STATE OF CALIFORNIA — DEPARTMENT OF FINANCE ECONOMIC AND FISCAL IMPACT STATEMENT (REGULATIONS AND ORDERS) STD. 399 (Rev. 10/2019)

ECONOMIC IMPACT STATEMENT

| | ECONOMIC IMITACT S | O LATENIEN I | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|------------------------------------------------------|--------------------|
| DEPARTMENT NAME | CONTACT PERSON | EMAIL ADDRESS | TELEPHONE NUMBER |
| State Water Resources Control Board | Sherly Rosilela | sherly.rosilela@waterboards.ca. | 916-3415578 |
| DESCRIPTIVE TITLE FROM NOTICE REGISTER OR FORM 400 Onsite Treatment and Reuse of Nonpota | ble Water regulations | | NOTICE FILE NUMBER |
| A. ESTIMATED PRIVATE SECTOR COST IMPA | CTS Include calculations and assump | tions in the rulemaking record. | |
| Check the appropriate box(es) below to indicat a. Impacts business and/or employees b. Impacts small businesses c. Impacts jobs or occupations d. Impacts California competitiveness | e. Imposes reporting re | instead of performance | |
| | a through g is checked, complete is checked, complete the Fiscal Im | = | |
| 2. The (Agency/Department) | | impact of this regulation (which includes the | fiscal impact) is: |
| ⊠ Below \$10 million Between \$10 and \$25 million | | | |
| | is over \$50 million, agencies are required ent Code Section 11346.3(c)] | to submit a <u>Standardized Regulatory Impact As</u> | <u>sessment</u> |
| 3. Enter the total number of businesses impacted | 68 (see att.) | | |
| Describe the types of businesses (Include nonp | orofits): Commercial, commercial | real estate, hospitality, nonprofits. | See att. |
| Enter the number or percentage of total businesses impacted that are small businesses: | 0 (see att.) | | |
| 4. Enter the number of businesses that will be cre | ated: 0 elimina | ted: <u>0</u> | |
| Explain: The regulation is not expecte | d to cause entry of new busine | esses or the exit of existing ones. Se | ee att. |
| 5. Indicate the geographic extent of impacts: | 7 | | |
| 6. Enter the number of jobs created: 50/yr in 7 | yrs and eliminated: 0 | | |
| Describe the types of jobs or occupations impatreatment trains. See att. | cted: Jobs related to manufact | uring and installation of alternate v | vater source |
| Will the regulation affect the ability of California other states by making it more costly to produc If YES, explain briefly: - | e goods or services here? YI | | |
| | | | |
| | | | |

STATE OF CALIFORNIA — DEPARTMENT OF FINANCE ECONOMIC AND FISCAL IMPACT STATEMENT (REGULATIONS AND ORDERS) STD. 399 (Rev. 10/2019)

ECONOMIC IMPACT STATEMENT (CONTINUED)

