order, revised.
- Section 4: <u>**REPORT OF ANNUAL MEETING.</u>** An annual report of the activities of the annual meeting and the business conducted therein shall be published and distributed to all shareholders not later than 60 days following the meeting.</u>

- Section 5: <u>SPECIAL MEETINGS.</u> Special meetings of shareholders for any purpose or purposes whatsoever may be called at any time by the president, or by the Board of Directors, or by any one or more shareholders holding not less than 10 percent (10%) of the voting power of the Company. Such meetings may be held at the principle office of the Company or at any place within the State designated by written consent of the shareholders entitled to vote thereat, or by the Board of Directors pursuant to authority granted by the Board in and by these Bylaws. The purpose of such special meetings shall be stated in the announcement of intent to call meetings.
- Section 6: <u>OUORUM.</u> The presence in person or by proxy of 25% of all shareholders in good standing of the Company, shall constitute a quorum for the transaction of business at any meeting of the shareholders.
- Section 7: <u>VOTING.</u> A record date for voting purposes is fixed in Section 1 of Article IV of these Bylaws.

The vote of shareholders at any shareholder's meeting may be by voice or by ballot; provided, however, that all elections for Directors shall be by ballot.

Each shareholder of record entitled to vote is entitled to one vote for each share owned, in accordance with Article VI of these Bylaws.

Voting by incompetents, minors, decedents, corporations or partnerships are governed by Corporation Code. Sections 2218 to 2223.

The Board of Directors shall appoint an Inspector of Elections to be responsible for verification of voting eligibility of all shareholders, at the annual meeting or any special meeting of shareholders. The Inspector of Elections shall also be responsible for voting procedures as indicated by the Board of Directors.

ARTICLE VI

SHAREHOLDERS

- **Section 1:** Shareholders in the Company shall be limited to owners of not less than one (1) lot at Blue Lake Springs, Units 1 through 5 and 7 through 13.
- Section 2: A lot held as community property shall qualify the owners thereof for one (1) share only in the Company, which share may be held in the name of either spouse as manager of the community. In the event of multiple owners of a single lot, only one (1) designated person among such owners shall be a shareholder of the Company. Shares are appurtenant to the lots owned and cannot be sold separately, nor can shares be combined or the number of shares reduced should adjacent parcels be consolidated.
- Section 3: Each shareholder shall be entitled to one vote for each share held.

Section 4: The payment of all delinquent invoices, late charges, interest, penalties and fees for water or related charges or services furnished to the lot owner and/or shareholder, shall be a condition precedent to the transfer of any share referred to above. This shall be the case whether or not the share is ever construed to be, or not to be appurtenant to the lot described in said share.

Notwithstanding the above, Company still reserves the right to refuse to deliver water and related services to any lot for which payment of all fees, services, and charges are not current at the time of the requested transfer of said share, or the transfer sale and conveyance of the lot designated in said share certificate by forfeiture as per Section 331 of the Civil Code of the State of California now pertaining, and the declaration of restrictions affecting the Blue Lake Springs Subdivision on record with the County Recorder's Office in Calaveras County.

- **Section 5:** All liability incurred by the shareholder in connection with the furnishing of water and related services to the lot designated in said share certificate shall be deemed and construed to be a continuing lien upon said land designated and described in said share certificate and the transferee of the share and/or lot shall be responsible for satisfying the liabilities in full as a condition of receiving water service from the Company.
- Section 6: Any assignee, purchaser, transferee or successor of interest shall assume and be responsible for the payment of any and all liabilities, fees and costs for water furnished to the lot prior to acquisition of title to said lot as a condition to receiving water service from the Blue Lake Springs Mutual Water Company.

ARTICLE VII

AMENDMENTS

- Section 1: These Bylaws may be amended, repealed, or added to or new Bylaws adopted by a majority of the eligible votes present, in person or by proxy provided that the proposed revisions and amendments are distributed to the shareholders not less than thirty (30) days prior to the meeting at which they are to be considered for approval.
- Section 2: Wherever in these Bylaws there may exist a reference to a section number of the former Corporations Code, or a conflict with the minimum mandated requirement of the Mutual Benefit Corporation Law of the State of California, the provisions, and section numbers of the current law, on file in the office of the Company's Secretary, shall supersede and be in effect as if fully incorporated and set forth herein.

ARTICLE VIII

WAIVERS, CONSENTS, APPROVALS

Section 1: Absentees from any meeting of Directors, at which a quorum is present, may sign a waiver of such notice, or a consent to the holding of such meeting, or an approval of the

minutes thereof, and validate all transactions had or taken thereat, regardless of whether such notice had in fact been given.

ARTICLE IX

SECURITIES

Section 1: The smallest security that may be issued by the Company is one share. No fractional securities will be issued.

ARTICLE X

DISSOLUTION

Section 1: In the event of the dissolution of the Company, each shareholder shall receive his prorated portion of the Company property and assets after all of the Company's debts have been paid or provided for.

ARTICLE XI

SEVERABILITY CLAUSE

Section 1: If any part of these Bylaws, or the application thereof to any person or circumstances is held unconstitutional, the remainder of the Bylaws and the application of such part to other persons and circumstances shall not be affected thereby.

AMENDMENTS

Article VII, Section 2 Amended June 4, 1983

Article VI, Section 2 Amended June 4, 1983

Article II, Section 3 Amended June 1, 1985
e) to indemnify and hold harmless the Directors and officers of the Water Company from any claim, lawsuit, or civil judgment arising out of or in the course and scope of their official duties.

Article VI, Section 2 Amended June 2, 2012 Shares are appurtenant to the lots owned and cannot be sold separately nor can shares be combined or the number of shares reduced should adjacent parcels be consolidated.

Article I, Section 2 Amended March 8, 2014
 The principle office of the business shall be located within the town of Arnold, in the County of Calaveras, in the State of California.

APPENDIX H

BLSMWC FY 2016 Budget

BLUE LAKE SPRINGS MUTUAL WATER COMPANY 2016 BUDGET

OPERATING INCOME & EXPENSE

INCOME DETAIL:

Residence / Lot Fees	661,850
Interest/Priors	4,000
Handheld Hose Water Fees	15,000
Metered Water Fees	4,000
Water Meters	4,000
Snowfiake Lodge Water	2,000
New Connections - Non-Restricted	0
Transfer Fees	9,450
Miscellaneous	500
Interest Income (Operating)	300
Penalties	13,000
	714,100

NON-OPERATING INCOME DETAIL:

Employee Contribution to Health Insurance	6,200
Carry Over Capital from 2014	184,000
TOTAL NON-OPERATING INCOME	190,200
TOTAL OPERATING INCOME	904,300

NET OPERATIONS	
TOTAL OPERATING EXPENSES	904,30
State Water System Fees	12,000
Office Equipment Repairs	50
Education & Training	2,00
Viscellaneous	5,00
Depreciation / Amoritization	7,00
ncome Tax	1,50
Office Rental	14,00
Postage	1,00
Drought	250
Meeting & Membership	9,50
_egal, Contractual, Professional Services	19,0 0
System Maintenance	64,00
Vehicle / Maintenance	5,00
Vehicle / Operating	11,00
Telephone / Communications	10,00
Standby Power Generation (fuel and maintenance)	2,00
Operating Supplies	15,00
Water Test (State requirements)	8,00
CCWD Water Purchase	92,00
Power (wells, treatment plant & system pumps)	30,00
Workers Comp Insurance	20,00
Property / Liability Insurance	25,00
Benefits (insurance & IRA)	141,65
Salaries & Taxes	406,65

EXPANSION & IMPROVEMENTS INCOME & EXPENSE

INCOME DETAIL:

;

Residence / Lot Fees	813.056
Funding for Expansion & Emprovements	0.0,000
Carry Over Capital Improvement Account	382,000
Subtotal	1,195,056
OTHER INCOME (RESTRICTED):	
Interest Income (E. & I. Funds)	1,000
New Connections - Restricted	0
Miscellaneous Income	4,000
Special Assessment (unpaid prior 1994 balance)	2,000
Subtotal	7,000
TOTAL E. & I. INCOME	1,202,056

EXPENSE DETAIL:

_
1,202,056
175,0 00
613,056
5,000
225,000
7,000
65,000
35,000
3,000
32,000
25,000
17,000

APPENDIX I

BLSMWC Yearly Inspection





State Water Resources Control Board Division of Drinking Water

August 5, 2014

System No. 0510009

David Hicks General Manager Blue Lake Springs Mutual Water Company P. O. Box 712 Arnold, CA 95223

INSPECTION OF BLUE LAKE SPRINGS MUTUAL WATER COMPANY WATER SYSTEM

Dear Mr. Hicks

The Blue Lake Springs domestic water system was inspected on July 11, 2014, by Dave Remick, Sanitary Engineer, with the State Water Resources Control Board, Division of Drinking Water (Division). The inspection indicated that the water system was well maintained and operated. However, the inspection of the water system and a review of the Division's files and database revealed a few deficiencies that require attention.

The inspection findings are documented in a memorandum prepared by Mr. Remick. A copy of that memorandum is enclosed for your information. Please review the memorandum and provide the Division with a written response that outlines a plan and schedule for correcting the deficiencies. Your response should be forwarded to the Division by August 29, 2014.

If you have any questions regarding the inspection or the findings, please contact Dave Remick by email at <u>David.Remick@waterboards.ca.gov</u> or by phone at (209) 948-3878.

Sincerely.

Bhupirider(S. Sahota, P.E. District Engineer, Stockton District NORTHERN CALIFORNIA BRANCH DRINKING WATER FIELD OPERATIONS

Attachments: Inspection Memorandum

H:\Stockton System Files\Calaveras County\0510009\2014\BLS AI Transmittal Ltr 8-5-14

LETTER TO PAURAND BHUPINDER 119/1628 8-26-14 vaterboards men

Felicia Marcus, chair [Thomas Howard, executive director $\mathbb{P}^{\mathbb{P}^{2^{n}}}$

31 E. Channel Street, Room 270, Stockton, CA 95202 | www.waterboards.ca.gov



EDMUND G. BROWN JR.



MATTHEW RODRIQUEZ SECRETARY FOR ENVIRONMENTAL PROTECTION

State Water Resources Control Board

Division of Drinking Water

TO: ••Bhupinder Sahota, Stockton District Engineer

(°C);

- FROM: Dave Remick Sanitary Engineer DIVISION OF DRINKING WATER, STOCKTON DISTRICT
- DATE: August 5, 2014

SUBJECT: BLUE LAKE SPRINGS MWC (System No. 0510009) 2014 INSPECTION FINDINGS

The inspection of the Blue Lake Springs Water System was performed by Dave Remick, Sanitary Engineer, with the State Water Resources Control Board, Division of Drinking Water (Division) on July 11, 2014, with the assistance of David Hicks, General Manager and Chief Treatment Plant Operator.

The Blue Lake Springs (BLS) water system is well maintained and operated and the treatment facilities and well sites appeared to be in good order at the time of the inspection. Chemical monitoring is up-to-date for the system's wells with the exception of inorganic monitoring. Additionally, it was noted and discussed with Mr. Hicks that the wells do not have individual flow meters. The combined flow into the treatment plant is recorded but regulations require each individual source to have a flow meter (see discussion in Section I below).

SECTION I of this memorandum describes items of note that require attention. SECTION II includes a summary of Blue Lake Springs' Lead and Copper Tap Monitoring and includes a detailed discussion of the chemical monitoring status at the time of the inspection and lists upcoming monitoring dates.

Also appended to this memorandum is a table, which lists upcoming monitoring requirements for the period of January 2014 through December 2016.

31 E. Channel Street, Room 270, Stockton, CA 95202 | www.waterboards.ca.gov

FELICIA MARCUS, CHAIR | THOMAS HOWARD, EXECUTIVE DIRECTOR

SECTION I – Items Requiring Attention

1. Update Bacteriological Sample Siting Plan (BSSP)

BLS' reported population (2013 Electronic Annual maximum and 1,713 connections requires 7 sa

ned for bacteriological quality (based on 6,000 population). Past reported seasonal maximums required five samples per month. A review of monitoring results from January 2001 through June 2014 indicates BLS has been taking five monthly samples and there has been only one total coliform positive sample (July 2013) during that time period. Based on the reported increased seasonal population number, the required number of samples per month is now seven. Although it is understood that the seasonal population varies, it would be difficult to determine accurately the number of people residing in BLS on a month-to-month basis and therefore, the number of monthly samples is determined by the reported seasonal maximum.

BLS' Bacteriological Sample Siting Plan and map was revised (dated 5/22/12) and a copy is on file. The BSSP and map shall be revised again to add two additional sample sites (for a total of 7 sites) and associated repeat sites. BLS shall begin sampling from a total of seven sites in August 2014. A copy of the revised BSSP and system map showing the sample site locations shall be submitted to the Division's Stockton District office by September 30, 2014.

Installation of Flow Meters on Wells Nos. 2, & 3 2.

Active Wells Nos. 2 & 3 do not have flow meters installed. Title 22 of the California Code of Regulations, section 64561, requires that each water system shall:

(a) Except for inactive sources, install a flow meter at a location between each water source and the entry point to the distribution system;

(b) Meter the quantity of water flow from each source, and record the total monthly production each MONTH. MAKE CHART

By August 29, 2014, provide the Division with a plan and schedule for installing flow meters on Wells Nos. 2 and 3. The meters shall be in place and operational by November 26, 2014. -

Delinguent Inorganics Monitoring 3.

In updating BLS' monitoring plan, the Division's database showed most of the required inorganic chemicals to be delinguent. Generally, inorganics and General Mineral/General Physical monitoring are done at the same time. However, inorganics monitoring was not included with the last October 2013 General Mineral/General Physical monitoring for both active wells. A copy of the delinquent list for each well is attached to this memorandum.

2014

easonal

NEW SAMPLING 9-8 2601 RUTHLIN

. SANDAE

70-11 1996

BLS shall conduct inorganics monitoring for Wells Nos. 2 and 3 in August 2014, with the results transmitted to the Division via EDT. Note that asbestos shall also be included in the inorganics monitoring. Source monitoring for asbestos is required once every 9 years and was last done for Well No. 2 in 1995 and there is no record of monitoring having been done for Well No. 3.

4. Stage 2 Disinfection Byproducts Rule (Stage 2 DBPR)

Since BSL no longer purchases treated surface water from CCWD, it is not classified as a Combined Distribution System and is classified as a Schedule 4 system, for which Stage 2 DBPR monitoring began in October 2013.

Since the BLS distribution system is now under Schedule 4 (due to reported population of BLS), only two sample sites will be required, with TTHM and HAA5 samples from each site annually. The two sites will be 71-13 (original Stage 1 monitoring site) due to historical high TTHM values, and 826-7 due to high HAA5 values from 2008/09 Standard Monitoring.

BLS began complying with monitoring requirements of the Stage 2 DBPR in Q3 of 2013, as required (see table below).

