

**ECONOMIC AND FISCAL IMPACT STATEMENT
(REGULATIONS AND ORDERS)**

STD. 399 (Rev. 10/2019)

ECONOMIC IMPACT STATEMENT

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|--|-------------------------------------|---|---------------------------------------|
| DEPARTMENT NAME State Water Resources Control Board | CONTACT PERSON Conny Mitterhofer | EMAIL ADDRESS conny.mitterhofer@waterboard | TELEPHONE NUMBER +1 (916) 341-5720 |
| DESCRIPTIVE TITLE FROM NOTICE REGISTER OR FORM 400 Updates to the Water Diversion and Use and Water Measurement and Reporting Regulations | | | NOTICE FILE NUMBER Z |

A. ESTIMATED PRIVATE SECTOR COST IMPACTS *Include calculations and assumptions in the rulemaking record.*

1. Check the appropriate box(es) below to indicate whether this regulation:

- a. Impacts business and/or employees e. Imposes reporting requirements
 b. Impacts small businesses f. Imposes prescriptive instead of performance
 c. Impacts jobs or occupations g. Impacts individuals
 d. Impacts California competitiveness h. None of the above (Explain below):

-

If any box in Items 1 a through g is checked, complete this Economic Impact Statement.***If box in Item 1.h. is checked, complete the Fiscal Impact Statement as appropriate.***

2. The State Water Resources Control Board estimates that the economic impact of this regulation (which includes the fiscal impact) is:
(Agency/Department)

- Below \$10 million
 Between \$10 and \$25 million
 Between \$25 and \$50 million
 Over \$50 million *[If the economic impact is over \$50 million, agencies are required to submit a Standardized Regulatory Impact Assessment as specified in Government Code Section 11346.3(c)]*

3. Enter the total number of businesses impacted: 9,900 (see att.)Describe the types of businesses (Include nonprofits): All regulated businesses are private water right holders.Enter the number or percentage of total businesses impacted that are small businesses: 5% (see att.)4. Enter the number of businesses that will be created: 0 eliminated: 0Explain: The proposed update to SB 88 is not expected to create or eliminate businesses in California. See attachment.

5. Indicate the geographic extent of impacts: Statewide
 Local or regional (List areas): _____

6. Enter the number of jobs created: 0 and eliminated: 0Describe the types of jobs or occupations impacted: The proposed update to SB 88 is not expected to create or eliminate jobs in California. See attachment.

7. Will the regulation affect the ability of California businesses to compete with other states by making it more costly to produce goods or services here? YES NO

If YES, explain briefly: _____

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ECONOMIC IMPACT STATEMENT (CONTINUED)**B. ESTIMATED COSTS** *Include calculations and assumptions in the rulemaking record.*

1. What are the total statewide dollar costs that businesses and individuals may incur to comply with this regulation over its lifetime? \$ 2.17M + \$151K/yr
- a. Initial costs for a small business: \$ 516 (see att.) Annual ongoing costs: \$ 0 Years: 1
- b. Initial costs for a typical business: \$ 516 (see att.) Annual ongoing costs: \$ 0 Years: 1
- c. Initial costs for an individual: \$ 516 (see att.) Annual ongoing costs: \$ 0 Years: 1
- d. Describe other economic costs that may occur: The proposed update will impact private water right holders' reporting costs as well as expenses related to new measurement and telemetering equipment. See attachment.
2. If multiple industries are impacted, enter the share of total costs for each industry: Water right holders subject to the SB 88 regulation are the only party on which the proposed update imposes obligations and that, as a consequence, would incur costs. See att.
3. If the regulation imposes reporting requirements, enter the annual costs a typical business may incur to comply with these requirements. *Include the dollar costs to do programming, record keeping, reporting, and other paperwork, whether or not the paperwork must be submitted.* \$ 0 (see att.)
4. Will this regulation directly impact housing costs? YES NO
If YES, enter the annual dollar cost per housing unit: \$ 0
Number of units: 0
5. Are there comparable Federal regulations? YES NO

Explain the need for State regulation given the existence or absence of Federal regulations: The Water Board is proposing to revise the SB 88 regulation to improve the data quality and usability as well as to improve the overall clarity of the text. See attachment.

Enter any additional costs to businesses and/or individuals that may be due to State - Federal differences: \$ 0

C. ESTIMATED BENEFITS *Estimation of the dollar value of benefits is not specifically required by rulemaking law, but encouraged.*

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 proposed update is anticipated to improve the accuracy, consistency, and usability of water diversion data, which is essential for effective water management. It will help streamline reporting for water right holders and make data analysis more efficient for the Water Board. See att.
2. Are the benefits the result of: specific statutory requirements, or goals developed by the agency based on broad statutory authority?
Explain: The proposed update to the SB 88 regulation is based on feedback from existing diverters. See attachment.
3. What are the total statewide benefits from this regulation over its lifetime? \$ 0 (see att.)
4. Briefly describe any expansion of businesses currently doing business within the State of California that would result from this regulation: Existing manufacturers of measurement and telemetering devices, engineering consulting firms, contractors, and related businesses that assist diverters likely would not need to expand production. See attachment.

D. ALTERNATIVES TO THE REGULATION *Include calculations and assumptions in the rulemaking record. Estimation of the dollar value of benefits is not specifically required by rulemaking law, but encouraged.*

1. List alternatives considered and describe them below. If no alternatives were considered, explain why not: Alternative 1 considers only two of the requirements proposed in the SB 88 regulation update. Alternative 2 considers all the requirements in the proposed update and makes one of them relatively more stringent. See attachment.

