

501 Taft Highway Bakersfield, California

## TUESDAY, September 7, 2021

#### **AGENDA**

## CALL TO ORDER AND ANNOUNCEMENT OF QUORUM

12:00PM

**A.** Administration of Oath of Office for Division 5 Director.

#### **CLOSED SESSION:**

- **A.** Conference with Legal Counsel Existing Litigation Closed Session Pursuant to Gov. Code § 54956.9(d)(1):
  - 1. SWRCB Kern River
- **B.** Conference with Legal Counsel Initiation of Litigation Closed Session Pursuant to Gov. Code § 54956.9(d)(4):
  - 1. One Matter

#### **REGULAR SESSION:**

#### INTRODUCTION OF GUESTS AND PUBLIC

- **PUBLIC COMMENT** (Members of the public may address the Board of Directors on any matter not on the agenda, but absent extraordinary circumstances, the Board may not act on such matters. Members of the public may address items of interest that are listed on the agenda prior to the Board's decision on such items.)
- II. MANAGER'S REPORT (The General Manager will discuss, and the Board will consider various items and issues relating to the ongoing and future operations of the District which are of interest to the Board)
  - A. Approve Minutes of the Regular Board Meeting of August 17, 2021.
  - B. Review and Consideration of Land IQ Agreement for Evapotranspiration, Precipitation, and Crop Type within Kern Delta Water District.
- III. BOARD MEMBER COMMENTS (This item provides Board Members with an opportunity to make announcements or provide general comments.)

## IV. ADJOURN

Requests for disability related modifications or accommodations, including auxiliary aids or services may be made by telephoning or contacting Madelyne Rodriguez at the District Office (661-834-4656). Please attempt to make such requests known at least 24 hours before the scheduled meeting. Pursuant to Government Code section 54957.5, any materials relating to an open session item on this agenda, distributed to the Board of Directors after the distribution of the agenda packet, will be made available for public inspection at the time of distribution at the District, 501 Taft Highway, Bakersfield, CA.



## MINUTES OF THE REGULAR MEETING OF THE BOARD OF DIRECTORS

August 17, 2021

## TUESDAY, August 17, 2021, 12:07PM-3:02PM

DIRECTORS PRESENT: Palla, Kaiser, Tillema, Antongiovanni, Garone, Collins, Mendonca, and Spitzer.

**DIRECTORS ABSENT:** 

STAFF PRESENT: General Manager Teglia, Water Resources Manager Mulkay, Assistant General

Manager Bellue, General Counsel Iger, Controller Duncan, Hydrographer Hyatt,

Groundwater Manager Marquez and Administrative Assistant Rodriguez.

OTHERS PRESENT: Lindsey McGuire, Jeff Fabbri and Travis Millwee.

## CLOSED SESSION DECLARED AT 12:07PM

President Palla called to order the Closed Session of the Kern Delta Board of Directors at 12:07PM regarding the following agenda items:

- A. Conference with Legal Counsel Existing Litigation Closed Session Pursuant to Gov. Code § 54956.9(d)(1):
  - 1. SWRCB Kern River
  - 2. Rosedale Rio Bravo Water Storage District, et al. v. Kern County Water Agency, et al.
- B. Conference with Legal Counsel Initiation of Litigation Closed Session Pursuant to Gov. Code § 54956.9(d)(4):
  - 1. One Matter

Closed Session was concluded at 12:56PM.

#### **REGULAR SESSION DECLARED AT 1:03PM**

President Palla called to order the Regular Session of the Kern Delta Board of Directors at 1:03PM.

Closed Session Report: District General Counsel Iger reported the following:

Item A: No reportable action. Item B: No reportable action.

#### INTRODUCTION OF GUESTS AND PUBLIC

Those listed as others present were announced as guests.

#### I. PUBLIC COMMENT

None.

#### II. CONSENT CALENDAR

M/S/C (Garone/Collins) (yes-8, no-0): By unanimous vote, the Board approved and authorized items II A through II D of the Consent Calendar.

- A. Approval of Minutes from the Regular Board Meeting of August 3, 2021.
- B. Approval of the July/August District Construction and Water Banking Disbursements.
- C. Approval of the July/August District Disbursements.
- D. Adoption of Resolution 2021-05 Adopting the Updated Multi-Jurisdiction Hazard Mitigation Plan.

#### III. BUSINESS AND FINANCE

- A. <u>Business & Finance Committee August 16, 2021:</u> District Controller Duncan provided a report from the August Business & Finance Committee Meeting.
- A(i). <u>Approval of July 2021 Financial Reports:</u> Mr. Duncan presented the July 2021 District and Water Banking Project Financial Statements, Treasurer's Reports, and District Delinquency Report.
- M/S/C (Antongiovanni/Tillema) (yes-8, no-0): By unanimous vote, the Board approved the July 2021 District and Water Banking Project Financial Statements, Treasurer's Reports, and Delinquency Report as presented.
- B. Review and Acceptance of 2020 Audited Financial Reports\*: Ms. Lindsey McGuire of Brown Armstrong provided an overview of the recently finalized 2020 Audited Financial Reports. Ms. McGuire conveyed that during the audit review there were no audit findings or issues identified. The audit provides a clean opinion regarding the District's financials and no deficiencies were identified. Following the presentation and discussion the Board accepted the audit report.
- M/S/C (Antongiovanni/Tillema) (yes-8, no-0): By unanimous vote, the Board accepted the 2020 Audited Financial Reports as presented.

\*Note: Item IIIB was heard prior to Item IIIA out of curtesy to Ms. McGuire who was on hand to present item IIIB.

