



ROSEDALE - RIO BRAVO

WATER STORAGE DISTRICT

849 Allen Road • P. O. Box 867 • Bakersfield, California 93302-0867 • (661) 589-6045 • FAX (661) 589-1867

September 15, 2010

Dirk Marks
Castaic Lake Water Agency
27234 Bouquet Canyon Road
Santa Clarita, CA 91350-2173

Re: Operating Agreement between Rosedale-Rio Bravo Water Storage District and
Castaic Lake Water Agency

Dear Dirk:

Enclosed, please find two fully executed copies of the Operating Agreement between Rosedale-Rio Bravo Water Storage District and Castaic Lake Water Agency (Operating Agreement). Also enclosed is the fully executed Addendum No. 4 to the Agreement for a Water Banking and Exchange Program (Addendum).

I would like to thank you for your commitment to develop an Operating Agreement based upon a spirit of partnership and sound water management. I strongly believe this commitment; manifested in the terms of the both the Operating Agreement and Addendum, will help to ensure a successful long-term relationship between our respective districts.

Sincerely,

A handwritten signature in black ink, appearing to read "Eric Averett", written over a horizontal line.

Eric Averett
General Manager

**OPERATING AGREEMENT
BETWEEN
ROSEDALE-RIO BRAVO WATER STORAGE DISTRICT
AND
CASTAIC LAKE WATER AGENCY**

THIS AGREEMENT ("Operating Agreement") is made and entered into as of this 15th day of September, 2010 by and between ROSEDALE-RIO BRAVO WATER STORAGE DISTRICT ("Rosedale") and CASTAIC LAKE WATER AGENCY ("Castaic"). Rosedale and Castaic are sometimes referred to individually as a "Party" and collectively as the "Parties."

RECITALS

A. On or about November 15, 2005 Rosedale and Castaic entered into an agreement for a water banking and exchange program ("Banking Agreement"). The Banking Agreement has been amended by the initial Addendum dated January 27, 2006, Addendum No. 2 dated June 8, 2006, Addendum No 3 dated May 22, 2007, and Addendum No 4 concurrently herewith. The Banking Agreement provides for banking and recovery at Castaic's election of up to 20,000 acre-feet per year ("Castaic's Recovery Rights" herein) and certain other rights of Castaic as more particularly described therein ("Banked Water").

B. The Banking Agreement is part of a larger water banking and exchange program more particularly described in the Banking Agreement and therein referred to as the "RRB Program". The RRB Program contemplates maximum basin storage of over 300,000 acre feet ("AF") and annual recovery of up to 45,000 AF per year ("AFY"). Castaic's participation in the RRB Program pursuant to the Banking Agreement is referred to as the "CLWA Project".

C. The Parties enter into this Operating Agreement to supplement and complement the Banking Agreement but not to amend, modify or contradict the same. The purpose of this Operating Agreement is to identify and define certain operational plans and procedures to (i) improve opportunities for the Parties to mutually benefit from operations under the Banking Agreement and (ii) improve performance by the Parties in fulfilling their respective obligations under the terms and conditions of the Banking Agreement.

AGREEMENT

1. RECOVERY FACILITIES

a. Recovery Facilities: Paragraph 1.B.(2) of the Banking Agreement provides, in part: "The extraction/delivery facilities have the capacity to deliver the CLWA Project water to the California Aqueduct, subject to scheduling of other uses of such facilities by entitled Parties".

b. Terms: In carrying out the RRB Program, Rosedale uses the terms "first priority rights" and "second priority rights," which terms are not used or defined in the Banking Agreement. To clarify the meaning of "scheduling of other uses of such facilities by entitled parties" as set forth in Paragraph 1.B.(2) and without changing or amending the Banking Agreement, the parties understand Rosedale applies those terms to the RRB Program of which the CLWA project is a part as follows:

(1) "First Priority Rights" means: capacity rights in and to extraction/delivery facilities which are part of the RRB Program and would be available to Rosedale for its uses and purposes but for the fact that the capacity

rights are then required, by law or contract, to be used for the benefit of one or more RRB Program Participant.