| В. | B. ESTIMATED COSTS Include calculations and assumptions in the rulemaking record. | |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|
| 1. | 1. What are the total statewide dollar costs that businesses and individuals may incur to comply with this regulation over its | lifetime? \$ 2.3M - 7.0M /yr |
| | | Years: 1-7 |
| | b. Initial costs for a typical business: \$275,000 - 400,000 Annual ongoing costs: \$27,500 - 43,000 | Years: 1-7 |
| | c. Initial costs for an individual: \$0 Annual ongoing costs: \$0 | <u></u> |
| | d. Describe other economic costs that may occur: No other economic costs are expected to occur. | |
| | | |
| 2. | 2. If multiple industries are impacted, enter the share of total costs for each industry: 6% nonprofit (\$0.1M - \$0.4M) real estate (\$2.2M - \$6.6M). See attachment. | and 94% commercial/comm. |
| 3. | 3. If the regulation imposes reporting requirements, enter the annual costs a typical business may incur to comply with thes Include the dollar costs to do programming, record keeping, reporting, and other paperwork, whether or not the paperwork must | e requirements. st be submitted. \$ 0 (see att.) |
| 4. | 4. Will this regulation directly impact housing costs? YES X NO | |
| | If YES, enter the annual dollar cost per housing unit: 9 | |
| | Number of units: 0 | |
| 5. | 5. Are there comparable Federal regulations? YES X NO | |
| | Explain the need for State regulation given the existence or absence of Federal regulations: Adoption of the regula section 13558 of the Water Code. | tions is mandated by |
| | Enter any additional costs to businesses and/or individuals that may be due to State - Federal differences: \$ 0 | |
| c. | C. ESTIMATED BENEFITS Estimation of the dollar value of benefits is not specifically required by rulemaking law, but enc | ouraged. |
| 1. | 1. Briefly summarize the benefits of the regulation, which may include among others, the health and welfare of California residents, worker safety and the State's environment: The regulations would proonsite treated nonpotable water reuse projects, thus it would further ensure the protection | |
| | welfare, with no adverse impacts to worker safety or California's environment. | |
| 2. | 2. Are the benefits the result of: 🔀 specific statutory requirements, or 🔲 goals developed by the agency based on broad | d statutory authority? |
| | Explain: Section 13558 of the Water Code mandates the adoption of the regulations. | |
| 3. | 3. What are the total statewide benefits from this regulation over its lifetime? \$ 0 (see attachment) | |
| 4. | 4. Briefly describe any expansion of businesses currently doing business within the State of California that would result from of equipment and material for treatment trains and businesses that provide support may | |
| | in the short term, but this is not expected to be significant statewide. See attachment. | |
| D. | D. ALTERNATIVES TO THE REGULATION Include calculations and assumptions in the rulemaking record. Estimation of specifically required by rulemaking law, but encouraged. | f the dollar value of benefits is not |
| 1. | List alternatives considered and describe them below. If no alternatives were considered, explain why not: No alternatives because adoption of the regulations is mandated by law. The statutory mandate is explicit a | |
| | State Board with the discretion to consider any alternatives. See attachment. | <u>. </u> |

STATE OF CALIFORNIA — DEPARTMENT OF FINANCE ECONOMIC AND FISCAL IMPACT STATEMENT (REGULATIONS AND ORDERS)

STD. 399 (Rev. 10/2019)

| | | | ECON | JMIC IMPACT | STATEMENT (CONTINUED) |
|----|---------------------------------|----------------------------------------|-----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2. | Summarize the | total statewide c | osts and benefits | from this regulation ar | nd each alternative considered: |
| | Regulation: | Benefit: \$ | 0 | Cost: \$ 2.3M - 7.0 | OM /yr |
| | Alternative 1: | | | Cost: \$ n/a | |
| | Alternative 2: | | n/a | | |
| 3. | | | | —————————————————————————————————————— | Statutory mandate does not provide the State Board with the |
| | | | _ | es. See attachmer | · · · · · · · · · · · · · · · · · · · |
| 4. | regulation man | dates the use of edures. Were pe | f specific techno rformance stanc | | |
| | | | | es. See attachmer | |
| | | | | | |
| Ε. | MAJOR REGUI | LATIONS Includ | de calculations a | nd assumptions in the | rulemaking record. |
| | | | | , , | (Cal/EPA) boards, offices and departments are required to Safety Code section 57005). Otherwise, skip to E4. |
| 1. | Will the estimate | ed costs of this re | egulation to Calif | ornia business enterpri | ises exceed \$10 million ? YES NO |
| | | | | | complete E2. and E3 NO, skip to E4 |
| 2. | Briefly describe | each alternative, | , or combination | of alternatives, for which | ch a cost-effectiveness analysis was performed: |
| | Alternative 1: | | | | |
| | Alternative 2: | | | | - |
| | (Attach addition | al pages for othe | r alternatives) | | |
| 2 | F 4b | | | and a supplication of the | the database and according to the street of |
| 3. | | | ernative just desc - | | ated total cost and overall cost-effectiveness ratio: ectiveness ratio: \$ - |
| | Alternative 1: T | | | . | ectiveness ratio: \$ - |
| | Alternative 2: T | | _ | | ectiveness ratio: \$ - |
| 1 | | | L roviou bayo an | | |
| 4. | exceeding \$50 | million in any 12 | | etween the date the ma | mpact to business enterprises and individuals located in or doing business in California ajor regulation is estimated to be filed with the Secretary of State through 12 months |
| | YES [| X NO | | | |
| | - | • | | zed Regulatory Impact A le the SRIA in the Initial S | Assessment (SRIA) as specified in statement of Reasons. |
| 5. | Briefly describe | _ | | | |
| | | | | | egulations are assumed to increase the investment (capital costs) in existing |
| | multifamily re | esidential, com | mercial, and m | ixed use buildings ir | n City & County of San Francisco and County of Los Angeles . See attachmen |
| | The incentive for | or innovation in p | products, materia | als or processes: The p | proposed regulations will have negligible impact on innovation in products |
| | | | | | ogies and due to the relatively small scale installations. See attachment |
| | The benefits of residents, work | the regulations, er safety, and the | including, but no e state's environr | ot limited to, benefits to nent and quality of life. | o the health, safety, and welfare of California , among any other benefits identified by the agency: The proposed regulations |
| | | | | | fare of California residents and worker safety. See attachment. |