#### IV. OPERATIONS AND PROJECTS

- A. A(i-iv). Operations and Projects Committee August 3, 2021: Assistant General Manager Bellue briefly reported on the August Operations and Projects Committee Meeting including District maintenance activities, recent encroachment permit requests, and status updates related to both the Sunset Groundwater Recharge Facility project and the Old River Basins project.
- B. <u>District Meter Specification Discussion:</u> District staff provided the Board with a draft document designed to convey the District's preferred flow meter parameters. The document provides several specific parameters

that can be utilized by District growers when installing flow meters on wells. The Board provided feedback on the draft document which will be updated to reflect the comments received. The Board plans to have continued discussions regarding the topic of flow-meters and development of a potential District program at a future Board meeting.

#### V. KERN RIVER WATERMASTER

- A. A(ii). <u>District Water Master Report:</u> District Hydrographer Hyatt reviewed and discussed the water supplies of the District for the month of July and early August. Approximately 12,121 acre-feet of water was delivered in District during July. Mr. Hyatt also provided information related to a long-term seasonal outlook, which included current river forecast information showing a 15% April July runoff on the Kern River and the current State Water Project allocation, which is 5%. Finally, Mr. Hyatt discussed the status/schedule of various District utilities based on the current runoff information.
- B. B(i). <u>Kern River Watermaster Report:</u> The August Isabella construction update, provided by the Army Corps of Engineers, was included in the Board packet.
- C. <u>District Groundwater Manager Report:</u> Groundwater Manager Marquez provided graphical information regarding depth to groundwater at various monitoring locations throughout the District.

#### VI. MANAGER'S REPORT

- A. Mr. Teglia provided a brief verbal report highlighting two recent meetings of note covered under item B below. The first was an update regarding a recent Kern Subbasin SGMA Coordination Committee meeting where basin boundary adjustment and other topics were discussed. The second was a recent meeting of the Kern River Watershed Coalition Authority where the CV-SALTS regulatory program was discussed.
- B. External Agency Report: Mr. Teglia provided verbal comments supplementing a memorandum included in the Board package which provided information on the meetings and activities of various external agencies. These agencies include, but are not limited to, the Kern County Water Agency (including the status of the Delta Conveyance Project and Contract Extension), Kern Fan Authority, Kern River Watershed Coalition Authority, Kern Groundwater Authority, Kern River Groundwater Sustainability Agency, the South Valley Water Resources Authority, the Water Association of Kern County, and the Integrated Regional Water Management Plan.
- C. <u>Water Banking Projects Report:</u> Mr. Teglia provided verbal comments supplementing a memorandum included in the Board package which provided information on water banking project activity on the Kern Fan.

### VII. ATTORNEY'S REPORT

- A. <u>2021 District Election Update:</u> Mr. Iger provided a verbal update regarding the 2021 District Election. Mr. Iger conveyed that the only candidates that filed election papers for Divisions 1,2,4 & 7 were the incumbents for those seats. As such, a District Election is not necessary and the appropriate correspondence to the County Board of Supervisors has been sent requesting appointment of the above referenced incumbents.
- B. <u>Appointment of Division 5 Director</u>: Mr. Iger conveyed that after the required posting period, the District had received only one name for consideration for the recently vacated Division 5 Director seat (Robert Fanucchi). As such, the Board took action to appoint Robert Fanucchi as the new Division 5 Director, serving the remainder of the existing term until 2023.

M/S/C (Kaiser/Garone) (yes-8, no-0): By unanimous vote, the Board approved the appointment of Robert Fanucchi as the new Division 5 Director.

## VIII. BOARD MEMBER COMMENTS

None.

## IX. ADJOURNMENT:

There being no further business, President Palla adjourned the meeting at approximately 3:02PM.

Respectfully Submitted,

Steven Teglia, General Manager

Approved by Board,

Richard Tillema, Board Secretary

#### LAND IQ, LLC

#### CLIENT SERVICES AGREEMENT

#### Agreement No. 2021-06

THIS CLIENT SERVICES AGREEMENT (the "Agreement") is made and entered into effective as of September 7, 2021 by and between Land IQ, LLC, a California limited liability company, ("Land IQ"), and Kern Delta Water District, a California Water District ("Client").

**WHEREAS,** Land IQ is engaged in the business of providing services to its clients that involve, among other services, the performance of analyses of soil, landscape, remotely sensed imagery, water, air, and crop production data, hydrological modeling, research services, and technical consultation and research in the fields of agriculture, remote sensing, water quality and supply management, geospatial analysis, environmental regulatory compliance, and legal support.

**WHEREAS**, Client desires to engage Land IQ to perform certain Designated Services (defined below), and Land IQ desires to perform such Designated Services, all on the terms and conditions set forth herein.

**NOW**, **THEREFORE**, for and in consideration of the mutual promises in this Agreement, and all other good and valuable consideration, the receipt and legal sufficiency of which are hereby acknowledged, the parties agree as follows:

#### 1. Designated Services

Client hereby engages Land IQ, and Land IQ hereby accepts such engagement, at all times during the Term (as hereinafter defined), to provide those services to Client described on the Statements of Work entered into and attached hereto from time to time by the parties, each of which Statement of Work shall relate to a specific project, shall be substantially in the form of **Exhibit A** and shall be attached hereto and incorporated into this Agreement at the time such Statement of Work is agreed upon by the parties hereto (collectively, the "**Designated Services**"). Each such Statement of Work shall also set forth the Designated Services that shall be performed by Land IQ, and may include descriptions of deliverable items, deliverable schedules, acceptance criteria and other payment schedules. Although approved at project initiation, the Designated Services and any limitations on charges may be modified from time to time as agreed to in writing by the parties, for the applicable Statement of Work.

