

AMENDED IN ASSEMBLY MARCH 1, 2016

CALIFORNIA LEGISLATURE—2015–16 REGULAR SESSION

ASSEMBLY BILL

No. 1755

Introduced by Assembly Member Dodd

February 2, 2016

An act to add Part 4.9 (commencing with Section 12400) to Division 6 of the Water Code, relating to water data.

LEGISLATIVE COUNSEL'S DIGEST

AB 1755, as amended, Dodd. The Open and Transparent Water Data Act.

Existing law imposes on the Department of Water Resources various duties with respect to water in the state. Under existing law, the State Water Resources Control Board administers a water rights program pursuant to which the state board grants permits and licenses to appropriate water. Existing law regulates water transfers and authorizes a permittee or licensee to change the point of diversion, place of use, or purpose of use due to a transfer or exchange of water or water rights if certain conditions are met.

This bill would enact the Open and Transparent Water Data Act. The act would require the department to establish a public benefit corporation that would create and manage (1) a statewide water information ~~accounting~~ system to improve the ability of the state to meet the growing demand for water supply reliability and healthy ecosystems, that, among things, would integrate existing water data information from multiple databases and (2) an online water transfer information clearinghouse for water transfer information that would include, among other things, a database of historic water transfers and transfers pending responsible

agency approval and a public forum to exchange information on water market issues.

The act would require the department, the state board, and the Department of Fish and Wildlife to develop protocols for data sharing, documentation, quality control, public access, and promotion of open source platforms and decision support tools related to water ~~data~~. *data and to submit to the Legislature a report on those protocols.* The act would specify that a recipient of state funds for research or projects relating to the improvement of water data shall adhere to those protocols or be ineligible for state funding. ~~The act would impose various other duties on the department, state board, and Department of Fish and Wildlife related to the improvement of water data, including submitting reports to the Legislature on the protocols the agencies develop and on the feasibility of creating a better surface water and groundwater monitoring network.~~

The act would create the Water Information System Administration Fund. The act would specify that moneys in the fund would be available, upon appropriation, to the department for the improvement of water data and for the purposes of the act.

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. Part 4.9 (commencing with Section 12400) is
2 added to Division 6 of the Water Code, to read:

3
4 PART 4.9. THE OPEN AND TRANSPARENT WATER DATA
5 ACT

6
7 CHAPTER 1. GENERAL PROVISIONS

8
9 12400. This part shall be known, and may be cited, as the Open
10 and Transparent Water Data Act.

11 12401. The Legislature finds and declares all of the following:

12 (a) The recent drought reveals that California needs a real-time,
13 accessible statewide water information ~~accounting~~ system to help
14 water managers operate California’s water system more effectively
15 and help water users make informed decisions based on water
16 availability and allocation.

1 (b) California has a number of databases containing information
2 on hydrology, biology, water quality, the physical environment,
3 and water rights and use. The passage of the Sustainable
4 Groundwater Management Act (Part 2.74 (commencing with
5 Section 10720)) will result in more data on groundwater use and
6 availability. Unfortunately, current water data is often challenging
7 to obtain, outdated, and not always readily available to water
8 managers and the public due to its collection by numerous entities
9 and storage in disparate databases that often rely on tools that do
10 not keep pace with technological advances.

11 ~~(e) The ability to measure stream flow is hampered for some~~
12 ~~streams that lack gauges.~~

13 ~~(d)~~

14 (c) The need to account for California’s water is essential, yet
15 water managers must make decisions about water resources while
16 relying on outdated and incomplete information. A greater
17 understanding of and ability to access existing water data will
18 support more timely and science-based decisions related to water
19 planning, water allocations, water transfers, and water use
20 efficiency that will lead California to a more sustainable water
21 future.

22 ~~(e)~~

23 (d) On October 2, 2015, the Delta Stewardship Council released
24 a white paper entitled “Enhancing the Vision for Managing
25 California’s Environmental Information.” The white paper and the
26 Environmental Data Summit were a collaborative effort of the
27 Delta Stewardship Council and its Delta Science Program, the
28 Department of Water Resources, the Sacramento-San Joaquin
29 Delta Conservancy, the State Water Resources Control Board, the
30 Department of Fish and Wildlife, the San Francisco Estuary
31 Institute, the State and Federal Contractors Water Agency, and 34
32 North. The white paper recommended four necessary actions to
33 achieve the goal of streamlining the collaboration of huge amounts
34 of environmental data between various state and federal agencies
35 and identified the need for new policies for managing California’s
36 large amounts of data: development of a system where data could
37 be accessed from a centralized source, implementing new methods
38 for clear documentation of existing data, and developing business
39 models that will better facilitate the management of data.