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ECONOMIC IMPACT STATEMENT (CONTINUED)

2. Summarize the total statewide costs and benefits from this regulation and each alternative considered:

Regulation: Benefit: \$ 0 Cost: \$ 4.7M + \$465K/yr
 Alternative 1: Benefit: \$ 0 Cost: \$ 0.6M + \$27K/yr
 Alternative 2: Benefit: \$ 0 Cost: \$ 6.1M + \$694K/yr

3. Briefly discuss any quantification issues that are relevant to a comparison of estimated costs and benefits for this regulation or alternatives: The proposed SB 88 regulation update and alternatives could yield benefits that are not possible to quantify given the existing data. See attachment.

4. Rulemaking law requires agencies to consider performance standards as an alternative, if a regulation mandates the use of specific technologies or equipment, or prescribes specific actions or procedures. Were performance standards considered to lower compliance costs? YES NO

Explain: The proposed update to SB 88 does not mandate the use of specific technologies or equipment, or prescribe specific actions or procedures.

E. MAJOR REGULATIONS *Include calculations and assumptions in the rulemaking record.*

California Environmental Protection Agency (Cal/EPA) boards, offices and departments are required to submit the following (per Health and Safety Code section 57005). Otherwise, skip to E4.

1. Will the estimated costs of this regulation to California business enterprises exceed \$10 million? YES NO

***If YES, complete E2. and E3
If NO, skip to E4***

2. Briefly describe each alternative, or combination of alternatives, for which a cost-effectiveness analysis was performed:

Alternative 1: -
 Alternative 2: -

(Attach additional pages for other alternatives)

3. For the regulation, and each alternative just described, enter the estimated total cost and overall cost-effectiveness ratio:

Regulation: Total Cost \$ - Cost-effectiveness ratio: \$ -
 Alternative 1: Total Cost \$ - Cost-effectiveness ratio: \$ -
 Alternative 2: Total Cost \$ - Cost-effectiveness ratio: \$ -

4. Will the regulation subject to OAL review have an estimated economic impact to business enterprises and individuals located in or doing business in California exceeding \$50 million in any 12-month period between the date the major regulation is estimated to be filed with the Secretary of State through 12 months after the major regulation is estimated to be fully implemented?

YES NO

If YES, agencies are required to submit a Standardized Regulatory Impact Assessment (SRIA) as specified in Government Code Section 11346.3(c) and to include the SRIA in the Initial Statement of Reasons.

5. Briefly describe the following:

The increase or decrease of investment in the State: The proposed update might increase capital expenditure, but the increase is negligible and not sufficiently large to affect production levels of existing in-state manufacturers. See attachment.

The incentive for innovation in products, materials or processes: The proposed update rely on well-established measurement and telemetry technologies, and thus the impact on innovation in products, materials, or processes is negligible. See att.

The benefits of the 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 proposed update is expected to improve the accuracy, consistency, and usability of water diversion data, and streamline reporting. See att.

**ECONOMIC AND FISCAL IMPACT STATEMENT
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FISCAL IMPACT STATEMENT

A. FISCAL EFFECT ON LOCAL GOVERNMENT *Indicate appropriate boxes 1 through 6 and attach calculations and assumptions of fiscal impact for the current year and two subsequent Fiscal Years.*

1. Additional expenditures in the current State Fiscal Year which are reimbursable by the State. (Approximate)
(Pursuant to Section 6 of Article XIII B of the California Constitution and Sections 17500 et seq. of the Government Code).

\$ _____

a. Funding provided in _____

Budget Act of _____ or Chapter _____, Statutes of _____

b. Funding will be requested in the Governor's Budget Act of _____

Fiscal Year: _____

2. Additional expenditures in the current State Fiscal Year which are NOT reimbursable by the State. (Approximate)
(Pursuant to Section 6 of Article XIII B of the California Constitution and Sections 17500 et seq. of the Government Code).

\$ 2.4M (see att.)

Check reason(s) this regulation is not reimbursable and provide the appropriate information:

a. Implements the Federal mandate contained 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 approval of Proposition No. _____

Date of Election: _____

d. Issued only in response to a specific request from affected local entity(s).

Local entity(s) affected: _____

e. Will be fully financed from the fees, revenue, etc. from: adjustment to service charges, fees, or assessments over time (see att.)

Authorized by Section: 17556 of the Government Code;

f. Provides for savings to each affected unit of local government which will, at a minimum, offset any additional costs to each;

g. Creates, eliminates, or changes the penalty for a new crime or infraction contained in _____

3. Annual Savings. (approximate)

\$ _____

4. No additional costs or savings. This regulation makes only technical, non-substantive or clarifying changes to current law regulations.

5. No fiscal impact exists. This regulation does not affect any local entity or program.

6. Other. Explain Local government agencies are projected to incur annual costs of approximately \$310,000 in subsequent State Fiscal Years. See attachment.

**ECONOMIC AND FISCAL IMPACT STATEMENT
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FISCAL IMPACT STATEMENT (CONTINUED)

B. FISCAL EFFECT ON STATE GOVERNMENT *Indicate appropriate boxes 1 through 4 and attach calculations and assumptions of fiscal impact for the current year and two subsequent Fiscal Years.*

1. Additional expenditures in the current State Fiscal Year. (Approximate)

\$ 65,000 (see att.)

It is anticipated that State agencies will:

a. Absorb these additional costs within their existing budgets and resources.

b. Increase the currently authorized budget level for the _____ Fiscal 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 State government agencies are projected to incur annual costs of approximately \$3,600 in subsequent State Fiscal Years. See attachment.

C. FISCAL EFFECT ON FEDERAL FUNDING OF STATE PROGRAMS *Indicate appropriate boxes 1 through 4 and attach calculations and assumptions of fiscal impact for the current year and two subsequent Fiscal Years.*

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

 **Ryan M. Wilson**

 Digitally signed by Ryan M. Wilson
Date: 2025.01.31 14:07:24 -08'00'


DATE

January 31, 2025

The signature attests that the agency has completed the STD. 399 according to the instructions in SAM sections 6601-6616, and understands the impacts of the proposed rulemaking. State boards, offices, or departments not under an Agency Secretary must have the form signed by the highest ranking official in the organization.

