

**2015 WATER PRODUCTION, CONVEYANCE, AND RECIPROCAL SALES AGREEMENT
BETWEEN
THE CITY OF RIVERSIDE
and
THE REGENTS OF THE UNIVERSITY OF CALIFORNIA**

1. **PARTIES:** This Water Production, Conveyance, and Reciprocal Sales Agreement ("Agreement") is made and entered into by and between the **City of Riverside** ("Riverside"), a California municipal corporation, and the **Regents of the University of California** ("Regents"), a California public corporation, hereinafter referred to jointly as "Parties" and individually as "Party".

2. **RECITALS:**

2.1 Regents operate an institution of higher learning located within the corporate limits of Riverside, known as the University of California, Riverside (Campus).

2.2 Riverside operates a municipal utility providing wholesale water and electric services to entities located within and outside of its service territory, and retail water and electric service to its customers located within its service territory.

2.3 Riverside, through its Public Utilities Department, supplies potable water for domestic, commercial, and institutional uses to the Campus.

2.4 Riverside, as owner of the assets of the Gage Canal Company, and beneficiary of certain rights under the terms of the Stipulation for Judgment in Eminent Domain and Final Order of Condemnation in *City of Riverside v. Gage Canal Company* (Riverside Superior Court No. 70785), causes non-potable water for agricultural uses to be delivered to the Campus via the Gage Canal Company operated facilities.

2.5 Each Party is subject to the terms of the judgment in *Western Municipal Water District v. East San Bernardino County Water District* (Riverside County Superior Court No. 78426) (the "1969 Judgment") governing, among other things, the Parties' respective rights and

obligations related to the beneficial use and maintenance of the Bunker Hill Basin, Rialto/Colton Basin, Riverside North Basin and Riverside South Basin.

2.6 Regents, as shareholders in the Gage Canal Company, have certain rights to receive non-potable water service from the Gage Canal Company operated facilities. Regents' rights represented by share ownership upon execution of this Agreement total 987 acre-feet annually (afa).

2.7 Riverside, as shareholders in the Gage Canal Company, have certain rights to receive non-potable water service from the Gage Canal Company operated facilities.

2.8 Regents have certain water rights which can be produced and exported from the Bunker Hill Basin as defined under the 1969 Judgment. Regents' Bunker Hill Basin rights represented by the 1969 Judgment upon execution of this Agreement are 536 acre-feet annually (afa) for its Hunt Wells rights, 184 afa for its East Riverside Water Company rights, and 18 afa for its participation in the Seven Oaks Dam New Conservation Water Supply for a total of 738 afa.

2.9 Regents own the Main Street Well, which is capable of producing water from the Riverside South Basin as defined under the 1969 Judgment. Regents' Riverside South Basin historical production value and accumulated under production credits upon execution of this Agreement total 552 acre-feet annually (afa). The Main Street Well produces water that is suitable for irrigation purposes, but is not of sufficient quality to be used for domestic purposes without significant treatment.

2.10 Regents are diligently investigating construction of a new Agricultural Well to offset the Campus agricultural water requirements currently met through delivery of Regents' Gage Canal Company shares.

2.11 Regents' operation of a new Agricultural Well could yield total water supplies in excess of the current annual requirements of the Campus.

2.12 The Parties desire to optimize the production and conveyance of the Regent's water rights for domestic and agricultural water use on the Campus, and make any supplies in

excess of the Campus requirement available for purchase/sale to Riverside for use within its service territory.

2.13 Regents has requested that Riverside provide the Production Services and Conveyance Services described herein, and Riverside is willing to provide such services in accordance with the rates, terms and conditions of this Agreement.

2.14 Riverside has requested the Regents provide any potable water supplies in excess of the annual Campus requirements on an annual purchase basis, and Regents is willing to provide such in accordance with the rates, terms and conditions of this Agreement.

3. AGREEMENT: The Parties agree as follows:

4. DEFINITIONS: Terms used herein with initial capitalization, whether in singular or plural, shall have the following meanings:

4.1 1969 Judgment: The judgment rendered by the court in *Western Municipal Water District v. East San Bernardino County Water District* (Riverside County Superior Court No. 78426) and governing, among other things, the Parties' respective rights and obligations related to the beneficial use and maintenance of the Bunker Hill Basin, Rialto/Colton Basin, Riverside North Basin and Riverside South Basin.

4.2 Agricultural Well: That well which at the date of execution of this Agreement is contemplated by the Regents to be constructed on the Campus to offset the current agricultural water requirements currently met through delivery of Regents' Gage Canal Company shares.

4.3 Authorized Representative: The representative designated by each Party, in accordance with Section 13, to act on such Party's behalf with respect to those matters specified herein to be the functions of such Authorized Representative.

