

**COUNTY CONTRACT NUMBER 555655
AGREEMENT WITH DUDEK FOR GROUNDWATER SUSTAINABILITY PLAN
FOR BORREGO VALLEY GROUNDWATER BASIN**

This Agreement ("Agreement") is made and entered into on the date shown on the signature page ("Effective Date") by and between the County of San Diego, a political subdivision of the State of California ("County") and Contractor Dudek, located at 605 Third Street, Encinitas, CA 92024 ("Contractor"), with reference to the following facts:

RECITALS

- A. The County, by action of the Board of Supervisors Minute Order No. 1, October 19, 2016, authorized the Director of Purchasing and Contracting, to award a Contract for the Development of the Groundwater Sustainability Plan for the Borrego Valley Groundwater Basin.
- B. Contractor is specially trained and possesses certain skills, experience, education and competency to perform these services.
- C. The Chief Administrative Officer made a determination that Contractor can perform the services more economically and efficiently than the County, pursuant to Section 703.10 of the County Charter.
- D. The Agreement shall consist of this document, Exhibit A Statement of Work, Exhibit A-1 Contractor's Proposal Dated 12/06/16, Exhibit B Insurance Requirements and Exhibit C, Payment Schedule. In the event that any provision of the Agreement or its Exhibits, A, A-1, B or C, conflicts with any other term or condition, precedence shall be: First (1st) the Agreement; Second (2nd) Exhibit B; Third (3rd) Exhibit A; Fourth (4th) Exhibit C; and fifth (5th) Exhibit A-1.

NOW THEREFORE, for valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties agree as follows:

**ARTICLE 1
PERFORMANCE OF WORK**

- 1.1 Standard of Performance. Contractor shall, in good and workmanlike manner and in accordance with the highest professional standards, at its own cost and expense, furnish all of the labor, technical, administrative, professional and all other personnel, all supplies and materials, equipment, printing, transportation, facilities, and all other means whatsoever, except as herein otherwise expressly specified to be furnished by County, necessary or proper to perform and complete the work and provide the services required of Contractor by this Agreement.
- 1.2 Contractor's Representative. The person identified on the signature page ("Contractor's Representative") shall ensure that Contractor's duties under this Agreement shall be performed on behalf of the Contractor by qualified personnel; Contractor represents and warrants that (1) Contractor has fulfilled all applicable requirements of the laws of the State of California to perform the services under this Agreement and (2) Contractor's Representative has full authority to act for Contractor hereunder. Contractor and County recognize that the services to be provided by Contractor's Representative pursuant to this Agreement are unique: accordingly, Contractor's Representative shall not be changed during the Term of the Agreement without County's written consent. County reserves the right to terminate this Agreement pursuant to Clause 7.1 "Termination for Default", if Contractor's Representative should leave Contractor's employ, or if, in County's judgment, the work hereunder is not being performed by Contractor's Representative.
- 1.3 Contractor as Independent Contractor. Contractor is, for all purposes of this Agreement, an independent Contractor, and neither Contractor nor Contractor's employees or subcontractors shall be deemed to be employees of the County. Contractor shall perform its obligations under this Agreement according to the Contractor's own means and methods of work which shall be in the exclusive charge and under the control of the Contractor, and which shall not be subject to control or supervision by County except as to the results of the work. Neither Contractor nor Contractor's employees or subcontractors shall be entitled to any benefits to which County employees are entitled, including without limitation, overtime, retirement benefits, workers' compensation benefits and injury leave.
- 1.4 Contractor's Agents and Employees or Subcontractors. Contractor shall obtain, at Contractor's expense, all agents, employees and subcontractors required for Contractor to perform its duties under this Agreement, and all such services shall be performed by Contractor's Representative, or under Contractor's Representatives' supervision, by persons authorized by law to perform such services. Retention by Contractor of any agent, employee or subcontractor shall be at Contractor's sole cost and expense, and County shall have no obligation to pay Contractor's agents, employees or subcontractors; to support any such person's or entity's claim against the Contractor; or to defend Contractor against any such claim.

Any subcontract or consultant agreement, which is in excess of fifty thousand dollars (\$50,000) or twenty five percent (25%) of the value of the contract, whichever is less, or a combination of subcontracts or consultant agreements to the same individual or firm for the Agreement period, or any subcontract or consultant agreement for professional medical or mental health services, regardless of value, must have prior concurrence of the Contracting Officer's Representative ("COR"). Contractor shall provide Contracting Officer Representative with copies of all other subcontracts relating to this Agreement entered into by Contractor within 30 days after the effective date of the subcontract. Such subcontractors of Contractor shall

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EXHIBIT A – STATEMENT OF WORK

sampled each round. These wells will be selected by the COR upon recommendation by the Contractor. Contractor shall obtain samples from existing operable wells. Contractor shall provide a Sampling and Analysis Plan (SAP) that will detail sampling protocol, analytical methods, and quality assurance/quality control requirements. Contractor shall measure field parameters, including dissolved oxygen, specific conductance, pH, and water temperature prior to sampling. Contractor shall obtain water samples using appropriate sampling methodology and submit samples to a California-certified laboratory for analysis⁴. Each sample shall be analyzed for nitrate, total dissolved solids (TDS), arsenic, fluoride, gross alpha and uranium. Contractor will utilize water level and quality data to determine water level trends and groundwater quality trends for constituents of concern in the basin.