STATE OF CALIFORNIA — DEPARTMENT OF FINANCE ECONOMIC AND FISCAL IMPACT STATEMENT (REGULATIONS AND ORDERS) STD. 399 (Rev. 10/2019)

FISCAL IMPACT STATEMENT

| (Pursuant to Section 6 of Article XIII B of the C | | able by the State. (Approximate) tions 17500 et seq. of the Governi | ment Code). |
|---------------------------------------------------------------------------------------------------|----------------------------------------------|------------------------------------------------------------------------|------------------------|
| \$ | _ | | |
| a. Funding provided in | | | |
| Budget Act of | or Chapter | , Statutes of | |
| b. Funding will be requested in the Govern | or's Budget Act of | | |
| | Fiscal Year: | | |
| 2. Additional expenditures in the current State (Pursuant to Section 6 of Article XIII B of the C | | | |
| \$ | | tions 17 300 et seq. of the doverni | ment edde). |
| Check reason(s) this regulation is not reimbursabl | | nformation: | |
| a. Implements the Federal mandate contai | ned in | | |
| b. Implements the court mandate set forth | by the | | Court. |
| Case of: | | vs | |
| c. Implements a mandate of the people of | this State expressed in their a _l | oproval of Proposition No. | |
| Date of Election: | | | |
| d. Issued only in response to a specific requ | | | |
| Local entity(s) affected: | | | |
| | | | |
| e. Will be fully financed from the fees, rever | nue, etc. from: | | |
| Authorized by Section: | 0 | f the | Code; |
| | t of local government which v | vill, at a minimum, offset any addi | tional costs to each; |
| f. Provides for savings to each affected uni | | | |
| f. Provides for savings to each affected uni g. Creates, eliminates, or changes the pena | Ity for a new crime or infraction | on contained in | |
| g. Creates, eliminates, or changes the pena | lty for a new crime or infraction | on contained in | |
| | lty for a new crime or infractio | on contained in | |
| g. Creates, eliminates, or changes the pena 3. Annual Savings. (approximate) | - | | |
| g. Creates, eliminates, or changes the pena 3. Annual Savings. (approximate) | - | | rrent law regulations. |
| g. Creates, eliminates, or changes the pena 3. Annual Savings. (approximate) | – makes only technical, non-subs | stantive or clarifying changes to cui | rrent law regulations. |

STATE OF CALIFORNIA — DEPARTMENT OF FINANCE ECONOMIC AND FISCAL IMPACT STATEMENT (REGULATIONS AND ORDERS) STD. 399 (Rev. 10/2019)

FISCAL IMPACT STATEMENT (CONTINUED)

