# State Water Resources Control Board Revised Total Coliform Rule

#### Attachment A to Form STD 399

#### SBDDW-20-002

Note: Detailed assumptions and calculations are included in the Cost Estimating Methodology (CEM). For reference, Tables 23 and 24 from the CEM have been formatted and included in this document.

#### **ECONOMIC IMPACT STATEMENT (PAGE 1)**

#### Section A. Estimated Private Sector Cost Impacts (Page 1)

A.3

The proposed regulation applies only to public drinking water systems, as defined pursuant to Health and Safety Code section 116275(h), which are not businesses or individuals. Public water systems (PWS) are water companies and/or utilities providing drinking water to the public and, pursuant to Government Code section 11342.610, are excluded from the criteria of a small business. As such, there will be no direct economic impact to businesses or individuals. However, indirect economic impact will likely occur due to California's 7,499 PWS passing on any increased costs related to the regulation to its ratepayers, which may include business or individuals. Therefore, even though the proposed regulation does not directly affect businesses or individuals, those entities may be indirectly impacted by the regulation.

The State Water Resources Control Board (State Water Board) recognizes indirect impacts to businesses may occur as a result of increased water rates due to additional monitoring and revisions to the Bacteriological Sample Siting Plan, as PWS costs are passed on to customers. Private water systems may also be businesses, such as mobile home parks, restaurants, or processing plants, which will incur indirect costs, and private and local water systems likely include businesses within their service areas. Every type of business that requires potable drinking water either for their customers, employees, or for processes/operations is expected to be indirectly impacted. The State Water Board does not track or have a way of estimating the total number of businesses contained within every PWS. The State Water Board also does not track or have a way of estimating the criteria of a small business.

#### A.4

As noted above, the regulation directly impacts only PWS, as defined pursuant to Health and Safety Code section 116275(h), which are not businesses. Regardless, the proposed regulation is not expected to create or eliminate any businesses. As a result

of the proposed regulation, businesses providing laboratory analytical services or various types of sample delivery service may experience increased demand.

## A.6

It is expected that there would not be any significant change in PWS or regulatory personnel needed for compliance with the new requirements. However, increased frequency of bacteriological monitoring could increase demands for laboratory analytical services or various types of sample delivery services, which could affect jobs. The State Water Board does not track or have a way of estimating the total change in statewide employment. Jobs and occupations for or businesses that rely on potable drinking water for either their customers, employees, or processes/operations would most likely be impacted.

## Section B. Estimated Costs (Page 2)

B.1

For the purposes of this calculation, as this regulation does not have an end date, a regulation lifetime of 20 years was assumed, without considering economic variability. The total statewide dollar costs incurred, then, are expected to be the one-time cost of \$63,000 plus 20 years of annual costs at \$209,000, for a total of \$4,243,000 (see Tables 23 and 24).

Regulatory Requirement	No. of Affected Water Systems (Sources)	Cost Type	Federal	State	Local	Private
Table 17 – Raw Water Bacteriological Monitoring	584 (1,191)	Annual Increase	\$5,700	\$10,000	\$149,000	\$198,000
Table 18 – Return to Routine Bacteriological Monitoring (CWS, Using GW (not GWUDI), and Serving 25-1,000 Persons)	6	Annual Loss of Previous Cost Savings	\$0 Net Cost = \$0 <sup>(b)</sup>	\$0 Net Cost = \$0 <sup>(b)</sup>	\$600 Net Cost = \$0 <sup>(b)</sup>	\$3,000 Net Cost = \$0 <sup>(b)</sup>

## Table 23

## Estimated Total Cost by Water System Ownership<sup>(a)</sup>

Regulatory Requirement	No. of Affected Water Systems (Sources)	Cost Type	Federal	State	Local	Private
Table 19 – Return to Routine Bacteriological Monitoring (NTNCWS, Using GW (not GWUDI), and Serving 25-1,000 Persons)	22	Annual Loss of Previous Cost Savings	\$0 Net Cost = \$0 <sup>(b)</sup>	\$0 Net Cost = \$0 <sup>(b)</sup>	\$4,900 Net Cost = \$0 <sup>(b)</sup>	\$8,500 Net Cost = \$0 <sup>(b)</sup>
Table 20 – Monthly Coliform Summary <sup>(c)</sup>	6,340	Annual Decrease	\$6,700	\$4,500	\$28,000	\$114,000
		Net Annual Cost	-\$1,100	\$5,500	\$121,000	\$84,000
Table 21 – Bacteriological Sample Siting Plan	612	One- Time	\$1,700	\$2,300	\$26,000	\$34,000

