

AMENDED IN SENATE APRIL 6, 2015

SENATE BILL

No. 471

Introduced by Senator Pavley

February 26, 2015

An act to *add Chapter 10 (commencing with Section 39950) to Part 2 of Division 26 of the Health and Safety Code, to add Section 75214.5 to the Public Resources Code, and to amend Sections 10537 and 10538 of, and to add Section 79746.5 to, the Water Code, relating to water.*

LEGISLATIVE COUNSEL'S DIGEST

SB 471, as amended, Pavley. Water, energy, and reduction of greenhouse gas emissions: planning.

~~(1) Existing law requires all moneys, except for fines and penalties, collected by the State Air Resources Board from the auction or sale of allowances as part of a market-based compliance mechanism relative to reduction of greenhouse gas emissions, to be deposited in the Greenhouse Gas Reduction Fund. Existing~~

(1) Existing law designates the State Air Resources Board as the state agency charged with monitoring and regulating sources of emissions of greenhouse gases. Existing law requires all moneys, except for fines and penalties, collected by the State Air Resources Board from the auction or sale of allowances as part of a market-based compliance mechanism relative to reduction of greenhouse gas emissions, commonly known as cap and trade revenues, to be deposited in the Greenhouse Gas Reduction Fund, and to be used, upon appropriation by the Legislature, for specified purposes.

This bill would require the state board, in cooperation with various other agencies, to develop an emissions inventory of greenhouse gas emissions from the water system in the state, using best available data.

The bill would provide water recycling, wastewater treatment, water end-use efficiency, water technology improvements, best management practices, and other projects that reduce water system greenhouse gas emissions shall be eligible for funding from the Greenhouse Gas Reduction Fund.

(2) Existing law continuously appropriates specified portions of the annual proceeds in the Greenhouse Gas Reduction Fund to various programs including 20% for the Affordable Housing and Sustainable Communities Program, administered by the Strategic Growth Council. Existing law specifies the objectives for the program and identifies categories of projects eligible for funding under this program.

This bill would require the council, in implementing these provisions, to give special consideration to awarding funds to eligible projects that, in addition to existing objectives and goals, would also result in reduced energy use by a water supplier, an end user of water, or both. *greenhouse gas emissions by the water system in the state.*

~~(2)~~

(3) The Integrated Regional Water Management Planning Act authorizes a regional water management group to prepare an integrated regional water management plan, in accordance with certain procedures, for the implementation or operation of specified qualified projects or programs pertaining to water supply, water quality, or related matters. The act defines “regional projects or programs” as projects or programs identified in an integrated regional water management plan that accomplish specified water-related goals, including an increase in water supplies through the use of certain means.

This bill would specifically include projects or programs that reduce *the greenhouse gas emissions from* energy used to acquire, transport, treat, or distribute water as a regional project or program.

~~(3)~~

(4) Existing law, the Water Quality, Supply, and Infrastructure Improvement Act of 2014, approved by the voters as Proposition 1 at the November 4, 2014, statewide general election, authorizes the issuance of general obligation bonds in the amount of \$7,545,000,000 to finance a water quality, supply, and infrastructure improvement program. The bond act provides that the sum of \$810,000,000 is to be available, upon appropriation by the Legislature, for expenditures on, and competitive grants and loans to, projects that are included in and implemented in, an adopted integrated regional water management plan and respond to climate change and contribute to regional water security.

The bond act authorizes the use of \$100,000,000 of those funds for direct expenditures, and for grants and loans, for certain water conservation and water-use efficiency plans, projects, and programs.

This bill, in implementing the direct expenditures, grants, and loans for these water conservation and water-use efficiency plans, projects, and programs, would require special consideration be given to expenditures, grants, and loans that would result in reduced energy use by the water supplier, end user of the water, or both: *greenhouse gas emissions.*

~~(4)~~

(5) The bill would make legislative findings and declarations, and a statement of legislative intent, with regard to the nexus between water and energy and water and reduction of greenhouse gas emissions.