| B. FISCAL EFFECT ON STATE GOVERNMENT Indicate appropriate boxes 1 through 4 and attach calculations and a year and two subsequent Fiscal Years. | ssumptions of fiscal impact for the current |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|
| 1. Additional expenditures in the current State Fiscal Year. (Approximate) | |
| \$ | |
| \$ | |
| a. Absorb these additional costs within their existing budgets and resources. | |
| | |
| b. Increase the currently authorized budget level for theFiscal Year | |
| 2. Savings in the current State Fiscal Year. (Approximate) | |
| \$ | |
| 3. No fiscal impact exists. This regulation does not affect any State agency or program. | |
| 4. Other. Explain | |
| | |
| C. FISCAL EFFECT ON FEDERAL FUNDING OF STATE PROGRAMS Indicate appropriate boxes 1 through 4 and att impact for the current year and two subsequent Fiscal Years. | ach calculations and assumptions of fiscal |
| 1. Additional expenditures in the current State Fiscal Year. (Approximate) | |
| \$ | |
| 2. Savings in the current State Fiscal Year. (Approximate) | |
| \$ | |
| 3. No fiscal impact exists. This regulation does not affect any federally funded State agency or program. | |
| 4. Other. Explain | |
| | |
| FISCAL OFFICER SIGNATURE | DATE |
| Signed form on file | |
| The signature attests that the agency has completed the STD. 399 according to the instructions in SAM sections and section in the impacts of the proposed rulemaking. State boards, offices, or departments not under an Agency Secretary fighest ranking official in the organization. | |
| AGENCY SECRETARY | DATE |
| Signed form on file | |
| Finance approval and signature is required when SAM sections 6601-6616 require completion of Fiscal In | npact Statement in the STD. 399. |
| DEPARTMENT OF FINANCE PROGRAM BUDGET MANAGER | DATE |
| | |
| | · |

Attachment to STD 399

Onsite Treatment and Reuse of Nonpotable Water Regulations

ECONOMIC IMPACT STATEMENT Supplemental Notes

Section A, Estimated Private Sector Cost Impacts

A.2.

State Board staff estimated total cost impact of the proposed regulations for the first seven years after the regulation is effective, whereas total cost impact includes direct cost impact and fiscal impact. Direct cost impact to privately owned businesses and fiscal impact to local government consist of capital and operations & maintenance costs related to replacement of and the subsequent operation and maintenance of existing OTNWS in operation before the effective date of the regulations. Total cost is expected to range between \$6.4 million and \$8.6 million per year in the first five years, where the maximum total cost is expected to occur on year 5. Costs for subsequent years beyond year 5 are limited to annually incurred operations and maintenance cost of \$2.8 million.

Cost estimate for the first 7 years of regulatory implementation, for privately owned business and local governments

| Year | Capital Cost | O&M Cost | Total Cost |
|------|--------------|-------------|-------------|
| 1 | \$5,815,000 | \$567,100 | \$6,382,100 |
| 2 | \$5,815,000 | \$1,134,200 | \$6,949,200 |
| 3 | \$5,815,000 | \$1,701,300 | \$7,516,300 |
| 4 | \$5,815,000 | \$2,268,400 | \$8,083,400 |
| 5 | \$5,815,000 | \$2,835,500 | \$8,650,500 |
| 6 | \$0 | \$2,835,500 | \$2,835,500 |
| 7 | \$0 | \$2,835,500 | \$2,835,500 |

The breakdown of direct cost impact and fiscal impact are further provided in Economic Impact Statement section B.1 response and Fiscal Impact Statement section A.6 response.

Assumptions and Calculations

The cost estimate is based on the best available data to State Board staff at the time the analysis was performed with the following assumptions:

- Existing rainwater treatment systems will be replaced based on the requirements for roof runoff treatment standards.
- The cost impacts of the proposed regulations are limited to existing OTNWS in operation before the effective date of the proposed regulations. Onsite treatment and reuse of alternate water sources is not mandatory statewide. The state has no ability to reasonably predict where and how many new alternate water source systems will be constructed statewide. The proposed regulations will provide a statewide minimum standard for treatment, distribution, and use of alternate water sources. The proposed regulations will have no effect on the decisions to have new alternate water source systems or OTNWS constructed. In local jurisdictions where onsite treatment and reuse of nonpotable water is mandated through a local jurisdiction ordinance, such as City and County of San Francisco, any costs related to installation and operation of new OTNWS will be incurred regardless of the adoption of the proposed regulations.
- Capital cost and O&M of treatment train for each type of alternate water source are assumed equal for indoor and outdoor uses. The pathogen log reduction target difference between indoor and outdoor uses is generally between 0.5 to 1.0 log, which can easily be addressed by minimal increase in UV dose (electricity cost) or free chlorine dose (chemical cost).
- Existing OTNWS will incur a 100% capital cost (replacement) and ongoing 100% annual O&M cost. To simplify the cost estimates and to account for the many variations between each installed system conditions and operations that can result in lower cost or higher cost for upgrading, State Board staff conservatively assumes the full replacement (capital) cost and full O&M cost for each existing OTNWS. In reality, existing OTNWS may already have some or most of the treatment processes and associated auxiliary equipment, which would not necessitate a full replacement (i.e. partial treatment train replacement or addition to an existing treatment train would be sufficient) to comply with the proposed regulations. For example, an existing OTNWS treatment train may already have existing filtration process and need only new disinfection system. A full replacement (capital) cost is a conservative assumption as it likely overestimates the cost of the proposed regulation. Existing OTNWS have existing and recurring associated O&M cost; therefore, the assumption of full O&M cost is conservative. Depending on the extent of upgrade or replacement, an existing OTNWS may incur incremental O&M cost as a result of complying with the proposed regulations.
- No additional costs are associated with reporting requirements for the proposed regulations. The existing OTNWS are already required to submit water quality monitoring reports to their local jurisdictions. These existing water quality reporting are comparable to water quality reporting required by the proposed regulations.

