

AMENDED IN ASSEMBLY MAY 11, 2016

AMENDED IN ASSEMBLY APRIL 5, 2016

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~~ *department*, by *January 1, 2018*, to establish a ~~public benefit corporation that would create and manage (1) create, operate, and maintain~~ a statewide *integrated water information system to improve the ability of the state to meet the growing demand for water supply reliability and healthy ecosystems*; *data platform* that, among things, would integrate existing water *and ecological* data

information from multiple databases and ~~(2) an online water transfer information clearinghouse to report on water transactions that would include a database with information~~ *provide data* on completed water transfers, a public forum to exchange information on water market issues, and information to assist proponents with the water transfer approval processes. *transfers and exchanges.*

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~~ *open-source* platforms and decision support tools related to water 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 create the ~~Water Information System Data Administration Fund~~. The act would specify that moneys in the fund would be available, upon appropriation, to the ~~department~~ *department, the state board, and the Department of Fish and Wildlife* for the improvement of water data and for ~~the~~ *certain other* 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 system~~ *to integrate existing*
14 *water and ecological data into an authoritative open-access*
15 *platform* to help water managers operate California’s water system

1 more effectively and help water users make informed decisions
2 based on water availability and allocation.

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9 to obtain, outdated, and not always readily available to water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

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

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

38 ~~(e) The California Water Plan Update 2013, Volume 1, Chapter
39 6, entitled "Integrated Data and Analysis: Informed and Transparent
40 Decision-Making," describes key actions needed to improve water~~

1 resources information and analysis for integrated water
2 management and urges agencies that collect data to work together
3 to prioritize and align water resources information that is collected
4 by multiple agencies.

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

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

13 (2) Safeguard and restore California's freshwater ecosystems
14 so they can withstand variations in climate and competing demands
15 for water.

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

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

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

27 (b) State and federal leadership, increased awareness by
28 business, governmental, and nongovernmental organizations
29 through open and transparent access to data, and improved
30 technology and availability of open-source platforms create a
31 unique opportunity that California should seize upon to integrate
32 and increase access to existing water data.

33 (c) California is working to increase access to water data
34 collected by state agencies. The state board is piloting a project
35 to make water quality datasets available online through an open
36 data portal. The portal creates an opportunity to foster
37 collaboration among state agencies, share and integrate existing
38 datasets, improve state agency operations through data-driven
39 decisionmaking, and improve transparency and accountability.

1 (d) State agencies should promote openness and interoperability
2 of water data. Making information accessible, discoverable, and
3 usable by the public can foster entrepreneurship, innovation, and
4 scientific discovery.

5 (j)

6 (e) Water data and research that is gathered using state funds
7 should be made publicly accessible. State delegation of data
8 management to contractors should not result in the public losing
9 access to its own information.

10 (k)

11 (f) The availability of ~~cheap and open-source tools could help~~
12 ~~produce an~~ makes it easier to access and explore water and
13 ecological data and could facilitate the creation of an online
14 integrated water transfer information clearinghouse data platform
15 without the need to create an expensive new centralized database.

16 (l) ~~An effective water market is one of several water~~
17 ~~management tools needed to improve the state's water supply~~
18 ~~reliability.~~

19 12402. Unless the context otherwise requires, the following
20 definitions govern the construction of this part:

21 (a) ~~“Clearinghouse” means the online water transfer information~~
22 ~~clearinghouse created pursuant to Section 12415.~~

23 (b)

24 (a) “Department” means the Department of Water Resources.

25 (c)

26 (b) “Metadata” means data that describes data.

27 (d) ~~“NGO” means a nongovernmental organization.~~

28 (c) “Platform” means the statewide integrated water data
29 platform described in Section 12415.

30 (e)

31 (d) “State board” means the State Water Resources Control
32 Board.

33 (f) ~~“Water information system” means the statewide water~~
34 ~~information system created pursuant to Section 12410.~~

1 CHAPTER 2. PUBLIC BENEFIT CORPORATION PARTICIPATION
2 STATEWIDE WATER DATA INTEGRATION

3
4 Article 1. General Provisions
5

6 ~~12405. (a) The department shall establish a public benefit~~
7 ~~corporation to house, manage, and oversee the statewide water~~
8 ~~information system created pursuant to Section 12410 and the~~
9 ~~online water transfer information clearinghouse created pursuant~~
10 ~~to Section 12415.~~

11 ~~(b) The public benefit corporation may, notwithstanding any~~
12 ~~other law and not subject to otherwise applicable provisions of the~~
13 ~~Government Code and Public Contract Code, operate the water~~
14 ~~information system and the clearinghouse on its own, through a~~
15 ~~third party, or by engaging the services of private consultants,~~
16 ~~educational institutions, and NGOs to render professional and~~
17 ~~technical assistance with and advice for carrying out creation and~~
18 ~~management activities.~~