#### 2. Compensation and Billing

In consideration of the performance of the Designated Services described in each Statement of Work, Client shall pay to Land IQ compensation in the form of professional fees at the rate of \$0.76/acre/year, thus Client will receive a monthly invoice of \$7,429 for the 3-year duration based upon the acreage identified in Exhibit A.

Notwithstanding the above, the compensation to be paid to Land IQ in connection with the performance of the Designated Services is subject to modification by the parties hereto in connection with any modifications to the Designated Services hereunder, as provided in Section 1 above.

Land IQ shall invoice Client for amounts due from the performance of the Designated Services on a monthly basis except as otherwise agreed upon in a Statement of Work, and Client shall pay all invoiced amounts within thirty (30) days after the date of the applicable invoice unless other arrangements are made in advance. All unpaid invoices shall accrue interest at the rate of one and one-half percent (1.5%) per month to the extent that they are not paid by the end of such thirty (30) day period. Any payment will be applied first to accrued interest, then to accrued late charges and then to any remaining balance. Client shall also be responsible for all costs and attorneys' fees incurred by Land IQ in collecting delinquent amounts.

## 3. Termination/Suspension of Services

The term of this Agreement (the "**Term**") shall begin on the date hereof and shall continue until terminated pursuant to the terms hereof.

Either party shall have the right to terminate this Agreement for any reason whatsoever, upon thirty (30) days prior written notice thereof to the other party. Furthermore, either party shall have the right to terminate this Agreement immediately upon written notice thereof to the other party if such other party breaches any of the terms of this Agreement or fails to perform or observe any of its obligations hereunder, and such breach or failure is not cured within a period of ten (10) days after the receipt by the breaching party of written notice of such breach or failure specifying the nature of the breach or failure. Finally, Land IQ may terminate this Agreement or suspend the performance of the Designated Services upon ten (10) days prior written notice to Client if timely payment of invoices is not made.

Upon termination of this Agreement for any reason, Client shall pay to Land IQ all earned but unpaid professional fees and other amounts hereunder, and all reimbursable but unreimbursed expenses, costs and disbursements described herein; and if such termination occurs before completion of the Designated Services, then the amount of professional fees to be paid to Land IQ shall be determined (a) with respect to "fixed fee" Designated Services, on a pro rata basis based on the percentage of Designated Services then completed, and (b) with respect to "time and materials" Designated Services, based on the number of hours then performed and the amount of materials then used.

Upon termination of this Agreement for any reason, and after Client has paid in full all amounts described in this Section 3, Land IQ shall promptly return to Client copies of all Deliverables completed at time of termination, as described in the subject Statements of Work, except for one (1) copy, which Land IQ shall be entitled to keep. Furthermore, upon termination of this Agreement for any reason, Client shall promptly return to Land IQ copies of all physical embodiments of all Tools and Rights (defined below) and other data, records or materials of whatever nature or kind belonging to Land IQ, including all materials incorporating the proprietary information of Land IQ, and Client shall not retain any such copies. Finally, notwithstanding any provision of this Agreement to the contrary, the terms and provisions of Sections 3, 5, 10-13, and 15-26 shall survive any termination of this Agreement.

#### 4. Delays and Force Majeure

Land IQ shall not be liable for delays in the performance of, or failures to perform, Designated Services caused by circumstances beyond its reasonable control, including without limitation, acts of God or the public enemy, acts and/or omissions of federal, state and local government authorities and regulatory actions, strikes and other labor disputes, riots, civil unrest, war, lockouts, accidents, fires, floods, unusually severe weather, epidemics and quarantine restrictions, death or disability of personnel, Client's failure to furnish necessary information, sabotage, failures or delays in transportation or communication, failures or substitutions of equipment, embargos, and shortages of labor, fuel, raw materials or equipment. For delays resulting from actions or inactions of Client or its representatives, or of third parties, Land IQ shall be given an appropriate time extension and shall be compensated for all additional costs of labor, equipment and other direct and indirect costs Land IQ incurs during any delay or interruption of services caused by circumstances beyond Land IQ control. Delays of more than ninety (90) days shall, at the option of either party, make this Agreement subject to termination.

Client recognizes that delays relating to the processing of permit applications or approval of permits are beyond the control of Land IQ. Land IQ makes no warranties and Client waives any claims against Land IQ relating to the timeliness of approvals or the success of permit applications prepared under this Agreement.

#### 5. Ownership of Materials

Unless otherwise expressly agreed upon in a particular Statement of Work, Client is and shall be the owner of all final documents and other written communications, generated by Land IQ in the performance of the Designated Services <u>and</u> identified as being deliverables under the applicable Statements of Work (collectively, the "**Deliverables**"). Notwithstanding any other provisions of this Agreement, Client may use, distribute and submit such Deliverables to regulatory agencies and principals of Client, as well as to third parties, including without limitation, press or media representatives and representatives of citizens or public interest groups in connection with Client's interests relating to the applicable Site (defined below). Client shall also be the owner of all licenses to information, maps, websites or products, generated by Land IQ <u>and</u> identified as being deliverables under the applicable Statements of Work (collectively, the "**Licenses**"). Use and distribution of any and all Licenses by the Client will be limited by the terms of a

License Agreement to be completed by both parties. The License Agreement shall not override any other terms and conditions of this Agreement.