4.4 Bunker Hill Basin: The groundwater basin so defined and described in the 1969 Judgment.

4.5 Campus: The campus of the University of California that is located in the City of Riverside in portions of sections 20, 29 and 30 of T. 2. S., R. 4. W., S.B.B.& M.

4.6 Capital Component: The component of the Service Rate intended to recover Riverside's capital cost of providing Production Services and Conveyance Services

4.7 Conveyance Services: Riverside's use of its water treatment, transmission and distribution systems to convey water from a Point of Receipt to a Point of Delivery.

4.8 Delivery Month: A month for which Regents receive water under the terms of this Agreement.

4.9 Fiscal Year: The twelve (12) month period commencing each July 1 during the term of this Agreement and ending the following June 30.

4.10 O&M Component: The component of the Service Rate intended to recover Riverside's operating and maintenance cost of providing Production Services and Conveyance Services.

4.11 Point of Delivery: The Point of Interconnection where water is delivered to Regents by Riverside in connection with Conveyance Services provided hereunder.

4.12 Point of Receipt: The Point of Interconnection where water is delivered to Riverside by Regents, or on Regent's behalf, in connection with Conveyance Services provided hereunder. With respect to Riverside's simultaneous provision of both Production Services and Conveyance Services, the well head discharge block valve shall be deemed to be the Point of Receipt.

4.13 Production Services: Riverside's extraction of groundwater for the benefit of Regents using Riverside's water well(s) in the Bunker Hill Basin, Rialto/Colton Basin, Riverside North Basin, and/or Riverside South Basin.

4.14 RESERVED

4.15 Rialto/Colton Basin: The groundwater basin so defined and described in the 1969 Judgment.

4.16 Riverside North Basin: The groundwater basin so defined and described in the 1969 Judgment.

4.17 Riverside South Basin: The groundwater basin so defined and described in the 1969 Judgment.

4.18 Service Rate: The rate, expressed in dollars per acre-foot and rounded to nearest cent, to be paid by Regents to Riverside in connection with Riverside's provision of Production Services or Conveyance Services, or both.

4.19 Storage Services: The retention and storage of water using Riverside's reservoir capability for later delivery of such water to Regents.

4.20 Uncontrollable Force: Any cause or event which is beyond the control of the Party affected, including, but not restricted to, failure of or threat of failure of facilities, flood, earthquake, storm, fire, lightning, other natural catastrophes, epidemic, war, terrorist act, riot, civil disturbance or disobedience, labor dispute or strike, labor or material shortage, sabotage, restraint by court order or public authority and action or non-action by or failure to obtain the necessary authorizations or approvals from any governmental agency or authority which by exercise of due diligence such Party could not reasonably have been expected to avoid and which by exercise of due diligence it shall be unable to overcome. Any Party rendered unable to fulfill any obligation by reason of an uncontrollable force must exercise due diligence to remove such inability.

5. EFFECTIVE DATE AND TERM:

5.1 This Agreement shall be effective June 1, 2015 and the Agreement shall remain in effect until terminated pursuant to the provisions herein.

5.2 This Agreement shall terminate upon the earliest of any of the following to occur:

5.2.1 Ten (10) years from the effective date of this Agreement, as specified in Section 5.1.

5.2.2 Upon advance written notice by either Party at least one hundred eighty (180) days prior to the specified date of termination; or

5.2.3 Upon thirty (30) days advance written notice by the non-defaulting Party to the defaulting Party following a material breach of this Agreement. Prior to giving any such written notice, the non-defaulting Party shall give the defaulting Party not less than 30 days advance written notice of the non-defaulting Party's intent to terminate, which notice shall describe the nature of any material breach in reasonable detail. A thirty day notice of termination may be sent if and only if the defaulting Party fails to cure its material breach within thirty days of the defaulting Party's receipt of the notice of intent to terminate.

5.3 Upon mutual agreement, Regents and Riverside each shall have the right to extend the term of this Agreement for similar periods.

5.4 Obligations incurred hereunder but not satisfied prior to termination of this Agreement shall survive such termination until fully discharged, including any payments due by one Party to the other Party hereunder.

6. PRODUCTION AND CONVEYANCE SERVICES:

6.1 Production Services: Riverside shall utilize its water production facilities during each Delivery Month as required to extract groundwater on Regents' behalf from the Bunker Hill Basin, Rialto/Colton Basin, Riverside North Basin and/or Riverside South Basin as set forth in the Operating Plan established pursuant to Section 6.3. For each acre-foot, or portion thereof, of water produced by Riverside on Regents' behalf, Regents shall pay Riverside the rate determined in accordance with Section 9 of this Agreement.

