

Assembly Bill No. 1404

CHAPTER 675

An act to amend Sections 5100, 5103, and 10004.6 of, and to add Article 4.3 (commencing with Section 531) to Chapter 8 of Division 1 of, the Water Code, relating to water.

[Approved by Governor October 14, 2007. Filed with
Secretary of State October 14, 2007.]

LEGISLATIVE COUNSEL'S DIGEST

AB 1404, Laird. Water measurement information.

(1) Existing law, with certain exceptions, requires each person who diverts water after December 31, 1965, to file with the State Water Resources Control Board a statement of diversion and use. Existing law requires other water users or suppliers to report other water use information to various state agencies. Existing law requires certain water suppliers to install water meters on specified service connections and to charge for water service each customer that has a service connection for which a water meter has been installed based on the actual volume of deliveries, as measured by the water meter.

This bill would require the Department of Water Resources, the board, and the State Department of Public Health to coordinate the collection, management, and use of agricultural and urban water measurement information provided to each agency. The bill would require the board, in collaboration with the department, the California Bay-Delta Authority or its successor agency, and the State Department of Public Health, to prepare and submit a report to the Legislature by January 1, 2009, evaluating the feasibility, estimated costs, and potential means of financing a coordinated water measurement database.

The bill would require agricultural water suppliers to report, each year, aggregated farm-gate delivery data, as defined, to the department.

The bill, with certain exceptions and not later than January 1, 2012, would require persons required to submit to the board a specified annual statement of water diversion and use to include in that statement monthly records of water diversions. The bill, with a certain exception, would condition eligibility for certain grants or loans to those persons on compliance with this reporting requirement.

(2) Existing law requires the department to update the California Water Plan, which is a plan for the conservation, development, and use of the water resources of the state, every 5 years. The department, as part of the update, is required to release assumptions and estimates relating to current and projected water use.

This bill would require the department to include assumptions and estimates relating to current and projected water use for agricultural water diversion and use.

(3) This bill also would incorporate additional changes in Section 10004.6 of the Water Code proposed by SB 862, to be operative if this bill and SB 862 are both enacted and become effective on or before January 1, 2008, and this bill is enacted last.

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

SECTION 1. The Legislature finds and declares all of the following:

(a) As growth and development continue to make California's water resources increasingly scarce, diverse stakeholder groups have recognized the importance of accurate water measurement. Appropriate measurement of water use facilitates better water management by making critical information available to local, state, and federal water managers and planners. A greater understanding of water use will support better decisions related to water planning, water allocations, water transfers, and water use efficiency.

(b) On April 8, 2004, the California Bay-Delta Authority approved an urban and agricultural water use measurement proposal that was developed through an open multiyear process of technical review and consultation by diverse stakeholders and agencies. The review and consultation were designed to result in a balanced package of actions that together can advance meaningful and beneficial change.

(c) Agricultural water measurement recommendations were developed by an independent panel that issued a report in September 2003 entitled "Independent Panel on Appropriate Measurement of Agricultural Water Use." The independent panel identified seven categories for improving agricultural water measurement, and on a region-by-region basis evaluated the costs and benefits associated with changing the current practices. The panel emphasized that implementation of new measurement methods must be adaptive, account for changes in technology and economics, and allow for local flexibility. Implementation approaches were directed to be regionally sensitive, incentive driven, and cost effective.

(d) The Department of Water Resources, the State Water Resources Control Board, the State Department of Public Health, and the California Bay-Delta Authority should cooperate and coordinate their efforts in collecting, managing, and utilizing water use measurement information to ensure that the information is put to optimal use in water resource planning and decisionmaking, to increase efficiency, and to reduce redundancy of effort, administrative costs, and duplicative reporting burdens on persons required to report measurement information.

(e) Interagency coordination is particularly necessary for the purposes of developing forms, protocols, data sets, and research on measurement-related issues, and for the purpose of undertaking adaptive

management to identify future actions to improve water use measurement and water use efficiency in California.