Stage 2 Compliance Monitoring Site ID	Projected Sampling Date (date or week)			week)
	Period 1	Period 2	Period 3	Period 4
Site 826-7 (2309 Barbara)	NA	NA	August 2013	NA
Site 71-13 (1693 Wawona)	NA	NA	August 2013	NA

Stage 2 DBPR Compliance Monitoring Schedule

Stage 2 DBPR Annual Monitoring Results

Date		Annual TTHM (ug/l)	Annual HAA5 (ug/l)
8/21/13	Site 826-7 (2309 Barbara)	46.0	16.0
8/21/13	Site 71-13 (1693 Wawona)	36.0	25.0

With the start of Stage 2 DBP monitoring, BLS now samples annually from the two sites in the table above. All results are sent to the Division's Stockton District office and are transmitted electronically via EDT using the following two Station Codes:

- Site 826-7 (2309 Barbara Way): 0510009-900
- Site 71-13 (1693 Wawona Way): 0510009-901

SECTION II – Lead and Copper Status and Chemical Monitoring Status

1. <u>Lead and Copper</u> (tap monitoring)

Summary of Lead and Copper Tap Monitoring (BLS)				
Sampling Round	Date Completed	No. of	90% Lead	90% Copper
		Samples	(ug/l)	(mg/L)
1 ^{s1} Initial	7/93	40	3.9	0.94
2 nd Initial	8/94	40	5.7	0.68
1 st Annual	6/95	40	4.1	0.44
2 nd Annual	9/96	20	4.3	0.40
3 rd Annual	9/97	20	<3.0	0.26
1 st Triennial	9/00	20	<3.0	0.414
2 nd Triennial	9/03	20	<3.0	0.35
3 rd Triennial	7/06	20	3.9	0.27
4 th Triennial	8/09	20	8.1	0.21
5 th Triennial	8/12	20	6.6	0.25
6 th Triennial	Due Between June and Sept. 2015			

All tap monitoring results to date show that the action levels of 15 ug/L for lead and 1.3 mg/L for copper have not been exceeded. The next round of triennial lead and copper sampling will be due between June and September of 2015.

2. <u>Chemical Monitoring</u>: The table below lists the dates of the last monitoring for each chemical category, as shown in the Department's database. Note that Well No. 1 is Standby and monitoring is required every nine years.

Well	Inorganics	Nitrate	GM/GP	VOCs	SOCs	Natural Radioactivity
Freq.=	3 Yr	1 Yr	3 Yrs	3 Yrs	9 Yrs	Single Sample 3,6 or 9 yrs
2	10/13 (incomplete)	10/13	10/13	3/14	8/11	2/13 (9 years)
3	10/13 (incomplete)	10/13	10/13	3/12	8/11	3/12 (9 years)
		andby Well	s-Monitoring	Is Every Nine	Years	·····
1 Standby	9/10	9/10	9/10	2/11	2/11	12/08 & 3/09 (9 years)

Summary of Last Monitoring (Blue Lake Springs)

Well	Inorganics	Nitrate	GM/GP	VOCs	SOCs	Natural Radioactivity
Freq.=	3 Yr	1 Yr	3 Yrs	3 Yrs	9 Yrs	Single Sample 3,6 or 9 yrs
2	8/14	10/14	10/16	3/17	8/2020	2/2022
3	8/14	10/14	10/16	3/15	8/2020	3/2021
	S	tandby Well	s-Monitoring	Is Every Nine	e Years	
1 Standby	9/2019	9/2019	9/2019	2/2020	2/2020	3/2018

Summary of Next Due Monitoring (Blue Lake Springs)

(i.) <u>Inorganics</u>:

Routine monitoring for inorganic chemicals is required <u>every three years</u> for active wells and every nine years for standby wells.

Inorganics monitoring for the system's active wells is incomplete. The October 2013 monitoring did not cover all of the regulated inorganics. Inorganics monitoring shall be conducted in August 2014 with all required chemicals analyzed (see item 3 in Section I above).

<u>Asbestos Monitoring in Distribution</u>: The BLS distribution system reportedly contains about 20% asbestos cement pipe. Well No. 2 was monitored for asbestos in September 1995 with no detection (<0.026 MFL). The aggressive index of the two wells does not appear to indicate aggressive water. Asbestos monitoring was conducted in November 2009 (result was non-detect) with one representative sample collected in the distribution system. **Next asbestos monitoring will be due in 2018**.

<u>Arsenic Note</u>: Compliance with the MCL of 0.010 mg/L is based on the running average of the monitoring results for four consecutive quarters. Monitoring results listed in the following table indicate arsenic concentrations less than 2.0 ug/L in both of the active wells as of the most recent monitoring.

	BLS Arsenic Monitoring	
Well No.	Arsenic Concentration (Date)	
2	< 2.0 ug/l (9/10)	
3	<2.0 ug/l (9/10)	
1-Standby	<2.0 ug/l (9/10)	

Perchlorate Monitoring (Once Every 3 Years)

Well No.	Most Recent Sampling Result (Date)	Next Monitoring Due (May thru Sept)
2	<4 ug/l (8/2011)	2014
3	<4 ug/l (8/2011)	2014

(ii.)<u>Nitrate</u>:

All active wells are required to be monitored annually. Wells with nitrate concentrations in excess of 50 percent of the MCL (MCL=45 mg/L) are required to be monitored guarterly.

Well Number	Concentration in mg/L & (Date sampled)	Monitoring Frequency Required
2	<0.22 mg/L (10/13)	Annual
3	<0.22 mg/L (10/13)	Annual
1-Standby	<0.22 mg/L (9/10)	9 years-9/2019

Summary of Most Recent Nitrate Monitoring (BLS)

Nitrite (as nitrogen) and Nitrate+Nitrite monitoring is required <u>every 3 years</u>. The following is a summary of the monitoring results for BLS's wells, based upon the most recent monitoring

Well	Most Recent Nitrite Monitoring	Next Nitrite Monitoring Due
2	<50.0 (10/13)	10/2016
3	<50.0 (10/13)	10/2016
1-Standby	<50.0 (9/10)	9 years-9/2019

Nitrite (as N) (once every 3 years for active wells)

(iii) Secondary Standards-A, Secondary Standards-B, & General Minerals:

Monitoring is required <u>every three years</u> for active wells and every nine years for standby wells. Secondary Standards and General Minerals monitoring for the system's wells is current and the next required monitoring is shown in the table above (Summary of Next Due Monitoring).

Iron and Manganese

Blue Lake Springs' raw well water source exceeds the manganese secondary maximum contaminant level (MCL) of 50 ug/L and has varying amounts of iron (MCL=300 ug/L). From the table below, it is apparent that both iron and manganese levels have been increasing over time.

Raw Water Iron and Manganese

	Iron	Manganese
	Result (Date)	Result (Date)
Well 2	270 ug/L (9/04)	250 ug/L (9/04)
	330 ug/L (9/07)	260 ug/L (9/07)
	260 ug/L (9/10)	270 ug/L (9/10)
	1,200 ug/L (10/13)	500 ug/L (10/13)
Well 3	150 ug/L (9/04)	240 ug/L (9/04)
	140 ug/L (9/07)	250 ug/L (9/07)
	250 ug/L (9/10)	280 ug/L (9/10)
	340 ug/L (10/13)	400 ug/L (10/13)
Standby	150 ug/L (9/98)	210 ug/L (9/98)
Well 1	90 ug/L (9/01)	240 ug/L (9/01)
	500 ug/L (9/10)	100 ug/L (9/10)

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Section 64449, Title 22, California Code of Regulations (CCR), states that secondary MCL shall not be exceeded in the water supplied to the public, because this constituent may adversely affect the taste, odor, or appearance of drinking water. Prior to 2005, Blue Lake Springs conducted monitoring of the treated water for iron and manganese on a quarterly basis to verify that the treatment process is effective in reducing the iron and manganese levels in the treated water to acceptable levels. Beginning in 2005, BLS was directed to monitor the treated water monthly for iron and manganese. Monthly treated water monitoring shall be continued.

For the period of January 2003 through March 2007 monitoring, all monthly treated water iron results were <50.0 ug/L and all manganese results were <20.0 ug/L.

Beginning with April 2007, the laboratory began reporting results for iron as <20.0 ug/L and manganese results as <5.0 mg/L. Through the most recent (May 2014) monthly reported result for iron, nearly all have been <20.0 ug/L except for the following monthly results, which were all less than the MCL (4/08-43.0 ug/L, 10/08-98 ug/L, 4/09-36 ug/L, 2/12-200 ug/L, 7/12-220 ug/L, 12/13-25 ug/L, & 4/14-100 ug/L). For manganese, nearly all results since April 2007 have been <5.0 mg/L, with a few months slightly higher.

The treatment process is doing a very good job of removing iron and manganese, even with the recent spike upward in both iron and manganese in both wells (see table above).

(iv.) Volatile Organic Chemicals (VOC):

VOC monitoring is required <u>every 3 years</u> for existing wells and every nine years for standby wells.

VOC monitoring for the system's wells is current and the next required monitoring is shown in the table above (Summary of Next Due Monitoring).

(v.) Synthetic Organic Chemicals (SOC):

<u>Waivers</u>: Monitoring has been waived except for the chemicals listed in the table below. The Department is currently requiring Atrazine and Simazine monitoring once every nine years.

The following table lists the SOCs for which monitoring must be conducted and the schedule and frequency of monitoring.

Required SOC Monitoring (Blue Lake Springs Wells 2 & 3)

Chemical	Monitoring Due	Frequency
Atrazine	Between July and August 2020	Once every nine (9) years.
Simazine	Between July and August 2020	Once every nine (9) years.

<u>Standby Well No. 1</u>: SOC monitoring was last conducted in February 2011 for this well. The next SOC monitoring shall be conducted in February 2020.

(vi.) Natural Radioactivity (Gross Alpha, Radium-228, Uranium):

Radioactivity monitoring has been conducted and the average gross alpha level is shown in the table below along with the next monitoring in accordance with the new radionuclide Federal rule, which states that for Gross Alpha of less than 3 pCi/l, subsequent monitoring frequency is <u>one sample every nine years</u>. For Gross Alpha greater than or equal to 3 and less than or equal to 7.5 pCi/l (\geq 3 and \leq 7.5 pCi/l), subsequent monitoring frequency is <u>one sample every six years</u> and for Gross Alpha greater than or equal to 7.5 and less than or equal to 15 pCi/l (\geq 7.5 and \leq 15 pCi/l), subsequent monitoring frequency is <u>one sample every six years</u> and for Gross Alpha greater than or equal to 7.5 and less than or equal to 15 pCi/l (\geq 7.5 and \leq 15 pCi/l), subsequent monitoring frequency is <u>one sample every three years</u>.

The Department's database indicates that Radium-228 monitoring was conducted for Wells Nos. 2 & 3 for four quarters (1/06, 4/06, 7/06, 10/06) and the results were all non-detect. **No additional Radium-228 monitoring is required at this time.**

	Monitoring Conducted	Next Monitoring Required for Gross Alpha
Well No. 2	Single sample (2/13) for gross alpha was analyzed with result of <3.0 pCi/L.	Single sample for Gross Alpha every 9 years. Due in 2/2022.
Well No. 3	Single sample (3/12) for gross alpha was analyzed with result of <3.0 pCi/L.	Single sample for Gross Alpha every 9 years. Due in 3/2021.
Standby Well No. 1	Single samples (12/08 & 3/09) for gross alpha were analyzed with results of 1.57 pCi/L & 0.25 pCi/L, respectively.	Single sample for Gross Alpha every 9 years. Due in 3/2018.

Summary of Blue Lake Springs Radioactivity Monitoring

H:\Stockton System Files\0510009\BLS 0510009 2014 AI Findings.

LARGE WATER SYSTEM 2014 ANNUAL REPORT TO THE DRINKING WATER PROGRAM FOR YEAR ENDING DECEMBER 31, 2014 [Section 116530 Health & Safety Code]

WATER SYSTEM INFORMA	ATION
Water System No.:	CA0510009
Water System Name:	BLUE LAKE SPRINGS MUT WTR
Water System Ownership (See descriptions below):	Privately owned Mutual Water Company or Association
Physical location: (address line 1, address line 2, city, zip) Note: <u>NO</u> P.O. Box	P.O. BOX 6015 ARNOLD 95223
General Office Phone:⑦ (with area code)	
Web site address:	blsmwc.com

Water System Ownership Descriptions:

- Local Government: e.g., city, county, or special district, local school district, junior colleges, county or community parks, etc.
- State or Federal Government: e.g., state or national park, BLM, USFS and COE campgrounds and recreation facilities, state hospitals, State universities and colleges, California Veterans Home, County or District Fairs and Expositions, Caltrans rest stop, military base, other state or federal facility
- Privately owned, non-PUC-regulated (Community Water System): e.g., mobile home park, apartment or condominium
- Privately owned business (non-community): e.g., church, private school, restaurant, amusement park, RV park/campground, motel, ranch/farm, factory, other business establishment

REPORT SUBMITTED BY:		
Name:	David Hicks	
Title:	Watermaster	
Business phone:	209-795-7025	
Cell phone:		
Email address:	davehicks@goldrush.com	

COMMENTS: My Title has been changed to General Manager - Dave Hicks

1. Public Water System Contacts ③

<u>Click here</u> to learn how to Modify, Add and Delete Contacts in the table below. IMPORTANT: Each water system must have one and only one Administrative Contact AND one and only one Financial Contact. The same person may be both the Administrative and Financial Contacts.

Please provide an email address for the Administrative Contact as most email communication, particularly email blasts, from the Division of Drinking Water will be sent to the email address of the Administrative Contact.

NAME, TITLE & ADDRESS	PHONE TYPE	PHONE NO.	EMAIL	CONTACT (pick all that	
HICKS, DAVID	Business	209-795-7025		□ ** Delete Contact ** ☑ Administrative	Operator

http://drinc.ca.gov/ear/PWSEarReport.aspx?printable=yes&SurveyID=13&PwsID=CA0510009

3/21/2016

drinc.ca.gov/ear/PWSEarReport.aspx?printable=yes&SurveyID=13&PwsID=CA0510009

1,2010	I I III.Ca.govrean	i		1	1
MANAGER	Facsimile	209-795-7019	davehicks@goldrush.com	🗆 Financial	Emergency
P.O. Box 6015	Mobile	768-8901		Designated Operator In Charge	🗹 Water Quality
ARNOLD CA 95223	Emergency	209-795-7030	-	Owner 🗆 🗆	🗹 Legal
				🗆 Funding	Contract Operato
		1	1		1
SCHMEDES, LEE	Business	209-795-7025	admin@blsmwc.com	 ** Delete Contact ** Administrative 	□ Operator
Adminisrative Operations Manager	Facsimile	209-795-4438		I Financial	Emergency
P.O. Box 6015	Mobile			 Designated Operator In Charge 	🗆 Water Quality
ARNOLD CA 95223	Emergency			Owner	🗆 Legal
				🗆 Funding	Contract Operato
			·····		
	Business	209-795-7025		 ** Delete Contact ** Administrative 	☑ Operator
Bill Heinle	Facsimile			□ Financial	C Emergency
P.O. Box 6015	Mobile	768-2862		Designated Operator In Charge	☑ Water Quality
Arnold CA 95223	Emergency	209-795-7030		🗆 Owner	🗆 Legal
				🗆 Funding	Contract Operator
	Business	209-795-7025		□ ** Delete Contact ** □ Administrative	 Operator
Matt Jamagin	Facsimile			🗆 Financial	☑ Emergency
P.O. Box 6015	Mobile	768-8903		Designated Operator In Charge	☑ Water Quality
Arnold CA 95223	Emergency	209-795-7030		🗆 Owner	🗆 Legal
				🗆 Funding	Contract Operator
	Business	209-795-7025		□ ** Delete Contact ** □ Administrative	☑ Operator
Tyler Mayo	Facsimile			🗆 Financial	Emergency
P.O. Box 6015	Mohile	768-8902		Designated Operator In Charge	☑ Water Quality
Arnold CA 95223	Emergency	209-795-7030		□ Owner	🗆 Legal
				🗆 Funding	Contract Operator
					·····
	Business	209-795-7025		☐ ** Delete Contact ** ☑ Administrative	Operator
Nhu Bergstrom	Facsimile	209-795-7019		□ Financial	Emergency
P.O. Box 6015	Mobile			Designated Operator In Charge	□ Water Quality
Arnold CA 95223	Emergency			□ Owner	🗆 Legal
				🗆 Funding	Contract Operator
		(1		
	Business			□ ** Delete Contact ** □ Administrative	• Operator
	Facsimile			□ Financial	Emergency