- The statutes allow up to five years for the owners of existing alternate water source systems to come into compliance with the state regulations. For the estimation of direct cost impact and fiscal impact of the proposed regulations, staff assumed that the installation of replacement systems would occur in equal increments during the first five years after the proposed regulations are effective. The assumption that system replacement would be evenly distributed over time is based on the following. First, data on existing alternate water source system sizes, system owner's budgets, and other individual/site-specific information are not available at the time of writing, which makes it infeasible for State Board staff to make system-specific replacement projections. Second, in the absence of system-specific data, the assumption that system replacement would be evenly distributed over the five-year period is most consistent with the following evidence and observed factors:
 - Decentralized implementation: The replacement process will be carried out by multiple independent entities (building owners or private companies), each making their own decisions about timing and resources.
 - Local jurisdiction resource availability to implement regulations: It is anticipated that local jurisdiction will be absorbing the additional permitting workload with their existing available staffing, which would result in paced review and permit issuance.
 - Lack of historical precedence of compliance rate for similar regulations: The proposed regulations will likely be implemented similarly to building standards. Government (state or local) mandated retroactive compliance with construction or installation standards at a building scale, particularly for private owned buildings, is uncommon. Generally, building standards are applicable at the time of permit issuance, and new building standards are not retroactively enforced.
 - Risk mitigation and financial planning: Government owned facilities will likely be replaced over multiple budget years to spread the cost. Phasing replacements over multiple years will reduce the risk of supply chain issues, overallocated workload (if self-performed by local agency employees), or contractor unavailability.

A.3.

State Board staff identified 68 existing alternate water systems in City and County of San Francisco and County of Los Angeles that would be impacted by the proposed regulations. These systems are located within privately owned commercial, multi-family, or mixed use buildings owned by commercial, real estate holding, hospitality, and non-profit companies.

State Board staff assumes the definition of "Small Business" to be as defined in Government Code section 11346.3 (b)(4)(B), where a "small business" means a business that is all of the following:

- Independently owned and operated,
- Not dominant in its field of operation.
- Has fewer than 100 employees.

Data to determine if an impacted alternate water system is located within a building owned by a business meeting the criteria above are not available. Therefore, it is not possible to determine the number of small businesses, if any, that would be affected by the proposed regulations.

A.4.

The proposed regulation is not expected to cause entry of new businesses or the exit of existing ones from the commercial, multi-family, or mixed use buildings real estate markets. The proposed regulations are assumed to increase the investment (capital costs) in existing OTNWS at multifamily residential, commercial, and mixed use buildings in City and County of San Francisco and County of Los Angeles. This increased investment should be met through increased production by in-state companies, mostly manufacturers of equipment and material for treatment trains. Thus, existing manufacturers of equipment and material for treatment trains, including manufacturers of electrical and plumbing fixtures and chemical manufacturers, will potentially expand production in the short term, as a result of the proposed regulations. Similarly, businesses that provide support, maintenance, and repair of treatment trains might experience some expansion. However, this expansion is not expected to be significant statewide, nor are new businesses expected to be created.

A.6.