~~(5) The bill would also state the intent of the Legislature to enact legislation to require the Energy Resources Conservation and Development Commission to update and further refine its 2007 study of water-related energy use in California, without imposing any new emissions regulations on affected entities.~~

Vote: majority. Appropriation: no. Fiscal committee: yes.
State-mandated local program: no.

The people of the State of California do enact as follows:

1 SECTION 1. (a) The Legislature finds and declares all of the
2 following:

3 (1) Water and energy resources are inextricably connected. This
4 relationship is known as the water-energy nexus.

5 ~~(A) Transportation and treatment of water, treatment and
6 disposal of wastewater, and the energy used to heat and consume
7 water account for nearly 20 percent of the total electricity and 30
8 percent of nonpowerplant-related natural gas consumed in
9 California.~~

10 ~~(B) Similarly, water is used to turn turbines for hydropower, to
11 produce steam for thermoelectric power, and to cool equipment
12 by absorbing the waste heat produced by power generation.~~

13 (A) *The energy used to drive California's water system,
14 including, but not limited to, the fuels used to power groundwater
15 pumps, transportation, treatment and disposal systems for water
16 and wastewater, heating and cooling of water in buildings and
17 other facilities, and the delivery of water to end users, accounts*

1 for nearly 20 percent of the total electricity usage, 30 percent of
2 nonpower-related natural gas consumed, and an unknown quantity
3 of greenhouse gas emissions associated with that energy
4 production.

5 (B) The water used to drive California's energy system,
6 including, but not limited to, the water used to turn turbines for
7 hydropower, to produce steam and cooling systems for
8 thermoelectric power, and to extract and refine oil and gas,
9 represents a substantial portion of our state water demand.

10 (C) Consequently, saving water saves energy, and vice versa.

11 ~~(2)~~

12 ~~(D) Because of the water-energy nexus, there is also a~~
13 ~~water-greenhouse gas nexus: production of energy often results in~~
14 ~~the emission of greenhouse gases, there is substantial potential~~
15 ~~for emission reductions in the water system.~~

16 ~~(A) Production of energy often results in production of~~
17 ~~greenhouse gases.~~

18 ~~(B) Consequently, saving water saves energy and, by extension,~~
19 ~~reduces greenhouse gas emissions.~~

20 ~~(3)~~

21 (2) Planning for water use is often conducted without
22 consideration of energy use or greenhouse gas emissions. Similarly,
23 planning for energy and reduction of greenhouse gas emissions is
24 often conducted without consideration of water resources. *As a*
25 *result, local and state agencies may not be identifying projects*
26 *that best serve water and energy investments to maximize*
27 *greenhouse gas emissions reductions.*

28 (b) It is the intent of the Legislature, in enacting this act, to:

29 (1) Provide the best available data on the water-energy nexus
30 so that it may be included in the scoping plan update prepared
31 pursuant to the California Global Warming Solutions Act of 2006
32 (Ch. 488, Stats. 2006).

33 (2) More closely integrate the planning for water, energy, and
34 greenhouse gas emissions.

35 (3) Enable opportunities for innovative projects and programs
36 that reduce the greenhouse gas intensity of our water system ~~and~~
37 ~~the water intensity of our energy system to access eligible funds,~~
38 ~~including moneys from the Greenhouse Gas Reduction Fund, the~~
39 ~~Water Quality, Supply, and Infrastructure Improvement Act of~~
40 ~~2014 (Proposition 1), the Electric Program Investment Charge~~

1 ~~Fund, and investor-owned utility ratepayer dollars in order to~~
2 ~~access eligible funds.~~

3 ~~(e) It is further the intent of the Legislature to enact legislation~~
4 ~~to require the Energy Resources Conservation and Development~~
5 ~~Commission to update and further refine its 2007 study of~~
6 ~~water-related energy use in California, including source-specific~~
7 ~~data, which would be anonymized to the extent necessary to protect~~
8 ~~business confidential information or security sensitive information;~~
9 ~~and without imposing any new emissions regulations on the entities~~
10 ~~with which these water-related energy use emissions are associated.~~