AGENCY SECRETARY

 **John Russell**

 Digitally signed by John Russell
Date: 2025.02.14 15:30:01 -08'00'

DATE

February 14, 2025

Finance approval and signature is required when SAM sections 6601-6616 require completion of Fiscal Impact Statement in the STD. 399.

DEPARTMENT OF FINANCE PROGRAM BUDGET MANAGER



DATE

Attachment to STD-399 Form
Proposed Updates to the
Water Diversion and Use and
Water Measurement and Reporting Regulations

Note: The numbers presented with headers, when they appear, indicate the associated question(s) in the STD-399 form.

ECONOMIC IMPACT STATEMENT

A. Estimated Private Sector Cost Impacts

3. Enter the total number of businesses impacted:

Of the 11,500 water rights subject to the SB 88 regulation that were included in this economic impact assessment, approximately 9,900 water rights (86 percent) are held by private diverters, 200 (2 percent) by the state government, and 1,400 (12 percent) by local governments.

Describe the types of businesses (Include nonprofits):

All regulated businesses are private water right holders.

Enter the number or percentage of total businesses impacted that are small businesses:

To assess the impact on typical and small regulated businesses, approximately 9,900 water rights held by private diverters were analyzed. The volume of water allowed to be diverted for a water right varies significantly, ranging from ten acre-feet per year to more than 500,000 acre-feet per year. The median water right among private diverters, in terms of volume allowed to be diverted, is approximately 100 acre-feet, and the fifth percentile is approximately 14 acre-feet. The median number of water rights held by private diverters is one. The “typical” water right holder in this economic impact assessment is, therefore, defined as holding approximately one water right for an allowed diversion volume of 100 acre-feet, and the “small” water right holder is defined as holding one water right for a diversion volume of 14 acre-feet of water or less.

4. Enter the number of businesses that will be created:

Existing manufacturers of measurement equipment and recording devices likely would not need to expand production as a result of the proposed SB 88 regulation update. Similarly, businesses that provide support, maintenance, and repair of such equipment would not experience any notable expansion. Likewise, engineering consulting firms, contractors, and related businesses that assist diverters with the reporting requirements and measurement data management would not experience any notable expansion. Accordingly, it is unlikely that new businesses in these manufacturing or service sectors will be created in the state. No existing business is expected to be eliminated as a result of the proposed SB 88 regulation update.

6. Enter the number of jobs created and eliminated. Describe the types of jobs or occupations impacted:

For the reasons explained in the previous question, it is unlikely that jobs will be created or eliminated within the state as a result of the proposed update.

7. Will the regulation affect the ability of California businesses to compete with other states by making it more costly to produce goods or services here?

The proposed SB 88 regulation update is not expected to make it more costly to produce goods or services in California, and would not put in-state businesses at a disadvantage. Please see C.1.

B. Estimated Costs

1. What are the total statewide dollar costs that businesses and individuals may incur to comply with this regulation over its lifetime?

As explained below, the proposed update will potentially impact water right holders' reporting costs as well as expenses related to new measurement and recording equipment. The proposed update is estimated to have a one-time cost impact on businesses and individuals of approximately \$2.17 million (\$1.53 million in reporting-related tasks plus \$637,000 in equipment installation), plus an annual cost impact of approximately \$151,100 (\$55,600 in reporting-related tasks plus \$95,500 in equipment maintenance).

Reporting Costs

The proposed update to the SB 88 regulation will revise some of the current reporting requirements that could have an economic impact on diverters. More specifically, when reporting, diverters will be required to (1) provide information on rediversions (if requested by the Water Board), (2) provide an email address for their CalWATRS account, (3) submit their measurement data using a specified datafile format or template in CalWATRS, (4) submit their large diversion submissions to CalWATRS (if subject to the large diversion requirements), (5) identify their measurement location, and (6) file a Report of Measurement Methodology form describing how they are measuring and accounting for diversions.

The table below summarizes the impact on reporting costs for private water right holders (reporting costs for state and local governments are analyzed separately). As shown in the table, private water right holders combined will potentially experience a one-time reporting cost of approximately \$1.5 million and subsequent annual reporting costs of approximately \$56,000 as a result of the proposed SB 88 regulation update.

Table 1
Reporting costs for private water right holders

| Reporting-related Task | Cost (\$) | |
|------------------------------|------------------|---------------|
| | One-time | Recurring |
| Rediversion | 0 | 17,967 |
| Email account | 77,678 | 0 |
| Measurement data template | 413,721 | 20,047 |
| Large diversion requirements | 529,304 | 0 |
| Measurement location | 201,964 | 2,506 |
| Measurement methodology | 310,298 | 15,035 |
| Total | 1,532,975 | 55,555 |

Note: Total numbers and percentages in this and subsequent tables may not add up due to rounding. In this and subsequent tables, "Recurring" costs include: (a) estimated annual costs incurred by water right holders after the proposed regulation becomes effective (e.g., annual operation and maintenance of measurement devices), and (b) estimated initial costs sustained in subsequent years as additional water right holders begin to incur these costs (e.g., the cost of submitting an annual report with measurement data).

Water redirection is an important metric for accounting for the total amount of water diverted and used, and many diverters are already measuring and reporting redirections.¹ These diverters would be required to indicate, to the extent possible, the amount of water redirected in submitted measurement data. The amount of time needed to submit the information about a redirection would vary and is expected to be, on average, two hours every year, per point of redirection (“PoRD”). Assuming an hourly rate of \$121.40, which is based on the 2024 median hourly wage of a mechanical engineer in California multiplied by a factor of two to account for benefits and overhead, the cost of reporting the required information to the Water Board would be approximately \$243 per PoRD per year ($\$121.40/\text{hour} \times 2 \text{ hours}$). It is projected that private diverters would be asked to report information for approximately 74 PoRDs every year. Thus, the total reporting cost of this requirement, as shown in the table, would be about \$18,000 per year ($\$243/\text{PoRD} \times 74 \text{ PoRDs}$) for private diverters. Some of the diverters would additionally need to install measurement devices to measure redirections, as discussed later in this document.