6.2 Conveyance Services: Riverside shall utilize its water treatment, transmission, and/or distribution facilities during each Delivery Month as required to simultaneously deliver to Regents an equal amount of water to a Point of Delivery, as set forth in the Operating Plan established pursuant to Section 6.3. For each acre-foot, or portion thereof, of water conveyed by Riverside on Regents' behalf, Regents shall pay Riverside the rate determined in accordance with Section 9 of this Agreement.

6.3 Operating Plan:

6.3.1 During each Delivery Month, Riverside shall provide Conveyance Services to the Point(s) of Delivery as identified below:

6.3.1.1 3800 Canyon Crest Drive, RPU Premise ID 120139. Primary Campus metering point at Canyon Crest Drive and University Avenue.

6.3.1.2 800 Linden Street, RPU Premise ID 154480. Secondary Campus metering point at Linden Street east of Canyon Crest Drive.

6.3.2 Riverside shall provide Production and Conveyance Services from groundwater sources in the following order of priority:

6.3.2.1 Bunker Hill Basin as first priority until Regents' annual production rights as defined in Section 2.8 are exhausted.

6.3.2.2 Riverside South Basin as second priority until Regents' annual historical production value as defined in Section 2.9 are exhausted. This historical production value will be produced by the Agricultural Well after it is successfully commissioned.

6.3.3 Riverside shall provide Conveyance Services from its point of interconnection with Gage Canal Company operated potable pipeline facilities to the Point(s) of Delivery of Regents' Gage Water as defined in Section 2.6, but only after Regents' successful commissioning of its new Agricultural Well.

6.3.4 In the event Regents' Campus water requirements exceed the amount of water that can be delivered from Regents' owned resources and/or delivered under the Production and Conveyance Services provisions herein, Riverside shall provide water service to the Campus as demanded under its normal water service terms and conditions as defined by its Water Rules and applicable rate schedules.

7. MEASUREMENT OF WATER PRODUCED OR CONVEYED:

7.1 Any metering devices used to measure the delivery of water under this Agreement at a Point of Delivery shall be owned by Riverside and shall be installed, operated, calibrated, and maintained in accordance with Riverside's standard requirements. Any such

metering devices shall be maintained directly by Riverside or by agents or subcontractors directly under Riverside's control.

7.2 Riverside shall arrange the inspection and testing of the metering devices at least once per five calendar years, unless more frequent testing and inspection is appropriate as a result of repairs to or replacements of a metering device. Riverside shall provide reasonable advance notice to Regents of any such testing or inspection activities in order to permit a representative of Regents to witness such activities, and shall provide Regents with copies of any periodic or special inspection or testing reports relating to the metering devices upon request by Regents. Regents, at its own expense, may request in writing that Riverside initiate additional testing and inspection of the metering devices, and Riverside shall comply with any such request as soon as practical after the request is made.

8. CONTINUITY OF SERVICE:

8.1 Riverside reserves the right to temporarily interrupt or curtail Production Services and/or Conveyance Services hereunder; (i) upon reasonable advance notice to Regents to make repairs, replacements, modifications, or to perform maintenance work, all for the purpose of maintaining continuity of Production Services and/or Conveyance Services, or (ii) without notice to Regents because of an existing or impending Uncontrollable Force, as reasonably determined by Riverside.

8.2 Notwithstanding the provisions of Section 8.1, Riverside may interrupt or curtail Production Services and/or Conveyance Services to the extent that the continued provision of such services could reasonably be determined by Riverside to (i) adversely affect the quality, reliability or cost of service related to water deliveries by Riverside to its retail customers, or (ii) cause Riverside to violate the terms of any rule, regulation, or binding obligation it may otherwise have with respect to the production, treatment or delivery of water.

9. RATES AND CHARGES:

9.1 For Production Services and Conveyance Services rendered by Riverside to Regents hereunder, Regents shall pay the associated rate(s) per acre-foot of water, or portion thereof, applicable to the service provided, including 1) Energy Component, 2) Operation &

Maintenance (O&M) Component, 3) Capital Recovery Component, 4) General Fund Transfer, and, 5) Production Assessments.

9.1.1 Energy Component: The Energy Component of the rates for Production Services and Conveyance Services shall be in accordance with Sections 9.1.1.1 and 9.1.1.2. Attached hereto as Exhibit B and incorporated herein by this reference is the methodology and initial estimated costs to be used by Riverside in determining the Energy Component for Production Services and Conveyance Services.

9.1.1.1 Production Services: For each acre foot, or portion thereof, of water produced, Regents shall pay the actual average unit cost of Riverside's Waterman System production facilities, including the John W. North pumping plant as well as future water supply transmission main pumping plants needed for the operation of Riverside's water system. Such unit cost shall be determined on the basis of the same objective criteria and methodology applicable to comparable nonpublic users.