With existing manufacturers of equipment and material for treatment trains potentially expanding production in the short term, these businesses might slightly increase hiring of jobs in this sector because of the proposed regulations. However, the overall impact of the proposed regulations on jobs is negligible compared to California's labor force. The total number of jobs within the state is estimated to increase by 50 per year, on average, in the seven years after the proposed regulations are effective. This impact on jobs within the state was estimated using the regional economic model developed by the U.S. Bureau of Economic Analysis, the Regional Input-Output Modeling System (RIMS II). Note that the RIMS II model cannot directly estimate the number of jobs created or eliminated, but it can calculate the net gain or loss of jobs. The table below lists the five main industries in RIMS II that would be affected by investment purchases

made for the existing OTNWS at multifamily residential, commercial, and mixed use buildings.

Affected final-demand industries

| Code | RIMS II Industry |
|--------|--------------------------------------------------------------------------|
| 5419A0 | All other miscellaneous professional, scientific, and technical services |
| 811200 | Electronic and precision equipment repair and maintenance |
| 332996 | Fabricated pipe and pipe fitting manufacturing |
| 33391A | Pump and pumping equipment manufacturing |
| 325180 | Other basic inorganic chemical manufacturing |

Section B, Estimated Costs

B.1.

State Board staff estimated direct cost impact of the proposed regulations on privately owned systems that may be impacted by the proposed regulations for the first seven years after the regulation is effective. Direct costs, which include capital and operations and maintenance, incurred by privately owned businesses are expected to range between \$5.1 million and \$7.0 million per year in the first five years. Costs for subsequent years beyond year 5 are limited to annually incurred operations and maintenance cost of \$2.3 million.

Cost estimate for the first 7 years of regulatory implementation for privately owned systems

| Year | Capital Cost | O&M Cost | Total Cost |
|------|--------------|--------------|--------------|
| 1 | \$ 4,680,000 | \$ 465,400 | \$ 5,145,400 |
| 2 | \$ 4,680,000 | \$ 930,980 | \$ 5,610,800 |
| 3 | \$ 4,680,000 | \$ 1,396,200 | \$ 6,076,200 |
| 4 | \$ 4,680,000 | \$ 1,861,600 | \$ 6,541,600 |
| 5 | \$ 4,680,000 | \$ 2,327,000 | \$ 7,007,000 |
| 6 | \$ 0 | \$ 2,327,000 | \$ 2,327,000 |
| 7 | \$ 0 | \$ 2,327,000 | \$ 2,327,000 |

Capital costs include a complete and fully functional treatment train (all necessary treatment processes complete with auxiliary equipment needed for the proper functioning of each unit process, including plumbing, electrical, and signal wiring within the treatment train), instrumentation and controls integration (including capability for automatic shut-down or diversion), design fees, manufacturing, shipping, and

installation. Annual O&M costs include expenses associated with system maintenance, parts replacement, repair, chemicals, electricity, and operations labor.

Cost estimate for treatment trains by water source type

| Water | Capital Cost | O&M Annual | Capital Cost | O&M Annual |
|-------------|----------------|---------------|--------------|------------|
| Source Type | Estimate Range | Cost Estimate | Average | Cost |
| | | Range | | Average |
| Graywater | \$300,000 to | \$20,000 to | \$400,000 | \$43,000 |
| | \$500,000 | \$66,000 | | |
| Stormwater | \$300,000 to | \$15,000 to | \$375,000 | \$32,500 |
| | \$450,000 | \$50,000 | | |
| Roof runoff | \$200,000 to | \$15,000 to | \$275,000 | \$27,500 |
| | \$350,000 | \$40,000 | | |

The total capital cost for full replacement of all existing privately owned alternate water source systems is assumed to be a one-time cost that will be incurred over the years analyzed. The total annual O&M cost for privately owned OTNWS reflects cost at full replacement. Capital cost and O&M cost are shown below.