19 ~~(c) To the extent permitted by federal law, the public benefit~~
20 ~~corporation may receive gifts, grants, or donations of moneys from~~
21 ~~any agency of the federal government, any agency of the state, or~~
22 ~~any municipality, county, or other political subdivision thereof, or~~
23 ~~from any individual, association, foundation, or corporation for~~
24 ~~achieving any of the purposes of this part. These moneys shall be~~
25 ~~deposited in the Water Information System Administration Fund~~
26 ~~created pursuant to Section 12425.~~

27 *12405. The department, the state board, and the Department*
28 *of Fish and Wildlife shall coordinate and integrate existing water*
29 *and ecological data from local, state, and federal agencies. The*
30 *purposes for integrating water and ecological data are to provide*
31 *adequate information to implement the Sustainable Groundwater*
32 *Management Act (Part 2.74 (commencing with Section 10720)),*
33 *improve the management of the state’s water resources, and bring*
34 *greater transparency to water transfers and the market.*

35 *12406. (a) The department, the state board, and the*
36 *Department of Fish and Wildlife shall develop protocols for data*
37 *sharing, documentation, quality control, public access, and*
38 *promotion of open-source platforms and decision support tools*
39 *related to water data. The agencies shall develop and submit to*
40 *the Legislature, in compliance with Section 9795 of the Government*

1 *Code and before the establishment of a statewide integrated water*
2 *data platform pursuant to Section 12410, a report describing these*
3 *protocols. The report shall be developed in collaboration with*
4 *relevant federal agencies and interested stakeholders, including,*
5 *but not limited to, technology and open data experts and water*
6 *data users.*

7 *(b) Grant recipients for research or projects relating to the*
8 *improvement of water data that receive state funds shall adhere*
9 *to the protocols developed by state agencies pursuant to*
10 *subdivision (a) for data sharing, transparency, documentation,*
11 *and quality control.*

12 *(c) A researcher or grant recipient that does not comply with*
13 *subdivision (b) is not eligible for state funding until the researcher*
14 *or grant recipient complies with those requirements.*

15

16 *Article 2. Statewide Integrated Water Data Platform Creation*

17

18 *12410. (a) The department shall create, operate, and maintain*
19 *a statewide integrated water data platform in accordance with*
20 *Section 12415 by January 1, 2018.*

21 *(b) The department may partner with an existing nonprofit*
22 *organization, or with a new nonprofit organization that the*
23 *department creates, organized under paragraph (3) of subsection*
24 *(c) of Section 501 of Title 26 of the United States Code, or may*
25 *partner with another state agency, to create, operate, and maintain*
26 *the platform.*

27 *(c) Notwithstanding subdivision (a), the department may enter*
28 *into an agreement with an existing nonprofit organization, or with*
29 *a new nonprofit organization that the department creates,*
30 *organized under paragraph (3) of subsection (c) of Section 501 of*
31 *Title 26 of the United States Code, for that nonprofit organization*
32 *to create, operate, and maintain the platform.*

33 *(d) A nonprofit organization that participates in creating,*
34 *operating, or maintaining the platform may receive public funds,*
35 *court-ordered mitigation funds, or other funds to assist in carrying*
36 *out the responsibilities for integrating and managing existing water*
37 *and ecological data as described in Section 12415.*

1 Article 2.3. Statewide *Integrated Water Information System*
 2 *Data Platform Features*

3
 4 ~~12410. (a) The public benefit corporation established pursuant~~
 5 ~~to Section 12405 shall establish a statewide water information~~
 6 ~~system to improve the ability of the state to meet the growing~~
 7 ~~demand for water supply reliability and healthy ecosystems. The~~
 8 ~~public benefit corporation shall create the water information system~~
 9 ~~in collaboration with state and federal agencies, water data users,~~
 10 ~~and water experts.~~

11 ~~(b) The water information system~~

12 *12415. The statewide integrated water data platform created*
 13 *pursuant to Section 12410 shall, at a minimum, do all of the*
 14 *following:*

15 ~~(1)~~

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

20 ~~(2)~~

21 ~~(b) Integrate, at a minimum, the following datasets:~~

22 ~~(A)~~

23 ~~(1) The department’s information on State Water Project~~
 24 ~~reservoir operations, groundwater use, and groundwater levels~~
 25 ~~through California Statewide Groundwater Elevation Monitoring~~
 26 ~~(CASGEM), urban water use, and land use.~~

27 ~~(B)~~

28 ~~(2) The state board’s data on water rights, water diversions, and~~
 29 ~~water quality through California Environmental Data Exchange~~
 30 ~~Network (CEDEN).~~

31 ~~(C)~~

32 ~~(3) The Department of Fish and Wildlife’s information on fish~~
 33 ~~abundance and distribution.~~

34 ~~(D)~~

35 ~~(4) The United States Geological Survey’s streamflow~~
 36 ~~conditions information through the National Water Information~~
 37 ~~System.~~

38 ~~(E)~~

39 ~~(5) The United States Bureau of Reclamation’s federal Central~~
 40 ~~Valley Project operations information.~~

1 ~~(F)~~
 2 (6) The United States Fish and Wildlife Service’s, United States
 3 Forest Service’s, and National Oceanic and Atmospheric
 4 Administration Fisheries’ fish abundance information.