SEC. 2. Article 4.3 (commencing with Section 531) is added to Chapter 8 of Division 1 of the Water Code, to read:

Article 4.3. Agricultural and Urban Water Use Reporting

531. Unless the context otherwise requires, the definitions set forth in this section govern the construction of this article.

(a) "Aggregated farm-gate delivery data" means information reflecting the total volume of water an agricultural water supplier provides to its customers and is calculated by totaling its deliveries to individual customers.

(b) "Agricultural water supplier" means a supplier either publicly or privately owned, supplying 2,000 acre-feet or more of surface water annually for agricultural purposes or serving 2,000 or more acres of agricultural land. An agricultural water supplier includes a supplier or contractor for water, regardless of the basis of right, which distributes or sells water for ultimate resale to customers.

(c) "Authority" means the California Bay-Delta Authority.

(d) "Best professional practices" means practices attaining and maintaining accuracy of measurement and reporting devices and methods.

(e) "Diversion" has the meaning set forth in subdivision (c) of Section 5100.

(f) "Farm-gate" means the point at which water is delivered from the agricultural water supplier's distribution system to each of its customers.

(g) "Person" has the meaning set forth in subdivision (d) of Section 5100.

531.2. The department, the board, and the State Department of Public Health shall coordinate the collection, management, and use of agricultural and urban water measurement information provided to each agency.

531.5. (a) The board, in collaboration with the department, the authority or its successor agency, and the State Department of Public Health, shall prepare and submit a report to the Legislature by January 1, 2009, evaluating the feasibility, estimated costs, and potential means of financing a coordinated water measurement database. The evaluation shall include, but is not necessarily limited to, agricultural and urban water measurement data related to deliveries, diversions, licenses, permits, and other information received by these state agencies that supports effective state and regional water management planning and decisionmaking. The evaluation shall also consider how the database can provide information to address impacts related to climate change mitigation and adaptation.

(b) The report shall consider coordinating the collection and sharing of data through the use of technologies used by the National Environmental Information Exchange Network and the existing data exchange infrastructure of the involved agencies.

(c) It is the intent of the Legislature that the report provide an initial feasibility assessment, and is not intended to serve as the final Feasibility Study Report required by the State Administrative Manual.

531.10. (a) An agricultural water supplier shall submit an annual report to the department that summarizes aggregated farm-gate delivery data, on a monthly or bimonthly basis, using best professional practices.

(b) Nothing in this article shall be construed to require the implementation of water measurement programs or practices that are not locally cost effective.

(c) It is the intent of the Legislature that the requirements of this section shall complement and not affect the scope of authority granted to the department or the board by provisions of law other than this article.

531.15. Notwithstanding any other provision of the law, state agencies shall carry out the duties described in this article only to the extent that funds are made available for the purposes of implementing those duties.

531.20. To the extent that the provisions of this article conflict with the requirements of Chapter 4800 of the State Administrative Manual, the requirements of that chapter shall control.

SEC. 3. Section 5100 of the Water Code is amended to read:

5100. As used in this part:

(a) “Best available technologies” means technologies at the highest technically practical level, using flow totaling devices, and if necessary, data loggers and telemetry.

(b) “Best professional practices” means practices attaining and maintaining the accuracy of measurement and reporting devices and methods.

(c) “Diversion” means taking water by gravity or pumping from a surface stream or subterranean stream flowing through a known and definite channel, or other body of surface water, into a canal, pipeline, or other conduit, and includes impoundment of water in a reservoir.

(d) “Person” means all persons whether natural or artificial, including the United States of America, State of California, and all political subdivisions, districts, municipalities, and public agencies.

(e) “Tidal zone” means those portions of the Sacramento-San Joaquin Delta as described in Section 12220 that are ordinarily subject to tidal action.

SEC. 4. Section 5103 of the Water Code is amended to read:

5103. Each statement shall be prepared on a form provided by the board. The statement shall include all of the following information:

(a) The name and address of the person who diverted water and of the person filing the statement.

(b) The name of the stream or other source from which water was diverted, and the name of the next major stream or other body of water to which the source is tributary.