Most water right holders, approximately 90 percent, have already provided an email address to the Water Board and, therefore, would not incur any additional cost to comply with the email requirement for a CalWATRS account. It is assumed that the remaining water right holders would have to create an email account and submit it to the Water Board. The amount of time needed to do so would vary and is expected to be, on average, 30 minutes per water right holder. It is projected that approximately 1,280 private water right holders (ten percent of 12,797) would need to create an email account and report it to CalWATRS. Thus, assuming as before an hourly rate of \$121.40, the total reporting cost of this requirement, as shown in the table above, would be approximately \$77,700 for private water right holders.

The amount of time needed to submit measurement data in the template designed by the Water Board would vary and is expected to be, on average, two hours per water right. This average accounts for the instances in which a water right is associated with multiple points of diversion. The average also accounts for both diverters who are already providing measurement data to the Water Board, as well as diverters who have not submitted datafiles before, but are projected to start doing so in the next years. While the former group of diverters will likely spend less than two hours on average to update their datafiles to conform with the template, the latter (and smaller) group will probably need approximately two hours on average to create a datafile conforming to the template and upload it. Among private diverters, it is estimated that approximately 1,704 water rights already submitting datafiles would conform to the template in the first year after the proposed regulation is effective, and another 83 water rights would start submitting datafiles conforming to the template every year afterwards. Therefore, assuming as before an hourly rate of \$121.40, the total reporting cost of the template requirement for private diverters would be an initial \$413,700 plus approximately \$20,000 every year.

The amount of time needed to comply with the large diversion requirement that data be submitted to CalWATRS would depend on, among other factors, whether the diverter is already reporting to a public website in accordance with the existing telemetry requirements. For the large diversion requirements, diverters may either submit measurement data in a template provided in CalWATRS, or they may connect their measurement and reporting equipment to transmit measurement data directly to CalWATRS. Based on current data submission rates for the existing telemetry requirements, it is expected that most diverters will opt to connect their devices to CalWATRS. If the diverter is already reporting to a public website, the amount of time needed to adjust that process to submit to CalWATRS is estimated to be, on average, eight hours per water right. If the diverter is not currently telemetering to a public website, then the amount of time needed to set up a connection to CalWATRS is estimated to be, on average, 16 hours per water right. These averages account for the instances in which a water right is associated with multiple points of diversion and therefore

¹ Diverters may already be measuring redirections specifically, or they may be measuring a combination of redirections, diversions to storage, and/or direct diversions at the same point of diversion.

multiple devices. Notably, the amount of time needed to transmit data to CalWATRS will likely decline over the years, as device manufacturers start supporting CalWATRS integration in the future. Among private diverters, it is estimated that 321 water rights are already telemetering to public websites and an additional 112 would be setting up these connections or uploading large diversion datafile templates for the first time. Therefore, assuming an hourly rate of \$121.40, the total reporting cost of this requirement for private diverters would be approximately \$529,300. Some of the 112 diverters would additionally need appropriate measurement and recording devices.

Diverters will be able to identify their measurement location in CalWATRS by zooming in on a map and clicking the appropriate location. The amount of time needed to do that would vary and is expected to be, on average, 15 minutes per water right. This average accounts for the instances in which a water right is associated with multiple points of diversion. Among private diverters, it is estimated that approximately 6,700 water rights (those already submitting annual reports with measurement data to the Water Board, as well as those with diversions greater than zero that are submitting annual reports without measurement data) would identify their measurement locations in the first year after the proposed regulation is effective, and an additional 83 water rights would start doing so every year afterwards (those that will start submitting measurement data to the Board). Therefore, assuming an hourly rate of \$121.40, the total reporting cost of this requirement for private diverters would be an initial \$202,000 plus approximately \$2,500 every year.

The amount of time needed to describe the existing measurement methodology being used by the diverter and to file the Report of Measurement Methodology with the Water Board would vary and is expected to be, on average, 1.5 hours per water right. This estimate accounts for the potential time spent on describing calculations, conversions, and quality assurance protocols, through which the diverter accounts for the volume and flow rate of water diverted under each water right. Among private diverters, it is estimated that approximately 1,704 water rights already submitting datafiles would additionally file the Report of Measurement Methodology in the first year after the proposed regulation is effective, and another 83 water rights would start submitting such reports every year afterwards. Therefore, assuming as before an hourly rate of \$121.40, the total reporting cost of the measurement methodology requirement for private diverters would be an initial \$310,300 plus approximately \$15,000 every year.

Equipment Installation and Maintenance Costs

Some of the diverters will need certain equipment in order to be able to comply with the new redirection and large diversion requirements. Table 2 summarizes the impact of these requirements on equipment installation, operation, and maintenance costs for private diverters (equipment installation and maintenance costs for state and local governments are analyzed separately). As shown in the table, private diverters will potentially experience (one-time) equipment installation costs of approximately \$637,000 and subsequent annual maintenance costs of approximately \$96,000 as a result of the proposed SB 88 regulation update.