- (a) Costs may differ from Tables 17 through 22, from Table 24, and within Table 23 due to rounding.
- (b) Net cost is \$0 because the cost of routine and reduced monitoring under the state TCR was captured under the federal TCR. While the requirement to return to routine monitoring results in a loss of a previous cost saving, it does not result in an additional cost over existing state regulations.
- (c) SDWIS database indicated mixed ownership for systems 0105020 and 1000586, which were assumed to be local and private, respectively, based on available information

#### Table 24

#### Estimated Total Cost for Years 1, 2, and 3

Net Cost Type <sup>(a)</sup>	Year 1	Year 2	Year 3
Annual	\$209,000	\$209,000	\$209,000
One-Time	\$63,000	Not applicable	Not applicable
Total	\$272,000	\$209,000	\$209,000

<sup>(</sup>a) From Table 22.

B.1.a. Public water systems are water companies and/or utilities providing drinking water to the public and, pursuant to Government Code section 11342.610, are excluded from the definition of a small business.

B.1.b and c. For these calculations, the PWS impacted by the proposed regulation are considered as typical businesses. PWS are not equally impacted by the costs due to the proposed regulation.

Therefore, the initial costs are based on the one-time cost of \$63,000 for the 612 PWS identified in the proposed regulation and then by the populations served by the 612 PWS. The on-going costs refer to only the additional costs (cost savings is not included) associated with Raw Water Bacteriological Monitoring on Table 24 distributed equally amongst the 584 affected PWS.

For individuals, indirect economic impact will likely occur due to PWS passing on any increased costs related to the regulation to its ratepayers. The costs calculated here conservatively estimate impacts for individuals served by affected PWS and are derived from costs to PWS divided by the total number of service connections. Service connections may represent a household, business, or collection/mix of either (*e.g.*, business park). Those PWS with higher numbers of service connections would experience lower per connection cost increases due to a larger number of connections sharing the costs.

Passed-on costs are likely to be incorporated into regular billing, with discrete initial costs for individuals highly unlikely. The impact of one-time costs on water supply rates will depend on the PWS's method for recouping these costs. Lacking that information, initial costs for individuals are based on an equal cost distribution amongst the population served by the affected PWS.

Costs incurred to an individual PWS as a result of these regulations would be highly dependent upon which proposed regulatory provision(s) is applicable to each PWS, and the number of water sources. For the state-only requirements proposed, the following costs and savings are realized:

- Raw Water Bacteriological Monitoring: 584 water systems, serving 1,157,498 service connections, realize total increased annual costs of \$363,000, or an average of \$0.31 per service connection, broken down as follows:
  - 494 small PWS with 666 groundwater [not groundwater under the direct influence of surface water (GWUDI)] sources with disinfection would see annual cost increases totaling \$188,000, or an approximate average of \$381 per PWS.
  - 90 large PWS with 525 groundwater (not GWUDI) sources with disinfection would see annual cost increases totaling \$175,000, or an approximate average of \$1,940 per water system.
  - For a service connection conservatively assumed to serve two persons, this would amount to an average of \$0.16 per individual in annual

increased costs, for 20 years, for persons served by a PWS subject to this requirement.

