DRAFT Initial Study/ Negative Declaration

Analyzing the Impact of Senate Bill 555 Water Loss Performance Standards

January 7, 2022

State Water Resource Control Board
Office of Research, Planning and Performance
1001 I Street
Sacramento, CA 95814

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NEGATIVE DECLARATION

1. Project title:	Water Loss Performance Standards
2. Lead Agency Name and Address:	State Water Resources Control Board 1001 I Street Sacramento, CA 95814
3. Contact person and Phone Number:	Beti Girma Water Resources Control Engineer (916) 341-5469 ORPP-WaterLossControl@waterboards.ca.gov
4. Project location:	California
5. Project sponsor's name and address:	State Water Resource Control Board Office of Research, Planning and Performance: Climate & Conservation Unit 1001 I Street Sacramento, CA 95814
6. General plan designation:	N/A
7. Zoning:	N/A

8. Description of project:

California Water Code 10608.34 (Senate Bill 555, 2015) sets statutory requirements for monitoring and reducing water lost from drinking water distribution systems. The State Water Resources Control Board (State Water Board) is required to develop the performance standards for such water loss for urban retail water suppliers (URWS, suppliers, or utilities). An URWS is defined as a water supplier, either publicly or privately owned, that directly provides potable municipal water to more than 3,000 end users, or that supplies more than 3,000 acre-feet of potable water annually at retail for municipal purposes. (Wat. Code, § 10608.12, subd. (t).) There are 366 urban retail water suppliers in California who supply water to approximately 567 systems subject to this regulation. California Water Code 10608.34 requires the State Water Board to incorporate life-cycle cost assessment in the development of the performance standards. Such an assessment considers the costs and benefits from implementing necessary compliance interventions over time, including planning, construction, and operation activities. The goal of these standards is to reduce the real water loss from utility distribution system components in order to help extend existing water supplies in the face of climate change by encouraging improved water use efficiency. These standards must also undergo review for compliance with the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.; Cal. Code Regs., tit. 14, § 15000 et seq. (CEQA Guidelines)), to ensure that they will not result in undue harm to the environment, or that any possible harm can and would be adequately mitigated.

URWS have been required to submit water loss audits since October 2017, under regulations developed by the Department of Water Resources (DWR). State law requires the submitted audits to be validated (validation is the process of assessing the quality of data entered in the audit). One output of these audits is an estimate of the "real water loss," or leakage, from the utility's distribution system. Another component of these audits is the apparent losses reported in the annual audits. Both the real water loss and the apparent water losses are the parameters of concern for this regulatory effort. The water loss audits are required to be conducted using the current version of the Free Water Audit Software by the American Water Works Association (AWWA).

The proposed regulation includes performance standards for the volume of water lost for urban retail water suppliers. The volume of water losses is defined by AWWA as the sum of real losses (e.g., leaks) and apparent losses (e.g., theft and accounting errors).
The proposed regulation would require all urban retail water suppliers to meet utility-specific water loss standards. The proposed regulation requires: 1) Data to be submitted on data quality, pressure management, and asset management; 2) Compliance with individual volumetric real loss standards, if assessed as economically feasible by the State Water Board's economic model; 3) Submission of apparent loss data, if apparent losses are above the average apparent losses from 2017 through 2020; and 4) Annual reports of breaks, repairs, and estimated water losses to the State Water Board. These requirements are sequenced over several years, with compliance with the designated allowable water loss volume expected by 2028. To achieve these standards, utilities would be expected to implement any strategy of their choosing, which may include operational, maintenance, rehabilitation, and replacement activities.

URWS can comply with these proposed standards in many ways (Table 1). Potential compliance activities include administrative data management, leak detection surveys, and leakage repair activities. These actions would result in minimal impacts on the environment.

All the expected potential activities are standard operations and maintenance activities that are routinely conducted by URWS. Drinking water utilities routinely repair leaks and main breaks, install and replace meters, and undertake pipeline rehabilitation and replacement. This proposed regulation is expected to incrementally increase these activities as URWS work to achieve their unique water loss standards.

Some potential compliance activities, such as leak detection and leak repair, would occur on urban roadways, right of ways, or adjacent areas. These activities involve the use of light-duty vehicles and construction equipment, but would be infrequent, limited in area, and of short (hours, rarely days) duration.

In some situations, utilities may choose to undertake more extensive pipe rehabilitation or replacement projects. Medium- and heavy-duty vehicles and construction equipment could be used for such activities. These construction activities would be infrequent and temporary but could cause adverse impacts to the environment. For the situations where utilities choose to undertake more-extensive pipe rehabilitation or replacement projects, these site-specific projects would individually require CEQA analyses and possible mitigation.

Most of the expected compliance activity projects would be categorically exempt from CEQA under the Secretary for Resources' Guidelines:
Class 1: Operation, repair, maintenance, or minor alteration of existing structures or facilities not expanding existing uses. (Guidelines Section 15301)
Class 2: Replacement or reconstruction of existing structures or facilities on the same site having substantially the same purpose and capacity. (Guidelines Section 15302)
Class 3: New construction of limited small new facilities; installation of small, new equipment and facilities in small structures; and conversion of the use of small existing structures. (Guidelines Section 15303)
Class 4: Minor alterations in the condition of the land, such as grading, gardening, and landscaping, that do not affect sensitive resources. (Guidelines Section 15304)
Class 11: Construction or placement of minor structures accessory to existing facilities. (Guidelines Section 15311)

Installation of new, or repair, or removal of an existing pipeline under 1 mile is statutorily exempt under. (Pub. Resource Code, § 21080.21.)

This draft Initial Study/Negative Declaration evaluates how URWS actions to comply with their performance standards could impact California's environment in the aggregate. Because many of the required actions do not have the potential to cause a substantial impact on the environment, the analysis focuses primarily on field activities, repairs and construction-related work expected to be necessary to control distribution system leakage and achieve the utilities' allowable water loss volumes. In evaluating the potential impacts, the analysis must also consider the influence of existing rules, regulations, ordinances, permits, and policies.

9. Surrounding land uses and setting:

Water Code section 10608.34 applies only to URWS. As these systems are in urban (including suburban) areas, and the proposed regulation does not have a reasonable likelihood of causing impacts outside of urban retail water suppliers' boundaries, the proposed regulation will predominantly impact a relatively small physical area of the state (Figure 1). This draft Initial Study/Negative Declaration therefore focuses on how the proposed regulation would affect California's environment in urban areas.

Much of these urban areas would not be impacted by the proposed regulation. Many of the expected utility compliance activities would occur on existing utility sites and are existing operations and maintenance activities, even if the frequency of some of these activities may increase.

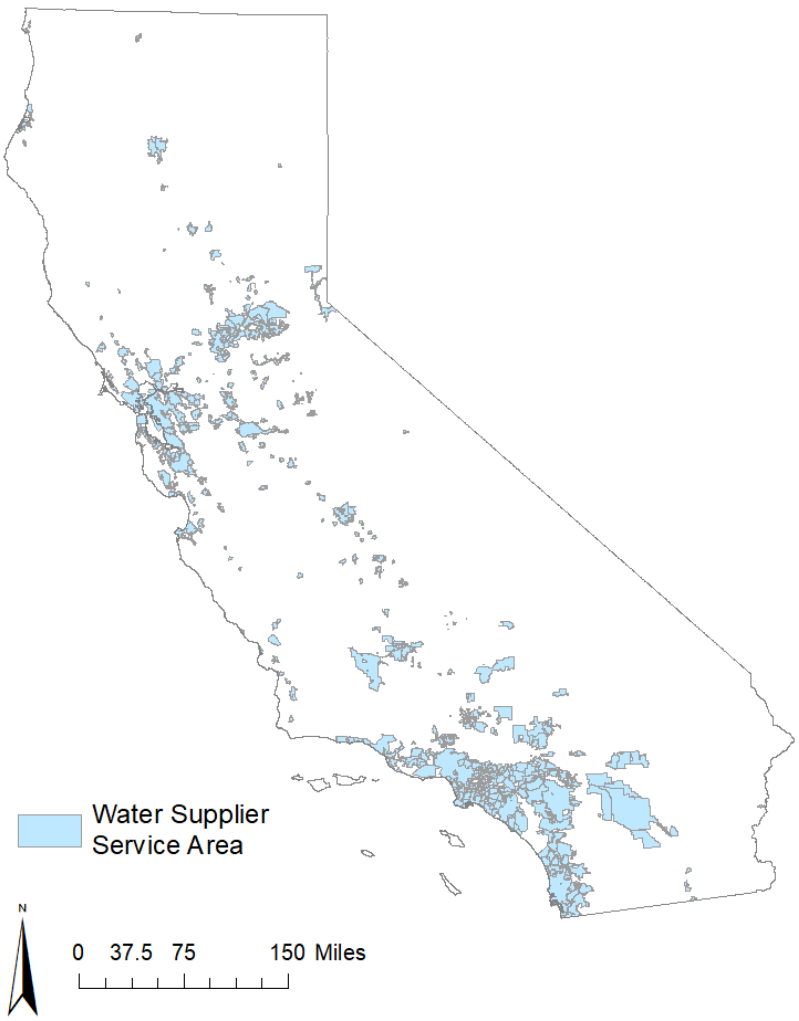

Figure 1: Urban Areas of California

Analytical scope

Because most of the anticipated utility compliance activities are also conducted routinely as part of normal system operations, this analysis will consider both the aggregate impacts of anticipated regulatory-specific activities and the measure of these impacts against the backdrop of current practices.