Table 2
Equipment installation and maintenance costs for private water right holders

| Equipment-related Task | Cost (\$) | |
|---|------------------|------------------|
| | One-time | Recurring |
| Measurement device installation (rediversion requirement) | 297,602 | 0 |
| Measurement device maintenance (rediversion requirement) | 0 | 44,640 |
| Telemetry-capable recording device installation | 339,150 | 0 |
| Telemetry-capable recording device maintenance | 0 | 50,873 |
| Total | 636,752 | 95,513 |

The installation cost of a new measurement device is case-specific and thus can vary widely. For large diversions (direct diversions of 10,000 acre-feet/year or more), the installation cost can range from \$13,500 to \$26,200 per device, and includes the costs of an open channel flow device, pressure transducer, staff gauge, data logger recording device, and telemetry. Telemetry is not a required feature for measuring large diversions, but will generally be desired based on the frequency at which diverters are required to collect and submit measurement data. Often rediversions occur and are already being measured at a point of direct diversion or diversion to storage, in which case the diverter would need to account for the rediversion but an additional measuring device would not be necessary. If necessary, and by request, other diverters may need to install an additional measuring device for points of rediversions that are not already being measured. Most of the diverters that are projected to need new measurement devices for points of rediversion have diversions greater than 10,000 acre-feet/year, and, therefore, would likely incur installation costs in that price range. The mid-point of that range, approximately \$19,840/PoRD, was thus assumed as the potential installation cost incurred by diverters projected to need new measurement devices at their points of rediversion. Among private diverters, about 15 points of rediversion are projected to need new measurement devices, and would thus incur total installation costs of approximately \$297,600, as shown in the table above.

Following industry standards, it was assumed that the annual cost of operation and maintenance of the measuring device would be equal to 15 percent of the cost of installing a new device. Thus, the total cost incurred by the 15 private diverters to operate and maintain new measuring devices for measuring rediversions would be approximately \$44,600 per year.

Like measurement devices, the installation cost of a new recording device for transmitting large diversion data is case-specific and can vary widely. It depends, for example, on the type of transmission and the frequency and volume of transmission that diverters choose to do. The installation cost of these devices can range from \$3,500 (e.g., out-of-the-box cellular chips, transmission of daily measurements of a few parameters, one-year cellular plan) to \$5,000 (e.g., use of satellite or radio if cellular reception is not reliable). The mid-point of that range, \$4,250/device, or approximately \$5,950/water right, was thus assumed as the potential installation cost incurred by diverters projected to need new devices. Among private diverters, approximately 57 water rights are projected to need new recording devices for transmitting large diversion data, and would thus incur total installation costs of approximately \$399,200.

Following industry standards, it was assumed as before that the annual cost of operation and maintenance of the telemetry-capable recording device would be equal to 15 percent of the cost of installing a new device. Thus, the total cost to operate and maintain new devices associated with the 57 water rights would be approximately \$50,900 per year.

Cost Impact on Businesses and Individuals

The small and typical water right holders as defined before likely will not be affected by the rediversion and large diversion requirements, water right holders that will likely need new measurement or recording devices are some of the largest diverters. The remaining requirements, i.e., the ones related to the new reporting tasks described above, are projected to have some impact on small and typical water right holders.

Table 3 shows the cost impact on a small or typical water right holder, based on the unit costs discussed before, including the assumed hourly rate of \$121.40. Both small and typical water right holders are expected to incur a one-time cost of approximately \$516 (per business on average), which accounts for the time needed to provide an email address for their CalWATRS account, submit their measurement data using a template provided by the Water Board or CalWATRS, identify their measurement location, and file a Report of Measurement Methodology form describing how they are measuring and accounting for diversions, discussed previously.

Table 3
Cost impact on a typical or small private water right holder

| Reporting-related Task | Cost (\$) |
|-------------------------------|------------------|
| Email account | 61 |
| Measurement data template | 243 |
| Measurement location | 30 |
| Measurement methodology | 182 |
| Total | 516 |

It is likely that some of the private diverters discussed are individuals and not businesses. However, it is not possible to distinguish between individuals and businesses with the available data. For that reason, it is assumed that, like small and typical regulated businesses, most of the individuals holding water rights and subject to the SB 88 regulation would only incur the reporting-related costs of \$516 (per individual on average), but not the costs related to new measurement and recording devices.

2. If multiple industries are impacted, enter the share of total costs for each industry:

Water right holders subject to the SB 88 regulation are the only party on which the proposed update imposes obligations. Data on the industries (e.g., agriculture) in which the water right holders operate are not available.

Other parties may be affected indirectly, but are not expected to incur costs or any other significant impact. Existing manufacturers of measurement and recording equipment likely would not need to expand production. Similarly, businesses that provide support, maintenance, and repair of such equipment would not experience any notable expansion. Likewise, engineering consulting firms, contractors, and related businesses that assist diverters with the reporting requirements and measurement data management would not experience any notable expansion.

3. If the regulation imposes reporting requirements, enter the annual costs a typical business may incur to comply with these requirements:

Please see Table 3 and the respective explanation in B.1 above.

5. Explain the need for State regulation given the existence or absence of Federal regulations:

Accurately measured water diversion data is critical for managing and making informed decisions about California's water supply, especially during droughts. The measuring and reporting regulation (chapter 2.8 of title 23 of the California Code of Regulations, often referred to as SB 88) requires

many diverters to measure and report the amount of water they divert. Although the SB 88 regulation has been in effect since March 2016, only a limited amount of useful data has been submitted so far, in part due to non-standardized formatting, inconsistent measurement values, and other quality control issues.

The Water Board is proposing to revise the SB 88 regulation to improve the quality and usability of the data submitted under the regulation, as well as to improve the overall clarity of the text. The proposed revisions are based on feedback from existing diverters and reporters, after substantial outreach and engagement over the previous two years. Additionally, the Water Board is also proposing minor revisions to the "Appropriation of Water" and the "Water Diversion and Use Reports" regulations (chapters 2 and 2.7 of title 23 of the California Code of Regulations).