- Monthly Coliform Summary: 6,340 affected PWS, serving 191,507 service connections, realize a total annual savings of \$154,000, or an average of \$0.80 per service connection, broken down as follows:
  - 1,746 water systems would see a savings totaling \$58,048.35, or approximately \$33.25 per water system.
  - 1,463 water systems would see a savings totaling \$52,384.47, or approximately \$35.80 per water system.
  - 287 water systems would see a savings totaling \$11,011.02, or approximately \$38.37 per water system.
  - 1,952 water systems would see a savings totaling \$21,632.38, or approximately \$11.08 per water system.
  - 775 water systems would see a savings totaling \$9,249.94, or approximately \$11.94 per water system.
  - 117 water systems would see a savings totaling \$1,496.27, or approximately \$12.79 per water system.
  - For a service connection conservatively assumed to serve two persons this would amount to an average of \$0.40 per individual in annual savings, for 20 years, for persons served by a PWS subject to this requirement.
- Bacteriological Sample Siting Plan: 612 affected PWS, serving 1,157,898 service connections, would realize total one-time additional costs of \$63,000, or an average of \$0.05 per service connection, broken down as follows:
  - O 320 water systems serving ≤100 persons each would see one-time additional costs totaling \$21,363.20, or approximately \$67.76 per water system.
  - 177 water systems serving 101 to 500 persons each would see one-time additional costs totaling \$12,726.30, or approximately\$71.90 per water system.
  - 25 water systems serving 501 to 1,000 persons each would see one-time additional costs totaling \$3,852.00, or approximately \$154 per water system.
  - 34 water systems serving 1,001 to 4,100 persons each would see onetime additional costs totaling \$5.386.96, or approximately \$158 per water system.
  - 24 water systems serving 4,100 to 33,000 persons each would see onetime additional costs totaling \$6,904.80, or approximately \$287 per water system.
  - 18 water systems serving 33,001 to 96,000 persons each would see onetime additional costs totaling \$6,969.60, or approximately \$387 per water system.

- 14 water systems serving >96,000 persons each would see one-time additional costs totaling \$6,083.84, or approximately \$434 per water system.
- For a service connection conservatively assumed to serve two persons this would amount to an average of \$0.03 per individual in one-time costs, for persons served by a PWS subject to this requirement.

## B.2

The State Water Board assumes that any industry served by an impacted PWS will be indirectly affected but does not have sufficient data to evaluate how a given industry will be impacted in relation to others.

## B.3

PWS are not considered businesses pursuant to Government Code section 11342.610. If considered a typical business, a PWS will be subject to reporting costs. The annual cost of \$209,000 incorporates all statewide costs and cost savings. The proposed regulations apply to all 7,499 public water systems. To the extent that this regulation requires reporting of businesses, such reporting is necessary to ensure compliance with the drinking water standards for health, safety, or welfare of the people of the state. Therefore, this value represents an average that is derived from the annual cost of \$209,000, not including the one-time cost, distributed equally amongst the 7,499 public after systems.

## B.5.

This regulation is primarily to adopt existing federal Revised Total Coliform Rule (RTCR) regulations. California has been granted primary enforcement responsibility by the United States Environmental Protection Agency (U.S. EPA) for PWS in California. To maintain this enforcement authority, also known as "primacy", California is required to promulgate regulations that are no less stringent than federal regulations. The State Water Board is proposing these regulations primarily to maintain primacy.

The proposed regulations also contain requirements beyond the federal regulations. These state-only requirements include related bacteriological monitoring and reporting requirements intended to provide the additional public health protection consistent with Health and Safety Code section 116365, provide increased clarity, or eliminate unnecessary requirements in achieving the regulatory purpose. The primary costs associated with the state-only requirements are due to the addition of requirements for bacteriological monitoring of groundwater (not Groundwater Under the Direct Influence of Surface Water (GWUDI)) sources that are treated with a primary or residual disinfectant on a continuous basis and for revising bacteriological sample siting plans to include the source sample sites.

## Section C. Estimated Benefits (Page 2)

## C.1

In addition to maintaining primary enforcement authority, the benefits of the proposed regulations include increased public health protection through improved monitoring for the presence of microbial contamination in groundwater sources and the distribution system; investigation and response to microbial contamination; and ensuring the integrity of the drinking water distribution system. The state-only requirements include related bacteriological monitoring and reporting requirements intended to provide the additional public health protection consistent with Health and Safety Code section 116270, provide increased clarity, or eliminate requirements unnecessary to achieve the regulatory purpose.