9.1.1.2 Conveyance Services: For each acre foot, or portion thereof, of water conveyed to the Riverside's 1037 foot pressure zone, Regents shall pay the sum of the actual average unit cost of operation for Riverside's Chicago booster pumping station. For water delivered to higher pressure zones, incremental Energy Component shall be calculated by adding the actual average unit cost for applicable booster stations, as reasonably determined by Riverside. Such unit cost shall be determined on the basis of the same objective criteria and methodology applicable to comparable nonpublic users.

9.1.2 O&M Component: The O&M Component of the rates for Production Services and Conveyance Services shall be in accordance with Sections 9.1.2.1 through 9.1.2.3. The O&M component billed to Regents shall be annually adjusted, on June 1 of each year, starting on June 1, 2016, upward by two-percent (2.0%) to reflect the estimated percentage increase, for the twelve month period prior to the adjustment, if any, in the Consumer Price Index for all Urban Consumers for the Los Angeles-Anaheim-Riverside area published by the United States Department of Labor, Bureau of Labor Statistics ("CPI"). Whenever the actual changes to the CPI for the twelve month period prior to the date of the adjustment are published, the

billing to Regents will be adjusted commensurate with the actual changes, with credits/debits, as appropriate, to make the overall billing to Regents consistent with such changes. If the chosen CPI is unavailable, the parties will reasonably agree on a different Consumer Price Index to be utilized for adjustments made pursuant to this paragraph. At Year five of this agreement, Parties agree to review the cost elements and, if warranted by mutual consent of the Parties, reset the O&M Component to reflect then current costs. Attached hereto as Exhibit C and incorporated herein by this reference is the methodology and initial costs to be used by Riverside in determining the O&M Component for Production Services and Conveyance Services.

9.1.2.1 Riverside South Basin: For each acre foot, or portion thereof, of water produced and conveyed, Regents shall pay the sum of One Hundred Fifteen dollars and Twenty Two cents (\$115.22), adjusted annually for inflation as described in Paragraph 9.1.2.

9.1.2.2 Bunker Hill Basin: For each acre foot, or portion thereof, of water produced and conveyed, Regents shall pay the sum of One Hundred Eight dollars and Forty Five cents (\$108.45), adjusted annually for inflation as described in Paragraph 9.1.2.

9.1.2.3 Gage Water: For each acre foot, or portion thereof, of water produced and conveyed, Regents shall pay the sum of Forty Nine dollars and Five cents (\$49.05), adjusted annually for inflation as described in Paragraph 9.1.2.

9.1.3 Capital Recovery Component: The Capital Recovery Component of the rates for Production Services and Conveyance Services shall be in accordance with Sections 9.1.3.1 through 9.1.3.3. Attached hereto as Exhibit D and incorporated herein by this reference is the methodology and costs to be used by Riverside in determining the Capital Recovery Component for Production Services and Conveyance Services.

9.1.3.1 Riverside South Basin: For each acre foot, or portion thereof, of water produced and conveyed, Regents shall pay the sum of Two dollars and Sixty Two cents (\$2.62), fixed for the term of the Agreement.

9.1.3.2 Bunker Hill Basin: For each acre foot, or portion thereof, of water

produced and conveyed, Regents shall pay the sum of Three dollars and Four cents (\$3.04), fixed for the term of the Agreement.

9.1.3.3 Gage Water: For each acre foot, or portion thereof, of water produced and conveyed, Regents shall pay the sum of Two dollars and Twenty Eight cents (\$2.28), fixed for the term of the Agreement.

9.1.3.4 Evans Reservoir to Primary Campus Meter: For each acre foot, or portion thereof, of water produced and conveyed, Regents shall pay the sum of Thirty Two dollars and Sixty Five cents (\$32.65), fixed for the term of the Agreement.

9.1.3.5 Secondary Meter: For each acre foot, or portion thereof, of water produced and conveyed to the Campus Secondary Metering point, Regents shall pay the sum of the rate in Paragraph 9.1.3.4 (Evans Reservoir to Primary Campus Meter) plus Seventeen dollars and Sixty cents (\$17.60), fixed for the term of the Agreement.

9.1.4 General Fund Transfer: All cost components charged by Riverside for Production and Conveyance Services shall be adjusted upward to reflect the 11.5% General Fund Transfer on gross revenues, as set forth in Riverside City Charter section 1204.1 as approved by Riverside voters through the June 2013 Municipal Ballot Measure A.