C. Estimated Benefits

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 proposed SB 88 regulation update is expected to yield benefits that are not possible to quantify given the existing data. The proposed update aims to enhance the accuracy, consistency, and usability of reported data, which is crucial for effective water management, especially in drought conditions. By restructuring the regulation for clarity, simplifying requirements, and standardizing data formats, the proposed update will make it easier for water right holders to comply and for the Water Board to analyze the data systematically.

More specifically, the proposed update clarifies key terms, like "measurement device," and more explicitly requires labelling of points of redirection and identification of measurement locations. These changes are expected to reduce reporting confusion and prevent data inconsistencies. The addition of exemption criteria for those who did not divert and expanded eligibility for alternative compliance plans will introduce flexibility for diverters, easing compliance burdens while ensuring that necessary data is captured. Aligning reporting requirements with the water year and mandating email addresses for digital reporting will further streamline processes, supporting a more transparent and responsive water management framework in California. By clarifying and streamlining reporting processes, taken together these changes are expected to reduce some of the compliance costs for water right holders. These cost savings were not quantified in this economic impact assessment because of data limitations. More specifically, the cost savings associated with greater understanding of requirements may vary greatly between water right holders and cannot be easily quantified. The benefits from improvements in water rights administration and statewide water management also are difficult to assign a value to, because they depend on future decisions and conditions that cannot be accurately forecasted.

2. Are the benefits the result of specific statutory requirements, or goals developed by the agency based on broad statutory authority?

Please see B.5 above.

3. What are the total statewide benefits from this regulation over its lifetime?

The proposed SB 88 regulation update is expected to yield benefits that are not possible to quantify given the existing data. Please C.1 above.

4. Briefly describe any expansion of businesses currently doing business within the State of California that would result from this regulation:

As noted above, existing manufacturers of measurement and recording equipment likely would not need to expand production as a result of the proposed SB 88 regulation update. Similarly, businesses that provide support, maintenance, and repair of such equipment would not experience

any notable expansion. Likewise, engineering consulting firms, contractors, and related businesses that assist diverters with the reporting requirements and measurement data management would not experience any notable expansion.

D. Alternatives to the Regulation

1. List alternatives considered and describe them below:

Two alternatives to the proposed SB 88 regulation update were evaluated. Like the proposed update, the two alternatives improve clarity and organization of the existing regulatory text. However, the first alternative (“Alternative 1”) considers only two of the requirements proposed in the SB 88 regulation update: (a) water right holders would be required to provide an email for their CalWATRS account, and (b) diverters would be required to use a Water Board template to report measurement data or transmit data directly to CalWATRS. Alternative 1 is, therefore, less stringent than the proposed SB 88 regulation update. The second alternative (“Alternative 2”) considers all the requirements proposed in the SB 88 regulation update and makes one of them relatively more stringent: all rediversions (and not only those requested by the Water Board) would be required to be measured and reported as such. Alternative 2 is, therefore, more stringent than the proposed SB 88 regulation update.

2. Summarize the total statewide costs and benefits from this regulation and each alternative considered:

Table 4 below summarizes the estimated cost impact of Alternatives 1 and 2, as well as the estimated cost impact of the proposed SB 88 regulation update for comparison. For simplicity, the cost estimates shown in the table include potential fiscal impacts. Under Alternative 1, water right holders would incur one-time costs of approximately \$630,000, plus annual costs of approximately \$27,000, that reflect the time needed to comply with the email and data template requirements. Water right holders under this alternative would not incur any costs related to equipment installation and maintenance. Under Alternative 2, water right holders would incur one-time costs of approximately \$6.1 million, plus annual costs of approximately \$700,000. Compared to the proposed update, diverters under this alternative would have to report a greater number of rediversions and install more measurement devices, and, therefore, incur higher reporting, installation, and maintenance costs in aggregate.

Table 4
Estimated costs for water right holders under Alternative 1, the proposed SB 88 regulation update, and Alternative 2

| Alternatives and Proposed Update | Cost (\$) | |
|----------------------------------|-----------|-----------|
| | One-time | Recurring |
| Alternative 1 | 629,243 | 26,562 |
| Proposed SB 88 regulation update | 4,668,081 | 465,374 |
| Alternative 2 | 6,076,731 | 693,910 |

Note: Cost estimates in the table include fiscal impacts on state and local governments.

3. Briefly discuss any quantification issues that are relevant to a comparison of estimated costs and benefits for this regulation or alternatives:

Please see B.1 for cost impact assumptions and C.1 for discussion of potential benefits and data limitation.

E. Major Regulations

1. Will the estimated costs of this regulation to California business enterprises exceed \$10 million?

The proposed update is estimated to have a one-time cost impact on businesses and individuals of approximately \$2.17 million, plus an annual cost impact of approximately \$151,100. Please see B.1.

4. Will the regulation subject to OAL review have an estimated economic impact to business enterprises and individuals located in or doing business in California exceeding \$50 million in any 12-month period?

Please see B.1 and E.5.

5. Briefly describe the following:

The increase or decrease of investment in the State:

The proposed update is expected to increase capital expenditure through the purchase of new measurement and recording equipment by some of the diverters. This increased capital expenditure, however, is relatively negligible, and thus not sufficiently large to affect production levels of existing in-state manufacturers of flow meters, gauges, telemetry-capable recording devices, and related equipment. Therefore, no significant increase in investment is expected statewide.

The incentive for innovation in products, materials or processes:

The SB 88 regulation and proposed update rely on available and well-established measurement and recording technologies. As noted, an increasing number of telemetry-capable recording device manufacturers will potentially start supporting integration with CalWATRS in the coming years, which could be seen as an innovation. However, the overall impact of the proposed update on innovation in products, materials, or processes likely will be negligible.

The benefits of the 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:

Please see C.1.