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· · · · · · · · · · · · · · · · · · ·	Mobile			 Designated Operator In Charge 	U Water Quality
	Emergency			🗋 Owner	🗆 Legal
				Funding	Contract Operator
	Business			 ** Delete Contact * Administrative 	* 🗆 Operator
	Facsimile			🗆 Financial	□ Emergency
	Mobile			Designated Operator In Charge	□ Water Quality
	Emergency			🗆 Owner	🗆 Legal
				□ Funding	
Add Additional Contact@			(pick all	that apply)	
Contract Operator					
Contact Name	Business	Bus. #		□Administrative	□ Operator
Title	Facsimile	Fax No	Email Addr	□ Financial	□ Emergency
Address Line 1 Address Line 2	Mobile	Mob. #		☐ Designated Operator In Charge	🗆 Water Quality
CitySTZip	Emergency	Emer. #		🗋 Owner	□ Legal
				□ Funding	Contract Operator
Add Additional Contact@				(pick all	that apply)
Contact Name	Business	Bus. #		⊔ Administrative	□ Operator
Title	Facsimile	Fax No	Email Addr	Financial	Emergency
Address Line 1 Address Line 2	Mobile	Mob. #		⊔ Designated Operator In Charge	□ Water Quality
CitySTZip	Emergency	Emer. #		□ Owner	🗆 Legal
				🗆 Funding	Contract Operator
Add Additional Contact®				(pick all	that apply)
Contact Name	Business	Bus. #			□ Operator
Title	Facsimile	Fax No	Email Addr	□ Financial	Emergency
Address Line 1 Address Line 2	Mobile	Mob. #	2nd Email Addr-	 Designated Operator In Charge 	🗆 Water Quality
CitySTZip	Emergency	Emer. #		🗆 Owner	🗆 Legal
				□ Funding	Contract Operator
Add Additional Contact®				(pick all	that apply)
-Contact Name	Business	Bus. #	- Duell Add	C Administrative	□ Operator
Title	Facsimile	Fax No	Email Addr	🗋 Financial	□ Emergency
Address Line 1 Address Line 2	Mobile	Mob. #	2nd Email Addr-	Designated Operator In Charge	□ Water Quality
CitySTZip	Emergency	Emer. #		□ Owner	🗆 Legal
				□ Funding	Contract Operator

2. POPULATION SERVED

Permanent population or number of long-term residents*:

3/21/2016

drinc.ca.gov/ear/PWSEarReport.aspx?printable=yes&SurveyID=13&PwsID=CA0510009

500

lation.

*Long-term resident means someone who resides within the water system service area for more than half of the year.

Method used to determine population:	Other

If permanent population is based on "Other", identify the methods or sources of how it was estimated::

Long term households were determined by Company Records and field crew observation. Population was estimated averaging 2.6 residents per household.

Seasonal Maximum Population (If applicable): 6000

Provide season ② :

Beg	n Date	End	Date
MM	DD	MM	DD
7	4	9	30

List the names of communities served by the system identifying both incorporated and unincorporated areas:

Blue Lake Springs Subdivision

COMMENTS:[®]

3. NUMBER OF SERVICE CONNECTIONS(as of December 31, 2014)

A. Active Service Connections:

Total Active Potable Water Connections currently in Division of Drinking Water database: 1659

The total number of Service Connections as of December 31, 2014 must be reported as either <u>Unmetered</u> or <u>Metered</u> for each Service Connection Type as appropriate.

	Pot	Potable Water			Recycled Water			
TYPE Do NOT report fire sprinkler connections and fire hydrants. These connections are not counted toward "service connections" for compliance purposes.	Unmetered	Metered	Total*	Unmetered	Metered	Total*		
<u>Single-family Residential:</u> single family detached dwellings	1452	262	1714			0		
<u>Multi-family Residential:</u> duplexes, town homes, condominiums, apartments, and trailer parks	none	none	0			0		
<u>Commercial/Institutional:</u> hotels, schools, prisons, hospitals, nursing homes, dormitories, laundries, retail establishments (malls, shopping centers, retail stores, service shops, restaurants), office buildings, gas stations, and other service connections that do not meet any of the		2	2			0		

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connection type definitions						[
Industrial: industrial parks, manufacturing, warehouses, utilities, assemblers	none	none	0			0
Landscape Irrigation: Play fields, golf courses, roadways, median strips, cemeteries, parks and other dedicated landscape connections	none	none	0			0
Agricultural Irrigation: irrigation of commercially-grown crops and other dedicated agricultural connections	none	none	0			0
Total Active Connections*	1452	264	1716	0	0	0

*Calculated field

To update totals click here

 B. Number of Inactive Connections (all types)
 308

 Include only service connections that have been physically disconnected (i.e., meter removed)
 308

 from the water system. All other service connections should be considered as "Active."
 308

COMMENTS: The 308 inactive connections are unimproved lots.

4. GROUNDWATER (GW) AND SURFACE WATER (SW) SOURCES

Туре	Total No. Approved (by permit)	Total No. New/ Added in 2014	Total No. Inactivated in 2014	Total No. Destroyed in 2014
Active Groundwater Intakes (Wells)	2			
Active Surface Water Intakes (Raw)	0			
Active Purchased Water (GW) Connections	0			
Active Purchased Water (SW) Connections	0			
Standby Sources ¹ ⑦	1			
Emergency Interconnections	2			·······
Inactive Sources ²				

¹If a standby source ③ was used in 2014, provide the following information.

Name of the Standby Source used in 2014:	No. of days the Standby Source was in operation:	Were customers notified? (Y/N)	Was the Division of Drinking Water notified? (Y/N)	Describe the reason the Standby Source was used:

²Inactive sources are not approved as sources of supply and must be physically disconnected or otherwise isolated so that only an intentional act by an operator can place the source in service.

COMMENTS: We did not use our standby source in 2014.

5. WATER PRODUCED, PURCHASED AND SOLD

The <u>Maximum Dav</u> is the day during 2014 with the highest total water usage. Provide the *date* for that day in Column B, then complete Columns C, D and E, indicating how much of the water on that day was from each source.

The <u>Maximum Month</u> is the month during 2014 with the highest total water usage. Provide the *month* in Column B, then complete Columns C, D and E, indicating how much of the water during that month was from each source.

Units of Measure for this table: Million Gallons V

Volumes are hased on: METERED VOLUMES •

А	В	С	D	E	F	G	H	I
		·	Pota	able Water				
	Date/ Month	Water Produced from Groundwater (Wells)	Water Produced from Surface Water ²	Finished Water Purchased or Received from another PWS ⁵	Total Amount of Potable Water ^{3*}	Water Sold to Another PWS ⁵	Non- potable (exclude recycled)	Recycled
Maximum Day ¹	1/3/14	.336	0	0	0.336	0		
Maximum Month	7/14	5,837	0	0	5837	0		
January		3,346	0	0	3346	0	0	0
February		2,961	0	0	2961	0	0	0
March		2,979	0	0	2979	0	0	0
April		3,404	0	0	3404	0	0	0
May		3,972	0	0	3972	0	0	0
June		4,585	0	0	4585	0	0	0
July		5,837	0	0	5837	0	0	0
August		5,229	0	0	5229	0	0	0
September		3,804	0	0	3804	0	0	0
October		3,497	0	0	3497	0	0	0
Novemher		2,884	0	0	2884	0	0	0
December		3,449	0	0	3449	0	0	0
Annual Tota	al*	45947	0	0	45947	0	0	0
Percent Tre	ated ⁴	100		1	********************************	1 ,		

PWS = Public Water System

*Calculated field

Non-potable = water supplies, except recycled water, that do not enter the drinking water distribution system and are for non-potable uses only such as irrigation

Recycled = domestic wastewater which as a result of treatment is suitable for uses other than potable use such as irrigation or toilet flushing

¹Only report Maximum Day if it is actually measured or determined from production records. It should not be the average day demand during the maximum month of production.

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²Do not include raw water purchased; report only volume of water that was treated.

³(F) Total Amount of Potable Water = Sum of Columns (C), (D) and (E), automatically calculated. To update, click below

To update totals click here

⁴This is the percentage of the total annual volume for Groundwater produced that was provided treatment to meet drinking water standards other than precautionary disinfection.

⁵If water was <u>Purchased</u> from or <u>Sold</u> to another PWS, complete the table below:

Specify whether water was <i>Purchased</i> or <i>Sold</i>	Name of PWS

If recycled water was supplied to your customers, complete the table below:

Name of Recycled Water supplier

COMMENTS: 1

6a. WATER RATES

Indicate the type of water rate structure ③ used by your water system: Variable Base Rate + Variable Usage Rate

What is your billing frequency ③ other •

Complete the table below providing specific water rates applied to your customers:

Connection Type	FLAT BASE RATE	UNIFORM USAGE RATE	VARIABLE BASE RATE (provide range)		VARIABLE USAGE RATE (provide range)	
	\$ (Base)	\$ per hcf 💿	\$ Low	\$ High	\$ per hcf Low	\$ per hcf High
RESIDENTIAL 😨					-	
Single-family Residential		\$1.60	\$415.00	\$760.00		
Multi-family Residential						
Do you provide lifeline/low income subsidies?		No V				
If Yes, provide rates:						
NON-RESIDENTIAL 3	I		•••••••		d	
Commercial/Institutional	\$ 125.00				\$ 1.00	\$ 1.60
Industrial						
Landscape Irrigation						
Agricultural Irrigation						

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Other							
Do you have fire suppression surcharges?			<u>No</u>				
If Yes, provide rates:							
Do you have other surcharges?							
If Yes, provide rates:							

AVERAGE MONTHLY RESIDENTIAL WATER COST: \$65.64\$/mo.

This value can be calculated by dividing your total annual revenues from residential customers by 12 and then dividing a second time by the number of residential service connections. If you are unable to differentiate revenues by type of customer {residential, industrial, agricultural}; then take your total annual revenues from all water rate payments and divide by 12 and then divide by your total number of service connections.

NOTE: If this is not a "Community" Water System; enter N/A. If individual customers do not pay a separate bill for water enter "0".

6b. WATER DELIVERIES

Units of Measure for this table: Gallons

Provide monthly metered water deliveries in the table below.

Α	В	С	D	E	F	G	H	1	J
	Single- family Residential	Multi- family Residential	Commercial/ Institutional	Industrial	Landscape Irrigation	Other	Total Urban Retail ^{1*}	Agricultural	Other PWS
Check if Recycled Water is included:			D		۵	0		٥	
January	499,528		21,692				521220		
February	499,528		9,724				509252		
March	499,528		14,212				513740		
April	499,528		18,700				518228		
May	945,326		52,360				997686	······································	
June	945,326		86,768				1032094		
July	1,485,255		82,280				1567535		
August	1,485,255		70,312				1555567		
September	958,677		46,376				1005053		
October	958,677		35,156				993833		
November	499,528		11,220				510748		
December	499,528		10,472				510000		
Total*	9775684	0	459272	0	0	0	10234956	0	0

PWS = Public Water System

*Calculated field

¹Total Urban Retail = Sum of Columns (B) thru (G), automatically calculated. To update, click below

To update totals click here

COMMENTS: We have 272 meters read 4 times per year. 1 commercial meter read every month.

7. WATER QUALITY

ANNUAL NITRATE SAMPLING

Regulations require a minimum of annual sampling for nitrate. If any nitrate result is >= 1/2 the MCL of 45 mg/l (i.e., a result of >= 23 mg/l nitrate) then quarterly monitoring must be initiated.

Did your system conduct monitoring for nitrate during 2014 from each source?	Yes T	
--	-------	--

NOTE: If there were any sources that were not monitored because they were offline during 2014, you must contact your local regulatory agency to avoid an enforcement action for failure to monitor.

BACTERIOLOGICAL SAMPLE SITING PLAN

The coliform monitoring regulations require that an updated sample-siting plan be submitted at least every 10 years, and at any time the plan no longer ensures representative monitoring of the system (Section 64422 of Title 22).

Date of current bacteriological sample siting plan:	September 2014
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DIRECT ADDITIVES

Pursuant to Section 64590, Title 22 of the California Code of Regulations, (effective January 1, 1994), all chemicals or products, including chlorine, added directly to the drinking water as part of a treatment process must meet the ANSI/NSF Standard 60. Please complete the following table for each chemical used by this water system. If you are not sure whether a chemical you are using meets this standard, contact the manufacturer or distributor of the chemical.

Name of Chemical	Name of Manufacturer			Use initiated in 2014 ⑦ (Y/N)
Chlorine 3" Tabs	PPG	oxidation/disinfection	yes	no
Caustic Soda	Sierra Chemical Co.	ph control	yes	no
Potassium Permanganate	Univar	taste and odor control	yes	no

INDIRECT ADDITIVES

As of March 9, 2008, a water system shall not use any chemical, material, lubricant, or product in the production, treatment or distribution of drinking water that comes in contact with the drinking water that does not have certification of meeting NSF/ANSI standard 61.

Does your water system have procedures to ensure all future equipment and materials meet this standard?

Yes 🔻

If you have any questions on the requirements related to indirect additives, you may contact your local regulatory agency.

COMMENTS: 1

8. CROSS-CONNECTION CONTROL ③

	Total	Number	Number	Number	Number
	Number in	Installed	Tested in	Failed in	Repaired/
	System	in 2014	2014	2014	Replaced
Backflow Assemblies ⑦ on the Service	0				

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1/2016	rintabie≍yes&Surveyit	J=13&PwsiD=CA0510		
Connections or Meter		1		
Backflow Assemblies On- site but not on the Service Connections or Meter 3	2	2	0	0
Air-gap Separation 3	0			
No. of <i>Inactive</i> Backflow Pre-	0	0		
Date of last cross-connection	August 2	August 2010 and is ongoing		
Cross Connection Control Pro	gram Coordinator			
Name:	David I I	Hicks		
Certification Number:	#BMI-11	-0077-S		
Business Phone:	davehick	s@goldrush.com		

Describe any cross-connection incidents ③ that occurred during 2014:

Certification or training received: Cross Connection Specialist Certification Course

None

COMMENTS:

9. CONSUMER CONFIDENCE REPORT ③ (does not apply to Transient Noncommunity water systems)

THE 2014 CCR MUST BE DISTRIBUTED TO YOUR CUSTOMERS AND A COPY SUBMITTED TO YOUR LOCAL REGULATORY AGENCY BY JULY 1, 2015. IN ADDITION, PUBLIC WATER SYSTEMS THAT ARE ALSO REGULATED BY THE CALIFORNIA PUBLIC UTILITIES COMMISSION (PUC) MUST MAIL A COPY OF THEIR CCR TO THE PUC BY JULY 1, 2015.

CERTIFICATION MUST BE SUBMITTED TO YOUR LOCAL REGULATORY AGENCY BY OCTOBER 1, 2015, STATING THAT THE 2014 CCR HAS BEEN DISTRIBUTED TO CUSTOMERS AND THAT THE INFORMATION IS CORRECT.

The CCR guidance, CCR template, and the certification form can be obtained from the Division of Drinking Water web site at:<u>http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/CCR.shtml</u>

Indicate the date your 2014 CCR was distributed or will be distributed to your customers: 4-30-2015 mm/dd/yyyy

PUBLIC WATER SYSTEMS THAT SERVE 100,000 OR MORE PERSONS ARE REQUIRED TO POST THEIR CCR ON THE INTERNET.

If your water system serves 100,000 or more persons, indicate the date the CCR was or will be posted to the Internet:

If applicable, please provide the URL link to the CCR posted on the Internet:

COMMENTS:

10. OPERATOR CERTIFICATION

A. Please list the State certified Water <u>Treatment Plant</u> Operators employed by your water system that supervise and direct the operation of your water treatment plants, beginning with the chief operator(s) ③.