9.1.5 Production Assessments: Regents shall be responsible for payment of any groundwater production assessments, taxes, or other charges levied by any governmental agency, for each acre foot, or portion thereof, produced in accordance with this agreement. Any such charges shall be added to monthly invoices provided by Riverside as soon as practical after receipt and without markup.

9.2 Basis of Billing: All costs shall be accrued based on the reading of Riverside's meter(s) at the Point of Delivery.

9.3 Customer and Meter Charge: Regents shall pay all other applicable charges for receipt of municipal water service in accordance with Riverside's Water Rules and applicable rate schedule(s). Notwithstanding the preceding sentence, charges for Production and Conveyance Services set forth in this Agreement shall not be subject to Riverside's Water

Rules and rate schedule(s).

9.4 **Invoicing and Reconciliation of Costs:** For each monthly billing cycle, Riverside shall invoice Regents at their service address of record a commodity charge that represents the approximate average rate for Production Services and Conveyance Services as detailed in Section 9.1 *et. seq.* In each June and December of the Agreement term, the actual costs per Section 9.1 *et. seq.* shall be reconciled against the prior invoiced costs and the difference shall be invoiced or credited. The unit charge to be billed in Year 1 of this agreement is \$0.5300/ccf, and shall be adjusted annually.

10. RECIPROCAL SALES: In the event Regents reduce Campus water requirements, develop new water resources that result in potable supplies in excess of Campus requirements, or any combination thereof, Riverside shall produce such supplies for use within its domestic water system. Riverside shall pay Regents for each acre foot, or portion thereof, of such water produced or conserved in accordance with Paragraphs 10.1 *et. seq.*

10.1 **Bunker Hill Basin:** For each acre foot, or portion thereof, of water actually produced by Riverside from the Bunker Hill Basin, Riverside shall pay Regents the sum of Two Hundred Twenty Five Dollars (\$225.00), adjusted annually for inflation as described in Paragraph 9.1.2.

10.2 **Agricultural Well:** The sale and purchase of any excess total water supply from the proposed Agricultural Well shall be subject to terms and conditions of a separate agreement to be executed by the parties subject to the concurrence of the Gage Canal Company.

11. INDEMNIFICATION AND HOLD HARMLESS: Riverside shall indemnify, protect, defend and hold Regents, its employees, students, officers, and agents harmless from any liens, claims, costs, damages, liability or loss, including reasonable attorney's fees, arising from this Agreement, but only in proportion to and to the extent such liens, claims, damages, liability or loss are caused by or result from the willful or negligent acts, errors or omissions of Riverside, its employees, officers, or agents.

Regents shall indemnify, protect, defend and hold harmless Riverside, its employees, officers, and agents from any liens, claims, costs, damages, liability or loss arising from this Agreement, including reasonable attorneys' fees, but only in proportion to and to the extent such liens, claims, costs, damages, liability or loss are caused by or result from the willful or negligent acts, errors or omissions of Regents, its employees, students, officers, or agents.

12. TRANSFER OF INTEREST: RESERVED

13. NOTICES/PAYMENTS/AUTHORIZED REPRESENTATIVES

a. Any written notice under this Agreement shall be deemed properly given and effective on the date delivered if delivered in person or on the day after deposited in the U.S. mail if sent by registered or certified mail, postage prepaid, to the person at the address specified below unless otherwise provided for in this Third Agreement:

If sent to the Riverside, address to:

Riverside Public Utilities
Girish Balachandran
General Manager
3900 Main Street
Riverside, CA 92522

If sent to the Regents, address to:

Regents of California
Riverside Campus
Ken Mueller
Director, Physical Plant
3401 Watkins Dr.
Riverside, CA 92521

b. The Authorized Representatives are authorized to act on behalf of the Party they represent in the implementation of this Agreement. The Authorized Representatives shall have no authority or power to modify, add, waive, or eliminate any terms or conditions of this Agreement. The Authorized Representatives shall be initially the same as those provided in Section 13; however either Party may at any time change the designation of its Authorized Representative by written notice to the other Party pursuant to Section 13.

14. COMPLETE AGREEMENT; SEVERABILITY; WAIVER: This Agreement and attached Exhibits shall constitute the entire understanding between Regents and Riverside relating to the sale, distribution and transmission of water by Riverside to Regents at all service locations on the Campus and supersedes any and all previous written and oral agreements and communications between the parties pertaining to such matters, including but not limited to other water sales agreements. In the event that any of the provisions or portions thereof in this Agreement are held to be unenforceable or invalid by any regulatory agency or court of competent jurisdiction, the validity and enforcement of the remaining provisions and portions are not affected thereby. A waiver by a party, at any time, of its rights with respect to a default under this Agreement, or with respect to any other matter in connection with this Agreement, shall not be deemed a waiver with respect to any other or subsequent default or matter.