(2) "Second Priority Rights" means: capacity rights in and to extraction/delivery facilities which are part of the RRB Program and which are available to Rosedale for its uses and purposes because the capacity rights are not then required, by law or contract, to be used for the benefit of one or more RRB Program Participant.

c. Recovery of Banked Water Enhancement: In an effort to improve or enhance the ability to recover Castaic's Banked Water, Rosedale agrees to exclusively dedicate to Castaic all second priority rights in and to all existing, planned and future recovery facilities constructed within Rosedale, including recovery facilities constructed by Rosedale ("RRB Recovery Facilities" herein), to meet the Castaic Recovery Rights under the Banking Agreement, subject only to the legal or contractual obligation which Rosedale may have to supply water to any person, entity or organization for whose benefit the recovery facility was constructed. Existing and planned facilities, so far as known to Rosedale as of the date of this Operating Agreement, and any legal or contractual obligation relating thereto, are more fully described in Attachment 1 which is incorporated herein by this reference. Rosedale shall not increase the rights of entitled or other parties to the use of Rosedale recovery facilities above the amount set out on Attachment 1 if the aggregate active and useable capacity of all recovery facilities is reduced below the capacity needed to meet Castaic's Recovery Rights, under the Banking Agreement. Also, Rosedale shall operate, repair, replace, and maintain all

existing and future RRB Recovery Facilities according to sound engineering practices and standards so as to not impair or diminish Castaic's Recovery Rights. The commitment made by Rosedale to Castaic herein shall be included and acknowledged in any future agreement which Rosedale makes with any third party involving the construction, availability, or use of recovery facilities within the boundaries of Rosedale.

d. Surface Water: Rosedale must manage its surface water supplies, including without limitation its State Water Project ("SWP") water supplies, for the highest and best use and benefit of Rosedale. Accordingly, Rosedale shall determine, in its sole discretion and judgment, whether to meet the recovery demands of Castaic by exchange delivery [pursuant to Paragraph 1.B.(1) of the Banking Agreement] or by extraction delivery [pursuant to Paragraph 1.B.(2) of the Banking Agreement].

2. **SCHEDULING**

a. Scheduling Enhancement: To assist the Parties in the performance of their obligations for banking and recovery of Castaic's Banked Water, it is agreed that on or before February 15 of each year Castaic and Rosedale shall exchange preliminary delivery schedules using best forecasts of their available water supplies. Rosedale and Castaic will coordinate their water delivery schedules to reflect the terms of this Operating Agreement with final delivery schedules to be determined by May 1 of each year, or at a later date as necessitated by SWP operations. .

b. Annual Report: Rosedale shall prepare an annual written report on or before February 15 of each year and delivered to Castaic setting forth the condition, needed maintenance and repair, and then current extraction capacity of each of the RRB Recovery Facilities, and verify the ability to deliver Castaic's Recovery Rights.

3. RE-REGULATION

It is understood that effective water management may reduce reliance upon dry year recovery operations. The Parties agree to cooperate with one another, in good faith, to define and implement water management strategies that are mutually beneficial.

IN WITNESS WHEREOF, the Parties have executed this Operating Agreement as of the date first set forth above.

CASTAIC LAKE WATER AGENCY

By: *[Signature]*

Title: GENERAL MANAGER

APPROVED AS TO FORM:

McCORMICK, KIDMAN & BEHRENS, LLP

By: *[Signature]*

ROSEDALE-RIO BRAVO WATER STORAGE DISTRICT

By: _____

Title: _____

APPROVED AS TO FORM:

McMURTREY, HARTSOCK & WORTH

By _____

ATTACHMENT 1

SUMMARY OF ROSEDALE-RIO BRAVO WSD BANKING PROGRAMS

EXISTING PROGRAMS				
PARTNER	Type	Existing Wells	Existing Well Capacity (AF/YR)	Capacity Committed to Castaic (AF/YR)
Castaic /BV Sale Program	Sale	3	10,841	2,591
Irvine Ranch Water District ¹	Banking	7	25,295	7,795
subtotal:		10	53,635	10,385