Your Highest Treatment System Classification is: T2

Name Grade of Operator	Chief or Shift ¹ (C/S)	Operator Number	Expiration Date	
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Bill Heinle	2	С	31489	2-1-2016
Tyler Mayo	1	S	34533	7-1-2015
Matt Jarnagin	2	S	35758	1-1-2017
Dave Hicks	3	Standby	13874	10-1-2017

¹Use "C" for Chief Operator and "S" for Shift Operator. If neither, leave blank.

Do your Chief and Shift Treatment Plant Operators have the minimum level required? Yes •

B. Please list the State certified Water Distribution Operators employed by your water system that supervise and direct the operation of your distribution systems, beginning with the chief operator(s) O.

Your Distribution System Classification is: D2

Name	Grade of Operator	Chief or Shift ¹ (C/S)	Operator Number	Expiration Date
Bill Heinle	2	С	35669	4-1-2018
Tyler Mayo	1	S	42200	5-1-2016
Dave Hicks	2	Standby	19779	3-1-2018
Matt Jarnagin	2	S	44370	11-1-2017

¹Use "C" for Chief Operator and "S" for Shift Operator. If neither, leave blank.

Do your Chief and Shift Distribution System Operators have the minimum level required? Yes Ŧ

COMMENTS: 2

11. WATER SYSTEM IMPROVEMENTS

The California Waterworks Standards (Section 64556) require an amended permit for any of the following improvements or modifications:

- Addition of a new distribution reservoir with a capacity of 100,000 gallons or more
- Modification or extension of the existing distribution system using an alternative to the requirements of the California Waterworks Standards (see Sections 64570 through 64578)
- Modification of the water supply by:
 - Adding a new source
 - Changing the status of an existing source (for example, active to standby) or
 - Changing or altering a source, such that the quality or quantity of water supply could be affected
- · Any addition or change in treatment, including
 - Design capacity
 - Process
- Expansion of the existing service area by 20 percent or more of the number of service connections specified in your current permit.

If your water system made any improvements or modifications during 2014 for which a permit was not obtained, please describe the improvements or modifications below. None

Indicate any planned improvements or modifications for 2015.

We plan to add a new well in 2015.

COMMENTS: @

12. COMPLAINTS REPORTED (WRITTEN OR VERBAL)

Type of Complaint	No. of Complaints Reported by	No. of Complaints Investigated	No. of Complaints reported to the Division of Drinking Water	Brief Description of Cause and Corrective Action taken
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	Customers		or Local County Staff	
Taste and Odor	2	2	0	sulfer smell/flushed house and water heater
Color	0	0	0	
Turbidity	0	0	0	
Visible Organisms	0	0	0	· · · · · · · · · · · · · · · · · · ·
Pressure (High or Low)	60	60	0	Changed regulator at service box
Water Outages ¹	65	65	0	15 main breaks/50 service leaks shut off
Illnesses (Waterborne)				
Other (Specify)				
Total No. of Complaints*	127	127	0	

¹These are customer complaints of a water outage and not necessarily the same as the water outages reported under "System Problems" in the Distribution Section of the EARDWP. *Calculated field

To update totals click here

COMMENTS: 7

13. RECYCLED WATER USE[®]

Recycled Water (RW) Use Sites	Total No. of Approved Sites as of Dec. 31, 2014	No. of New Sites Approved in 2014	No. of Sites Proposed for 2015
Irrigation, Agriculture			
Irrigation, Landscape			
Industrial			
Dual-plumbed ⑦ (In-building)			
Dual-plumbed (Single-family lot)			
Cooling Towers			
Other			
Total*	0	0	0

To update totals click here

Name of the recycled water coordinator:	
Business Phone:	
Email address:	
How many inspections of recycled water use sites were conducted in 2014?	
How many pressure/shutdown tests were performed in 2014?	
Do all of your recycled water uses sites have an on-site supervisor?	-Pick one- 🔻
How many recycled water uses sites do not have an on-site supervisor?	

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14. SYSTEM OPERATION - TREATMENT

A. GROUNDWATER TREATMENT (respond only if groundwater treatment is provided)

Groundwater Treatment Plant Name	Treatment Plant Classification	Capacity (MGD)	Type of Treatment	Date of Operations Plan	Is Operations Plan Current? (Y/N)
Mike Herreid Water Treatment Plant	T2	.570	iron/mang. rem.	11-8-2013	yes

Describe any plant problems, process failures, major shutdowns, etc., which occurred in 2014 and substantially affected the plant performance AND/OR any significant modifications or maintenance provided to the plant(s):

NONE

B. SURFACE WATER TREATMENT (respond only if surface water treatment is provided)

Surface water Treatment Plant Name	Treatment Plant Classification	Capacity (MGD)	Type of Treatment	Date of Operations Plan	Is Operations Plan Current? (Y/N)

Describe any plant problems, process failures, major shutdowns, etc., which occurred in 2014 and substantially affected the plant performance AND/OR any significant modifications or maintenance provided to the plant(s):

TD = Treatment or Distribution operator at any level

NR, N/A, NA = There are no facilities subject to the Certified Treatment Plant Operator requirements

Date of current Emergency Disinfection Plan (EDP)*:	5-17-2012
*As required under Section 64660(c)(2). The EDP may be included in your w Operations Plan. If so, provide the Name and Date of those plans below:.	ater system's Emergency Response Plan or
Name of Document that includes the Emergency Disinfection Plan:	Emergency Disinfection Plan
Date of document that includes the Emergency Disinfection Plan:	5-17-12
Date of last watershed sanitary survey report ⑦:	N/A

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Date planned to complete next watershed sanitary survey report*:

N/A

*As required under Section 64665, each watershed sanitary survey shall be updated at least every 5 years.

COMMENTS:⁽²⁾

15. SYSTEM OPERATION – DISTRIBUTION

A. DEAD-END FLUSHING PROGRAM

Total No.	No. with	No. Flushed	Frequency of
in System	Blowoffs	in 2014	Flushing
53	45	31	when needed

B. VALVE EXERCISE PROGRAM

Size Range of Valves	Total No. in System	No. Exercised in 2014	Frequency of Valve Exercising
1.5" to 8"	265	181	once a year

C. STORAGE TANK/RESERVOIR INSPECTION/CLEANING PROGRAM

(Do not include pressure tanks)

Tank name	Capacity (in million gallons, MG)	Year installed	Date of last inspection ⑦	Date of last cleaning	Date re-lined or coated
Tank # 4	.750	1992	11-2013	11-2013	
Tank # 6	.750	1992	4-2013	10-4-2012	
Tank # 8 at T.P.	.150	2007	1-2015	2007	

D. SYSTEM PROBLEMS

Type of Problem	No. of Problems	No. of Problems Iuvestigated	No. of Problems Reported to the Division of Drinking Water or Local County Staff	Brief Description of Cause and Corrective Action Taken
Service Connection Breaks/ Leaks	50	50		leaks in service line/owner notified to repair
Main Breaks/Leaks	15	15		repaired and flushed main
Water Outages	15	15		Tree roots/ digging by owner/repaired/flushed
Boil Water Orders				
Total*	80	80	0	

16. EMERGENCY PREPAREDNESS AND RESPONSE

A. EMERGENCY RESPONSE PLANS

PUBLIC WATER SYSTEMS WITH AT LEAST 3,300 OR MORE PERSONS ARE REQUIRED TO REVIEW AND REVISE THEIR EMERGENCY

RESPONSE PLAN TO ENSURE THAT THE PLANS ARE SUFFICIENT TO ADDRESS POSSIBLE DISASTER SCENARIOS.

Do you have an Emergency Response Plan (ERP) that addresses the procedures for the restoration of water service for your water system?	Yes ▼
Date of your current Emergency Response Plan:	5-17-12
Date ERP was last exercised with a tabletop or other activity:	7-3-14

B. AUXILIARY POWER SUPPLY

Does your water system have backup power for:	
1. Sources:	None 🔻
2. Pumping Stations:	All
3. Water Treatment Plants:	All
If your system has backup power, how many times per year is it exercised?	once a month
Can your system maintain system pressure either by backup power or by storage during power outages of 2 hours or less?	Yes
Is your backup power system automatic or manual start?:	Manual Start 🔻

COMMENTS: (1) A generator can be brought up to the wells if needed, 1 day notice

17. WATER CONSERVATION AND DROUGHT PREPAREDNESS

Date of your revised Drought Preparedness Plan, if any:	4-30-14
If you experienced water shortages in 2014, please estimate the amount of shortfall in millions of gallons:	none
Did drought conditions cause you to activate emergency standby wells in 2014?	No T
Do you project water shortages in the current calendar year?	No T
Did you implement NEW water conservation measures in 2014?	Yes 💌
If you implemented NEW water conservation measures in 2014, please estimate how much wa millions of gallons (relative to 2013): 10 (MG) 20 % reduction in demand	ter was conserved in
Do you anticipate having to go to mandatory rationing in the upcoming year?	No 🔻
Are your water sources metered?	Yes T
Do you routinely monitor the <i>static</i> water levels in your wells?	Yes T
Do you routinely monitor the <i>pumping</i> water levels in your wells?	Yes
Are these levels recovering, declining or steady?:	Declining

Please list any other long term actions you are considering or planning: Starting in May of 2015 we will go to Stage 3 of our Drought Plan, suspending all outside watering.

COMMENTS:

Disclosure: Be advised that Section 116725 and 116730 of the California Health and Safety Code states that any person who knowingly makes any false statement on any report or document submitted for the purpose of compliance may be liable for a civil penalty not to exceed five thousand dollars (\$5,000) for each separate violations for each day that the violation continues. In addition, the violators may be prosecuted in criminal court and upon conviction, be punished by a fine of not more than \$25,000 for each day of violation, or be imprisoned in county jail not to exceed one year, or both the fine and imprisonment.

LARGE WATER SYSTEM 2012 ANNUAL REPORT TO THE DRINKING WATER PROGRAM FOR YEAR ENDING DECEMBER 31, 2012 [Section 116530 Health & Safety Code]

WATER SYSTEM INFORM	ATION
Water System No.:	CA0510009
Water System Name:	BLUE LAKE SPRINGS MUT WTR
Water System Ownership (See descriptions below):	Privately owned Mutual Water Company or Association
Physical location: (address line 1, address line 2, city, zip) Note: <u>NO</u> P.O. Box	335 Blue Lake Springs Drive ARNOLD 95223
General Office Phone: (with area code)	209-795-7025
Web site address:	blsmwc.com

Water System Ownership Descriptions:

- Local Government: e.g., city, county, or special district, local school district, junior colleges, county or community parks, etc.
 State or Federal Government: e.g., state or national park, BLM, USFS and COE campgrounds and recreation facilities, state hospitals, State universities and colleges, California Veterans Home, County or District Fairs and Expositions, Caltrans rest stop, military base, other state or federal facility
- Privately owned, non-PUC-regulated (Community Water System): e.g., mobile home park, apartment or condominium
- Privately owned business (non-community): e.g., church, private school, restaurant, amusement park, RV park/campground, motel, ranch/farm, factory, other business establishment

REPORT SUBMITTE	D BY: ⑦	
Name:	David Hicks	
Title:	Watermaster	
Business phone:	209-795-7025	
Cell phone:		<u></u>
Email address:	davehicks@goldrush.com	

COMMENTS: 12 My Title has been changed to General Manager - Dave Hicks

1. Public Water System Contacts ③

<u>Click here</u> to learn how to Modify, Add and Delete Contacts in the table below.

NAME, TITLE & ADDRESS	PHONE TYPE	PHONE NO.	EMAIL	CONTACT TYPE (pick all that apply)	
HICKS, DAVID	Business	209-795-7025	davehicks@goldrush.com	 ** Delete Contact ** Administrative 	Operator
MANAGER	Facsimile			🗹 Financial	🕑 Emergency
P.O. Box 712	Mobile			☐ Designated Operator In Charge	C Water Quality

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ARNOLD CA 95223	Emergency	Owner	🗹 Legal
	Business	□ ** Delete Contact ** □ Administrative	Operator
	Facsimile		□ Emergency
	Mobile	☐ Designated Operator In Charge	U Water Quality
	Emergency	□Оwлег	🗆 Legal
	Business	□ ** Delete Contact ** □ Administrative	□ Operator
	Facsimile	⊖ Financial	□ Emergency
-	Mobile	☐ Designated Operator In Charge	□ Water Quality
	Emergency	□ Owner	🗆 Legal
	Business	☐ ** Delete Contact ** ☐ Administrative	□ Operator
	Facsimile		□ Emergency
	Mobile	Designated Operator In Charge	□ Water Quality
	Emergency	□ Owner	🗆 Legal
		· · · · · · · · · · · · · · · · · · ·	
	Business	□ ** Delete Contact ** □ Administrative	Operator
	Facsimile		
	Mobile	□ Designated Operator In Charge	□ Water Quality
	Emergency		🗆 Legal
			-r
	Business	The second	Operator
	Facsimile		Emergency
	Mobile	☐ Designated Operator In Charge	🗆 Water Quality
	Emergency		🗆 Legal
	······		
	Business	□ ** Delete Contact ** □ Administrative	Operator
	Facsimile		Emergency
	Mobile	□ Designated Operator In Charge	U Water Quality
	Emergency	□ Owner	🗆 Legal
	Business	☐ ** Delete Contact ** ☐ Administrative	니 Operator
	Facsimile		
	Mobile	☐ Designated Operator In Charge	□ Water Quality
	Emergency	☐ Owner	🗆 Legal

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Add Additional Contact [®]			(pick all t	(pick all that apply)		
Lee Schmedes	Business	209-795-7025		Administrative	Operator	
Executive Assistant	Facsimile	209-795-4438	admin@blsmwc.com	🖸 Financial	Emergency	
P.O. Box 712 335 Blue Lake Springs Dr.	Mobile	Mob. #	2nd Email Addr-	☐ Designated Operator In Charge	🗆 Water Qualit	
Amold -CA95223-	Emergency	Emer. #		□Owner	🗆 Legal	
Add Additional Contact [®]			(pick all t	(pick all that apply)		
Bill Heinle	Business	209-795-7030		□ Administrative	□ Operator	
Watermaster	Facsimile	Fax No	Email Addr	GFinancial	🗹 Emergency	
491 Blue Lake Springs Drive Address Line 2	Mobile	Mob. #	2nd Email Addr-	Designated Operator In Charge	☑ Water Quality	
Arnold -CA 95223	Emergency	Emer. #		Owner	🗆 Legal	

2. POPULATION SERVED

Permanent population (from latest US Census or finance data) or number of long-term residents*:	650
---	-----

*Long-term resident means someone who resides within the water system service area for more than half of the year.