15. EFFECTIVE WATER RULES AND RATES: This Agreement sets forth the terms and price under which water services are to be supplied to the Regents by Riverside. If conflicts arise between this Agreement and Riverside's Water Rules, the terms of this Agreement shall take precedence. Only those Water Rules not in conflict with the terms of this Agreement shall apply to any service by Riverside to Regents.

16. ASSIGNMENT: This Agreement shall not be assigned by either party without written consent of the other party, excepting the assignment of the entire interest of the assigning party hereunder to a parent, affiliate or subsidiary entity, or to an entity succeeding to all or substantially all of the business, properties and assets of the assigning party. Upon such assignment this Agreement shall extend to and be binding upon the successor and assignees of the respective parties hereof, but no assignment or change of interest shall have the effect of releasing the assigning party from any of its obligations hereunder unless such release of such assigning party is assented to in writing by the other party to whom the obligations are owing under this Agreement.

17. JURISDICTION; VENUE: This Agreement shall be interpreted under and construed in accordance with the laws of the State of California. Exclusive venue for any action or

proceedings arising out of this Agreement is in the courts located in the County of Riverside, California. In the event either party hereto shall bring suit to enforce any term of this Agreement or to recover any damages for and on account of the breach of any term or condition of this Agreement, it is mutually agreed that each party shall bear their own attorney's fees.

18. EXHIBITS: All exhibits attached to this Agreement and referenced herein are incorporated into and made part of this Agreement.

19. TIME: Time is of the essence to each and every term and provision of this Third Agreement.

IN WITNESS WHEREOF, the parties have entered into this Third Agreement on the date and year first written above.

RIVERSIDE OF RIVERSIDE

REGENTS OF THE REGENTS OF

Name: _____

Name: _____

Title: City Manager

Title:

Attest: _____

City Clerk

Date: _____

APPROVED AS TO FORM:



Deputy City Attorney

Exhibit A

Reserved

Exhibit B

Energy Component

Case 1 – Water produced from the Bunker Hill Basin

Component	Typical Unit Cost	
	(\$/acre-foot)	(\$/ccf)
Average Production Cost of Hunt Wells or appropriate surrogate	\$45.00	
Average delivery cost to 3800 Canyon Crest Drive (Chicago Booster Energy)	\$15.00	
Total Energy Cost to 3800 Canyon Crest Drive	\$60.00	\$0.14
Average delivery cost to 800 Linden Street (Linden Booster and Lemona Booster Energy)	\$65.00	
Total Energy Cost to 800 Linden Street	\$110.00	\$0.25

Case 2 – Water produced from the Riverside South Basin

Component	Typical Unit Cost	
	(\$/acre-foot)	(\$/ccf)
Average Production Cost of North Orange Wells	\$40.00	
Average delivery cost to 3800 Canyon Crest Drive (Chicago Booster Energy)	\$15.00	
Total Energy Cost to 3800 Canyon Crest Drive	\$55.00	\$0.13
Average delivery cost to 800 Linden Street (Linden Booster and Lemona Booster Energy)	\$65.00	
Total Energy Cost to 800 Linden Street	\$105.00	\$0.24

Case 3 – Water produced from the Gage Canal

Component	Typical Unit Cost	
	(\$/acre-foot)	(\$/ccf)
Average Production Cost of Gage Canal ¹	\$0.00	
Pumping Against the Head ²	\$16.00	
Average delivery cost to 3800 Canyon Crest Drive (Chicago Booster Energy)	\$15.00	
Total Energy Cost to 3800 Canyon Crest Drive	\$31.00	\$0.07
Average delivery cost to 800 Linden Street (Linden Booster and Lemona Booster Energy)	\$65.00	
Total Energy Cost to 800 Linden Street	\$81.00	\$0.19

¹ UC Regents pay for Gage's energy costs via its assessments for its Gage Canal Stock

² Assessed by Gage to City for pumping into the pipeline for potable service

Exhibit C

Operations and Maintenance (O&M) Component

Case 1 – Water produced from the Bunker Hill Basin

Component	Typical Unit Cost	
	(\$/acre-foot)	(\$/ccf)
Average System Production Cost ¹	\$62.17	
Average System Distribution Operation Cost ¹	\$32.38	
Apportioned System Distribution Maintenance Cost ²	\$13.90	
Total O&M Cost	\$108.45	\$0.25

¹ Excludes power costs

² Equal to 0.65% of Capital Replacement

Case 2 – Water produced from the Riverside South Basin

Component	Typical Unit Cost	
	(\$/acre-foot)	(\$/ccf)
Average System Production Cost ¹	\$62.14	
Average System Distribution Operation Cost ¹	\$32.38	
Apportioned System Distribution Maintenance Cost ²	\$20.70	
Total O&M Cost	\$115.22	\$0.26