PLANNED OR PROJECTED PROGRAMS				
PARTNER	Type	Planned Wells	Planned Well Capacity (AF/YR)	Capacity Committed to Castaic (AF/YR)
Rosedale Landowner ²	Recovery	5	7,000	7,000
Expanded Kern-Tulare Program	Banking	3	10,841	3,341
subtotal:		15	43,135	10,341

Total Existing and Projected Capacity 20,726

Footnote:

1. Agreement Rosedale-Rio Bravo Water Storage District and Irvine Ranch Water District For A Water Banking and Exchange Program dated January 13, 2009
2. Rosedale in-district program providing for connection of landowners wells for recovery of previously banked water.

**ADDENDUM No. 4 TO AGREEMENT
ROSEDALE-RIO BRAVO WATER STORAGE DISTRICT
AND
CASTAIC LAKE WATER AGENCY
FOR A WATER BANKING AND EXCHANGE PROGRAM**

This is a further addendum (i.e., Addendum No. 4) to the above-entitled Agreement executed by the parties effective November 15, 2005.

1. Extraction Delivery Charges: Under Paragraphs 4.B. and 4.C. of the Banking Agreement, Castaic is required to pay certain amounts for the recovery and delivery of banked Castaic water. It is understood and agreed that the specific amounts set forth in the Banking Agreement were estimates of such costs as of the date of the Banking Agreement and do not represent maximum limits on the obligation assumed by Castaic. It is further understood and agreed that Castaic will pay all costs actually incurred by Rosedale in the recovery and delivery of banked Castaic water. The Extraction Delivery Charge shall include Operations, Maintenance, Power & Replacement (OMP&R) for the groundwater recovery wells. Exhibit A provides an example of the Operation, Maintenance, and Replacement cost calculation. Exhibit B provides an example of the Power cost calculation. For water extracted utilizing groundwater recovery wells constructed and paid for by Castaic there shall be no Replacement costs. In addition to the OMP&R costs Castaic shall be responsible for the actual Cross Valley Canal costs associated with the delivery of recovered groundwater through the Cross Valley Canal. A detailed accounting of such costs will be provided by Rosedale to Castaic upon request.

2. Exchange Delivery Charges: Rosedale may, from time to time, in its sole discretion and judgment, choose to meet the recovery demand of Castaic by exchange delivery using surface water supplies available to Rosedale. Exchange deliveries benefit Castaic by reducing or eliminating recovery costs that would otherwise be borne by Castaic. To encourage exchange deliveries whenever possible, it is agreed that Castaic will pay Rosedale for each acre foot provided by exchange delivery one-half (1/2) of the estimated and/or calculated avoided costs that would otherwise have been borne by Castaic had the same acre foot been provided via the extraction delivery method. For purposes of determining Exchange Delivery Charge rates, the calculation and rate provided in Exhibit A & B for Extraction Delivery Charges shall be utilized.

This Addendum No. 4 may be executed in counterparts, each of which shall be deemed an original and, all of which, taken together, shall constitute one and the same instrument. Signatures sent by facsimile shall be deemed originals and treated in all respects as originals.

IN WITNESS WHEREOF, each Party has executed this Addendum on the date set forth below, said Addendum to be effective on the later of the two, i.e., when both Parties have signed this Addendum.