Seasonal Maximum Population (If applicable):	6000

Provide season 🕲 :

Begin	Date	End	Date
ММ	DD	MM	DD
6	1	9	30

COMMENTS:@

Industrial:

3. NUMBER OF SERVICE CONNECTIONS (as of December 31, 2012)

A. Active Service Connections:

Total Active Connections currently in CDPH database: The total number of Service Connections as of December 31, 2012 must be reported as either <u>Unmetered</u> or <u>Metered</u> for each Service Connection Type as appropriate.			1711		
TYPE Do NOT report fire sprinkler connections. These connections are not counted toward "service connections" for compliance purposes.	Unmete	red	Metered	Total*	
Residential: single family homes, town homes, condominiums, apartments	1462		249	1711	
<u>Commercial:</u> hotels, schools, hospitals, malls, shopping centers, retail stores, service shops, restaurants, parks (hut not irrigation), office buildings, gas stations			1	1	

business parks, manufacturing, warehouses, utilities, assemblers

0

none

none

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Agricultural (agricultural and non-agricultural irrigation services): farms, golf courses, roadways, park irrigation	поne	none	0
Other (services that do not meet any of the above definitions): This service connection type is intended to be used by <u>noncommunity systems</u> such as churches, businesses, parks, schools and other public institutions that operate as an individual public water system and do not specifically have connections for which water rates are charged.	none	none	0
Total Active Connections*	1462	250	1712

*Calculated field

To update totals click here

3. Number of Inactive Connections (all types)	314	

COMMENTS: ⑦

4. GROUNDWATER (GW) AND SURFACE WATER (SW) SOURCES

Туре	Total No. Approved (by permit)	Total No. New/ Added in 2012	Total No. Inactivated in 2012	Total No. Abandoned/ Destroyed in 2012
Active Groundwater Intakes (Wells)	2			
Active Surface Water Intakes (Raw)	0			
Active Purchased Water (GW) Connections	0			
Active Purchased Water (SW) Connections	2			
Standby Sources ¹ ③	1			
Emergency Interconnections	2	0		
Inactive Wells ²	0			

¹If a standby source ⑦ was used in 2012, provide the following information.

Name of the Standby Source used in 2012:	No. of days the Standby Source was in operation:	Were customers notified? (Y/N)	Was CDPH notified? (Y/N)	Describe the reason the Standby Source was used:

-				

²Inactive sources are not approved as sources of supply and must be physically disconnected or otherwise isolated so that only an intentional act by an operator can place the source in service.

COMMENTS: No standby source was used in 2012

5. FINISHED WATER PRODUCED, PURCHASED AND SOLD

The Maximum Day is the day during 2012 with the highest total water usage. Provide the date for that day in Column A,

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then complete Columns B, C and D, indicating how much of the water on that day was from each source.

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The <u>Maximum Month</u> is the month during 2012 with the highest total water usage. Provide the *month* in Column A, then complete Columns B, C and D, indicating how much of the water during that month was from each source.

Units of Measure for this table: Gallons

Volumes are based on: METERED VOLUMES *

A	\	ВС		D	E	F
		Water Produced		Water Purchased or	Total Amount of	Water Sold to another
		Groundwater	Surface Water	Received from another PWS	Water ²	PWS ³
Maximum D	ay ¹	- 295,000	NONE	NONE	295000	NONE
Date:	7-7-12	- 295,000				
Maximun	n Month	6 002 000	NONE	NONE	6902000	NONE
Month:	July	- 6,902,000	NONE	NONE	0902000	INCINE
Annual Total	l	53,447,000	NONE	NONE	53447000	NONE
Percent Trea	ted ³	100%	NONE	NONE		

PWS = Public Water System

¹Only report Maximum Day if it is actually measured or determined from production records. It should not be the average day demand during the maximum month of production.

 2 (E) Total Amount of Water = Sum of Columns (B), (C) and (D), automatically calculated. To update, click below

To update totals click here

³This is the percentage of the annual volume for each water type (Groundwater, Surface Water, and Purchased/Received) that was provided treatment to meet drinking water standards other than precautionary disinfection.

If water was <u>Purchased</u> from or <u>Sold</u> to another PWS, complete the table below:

Specify whether water was <i>Purchased</i> or <i>Sold</i>	Name of PWS

COMMENTS:⁽²⁾ NO WATER WAS PURCHASED OR SOLD IN 2012

6. WATER RATES

Indicate the type of water rate structure ③ used by your water system: Variable Base Rate

What is your billing frequency ③ other •

Complete the table below providing specific water rates applied to your customers:

Connection	FLAT BASE RATE	UNIFORM USAGE RATE	VARIABLE (provide	BASE RATE e range)		JSAGE RATE e range)
Туре	\$ (Base)	\$ per hcf ③	\$ Low	\$ High	S per hcf Low	\$ per hcf High

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RESIDENTIAL	Ð					
Residential		\$1.50	\$384.00	\$703.00		
Multi-residential						
Additional Residential						
Do you provide lif	eline/low incom	e subsidies?	No		·	
If Yes, provide rates:						
NON-RESIDENT	IAL 🕐					
General						
Commercial	\$110.00				\$1.00	\$1.60
Industrial						
Agricultural						
Government						
Other						
Additional Non- residential						
Do you have fire supression surcharges?		Nov				
If Yes, provide rates:						
Do you have other surcharges?						
If Yes, provide rates:						

AVERAGE MONTHLY RESIDENTIAL WATER COST: \$58.44\$/mo.

This value can be calculated by dividing your total annual revenues from residential customers by 12 and then dividing a second time by the number of residential service connections. If you are unable to differentiate revenues by type of customer {residential, industrial, agricultural}; then take your total annual revenues from all water rate payments and divide by 12 and then divide by your total number of service connections.

NOTE: If this is not a "Community" Water System; enter N/A. If individual customers do not pay a separate bill for water enter "0".

COMMENTS: 3

7. WATER QUALITY

ANNUAL NITRATE SAMPLING

Regulations require a minimum of annual sampling for nitrate. If any nitrate result is $\geq 1/2$ the MCL of 45 mg/l (i.e., a result of ≥ 23 mg/l nitrate) then quarterly monitoring must be initiated.

NOTE: If there were any sources that were not monitored because they were offline during 2012, you must contact your local regulatory agency to avoid an enforcement action for failure to monitor.

BACTERIOLOGICAL SAMPLE SITING PLAN

The coliform monitoring regulations require that an updated sample-siting plan be submitted at least every 10 years, and at any time the plan no longer ensures representative monitoring of the system (Section 64422 of Title 22).

Date of current bacteriological sample siting plan:	May 2012

DIRECT ADDITIVES

Pursuant to Section 64590, Title 22 of the California Code of Regulations, (effective January 1, 1994), all chemicals or products, including chlorine, added directly to the drinking water as part of a treatment process must meet the ANSI/NSF Standard 60. Please complete the following table for each chemical used by this water system. If you are not sure whether a chemical you are using meets this standard, contact the manufacturer or distributor of the chemical.

Name of Chemical	Name of Manufacturer	Purpose of using chemical	Chemical is ANSI/NSF Standard 60 certified (Y/N)	Use initiated in 2012 ⑦ (Y/N)
Chlorine 3" Tabs	P.P.G.	oxidation/disinfection	yes	no
Caustic Soda	Sierra Chemical Co.	ph control	yes	no
Potassium Permanganate	Univar	Taste and Odor	yes	no

INDIRECT ADDITIVES

As of March 9, 2008, a water system shall not use any chemical, material, lubricant, or product in the production, treatment or distribution of drinking water that comes in contact with the drinking water that does not have certification of meeting NSF/ANSI standard 61.

Yes

¥

Does your water system have procedures to ensure all future equipment and materials meet this
standard?

If you have any questions on the requirements related to indirect additives, you may contact your local regulatory agency.

COMMENTS: 2

Business Phone:

8. CROSS-CONNECTION CONTROL ③

	Total Number in System	Number Installed in 2012	Number Tested in 2012	Number Failed in 2012	Number Repaired/ Replaced
Backflow Assemblies ⑦ on the Service Connections or Meter	0	0	0	0	0
Backflow Assemblies On- site but not on the Service Connections or Meter	2	0	2	0	0
Air-gap Separation ②	0	0			
No. of <i>Inactive</i> Backflow Preve	ntion Assemblies in wa	ter system in 201	2 🕐:		
Date of last cross-connection control survey done on the system:				August 2010 and is ongoing	
Cross Connection Control Progr	am Coordinator				
Name:				David I Hicks	
Certification Number:		#BMI-11-0077-S			

Email Address:

209-795-7025

Certification or training received: Cross Connection Specialist Certification Course

Describe any cross-connection incidents ③ that occurred during 2012:

None

COMMENTS:

9. CONSUMER CONFIDENCE REPORT ③ (does not apply to Transient Noncommunity water systems)

THE 2012 CCR MUST BE DISTRIBUTED TO YOUR CUSTOMERS AND A COPY SUBMITTED TO YOUR LOCAL REGULATORY AGENCY BY JULY 1, 2013.

CERTIFICATION MUST BE SUBMITTED TO YOUR LOCAL REGULATORY AGENCY BY OCTOBER 1, 2013, STATING THAT THE 2012 CCR HAS BEEN DISTRIBUTED TO CUSTOMERS AND THAT THE INFORMATION IS CORRECT.

The CCR guidance, CCR template, and the certification form can be obtained from the CDPH web site at: <u>http://www.cdph.ca.gov/certlic/drinkingwater/Pages/CCR.aspx</u>

Indicate the date your 2012 CCR was distributed or will be distributed to your customers:	5/2/2013 mm/dd/yyyy

PUBLIC WATER SYSTEMS THAT SERVE 100,000 OR MORE PERSONS ARE REQUIRED TO POST THEIR CCR ON THE INTERNET.

N/A

If your water system serves	100,000 or more persons	, indicate the date the CO	CR was or will be posted to the
Internet:			

If applicable, please provide the URL link to the CCR posted on the Internet:

COMMENTS: 3

10. OPERATOR CERTIFICATION

A. Please list the State certified Water <u>Treatment Plant</u> Operators employed by your water system that supervise and direct the operation of your water treatment plants, beginning with the chief operator(s) ③.

Name	Operator Number	Grade of Operator	Renewal/ Expiration Date
David I. Hicks	13874	T3	10/1/14
Thomas J. Milligan	14413	T2	11/1/13
William M. Heinle	31489	T2	2/1/16

B. Please list the State certified Water <u>Distribution</u> Operators employed by your water system that supervise and direct the operation of your distribution systems, beginning with the chief operator(s) ⁽²⁾.

Name	Operator Number	Grade of Operator	Renewal/ Expiration Date
David I. Hicks	10779	D2	7/1/15
Thomas J. Milligan	31729	D2	8/1/15
William M. Heinle	35669	D2	4/1/15

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	COMMENTS:®			
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I1. WATER SYSTEM IMPROVEMENTS

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The California Waterworks Standards (Section 64556) require an amended permit for any of the following improvements or modifications:

1

- · Addition of a new distribution reservoir with a capacity of 100,000 gallons or more
- Modification or extension of the existing distribution system using an alternative to the requirements of the California Waterworks Standards (see Sections 64570 through 64578)
- Modification of the water supply by:
 - Adding a new source
 - · Changing the status of an existing source (for example, active to standby) or
 - Changing or altering a source, such that the quality or quantity of water supply could be affected
- · Any addition or change in treatment, including
 - Design capacity
 - Process
- Expansion of the existing service area by 20 percent or more of the number of service connections specified in your current permit.

If your water system made any improvements or modifications during 2012 for which a permit was not obtained, please describe the improvements or modifications below.

Indicate any planned improvements or modifications for 2013. We are planning to add a new well to our system if possible in 2013.

COMMENTS: 20

12. COMPLAINTS REPORTED (WRITTEN OR VERBAL)

Type of Complaint	No. of Complaints Reported by Customers	No. of Complaints Investigated	No. of Complaints reported to CDPH	Brief Description of Cause and Corrective Action taken
Taste and Odor	2	2	None	Sulfur smell/ flushed house and water heater
Color	0	0	0	
Turhidity	0	0	0	
Visible Organisms	0	0	0	
Pressure (High or Low)	30	30	none	Changed regulator at service box
Water Outages	50	50	none	3 main leaks/47 leaks shut off at service box
Illnesses (Waterborne)	0	0	0	
Other (Specify)	5	5	none	Spots on dishes/ Get Jet Dry for dishwasher
Total No. of Complaints*	87	87	0	

*Calculated field

To update totals click here

COMMENTS: 70% of connections are vacation homes. Smell develops in water heater after long periods of non use.

13. RECYCLED WATER USE[®]

Recycled Water (RW) Use Sites	Total No. of Approved Sites as of Dec. 31, 2012	No. of New Sites Approved in 2012	No. of Sites Proposed for 2013
Irrigation, Agriculture	N/A		
Irrigation, Landscape	N/A		
Industrial	N/A		
Dual-plumbed ⑦ (In-building)	N/A	······································	
Dual-plumbed (Single-family lot)	N/A		
Cooling Towers	N/A		
Other	0	0	0
Total*	0	0	0

To update totals click here

Name of the recycled water coordinator:	N/A			
Business Phone:				
Email address:				
How many inspections of recycled water use sites were conducted in 2012?				
How many pressure/shutdown tests were performed in 2012?				
Do all of your recycled water uses sites have an on-site supervisor?	–Pick one– ▼			
How many recycled water uses sites do not have an on-site supervisor?				
COMMENTS:@				

14. SYSTEM OPERATION - TREATMENT

A. GROUNDWATER TREATMENT (respond only if groundwater treatment is provided)

Groundwater Treatment Plant Name	Capacity (MGD)	Type of Treatment	Date of Operations Plan	Is Operations Plan Current? (Y/N)
B.L.S Water Treatment Plant	.370	iron/mang.rem.	May 2009	yes

Describe any plant problems, process failures, major shutdowns, etc., that occurred in 2012 and substantially affected the plant performance AND/OR any significant modifications or maintenance provided to the plant(s):

No Plant problems. We replaced the filter media in March.

B. SURFACE WATER TREATMENT (respond only if surface water treatment is provided)

Surface water

Is Operations

Treatment Plant Name	Capacity (MGD)	Type of Treatment	Date of Operations Plan	Pian Current? (Y/N)

Describe any plant problems, process failures, major shutdowns, etc., that occurred in 2012 and substantially affected the plant performance AND/OR any significant modifications or maintenance provided to the plant(s):

Date of current Emergency Disinfection Plan (EDP)*:	June 2012				
*As required under Section 64660(c)(2). The EDP may be included in your water system's Emergency Response Plan or Operations Plan. If so, provide the Name and Date of those plans below:.					
Name of Document that includes the Emergency Disinfection Plan:					
Date of document that includes the Emergency Disinfection Plan:					
Date of last watershed sanitary survey report ③:					
Date planned to complete next watershed sanitary survey report*:					
*As required under Section 64665, each watershed sanitary survey shall be updated at least every 5 years.					
COMMENTS:					

15. SYSTEM OPERATION – DISTRIBUTION

A. DEAD-END FLUSHING PROGRAM

Total No.	No. with	No. Flushed	Frequency of
in System	Blowoffs	in 2012	Flushing
40	40	40	6-12 months

B. VALVE EXERCISE PROGRAM

Size Range of Valves	Total No. in System	No. Exercised in 2012	Frequency of Valve Exercising
1 12"-8"	170	70	yearly

C. STORAGE TANK/RESERVOIR INSPECTION/CLEANING PROGRAM

(Do not include pressure tanks)

Tank name	Capacity (in million gallons, MG)	Year installed	Date of last inspection ⑦	Date of last cleaning	Date re-lined or coated	
		.				

0.750	1992	2011	2011	
0.750	1992	2012	10/4/2012	
0.150	2007	2011	2007	
	0.750	0.750 1992	0.750 1992 2012	0.750 1992 2012 10/4/2012

D. SYSTEM PROBLEMS

Type of Problem	No. of Problems	No. of Problems Investigated	No. of Problems Reported to CDPH	Brief Description of Cause and Corrective Action Taken
Service Connection Breaks/ Leaks	47	47	none	Service line break/Leak in Service Box/repaired
Main Breaks/Leaks	3	3	none	Tree on line/breaks in main repaired/flushed
Water Outages	3	100%	none	Main breaks
Boil Water Orders	0	0	0	
Total*	53	50	0	
To update totals click her	e	l	1	

COMMENTS:3

16. EMERGENCY PREPAREDNESS AND RESPONSE

A. EMERGENCY RESPONSE PLANS

PUBLIC WATER SYSTEMS WITH AT LEAST 3,300 OR MORE PERSONS ARE REQUIRED TO REVIEW AND REVISE THEIR EMERGENCY RESPONSE PLAN TO ENSURE THAT THE PLANS ARE SUFFICIENT TO ADDRESS POSSIBLE DISASTER SCENARIOS.