¹ Excludes power costs

² Equal to 0.65% of Capital Replacement

Case 3 – Water produced from the Gage Canal

Component	Typical Unit Cost	
	(\$/acre-foot)	(\$/ccf)
Average System Production Cost ¹	\$4.19	
Average System Distribution Operation Cost ¹	\$32.38	
Apportioned System Distribution Maintenance Cost ²	\$12.48	
Total O&M Cost	\$49.05	\$0.11

¹ Excludes power costs

² Equal to 0.65% of Capital Replacement

Exhibit C

Operations and Maintenance (O&M) Component- Cost Calculation

Average System Production Cost¹	Case 1 Bunker Hill Basin	Case 2 Riverside South Basin	Case 3 Gage Canal
Total System Production Costs by Source	\$3,533,976	\$2,906,033	\$2,870,927
Less: Settlement Reimbursements	(\$207,093)	(\$560,913)	(\$782,229)
Less: Power Costs	(\$1,183,201)	(\$708,309)	(\$827,433)
Less: Capacity/Standby Charges	\$0	(\$1,979)	\$0
Less: Taxes and Assessments	(\$525,911)	(\$63,919)	(\$1,118,645)
Net System Production Costs by Source	\$1,617,771	\$1,570,913	\$142,620
AF Produced by Source	26,021.89	25,278.60	34,094.62
Net System Production Costs by Source/AF Produced= Average Production Costs Per Unit	\$62.17	\$62.14	\$4.19

Average System Distribution Operation Cost¹	Case 1 Bunker Hill Basin	Case 2 Riverside South Basin	Case 3 Gage Canal
Total System Distribution Costs	\$5,088,701	\$5,088,701	\$5,088,701
Less: Power Costs	(\$2,064,505)	(\$2,064,505)	(\$2,064,505)
Less: Capacity/Standby Charges	(\$1,257)	(\$1,257)	(\$1,257)
Less: Taxes and Assessments	(\$25,812)	(\$25,812)	(\$25,812)
Net System Distribution Costs	\$2,997,127	\$2,997,127	\$2,997,127
AF Produced	92,559.83	92,559.83	92,559.83
Net System Production Cost/AF Produced = Average Distribution Costs Per Unit	\$32.38	\$32.38	\$32.38

Apportioned System Distribution Maintenance Cost²		Case 1 Bunker Hill Basin	Case 2 Riverside South Basin	Case 3 Gage Canal
Total Capital Replacement Costs by Source	A	\$46,481,988	\$51,491,078	\$53,480,026
Annual Use- AF	B	26,022	18,180	34,094
Total Capital Replacement Costs by Source/Annual Use by AF = Capital Replacement Costs Per Unit	A/B	\$1,786.25	\$2,832.29	\$1,568.61
Capital Replacement Costs Per Unit x 0.65% =Apportioned System Distribution Maintenance Cost	A/B X 0.65%	\$11.61	\$18.41	\$10.19
Total Capital Replacement Costs-Evans Reservoir to Primary Campus Meter	C	\$33,026,563	\$33,026,563	\$33,026,563
Annual Use-AF	D	93,877	93,877	93,877
Total Capital Replacement Costs-Evans Reservoir to Primary Campus Meter/Annual Use by AF = Capital Replacement Costs-Evans Reservoir to Primary Campus Meter Per Unit	C/D	\$351.81	\$351.81	\$351.81
Capital Replacement Costs-Evans Reservoir to Primary Campus Meter x 0.65 = Apportioned System Distribution Costs-Evans Reservoir to Primary Campus Meter	C/D X 0.65%	\$2.29	\$2.29	\$2.29
Total Apportioned System Distribution Costs		\$13.90	\$20.70	\$12.48