Date: 9/15/10

CASTAIC LAKE WATER AGENCY

By: [Signature]

AKM Title: GENERAL MANAGER

APPROVED AS TO FORM:
McCORMICK, KIDMAN & BEHRENS, LLP

By: [Signature]

Date: 9/15/10

ROSEDALE-RIO BRAVO WATER
STORAGE DISTRICT

By: _____

Title: _____

APPROVED AS TO FORM:
McMURTREY, HARTSOCK & WORTH

By: _____

EXHIBIT A

ROSEDALE-RIO BRAVO WSD OPERATIONS, MAINTENANCE & REPLACEMENT COST ANALYSIS

Well production = (5 cfs for 300 days)	2,975 AF/year
Assume well is used once every 5 years =	595 AF/year
Initial Well Cost =	\$263,430
Average Service Life =	30 years
Annual Depreciation Amount =	\$8,781 /year
Well Replacement Component =	\$14.76 /AF
Estimated Pump & Equipment Cost =	\$150,000
Average Service Life =	30 years
Annual Depreciation Amount =	\$5,000 /year
Pump Replacement Component =	\$8.40 /AF
Other Well Maintenance Items = (rehab casings, electrical, service motors, etc.)	\$40,000
Average Interval =	15 years
Annual Maintenance Amount =	\$2,667 /year
Annual Operations & Monitoring Costs (staff time, administration, monitoring)	\$7,500
Average Interval =	5 years
Annual Operations Amount =	\$1,500 /year
Operations & Maintenance Component =	\$7.00 /AF
Total Maintenance and Replacement =	\$30.16 /AF

Note:

All calculations are estimates provided for illustrative purposes only and actual costs will vary depending upon third party rate increases, inflation, changing conditions, etc

EXHIBIT B

WELL POWER CALCULATION SHEET

Power Charge = Power Rate (\$/KWH) X Energy Use (Avg. KWH/AF)

Notes:

- 1) \$/KWH is calculated by using PG&E, Ag 5b rate or future equivalent determined prior to may 1 of each year
AG5b rate is melded across the times of use.
- 2) Pump TDH is a determined from field measurements taken monthly. Power costs will be set
and adjusted based upon monthly TDH measurements made by Rosedale Staff
- 3) Pump TDH taken from four stage flowserve 14ENL pump with a 10.6-inch drim and design point of 2500 gpm @226ft
- 4) Power usage derived from 250HP US premium efficient hollow-shaft electric motor
- 5) Well efficiency tests shall be performed annually and adjustments shall be made to the forumula herein to reflect field conditions.
- 6) All calculations are estimates provided for illustrative purposes only and actual costs will vary depending
upon third party rate increases, inflation, changing conditions, etc

PUMP TDH (Ft)	Average KWH/AF	Cost Per KWH (\$)	Cost Per AF (\$)
50	156.3	\$ 0.1201	\$ 18.76
60	163.3	\$ 0.1201	\$ 19.60
70	169.7	\$ 0.1201	\$ 20.37
80	175.8	\$ 0.1201	\$ 21.10
90	181.8	\$ 0.1201	\$ 21.83
100	187.8	\$ 0.1201	\$ 22.55
110	193.8	\$ 0.1201	\$ 23.27
120	200.0	\$ 0.1201	\$ 24.01
130	206.5	\$ 0.1201	\$ 24.79
140	213.2	\$ 0.1201	\$ 25.59
150	220.2	\$ 0.1201	\$ 26.44
160	227.7	\$ 0.1201	\$ 27.34
170	235.5	\$ 0.1201	\$ 28.27
180	243.9	\$ 0.1201	\$ 29.28
190	252.8	\$ 0.1201	\$ 30.35
200	262.3	\$ 0.1201	\$ 31.49
210	272.5	\$ 0.1201	\$ 32.71
220	283.6	\$ 0.1201	\$ 34.05
230	295.5	\$ 0.1201	\$ 35.47
240	308.4	\$ 0.1201	\$ 37.02
250	322.5	\$ 0.1201	\$ 38.72
260	337.9	\$ 0.1201	\$ 40.56
270	354.9	\$ 0.1201	\$ 42.61
280	373.6	\$ 0.1201	\$ 44.85
290	394.3	\$ 0.1201	\$ 47.34
300	417.4	\$ 0.1201	\$ 50.11
310	443.4	\$ 0.1201	\$ 53.23
320	472.7	\$ 0.1201	\$ 56.75
330	506.2	\$ 0.1201	\$ 60.77
340	544.6	\$ 0.1201	\$ 65.38