Summary of findings

The proposed regulation would not have a significant adverse effect on the environment.

10. Other public agencies whose approval is required:	No
11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, has consultation begun?	Yes

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

Aesthetics	Agricultural Resources	Air Quality
Biological Resources	Cultural Resources	Geology/Soils
Greenhouse Gas Emissions	Hazards and Hazardous Materials	Hydrology/Water Quality
Land use/Planning	Mineral Resources	Noise
Population/Housing	Public Services	Recreation
Transportation/Traffic	Utilities/Services Systems	Mandatory Findings of Significance
Tribal Cultural Resources		

DETERMINATION

The following table presents a list of possible determinations. On the basis of this initial evaluation, the determination in the first row was made.

X	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or

	NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Eileen Sobeck
Executive Director, State Water Resources Control Board

January 7, 2022
Date

EVALUATION OF ENVIRONMENTAL IMPACTS

This section identifies the environmental impacts of this project by answering questions from Appendix G of the CEQA Guidelines, the Environmental Checklist Form. The environmental issues evaluated in this chapter include:

Aesthetics	Agricultural Resources	Air Quality
Biological Resources	Cultural Resources	Geology/Soils
Greenhouse Gas Emissions	Hazards and Hazardous Materials	Hydrology/Water Quality
Land use/Planning	Mineral Resources	Noise
Population/Housing	Public Services	Recreation
Transportation/Traffic	Utilities/Services Systems	Mandatory Findings of Significance
Tribal Cultural Resource		

All analyses take the entire action involved into account, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts. Impacts are categorized as follows:

Potentially Significant Impact is appropriate if there is substantial evidence that an effect is significant or where the established threshold has been exceeded. If there are one or more "Potentially Significant Impact" entries when the determination is made, an Environmental Impact Report (EIR) may be required.

Less Than Significant with Mitigation Incorporated applies where the incorporation of mitigation measures would reduce an effect from Potentially Significant Impact to a Less Than Significant Impact. Mitigation measures are prescribed to reduce the effect to a less than significant level.

Less Than Significant Impact applies when the project will affect or is affected by the environment, but based on sources cited in the report, the impact will not have an adverse effect. For the purpose of this report, beneficial impacts are also identified as less than

significant. The benefit is identified in the discussion of impacts, which follows each checklist category.

A No Impact answer is adequately supported if referenced information sources show that the impact simply does not apply to projects like the one involved. A No Impact Answer is explained where it is based on project-specific factors as well as general standards.

ENVIRONMENTAL CHECKLIST

The State Water Board has prepared this Initial Study to evaluate foreseeable environmental impacts and to determine if adopting the proposed regulation is likely to cause a significant impact to the environment. The adoption of the proposed regulation is for statewide application. It cannot be predicted what specific activities any particular supplier will take at any given time or in any given location to achieve their water loss standard, and those activities may require their own CEQA analyses when suppliers have determined what specific projects they will undertake. This Initial Study assumes that suppliers are most likely to select compliance activities from available practices and will presumably select the least costly alternative in most cases.

The following evaluation of the environmental factors considers potential impacts that may result from the adoption of the proposed regulation, against a baseline of not adopting the regulation. It is recognized that most or all the potential compliance activities are activities that many URWS conduct as part of normal operations and maintenance, or for compliance with other statutes, regulations, or rules. Their use for compliance with this proposed regulation will, in many cases, be incremental or supplementary to their use for other purposes.

AESTHETICS. Would the project:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Have a substantial adverse effect on a scenic vista?			X	
Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?			X	
Substantially degrade the existing visual character or quality of the site and its surroundings?			X	
Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?			X	

Background and Affected Environment:
The project location is the State of California. The potentially affected environments are all environments within urban areas supplied with drinking water from URWS. The visual landscape in the potentially affected area is largely developed, consisting of residential, commercial, industrial, and institutional land uses.

Some of the possible compliance activities for the proposed regulation, specifically leak detection, leak repair, and pipe rehabilitation or replacement, will require short-term (days to weeks) use of utility equipment.

The proposed regulation would have a less than significant impact on aesthetic resources.

Discussion:
Have a substantial adverse effect on a scenic vista?

Less than Significant Impact. Some potential compliance activities, such as leak detection, leak repair, and pipe rehabilitation or replacement, would occur on urban roadways or adjacent areas. Because urban roadways are not considered scenic vistas, there will be no impacts to scenic vistas.

Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

Less Than Significant Impact. The proposed regulation applies to about 366 URWS. It is unlikely that any of these utilities have distribution systems or other distribution components that are within or adjacent to a state scenic highway. To the extent that a utility would have leak detection, leak repair, or pipeline rehabilitation or replacement activities that occur within or adjacent to a state scenic highway, these activities involve operations that are unlikely to substantially damage scenic resources.

Substantially degrade the existing visual character or quality of the site and its surroundings?

Less Than Significant Impact. Some possible compliance activities, such as leak detection, leak repair, and pipe rehabilitation or replacement, would occur on urban roadways or adjacent areas. It is recognized that most, or all, of these potential compliance activities are activities that many URWS conduct as part of normal operations and maintenance. To the extent that roadways are themselves visually appealing or used as the viewpoint for scenic areas, those roadways are unlikely to be impacted by the proposed regulation.
There would be no long-term impacts to the existing visual character or quality of the site and its surroundings.

These responses, while possible, are unlikely to be widespread or substantial, and therefore would not substantially degrade the existing visual character or quality of a site or its surroundings.

Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?

Less than Significant Impact. Activities to comply with the proposed regulation, such as leak detection, leak repair, and pipe rehabilitation or replacement, would occur on urban roadways or adjacent areas. While most of these activities are done during daylight hours, some work (especially emergency repairs) might occur at night and would require the use of illumination. Because these repair activities would be infrequent and of short (hours, rarely days) duration, cumulative impacts would be less than significant. Successful compliance with the proposed regulation is expected to reduce the number and adverse impacts of emergency repairs.

AGRICULTURAL AND FOREST RESOURCES. Would the project:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to a non-agricultural use?				X
Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				X
Result in the loss of forest land or conversion of forest land to non-forest use?				X
Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forestland to non-forest use?				X

Background and Affected Environment:

The project location is the State of California. The potentially affected environments are all environments within urban areas served by URWS. The landscape in the potentially affected area is largely developed, consisting of residential, commercial, industrial, and institutional land uses.

The proposed regulation would have no impact on agricultural and forest resources.

Discussion:
Have a substantial adverse effect on Prime Farmland, Unique Farmland, or Farmland of Statewide Importance?

No impact. The proposed regulation applies to URWS in urban settings. The proposed project would not convert farmland to a non-agricultural use, nor have a substantial adverse effect on farmland.

Conflict with existing zoning for agricultural use, or a Williamson Act contract?

No impact. The proposed regulation applies to URWS in urban settings and has no potential to impact agricultural and forest resources. The affected URWS are in areas not zoned for agricultural use and not under Williamson Act contracts. Therefore, the proposed project would not conflict with existing zoning for agricultural use, or a Williamson Act contract.

Conflict with existing zoning for, or cause rezoning of, forest land, or timberland zoned Timberland Production?

No impact. The proposed regulation applies to URWS in urban settings and has no potential to impact zoning for forestland or timberland.

Result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. The proposed regulation applies to URWS in urban settings and has no potential to impact agricultural and forest resources. It will not result in the loss of forest land or conversion of forest land to non-forest use.

Involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland, to non-agricultural use or conversion of forest land to non-forest use?

No Impact. The proposed regulation applies to URWS in urban settings and has no potential to impact agricultural and forest resources. It will not result in conversion of farmland to non-agricultural use, nor result in conversion of forest land to non-forest use.

AIR QUALITY. Would the project:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Conflict with or obstruct implementation of the applicable air quality plan?				X
Violate any air quality standard or contribute substantially to an existing or projected air quality violation?				X
Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?				X
Expose sensitive receptors to substantial pollutant concentrations?				X
Create objectionable odors affecting a substantial number of people?			X	

Background and Affected Environment:
The project location is the State of California. The potentially affected environments are environments within urban areas served by the URWS affected by this regulation. The landscape in the potentially affected area is largely developed, consisting of residential, commercial, industrial, and institutional land uses. These areas would generally be covered by air quality plans.

Some of the possible compliance activities for the proposed regulation, specifically leak detection, leak repair, and pipe rehabilitation or replacement, will require short-term (days to weeks) use of utility equipment.

The proposed regulation would have no impact, or a less than significant impact, on air quality.

Discussion:
Conflict with or obstruct implementation of the applicable air quality plan?

No Impact. Activities to comply with the proposed regulation may include administrative data management activities, installation of production metering and pressure monitoring equipment inside existing facilities, and testing of metering and pressure monitoring equipment inside existing facilities. These would not conflict with or obstruct implementation of the applicable air quality plan.