Exhibit D

Capital Recovery Component

Facility	Size	Replacement Cost		Annual Use (AF)	Unit Cost/AF	UCR Use	UCR Proportion	UCR Cost/AF
		Unit Cost	Facility Cost					
Riverside South Basin = 221 AFA								
Riverside South Wells	8 ea	\$ 2,500,000	\$ 20,000,000	\$ 1,200,000	\$ 66.01	\$ 221	1.22%	\$ 0.80
Well Equipment	8 ea	\$ 500,000	\$ 4,000,000	\$ 240,000	\$ 13.20	\$ 221	1.22%	\$ 0.16
Palmyria Collection Pipeline	12,600 ft	\$ 420	\$ 5,292,000	\$ 317,520	\$ 31.75	\$ 122	1.22%	\$ 0.39
North Orange Collection	11,825 ft	\$ 420	\$ 4,966,500	\$ 297,990	\$ 8,180	\$ 99	1.21%	\$ 0.44
Palmyria Treatment Plant	1,000 HP	\$ 1,900	\$ 1,900,000	\$ 114,000	\$ 11.40	\$ 121	1.21%	\$ 0.14
North Orange Chlorination	LS		\$ 650,000	\$ 39,000	\$ 18,180	\$ 221	1.22%	\$ 0.03
North Orange Transmission	9,835 ft	\$ 810	\$ 7,966,350	\$ 477,981	\$ 18,180	\$ 221	1.22%	\$ 0.32
Engineering, Construction Management, Environmental, Regulatory and Legal @15% of Capital			\$ 6,716,228	\$ 402,974				\$ 0.34
Total Capital Replacement			\$ 51,491,078				Capital Recovery Component - Riverside South Basin	\$ 2.62
Bunker Hill Basin = 738 AFA								
Waterman Pipeline	46,752 ft	\$ 810	\$ 37,869,120	\$ 2,272,147	\$ 26,022	\$ 738	2.84%	\$ 2.48
North Waterman Chlorination	LS		\$ 650,000	\$ 39,000	\$ 26,022	\$ 738	2.84%	\$ 0.04
Grand Terrace Booster	1,000 HP	\$ 1,900	\$ 1,900,000	\$ 114,000	\$ 26,022	\$ 738	2.84%	\$ 0.12
Engineering, Construction Management, Environmental, Regulatory and Legal @15% of Capital			\$ 6,062,868					\$ 0.40
Total Capital Replacement			\$ 46,481,988				Capital Recovery Component - Bunker Hill Basin	\$ 3.04
Gage Water Deliveries = 826 AFA								
Gage Transmission Pipeline	54365 ft	\$ 810	\$ 44,035,650	\$ 2,642,139	\$ 34,094	\$ 826	2.42%	\$ 1.88
Gage Chlorination	LS		\$ 650,000	\$ 39,000	\$ 34,094	\$ 826	2.42%	\$ 0.03
Gage Pipeline Linden Street	2,526 ft	\$ 720	\$ 1,818,720	\$ 109,123	\$ 34,094	\$ 826	2.42%	\$ 0.08
Engineering, Construction Management, Environmental, Regulatory and Legal @15% of Capital			\$ 6,975,656					\$ 0.30
Total Capital Replacement			\$ 53,480,026				Capital Recovery Component - Gage Water Deliveries	\$ 2.28
Capital Recovery Evans Reservoir to Primary Campus Meter								
Evans Reservoir	16,000,000 gal	\$ 1.00	\$ 16,000,000	\$ 960,000	\$ 93,877	\$ 1200	1.28%	\$ 0.13
Evans Transmission	2,915 ft	\$ 1,000	\$ 2,915,000	\$ 174,900	\$ 93,877	\$ 1200	1.28%	\$ 0.02
Chicago Booster	110 HP	\$ 4,000	\$ 440,000	\$ 26,400	\$ 5,000	\$ 1200	24.00%	\$ 1.27
Chicago TM	5,325 ft	\$ 350	\$ 1,863,750	\$ 111,825	\$ 5,000	\$ 1200	24.00%	\$ 5.37
University Reservoir*	5,000,000 gal	\$ 1.50	\$ 7,500,000	\$ 450,000	\$ 5,000	\$ 1200	24.00%	\$ 21.60
Engineering, Construction Management, Environmental, Regulatory and Legal @15% of Capital			\$ 4,307,813		\$ 90.00			\$ 4.26
Total Capital Replacement			\$ 33,026,563				Capital Recovery Component - System Delivery from Evans	\$ 32.65
Secondary Meter Adder								
Linden Booster	1,200 HP	\$ 1,900	\$ 2,280,000	\$ 136,800	\$ 4,998	\$ 1200	24.01%	\$ 6.57
Linden Transmission Main	2,770 ft	\$ 450	\$ 1,246,500	\$ 74,790	\$ 4,998	\$ 1200	24.01%	\$ 3.59
Lemona Booster	225 HP	\$ 3,400	\$ 765,000	\$ 45,900	\$ 1,760	\$ 1200	68.18%	\$ 17.78
Lemona Transmission Main	1,830 ft	\$ 280	\$ 512,400	\$ 30,744	\$ 1,760	\$ 1200	68.18%	\$ 11.91
Engineering, Construction Management, Environmental, Regulatory and Legal @15% of Capital			\$ 720,585					\$ 5.98
								Less CRC for Chicago Delivery
								CRC Adder for Secondary Meter Location
								\$ (28.23)
								\$ 17.60