

## Summary

# Alternative Compliance Plan for Water Right (A022102)

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## INTRODUCTION

See [Information and Instruction Sheet](#) for assistance in completing this form. The form shall be completed by the water right owner, their agent, or for an Alternative Compliance Plan filed for a group, the designated contact. The vast majority of water right owners should be able to meet the measurement requirements. Participation in an Alternative Compliance Plan does not relieve the participant of the independent obligation to file an online annual Report of Water Diversion and Use.

All sections of the form below must be completed. An incomplete form does not excuse non-compliance with the regulation or release you from the obligation to measure. The Alternative Compliance Plan may not be used to avoid measurement and monitoring, but should be used to describe an alternative method of measurement and monitoring which will provide the information required by the Regulation. Estimated diversion records may not meet the Regulation's accuracy requirements without supporting documentation.

Note: The large text boxes in the form have a character limit of 2,000 characters. Responses requiring more than 2,000 characters for a particular text box should be submitted as an attachment in Section I of this form. Additional information should be attached in Section I.

## SECTION A - WATER RIGHT OWNER INFORMATION

This section of the form describes the information that is required for each water right or claimed right covered under the Alternative Compliance Plan.

In Section I, attach a table (in Microsoft Excel .xlsx, comma-separated .csv, or tab-separated .txt format) containing the Application or Statement Number for each water right covered under the Alternative Compliance Plan. For your water right, answer the questions below.

(1) Owner Name(s) \*

South Sutter Water Distr

(2) Email Address \*

sswd@hughes.net

(3) Phone Number \*

5306562242

(4) Mailing Address Line 1 \*

2464 Pacific Avenue

(5) Mailing Address Line 2:

(6) City \*

Sacramento

(7) State \*

California

(8) Zip Code \*

95659

(9) Is the Water Right Owner also the Primary Contact? \*

☐ Yes

☒ No

On questions 10 through 13, please tell us what you understand the requirements of the regulation to be for this water right to be.

(9) Installation Deadline \*

☒ January 1, 2017

- ☐ July 1, 2017
- ☐ January 1, 2018

**(10) Measurement Accuracy \***

- ☒ 10%
- ☐ 15%
- ☐ Other, as specified in the Alternative Compliance Plan (if submitted)

**(11) Required Monitoring Frequency \***

- ☒ Hourly
- ☐ Daily
- ☐ Weekly
- ☐ Monthly

**(12) Qualifications of the Individual Installing/Certifying \***

- ☒ A California Licensed Professional Engineer (PE), a person working under the supervision of a California PE, a California-licensed contractor authorized by the State License Board for C- 57 well drilling or C- 61 Limited Specialty/D-21 Machinery and Pumps, or a Hydrologist or Engineer employed by a Federal Agency
- ☐ A person trained and experienced in water measurement (for diversions of less than 100 acre-feet per year - no specific training is required; the person using any equipment and reporting the information must know how to use the equipment and submit correct information)

## SECTION B - INFORMATION ON PRIMARY CONTACT

This section of the form includes the contact information for the primary contact associated with the Alternative Compliance Plan.

**(1) Name(s): \***

MBK Engineers, C/O Kyl

**(2) Phone Number: \***

(916) 456-4400

**(3) Email Address: \***

knutson@mbkengineers

**(4) Mailing Address Line 1: \***

455 University Avenue, S

**(5) Mailing Address Line 2:**

**(6) City: \***

Sacramento

**(7) State: \***

California

**(8) Zip Code: \***

95825

**(8) The Alternative Compliance Plan Primary Contact is a(n): \***

- ☐ Water Right Owner
- ☒ Agent

## SECTION C - INFORMATION ON QUALIFIED INDIVIDUAL

This section of the form includes the contact information for the Qualified Individual certifying the Alternative Compliance Plan.