(c) The place of diversion. If a public land survey has been made, location of diversion works shall be described to the nearest 40-acre subdivision. If not, it shall be described by reference to nearest local landmarks or other recorded surveys.

(d) The capacity of the diversion works and of the storage reservoir, if any, and the months in which water was used during the preceding calendar year.

(e) (1) On and after January 1, 2012, monthly records of water diversions. The measurements of the diversion shall be made using best available technologies and best professional practices. Nothing in this paragraph shall be construed to require the implementation of technologies or practices that are not locally cost effective.

(2) Paragraph (1) does not apply to a surface water diversion with a combined diversion capacity from a natural channel that is less than 50 cubic feet per second or to diverters using siphons in the tidal zone.

(3) (A) The terms of, and eligibility for, any grant or loan awarded or administered by the department, the board, or the California Bay-Delta Authority on behalf of a person that is subject to paragraph (1) shall be conditioned on compliance with that paragraph.

(B) Notwithstanding subparagraph (A), the board may determine that a person is eligible for a grant or loan even though the person is not complying with paragraph (1), if both of the following apply:

(i) The board determines that the grant or loan will assist the grantee or loan recipient in complying with paragraph (1).

(ii) The person has submitted to the board a one-year schedule for complying with paragraph (1).

(C) It is the intent of the Legislature that the requirements of this subdivision shall complement and not affect the scope of authority granted to the board by provisions of law other than this article.

(f) For persons not subject to paragraph (1) of subdivision (e), a description of the acreage of each crop irrigated, the average number of people served with water, the average number of stock watered, and the nature and extent of any other use during the preceding calendar year, or other equivalent information that indicates the quantity of water used as may be prescribed by the board. Those who maintain water measuring devices and keep monthly records of water diversions shall state the quantity of water diverted by months during the preceding calendar year.

(g) The purpose of use.

(h) A general description of the area in which the water was used. If the water was used on an area within the $\frac{1}{16}$ section containing the point of diversion, a statement to that effect will suffice; otherwise a description or sketch of the general area of use shall be given.

(i) The year in which the diversion was commenced as near as is known.

SEC. 5. Section 10004.6 of the Water Code is amended to read:

10004.6. (a) As part of updating The California Water Plan every five years pursuant to subdivision (b) of Section 10004, the department shall conduct a study to determine the amount of water needed to meet the state's future needs and to recommend programs, policies, and facilities to meet those needs.

(b) The department shall consult with the advisory committee established pursuant to subdivision (b) of Section 10004 in carrying out this section.

(c) On or before January 1, 2002, and one year prior to issuing each successive update to The California Water Plan, the department shall release a preliminary draft of the assumptions and other estimates upon which the study will be based, to interested persons and entities throughout the state for their review and comments. The department shall provide these persons and entities an opportunity to present written or oral comments on the preliminary draft. The department shall consider these documents when adopting the final assumptions and estimates for the study. For the purpose of carrying out this subdivision, the department shall release, at a minimum, assumptions and other estimates relating to all of the following:

(1) Basin hydrology, including annual rainfall, estimated unimpaired streamflow, depletions, and consumptive uses.

(2) Groundwater supplies, including estimates of sustainable yield, supplies necessary to recover overdraft basins, and supplies lost due to pollution and other groundwater contaminants.

(3) Current and projected land use patterns, including the mix of residential, commercial, industrial, agricultural, and undeveloped lands.

(4) Environmental water needs, including regulatory instream flow requirements, nonregulated instream uses, and water needs by wetlands, preserves, refuges, and other managed and unmanaged natural resource lands.

(5) Current and projected population.

(6) Current and projected water use for all of the following:

(A) Interior uses in a single-family dwelling.

(B) Exterior uses in a single-family dwelling.

(C) All uses in a multifamily dwelling.

(D) Commercial uses.

(E) Industrial uses.

(F) Parks and open spaces.

(G) Agricultural water diversion and use.

(7) Evapotranspiration rates for major crop types, including estimates of evaporative losses by irrigation practice and the extent to which evaporation reduces transpiration.

(8) Current and projected adoption of urban and agricultural conservation practices.