5 (c) *Provide data on completed water transfers and exchanges,*
 6 *including publicly available or voluntarily provided data on the*
 7 *volume, price, and delivery method, identity of the buyers and*
 8 *sellers, and the water right associated with the transfer or*
 9 *exchange.*

10 ~~(3) Incorporate~~
 11 (d) *Provide clear and careful documentation of data quality and*
 12 *data formats through metadata.*

13 ~~(4)~~
 14 (e) Adhere to data protocols developed by state agencies
 15 pursuant to Section ~~12420~~. *12406.*

16 ~~(5)~~
 17 (f) Be able to receive both spatial and time series data from
 18 various sources.

19 ~~(6)~~
 20 (g) Enable custom dashboards, visualizations, graphing, and
 21 analysis.

22
 23 ~~Article 3. Online Water Transfer Information Clearinghouse~~
 24

25 ~~12415. (a) The public benefit corporation established pursuant~~
 26 ~~to Section 12405 shall establish an online water transfer~~
 27 ~~information clearinghouse to report on water transactions that shall~~
 28 ~~include all of the following:~~

29 ~~(1) A database with information on completed water transfers.~~

30 ~~(2) A public forum to exchange information on water market~~
 31 ~~issues.~~

32 ~~(3) Information to assist proponents with the water transfer~~
 33 ~~approval processes.~~

34 ~~(b) The public benefit corporation shall not arrange, coordinate,~~
 35 ~~negotiate, or approve proposed water transfers through the online~~
 36 ~~water transfer information clearinghouse.~~

37 ~~(c) The public benefit corporation shall not publish information~~
 38 ~~about proposed water transfers, except for information published~~
 39 ~~by the state board or other government agency, including, but not~~

1 limited to, information publicly available on a government agency
2 Internet Web site.

3

4 CHAPTER 3. STATE AGENCY RESPONSIBILITIES

5

6 12420. ~~(a) The department, the state board, and the Department~~
7 ~~of Fish and Wildlife shall develop an open, transparent process to~~
8 ~~develop protocols for data sharing, documentation, quality control,~~
9 ~~public access, and promotion of open source platforms and decision~~
10 ~~support tools related to water data. The agencies shall develop and~~
11 ~~submit to the Legislature, in compliance with Section 9795 of the~~
12 ~~Government Code and before the establishment of a statewide~~
13 ~~water information system pursuant to Section 12410, a report~~
14 ~~describing these processes and protocols.~~

15 ~~(b) Grant recipients for research or projects relating to the~~
16 ~~improvement of water data that receive state funds shall adhere to~~
17 ~~the protocols developed by state agencies pursuant to subdivision~~
18 ~~(a) for data sharing, transparency, documentation, and quality~~
19 ~~control.~~

20 ~~(c) A researcher or grant recipient that does not comply with~~
21 ~~subdivision (b) is not eligible for state funding until the researcher~~
22 ~~or grant recipient complies with those requirements.~~

23

24 CHAPTER 4.3. WATER INFORMATION SYSTEM DATA
25 ADMINISTRATION FUND

26

27 ~~12425.~~

28 12420. The Water Information System Data Administration
29 Fund is hereby created. All moneys in the fund are available, upon
30 appropriation, to the ~~department~~ *department, the state board, or*
31 *the Department of Fish and Wildlife* for the improvement of water
32 data, including installing stream gauges and maintaining stream
33 gauge networks, and for the purposes of this part, including, but
34 not limited to, maintaining surface water and groundwater
35 monitoring networks, establishing and operating the public benefit
36 ~~corporation created data, for entering into an agreement with, or~~
37 ~~establishing, a nonprofit organization~~ pursuant to Section ~~12405,~~
38 ~~12410, or creating, operating, or maintaining and updating the~~
39 ~~statewide integrated water information system and online water~~
40 ~~transfer information clearinghouse, data platform described in~~

1 *Section 12415, including the cost to verify data, and modernizing*
2 *water information databases.*

3 *12421. (a) (1) The department, the state board, or the*
4 *Department of Fish and Wildlife may enter into an agreement to*
5 *accept funds or services from any person, educational institution,*
6 *government entity, corporation or other business entity, or*
7 *organization for the maintenance, development, improvement, or*
8 *enhancement of a designated agencies' data, decision support*
9 *tools, or information technology projects. Under the direction of*
10 *the respective agency, the funds or services received shall*
11 *supplement, but not replace, existing resources for the*
12 *maintenance, development, improvement, or enhancement of*
13 *designated agency data, decision support tools, or information*
14 *technology systems. The respective agency and the sponsoring or*
15 *donating person, entity, government, or organization shall specify*
16 *in the agreement the level of service that is to be performed.*

17 *(b) Funds received pursuant to this section shall be deposited*
18 *in the Water Data Administration Fund created pursuant to Section*
19 *12420.*

O