Some potential compliance activities, such as leak detection, leak repair, meter installation and maintenance, and pipe rehabilitation or replacement, would occur on urban roadways

or adjacent areas. Light and medium-duty vehicles would be used for such activities, which would increase vehicle air emissions. Because these repair activities would be infrequent and of short (hours, rarely days) duration, impacts would be less than significant. These activities would not conflict with or obstruct implementation of the applicable air quality plan.

In some situations, utilities may choose to undertake more-extensive pipe rehabilitation or replacement projects. Medium- and heavy-duty vehicles and construction equipment could be used for such activities, which would increase vehicle air emissions. Because these construction activities would be infrequent and temporary, impacts would pose less than a significant impact. These activities would not conflict with or obstruct implementation of the applicable air quality plan.

Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

No Impact. Some potential compliance activities, such as leak detection, leak repair, meter installation and maintenance, and pipe rehabilitation or replacement, would occur on urban roadways or adjacent areas. Light and medium-duty vehicles would be used for such activities, which would increase vehicle air emissions. Because these repair activities would be infrequent and of temporary (hours, rarely days) duration, impacts would be less than significant. These would not violate any air quality standard, nor contribute substantially to an existing or projected air quality violation

Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

No Impact. Possible compliance activities, such as leak detection, leak repair, meter installation and maintenance, and pipe rehabilitation or replacement would occur on urban roadways or adjacent areas. Because these repair and construction activities would be infrequent, small in area, and of short (days, rarely weeks) duration, they would not result in a cumulatively considerable net increase of any criteria pollutant.

Expose sensitive receptors to substantial pollutant concentrations?

No Impact. Potential compliance activities, such as leak detection, leak repair, meter installation and maintenance, and pipe rehabilitation or replacement would occur on urban roadways or adjacent areas. In some situations, utilities may choose to undertake more-extensive pipe rehabilitation or replacement projects. Medium- or heavy-duty vehicles

would be used for such activities, which would increase vehicle air emissions. No other criteria pollutants would be produced. Because these repair and construction activities would be infrequent, small in area, of short (days, rarely weeks) duration, and qualitatively and quantitatively similar to typical urban vehicle air emissions, they would not expose sensitive receptors to substantial pollutant concentrations.

Create objectionable odors affecting a substantial number of people?

Less Than Significant Impact. In some compliance situations, utilities may choose to undertake more-extensive pipe rehabilitation projects using chemical grouts, spray-on internal coatings, sealants or linings, cured-in-place linings, slip lining, or other technologies that may produce unusual odors. Because these rehabilitation activities would be infrequent, temporary (days to weeks), and limited in area, they would not affect a substantial number of people.

BIOLOGICAL RESOURCES. Would the project:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?			X	
Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?			X	
Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act through direct removal, filling, hydrological interruption, or other means?			X	
Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?			X	
Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordnance?				X
Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan or other approved local, regional, or state habitat conservation plan?				X

Background and Affected Environment:

The project location is the State of California. The potentially affected environments are all environments within urban areas served by the URWS affected by this regulation. The

landscape in the potentially affected areas is largely developed, consisting of residential, commercial, industrial, and institutional land uses.

The purpose of this regulation is to decrease leakage from drinking water distribution system storage, pipes, and other infrastructure, including large-flow breakage events. The analysis considered impacts on species and ecosystems resulting from field activity-related habitat disruption, and accidental releases of treated drinking water to an adjacent water body. These would primary be from main break repairs and pipe rehabilitation and replacement. The analysis also considered that decreases in leakage and breakage would reduce groundwater recharge in some shallow aquifers and possibly flow into wetlands or other water bodies. These may yield adverse or beneficial effects on those ecosystems.

Activities to comply with the proposed regulation may include on-site, indoor administrative data management activities, installation of production metering and pressure monitoring equipment inside existing facilities, and testing of metering and pressure monitoring equipment inside existing facilities. They do not have the potential to impact any of the categories of biological resources.

Some potential compliance activities, such as leak detection, leak repair, and pipe rehabilitation or replacement, are normal operations and maintenance activities at most drinking water utilities. They would occur on existing urban roadways or immediately adjacent areas. These activities would be infrequent, small in area, and temporary (days, rarely weeks). For most situations, these projects are statutorily or categorically exempt from CEQA. With respect to compliance with the proposed regulation, an increase in the number of such projects is expected. In the aggregate, these additional projects have limited potential to impact any of the categories of biological resources.

The proposed regulation would have a less than significant impact on biological resources.

Discussion:
Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Less Than Significant Impact. Some potential compliance activity choices, such as leak detection, leak repair, and pipe rehabilitation or replacement would occur on existing urban roadways or immediately adjacent areas. These areas are rarely habitat for species identified as a candidate, sensitive, or special status species. These activities are generally infrequent, small in area, and temporary (days, rarely weeks). For most situations, these

activities are statutorily or categorically exempt from CEQA. These have limited potential to directly or indirectly impact any species identified as a candidate, sensitive, or special status species.

The analysis also considered impacts on species and ecosystems resulting from accidental releases of treated drinking water to an adjacent water body. These would primarily be from main break repairs, pipe rehabilitation, and replacement. Existing state and local regulations exist to address control and mitigation of these potential releases.

The analysis also considered that decreases in distribution system leakage and pipe breakage would reduce groundwater recharge in some shallow aquifers and possibly flow into wetlands or other water bodies. These may yield adverse or beneficial effects on those ecosystems, depending on site-specific conditions.

In the aggregate, the proposed regulation would have less than a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species.

Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Less Than Significant Impact. Some potential compliance activity choices, such as leak detection, leak repair, and pipe rehabilitation or replacement would occur on existing urban roadways or immediately adjacent areas. These areas are rarely in riparian habitats or other sensitive natural communities. These activities are generally infrequent, small in area, and temporary (days, rarely weeks). The analysis considered impacts on species and ecosystems resulting from accidental releases of treated drinking water into riparian or sensitive natural communities. These would primarily be from main break repairs, pipe rehabilitation and replacement. Existing state and local regulations exist to address control and mitigation of these potential releases. Successful compliance with the proposed regulation is expected to reduce main breaks and their repair activities, reducing potential impacts to the environment. In the aggregate, they have limited potential to have substantial adverse impacts on any such habitat.

The analysis also considered that decreases in distribution system leakage and pipe breakage could possibly reduce flow into historically seasonal streams. These may yield either adverse or beneficial impacts on the associated riparian habitat, depending on site-specific conditions. It has been noted that many once-ephemeral streams are now perennial, particularly in urban areas, where imported water and impervious surfaces have

modified watershed hydrology. Reduction in leakage-related flow may return these streams to their ephemeral state. It is unlikely, however, that this is occurring in significant quantities due to leaks from treated water conveyance systems, as there are existing costs associated with supplying and treating this water. Accordingly, it cannot reasonably be assumed that reducing leakage from these systems will have a significant effect on any riparian habitats or other sensitive natural communities.

In the aggregate, the proposed regulation would have less than a substantial adverse effect on any riparian habitat or other sensitive natural community.

Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act through direct removal, filling, hydrological interruption, or other means?

Less Than Significant Impact. Some potential compliance activity choices, such as leak detection, leak repair, and pipe rehabilitation or replacement, would occur on existing urban roadways or immediately adjacent areas. These adjacent areas are rarely classed as federally protected wetlands. These projects are generally infrequent, small in area, and temporary (days, rarely weeks). They do not involve activities that would remove, fill, interrupt hydrologically or otherwise have a substantial adverse effect on federally protected wetlands.

The analysis also considered impacts resulting from accidental releases of treated drinking water into federally protected wetlands. These would primary be associated with main break repairs, pipe rehabilitation and replacement, which would generally reduce these releases. Rarely, these activities could lead to accidental releases. Existing state and local regulations exist to address control and mitigation of these potential releases. Successful compliance with the proposed regulation is expected to reduce main breaks and their repair activities, reducing potential impacts. In the aggregate, they have limited potential to cause a substantial adverse impact on federally protected wetlands.

The analysis also considered that decreases in distribution system leakage and pipe breakage could possibly reduce flows into federally protected wetlands. If distribution system leakage is already occurring, these leaks may yield adverse or beneficial effects, depending on site-specific conditions. In some cases, chronic leakage may have resulted in the creation of wetlands. It is unlikely, however, that this is occurring in significant quantities due to leaks from treated water conveyance systems, as there are existing costs associated with supplying and treating this water. Accordingly, it cannot reasonably be assumed that reducing leakage from these systems will have a substantial adverse effect on federally protected wetlands.

In the aggregate, the proposed regulation would have less than a significant adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act through direct removal, filling, hydrological interruption, or other means.

Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Less Than Significant Impact. Some potential compliance activities, such as leak detection, leak repair, and pipe rehabilitation or replacement, would occur on existing urban roadways or adjacent areas. These activities would be of short duration and small scale. These have limited potential to impact movement of native species or use of native wildlife nursery sites.

Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordnance?

No Impact. The proposed regulation would not pre-empt or supersede the authority of local policies or ordinances protecting biological resources.