Do you have an Emergency Response Plan (ERP) that addresses the procedures for the restoration of water service for your water system?	Yes V
Date of your current Emergency Response Plan:	5-17-12
Date ERP was last exercised with a tabletop or other activity:	5-17-12

B. AUXILIARY POWER SUPPLY

Does your water system have backup power for:	
1. Sources:	None
2. Pumping Stations:	All
3. Water Treatment Plants:	All
If your system has backup power, how many times per year is it exercised?	Once a month
Can your system maintain system pressure either by backup power or by storage during power outages of 2 hours or less?	Yes v
Is your backup power system automatic or manual start?:	· Automatic 🔹

COMMENTS: We can bring up a generator for our wells on a rental basis/one day notice.

17. WATER CONSERVATION AND DROUGHT PREPAREDNESS

Date of your revised Drought Preparedness Plan, if any:	None		
If you experienced water shortages in 2012, please estimate the amount of shortfall in millions of gallons:	none		
Did drought conditions cause you to activate emergency standby wells in 2012?	No		
Do you project water shortages in the current calendar year?	No ▼		
Did you implement NEW water conservation measures in 2012?			
If you implemented NEW water conservation measures in 2012, please estimate how much water was con millions of gallons: (MG) % reduction in demand	served in		
Do you anticipate having to go to mandatory rationing in the upcoming year?			
Do you routinely monitor the static water levels in your wells?	Yes 🔻		

Please list any other long term actions you are considering or planning:

Do you routinely monitor the *pumping* water levels in your wells?

Are these levels recovering, declining or steady?:

The static well levels are recovering but declining overall as compared to previous years. If necessary, we will limit outside watering. We are actively searching for new well sites to supplement our supply.

Yes

Declining

.

COMMENTS:⁽²⁾ We have asked Calaveras County water District to allow a test well on their property in White Pines.

Disclosure: Be advised that Section 116725 and 116730 of the California Health and Safety Code states that any person who knowingly makes any false statement on any report or document submitted for the purpose of compliance may be liable for a civil penalty not to exceed five thousand dollars (\$5,000) for each separate violations for each day that the violation continues. In addition, the violators may be prosecuted in criminal court and upon conviction, be punished by a fine of not more than \$25,000 for each day of violation, or be imprisoned in county jail not to exceed one year, or both the fine and imprisonment.

LARGE WATER SYSTEM 2013 ANNUAL REPORT TO THE DRINKING WATER PROGRAM FOR YEAR ENDING DECEMBER 31, 2013 [Section 116530 Health & Safety Code]

WATER SYSTEM INFORM	ATION
Water System No.:	CA0510009
Water System Name:	BLUE LAKE SPRINGS MUT WTR
Water System Ownership (See descriptions below):	Privately owned Mutual Water Company or Association
Physical location: (address line 1, address line 2, city, zip) Note: <u>NO</u> P.O. Box	335 Blue Lake Springs Drive ARNOLD 95223
General Office Phone: ⑦ (with area code)	(209)-795-7030
Web site address:	blsmwc.com

Water System Ownership Descriptions:

- Local Government: e.g., city, county, or special district, local school district, junior colleges, county or community parks, etc.
 State or Federal Government: e.g., state or national park, BLM, USFS and COE campgrounds and recreation facilities, state hospitals, State universities and colleges, California Veterans Home, County or District Fairs and Expositions, Caltrans rest stop, military base, other state or federal facility
- Privately owned, non-PUC-regulated (Community Water System): e.g., mobile home park, apartment or condominium
- Privately owned business (non-community): e.g., church, private school, restaurant, amuscment park, RV park/campground, motel, ranch/farm, factory, other business establishment

REPORT SUBMITTED BY:				
Name:	David Hicks			
Title:	Watermaster			
Business phone:	209-795-7025			
Cell phone:				
Email address:	davehicks@goldrush.com			

COMMENTS: My Title has been changed to General Manager - Dave Hicks

1. Public Water System Contacts 👁

<u>Click here</u> to learn how to Modify, Add and Delete Contacts in the table below.

NAME, TITLE & ADDRESS	PHONE TYPE	PHONE NO.	EMAIL	CONTACT TYPE (pick all that apply)⑦	
HICKS, DAVID	Business	209-795-7025	davehicks@goldrush.com	 ** Delete Contact ** Administrative 	 Operator
MANAGER	Facsimile			⊔ Financial	Emergency
P.O. Box 712	Mobile	209-768-8903	beeper-588-5650	Designated Operator In Charge	🗷 Water Quality

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· 3/21/2016

drinc.ca.gov/ear/PWSEarReport.aspx?printable=yes&SurveyID=11&PwsID=CA0510009

ARNOLD CA 95223	Emergency	209-795-7030		Owner	🕑 Legal
	<u> </u>			- t , , , , , , , , , , , , , , , , , , ,	
SCHMEDES, LEE	Business	209-795-7025	admin@blsmwc.com	 ** Delete Contact ** Administrative 	Operator
Administrative Operations Manager	Facsimile	none		Financial	□ Emergency
P.O. Box 712	Mobile	209-768-6145		Designated Operator In Charge	□ Water Quality
ARNOLD CA 95223	Emergency	209-795-7030		🗇 Owner	🗆 Legal
					1
	Business	209-795-7025	_	 ** Delete Contact ** Administrative 	Operator
Bill Heinle	Facsimile			⊔ Financial	Emergency
P.O. Box 712	Mobile		beeper-588-5652	Designated Operator In Charge	☑ Water Quality
ARNOLD CA 95223	Emergency	209-795-7030		Owner	🗆 Legal
	Business	209-795-7025	_	☐ ** Delete Contact ** ☐ Administrative	☑ Operator
Tom Milligan	Facsimile		_	Financial	C Emergency
P.O. Box 712	Mobile	209-768-8903	beeper-588-5651	Designated Operator In Charge	☑ Water Quality
ARNOLD CA 95223	Emergency	209-795-7030		🗆 Owner	🗆 Legal
	Business	209-795-7025		 ** Delete Contact ** Administrative 	C Operator
Matt Jarnagin	Facsimile			🗆 Financial	Emergency
P.O.Box 712	Mobile	768-8904	beeper-588-5653	Designated Operator In Charge	☑ Water Quality
ARNOLD CA 95223	Emergency	209-795-7030		Owner	🗆 Legal
		1	ı · · · ·		
	Business			Administrative	Operator
	Facsimile			Financial	
	Mobile			Designated Operator In Charge	Water Quality
	Emergency			🗆 Owner	🗆 Legal
			r	1	
	Business			□ ** Delete Contact ** □ Administrative	□ Operator
	Facsimile		_	🗇 Financial	□ Emergency
	Mobile			Designated Operator In Charge	Water Quality
	Emergency			🗆 Owner	🗆 Legal
				1	
	Business			** Delete Contact ** Administrative	⊔ Operator
	Facsimile			🗆 Financial	Emergency
	Mobile			Designated Operator In Charge	D Water Quality
	Emergency			Owner	🗆 Legal

· 3/21/2016

drinc.ca.gov/ear/PW SEarReport.aspx?printable=yes&SurveyID=11&PwsID=CA0510009

Add Additional Contact [®]			(pick all th	at apply)	
Contact Name	Business	Bus. #		□ Administrative	Operator
Title	Facsimile	Fax No	Email Addr	□ Financial	□ Emergency
Address Line 1 Address Line 2	Mobile	Mob. #		Designated Operator In Charge	□ Water Quality
CitySTZip	Emergency	Emer. #		Owner	🗆 Legal
Add Additional Contact®			······	(pick all th	at apply)
Contact Name	Business	Bus. #		C Administrative	□ Operator
Title	Facsimile	Fax No	Email Addr	🗆 Financial	□ Emergency
Address Line 1 Address Line 2	Mobile	Mob. #		Designated Operator In Charge	C Water Quality
CitySTZip	Emergency	Emer. #		🗀 Owner	🗆 Legal
COMMENTS: [®]					

2. POPULATION SERVED

Permanent population (from latest US Census or finance data) or number of long-term residents*:	650

*Long-term resident means someone who resides within the water system service area for more than half of the year.

If permanent population is not based on latest US Census or finance data, identify the methods or sources of how it was estimated::

Seasonal Maximum Population (If applicable):	6000
--	------

Provide season ② :

Begir	1 Date	End	Date
ММ	DD	MM	DD
6	1	9	30

List the names of communities served by the system identifying both incorporated and unincorporated areas:

Blue Lake Springs Subdivision

COMMENTS:@

3. NUMBER OF SERVICE CONNECTIONS(as of December 31, 2013)

A. Active Service Connections:

Total Active Potable Water Connections currently in CDPH database:	1713	
--	------	--

The total number of Service Connections as of December 31, 2013 must be reported as either Unmetered or Metered for each Service Connection

1

Type as appropriate.

	Pota	ible Water		Recycled Water			
TYPE Do NOT report fire sprinkler connections. These connections are not counted toward "service connections" for compliance purposes.	Unmetered	Metered	Total*	Unmetered	Metered	Total*	
Single-family Residential: single family detached dwellings	1452	260	1712			0	
<u>Multi-family Residential:</u> duplexes, town homes, condominiums, apartments, and trailer parks	поне	none	0			0	
Commercial/Institutional: hotels, schools, prisons, bospitals, nursing homes, dormitories, laundries, retail establishments (malls, shopping centers, retail stores, service shops, restaurants), office buildings, gas stations	попе	1	1			0	
Industrial: industrial parks, manufacturing, warehouses, utilities, assemblers	none	none	0			0	
Landscape Irrigation: Play fields, golf courses, roadways, median strips, cemeteries, parks and other dedicated landscape connections	none	none	0			0	
Agricultural Irrigation: irrigation of commercially-grown crops and other dedicated agricultural connections	none	none	0			0	
Other (services that do not meet any of the above <u>definitions):</u> This service connection type is intended to be used by <u>noncommunity systems</u> such as churches, businesses, county, state and national parks, schools and other public institutions that operate as an individual public water system and do not specifically have connections for which water rates are charged.	none	none	0			0	
Total Active Connections*	1452	261	1713	0	0	0	

*Calculated field

To update totals click here

B. Number of Inactive Connections (all types)	311
---	-----

COMMENTS: The 311 inactive connections are unimproved lots.

4. GROUNDWATER (GW) AND SURFACE WATER (SW) SOURCES

Туре	Total No. Approved (by permit)	Total No. New/ Added in 2013	Total No. Inactivated in 2013	Total No. Abandoned/ Destroyed in 2013
Active Groundwater Intakes (Wells)	2			
Active Surface Water Intakes (Raw)	0			
Active Purchased Water (GW) Connections	0			

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Active Purchased Water (SW) Connections	2	1	 	
Standby Sources ¹ ⑦	1			
Emergency Interconnections	2	0		
Inactive Wells ²				

¹If a standby source ⑦ was used in 2013, provide the following information.

Name of the Standby Source used in 2013:	No. of days the Standby Source was in operation:	Were customers notified? (Y/N)	Was CDPH notified? (Y/N)	Describe the reason the Standby Source was used:

²Inactive sources are not approved as sources of supply and must be physically disconnected or otherwise isolated so that only an intentional act by an operator can place the source in service.

COMMENTS:3

5. WATER PRODUCED, PURCHASED AND SOLD

The Maximum Day is the day during 2013 with the highest total water usage. Provide the date for that day in Column B, then complete Columns C, D and E, indicating how much of the water on that day was from each source.

The Maximum Month is the month during 2013 with the highest total water usage. Provide the month in Column B, then complete Columns C, D and E, indicating how much of the water during that month was from each source.

Units of Measure for this table: | Gallons •

Volumes are based on: METERED VOLUMES **•**

А	В	С	D	Е	F	G	н	I
			Pota	able Water				
	Date/ Month	Water Produced from Groundwater (Wells)	Water Produced from Surface Water ²	Finished Water Purchased or Received from another PWS ⁵	Total Amount of Potable Water ^{3*}	Water Sold to Another PWS ⁵	Non- potable (exclude rccycled)	Recycled
Maximum Day ¹	6-25- 13	471,000	0	0	471000	0		
Maximum Month	JULY	7,799,000	0	0	7799000	0		
January		4,607,000	0	0	4607000	0	0	0
February		3,038,000	0	0	3038000	0	0	0
March		3,084,000	0	0	3084000	0	0	0
April		3,098,000	0	0	3098000	0	0	0
May		4,347,000	0	0	4347000	0	0	0

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June	5,825,000	0	0	5825000	0	0	0
July	7,799,000	0	0	7799000	0	0	0
August	4,433,000	0	2,956,000	7389000	0	0	0
September	1,151,000	0	3,629,000	4780000	0	0	0
October	3,769,000	0	0	3769000	0	0	0
November	4,309,000	0	0	4309000	0	0	0
December	4,115,000	0	0	4115000	0	0	0
Annual Total*	49575000	0	6585000	56160000	0	0	0
Percent Treated ⁴	100				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		•

PWS = Public Water System

*Calculated field

Non-potable = water supplies that do not enter the drinking water distribution system and are for non-potable uses only such as irrigation or toilet flushing

¹Only report Maximum Day if it is actually measured or determined from production records. It should not be the average day demand during the maximum month of production.

²Do not include raw water purchased; report only volume of water that was treated.

³(F) Total Amount of Potable Water = Sum of Columns (C), (D) and (E), automatically calculated. To update, click below

To update totals click here

⁴This is the percentage of the total annual volume for Groundwater produced that was provided treatment to meet drinking water standards other than precautionary disinfection.

⁵If water was *Purchased* from or *Sold* to another PWS, complete the table below:

Name of PWS
Calaveras County Water District

If recycled water was supplied to your customers, complete the table below:

Specify the level of treatment (e.g., tertiary, disinfected secondary)	Name of Recycled Water supplier

COMMENTS: D Maximum Day was a result of accidental storage tank overflow.

6a. WATER RATES

Indicate the type of water rate structure 3 used by your water system: Variable Base Rate + Variable Usage Rate

What is your billing frequency ③ other •

Complete the table below providing specific water rates applied to your customers:

Ŧ

Connection Type	FLAT BASE RATE	UNIFORM USAGE RATE		LE BASE ovide range)		LE USAGE ovide range)
	\$ (Base)	\$ per hcf ③	\$ Low	\$ High	S per hcf Low	S per hcf High
RESIDENTIAL 3						
Single-family Residential		\$1.60	\$407.00	\$745.00		
Multi-family Residential						
Do you provide lifeline/lov	w income subsi	idies?	No 🔻			
If Yes, provide rates:						
NON-RESIDENTIAL ③			······		<u></u>	-
Commercial/Institutional	\$ 110.00				\$ 1.00	\$ 1.60
Industrial						
Landscape Irrigation						
Agricultural Irrigation						
Other						
Do you have fire suppressi	on surcharges?	>	No 🔻]		
If Yes, provide rates:						
Do you have other surchar	ges?					
If Yes, provide rates:						

AVERAGE MONTHLY RESIDENTIAL WATER COST: \$61.77\$/mo.

This value can be calculated by dividing your total annual revenues from residential customers by 12 and then dividing a second time by the number of residential service connections. If you are unable to differentiate revenues by type of customer {residential, industrial, agricultural}; then take your total annual revenues from all water rate payments and divide by 12 and then divide by your total number of service connections.

NOTE: If this is not a "Community" Water System; enter N/A. If individual customers do not pay a separate bill for water enter "0".

6b. WATER DELIVERIES

Units of Measure for this table: Gallons

Provide monthly metered water deliveries in the table below.