(9) Current and projected supplies of water provided by water recycling and reuse.

(d) The department shall include a discussion of the potential for alternative water pricing policies to change current and projected water uses identified pursuant to paragraph (6) of subdivision (c).

(e) Nothing in this section requires or prohibits the department from updating any data necessary to update The California Water Plan pursuant to subdivision (b) of Section 10004.

SEC. 5.5. Section 10004.6 of the Water Code is amended to read:

10004.6. (a) As part of updating the California Water Plan every five years pursuant to subdivision (b) of Section 10004, the department shall conduct a study to determine the amount of water needed to meet the state's

future needs and to recommend programs, policies, and facilities to meet those needs.

(b) The department shall consult with the advisory committee established pursuant to subdivision (b) of Section 10004 in carrying out this section.

(c) One year prior to issuing each update to the California Water Plan, the department shall release a preliminary draft of the assumptions and other estimates upon which the study will be based, to interested persons and entities throughout the state for their review and comments. The department shall provide these persons and entities an opportunity to present written or oral comments on the preliminary draft. The department shall consider these documents when adopting the final assumptions and estimates for the study. For the purpose of carrying out this subdivision, the department shall release, at a minimum, assumptions and other estimates relating to all of the following:

(1) Basin hydrology, including annual rainfall, estimated unimpaired streamflow, depletions, and consumptive uses.

(2) Groundwater supplies, including estimates of sustainable yield, supplies necessary to recover overdraft basins, and supplies lost due to pollution and other groundwater contaminants.

(3) Current and projected land use patterns, including the mix of residential, commercial, industrial, agricultural, and undeveloped lands.

(4) Environmental water needs, including regulatory instream flow requirements, nonregulated instream uses, and water needs by wetlands, preserves, refuges, and other managed and unmanaged natural resource lands.

(5) Current and projected population.

(6) Current and projected water use for all of the following:

(A) Interior uses in a single-family dwelling.

(B) Exterior uses in a single-family dwelling.

(C) All uses in a multifamily dwelling.

(D) Commercial uses.

(E) Industrial uses.

(F) Parks and open spaces.

(G) Agricultural water diversion and use.

(7) Evapotranspiration rates for major crop types, including estimates of evaporative losses by irrigation practice and the extent to which evaporation reduces transpiration.

(8) Current and projected adoption of urban and agricultural conservation practices.

(9) Current and projected supplies of water provided by water recycling and reuse.

(10) For a preliminary draft of the assumptions and other estimates due on or after December 31, 2012, the amount of energy both produced by and required to provide current and projected water supplies during periods of both peak and nonpeak use, including consideration of the costs and benefits of the energy both produced and required by the current and projected water supplies.

(d) The department shall include a discussion of the potential for alternative water pricing policies to change current and projected water uses identified pursuant to paragraph (6) of subdivision (c).

(e) Nothing in this section requires or prohibits the department from updating any data necessary to update the California Water Plan pursuant to subdivision (b) of Section 10004.

SEC. 6. Section 5.5 of this bill incorporates amendments to Section 10004.6 of the Water Code proposed by both this bill and SB 862. It shall only become operative if (1) both bills are enacted and become effective on or before January 1, 2008, (2) each bill amends Section 10004.6 of the Water Code, and (3) this bill is enacted after SB 862, in which case Section 5 of this bill shall not become operative.

The AB 1404 requires that agricultural water suppliers to submit an annual report to the Department of Water Resources to include aggregated farm-gate water delivery data on a monthly or bi-monthly basis.

In order to meet this requirement, DWR has developed a draft plan and a procedure to collect information on agricultural water deliveries. The Draft Guidelines (attached) for AB 1404 includes cost benefits worksheet and one-page data entry form “Agricultural Farm-Gate Delivery Report (AB 1404)” and designed to collect monthly or bi-monthly aggregated farm-gate water delivery data. In order for agricultural water suppliers to be in compliance with provisions of AB 1404, they must provide information to DWR 1) Measured farm-gate deliveries, 2) Provide DWR with aggregated monthly or bi-monthly farm-gate deliveries on an annual basis, and 3) provide DWR information on their farm-gate measurement programs or practices to document that they are using “Best Professional Practices” or provide DWR documentation that water measurement is not locally cost-effective.