(1) Name(s): *	<input type="text" value="Kyle Knutson"/>
(2) Phone Number: *	<input type="text" value="(916) 456-4400"/>
(3) Email Address: *	<input type="text" value="knutson@mbkengineers"/>
(4) Mailing Address Line 1: *	<input type="text" value="455 University Avenue, S"/>
(5) Mailing Address Line 2:	<input type="text"/>
(6) City: *	<input type="text" value="Sacramento"/>
(7) State: *	<input type="text" value="California"/>
(8) Zip Code: *	<input type="text" value="95825"/>
(9) The qualifications of the individual certifying the Alternative Compliance Plan are: *	<div><p><input checked="" type="radio"/> California Licensed Professional Engineer (PE)</p><p><input type="radio"/> Person working under the supervision of a California Professional Engineer</p><p><input type="radio"/> California-licensed contractor authorized by the State License Board for C- 57 well drilling or C-61 Limited Specialty/D-21 Machinery and Pumps</p><p><input type="radio"/> Hydrologist or Engineer employed by a Federal Agency</p><p><input type="radio"/> Person trained and experienced in water measurement (for diversions of less than 100 acre-feet per year - no specific training is required; the person using any equipment and reporting the information must know how to use the equipment and submit correct information)</p></div>
(10) Qualifying Individual's PE or Contractor license number, if applicable:	<input type="text" value="86370"/>

## SECTION D - REQUEST FOR ALTERNATIVE COMPLIANCE

Water right holders who divert more than 10 acre-feet of water per year are required to measure the water they divert. A diverter may choose any measuring device, or combination of devices, that meet the measurement and monitoring requirements of the regulation. The measurement requirements are summarized on the [Reporting and Measurement Webpage](#).

**For each box checked in questions 1a through 3 below, submit a detailed explanation and attach substantiating documentation.**

**(1a) Diverter is seeking alternative compliance from the requirement(s) checked below. \***

- ☐ Measuring Device Location
- ☐ Required Accuracy
- ☐ Certification of Accuracy
- ☐ Installation and Maintenance
- ☒ Monitoring Frequency
- ☐ Telemetry
- ☐ Other (describe in Section 1b)

**(1b) Provide additional information for each of the reasons selected in question 1a: \***

The five tributaries (Coon Creek, Markham and Auburn Ravines, East Side Canal, and Yankee Slough) covered under this Alternative Compliance Plan typically convey little to no natural flow during the season covered by Applications 14430, 22102 and 23838. The majority of the water within these channels during the season covered under the Applications originates from the Bear River. During the irrigation season there is little to no natural flow in the small streams. These channels are utilized by SSWD as part of its conveyance system to redistribute and deliver Bear River diversions and releases from CFW Reservoir to its customers. The water diverted from the Bear River and stored water deliveries from CFW Reservoir are measured by the District just downstream of its diversion dam at its Main Canal weir. Near the weir is a pressure transducer that is used to estimate hourly flow over the weir using a rating developed by MBK. Downstream of the Main Canal weir are the delivery points to each of the tributaries. The District measures the quantities of water delivered to each of the tributaries from its Main Canal with the following:

- Coon Creek – The District measures deliveries using a weir and staff gage. Readings of the staff gage are made daily.
- Markham Ravine – The District measures deliveries using a McCrometer open flow meter with mechanical register. Readings of the totalizer are made daily.
- Auburn Ravine – The District measures deliveries using a McCrometer open flow meter with mechanical register. Readings of the totalizer are made daily.
- East Side Canal – The District attempts to operate its water delivery system with minimal spills; however, operational and seasonal spills are inherent utilizing open ditches and natural channels for conveyance facilities. The operational spills from Coon Creek drain into Reclamation District 1001's main canal. Markham Ravine and Auburn Ravine operational spills drain to the East Side Canal and thence into the Natomas Cross Canal. Yankee Slough surplus flows return to the Bear River channel. As described above, the East Side Canal is primarily a drainage channel, thus the District does not measure deliveries to the East Side Canal from each channel; however, diversions are measured.
- Yankee Slough – The District measures deliveries using a weir and staff gage. Readings are made daily.