A	В	с	D	E	F	G	н	I	J
	Single- family Residential	Multi- family Residential	Commercial/ Institutional	Industrial	Landscape Irrigation	Other	Total Urban Retail ^{1*}	Agricultural	Other PWS
Check if Recycled Water is included:		0			0	۵		D	
January	516,701	<u></u>	8,976				525677		
February	516,701		11,220				527921		
March	516,701		14,212				530913		
April	516,701		165,308				682009		
]									

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May	1,525,627		94,996		1		1620623		
June	1,525,627		135,388				1661015		
July	1,906,588		178,772				2085360		
August	1,906,588		136,136				2042724		
September	1,371,622		55,352				1426974		
October	1,371,622		20,196				1391818		
November	508,950		11,968				520918		
December	508,950		11,968				520918		
Total*	12692378	0	844492	0	0	0	13536870	0	0

PWS = Public Water System

*Calculated field

¹Total Urban Retail = Sum of Columns (B) thru (G), automatically calculated. To update, click below

To update totals click here

COMMENTS: We have 260 meters read 4 times per year. 1 commercial meter read every month.

7. WATER QUALITY

ANNUAL NITRATE SAMPLING

Regulations require a minimum of annual sampling for nitrate. If any nitrate result is >= 1/2 the MCL of 45 mg/l (i.e., a result of >= 23 mg/l nitrate) then quarterly monitoring must be initiated.

Did your system conduct monitoring for nitrate during 2013 from each source?	Yes
--	-----

NOTE: If there were any sources that were not monitored because they were offline during 2013, you must contact your local regulatory agency to avoid an enforcement action for failure to monitor.

BACTERIOLOGICAL SAMPLE SITING PLAN

The coliform monitoring regulations require that an updated sample-siting plan be submitted at least every 10 years, and at any time the plan no longer ensures representative monitoring of the system (Section 64422 of Title 22).

Date of current bacteriological sample siting plan:	May 2012

DIRECT ADDITIVES

Pursuant to Section 64590, Title 22 of the California Code of Regulations, (effective January 1, 1994), all chemicals or products, including chlorine, added directly to the drinking water as part of a treatment process must meet the ANSI/NSF Standard 60. Please complete the following table for each chemical used by this water system. If you are not sure whether a chemical you are using meets this standard, contact the manufacturer or distributor of the chemical.

Name of Chemical	Name of Manufacturer	Purpose of using chemical	Chemical is ANSI/NSF Standard 60 certified ⑦ (Y/N)	Use initiated in 2013 ⑦ (Y/N)
Chlorine 3" Tabs	PPG	oxidation/disinfection	yes	no
Caustic Soda	Sierra Chemical	ph control	yes	no

Potassium Permanganate	Univar	Taste and odor control	yes	no
h	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	Len	ł

INDIRECT ADDITIVES

As of March 9, 2008, a water system shall not use any chemical, material, lubricant, or product in the production, treatment or distribution of drinking water that comes in contact with the drinking water that does not have certification of meeting NSF/ANSI standard 61.

Does your water system have procedures to ensure all future equipment and materials meet this standard?	Yes 🔻
---	-------

If you have any questions on the requirements related to indirect additives, you may contact your local regulatory agency.

COMMENTS:®		

8. CROSS-CONNECTION CONTROL [®]

	Total Number in System	Number Installed in 2013	Number Tested in 2013	Number Failed in 2013	Number Repaired/ Replaced
Backflow Assemblies ⑦ on the Service Connections or Meter	0				
Backflow Assemblies On- site but not on the Service Connections or Meter	2		2	0	0
Air-gap Separation ③	0				

No. of Inactive Backflow	Prevention Assemblies in w	ater system in 2013 🕲:		
Date of last cross-connect	August 2010 and is ongoing			
Cross Connection Control	Program Coordinator			
Name:			David I Hicks	
Certification Number:			#BMI-11-0077-S	
Business Phone: 209-795-7025 Email Address:			davehicks@goldrush.com	
Certification or training	received: Cross Connection	1 Specialist Certification Cou	rse	

Describe any cross-connection incidents (2) that occurred during 2013:

none

COMMENTS:

9. CONSUMER CONFIDENCE REPORT ③ (does not apply to Transient Noncommunity water systems)

THE 2013 CCR MUST BE DISTRIBUTED TO YOUR CUSTOMERS AND A COPY SUBMITTED TO YOUR LOCAL REGULATORY AGENCY BY JULY I, 2014.

CERTIFICATION MUST BE SUBMITTED TO YOUR LOCAL REGULATORY AGENCY BY OCTOBER 1, 2014, STATING THAT THE 2013 CCR HAS BEEN DISTRIBUTED TO CUSTOMERS AND THAT THE INFORMATION IS CORRECT.

The CCR guidance, CCR template, and the certification form can be obtained from the CDPH web site at:<u>http://www.cdph.ca.gov/certlic/drinkingwater/Pages/CCR.aspx</u>

Indicate the date your 2013 CCR was distributed or will be distributed to your customers: 4-30-2014 mm/dd/yyyy

PUBLIC WATER SYSTEMS THAT SERVE 100,000 OR MORE PERSONS ARE REQUIRED TO POST THEIR CCR ON THE INTERNET.

If your water system serves 100,000 or more persons, indicate the date the CCR was or will be posted to the Internet:

If applicable, please provide the URL link to the CCR posted on the Internet:

COMMENTS:⁽²⁾

10. OPERATOR CERTIFICATION

A. Please list the State certified Water <u>Treatment Plant</u> Operators employed by your water system that supervise and direct the operation of your water treatment plants, beginning with the chief operator(s) ③.

Your Highest Treatment System Classification is:

Name	Grade of Operator	Chief or Shift ¹ (C/S)	Operator Number	Expiration Date
Bill Heinle	2	С	31489	2-1-2016
Tom Milligan	2	S	14413	3-1-2017
Matt Jarnagin	2	S	35758	3-1-2017
Dave Hicks	3	Standby	13874	10-1-14

¹Use "C" for Chief Operator and "S" for Shift Operator. If neither, leave blank.

Do your Chief and Shift Treatment Plant Operators have the minimum level required? Yes

B. Please list the State certified Water <u>Distribution</u> Operators employed by your water system that supervise and direct the operation of your distribution systems, beginning with the chief operator(s) **①**.

Your Distribution System Classification is:

Name	Grade of Operator			Expiration Date
Bill Heinle	2	С	35669	4-1-2015
Tom Milligan	2	S	31729	12-1-2015
Dave Hicks	2	Standby	19779	7-1-2015

¹Use "C" for Chief Operator and "S" for Shift Operator. If neither, leave blank.

Do your Chief and Shift Distribution System Operators have the minimum level required? Yes v

COMMENTS: 1

11. WATER SYSTEM IMPROVEMENTS

The California Waterworks Standards (Section 64556) require an amended permit for any of the following improvements or modifications:

- · Addition of a new distribution reservoir with a capacity of 100,000 gallons or more
- Modification or extension of the existing distribution system using an alternative to the requirements of the
- California Waterworks Standards (see Sections 64570 through 64578)
- Modification of the water supply by:
 - Adding a new source

- Changing the status of an existing source (for example, active to standby) or
- Changing or altering a source, such that the quality or quantity of water supply could be affected
- Any addition or change in treatment, including
 - Design capacity
 Process
- Expansion of the existing service area by 20 percent or more of the number of service connections specified in your current permit.

If your water system made any improvements or modifications during 2013 for which a permit was not obtained, please describe the improvements or modifications below. NONE

Indicate any planned improvements or modifications for 2014.

Well exploration to add new wells will be done in 2014.

COMMENTS: 1

12. COMPLAINTS REPORTED (WRITTEN OR VERBAL)

Type of Complaint	No. of Complaints Reported by Customers	No. of Complaints Investigated	No. of Complaints reported to CDPH	Brief Description of Cause and Corrective Action taken
Taste and Odor	3	3	Νοπε	sulfer smell / Flushed house and water heater
Color	0	0	0	
Turbidity	0	0	0	
Visible Organisms	0	0	0	
Pressure (High or Low)	55	55	NONE	Changed regulator at service box
Water Outages	40	40	NONE	10 main leaks/30 sevice line leaks shut off
Illnesses (Waterborne)	0	0	0	
Other (Specify)	0	0	0	
Total No. of Complaints*	98	98	0	

*Calculated field

To update totals click here

COMMENTS: Main Leaks were repaired. Sevice line leaks were shut off at service, homeowner to repair.

13. RECYCLED WATER USE[®]

Recycled Water (RW) Use Sites	Total No. of Approved Sites as of Dec. 31, 2013	No. of New Sites Approved in 2013	No. of Sites Proposed for 2014
Irrigation, Agriculture			
Irrigation, Landscape			
Industrial			
Dual-plumbed 3 (In-building)			
Dual-plumbed (Single-family lot)			
		·····	

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Cooling Towers			
Other			
Total*	0	0	0
To update totals click here	·	<u>.</u>	5

Name of the recycled water coordinator:	
Business Phone:	
Email address:	
How many inspections of recycled water use sites were conducted in 2013?	
How many pressure/shutdown tests were performed in 2013?	
Do all of your recycled water uses sites have an on-site supervisor?	-Pick one- ▼
How many recycled water uses sites do not have an on-site supervisor?	
COMMENTS: [®] No recycled water is used in our system.	

14. SYSTEM OPERATION - TREATMENT

A. GROUNDWATER TREATMENT (respond only if groundwater treatment is provided)

Groundwater Treatment Plant Name	Treatment Plant Classification	Capacity (MGD)	Type of Treatment	Date of Operations Plan	Is Operations Plan Current? (Y/N)
Blue Lake Springs Water Treatment Plant	Ground Water	.370	iron/mang. rem.	May 2009	no

Describe any plant problems, process failures, major shutdowns, etc., that occurred in 2013 and substantially affected the plant performance AND/OR any significant modifications or maintenance provided to the plant(s):

Plant was shut down in August for 4 weeks due to low water level in well. New SCADA system was installed at Plant in 2013.

B. SURFACE WATER TREATMENT (respond only if surface water treatment is provided)

Surface water Treatment Plant Name	Treatment Plant Classification	Capacity (MGD)	Type of Treatment	Date of Operations Plan	Is Operations Plan Current? (Y/N)
-					
					Name of the Address o

Describe any plant problems, process failures, major shutdowns, etc., that occurred in 2013 and substantially affected the plant performance AND/OR any significant modifications or maintenance provided to the plant(s):

٠

Date of current Emergency Disinfection Plan (EDP)*:	5-17-2012				
*As required under Section 64660(c)(2). The EDP may be included in your water system's Emergency Response P Operations Plan. If so, provide the Name and Date of those plans below:.					
Name of Document that includes the Emergency Disinfection Plan:	Emergency Disinfection Plan				
Date of document that includes the Emergency Disinfection Plan:	5-17-12				
Date of last watershed sanitary survey report 3:	N/A				
Date planned to complete next watershed sanitary survey report*:	N/A				
*As required under Section 64665, each watershed sanitary survey shall be	updated at least every 5 years.				

COMMENTS: ⑦

15. SYSTEM OPERATION – DISTRIBUTION

A. DEAD-END FLUSHING PROGRAM

Total No.	No. with	No. Flushed	Frequency of
in System	Blowoffs	in 2013	Flushing
53	45	45	

B. VALVE EXERCISE PROGRAM

Size Range of Valves	Total No. in System	No. Exercised in 2013	Frequency of Valve Exercising
l.5" to 8"	256	198	once a year

C. STORAGE TANK/RESERVOIR INSPECTION/CLEANING PROGRAM

(Do not include pressure tanks)

Tank name	Capacity (in million gallons, MG)	Year installed	Date of last inspection ⑦	Date of last cleaning	Date re-lined or coated
Tank # 4	.750	1992	11-2013	11-2013	
Tank # 6	.750	1992	4-2013	10-4-2012	
Tank # 8 at T.P.	.150	2007	4-2013	2007	

D. SYSTEM PROBLEMS

Type of Problem	No. of Problems	No. of Problems Investigated	No. of Problems Reported to	Brief Description of Cause and Corrective Action Taken
-----------------	--------------------	------------------------------------	-----------------------------------	---

			CDPH	
Service Connection Breaks/ Leaks	30	30	0	leaks in service line/owner notified to repair
Main Breaks/Leaks	10	10	0	repaired and flushed main
Water Outages 3	10	10	0	Tree roots/ digging by owner/repaired/flushed
Boil Water Orders	0	0	0	0
Total*	50	50	0	
To update totals click her	e j			

COMMENTS:

16. EMERGENCY PREPAREDNESS AND RESPONSE

A. EMERGENCY RESPONSE PLANS

PUBLIC WATER SYSTEMS WITH AT LEAST 3,300 OR MORE PERSONS ARE REQUIRED TO REVIEW AND REVISE THEIR EMERGENCY

RESPONSE PLAN TO ENSURE THAT THE PLANS ARE SUFFICIENT TO ADDRESS POSSIBLE DISASTER SCENARIOS.

Do you have an Emergency Response Plan (ERP) that addresses the procedures for the restoration of water service for your water system?	Yes V
Date of your current Emergency Response Plan:	5-17-12
Date ERP was last exercised with a tabletop or other activity:	6-3-13

B. AUXILIARY POWER SUPPLY

Г

Does your water system have backup power for:	
1. Sources:	None
2. Pumping Stations:	LIT
3. Water Treatment Plants:	
If your system has backup power, how many times per year is it exercised?	Once a month
Can your system maintain system pressure either by backup power or by storage during power outages of 2 hours or less?	Yes v
Is your backup power system automatic or manual start?:	Automatic 🔻

COMMENTS: A generator can be brought up to the wells if needed, 1 day notice.

17. WATER CONSERVATION AND DROUGHT PREPAREDNESS

Date of your revised Drought Preparedness Plan, if any:	4-30-14
If you experienced water shortages in 2013, please estimate the amount of shortfall in millions of gallons:	7,000,000
Did drought conditions cause you to activate emergency standby wells in 2013?	No
Do you project water shortages in the current calendar year?	No 🔻
Did you implement NEW water conservation measures in 2013?	Yes 🔻

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° 3/21/2016

drinc.ca.gov/ear/PWSEarReport.aspx?printable=yes&SurveyID=11&PwsID=CA0510009

If you implemented NEW water conservation measures in 2013, please estimate how much water was cor millions of gallons: none (MG) 0 % reduction in demand	served in
Do you anticipate having to go to mandatory rationing in the upcoming year?	No
Are your water sources metered?	Yes
Do you routinely monitor the <i>static</i> water levels in your wells?	Yes 🔻
Do you routinely monitor the <i>pumping</i> water levels in your wells?	Yes 🔻
Are these levels recovering, declining or steady?:	Declining v

Please list any other long term actions you are considering or planning: We have a new Drought Plan which includes drought stages, penalties for water waste, and public information procedures.

COMMENTS: [®] The Drought Plan was completed in 2014	

Disclosure: Be advised that Section 116725 and 116730 of the California Health and Safety Code states that any person who knowingly makes any false statement on any report or document submitted for the purpose of compliance may be liable for a civil penalty not to exceed five thousand dollars (\$5,000) for each separate violations for each day that the violation continues. In addition, the violators may be prosecuted in criminal court and upon conviction, be punished by a fine of not more than \$25,000 for each day of violation, or be imprisoned in county jail not to exceed one year, or both the fine and imprisonment.