The Draft Compliance with AB 1404 Requirements is submitted to the Agricultural Stakeholder and the Subcommittee for review and comment. The AB 1404 requirements of the agricultural water suppliers are not part of the rule making process for developing range of options for agricultural water measurement. However, because AB 1404 requires water measurement and reporting, the draft guidelines are submitted for ASC's information, review, and comment. The purpose is to provide additional information to the subject matter experts, agricultural water suppliers, and other

interested parties on the requirement of the AB 1404, Agricultural Farm-Gate Delivery Report Form, and solicit public input. Following the ASC review, we will incorporate stakeholder comments and prepare final draft for public review and DWR management approval.

Manucher Alemi, Ph. D., P.E.
Water Use and Efficiency Branch
Department of water resources
901 P Street
Sacramento CA 95616

Guidelines for Compliance with AB 1404 Requirements

Assembly Bill (AB) 1404 (Stats. 2007, ch. 675) amended Sections 5100, 5103, and 10004.6, and added Article 4.3 (connecting with Section 531) to Chapter 8 of Division 1 of, the Water Code, relating to water.

Section 531.10 (a) and (b) of the Water Code states that agricultural water suppliers shall submit an annual report to the Department of Water Resources (DWR) that summarizes aggregated farm-gate delivery data, on a monthly or bimonthly basis, using best professional practices, and nothing in this article shall be construed to require the implementation of water measurement programs or practices that are not locally cost effective.

Definitions of Terms (from AB 1404)

Agricultural Water Supplier

“Agricultural water supplier” means a supplier either publicly or privately owned, supplying 2,000 acre-feet or more of surface water annually for agricultural purposes or serving 2,000 or more acres of agricultural land. An agricultural water supplier includes a supplier or contractor for water, regardless of the basis of right, which distributes or sells water for ultimate resale to customers (Water Code Section 531.b)

Aggregated Farm-Gate Delivery Data

“Aggregated farm-gate delivery data” means information reflecting the total volume of water an agricultural water supplier provides to its customers and is calculated by totaling its deliveries to individual customers (Water Code Section 531.a)

Farm-gate

“Farm-gate” means the point at which water is delivered from the agricultural water supplier’s distribution system to each of its customers (Water Code Section 531.f).

Best Professional Practices

“Best professional practices” means practices attaining and maintaining accuracy of measurement and reporting devices and methods (Water Code Section 531.d).

Not Locally Cost Effective

The present value of the local benefits of implementing a water demand management measure is less than the present value of the local costs of implementing that measure. (Water Code Section 10631.5 (a) (4) (B))

What Must an Agricultural Water Supplier Do to be Compliant with AB 1404?

1. For those agricultural water suppliers providing farm-gate delivery data to DWR, they must:
 - a. Measure farm-gate deliveries,
 - b. Provide DWR with aggregated monthly or bimonthly farm-gate deliveries on an annual basis, and
 - c. Provide DWR information on their farm-gate measurement program or practices to document that they are using “Best Professional Practices”.
2. For those agricultural water suppliers not providing farm-gate delivery data to DWR, they must:
 - a. Provide DWR with information that documents that the implementation of a program or practices to measure farm-gate deliveries using Best Professional Practices is not locally cost effective.

Agricultural water suppliers may determine costs and benefits of water measurement to determine if the practice is locally-cost effective. Appendix 1, “Benefit to Cost Ratio Estimation” may be used to determine benefit to cost ratio. Agricultural water suppliers may also use the Net Benefit Analysis to determine comprehensive benefits and costs for this practice. NBA can be found on the Agricultural Water Management Council’s we site at:
<http://www.agwatercouncil.org/>

Reporting Required Information

Agricultural water suppliers must submit the required information listed below to DWR using the attached form. The suppliers can use an electronic form which may be found on DWR’s website at: <http://www.water.ca.gov/wateruseefficiency/>

Section 1 is for reporting basic information about the water supplier.
Section 2 is for reporting the water supplier representative’s contact information.