11 ~~SEC. 2. Chapter 10 (commencing with Section 39950) is added~~
12 ~~to Part 2 of Division 26 of the Health and Safety Code, to read:~~

13

14 ~~CHAPTER 10. EMISSIONS FROM THE WATER SYSTEM~~

15

16 ~~39950. (a) The state board, in cooperation with the State~~
17 ~~Energy Resources Conservation and Development Commission,~~
18 ~~the Public Utilities Commission, the State Water Resources Control~~
19 ~~Board, and the Department of Water Resources, shall develop an~~
20 ~~emissions inventory of greenhouse gas emissions from the water~~
21 ~~system in the state, using best available data.~~

22 ~~(b) Water recycling, wastewater treatment, water end-use~~
23 ~~efficiency, water technology improvements, best management~~
24 ~~practices, and other programs that reduce water system greenhouse~~
25 ~~gas emissions shall be eligible for funding from the Greenhouse~~
26 ~~Gas Reduction Fund.~~

27 ~~SEC. 2.~~

28 ~~SEC. 3. Section 75214.5 is added to the Public Resources Code,~~
29 ~~to read:~~

30 ~~75214.5. In implementing the program, the council shall give~~
31 ~~special consideration to awarding funds to eligible projects that,~~
32 ~~in addition to achieving the objectives identified in Section 75210~~
33 ~~and supporting the goals identified in Section 75214, would also~~
34 ~~result in reduced energy use by a water supplier, an end user of~~
35 ~~water, or both. greenhouse gas emissions by the water system in~~
36 ~~the state.~~

37 ~~SEC. 3.~~

38 ~~SEC. 4. Section 10537 of the Water Code is amended to read:~~

1 10537. “Regional projects or programs” means projects or
2 programs identified in an integrated regional water management
3 plan that accomplish any of the following:

4 (a) Reduce water demand through agricultural and urban water
5 use efficiency.

6 (b) Increase water supplies for any beneficial use through the
7 use of any of the following, or other, means:

8 (1) Groundwater storage and conjunctive water management.

9 (2) Desalination.

10 (3) Precipitation enhancement.

11 (4) Water recycling.

12 (5) Regional and local surface storage.

13 (6) Water-use efficiency.

14 (7) Stormwater management.

15 (c) Improve operational efficiency and water supply reliability,
16 including conveyance facilities, system reoperation, and water
17 transfers.

18 (d) Improve water quality, including drinking water treatment
19 and distribution, groundwater and aquifer remediation, matching
20 water quality to water use, wastewater treatment, water pollution
21 prevention, and management of urban and agricultural runoff.

22 (e) Improve resource stewardship, including agricultural lands
23 stewardship, ecosystem restoration, flood plain management,
24 recharge area protection, urban land use management, groundwater
25 management, water-dependent recreation, fishery restoration,
26 including fish passage improvement, and watershed management.

27 (f) Improve flood management through structural and
28 nonstructural means, or by any other means.

29 (g) Reduce *the greenhouse gas emissions from* energy used to
30 acquire, transport, treat, or distribute water.

31 ~~SEC. 4.~~

32 *SEC. 5.* Section 10538 of the Water Code is amended to read:

33 10538. “Regional reports or studies” means reports or studies
34 relating to any of the matters described in subdivisions (a) to (g),
35 inclusive, of Section 10537, that are identified in an integrated
36 regional water management plan.

37 ~~SEC. 5.~~

38 *SEC. 6.* Section 79746.5 is added to the Water Code, to read:

39 79746.5. In implementing Section 79746, special consideration
40 shall be given to expenditures, grants, and loans that, in addition

1 to the purposes of Section 79746, would also result in reduced
2 energy use by the water supplier, end user of the water, or both.
3 *greenhouse gas emissions.*

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