Notwithstanding any provision of this Agreement to the contrary, Land IQ shall retain and be the sole owner of all right, title and interest in and to all of the (a) ideas, know-how, approaches, methodologies, concepts, skills, tools, techniques, data libraries, processes, routines and technologies created, adapted or used by Land IQ in its business generally, irrespective of whether possessed by Land IQ prior to, or acquired, developed or refined by Land IQ (either independently or in concert with Client) during the course of, the performance of the Designated Services; (b) information, programming, software, documentation, data compilations, reports and any other media, working notes, drawings, designs, specifications, materials or other objects produced as a result of Land IQ' performance of the Designated Services, other than the Deliverables; and (c) applicable rights to patents, copyrights, trademarks, service marks, trade secrets and other intellectual property rights inherent therein and appurtenant thereto (collectively, the "Tools and Rights"). Client shall have no interest in or claim to such Tools and Rights, and Land IQ shall be free to use any such Tools and Rights in providing services to any persons or entities in the future.

Use by Client or third parties of any Tools and Rights or other intellectual property owned by Land IQ, or any device or enhancement developed by Land IQ, without the written permission of Land IQ, is prohibited, and Client shall defend, indemnify and hold Land IQ harmless from all losses, claims, damages and expenses, including reasonable attorneys' fees and costs, incurred by Land IQ and arising out of such unauthorized use. Further, Client shall reasonably compensate Land IQ for violation of any copyright, patent or other intellectual property rights occasioned by such unauthorized use.

#### 6. Right of Inspection and Audit

If Land IQ's professional service fees for any particular Designated Services are charged on a time and materials basis, Client may at its sole cost and expense, during the Term and for six (6) months after its completion, have reasonable access upon reasonable notice and during normal business hours to all pertinent Land IQ records and accounts relating to such charges. Client shall reimburse Land IQ for all personnel, materials and copying costs incurred by Land IQ for any such Client inspection and audit.

#### 7. Assignments and Subcontractors

Except as otherwise provided in this Agreement, neither Client nor Land IQ shall assign or otherwise transfer its rights, duties or obligations under this Agreement without the prior written consent of the other. Notwithstanding the above, Land IQ may subcontract the performance of those Designated Services which are ordinarily or customarily provided by others or which are necessary to prevent or minimize danger to persons, property or equipment, subject to the prior written consent of Client, which consent shall not be unreasonably withheld or delayed.

#### 8. Independent Contractor Status

It is agreed that Land IQ shall act as an independent contractor with respect to the performance of the Designated Services hereunder, and not as an employee, agent or representative of Client. To that end, the parties hereby acknowledge and agree that Client shall have no right to control the manner, means or method by which Land IQ performs the Designated Services hereunder. Rather, Client shall be entitled only to direct Land IQ with respect to the elements of the Designated Services to be performed by Land IQ and the results to be derived by Client, to inform Land IQ as to where and when such Designated Services shall be performed, and to review and assess the performance of such Designated Services by Land IQ for the limited purposes of assuring that such Designated Services have been performed and confirming that such results were satisfactory. Land IQ agrees to pay all income taxes due on amounts paid to it under this Agreement, and is solely responsible for timely remittance to appropriate authorities of all federal, state and local income taxes and charges incident to the payment of compensation for services, and to the operation of Land IQ' business. Land IQ shall not undertake to perform any regulatory or contractual obligation of Client or to assume any responsibility for Client's business or operations.

#### 9. Insurance

During the Term, Land IQ agrees to maintain statutory workers' compensation insurance in the amount required by law, and employer's liability, professional, commercial general and automobile liability insurance in the amount of at least One Million Dollars (\$1,000,000) each. Copies of certificates of insurance shall be issued upon request.

#### 10. Standard of Care

Land IQ agrees to perform the Designated Services pursuant to the terms of this Agreement and in material compliance with all applicable laws, rules and regulations of government authorities. Although Land IQ believes that the Designated Services shall provide the desired benefits sought by Client, Land IQ cannot give any warranty or guaranty with respect thereto, and specifically LAND IQ MAKES NO WARRANTIES, EXPRESS OR IMPLIED, OR WHETHER ARISING BY OPERATION OF LAW, COURSE OF PERFORMANCE OR DEALING, CUSTOM, USAGE IN THE TRADE OR PROFESSION OR OTHERWISE, WITH RESPECT TO THE DESIGNATED SERVICES, INCLUDING BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE. Client agrees to provide Land IQ with prompt written notice of any defect or suspected defect in the Designated Services.

#### 11. Limitation of Liability

- A. In no event shall the Land IQ Indemnitees (defined below) be liable to Client or to any other person or entity for any indirect, special or consequential damages or lost profits arising out of or related to this Agreement or the breach thereof, or to the performance of the Designated Services.
- B. Client acknowledges and agrees that Land IQ shall have no liability to Client with respect to the quality or condition of any data, media or other materials provided by Client to Land IQ as part of Land IQ' performance of the Designated Services. For example, if such data contains a virus, bug or other defect, Land IQ shall not be responsible for any such matters or for any costs or expenses necessary to correct same. Furthermore, Client acknowledges and agrees that Client shall be solely responsible for Client's data, media and materials while they are in transit to or from Land IQ. Land IQ shall not be held responsible for errors introduced within Land IQ' software or any other software that result from databases or database interfaces that have been developed by parties other than Land IQ.

Notwithstanding any other provision herein, (a) the collective liability of the Land IQ Indemnitees to Client shall be limited to injuries or losses caused during the Term by the gross negligence or willful misconduct of Land IQ, and (b) in no event shall the Land IQ Indemnitees' aggregate liability to Client exceed the <u>lesser</u> of (1) the total amount of professional service fees paid to Land IQ hereunder by Client with respect to the Statement of Work in dispute, and (2) Five Hundred Thousand Dollars (\$500,000), unless such actual or alleged losses arise directly or indirectly from Professional errors or omissions, in which event the Five Hundred Thousand Dollar (\$500,000) amount shall be increased to One Million Dollars (\$1,000,000).