Capital cost for existing privately owned alternate water source systems

| Jurisdiction | Alternate Water Source | Number of systems | Capital Cost per system | Total Capital Cost |
|------------------|---------------------------|-------------------|-------------------------|-----------------------|
| City and County | | | | |
| of San Francisco | Rainwater | 27 | \$275,000 | \$7,425,000 |
| City and County | | | | |
| of San Francisco | Stormwater | 2 | \$375,000 | \$750,000 |
| Los Angeles | | | | |
| County | Stormwater | 15 | \$375,000 | \$5,625,000 |
| Los Angeles | | | | |
| County | Graywater | 24 | \$400,000 | \$9,600,000 |
| | | | Total | \$23,400,000 |

Annual O&M cost for existing privately owned alternate water source systems

| Jurisdiction | Alternate Water Source | Number of systems | Annual O&M Cost per system | Total Annual O&M Cost |
|------------------|---------------------------|-------------------|----------------------------------|--------------------------|
| City and County | | | | |
| of San Francisco | Rainwater | 27 | \$27,500 | \$742,500 |
| City and County | | | | |
| of San Francisco | Stormwater | 2 | \$32,500 | \$65,000 |

| Jurisdiction | Alternate Water Source | Number of systems | Annual O&M Cost per system | Total Annual O&M Cost |
|--------------|---------------------------|-------------------|----------------------------------|--------------------------|
| Los Angeles | | | | |
| County | Stormwater | 15 | \$32,500 | \$487,500 |
| Los Angeles | | | | |
| County | Graywater | 24 | \$43,000 | \$1,032,000 |
| | | | Total | \$2,327,000 |

B.1.a

As noted before, data to determine if an impacted alternate water system is located within a building owned by a business meeting the "small business" criteria are not available. Therefore, it is not possible to determine the number of small businesses, if any, that would be affected by the proposed regulations. If a small business is affected, State Water Board staff assumes that the cost incurred by that small business will be the same as the cost incurred by a typical business if it owns and occupies an entire building and operates an alternate water source system. See section B.1.b below. Small businesses that rent and occupy spaces in privately owned buildings with operational alternate water source systems that are impacted by the proposed regulations might incur indirect cost impacts through increase in rent cost or facilities fee.

B.1.b

A typical business is defined as a hypothetical business entity that privately owns and occupies an entire building and operates an alternate water source system with the average attributes. Based on the numbers shown in Table 7, direct costs for a typical business are as following:

- A typical business operating a rainwater (roof runoff) system thus defined would incur a direct cost of approximately \$275,000 in Year 1 assuming a replacement system installation in Year 1. A typical business would incur a direct cost of \$27,500 in Year 2 and in subsequent years for operations and maintenance.
- A typical business operating a stormwater system thus defined would incur a
 direct cost of approximately \$375,000 in Year 1 assuming a replacement system
 installation in Year 1. A typical business would incur a direct cost of \$32,500 in
 Year 2 and in subsequent years for operations and maintenance.
- A typical business operating a graywater system thus defined would incur a
 direct cost of approximately \$400,000 in Year 1 assuming a replacement system
 installation in Year 1. A typical business would incur a direct cost of \$43,000 in
 Year 2 and in subsequent years for operations and maintenance.

B.1.c

Single family residences are not subject to the requirements of the proposed regulations; therefore, individuals are not expected to incur any direct costs to comply with the proposed regulations. The proposed regulations are only applicable to multifamily residential, commercial, and mixed-use occupancies. Costs related to compliance with the proposed regulations will be incurred directly by businesses or private entities owning the multifamily residential or mixed-use occupancy buildings. The costs related to compliance with the proposed regulations may be passed on to individuals in the form of increased cost of goods or services provided by the business, or in the form of increased facilities fee or condominium fee. At the time of this assessment, data to analyze potential pass-through to individuals are not available.

B.2.

Out of the 68 privately owned existing alternate water systems, approximately 6% (4 systems) belong to a nonprofit entity, while the rest of the privately owned existing alternate water systems (94% or 64 systems) are owned by commercial, commercial real estate, and real estate holding (investment) companies. This information is gathered based on a very limited permittee information provided by the Los Angeles County and City and County of San Francisco. Only permit information related to multifamily, mixed-use, and commercial buildings were obtained.

B.3.

No additional costs are associated with reporting requirements for the proposed regulations. The existing alternate water systems (that will be considered onsite treated nonpotable water systems) are already required to submit water quality monitoring reports to their local jurisdictions. These existing water quality reporting are comparable to by water quality reporting required by the proposed regulations.

Section C, Estimated Benefits

C.3.