While this regulation does not conflict with local policies or ordinances protecting biological resources, some compliance activities, such as leak detection, leak repair, and pipe rehabilitation or replacement, would occur on existing urban roadways or adjacent areas. These activities have limited potential to conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. Where urban trees or other biological resources form a substantial or important part of the visual character or quality of a site or area, the URWS would be expected to respond in an appropriate manner that fully or best preserves those resources.

Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan or other approved local, regional, or state habitat conservation plan?

No impact. The proposed regulation is not known to or expected to conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan or other approved local, regional or state habitat conservation plan.

CULTURAL RESOURCES. Would the project:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?			X	
Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?			X	
Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			X	
Disturb any human remains, including those interred outside of formal cemeteries?			X	

Background and Affected Environment:
The project location is the State of California. The potentially affected environment is within urban areas served by the URWS affected by this regulation. The landscape in the potentially affected areas is largely developed, consisting of residential, commercial, industrial, and institutional land uses.

To address potential effects on tribal cultural resources, the Water Board must also fulfill the requirements of Assembly Bill 52 (AB 52). AB 52 requires a lead agency to notify tribes traditionally and culturally affiliated with a project area of the details of the proposed project, provided the tribes have requested such notification (Pub. Res. Code, § 21080.3.1, subd. (d)).

The State Water Board Office of Public Participation (OPP) includes the office of the Tribal Liaison. OPP provided Office of Research, Planning and Performance (ORPP) a current list of tribes that have requested to be contacted for AB 52 Consultation. All of the tribes on the list were contacted in April 2019. ORPP was notified by postal carrier and/or electronic email receipt that the correspondence was received. If any of the notified tribes request consultation, then the lead agency must consult with the tribe to discuss avoidance and mitigation of significant impacts to tribal cultural resources (Pub. Res. Code, § 21080.3.2). In 2020, the State Water Board conducted a consultation with the United Auburn Indian Community regarding the proposed statewide regulation to establish water loss performance standards to reduce leakage from water distribution systems.

The proposed regulation would have less than a significant cumulative impact on cultural resources.

Discussion:
Cause a substantial adverse change in the significance of a historical resource?

Less Than Significant Impact. Some compliance activities, such as leak detection, leak repair, and pipe rehabilitation or replacement, would occur on existing urban roadways or immediately adjacent areas. These would not affect historical resources.

Cause a substantial adverse change in the significance of an archaeological resource?

Less Than Significant Impact. Some compliance activities, such as leak detection, leak repair, and pipe rehabilitation or replacement, would occur on existing urban roadways or immediately adjacent areas. Excavation would not be expected to result in the discovery of archeological materials since it would only occur in areas previously excavated. These activities have less than a significant potential to impact archaeological resources.

Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less Than Significant Impact. Some compliance activities, such as leak detection, leak repair, and pipe rehabilitation or replacement, would occur on existing urban roadways or immediately adjacent areas. Excavation would not be expected to cause the destruction of paleontological resources, sites, or unique google features, because it would only occur in areas previously excavated and, though it may occur more frequently than without the regulation, would only be expected to occur in the same locations (i.e., leaking/broken pipes) as without the regulation. These activities would have less than a significant potential to impact unique paleontological or geologic resources.

Disturb any human remains, including those interred outside of formal cemeteries?

Less Than Significant Impact. Some compliance activities, such as leak detection, leak repair, and pipe rehabilitation or replacement, would occur on existing urban roadways or immediately adjacent areas. Excavation would not be expected to result in the discovery or disturbance of any human remains, since it would only occur in areas previously excavated. These activities would have less than a significant potential to disturb human remains.

GEOLOGY AND SOILS. Would the project:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the state Geologist for the area or based on other substantial evidence of a known fault? Strong seismic ground shaking? Seismic-related ground failure, including liquefaction? Landslides?				X
Result in substantial soil erosion or the loss of topsoil?			X	
Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			X	
Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?			X	
Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				X

Background and Affected Environment:

The project location is the State of California. The potentially affected environment is within urban areas served by the URWS affected by this regulation. These areas have a variety of seismic, geological and soil settings that could be impacted by compliance activities.

Possible activities to comply with the proposed regulation may include on-site, indoor administrative data management, installation of production metering and pressure monitoring equipment inside existing facilities, and testing of metering and pressure monitoring equipment inside existing facilities. These do not have the potential to impact geology and soils.

Some possible compliance activities, such as leak detection, leak repair, pipe rehabilitation or replacement would occur on existing urban roadways or adjacent areas. While the frequency of these activities may change in response to the regulation, the type of activities or location are not expected to change substantially compared to without the regulation.

The proposed regulation would have a less than significant impact on geology and soils.

Discussion:

Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: Rupture of a known earthquake fault? Strong seismic ground shaking? Seismic-related ground failure, including liquefaction? Landslides?

No Impact. Likely compliance activities, such as leak detection, leak repair, pipe rehabilitation or replacement, would occur on existing urban roadways or adjacent areas. While the frequency of these activities may change in response to the regulation, the type of activities or location are not expected to change substantially compared to without the regulation. Accordingly, the regulation would not result in human safety risks, including the risk of loss, injury, or death involving rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure (including liquefaction) or landslides.

Result in substantial soil erosion or the loss of topsoil?

Less Than Significant Impact. Some possible compliance activities, such as leak repair and pipe rehabilitation or replacement, would involve small-scale, short-term excavation and site closure activities. These would primarily occur on existing urban roadways or adjacent areas. However, these activities could occur on land subject to erosion or topsoil loss during rain events. While the frequency of these activities may change in response to the regulation, the type of activities or location are not expected to change substantially compared to without the regulation. Local construction ordnances generally include provisions to control soil and sediment runoff, which would further lessen the potential for soil erosion or loss of topsoil. The proposed regulation would not result in substantial soil erosion or the loss of topsoil.

Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Less Than Significant Impact. Some potential compliance activities, such as leak repair and pipe rehabilitation or replacement, would involve small-scale, short-term excavation and site closure activities. These would primarily occur on existing urban roadways or adjacent areas. While the frequency of these activities may change in response to the regulation, the type of activities or location are not expected to change substantially compared to without the regulation. These activities could occur on land within a geologic unit or on soil that is unstable or would become unstable as a result of the project. Local construction ordinances generally include provisions to evaluate, and either mitigate soil stability issues, or disallow such construction. Therefore, the proposed regulation would

not result in substantial impacts from soil destabilization, including on- or off-site landslides, lateral spreading, subsidence, liquefaction or collapse.

Be located on expansive soil, creating substantial risks to life or property?

Less Than Significant Impact. The project would not involve construction of buildings (as defined in the Uniform Building code) or any habitable structures. Some possible compliance activities, such as leak repair and pipe rehabilitation or replacement, would involve small-scale, short-term excavation and site closure activities. These would primarily occur on existing urban roadways or adjacent areas. These existing soils may or may not have expansive properties, but the small scale and location of these activities would not result in substantial risks to life or property. For larger projects, local construction ordinances generally include provisions to evaluate, and either mitigate expansive soil issues, or disallow such construction. Therefore, the proposed regulation would not result in impacts from expansive soils creating substantial risks to life or property.

Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems, where sewers are not available for the disposal of waste water?

No Impact. The potentially affected environment is within urban and suburban areas served by the URWS affected by this regulation. These areas are sewered. No anticipated compliance activity would involve the disposal of water on land. Therefore, the proposed regulation would not affect the ability of soils to adequately support the use of septic tanks or alternative wastewater disposal systems, where sewers are not available.

GREENHOUSE GAS EMISSIONS. Would the project:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
Conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?				X

Background and Affected Environment:
The project location is the State of California. The potentially affected environment is within urban areas served by the URWS affected by this regulation. The potentially affected areas are largely developed, consisting of residential, commercial, industrial, and institutional land uses. State law requires local agencies to analyze the environmental impact of GHG emissions under CEQA.

The proposed regulation would have a less than significant impact on greenhouse gas (GHG) emissions.

Discussion:
Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, based on any applicable threshold of significance?

Less than Significant Impact. Potential activities to comply with the proposed regulation may include on-site, indoor administrative data management activities, installation of production metering and pressure monitoring equipment inside existing facilities, and testing of metering and pressure monitoring equipment inside existing facilities. These do not have the potential to generate significant GHG emissions.

Some potential compliance activities, such as leak detection, leak repair, and pipe rehabilitation or replacement would involve the use of vehicles and construction equipment. These generate carbon dioxide, a GHG, from fuel combustion. Such activities would be episodic, short in duration (days to weeks), and small in scale.

Because the objective of this regulation is to reduce economically feasible real water losses from utility distribution systems, new obligations resulting from the proposed regulation would generally accompany benefits to the supplier in the form of reduced water purchase/pumping, treatment, and delivery. These reductions would at the same time proportionately reduce GHG emissions resulting from the energy needed to make this water available for urban uses, but wasted by its loss. A considerable amount of energy is embedded in California's water distribution and treatment. It is estimated that over 7% of California's energy is used to acquire, treat, and deliver potable water, and then to collect, treat and dispose of the resulting wastewater (California Energy Commmission 2006). These reductions would be continuous and long-term, relative to short-term generation of greenhouse gases by regulatory compliance activities, such as to likely yield a net reduction in overall GHG emissions over the time of this regulatory action.

In total, these activities have a less than significant potential to generate GHG emissions that may have a significant impact on the environment.

Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHG?

No Impact. The proposed regulation would not conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHG.

HAZARDS. Would the project:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				X
Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			X	
Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			X	
Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X
For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?			X	
For a project located within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?			X	
Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X	
Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?			X	

Background and Affected Environment:
The project location is the State of California. The potentially affected environment is within urban areas served by the URWS affected by this regulation. The potentially affected areas are largely developed, consisting of residential, commercial, industrial, and institutional land uses.

Some potential compliance activities, such as leak detection, leak repair, and pipe rehabilitation or replacement, would occur on existing urban roadways or adjacent areas.

The proposed regulation would have no impact or a less than significant impact on hazards.

Discussion:

Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

No Impact. Some potential compliance activities, such as leak repair and pipe rehabilitation or replacement, could involve the use of small amounts of hazardous materials. Such activities would be episodic, short in duration (days to weeks), and small in scale; they would not be routine or of long duration. Therefore, the proposed regulation would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less Than Significant Impact. Some possible compliance activities, such as leak repair and pipe rehabilitation or replacement, could involve the use of small amounts of hazardous materials that could be accidentally released to the environment. Such activities would be episodic, short in duration (days to weeks), and small in scale. Local ordinances generally require site control and mitigation for possible accidental releases. Significant volumes of hazardous materials are not likely to be used or transported, and no reasonably foreseeable compliance activities would present a significant hazard to the public. The proposed regulation would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 1/4 mile of an existing or proposed school?

Less Than Significant Impact. Some possible compliance activities, such as leak repair and pipe rehabilitation or replacement, could involve the use of small amounts of hazardous materials that could be accidentally released to the environment. In general, these activities would occur on existing urban roadways or adjacent areas, some of which may be within ¼ mile of an existing or proposed school. Such activities would be episodic, short in duration (days to weeks), and small in scale. While the frequency of these activities may change in response to the regulation, the type and location of activities are not expected to change substantially compared to without the regulation. Local ordinances generally require site control and mitigation for possible accidental releases. No long-term emissions of hazardous materials would occur. Significant volumes of hazardous materials are not likely to be used or transported, and no reasonably foreseeable compliance

activities would involve hazardous or acutely hazardous materials, substances, or waste. Accordingly, the regulation would present a less than significant impact of hazardous emissions, or handling of hazardous or acutely hazardous materials, substances, or waste within 1/4 mile of an existing or proposed school.

Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

No Impact. The URWS and their distribution systems impacted by the proposed regulation would not be located on sites which are included on a list of hazardous materials sites. The potential compliance activities for the proposed regulation would not create a significant hazard to the public or the environment. It is recognized that most or all the potential compliance activities are activities that many URWS conduct as part of normal operations and maintenance, or for compliance with other statutes, regulations or rules. Their use for compliance with this proposed regulation will, in many cases, be incremental or supplementary to their use for other purposes.

For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

Less Than Significant Impact. Some possible compliance activities, such as leak repair and pipe rehabilitation or replacement, would involve small-scale, short-term excavation and site closure activities. In general, these activities would occur on existing urban roadways or adjacent areas, some of which may be within an airport land use plan, or within 2 miles of a public airport or public use airport. While the frequency of these activities may change in response to the regulation, the type of activities or location are not expected to change substantially compared to without the regulation. Such activities would be episodic, short in duration (days to weeks), and small in scale. These projects generally would be subject to local ordinances for safety hazards. They would result in a less than significant safety hazard for people residing or working in the project area.

For a project located within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

Less Than Significant Impact. Some possible compliance activities, such as leak repair and pipe rehabilitation or replacement, would involve small-scale, short-term excavation and site closure activities. In general, these activities would occur on existing urban roadways or adjacent areas, some of which may be located within the vicinity of a private

airstrip. Such activities would be episodic, short in duration (days to weeks), and small in scale. While the frequency of these activities may change in response to the regulation, the type of activities or location are not expected to change substantially compared to without the regulation. These projects would generally be subject to local ordinances for safety hazards. They would result in a less than significant safety hazard for people residing or working in the project area.

Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less Than Significant Impact. Some possible compliance activities, such as leak repair and pipe rehabilitation or replacement, would involve small-scale, short-term excavation and site closure activities. Many of these activities would occur on existing urban roadways or adjacent areas. They could impair the implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan. However, such activities would be episodic, short in duration (days to weeks), and small in scale. Additionally, while the frequency of these activities may change in response to the regulation, the type of activities or location are not expected to change substantially compared to without the regulation. Therefore, the proposed regulation would have a less than significant impact on the implementation of, or physically interference with, an adopted emergency response plan or emergency evacuation plan. In the event that street closures occur more frequently in response to the regulation, it is expected that agencies already have and will implement protocols to ensure there are no impacts to emergency response plans or evacuation plans.

Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

Less than Significant Impact. Potential activities to comply with the proposed regulation may include on-site, indoor administrative data management activities, installation of production metering and pressure monitoring equipment inside existing facilities, and testing of metering and pressure monitoring equipment inside existing facilities. These do not have the potential to expose people or structures to a significant risk of loss, injury or death involving wildland fires.

Some possible compliance activities, such as leak repair and pipe rehabilitation or replacement, would involve small-scale, short-term excavation and site closure activities. Many of these activities would occur on existing urban roadways or adjacent areas. While

the frequency of these activities may change in response to the regulation, the type of activities or location are not expected to change substantially compared to without the regulation. Such activities would be episodic, short in duration (days to weeks), and small in scale. The potential increase in these activities does not, however, have a potential to expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

HYDROLOGY AND WATER QUALITY. Would the project:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Violate any water quality standards or waste discharge requirements?			X	
Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?			X	
Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?			X	
Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?			X	
Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?				X
Otherwise substantially degrade water quality?			X	
Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				X
Place within a 100-year flood hazard area structures which would impede or redirect flood flows?				X
Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding of as a result of the failure of a levee or dam?				X
Inundation by seiche, tsunami, or mudflow?				X

Background and Affected Environment:

The project location is the State of California. The potentially affected environments are environments in urban areas served by the URWS affected by this regulation. These areas are largely developed, consisting of residential, commercial, industrial, and institutional land uses.

Activities to comply with the proposed regulation may include on-site, indoor administrative data management activities, installation of production metering and pressure monitoring equipment inside existing facilities, and testing of metering and pressure monitoring equipment inside existing facilities. These do not have the potential to impact any of the categories of concern for hydrology and water quality.

Some potential compliance activities, such as leak detection, leak repair, and pipe rehabilitation or replacement, would occur on existing urban roadways or adjacent areas. The analysis considered possible discharges of untreated or treated water incidentally from repair, rehabilitation or replacement activities. The analysis also considered that decreases in distribution system leakage and pipe breakage could reduce groundwater recharge in some shallow aquifers, and possibly flow into streams, wetlands or other water bodies. These have limited potential in the aggregate to significantly impact any of the categories of concern for hydrology and water quality.

The proposed regulation would have no impact or a less than significant impact on hydrology and water quality concerns.

Discussion:
Violate any water quality standards or waste discharge requirements?

Less than Significant Impact. Some possible compliance activities, such as leak repair and pipe rehabilitation or replacement, would involve small-scale, short-term excavation and site closure activities. Many of these activities would occur on existing urban roadways or adjacent areas. These activities could result in soil disturbance that could lead to erosion and sedimentation in any adjacent water bodies, which could violate water quality standards or waste discharge requirements. Such activities would be episodic, short in duration (days to weeks), and small in scale. These activities are likely to require individualized CEQA review and would be to local construction ordinances and other water quality protection requirements.

Some possible compliance activities, such as leak repair, pipe rehabilitation and replacement, could result in accidental discharges of treated drinking water into nearby water ways, which could violate water quality standards. Such activities, however, have associated required mitigations to prevent or limit these accidental discharges from reaching water ways. Also, the goal of this proposed regulation is to reduce leaks and main breaks that could result in discharges of treated drinking water. The overall impact of the proposed regulation would be a less than significant impact on compliance with water quality standards or waste discharge requirements.

Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

Less than Significant Impact. In general, the regulation is likely to protect groundwater levels from pumping of groundwater that is then lost to leaks. The analysis considered that decreases in distribution system leakage and pipe breakage from compliance activities for this proposed regulation could slightly reduce groundwater recharge in some shallow aquifers, in areas where water is imported by a supplier and then lost through the supplier's conveyance system. On a local basis, this could lead to a net deficit in aquifer volume, or a lowering of the local groundwater table level. Because most leaks are of relatively small volume, however, and larger leaks are generally already found and fixed relatively promptly, rarely would the production rate of pre-existing nearby wells drop to a level which would not support existing land uses or planned uses for which permits have been granted. In the aggregate, compliance activities for the proposed regulation would have less than significant impact on the depletion of groundwater supplies, or substantially interfere with groundwater recharge.

Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?

Less than Significant Impact. Some possible compliance activities, such as leak repair, pipe rehabilitation or pipe replacement, would involve small-scale, short-term excavation and site closure activities. Many of these activities would occur on existing urban roadways or adjacent areas. These may be near a stream or river, however, while the frequency of these activities may change in response to the regulation, the type of activities or location are not expected to change substantially compared to without the regulation. Most such activities would be small in scale relative to drainage areas, and thus would not be expected to appreciably affect drainage patterns, erosion or siltation.