Section 3 is for reporting of the monthly or bimonthly aggregated farm-gate deliveries and to identify the Best Professional Practices used.

Section 4 is for providing DWR with comments and explanations if the implementation of a farm-gate measurement program or Best Professional Practices is not locally cost effective.

Information on “Best Professional Practices” and “Not Locally Cost Effective”

AB1404 defines Best Professional Practices as practices attaining and maintaining accuracy of measurement and reporting devices and methods. It does not specify any method of measurement. The Water Code defines not locally cost effective as “The present value of the local benefits of implementing a water demand management measure is less than the present value of the local costs of implementing that measure”. The Water Code does not require DWR to develop any methods, or standards on “Best Professional Practices” or “Not Locally Cost Effective”, nor does it require water suppliers to use any specific water measurement methods. The Water Code does not require DWR to evaluate or review any information provided by agricultural water suppliers.

As a technical assistance to water suppliers, DWR is providing different sources of information on Best Professional Practices and Not Locally Cost Effective to water suppliers.

The final report, “Independent Panel on Appropriate Measurement of Agricultural Water Use” (September 2003) contains information pertaining to farm-gate deliveries that could help a local water supplier in gaining more understanding about measurement programs and practices and their accuracies. It also includes some information related to costs and benefits of measurement programs and practices that might be helpful. The report can be found at:

http://calwater.ca.gov/content/Documents/meetings/WaterUseEfficiency/FinalReport_Sept03.pdf

The Agricultural Water Management Council's website located here:

<http://www.agwatercouncil.org/Measurement/Measurement-Resources/menu-id-69.html>

contains information on measurement and has links to other sites with additional information on water measurement. Local cost effectiveness of water measurement may be determined by the cost benefit analysis worksheets developed by DWR in cooperation with the Agricultural Water Management Council in the Memorandum of Understanding Regarding Efficient Water Management Practices by Agricultural Water Suppliers in California, January 1, 1999 (see Appendix 1 for the worksheets).

Submitting the Annual Report

The completed form must be submitted by mail or e-mail to DWR on January 1 of each year beginning January 1, 2012. The completed forms should be sent to the following address:

Department of Water Resources
Water Use and Efficiency Branch
P.O. Box 942836
Sacramento, CA 94236
Attention: Tom Hawkins

The completed electronic form may be submitted online at <http://www.water.ca.gov/wateruseefficiency/> or by e-mail to Tom Hawkins at hawkins@water.ca.gov

This Guideline and the associated electronic form or any future submittal updates may be found on DWR's website at: <http://www.water.ca.gov/wateruseefficiency/>

Purpose of Use

The data collected by the Agricultural Farm-Gate Delivery Report will be useful in evaluating efficiency of California's agricultural water use. This data provide irrigation districts, growers, other agricultural and environmental water users with the information and tools to help them improve their water use efficiency planning and implementation. It also helps DWR to meet the Water Code Section 10004.6.a requirement:

“Existing law requires the department to update the California Water Plan every 5 years. The department conducts a study to determine the amount of water needed to meet the state's future needs and to recommend programs, policies, and facilities to meet those needs”.

Agricultural Farm-Gate Delivery Report (AB 1404 of 2007) Due Annually on January 1

Agricultural Water Supplier's Mailing Address

1. Water Agency Information

Name: _____
 Address: _____
 Phone #: _____
 Fax: _____
 # of Farm-Gates: _____
 Service Area Acreage: _____

2. Contact information

Submittal date: _____
 Name: _____
 Title: _____
 Address: _____
 Phone #: _____
 Fax: _____
 E-mail: _____

3. Aggregated Farm-Gate Deliveries:

Farm-Gate Deliveries, acre feet
 Monthly

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total

Bimonthly

Jan-Feb	Mar-Apr	May-Jun	Jul-Aug	Sep-Oct	Nov-Dec	Total

Best Professional Practices used: _____

If Best Professional Practices are not locally cost effective provide explanation in Section 4 below:

4. Explanations and Comments: _____