FISCAL IMPACT STATEMENT

A. Fiscal Effect on Local Government

2. Additional expenditures in the current State Fiscal Year which are NOT reimbursable by the State. (Approximate)

As stated before, approximately 12 percent, or 1,400, of the 11,500 water rights subject to the SB 88 regulation are held by local government agencies. The cost impact of the proposed SB 88 regulation update on this group of water rights is analyzed separately in this section, but is based on the same assumptions and calculations described for private water right holders.

As explained below, the proposed update is estimated to have a one-time cost impact on local government agencies of approximately \$2.4 million (\$635,586 in reporting-related tasks plus \$1,797,512 in equipment installation), assumed in this analysis to be incurred in the current State Fiscal Year, and an annual cost impact of approximately \$310,000 (\$40,739 in reporting-related tasks plus \$269,627 in equipment maintenance) in subsequent State Fiscal Years. Costs incurred by local agencies as a result of the proposed regulation are not reimbursable by the State. Local agencies are expected to fully make up for the costs incurred as a result of the proposed regulation,

if any, by adjusting their service charges, fees, or assessments over time. Government Code section 17556, subdivision (d), identifies the types of actions that are not reimbursable state mandates: “the local agency or school district has the authority to levy service charges, fees, or assessments sufficient to pay for the mandated program or increased level of service. This subdivision applies regardless of whether the authority to levy charges, fees, or assessments was enacted or adopted prior to or after the date on which the statute or executive order was enacted or issued.”

Table 5 summarizes the impact on reporting costs for local government agencies. Combined, they will potentially experience a one-time reporting cost of approximately \$635,600 and subsequent annual reporting costs of approximately \$41,000 as a result of the proposed SB 88 regulation update.

Table 5
Reporting costs for local governments

| Reporting-related Task | Cost (\$) | |
|------------------------------|----------------|---------------|
| | One-time | Recurring |
| Rediversion | 0 | 28,893 |
| Email account | 3,223 | 0 |
| Measurement data template | 130,384 | 6,318 |
| Large diversion requirements | 371,970 | 0 |
| Measurement location | 32,222 | 790 |
| Measurement methodology | 97,788 | 4,738 |
| Total | 635,586 | 40,739 |

As before, it assumed that the amount of time needed to submit the information about a point of rediversion would be, on average, two hours every year. Additionally, it is projected that local government agencies would be asked to report information for approximately 119 rediversions every year. Thus, assuming an hourly rate of \$121.40, the total reporting cost of this requirement would be about \$28,900 per year.

It is projected that approximately 53 local government agencies would need to create an email account and report it to CalWATRS,² and that the amount of time needed to do so would be, on average, 30 minutes per agency. Thus, assuming an hourly rate of \$121.40, the total reporting cost of this requirement, as shown in the table above, would be approximately \$3,200 for local government agencies.

The amount of time needed to submit measurement data in the template designed by the Water Board would be, on average, two hours per water right. Among local government agencies, it is projected that approximately 537 water rights already submitting datafiles would conform to the Board-provided data template in the first year after the proposed regulation is effective, and another 26 water rights would start submitting datafiles conforming to the template every year afterwards. Therefore, the total reporting cost of the template requirement for local government agencies would be an initial \$130,400 plus approximately \$6,300 every year.

The amount of time needed to comply with the large diversion requirement that data be submitted to CalWATRS is estimated to be either eight or 16 hours per water right, depending on whether the diverter is already reporting to a public website in accordance with the existing telemetry requirements. Among local government agencies, it is estimated that 319 water rights are already telemetering to public websites and an additional 32 would be telemetering for the first time, with the

² More precisely, the number of local government agencies that would need to create an email account is projected to be 53.1, and not 53 as shown in the text. This same approach (of showing rounded numbers in the text) was taken throughout the document for clarity, and does not affect the results of this economic impact assessment.

same assumption discussed before that diverters subject to the large diversion requirements will opt for telemetry-capable recording devices. Therefore, the total reporting cost of this requirement for local government agencies would be approximately \$372,000.

The amount of time to identify measurement locations in CalWATRS is expected to be, on average, 15 minutes per water right. Among local government agencies, it is estimated that approximately 1,100 water rights would identify their measurement locations in the first year after the proposed regulation is effective, and an additional 26 water rights would start doing so every year afterwards. Therefore, the total reporting cost of this requirement for local government agencies would be an initial \$32,200 plus approximately \$800 every year.

The amount of time needed to describe the existing measurement methodology being used and to file the Report of Measurement Methodology with the Water Board is expected to be, on average, 1.5 hours per water right. Among local government agencies, it is estimated that approximately 537 water rights already submitting datafiles would additionally file the Report of Measurement Methodology in the first year after the proposed regulation is effective, and another 26 water rights would start submitting such reports every year afterwards. Therefore, the total reporting cost of the measurement methodology requirement for local government agencies would be an initial \$97,800 plus approximately \$4,700 every year.

Table 6 summarizes the impact of the new rediversion and large diversion requirements on equipment installation, operation, and maintenance costs for local government agencies. Combined, they will potentially experience (one-time) equipment installation costs of approximately \$1.8 million and subsequent annual maintenance costs of approximately \$270,000 as a result of the proposed SB 88 regulation update.

Table 6
Equipment installation and maintenance costs for local governments

| Equipment-related Task | Cost (\$) | |
|---|------------------|------------------|
| | One-time | Recurring |
| Measurement device installation (rediversion requirement) | 1,785,612 | 0 |
| Measurement device maintenance (rediversion requirement) | 0 | 267,842 |
| Telemetry-capable recording device installation | 11,900 | 0 |
| Telemetry-capable recording device maintenance | 0 | 1,785 |
| Total | 1,797,512 | 269,627 |

As explained before, the installation cost incurred by diverters projected to need new measurement devices at their points of rediversion is assumed to be approximately \$19,840/PoRD. Among local governments, about 90 points of rediversion are projected to need new measurement devices, and would thus incur total installation costs of approximately \$1,786,000, and subsequent operating and maintenance costs (15 percent of installation costs) of approximately \$267,800 per year.