The anticipated benefit from this proposed regulatory action is the continued protection of the health and welfare of California residents and worker safety through the prevention of cross connection of onsite treated nonpotable water systems and potable water supply and the provision of a health-protective risk-based water quality standards for the use of onsite treated nonpotable water. The potential benefit of the proposed regulations cannot be quantified because the necessary data were not available at the time of writing.

C.4.

Existing manufacturers of equipment and material for treatment trains, including manufacturers of electrical and plumbing fixtures and chemical manufacturers, will potentially expand production in the short term, as a result of the proposed regulations. Similarly, businesses that provide support, maintenance, and repair of treatment trains might experience some expansion. However, this expansion is not expected to be significant statewide, nor are new businesses expected to be created.

Section D, Alternatives to the Regulation

D.1 - D.4

No alternatives were considered for the proposed regulations. The State Board has determined that no reasonable alternative considered or otherwise identified and brought to its attention would be more effective in carrying out the purpose for which this action is proposed, would be as effective and less burdensome to the regulated entities, or would be more cost-effective to the regulated entities, yet equally effective in implementing statutory requirements or other provisions of law, than adopting the proposed regulations. The statutory mandate is explicit in requiring the State Board to adopt risk-based water quality standards and does not provide the State Board with the discretion to consider any alternatives.

Section E, Major Regulations

E.5.

- Increase of investment in the state: As explained in previous sections, the
 proposed regulations are assumed to increase the investment (capital costs) in
 existing OTNWS at multifamily residential, commercial, and mixed use buildings in
 City and County of San Francisco and County of Los Angeles. This increased
 investment should be met through increased production by in-state companies,
 mostly manufacturers of equipment and material for treatment trains. However, the
 magnitude of such investments are negligible when compared to the state economy,
 and thus no significant increase of investment is expected statewide.
- The incentive for innovation in products, materials or processes: The proposed regulations rely on available and well-established treatment technologies (e.g. UV disinfection, chlorination, filtration) for demonstration of log reduction of pathogens. Innovation in the water treatment industry addresses all types of water sources. The scale of volumetric treatment of onsite nonpotable water is very minor compared to other industries, such as treatment of sources of drinking water or wastewater; therefore, the overall impact of the proposed regulations on innovation in products, materials, or processes is negligible compared to the overall water treatment industry.

• The benefits of regulations, including, but not limited to, benefits to the health, safety, and welfare of California residents, worker safety, and the state's environment and quality of life, among any other benefits identified by the agency: The anticipated benefit from this proposed regulatory action is the continued protection of the health and welfare of California residents and worker safety through the prevention of cross connection of onsite treated nonpotable water systems and potable water supply and the provision of a health-protective risk-based water quality standards for the use of onsite treated nonpotable water.

FISCAL IMPACT STATEMENT Supplemental Notes

Section B, Fiscal Effect on Local Government

A.6.

State Board staff estimated fiscal impact of the proposed regulations for the first seven years after the regulation is effective. Fiscal impact is expected to be incurred by local governments that own existing alternate water systems that will be impacted by the proposed regulations. State Board staff does not anticipate any fiscal impact on state government and federal funding of state programs. There are a total of 15 existing installed alternate water systems owned by local government in Los Angeles County that will be impacted by the proposed regulations. The estimated fiscal impact, which include capital and operations & maintenance costs, are expected to range between \$1.2 million and \$1.6 million per year in the first five years. Costs for subsequent years beyond year 5 are limited to annually incurred operations and maintenance cost of \$0.5 million. Cost for the first seven years of regulatory implementation for local government owned systems is presented in the table below.

Cost estimate for the first 7 years of regulatory implementation for all local government owned systems

| Year | Capital Cost | O&M Cost | Total Cost |
|------|--------------|------------|--------------|
| 1 | \$ 1,135,000 | \$ 101,700 | \$ 1,236,700 |
| 2 | \$ 1,135,000 | \$ 203,400 | \$ 1,338,400 |
| 3 | \$ 1,135,000 | \$ 305,100 | \$ 1,440,100 |
| 4 | \$ 1,135,000 | \$ 406,800 | \$ 1,541,800 |
| 5 | \$ 1,135,000 | \$ 508,500 | \$ 1,643,500 |
| 6 | \$ 0 | \$ 508,500 | \$ 508,500 |
| 7 | \$ 0 | \$ 508,500 | \$ 508,500 |