## C.2

The benefits described in C.1 derive from both specific statutory requirements and goals based on broad statutory authority. Increased clarity and efficiency in regulation are general, unadopted goals of the State Water Board, while specifically,

- HSC subsection 116270(f) states California's legislative intent to improve upon minimum requirements of the federal Safe Drinking Water Act and to establish a program that is more protective of public health than the minimum federal requirements;
- HSC subsection 116270(h) includes the legislative declaration that the California Safe Drinking Water Act be construed to ensure consistency with the requirements for states to obtain and maintain primary enforcement responsibility for PWS under the federal Safe Drinking Water Act and acts amendatory thereof or supplementary thereto;
- HSC subsection 116365(b) states the responsibility to enforce provisions of the federal Safe Drinking Water Act and regulations adopted pursuant thereto and to adopt regulations to implement the California Safe Drinking Water Act; and
- HSC section 116375 requires the State Water Board to adopt regulations for the monitoring of contaminants and reporting of results; requirements for operation and maintenance of PWS determined necessary to distribute a reliable supply of pure, wholesome, potable, and healthy water; and requirements for notifying the public of delivered water quality.

## C.3

The net statewide benefits are chiefly health-related and not measurable. Therefore, the potential health benefits cannot be financially quantified.

## C.4

Businesses providing laboratory analytical services or various types of sample delivery service may experience increased demand. The extent of possible expansion of businesses cannot be predicted.

## Section D. Alternatives to the Regulation (Page 2)

## D.1, 2, and 3 (Page 3)

As an alternative to the proposed regulation, the State Water Board considered adopting only the minimum required elements of the federal RTCR regulation. As those costs have been, and will continue to be, incurred regardless of the selected alternative, costs resulting from federally-imposed requirements are considered a minimum requirement. The proposed regulation adds a one-time cost of \$63,000

The potential statewide health benefits are not measurable; therefore, the potential health benefits cannot be financially quantified.

## FISCAL IMPACT STATEMENT (PAGE 4)

#### Section A. Fiscal Effect on Local Government (Page 4)

A.2

Fiscal Impact on Local Government: Additional, non-reimbursable local government expenditures in the current State Fiscal Year are estimated to total \$175,00 (which includes the annual cost of \$149,000 and the one-time cost of \$26,000). The one-time cost of \$26,000 only applies to the first fiscal year. The subsequent years will have an annual on-going cost of \$149,000 and an estimated annual cost savings of \$33,500. (see Table 23)

The proposed regulations would not impose a mandate on local agencies or school districts that requires state reimbursement. The proposed regulations implement a federal mandate for which the regulated community must comply, regardless of the adoption of this regulation, and establishes and clarifies requirements that are in addition to the federal RTCR and are known as state-only requirements. The proposed regulations will not be a requirement unique to local government and will apply equally to public and private water systems.

Local agencies or school districts currently incur costs in their operation of PWS. The proposed regulations will not result in a "new program or higher level of service" within the meaning of Article XIIIB, section 6 of the California Constitution because the proposed regulations apply generally to all individuals and entities that operate PWS in California and do not impose unique requirements on local governments (County of Los Angeles vs. State of California *et al*, 43 Cal App 3d 46 (1987)). Similarly, PWS may pass on the cost of regulation implementation through increasing service fees. Therefore, no state reimbursement of these costs is required.

Local regulatory agencies also may currently incur costs for their responsibility to enforce state regulations related to small PWS (fewer than 200 service connections) that they regulate. However, local agencies are authorized to assess fees to pay reasonable expenses incurred in enforcing statutes and regulations related to small PWS (Health & Saf. Code, § 101325). Therefore, no reimbursement of any incidental costs to local agencies in enforcing this regulation would be required (Gov. Code, § 17556(d)).

#### Section B. Fiscal Effect on State Government (Page 5)

Fiscal Impact on State Government: Additional, state government expenditures in the current State Fiscal Year are estimated to total \$12,300 (which includes the annual cost of \$10,000 and the one-time cost of \$2,300). The one-time cost of \$2,300 only applies to the first fiscal year. The subsequent years will have an annual on-going cost of \$10,000 and an estimated annual cost savings of \$4,500. (see Table 23)

These costs are associated with compliance for state government entities that have public water systems subject to these regulations. The State Water Board does not anticipate this regulation will result in any increased costs/workload for state water board staff to implement these regulations

#### Section C. Fiscal Effect on Federal Funding of State Programs (Page 5)

No direct fiscal impacts are anticipated to federally funded State agencies or programs. Insufficient information exists to calculate any indirect impacts.