40 ~~(f)~~

1 (e) The California Water Plan Update 2013, Volume 1, Chapter
2 6 6, entitled “Integrated Data and Analysis: Informed and
3 Transparent-Decision-Making” ~~Decision-Making~~,” describes key
4 actions needed to improve water resources information and analysis
5 for integrated water management and urges agencies that collect
6 data to work together to prioritize and align water resources
7 information that is collected by multiple agencies.

8 ~~(g)~~

9 (f) The California Water Action Plan recognizes the need to
10 take bold action to transfer the state’s water management system
11 to face the challenges of the 21st century. Climate change,
12 population growth, and vulnerable ecosystems create greater
13 uncertainty in future water availability. To address these challenges
14 California needs to do both of the following:

15 (1) Invest in a 21st century water management system that can
16 adapt to wide variations in rainfall.

17 (2) Safeguard and restore California’s freshwater ecosystems
18 so they can withstand variations in climate and competing demands
19 for water.

20 ~~(h)~~

21 (g) Standards for transparent access to data have changed with
22 the public demanding real-time information on demand. However,
23 the demand for available data currently outstrips the ability to
24 deliver information to water managers and the public.

25 ~~(i)~~

26 (h) Clear data standards and protocols help to promote
27 compatibility among datasets, allowing for sharing, aggregation,
28 and analysis by multiple groups.

29 ~~(j)~~

30 (i) Metadata summarizes basic information about data, which
31 can make finding and working with particular data easier. Clear
32 documentation of metadata avoids misunderstandings, reduces
33 disputes, and increases the effectiveness of management decisions.

34 ~~(k)~~

35 (j) Water data and research that is gathered using state funds
36 should be made publicly accessible. State delegation of data
37 management to contractors should not result in the public losing
38 access to its own information.

39 ~~(l)~~

1 (k) The availability of cheap and open-source tools could help
2 produce an online water transfer information clearinghouse without
3 the need to create an expensive new centralized database.

4 (m)

5 (l) An effective water market is one of several water
6 management tools needed to improve the state’s water supply
7 reliability.

8 12402. Unless the context otherwise requires, the following
9 definitions govern the construction of this part:

10 (a) “Clearinghouse” means the online water transfer information
11 clearinghouse created pursuant to Section 12415.

12 (b) “Department” means the Department of Water Resources.

13 (c) “Metadata” means data that describes data.

14 (d) “NGO” means a nongovernmental organization.

15 (e) “State board” means the State Water Resources Control
16 Board.

17 (f) “Water information system” means the statewide water
18 information-~~accounting~~ system created pursuant to Section 12410.

19
20 CHAPTER 2. PUBLIC BENEFIT CORPORATION PARTICIPATION

21
22 Article 1. General Provisions

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24 12405. (a) The department shall establish a public benefit
25 corporation to house, manage, and oversee the statewide water
26 information-~~accounting~~ system created pursuant to Section 12410
27 and the online water transfer information clearinghouse created
28 pursuant to Section 12415.

29 (b) The public benefit corporation may, notwithstanding any
30 other law and not subject to otherwise applicable provisions of the
31 Government Code and Public Contract Code, operate the water
32 information system and the clearinghouse on its own, through a
33 third party, or by engaging the services of private consultants,
34 educational institutions, and NGOs to render professional and
35 technical assistance with and advice for carrying out creation and
36 management activities.

37 (c) To the extent permitted by federal law, the public benefit
38 corporation may receive gifts, grants, or donations of moneys from
39 any agency of the federal government, any agency of the state, or
40 any municipality, county, or other political subdivision thereof, or

1 from any individual, association, foundation, or corporation for
2 achieving any of the purposes of this part. These moneys shall be
3 deposited in the Water Information System Administration Fund
4 created pursuant to Section 12425.

5

6 Article 2. Statewide Water Information-~~Accounting~~ Accounting System

7

8 12410. (a) The public benefit corporation established pursuant
9 to Section 12405 shall establish a statewide water information
10 ~~accounting~~ system to improve the ability of the state to meet the
11 growing demand for water supply reliability and healthy
12 ecosystems. The public benefit corporation shall create the water
13 information-~~accounting~~ system in collaboration with state and
14 federal agencies, water data users, and water experts.

15 (b) The water information-~~accounting~~ system shall, at a
16 minimum, do all of the following:

17 (1) Integrate existing water data information from multiple
18 autonomous databases managed by federal, state, and local agencies
19 and academia using consistent and standardized formats.