#### 12. Indemnity

- A. To the maximum extent permitted by law, Client shall defend, indemnify and hold harmless Land IQ, its members, managers, officers, and employees (collectively, the "Land IQ Indemnitees"), from and against any and all demands, claims, causes of action, suits, judgments, liabilities, liens, losses, damages, expenses, fines, penalties and assessments incurred or sustained by the Land IQ Indemnitees, or any of them, on account of (a) any personal injury, death or damage to or loss of property in any manner related to the management, conduct or operation of Client's business, (b) the gross negligence or willful misconduct of Client in the performance of its obligations under this Agreement, and/or (c) the failure of Client to comply with all of its obligations under this Agreement.
- B. To the maximum extent permitted by law, but subject to the limitations described in Sections 4, 11 and this Section 12, Land IQ shall defend, indemnify and hold harmless Client from and against any and all demands, claims, causes of action, suits, judgments, liabilities, liens, losses, damages, expenses, fines, penalties and assessments incurred or sustained by Client on account of the gross negligence or willful misconduct of Land IQ in the performance of its obligations under this Agreement; provided, however, that the maximum aggregate liability of the Land IQ shall not exceed the policy limit of the Land IQ's applicable policy.

#### 13. Confidentiality

Each party hereto acknowledges that, in connection with this Agreement, such party (the "Disclosee") might be making use of, acquiring and adding to, the Confidential Information of the other party (the "Discloser"). For purposes of this Agreement, "Confidential Information" shall mean (i) the confidential and proprietary information of the Discloser which is of a special and confidential nature and has tangible or intangible value and which includes, but is not limited to, the following: (1) information related to the suppliers, customers, and prospective suppliers and customers of the Discloser, (2) information concerning or related to the business of the Discloser that could be used as a competitive advantage by competitors if revealed or disclosed to such competitors or to persons or entities revealing or disclosing same to such competitors, and (3) "trade secrets", as that term is defined in California Civil Code Section 3426.1, as amended from time to time, or such other applicable state law, statute or code ("Trade Secrets"); (ii) the confidential and proprietary information of any other person or entity that the Discloser is obligated to maintain or hold as confidential; and (iii) any and all oral or written analyses, notes, compilations, studies, interpretations, extracts or summaries which contain, reflect or are based upon, in whole or in part, any of the confidential and proprietary information described in items (i) or (ii) as well as all photo, electronic or other copies or reproductions, in whole or in part, of any of the foregoing, stored in whatever medium (including electronic or magnetic); provided however, that Confidential Information shall not include any information that: (A) was generally known or available to the public (other than by reason of any violation by the Disclosee or any other person or entity of any written or other obligation of confidence) at the time of the disclosure to the Disclosee by the Discloser or any of its agents or representatives, or (B) became generally known or available to the public (other than by reason of any violation by the Disclosee or any other person or entity of any written or other obligation of confidence) after the time of disclosure to the Disclosee by the Discloser or any of its agents or representatives. Each Disclosee acknowledges that the Confidential Information has been and shall continue to be of central importance to the business of the Discloser, and that disclosure of it to, or its use by, others could cause substantial loss to the Discloser. Each Disclosee agrees that, at all times during the Term and (a) with respect to all Trade Secrets, for so long thereafter as such Trade Secrets continue to constitute Trade Secrets (or for a period of five (5) years after the Term, whichever is longer); and (b) with respect to all Confidential Information not constituting Trade Secrets, for a period of five (5) years after the Term, the Disclosee shall not, directly or indirectly, use, divulge or disclose to any person or entity, other than those persons or entities employed or engaged by the Disclosee who or which are authorized to receive such information, any of the Confidential Information which was obtained by the Disclosee as a result of the performance of this Agreement, and the Disclosee shall hold all of the Confidential Information confidential and inviolate and shall not use the Confidential Information against the best interests of the Discloser. Notwithstanding any provision of this Section to the contrary, the obligations of the parties set forth in this Section shall not in any manner be construed to limit or adversely affect the exercise of the rights and privileges of Section 5 above, and in the event of any conflict between the terms of this Section 13 and the terms of Section 5, the terms of Section 5 shall govern and control.

#### 14. Right of Entry and Property Responsibility

During the Term, Client shall grant or cause to be granted to Land IQ and its assignees and subcontractors, at Client's expense, free access to any Site affiliated with the Designated Services. Client shall notify the owners and possessors of such Site, whether they are lawfully or unlawfully in possession, that Client has granted such free access to such Site. Client shall secure permission and any permits necessary to allow Land IQ and its assignees and subcontractors free access to such Site at no charge to such parties unless otherwise specifically agreed to in writing. To the extent any equipment necessary to complete the Designated Services is placed or constructed on Client's property, Land IQ will obtain an encroachment permit with a waiver of the standard fees.

Land IQ shall not assume control of or responsibility for the property itself or the safety of persons not in Land IQ's employ.

#### 15. Site Uncertainties

In soil, landscape, land use, water and other scientific investigations, actual conditions may vary materially from those noted at test points, sample intervals, or by remote analyses. Because of the inherent uncertainties, changed or unanticipated conditions may arise during subsequent activities at any Site that could potentially affect project scope and cost. Because of these inherent uncertainties, Land IQ's reports and opinions with respect to any landscape condition are not guaranteed to be a representation of actual Site conditions or costs, and the consequences of unanticipated conditions during subsequent activities at any Site are not the responsibility of Land IQ.

#### 16. Nonsolicitation of Personnel

Client acknowledges that Land IQ provides a valuable service by identifying and assigning its employees, independent contractors and agents to assist Land IQ in conducting the Designated Services. Therefore, without the prior written consent of Land IQ, Client shall not recruit or hire any employee, independent contractor or agent of Land IQ that is or has been assigned to perform any of the Designated Services on behalf of Land IQ, or who actually performs any part of such Designated Services, until one (1) year after the termination of this Agreement in writing.