APPENDIX J

BLSMWC System Breakdown

							Main Line Replacement Costs																					
	Description					Mainline Replacement ¹						House	Services			V	alve Replac	ement	PRV Replace	ment	H	ydrant Rep	lacement	Air Relief Valve Replacement				
Road	BLSMC MP Project	Existing Condition Description	From	То	Press Zone	Existing Pipe Size (inch)	Mainline Rep (LF)	Rep Size (inch)	Unit Price/ Foot	Total Cost	Single Service	Unit Cost (Each)	Total Cost	Double Service	Unit Cost (Each)	Total Cost	Valves	Unit Cost (Each)	Total Cost	PRVs Unit Cost (Each) Total Cost	Hyd	Unit Cost (Each)	Total Cost	ARVs	Unit Cost (Each)	Total Cost	Total Cost
Wawona Way	Wawona	Backyard Mains Adjacent/Parallel to Road	Castlewood	End of Line	6/7	(2.5), (2), (1.5)	1928	6	\$70	\$134,960	9	\$2,000	\$18,000	11	\$2,300	\$25,300	10	\$2,000	\$20,000	2 \$30,000	\$60,000	3	\$5,800	\$17,400	2	\$3,000.00	\$6,000	\$281,660
Castlewood	Wawona	Backyard Mains Adjacent/Parallel to Road	Wawona	Seminole	6/7	(2.5), (2)	1972	6	\$70	\$138,040	9	\$2,000	\$18,000	11	\$2,300	\$25,300	12	\$2,000	\$24,000	2 \$30,000	\$60,000	3	\$5,800	\$17,400	2	\$3,000.00	\$6,000	\$288,740
Patricia (E)	Patricia	Backyard Mains Adjacent/Parallel to Road	Moran	Gertrude	4/5,2/3	(2), (1.5), (1)	2191	8,6	\$73	\$158,848	12	\$2,000	\$24,000	16	\$2,300	\$36,800	12	\$2,250	\$27,000	1 \$30,000	\$30,000	3	\$5,800	\$17,400	3	\$3,000.00	\$9,000	\$303,048
San Ramon	San Ramon	Backyard Mains Adjacent/Parallel to Road	Wawona	Kiote Hills	6/7	(2), (1.5), (1)	1578	6	\$70	\$110,460	7	\$2,000	\$14,000	10	\$2,300	\$23,000	9	\$2,000	\$18,000	1 \$30,000	\$30,000	2	\$5,800	\$11,600	2	\$3,000.00	\$6,000	\$213,060
Blue Lake Springs (N)	Blue Lake Springs	Backyard Mains Adjacent/Parallel to Road - 4" Pipe in the Street	Linda	Meadow Dr	1	2	2410	12,8	\$80	\$192,800	6	\$2,000	\$12,000	8	\$2,300	\$18,400	6	\$2,925	\$17,550	1 \$30,000	\$30,000	3	\$5,800	\$17,400	2	\$3,000.00	\$6,000	\$294,150
Patricia (W)	Patricia	Backyard Mains Adjacent/Parallel to Road	Getrude	George Ann	4/5	(2.5), (2), (1.5)	1972	8	\$75	\$147,900	8	\$2,000	\$16,000	10	\$2,300	\$23,000	12	\$2,500	\$30,000	2 \$30,000	\$60,000	3	\$5,800	\$17,400	2	\$3,000.00	\$6,000	\$300,300
Seminole	Wawona	Backyard Mains Adjacent/Parallel to Road	Silverado	El Ranchero	6/7	(2), (1)	2673	6	\$70	\$187,110	10	\$2,000	\$20,000	13	\$2,300	\$29,900	9	\$2,000	\$18,000	1 \$30,000	\$30,000	4	\$5,800	\$23,200	3	\$3,000.00	\$9,000	\$317,210
Meadow	Wawona	Backyard Mains Adjacent/Parallel to Road	Brae Burn	Kiote Hills	6/7	(2), (1.5)	2805	8,6	\$75	\$210,375	9	\$2,000	\$18,000	24	\$2,300	\$55,200	14	\$2,250	\$31,500	1 \$30,000	\$30,000	4	\$5,800	\$23,200	3	\$3,000.00	\$9,000	\$377,275
Colleen	Patricia	Backyard Mains Adjacent/Parallel to Road	Patricia	End of Line- Court	4/5	(2), (1.5)	964	6	\$70	\$67,480	3	\$2,000	\$6,000	5	\$2,300	\$11,500	1	\$2,000	\$2,000	0 \$30,000	\$0	1	\$5,800	\$5,800	1	\$3,000.00	\$3,000	\$95,780
Kiote Hills	San Ramon	Backyard Mains Adjacent/Parallel to Road	Castlewood	Seminole	6/7	2	1841	6	\$70	\$128,870	4	\$2,000	\$8,000	6	\$2,300	\$13,800	7	\$2,000	\$14,000	0 \$30,000	\$0	3	\$5,800	\$17,400	2	\$3,000.00	\$6,000	\$188,070
Moran (N)	Blue Lake Springs	Mains in Street	Hwy 4	Marilyn	1	(3), (2.5), (1.5)	3068	12,6	\$78	\$239,304	12	\$2,000	\$24,000	15	\$2,300	\$34,500	10	\$2,675	\$26,750	1 \$30,000	\$30,000	3	\$5,800	\$17,400	3	\$3,000.00	\$9,000	\$380,954
Blue Lake Springs (S)	Blue Lake Springs	Backyard Mains Adjacent/Parallel to Road	Meadow Ct	Moran	2/3	(2), (1.5)	1753	8	\$75	\$131,475	6	\$2,000	\$12,000	8	\$2,300	\$18,400	5	\$2,500	\$12,500	0 \$30,000	\$0	3	\$5,800	\$17,400	2	\$3,000.00	\$6,000	\$197,775
Anna Lee (N)	Julia	Mains in Street	Nola	Rainy	4/5	(1.5)	1972	6	\$70	\$138,040	7	\$2,000	\$14,000	9	\$2,300	\$20,700	4	\$2,000	\$8,000	1 \$30,000	\$30,000	2	\$5,800	\$11,600	2	\$3,000.00	\$6,000	\$228,340
Baywood View	San Ramon	Backyard Mains Adjacent/Parallel to Road	Almaden	End of Line End of Boundary	6/7	(2.5), (2), (1.5)	1797	6	\$70	\$125,790	5	\$2,000	\$10,000	7	\$2,300	\$16,100	4	\$2,000	\$8,000	0 \$30,000	\$0	1	\$5,800	\$5,800	2	\$3,000.00	\$6,000	\$171,690
Shirley	Rainy	Backyard Mains Adjacent/Parallel to Road	Patrica	End of Line- Court	4/5	(1), (1.5)	833	6	\$70	\$58,310	3	\$2,000	\$6,000	4	\$2,300	\$9,200	4	\$2,000	\$8,000	0 \$30,000	\$0	1	\$5,800	\$5,800	1	\$3,000.00	\$3,000	\$90,310
Rainy (W)	Rainy	Backyard Mains Adjacent/Parallel to Road - 6" and 4" in Street	Michelle	Anna Lee	4/5	(2), (1.5)	1740	6	\$70	\$121,800	7	\$2,000	\$14,000	9	\$2,300	\$20,700	4	\$2,000	\$8,000	0 \$30,000	\$0	2	\$5,800	\$11,600	2	\$3,000.00	\$6,000	\$182,100
Dean Julia	Dean Julia	4" and 2.5" mains in Street 2" Main in Street	Moran Nola	Nola Gloria	1 2/3	(4), (2.5) (2)	3068 1534	8,6 6	\$73 \$70	\$222,430 \$107,380	14 7	\$2,000 \$2,000	\$28,000 \$14,000	16 9	\$2,300 \$2,300	\$36,800 \$20,700	8 4	\$2,250 \$2,000	\$18,000 \$8,000	0 \$30,000 0 \$30,000	\$0 \$0	4 2	\$5,800 \$5,800	\$23,200 \$11,600	3 2	\$3,000.00 \$3,000.00	\$9,000 \$6,000	\$337,430 \$167,680
Moran (S)	Patricia	Backyard Mains Adjacent/Parallel to Road	Rainy	End of Line	2/3	1.5	2849	8,6	\$73	\$206,553	5	\$2,000	\$10,000	5	\$2,300	\$11,500	4	\$2,250	\$9,000	0 \$30,000	\$0	4	\$5,800	\$23,200	3	\$3,000.00	\$9,000	\$269,253
Jearrilynn	Rainy	Backyard Mains Adjacent/Parallel to Road	Jeannie	End of Line- Court	4/5	(1.5), (1)	1227	6	\$70	\$85,890	5	\$2,000	\$10,000	7	\$2,300	\$16,100	4	\$2,000	\$8,000	0 \$30,000	\$0	2	\$5,800	\$11,600	1	\$3,000.00	\$3,000	\$134,590
Moran (M)	Blue Lake Springs	Backyard Mains Adjacent/Parallel to Road and in Street	Marilynn	Rainy	2/3	(2.5), (1.5), 1.5	3725	8	\$75	\$279,375	16	\$2,000	\$32,000	20	\$2,300	\$46,000	12	\$2,500	\$30,000	1 \$30,000	\$30,000	5	\$5,800	\$29,000	4	\$3,000.00	\$12,000	\$458,375
Linda	Blue Lake Sprtogs	Backyard Mains Adjacent/Parallel to Road	Moran	Blue Lake Springs	1	2	745	12	\$85	\$63,325	3	\$2,000	\$6,000	4	\$2,300	\$9,200	2	\$3,350	\$6,700	0 \$30,000	\$0	1	\$5,800	\$5,800	1	\$3,000.00	\$3,000	\$94,025
Anna Lee (S)	Rainy	1.5" and 2.0" mains in Street	Rainy	Diana	2/3	(2),(1.5)	1972	6	\$70	\$138,040	10	\$2,000	\$20,000	11	\$2,300	\$25,300	2	\$2,000	\$4,000	0 \$30,000	\$0	1	\$5,800	\$5,800	2	\$3,000.00	\$6,000	\$199,140
Dianna	Rainy	Backyard Mains Adjacent/Parallel to Road - 3" in Street	Rainy	End of Line- Court	2/3	(3)	1052	6	\$70	\$73,640	5	\$2,000	\$10,000	6	\$2,300	\$13,800	2	\$2,000	\$4,000	0 \$30,000	\$0	1	\$5,800	\$5,800	1	\$3,000.00	\$3,000	\$110,240
Michelle	Rainy	Backyard Mains Adjacent/Parallel to Road	Rainy	Jeannie	4/5	(1.5)	657	6	\$70	\$45,990	2	\$2,000	\$4,000	4	\$2,300	\$9,200	2	\$2,000	\$4,000	0 \$30,000	\$0	1	\$5,800	\$5,800	1	\$3,000.00	\$3,000	\$71,990
Cypress Point	Wawona	Mains in Street	Meadow	End of Line	6/7	1.5	1052	8,6	\$73	\$76,270	2	\$2,000	\$4,000	4	\$2,300	\$9,200	3	\$2,250	\$6,750	0 \$30,000	\$0	1	\$5,800	\$5,800	1	\$3,000.00	\$3,000	\$105,020
North Sierra	San Ramon	Backyard Mains Adjacent/Parallel to Road	Castlewood	End of Line Dead End	6/7	(2.5)	657	6	\$70	\$45,990	2	\$2,000	\$4,000	4	\$2,300	\$9,200	2	\$2,000	\$4,000	0 \$30,000	\$0	0	\$5,800	\$0	1	\$3,000.00	\$3,000	\$66,190
Almaden	San Ramon	Backyard Mains Adjacent/Parallel to Road	Seminole	Baywood view	6/7	(2)	438	6	\$70	\$30,660	2	\$2,000	\$4,000	2	\$2,300	\$4,600	4	\$2,000	\$8,000	0 \$30,000	\$0	0	\$5,800	\$0	1	\$3,000.00	\$3,000	\$50,260
Dawyn	Julia	2.0" mains in Street	Moran	Marilyn	2/3	(2)	964	6	\$70	\$67,480	3	\$2,000	\$6,000	5	\$2,300	\$11,500	3	\$2,000	\$6,000	1 \$30,000	\$30,000	1	\$5,800	\$5,800	1	\$3,000.00	\$3,000	\$129,780
Silverado	San Ramon	Backyard Mains Adjacent/Parallel to Road	North Sierra	Baywood view End of Line	6/7	(6), (2)	1534	6	\$70	\$107,380	7	\$2,000	\$14,000	8	\$2,300	\$18,400	7	\$2,000	\$14,000	1 \$30,000	\$30,000	2	\$5,800	\$11,600	2	\$3,000.00	\$6,000	\$201,380
Russell	Dean	2.0" mains in Street	Moran	End of End Boundary	1	(2),(1.5)	3068	12,8,6	\$73	\$222,430	13	\$2,000	\$26,000	16	\$2,300	\$36,800	8	\$2,500	\$20,000	0 \$30,000	\$0	4	\$5,800	\$23,200	3	\$3,000.00	\$9,000	\$337,430
David Lee	Dean	2.0" mains in Street	Russel (N)	Russel (S)	1	(2)	1315	6	\$70	\$92,050	6	\$2,000	\$12,000	7	\$2,300	\$16,100	2	\$2,000	\$4,000	0 \$30,000	\$0	1	\$5,800	\$5,800	1	\$3,000.00	\$3,000	\$132,950
Marilynn	Julia	3.0" and 2.0" mains in Street	Moran	Nola	2/3	(2),(3)	2367	6	\$70	\$165,690	10	\$2,000	\$20,000	12	\$2,300	\$27,600	6	\$2,000	\$12,000	0 \$30,000	\$0	2	\$5,800	\$11,600	2	\$3,000.00	\$6,000	\$242,890
Kuehn	Dean	2.5" mains in Street	Moran	End of Line- Court	1	(2.5)	701	6	\$70	\$49,070	2	\$2,000	\$4,000	4	\$2,300	\$9,200	2	\$2,000	\$4,000	0 \$30,000	\$0	1	\$5,800	\$5,800	1	\$3,000.00	\$3,000	\$75,070
Helen	Julia	Backyard Mains Adjacent/Parallel to Road - 2.5" in Street	Moran	Marilyn	2/3	(2.5)	920	6	\$70	\$64,400	3	\$2,000	\$6,000	5	\$2,300	\$11,500	2	\$2,000	\$4,000	0 \$30,000	\$0	1	\$5,800	\$5,800	1	\$3,000.00	\$3,000	\$94,700
Jeannie	Rainy	Backyard Mains Adjacent/Parallel to Road	Jerrilynn	Shirly	4/5	(2.5),(1.5)	657	6	\$70	\$45,990	2	\$2,000	\$4,000	3	\$2,300	\$6,900	2	\$2,000	\$4,000	1 \$30,000	\$30,000	1	\$5,800	\$5,800	1	\$3,000.00	\$3,000	\$99,690
Rainy (E)	Rainy	4.0" mains in Street	Anna Lee	Moran	2/3	(4)	1400	6	\$70	\$98,000	7	\$2,000	\$14,000	8	\$2,300	\$18,400	2	\$2,000	\$4,000	0 \$30,000	\$0	0	\$5,800	\$0	1	\$3,000.00	\$3,000	\$137,400
Shannon	Julia	1.5" mains in Street	Nola	Julia	2/3	(1.5)	1753	6	\$70	\$122,710	4	\$2,000	\$8,000	6	\$2,300	\$13,800	4	\$2,000	\$8,000	0 \$30,000	\$0	1	\$5,800	\$5,800	2	\$3,000.00	\$6,000	\$164,310
Gertrude	Patricia	Backyard Mains Adjacent/Parallel to Road	Rainy	Patricia	4/5	(2.5), (2), (1.5)	2147	8	\$75	\$161,025	10	\$2,000	\$20,000	13	2300	\$29,900	5	2500	\$12,500	0 \$30,000	\$0	4	\$5,800	\$23,200	2	\$3,000.00	\$6,000	\$252,625

APPENDIX A

American Community Survey