In the aggregate, compliance activities for the proposed regulation would have a less than significant impact on the alteration of existing drainage patterns of the sites or areas, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site.

Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

Less than Significant Impact. Some possible compliance activities, such as leak repair, pipe rehabilitation or pipe replacement, would involve small-scale, short-term excavation and site closure activities. Compliance activities could result in soil disturbance or incidental water releases that could lead to changes in the existing drainage pattern of the site or area, however the reasonably foreseeable compliance response activities will be of the type and location of current leak detection and repair activities, are not expected to lead to substantial increase in the rate or amount of surface runoff in a manner which would result in flooding on- or off-site. Most such activities would be small in scale relative to their drainage areas, and thus would not be expected to appreciably affect drainage patterns, or substantially increase surface runoff. Additionally, these activities.

In the aggregate, compliance activities for the proposed regulation would have a less than significant impact on the alteration of existing drainage patterns of the sites or areas, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site.

Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

No Impact. Some potential compliance activities, such as leak repair and pipe rehabilitation or replacement, would involve excavation and site closure work that could create or contribute runoff water. Such activities would be episodic, short in duration (days to weeks), and small in scale. They would be subject to local ordinances to control runoff water and contamination. These projects would not be expected to exceed the capacity of existing or planned stormwater drainage systems, or provide substantial additional sources of polluted runoff.

Otherwise substantially degrade water quality?

Less than Significant Impact. Some potential compliance activities, such as leak repair and pipe rehabilitation or replacement, would involve excavation and site closure work that could create or contribute runoff water and sediment that could degrade water quality. Such activities would be episodic, short in duration (days to weeks), and small in scale. They would be subject to local ordinances to control runoff water and contamination. In

the aggregate, these projects would be expected to have less than significant impacts to substantially degrade water quality.

Place housing within a 100-year flood hazard area?

No Impact. Compliance with the proposed regulation would not require placing housing within a flood plain.

Place within a 100-year flood hazard area structures which would impede or redirect flood flows?

No Impact. Compliance with the proposed regulation would not require placing within a 100-year flood hazard area any structures that would impede or redirect flood flows,

Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding of as a result of the failure of a levee or dam?

No Impact. Compliance with the proposed regulation would not expose people or structures to flood risk.

Be subject to inundation by seiche, tsunami, or mudflow?

No Impact. Compliance with the proposed regulation would not result in or increase the risks to inundation by seiche, tsunami, or mudflow.

LAND USE PLANNING. Would the project:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Physically divide an established community?				X
Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?			X	

Conflict with any applicable habitat conservation plan or natural community conservation plan?			X	

Background and Affected Environment:
The project location is the State of California. The potentially affected environments are environments within urban areas served by the URWS affected by this regulation. These areas are largely developed, consisting of residential, commercial, industrial, and institutional land uses.

Activities to comply with the proposed regulation may include on-site, indoor administrative data management activities, installation of production metering and pressure monitoring equipment inside existing facilities, and testing of metering and pressure monitoring equipment inside existing facilities. These do not have the potential to impact land use planning.

Some compliance activities, such as leak detection, leak repair, and pipe rehabilitation or replacement, would occur on existing urban roadways or adjacent areas. These have limited potential to impact land use planning.

The proposed regulation would have no impact or a less than significant impact on land use planning

Discussion:
Physically divide an established community?

No Impact. Compliance with the proposed regulation would not require physically dividing an established community.

Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

Less Than Significant Impact. Adoption of the proposed regulation is not expected to conflict with any applicable land use plan, policy, or regulation. The proposed regulation is consistent with policies of the State Water Board and Regional Water Boards. The proposed regulation is not expected to conflict with other agencies' plans and does not address zoning or land use designations. A URWS would need to comply with any such agency's plans before undertaking certain potential compliance activities.

Conflict with any applicable habitat conservation plan or natural community conservation plan?

Less Than Significant Impact. Adoption of the proposed regulation is not expected to conflict with any applicable habitat conservation plan or natural community conservation plan. A URWS would need to comply with any such agency's plans before undertaking certain potential compliance activities.

MINERAL RESOURCES. Would the project:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				X
Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				X

Background and Affected Environment:
The project location is the State of California. The potentially affected environments are environments within urban areas served by the URWS affected by this regulation. These areas are largely developed, consisting of residential, commercial, industrial, and institutional land uses.

The California Surface Mining and Reclamation Act of 1975 (SMARA) required identification of mineral resources in California. SMARA maps identify and classify mineral resources as to their relative value for extraction.

Activities to comply with the proposed regulation may include on-site, indoor administrative data management activities, installation of production metering and pressure monitoring equipment inside existing facilities, and testing of metering and pressure monitoring equipment inside existing facilities.

Some compliance activities, such as leak detection, leak repair, and pipe rehabilitation or replacement, would occur on existing urban roadways or adjacent areas.

These activities do not have the potential to impact any of the categories of mineral resources.

Discussion:

Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

No Impact. Adoption of the proposed regulation is not expected to impact the availability of a known mineral resource. Most of the anticipated compliance activities for the proposed regulation are either on-site or on rights-of-way. Construction activities may include earthmoving (i.e., excavation), conveyance piping installation, and tank installations. These actions would be relatively small in scale and would not result in the loss of availability or physically preclude future mining activities from occurring.

Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

No Impact. Most of the anticipated compliance activities for the proposed regulation are either on-site or on rights-of-way. Any new construction would likely require individualized CEQA analysis and compliance with any local planning requirements. Compliance activities for the proposed regulation would not result in the loss of availability of locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

NOISE. Would the project:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			X	
Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?			X	
A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				X
A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?			X	
For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				X
For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				X

Background and Affected Environment:
The project location is the State of California. The potentially affected environments are environments within urban areas served by the URWS affected by this regulation. These areas are largely developed, consisting of residential, commercial, industrial, and institutional land uses.

Activities to comply with the proposed regulation may include on-site, indoor administrative data management activities, installation of production metering and pressure monitoring equipment inside existing facilities, and testing of metering and pressure monitoring equipment inside existing facilities. These do not have the potential to adversely impact noise.

Some possible compliance activities, such as leak repair and pipe rehabilitation or replacement, would create noise associated with excavation, construction and site closure. These projects would need to comply with local general plans or noise ordinances, and applicable standards of other agencies. While the frequency of these activities may change in response to the regulation, the type of activities or location are not expected to change substantially compared to without the regulation. They would be limited in area and of short (days to weeks) duration.

The proposed regulation would have no impact or a less than significant impact on noise.

Discussion:
Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less than Significant Impact. Potential compliance activities, such as leak detection, leak repair, and pipe rehabilitation or replacement, would create noise associated with excavation, construction and site closure. While the frequency of these activities may change in response to the regulation, the type of activities or location are not expected to change substantially compared to without the regulation. These activities would be small in scale and temporary. These projects would need to comply with local general plans or noise ordinances, and applicable standards of other agencies.

The proposed regulation would have less than significant impact on exposures of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?

Less Than Significant Impact. Potential compliance activities, such as leak detection, leak repair, and pipe rehabilitation or replacement, could create noise associated with excavation, construction and site closure. These activities would be small in scale and temporary, where the potential for exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels would be less than significant.

A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

Less than Significant Impact. Potential compliance activities, such as leak detection, leak repair, and pipe rehabilitation or replacement, could create ambient noise associated with excavation, construction, and site closure. While the frequency of these activities may change in response to the regulation, the type of activities or location are not expected to change substantially compared to without the regulation. These activities would be small in scale and temporary, and the potential impact less than significant.

A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Less Than Significant Impact. Potential site-specific compliance activities, such as leak detection, leak repair, and pipe rehabilitation or replacement, could create noise associated with excavation, construction and site closure. While the frequency of these activities may change in response to the regulation, the type of activities or location are not expected to change substantially compared to without the regulation. These activities would be small in scale and temporary. Projects would need to comply with local noise ordinances, which would be expected to keep temporary noise at less than significant levels. Potential site-specific compliance activities, such as leak detection, leak repair, and pipe rehabilitation or replacement, could create noise associated with excavation, construction and site closure. These activities would be small in scale and temporary, so that there would be no permanent increase in ambient noise levels in the project vicinity above levels existing without the project.

For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. Potential site-specific compliance activities, such as leak detection, leak repair, and pipe rehabilitation or replacement, could create noise associated with excavation, construction and site closure. While the frequency of these activities may change in

response to the regulation, the type of activities or location are not expected to change substantially compared to without the regulation. These activities would be small in scale and temporary. Projects would need to comply with local noise ordinances, which would be expected to keep temporary noise at less than significant levels. Such compliance projects would not be expected to expose people residing or working in the project area to excessive noise levels.

For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. Potential site-specific compliance activities, such as leak detection, leak repair, and pipe rehabilitation or replacement could create noise associated with excavation, construction and site closure. These activities would be small in scale and temporary, so that there would be no permanent increase in ambient noise levels in the project vicinity above levels existing without the project. Projects would need to comply with local noise ordinances, which would be expected to keep temporary noise at less than significant levels. Such compliance projects would not be expected to expose people residing or working in the project area to excessive noise levels.