#### 18. Notices

All notices, requests, demands and other communications required or permitted hereunder shall be in writing and, if mailed by prepaid first class mail or certified mail, return receipt requested, at any time other than during a general discontinuance of postal service due to strike, lockout or otherwise, shall be deemed to have been received on the earlier of the date shown on the receipt or three (3) business days after the postmarked date thereof. In addition, notices hereunder may be delivered by hand, in which event the notice shall be deemed effective when delivered, or by overnight courier, in which event the notice shall be deemed to have been received on the next business day following delivery to such courier. Finally, notices hereunder may be delivered by facsimile transmission or by electronic mail transmission; if sent by facsimile transmission, such notice shall be followed forthwith by letter and shall be deemed to have been received on the next business day following dispatch and acknowledgment of receipt by the recipient's facsimile machine; and if sent by electronic mail transmission, such notice shall be followed forthwith by letter and shall be deemed to have been received on the next business day following such transmission. All notices and other communications under this Agreement shall be given to the parties hereto at the following addresses:

(a) If to Land IQ:

Land IQ, LLC 2020 L Street, Suite 110 Sacramento, California 95811 Attention: Joel Kimmelshue phone: (916) 517-2482 email: jkimmelshue@landiq.com

(b) If to Client:

Kern Delta Water District 501 Taft Hwy Bakersfield, CA 93307 Attention: Steven Teglia phone: 661-834-4656 email: steven@kerndelta.org

unless and until notice of another or different address shall be given as provided herein.

## 19. Integration

This Agreement, including each Statement of Work and License Agreement related hereto and entered into by the parties hereto from time to time, and all other attachments, if any, hereto and to any Statement of Work and License Agreement,

embodies the entire agreement between, and the understanding of, the parties hereto in respect of the subject matter contained herein. The parties hereto have not relied upon any promises, representations, warranties, agreements, covenants or undertakings, other than those expressly set forth or referred to herein. This Agreement supersedes all prior or contemporaneous negotiations, understandings and agreements, whether written or oral, between the parties hereto with respect to the subject matter contained herein, including but not limited to any preprinted terms and conditions contained in any purchase order, request for proposal, proposal or other written communication between the parties. In the event of any conflict between the terms and conditions of this Agreement (excluding the Statements of Work and License Agreements) and the terms and conditions of a particular Statement of Work or License Agreement, the terms and conditions of this Agreement (excluding the Statements of Work and License Agreements) shall govern and control, except to the extent otherwise expressly provided in such Statement of Work or License Agreement.

#### 20. Extensions, Modifications or Amendments

No extension, modification or amendment of this Agreement shall be binding upon a party hereto unless such extension, modification or amendment is set forth in a written instrument, which is executed and delivered on behalf of such party.

#### 21. Successors and Assigns

This Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors and permitted assigns. Except as provided above, this Agreement shall not create any rights or benefits in any person or entity other than Client and Land IQ, nor is it intended to create any third-party beneficiaries to it.

#### 22. Severability

In case any one or more of the provisions contained in this Agreement shall for any reason be held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect any other provision of this Agreement, and this Agreement shall be construed as if such invalid, illegal or unenforceable provision were limited or modified, consistent with its general intent, to the extent necessary so that it shall be valid, legal and enforceable, or if it shall not be possible to so limit or modify such invalid, illegal or unenforceable provision, this Agreement shall be construed as if such invalid, illegal or unenforceable provision had never been contained herein, and all other provisions hereof shall be and remain unimpaired and in full force and effect.

#### 23. Waiver

The failure or delay of either party hereto at any time or times to require performance of any provision of this Agreement shall in no manner affect its right to enforce that provision. No single or partial waiver by either party hereto of any condition of this Agreement, or the breach of any term, agreement or covenant or the inaccuracy of any representation or warranty of this Agreement, whether by conduct or otherwise, in any one or more instances shall be construed or deemed to be a further or continuing waiver of any such condition, breach or inaccuracy or a waiver of any other condition, breach or inaccuracy.

## 24. Governing Law

This Agreement, and any and all claims arising out of the relationship between the parties hereto, shall be governed by and construed in accordance with the laws of the State of California, without giving effect to any conflicts or choice of laws principles which otherwise might be applicable.

## 25. Arbitration

Any dispute, claim or controversy relating in any way to this Agreement, whether in contract, in tort or otherwise, except a request for equitable, injunctive or restraining relief or to enforce an arbitration award, shall be resolved by arbitration in Sacramento, California, in accordance with the Commercial Arbitration Rules of the American Arbitration Association ("AAA"), subject to the limitations of this Section 25. This agreement to arbitrate will be specifically enforceable under the prevailing law of any court having jurisdiction. Notice of a demand for arbitration will be filed in writing with the other party hereto and with the American Arbitration Association. The demand for arbitration shall be made within a reasonable time after the claim, dispute or other matter in question has arisen, and in no event shall any

such demand be made after the date when institution of legal or equitable proceedings based on such claim, dispute or other matter in question would be barred by the applicable statute of limitations. The parties agree that three (3) arbitrators shall arbitrate all disputes. The arbitrators shall be selected by the joint agreement of the parties, but if they do not so agree within twenty (20) days after the date of the notice of a demand for arbitration referred to above, the selection shall be made pursuant to the Commercial Arbitration Rules from the panels of arbitrators maintained by the American Arbitration Association. The parties will be entitled to discovery in the arbitration proceeding to the extent provided for in civil actions in the United States District Court for the Eastern District of California. The award rendered by the arbitrators will be final, judgment may be entered upon it in any court having jurisdiction thereof, and the award will not be subject to vacation, modification or appeal, except to the extent permitted by Sections 10 and 11 of the Federal Arbitration Act, the terms of which Sections the parties agree shall apply. Except as provided to the contrary in Section 26, each party shall pay its own expenses of arbitration, and the expenses of the arbitrators shall be equally shared.