20 (2) Integrate, at a minimum, the following datasets:

21 (A) The department's information on State Water Project
22 reservoir operations, groundwater use, and groundwater levels
23 through California Statewide Groundwater Elevation Monitoring
24 (CASGEM), urban water use, and land use.

25 (B) The state board's data on water rights, water diversions,
26 and water quality through California Environmental Data Exchange
27 Network (CEDEN).

28 (C) The Department of Fish and Wildlife's information on fish
29 abundance and distribution.

30 (D) The United States Geological Survey's-~~stream-flow~~
31 *streamflow* conditions information through the National Water
32 Information System.

33 (E) The United States Bureau of Reclamation's federal Central
34 Valley Project operations information.

35 (F) The United States Fish and ~~Wildlife's~~, *Wildlife Service's*,
36 United States Forest Service's, and National Oceanic and
37 Atmospheric Administration Fisheries' fish abundance information.

38 (3) Incorporate clear and careful documentation of data quality
39 and data formats through metadata.

1 (4) Adhere to data protocols developed by state agencies
2 pursuant to Section 12420.

3 (5) Be able to receive both spatial and time series data from
4 various sources.

5 (6) Enable custom dashboards, visualizations, graphing, and
6 analysis.

7
8 Article 3. Online Water Transfer Information Clearinghouse
9

10 12415. The public benefit corporation established pursuant to
11 Section 12405 shall establish an online water transfer information
12 clearinghouse for water transfer information that shall include all
13 the following:

14 (a) A database of historic water transfers and transfers pending
15 responsible agency approval.

16 (b) A public forum to exchange information on water market
17 issues.

18 (c) Information to assist proponents with responsible agency
19 approval water transfer processes.

20
21 CHAPTER 3. STATE AGENCY RESPONSIBILITIES
22

23 12420. (a) The department, the state board, and the Department
24 of Fish and Wildlife shall develop an open, transparent process to
25 develop protocols for data sharing, documentation, quality control,
26 public access, and promotion of open source platforms and decision
27 support tools related to water data. The agencies shall develop and
28 submit to the Legislature, in compliance with Section 9795 of the
29 Government Code and before the establishment of a statewide
30 water information-accounting system pursuant to Section 12410,
31 a report describing these processes and protocols.

32 (b) Grant recipients for research or projects relating to the
33 improvement of water data that receive state funds shall adhere to
34 the protocols developed by state agencies pursuant to subdivision
35 (a) for data sharing, transparency, documentation, and quality
36 control.

37 (c) A researcher or grant recipient that does not comply with
38 subdivision (b) is not eligible for state funding until the researcher
39 or grant recipient complies with those requirements.

1 12421. (a) The department, the state board, and the Department
 2 of Fish and Wildlife shall, by _____, prepare and submit to the
 3 Legislature in compliance with Section 9795 of the Government
 4 Code a report that identifies priority basins and subbasins that need
 5 additional surface water or groundwater monitoring sites, evaluates
 6 the feasibility of creating a better surface water and groundwater
 7 monitoring network, and estimates the cost of and provides options
 8 for funding the water information system.

9 (b) The department shall develop both of the following:
 10 (1) A consistent method for estimating groundwater budgets.
 11 (2) A system for forecasting water supply availability and
 12 subbasin flows during wet, average, and dry periods.

13 12422. The state board shall do all of the following:
 14 (a) Develop a consistent and documented approach for
 15 estimating wet, average, and dry year water availability based on
 16 existing water use data collected from all surface water right
 17 holders that are required to file statements of diversion and use,
 18 including riparian and pre-1914 appropriative rights, and, where
 19 available, groundwater use information.

20 (b) (1) Require surface water right holders to electronically
 21 report return flow quantities and develop criteria for the reporting
 22 frequency that is required for different water rights holders.

23 (2) The state board may adopt a policy that requires more
 24 frequent monitoring and reporting from water right holders with
 25 water rights that are more likely to affect water availability than
 26 others.

27 (c) (1) Set and make public other water allocation priorities
 28 and quantities for wet, average, and dry periods for the environment
 29 and public health and safety.

30 (2) Categories of environmental flows shall include all of the
 31 following:

32 (A) Biological opinions pursuant to the federal Endangered
 33 Species Act of 1973 (16 U.S.C. Sec. 1531 et seq.);

34 (B) Federal Clean Water Act (33 U.S.C. Sec. 1251 et seq.) flows
 35 for water quality;

36 (C) Federal Migratory Bird Treaty Act (16 U.S.C. Sec. 703 et
 37 seq.) requirements for wetlands;

38 (D) Section 5937 of the Fish and Game Code, which requires
 39 fish flows downstream of dams;