POPULATION AND HOUSING. Would the project:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?			X	
Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				X
Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				X

Background and Affected Environment:
The project location is the State of California. The potentially affected environments are environments within urban areas served by the URWS affected by this regulation. These areas are largely developed, consisting of residential, commercial, industrial, and institutional land uses.

Activities to comply with the proposed regulation may include on-site, indoor administrative data management activities, installation of production metering and pressure monitoring equipment inside existing facilities, and testing of metering and pressure monitoring equipment inside existing facilities. These do not have the potential to impact population growth or housing.

Some compliance activities, such as leak detection, leak repair, and pipe rehabilitation or replacement, would occur on existing urban roadways or adjacent areas. These have limited potential to impact any of the categories of population growth or housing.

The proposed regulation would have no impact or a less than significant impact on population and housing.

Discussion:
Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Less Than Significant Impact. The goal of the proposed regulation is to decrease real water loss from URWS distribution systems. Compliance with the proposed regulation would have no direct impact on population growth. The water saved from reductions in water losses could potentially be available to support additional uses, including residential housing development. Therefore, it could indirectly induce population growth. It could also reduce URWS needs for investments in expanded water supplies and infrastructure. The expected quantities of water available from this regulation will be modest and, when considered alongside new statutory limitations regarding urban water use (see, e.g., Wat. Code, § 10609.12), any potential indirect population growth in an area resulting from the regulation will not be substantial.

Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

No Impact. Compliance activities for the proposed regulation would not displace existing housing or necessitate replacement housing elsewhere.

Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

No Impact. Compliances activities for the proposed regulation would not displace substantial numbers of people or necessitate replacement housing elsewhere.

PUBLIC SERVICES. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Fire protection?				X
Police Protection?				X
Schools?				X
Parks?				X
Other public facilities?				X

Background and Affected Environment:
The project location is the State of California. The potentially affected environments are environments within urban areas served by the URWS affected by this regulation. These areas are largely developed, consisting of residential, commercial, industrial, and institutional land uses.

Activities to comply with the proposed regulation may include on-site, indoor administrative data management activities, installation of production metering and pressure monitoring equipment inside existing facilities, and testing of metering and pressure monitoring equipment inside existing facilities. These do not have the potential to impact any of the categories of public services.

Some compliance activities, such as leak detection, leak repair, and pipe rehabilitation or replacement, would occur on existing urban roadways or adjacent areas. These have limited and temporary potential to impact any of the categories of public services. They would not be expected to require new or physically altered governmental facilities in order to maintain acceptable service ratios, response times or other performance objectives of government service agencies.

The proposed regulation would have no significant impact on public services.

Discussion:
Fire protection?

No Impact. The proposed regulation would not be expected to require new or physically altered governmental facilities in order to maintain acceptable service ratios, response times or otherwise affect the provision of fire protection services.

Pressure control activities must comply with applicable local fire flow and pressure requirements.

Police Protection?

No Impact. The proposed regulation would not be expected to require new or physically altered governmental facilities in order to maintain acceptable service ratios, response times or otherwise affect the provision of police protection services.

Schools?

No Impact. The proposed regulation would not be expected to require new or physically altered governmental facilities in order to maintain acceptable service ratios, response times or otherwise affect the provision of school services.

Parks?

No Impact. The proposed regulation would not be expected to require new or physically altered governmental facilities in order to maintain acceptable service ratios, response times or otherwise not affect the provision of park services.

Other public facilities?

No Impact. The proposed regulation would not be expected to require new or physically altered governmental facilities in order to maintain acceptable service ratios, response times or otherwise affect the provision of other public services or facilities.

RECREATION. Would the project:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				X
Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				X

Affected Environment:
The project location is the State of California. The potentially affected environments are environments within urban areas served by the URWS affected by this regulation. These areas are largely developed, consisting of residential, commercial, industrial, and institutional land uses.

Many potential compliance activities or projects will be done within the confines of existing URWS facilities. Some compliance activities, such as leak detection, leak repair, and pipe rehabilitation or replacement, would occur on existing urban roadways or adjacent areas. None are expected to adversely affect existing recreational facilities or result in the construction of new recreational facilities

The proposed regulation would have no impact on recreation.

Discussion:
Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

No Impact. The proposed regulation would not affect the use of existing neighborhood and regional parks or other recreational facilities.

Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

No Impact. The proposed regulation does not include recreational facilities or require that expansion of recreational facilities.

TRANSPORTATION/TRAFFIC. Would the project:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?			X	
Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?			X	
Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				X
Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				X
Result in inadequate emergency access?			X	
Conflict with adopted polices, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?				X

Background and Affected Environment:

The project location is the State of California. The potentially affected environments are environments within urban areas served by the URWS affected by this regulation. These areas are largely developed, consisting of residential, commercial, industrial, and institutional land uses.

Activities to comply with the proposed regulation may include on-site, indoor administrative data management activities, installation of production metering and pressure monitoring equipment inside existing facilities, and testing of metering and pressure monitoring equipment inside existing facilities. These do not have the potential to impact any of the categories of transportation and traffic.

Some compliance activities, such as leak detection, leak repair, and pipe rehabilitation or replacement would occur on existing urban roadways or adjacent areas. While the frequency of these activities may change in response to the regulation, the type of activities or location are not expected to change substantially compared to without the regulation. These have limited and temporary potential to impact any of the categories of transportation and traffic.

The proposed regulation would have no impact or a less than significant impact on transportation/traffic issues.

Discussion:
Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

Less Than Significant Impact. Compliance with the proposed regulation is not expected to substantially increase traffic or traffic-related hazards associated with URWS operations. Some compliance activities, such as leak detection, leak repair, and pipe rehabilitation or replacement would occur on existing urban roadways or adjacent areas. These would have limited and temporary potential to impact traffic flow at the project sites. Specific projects would be expected to comply with applicable plans, ordinances and policies establishing measures of effectiveness for the performance of the circulation system.

Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

Less Than Significant Impact. Compliance with the proposed regulation is not expected to substantially increase traffic or traffic-related hazards associated with URWS operations. Some compliance activities, such as leak detection, leak repair, and pipe rehabilitation or replacement would occur on existing urban roadways or adjacent areas. These would have limited and temporary potential to impact traffic flow at the project site. Specific projects would be expected to comply with applicable congestion management programs.

Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

No Impact. The proposed regulation would not affect air traffic patterns.

Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

No Impact. The proposed regulation would not affect road layout, increase hazards due to a design feature, or result in incompatible uses.

Result in inadequate emergency access?

Less Than Significant Impact. Compliance with the proposed regulation is not expected to substantially adversely impact emergency access associated with URWS operations. However, some compliance activities, such as leak detection, leak repair, and pipe rehabilitation or replacement would occur on existing urban roadways or adjacent areas. These would have limited and temporary potential to impact emergency access during operations. Specific projects would be expected to comply with applicable local plans and ordinances regarding access by emergency responders.

Conflict with adopted polices, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

Less Than Significant Impact. Compliance with the proposed regulation would not substantially conflict with adopted policies, plans or programs related to public transit, bicycle, or pedestrian facilities, nor will they otherwise decrease the long-term performance or safety of such facilities. However, some compliance activities, such as leak detection, leak repair, and pipe rehabilitation or replacement would occur on existing urban roadways or adjacent areas. These activities would have limited and temporary potential to impact public transit, bicycle and pedestrian facilities during compliance operations. Specific projects would be expected to comply with applicable local ordinances regarding public transit, bicycle, and pedestrian facilities.

TRIBAL CULTURAL RESOURCES. Would the project:		Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:					
i)	Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or			X	
ii)	A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in			X	

	subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.				

Background and Affected Environment:
The project location is the State of California. The potentially affected environments are environments is within urban areas served by the URWS affected by this regulation. These areas are largely developed, consisting of residential, commercial, industrial, and institutional land uses.

To address potential effects on tribal cultural resources, the Water Board must also fulfill the requirements of Assembly Bill 52 (AB 52). AB 52 requires a lead agency to notify tribes traditionally and culturally affiliated with a project area of the details of the proposed project, provided the tribes have requested such notification (Pub. Res. Code § 21080.3.1, subd. (d)).

The State Water Board Office of Public Participation (OPP) includes the office of the Tribal Liaison. OPP provided ORPP with a current list of tribes that have requested to be contacted for AB 52 Consultation. All of the tribes on the list were contacted in April 2019. ORPP was notified by postal carrier and/or electronic email receipt that the correspondence was received. If any of the notified tribes request consultation, then the lead agency must consult with the tribe to discuss avoidance and mitigation of significant impacts to tribal cultural resources (Pub. Res. Code § 21080.3.2). In 2020, the State Water Board conducted a consultation with the United Auburn Indian Community regarding the proposed statewide regulation to establish water loss performance standards to reduce leakage from water distribution systems.

Activities to comply with the proposed regulation may include on-site, indoor administrative data management activities, installation of production metering and pressure monitoring equipment inside existing facilities, and testing of metering and pressure monitoring equipment inside existing facilities. These do not have the potential to impact either of the categories of tribal cultural resources.