Downstream of the delivery point to each tributary the District measures the quantities diverted or delivered from the tributaries to each POD with the following:

- Pumped PODs – There are 23 pumped diversions along the tributaries. These pumps are equipped with permanent McCrometer saddle propeller meters with mechanical registers to measure the volume of water diverted. These meters are owned and maintained by the landowners.
- Gravity PODs – The District ditch tenders use McCrometer open flow meters to take periodic readings at 30 gravity turnouts to set the flow rate according to its customers' orders. Once a change in the system is made, the ditch tenders wait for the system to stabilize and then perform readings at each turnout affected by the change in order to verify the flow rate. This flow rate is then multiplied by the length of the customer's order to estimate the volume of water diverted. The accuracy of propeller meters can be significantly affected by debris in the small streams. Therefore, the periodic readings result in a more accurate measurement since the meters are regularly cleaned prior to and after taking each measurement. The quantities diverted under License 4653, 11121, and 12587 (Applications 14430, 22102, and 23838, respectively) are determined or calculated as the difference between the amount delivered to the District's customers and the amount released to the tributaries by the District. It is not feasible and unreasonably expensive for the District to upgrade existing equipment and/or install new measurement equipment at each POD. On average, during the four years from 2013 through 2016, 99% of the District's surface water supply originated from the Bear River. Only one percent (approximately 800 acre feet) originated from the small streams. The combined face value of the Licenses for the small streams represent less than 4% of the combined face value of all of the District's water right Licenses. Therefore strict compliance with these requirements is not reasonable.

(5000 character max.)

**(2a) Alternative compliance is being pursued because strict compliance with one or more of the requirements for measuring and monitoring (check all that apply): \***

- ☒ Is not feasible.
- ☐ Would unreasonably affect public trust resources.\*
- ☒ Is unreasonably expensive.\*\*
- ☐ Would result in the waste or unreasonable use of water.

\* Including fish, wildlife, recreation, navigation, and aesthetic values.

\*\* Plans claiming that strict compliance is unreasonably expensive shall be accompanied by an attached supporting cost analysis. The cost analysis should compare the cost of the proposed alternate measuring devices to the cost of the measurement devices required by the Regulation. All Plans shall include a budget and shall identify sources of financing. The budget should provide sufficient detail to show the cost of the proposed alternate measuring devices, the cost of obtaining any necessary permits, and the cost of installation.

**(2b) Provide additional information for each justification selected in question 2a: \***

See Attachment 2

(5000 character max.)



**(3a) Alternative compliance is requested under the following categories (check all that apply): \***

- ☐ Highly variable flow rate at point of diversion.
- ☐ Point of diversion is inaccessible a portion of the year due to weather or other on-site conditions.
- ☐ Point of diversion is under tidal influence
- ☒ There is an existing measuring device or measurement method in use.
- ☐ Water is corrosive to measurement equipment.
- ☐ The diversion is measured by another entity (identify entity and method of measurement used).
- ☐ Other (provide complete description in section 3b)

**(3b) Provide additional information for each of the categories selected in question 3a: \***

The District is currently utilizing this measurement method. See Section D (1b) above.

(5000 character max.)



**(4) Alternative Compliance Plans shall include alternative, objective measurement and performance standards that achieve the closest attainable compliance. Describe the measurement or alternative to measurement that will used at each point of diversion in the plan to achieve closest attainable compliance. \***

See Section D (1b) above.

(5000 character max.)

## SECTION E - AREA COVERED BY THE ALTERNATIVE COMPLIANCE PLAN

Summarize the following for each water right covered by the Alternative Compliance Plan. In Section I, attach maps, aerial photographs, or other renderings showing the area covered by the Alternative Compliance Plan and delineating the acreage of each place of use served. For the area covered by the Alternative Compliance Plan, include a list of assessor's parcel numbers and the current owner of each parcel.

**(1) Provide a general description of the area covered by the Alternative Compliance Plan. \***

See Attachments 4, 5 and 6

(5000 character max.)

**(2) Describe all diversion and conveyance works covered by the Alternative Compliance Plan. \***

See Attachment 3

(5000 character max.)

**(3) Describe the type(s) of Beneficial Use(s). \***

Irrigation

(5000 character max.)

**(4) Have you attached a list of assessor's parcel numbers and the current owner of each parcel covered by the Alternative Compliance Plan? (Attachments may be made under Section I of this form.) \***

☒ Yes | ☐ No

## SECTION F - MEASUREMENT AND MONITORING

**(1) For each Point of Diversion listed in the Alternative Compliance Plan, describe how the water is measured. \***

See Section D (1b) above.

(5000 character max.)