## 26. Attorneys' Fees

In the event of mediation, arbitration or litigation between Client and Land IQ arising out of the Agreement, each party shall be entitled to recover from the other all of its reasonable costs and attorneys' fees, to the extent that such party prevails over the other party in such proceeding. Notwithstanding the above, Client also agrees to pay all costs, including, without limitation, personnel charges under Land IQ' standard Schedule of Charges and reasonable attorneys' fees incurred by Land IQ in responding to any subpoena or other lawful demand by Client or a third party (including any government entity) for information, testimony or documents relating to the Designated Services provided under this Agreement.

IN WITNESS WHEREOF, the parties hereto have duly executed this Agreement effective as of the day and year first above written.

LAND IQ:
LAND IQ, LLC
$R_{V}$
By:
Name: <u>Joel Kimmelshue</u>
Title: Owner
CLIENT:
Kern Delta Water District
By:
Name: Steven Taglia
Title: General Manager

## **EXHIBIT A**

## STATEMENT OF WORK

SEE ATTACHED STATEMENT(S) OF WORK



# LAND IQ DATA DRIVEN METHOD (LDDM) FOR EVAPOTRANSPIRATION, PRECIPITATION, AND CROP TYPE AT THE FIELD LEVEL — KERN DELTA WATER DISTRICT

**TO:** Steve Teglia/Kern Delta Water District

FROM: Joel Kimmelshue/Land IQ

Seth Mulder/Land IQ Frank Anderson/Land IQ Zhongwu Wang/Land IQ Casey Gudel/Land IQ

**DATE:** July 7, 2021

## INTRODUCTION

This scope of work proposal was developed at the request of the Kern Delta Water District (KDWD) for the purpose of developing a monthly field by field estimate of actual evapotranspiration (ET) occurring within the KDWD. Included in the deliverables will also be field by field precipitation, and twice-yearly field by field crop mapping. A web tool will be used to relay the results each month.

Calculation of ET can be performed accurately using weighing lysimeters and eddy correlation monitoring techniques. These methods are limited, however, because they provide point values of ET for a specific location and fail to provide the ET on a regional scale. This limitation has motivated the development of using remotely sensed (RS) data from satellites to evaluate ET over large areas. Satellite data are well suited for deriving spatially continuous ET surfaces that can be sometimes pared down to the field scale because of their temporal and spatial characteristics. However, the most accurate use of RS models require calibration to actual surface measurements and work from the field level originally. The approach proposed for the tasks in this scope of work includes a combination of high-density, specific ground measurements and remotely sensed modeling, calibrated with those field measurements.

## STAFFING RESOURCES AND PROJECT COOPERATORS

Staff expected to work on this project from Land IQ have been involved in various aspects of evapotranspiration modeling, agricultural remote sensing, and regulatory support for the last 4 to 26 years, and are listed below. Other appropriately qualified staff may also participate to facilitate completion of any tasks approved by the KDWD as a part of this proposed scope of work.

- Principal In Charge and Principal Agricultural Scientist Joel Kimmelshue, PhD
- Principal Remote Sensing Analyst Zhongwu Wang, PhD
- Biometeorologist Frank Anderson, MS
- Agricultural Scientist Seth Mulder, MS



- Agricultural Scientist Andrew Loberg, BS
- Remote Sensing Analyst Juan Geng, MS
- Project Manager/Client Relations Casey Gudel, MS
- GIS Analyst Justin Sitton, BS
- Support Staff Various as needed

Land IQ also welcomes input and collaboration with KDWD and or associated District/GSA staff and intends on integrating staff into continued instrumentation efforts, data collection, and monitoring programs as the on-the-ground, local component of the team, if desired and feasible for KDWD. This is not a requirement of the work efforts, however.

Implementation of these tasks may also include coordination efforts with other technical providers that Land IQ will manage as a part of this overall effort. Land IQ intends on working openly with these parties to help facilitate, to the extent possible, understanding and acceptance of the work approaches and data management used for analysis and ultimate results.

## **TASKS**

This scope of work has been developed based on individual task discussions and requests from KDWD. These tasks include:

- Task 1 Monthly Field by Field ET, Precipitation, and Semiannual Crop Mapping
- Task 2 Monthly Reporting Via A Web-Based Tool
- Task 3 Station Management and Maintenance
- Task 4 Outreach

Each of these tasks is discussed in detail below and includes schedule and deliverables. A cost summary for all work is provided.

## TASK 1. MONTHLY FIELD BY FIELD ET, PRECIPITATION, AND SEMIANNUAL CROP MAPPING

Scope of Work: It is proposed that the Land IQ Data Driven Method (LDDM) developed for Semitropic Water Storage District (used since 2016), North Kern Water Storage District (used since 2018), Shafter Wasco Irrigation District (used since 2018), East Kaweah Groundwater Sustainability Agency (used since 2020), the Tule Subbasin Groundwater Sustainability Agencies (used since 2020), Kings County Water District and the Mid Kings River GSA (beginning in 2021), Southern San Joaquin Municipal Water District (beginning in 2021), Southwest Kings GSA (beginning in 2021) and North Fork Kings GSA (beginning in 2021), and others be used. The LDDM is used to interpret image data and leverages robust and repeated ground station data to be implemented within the KDWD as well as a more direct image analysis. The approach yields more accurate results when repeated and representative ground calibration data are available as compared to RS ET estimates without ground truthing.