Some compliance activities, such as leak detection, leak repair, and pipe rehabilitation or replacement, would occur on existing urban roadways or adjacent areas. These have limited potential to impact tribal cultural resources. Construction projects may require individualized CEQA analysis, and it is expected that those are the only activities that will have potential impacts on TCRs. Potential significant impacts to TCRs will be analyzed and mitigated for in the individual CEQA analyses once the potential construction projects and potentially impacted TCRs are known.

The proposed regulation would have a less than significant impact on tribal cultural resources.

Discussion:
Would the project cause a substantial adverse change in the significance of a tribal cultural resource… that is: listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?

Less Than Significant Impact. Potential compliance activities for the proposed regulation are predominantly associated with existing URWS facilities or existing infrastructure under roads and rights-of-way, and most potential compliance activities are expected to be the same types of activities, in the same locations, as would occur in the absence of the regulation, though the frequency of the activities may increase. Compliance activities involving existing infrastructure are unlikely to impact tribal cultural resources that are listed or eligible for listing in the California Register of Historical Resources or in a local register of historical resources.

Some potential compliance activities, such as major pipe replacement programs, could involve development of new sites. Construction projects may require individualized CEQA analyses, and appropriate mitigations. It is anticipated that these are the only projects that will have impacts on tribal cultural resources that are listed or eligible for listing in the California Register of Historical Resources or in a local register of historical resources. As part of any such individualized analyses, the presence of tribal cultural resources will be determined, and the project modified accordingly.

The proposed regulation would not cause a substantial adverse change in the significance of any tribal cultural resources that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1, subdivision (k).

Would the project cause a substantial adverse change in the significance of a tribal cultural resource… that is: A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Less Than Significant Impact. Potential compliance activities for the proposed regulation are predominantly associated with existing URWS facilities or existing infrastructure under roads and rights-of-way. These would not be expected to be associated with a tribal cultural resource, and thus unlikely to result in a substantial adverse change in its significance.

Some potential compliance activities, such as major pipe replacement programs, could involve development of new sites. These would likely require individualized CEQA analyses, and appropriate mitigations. As part of these, the presence of tribal cultural resources will be determined, and the project modified accordingly.

The proposed regulation would not significantly adversely impact any tribal cultural resources, including any resources determined by the lead agency to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, considering the significance of the resource to a California Native American tribe.

UTILITIES AND SERVICE SYSTEMS. Would the project:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				X
Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			X	
Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				X
Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?				X
Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				X
Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?				X
Comply with federal, state, and local statutes and regulations related to solid waste?				X

Background and Affected Environment:

The project location is the State of California. The potentially affected environments are environments within urban areas served by the URWS affected by this regulation. These areas are largely developed, consisting of residential, commercial, industrial, and institutional land uses.

Activities to comply with the proposed regulation may include on-site, indoor administrative data management activities, installation of production metering and

pressure monitoring equipment inside existing facilities, and testing of metering and pressure monitoring equipment inside existing facilities. These do not have the potential to impact utilities and service systems.

Some compliance activities, such as leak detection, leak repair, and pipe rehabilitation or replacement, would occur on existing urban roadways or adjacent areas. While the frequency of these activities may change in response to the regulation, the type of activities or location are not expected to change substantially compared to without the regulation. These have limited potential to impact other utilities and service systems.

The proposed regulation would have no impact or a less than significant impact on utilities and service systems.

Discussion:
Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

No Impact. Anticipated compliance activities for the proposed regulation would not involve discharges that would exceed wastewater treatment requirements of any Regional Water Quality Control Board.

Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

No Impact. The proposed regulation would not require or result in the construction of new water or wastewater treatment facilities.

Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

No Impact. The proposed regulation would not require or result in the construction of new, or the expansion of existing, stormwater drainage facilities.

Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

No Impact. Compliance activities for the proposed regulation would not require new water supplies.

Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

No Impact. Compliance activities for the proposed regulation would not require additional wastewater treatment facility capacity.

Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

No Impact. Compliance activities for the proposed regulation would not affect landfill capacity.

Comply with federal, state, and local statutes and regulations related to solid waste?

No Impact. The proposed regulation would not affect federal, state, and/or local statutes related to solid waste.

MANDATORY FINDINGS OF SIGNIFIGANCE. Would the project:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?			X	
Does the project have impacts that are individually limited, but cumulatively considerable? (Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)			X	
Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?				X

Background and Affected Environment:
The project location is the State of California. The potentially affected environments are environments within urban areas served by the URWS affected by this regulation. These areas are largely developed, consisting of residential, commercial, industrial, and institutional land uses.

Potential activities to comply with the proposed regulation include on-site, indoor administrative data management activities, installation of production metering and pressure monitoring equipment inside existing facilities, and testing of metering and pressure monitoring equipment inside existing facilities. These do not have the potential to significantly adversely impact the environment.

Some potential compliance activities, such as leak detection, leak repair, and pipe rehabilitation or replacement, would occur off-site on existing urban roadways or adjacent areas. These activities have limited potential to significantly adversely impact the environment. These activities are small in area, are short-term (hours, days), and do not involve substantial use of machinery or toxic materials.

Compliance by the 366 URWS impacted by the proposed regulation would have a less than significant cumulative adverse impact on the environment.

Discussion:
Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?

Less Than Significant Impact. The majority of potential compliance activities will be done in the urban environments of the 366 URWS at facility sites and at off-site locations that have been previously developed (roadways and rights-of-way) and of lower habitat value. While many of the projects would be statutorily or categorically exempt from CEQA, the types of projects that have the greatest potential to adversely impact the environment are also those projects that are most likely require individualized CEQA analyses, and appropriate mitigations.

Does the project have impacts that are individually limited, but cumulatively considerable? (Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)

Less than Significant Impact.

When viewed in connection with past, current, and future efforts, the cumulative effects of the proposed regulation will not be considerable and will have a less than significant impact on California's environment.

Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

No Impact. The proposed regulation would not have environmental effects which would cause substantial adverse effects on human beings, either directly or indirectly.

CITED WORKS

American Water Works Association (2016). M36: Water Audits and Loss Control Programs.

California Energy Commission (2006). Refining Estimates of Water-Related Energy Use in California.

Water Research Foundation and U.S. Environmental Protection Agency (2014). Real Loss Component Analysis: A Tool for Economic Water Loss Control.

TABLES

Table 1. Reasonably Foreseeable Water Loss Control Technologies

Technology/ activity	Location/scale
Metering:	
production meter installation	on existing utility site
customer meter installation	sidewalk median or customer site
production meter testing	on existing utility site

customer meter testing	removal/replacement; sidewalk median or customer site
customer meter replacement	sidewalk median or customer site
advanced metering infrastructure installation	on existing utility site
Monitoring and Assessment:	
system pressure monitoring and logging system installation	on existing utility site and local (hydrants)
historical pressure data analysis	office
impact studies (pressure vs. leakage, breaks)	on utility site and local (hydrants)
System Pressure Management:	
reconfiguration of pressure zones and storage	on existing site and/or small installations
reduce pressure during low demands	office or on site
pressure reducing valve installation	on existing site and/or small installations
booster pump installation	on existing site and/or new installations
storage tank retrofit or installation	on existing site and/or new installations
pump flywheel retrofit	on existing site
relief and check valve installation	on existing site and/or small installations
surge tank installation	on existing site
Leak Detection Activities:	
leak and break history analysis	office
leak detection- visual surveys and reporting	local, short-term field work
Leak Detection-Acoustic Methods:	
leak noise probe	local, short-term fieldwork
leak noise correlator	local, short-term fieldwork
ground microphone	local, short-term fieldwork
hydrophone	local, short-term fieldwork
leak noise data logger	local, short-term fieldwork
leak noise transmitter	local, short-term fieldwork
in-line detection sensor	local, short-term fieldwork
Leak Detection- Non-Acoustic Methods:	
tracer gas	local, short-term field work
ground-penetrating radar	local, short-term field work
thermography	local, short-term field work
satellite imaging	office and field work
DMA analysis	local, short-term field work
leak detection- flow measurements	local, short-term field work
leakage component analysis	office
Leak Management:	

valve O&M	local, short-term field work
Optimized Leak Repair:	
excavation	local, short-term field work
internal joint seals	local, short-term field work
pipe sleeves	local, short-term field work
chemical grouts	local, short-term field work
spray-on epoxy and polyurethane coating	local, short-term field work
Reinforced carbon fiber pipe wrapping	local, short-term field work
closure and site restoration	local, short-term field work
System Rehabilitation and Renewal:	
excavation	local, depends on extent
Pipe Rehabilitation:	
spray-on internal coatings, sealants and linings	local, depends on extent
sliplining	local, depends on extent
cured-in-place pipe linings	local, depends on extent
inserted hose linings	local, depends on extent
close fit linings	local, depends on extent
Pipe Replacement:	
open cut/ trenched	local, depends on extent
pipe bursting	local, depends on extent
pipe splitting	local, depends on extent
pipe reaming	local, depends on extent
pipe pulling	local, depends on extent
microtunneling	local, depends on extent
pipe jacking	local, depends on extent
pipe ramming	local, depends on extent
impact moling	local, depends on extent
horizontal directional drilling	local, depends on extent
site closure and restoration	local, depends on extent
system maintenance	on existing sites