**(2) Identify the measurement accuracy associated with the measurement devices. \***

All of the measurement devices utilized by the District are McCrometer or Water Specialties propeller flow meters. According to manufacturer's specifications the accuracy of these devices are +/- 2%. The overall accuracy of the approach described in this Plan is believed to be +/- 10%.

(5000 character max.)

**(3) Describe how the accuracy of the Alternative Compliance Plan was calculated. \***

The District, with assistance from MBK Engineers, is in the process of certifying the accuracy of the turnout measurement pursuant to SBx7-7 and this information will also be used to determine the accuracy for SB 88 where appropriate. This process includes an inventory of each turnout and in-stream measurements upstream and downstream of at a representative sample of turnouts to compare with the flow meter readings. In addition, the measurement records where the main canal drops into each small stream will be compared with the sum of the measurement records for the turnout deliveries. This comparison will produce an overall accuracy for the current approach.

(5000 character max.)

## SECTION G - IMPLEMENTATION SCHEDULE (IF NECESSARY)

**(1) If applicable, describe the implementation schedule for the Alternative Compliance Plan, including objective milestones from date of filing through final implementation. Milestones should include date of completion for construction and testing, expected dates of issuance of required permits, and expected date for compliance with the California Environmental Quality Act:**

See Section D (1b) above. The District is currently utilizing this approach and is in the process of certifying the turnout measurement accuracy pursuant to SBx7-7 (completion goal of December 2019). The District annually includes in their budget monies for MBK plan implementation, water use data review and reporting, and Kirkpatrick and Associates measurement equipment maintenance.

(5000 character max.)

**An Alternative Compliance Plan shall be submitted and implemented by the established regulatory deadlines (see form instructions for additional information) unless a Request for Additional Time has been granted.**

## SECTION H - OTHER PERMITS

**(1) Describe any other permits required to implement the Alternative Compliance Plan. Include information on the agency that will issue the permit, and the expected date of issuance.**

Not applicable

(5000 character max.)

## SECTION I - ATTACHMENTS



**(1) Attach documents that support the Alternative Compliance Plan.**

Choose File

No file selected

Upload

(Uploaded files:)

SSWD Alternative Compliance Plan for Tributaries\_3.29.18.pdf

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**(2) Provide a brief description of the attached documents.**

Attachment 1 – Water Rights Covered Under this Alternative Compliance Plan Attachment 2 – Cost Estimate to Install Measurement Equipment Attachment 3 – South Sutter Water District Conveyance System Attachment 4 – License 4653 Place of Use Map Attachment 5 – License 11121 Place of Use Map Attachment 6 – License 12587 Place of Use Map Attachment 7 – Assessor’s Parcel Numbers (APNs) and Landowner Information for Each Parcel Covered Under the Plan

(5000 character max.)

SECTION J - IMPORTANT INFORMATION AND SIGNATURES

Each participant in an Alternative Compliance Plan (Plan) must sign this form or an “opt-in” form that must be retained by the Plan manager. Attach a listing of participants, as needed, in Microsoft Excel .xlsx, comma-separated .csv, or tab-separated .txt format. By signing this form or the Plan’s “opt-in” form, each Plan participant acknowledges that the Plan will be timely implemented and that the measurement of diversions will substantially comply with the Measurement Regulation. Further, each Plan participant acknowledges that the water rights covered by the Plan will not be exercised outside the scope of the Plan. Each Plan participant is responsible for promptly informing the Division of Water Rights or Delta Watermaster, as appropriate, if the participant withdraws from the Plan. The Plan manager is responsible for promptly informing the Division of Water Rights or the Delta Watermaster, as appropriate, if the Plan is modified or abandoned or if the Implementation Schedule is adjusted.

I hereby certify that the information in this Alternative Compliance Plan is true to the best of my knowledge and belief and that the Alternative Compliance Plan is in compliance with the requirements of Title 23, Division 3, Chapter 2.8, Section 931 through 938 of the California Code of Regulations. \*

☒ Yes | ☐ No

Printed Name \*

Kyle Knutson

Division of Water Rights and Delta Watermaster staff may or may not evaluate the contents of an Alternative Compliance Plan at the time of receipt. Staff will initially determine if all the information has been filled out, and accept the Alternative Compliance Plan as complete or return it as incomplete. An Alternative Compliance Plan may be reviewed for compliance purposes at any time or as part of a systematic audit.