The installation cost of a new telemetry-capable recording device is estimated to be approximately \$5,950/water right. Among local government agencies, approximately two water rights are projected to need new devices, and would thus incur total installation costs of approximately \$11,900, and subsequent operating and maintenance costs (15 percent of installation costs) of approximately \$1,800 per year.

6. *Other. Explain:*

Local government agencies are projected to incur annual costs of approximately \$310,000 in subsequent State Fiscal Years. Please see A.2 above.

B. Fiscal Effect on State Government

1. Additional expenditures in the current State Fiscal Year. (Approximate)

Approximately two percent, or 200, of the 11,500 water rights subject to the SB 88 regulation are held by state government agencies. The cost impact of the proposed SB 88 regulation update on this group of water rights is analyzed separately in this section, but is based on the same assumptions and calculations described in for private water right holders.

As explained in the following paragraphs, the proposed update is estimated to have a one-time cost impact on state government agencies of approximately \$65,000 (\$41,456 in reporting-related tasks plus \$23,800 in equipment installation), assumed in this analysis to be incurred in the current State Fiscal Year, and an annual cost impact of approximately \$4,000 (\$371 in reporting-related tasks plus \$3,570 in equipment maintenance) in subsequent State Fiscal Years. State agencies would likely rely on existing budgets and resources to absorb these costs (and some of them would potentially recover these costs from end-users (beneficiaries of the diversions)).

Likely, state agencies will not be as impacted as private water right holders and local government agencies in aggregate. Table 7 summarizes the impact on reporting costs for state agencies. Combined, they will potentially experience a one-time reporting cost of approximately \$41,500 and subsequent annual reporting costs of approximately \$400 as a result of the proposed SB 88 regulation update.

Table 7
Reporting costs for state government

| Reporting-related Task | Cost (\$) | |
|-----------------------------|---------------|------------|
| | One-time | Recurring |
| Rediversion | 0 | 0 |
| Email account | 140 | 0 |
| Measurement data template | 4,087 | 198 |
| Large diversion requirement | 30,107 | 0 |
| Measurement location | 4,057 | 25 |
| Measurement methodology | 3,065 | 149 |
| Total | 41,456 | 371 |

It is projected that likely no state agency would be asked to report new rediversion information to the Water Board, and thus would not incur any costs related to this new requirement.

It is projected that potentially two or three state agencies would need to create an email account and report it to CalWATRS, and that the amount of time needed to do so would be, on average, 30 minutes per agency. Thus, assuming an hourly rate of \$121.40, the total reporting cost of this requirement, as shown in the table above, would be approximately \$140 for the state agencies.

The amount of time needed to submit measurement data in the template designed by the Water Board would be, on average, two hours per water right. Among state agencies, it is projected that approximately 17 water rights already submitting datafiles would conform to the Board-provided data template in the first year after the proposed regulation is effective, and one additional water right would start submitting datafiles conforming to the template every year afterwards. Therefore, the total reporting cost of the template requirement for state agencies would be an initial \$4,100 plus approximately \$200 every year.

The amount of time needed to comply with the large diversion requirement that data be submitted to CalWATRS is estimated to be either eight or 16 hours per water right, depending on whether the diverter is already reporting to a public website. Among state agencies, it is estimated that 17 water rights are already telemetering to public websites and an additional seven water rights would be telemetering for the first time, with the same assumption discussed before that diverters subject to the large diversion requirements will opt for telemetry-capable recording devices. Therefore, the total reporting cost of this requirement for state agencies would be approximately \$30,100.

The amount of time to identify measurement locations in CalWATRS is expected to be, on average, 15 minutes per water right. Among state agencies, it is estimated that approximately 134 water rights would identify their measurement locations in the first year after the proposed regulation is effective, and one additional water right would start doing so every year afterwards. Therefore, the total reporting cost of this requirement for state agencies would be an initial \$4,100 plus approximately \$30 every year.

The amount of time needed to describe the existing measurement methodology being used and to file the Report of Measurement Methodology with the Water Board is expected to be, on average, 1.5 hours per water right. Among state agencies, it is estimated that approximately 17 water rights already submitting datafiles would additionally file the Report of Measurement Methodology in the first year after the proposed regulation is effective, and one additional water right would start submitting such report every year afterwards. Therefore, the total reporting cost of the measurement methodology requirement for state agencies would be an initial \$3,100 plus approximately \$150 every year.

Table 8 summarizes the impact of the new rediversion and large diversion requirements on equipment installation, operation, and maintenance costs for state agencies. Combined, they will potentially experience (one-time) equipment installation costs of approximately \$23,800 and subsequent annual maintenance costs of approximately \$3,600 as a result of the proposed SB 88 regulation update. Given that no state agency is expected to report new rediversion information, these costs refer to the installation, operation, and maintenance of telemetry-capable recording devices.

Table 8
Equipment installation and maintenance costs for state government

| Equipment-related Task | Cost (\$) | |
|---|---------------|--------------|
| | One-time | Recurring |
| Measurement device installation (rediversion requirement) | 0 | 0 |
| Measurement device maintenance (rediversion requirement) | 0 | 0 |
| Telemetry-capable recording device installation | 23,800 | 0 |
| Telemetry-capable recording device maintenance | 0 | 3,570 |
| Total | 23,800 | 3,570 |

The installation cost of a new telemetry-capable recording device is estimated to be approximately \$5,950/water right. Among state agencies, approximately four water rights are projected to need new devices, and would thus incur total installation costs of approximately \$23,800, and subsequent operating and maintenance costs (15 percent of installation costs) of approximately \$3,600 per year.

4. Other. Explain:

State government agencies are projected to incur annual costs of approximately \$3,600 in subsequent State Fiscal Years. Please see B.1 above.