Because the LDDM establishes calibration and validation data at the field level and also analyzes at the field level, the result is field-level consumed water which can then be rolled up to any regional area desired. This is unique to the LDDM RS method as compared to other RS approaches and models.



This method does, however, require robust ground truthing data, which is proposed as part of this work effort for KDWD. This effort will employ Landsat 8, Sentinel 2, and purchased high resolution satellite imagery (contracted by Land IQ and included in the overall cost). Satellite data will be screened for cloud cover and terrain corrected. It is important that the images used contain a clear sky. Ground measurements from monitored eddy covariance (EC), surface renewal (SR), Land IQ stations, and cooperator stations will be used to generate hourly ET data correlated to the satellite image overpasses and then used as a dependent variable in the modeling process.

It should be noted that Land IQ has hired as flex employees for complete independent review of our monthly results the following individuals:

- Blake Sanden, M.S., UCCE Irrigation & Agronomy Farm Advisor Emeritus, Kern County
- Allan Fulton, M.S., UC Irrigation and Water Resources Advisor, Emeritus, Kings and Tehama Counties

**Deliverables:** None

**Schedule:** Individual analyses will be completed monthly, and results delivered (Task 2) to the KDWD within approximately 25 days from the end of the previous month.

## TASK 2. MONTHLY REPORTING VIA A WEB-BASED TOOL

**Scope of Work:** Monthly reports will be developed. The first of the 12 monthly reports will begin on the 1<sup>st</sup> of the month following completion of recording of 30 days of climatic data and will be delivered within approximately 25 days of the end of the previous month. Results will be delivered in both report and web-based format. The web tool will contain all fields, field boundaries, current crop mapping, coverages of field-by-field ET and precipitation as well as a download link for all results and reports. The web-based tool is designed to be used at the GSA level. The tool is not currently designed for individual grower access, however, can be developed at additional cost not included in this scope of work.

**Deliverables:** Monthly results will be delivered in both shape file and report formats.

In addition to ET, Land IQ will provide field by field crop type mapping for KDWD in electronic and summary form at least 2 times per year. These data will be the same crop mapping detail that are provided to the State of California, Department of Water Resources as Land IQ is the contractor for that dataset. The delivery of the crop mapping will be approximately July 15 and October 15 of each year and may be modified based on crop rotations and timing. Field by field precipitation will also be delivered as spatially interpolated from rain gauges on Land IQ climatic stations and other publicly available and reliable gauges (e.g. CIMIS stations, airports, municipalities, etc).

The three deliverables include:

- Monthly field-by-field ET
- Monthly field-by-field precipitation
- Field-by-field crop mapping (2 times per year)

All electronic vector and raster GIS files are available upon request.

**Schedule:** Individual analyses and reporting will be completed monthly, and results delivered within approximately 25 days of the end of the previous month being analyzed. Crop mapping data will be delivered on or about July 15 and October 15 of each year.



## TASK 3. STATION MANAGEMENT AND MAINTENANCE

**Scope of Work:** This effort installs, manages and continuously maintains 6-8 ground truthing climatic stations of eddy covariance and/or surface renewal approaches to collect instantaneous ET ground data at select locations representing crop production within KDWD. At times, and depending on crop type/location shift, it should be expected that some stations may need to be moved. However, with some permanent crops within KDWD, some stations will stay within those permanent crops and are not expected to be moved. Regardless, all costs are included in the overall cost. Participating grower cooperation is required for station siting.

The data collected by these stations will be used to calibrate the LDDM RS models for ET and create ET estimates across all fields within KDWD to get a complete estimate of KDWD-wide ET and ET by crop type by field. Data stations are fully telemetered by cellular communication systems to Land IQ servers. The system incorporates data flagging protocols to identify any inconsistencies in collection or outages. Land IQ will conduct approximately monthly site visits in coordination with KDWD personnel (if desired) to verify proper functionality and perform any necessary or seasonal adjustments.

**Deliverables:** None **Schedule:** Continuous

## Task 4. Outreach and Presentations

**Scope of Work:** This task accounts for up to two meetings per year to assist with or participate in outreach meetings with growers and/or District/GSA representatives.

**Deliverables:** Presentation materials

**Schedule:** As needed or directed by KDWD.

## **TOTAL COST AND PAYMENT TERMS**

According to DWR records and Land IQ mapping there are approximately 128,635 gross acres within KDWD. Land IQ has mapped 11,332 acres of urban areas within KDWD.

Therefore, the net analysis area is 117,303 acres. The annual cost is \$0.76/acre/year, thus KDWD will receive a monthly invoice of \$7,429 for the 3-year duration. This amount <u>does not include any credits</u> that may be realized through the grant moneys of approximately \$365,000 obtained by Kern Groundwater Authority for the purposes of this work.

Land IQ is currently in conversations with other neighboring GSA's and Subbasins. If those larger acreage GSA's and Subbasins ultimately use the LDDM, the per acre costs may decrease depending on the acres involved and associated equipment cost. The cost may also stay the same. These costs are based on a minimum of a 3-year project duration commitment. If KDWD decides to not complete the 3-year project duration, the remainder of costs for outstanding labor and expenses will be due.

The cost of \$0.76/acre/year includes all equipment, labor, expenses, supplies, project management, and all other associated costs.

It should be noted that costs are estimates at this time and unforeseen variables and/or efficiencies may occur which may alter costs up or down. Also, annual escalations (e.g. 1-4%) to account for increases in labor costs may or may not be implemented at the beginning of each calendar year.