3.1.5.2.1. Contractor shall provide a Sampling and Analysis Plan (SAP).

3.1.5.2.2. Contractor shall provide Laboratory Results (Excel and pdf) for each well sampled.

3.1.6. Additional Field Data

The water quality sampling program should be conducted utilizing existing groundwater wells to the extent it is feasible to obtain adequate spatial and depth coverage of each principle aquifer. If necessary, the Contractor may be required to install new wells screened at various depths to obtain adequate spatial samples. At COR's request and with prior written approval, these wells shall be installed by a California-licensed C-57 well driller and the Contractor is responsible for obtaining necessary permits prior to drilling. Contractor should assume the monitoring well will be constructed of 6-inch diameter polyvinyl chloride (PVC) pipe installed to a minimum depth of 300 feet bgs. Contractor shall be responsible for surveying any new well locations as required in the Emergency Regulations, as part of the well drilling task. The County reserves the right to procure services for this task under a separate contract.

3.1.6.1. At COR's request and with prior written approval, Contractor shall install groundwater well and provide Well Completion Report.

3.1.7. Water Budget

In 2015, the U.S. Geological Survey (USGS), in cooperation with BWD, completed an investigation for Borrego Valley entitled *Hydrogeology, Hydrologic Effects of Development, and Simulation of Groundwater Flow in the Borrego Valley, San Diego County, California*. Since a groundwater model has been completed for the basin, the Contractor may utilize the existing model to create a usable hydrogeologic conceptual model to be included in the GSP. The Contractor shall develop the hydrogeologic flow model/water budget to simulate current conditions and future impacts to the groundwater system regarding water levels and water quality⁵. Contractor shall consider both surface and groundwater data and run predictive simulations to determine effects of recharge and extraction on levels and quality along with implementation measures to be detailed in the GSP. The predictive scenarios should, at a minimum, coincide with the reporting dates and interim milestones detailed in Emergency Regulations 354.30. The purpose of this task will be to prepare models to determine impacts to groundwater resources, establish minimum thresholds for each applicable sustainability

⁴ All respective analytical methods must be certified by the California Environmental Laboratory Accreditation Program (ELAP). All analytical data must be reported by a California-certified laboratory.

⁵ Emergency Regulations 354.14 and 354.18

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FOR BORREGO VALLEY GROUNDWATER BASIN
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indicator⁶, to determine sustainable yield for the basin in its entirety that is acceptable to DWR, and to forecast potential economic costs associated with impacts to groundwater resources. The Contractor is encouraged to provide suggestions and recommendations that are acceptable to DWR regarding appropriate public domain modeling software and approach for the County's consideration. Note that this task is not required to be completed for Ocotillo Wells.

3.1.7.1. Contractor shall provide Groundwater Model input, output and maps (electronic and hard copy files).

3.1.7.2. Contractor shall provide a Technical Report: Refined Groundwater Budget.

3.1.8. Support Sustainable Management/Monitoring Network Assessments

When requested by the COR, the Contractor shall cooperate with BWD and the Advisory Committee to develop proposed projects, management actions⁷ and BMPs to achieve the sustainability goals for the basin. Each alternative approved by the COR shall be evaluated by the Contractor for undesirable results, to determine minimum thresholds, and evaluate cumulative hydrologic and economic effects. Other issues, constraints, and objectives should also be noted. The Contractor shall also evaluate the monitoring network to determine its effectiveness. Note that this task is not required to be completed for Ocotillo Wells.

3.1.8.1. Contractor shall provide Groundwater Model input, output and maps for projects, management actions, and BMPs (electronic and hard copy files).

3.1.8.2. Contractor shall provide a Technical Report: Sustainable Management Assessment.

3.1.8.3. Contractor shall provide a Technical Report: Monitoring Network Assessment

3.1.9. Support Projects and Management Actions

When requested by the COR, the Contractor shall evaluate the costs for the proposed projects and management actions identified to achieve the sustainability goals for the basin. The Contractor shall also prepare a cost benefit analysis for each proposed project/management action to determine its impact on the community. This analysis shall include an assessment of the feasibility of the proposed reduction schedule to avoid undesirable results. The Contractor shall include a review of proposed GSP projects and management actions as they are being developed to ascertain legal defensibility. Note that this task is not required to be completed for Ocotillo Wells.

3.1.9.1. Contractor shall provide a cost estimate (in Excel format) for each proposed project, management action and best management practice identified to achieve the sustainability goal for the basin.

3.1.9.2. Contractor shall provide a Technical Report: Projects and Management Actions Support.

3.1.10. Water Credits/Entitlements

The County and BWD intend to implement a cohesive water credits/entitlements program to encourage the voluntary cessation and/or reduction of measurable water uses in the valley and to enable a market-based transfer mechanism among current water users. The Contractor shall evaluate the existing water credits program for BWD and the County and develop a water credit/entitlement program, which includes determining appropriate benchmarking protocol for establishing and

⁶ Emergency Regulations 354.28

⁷ Emergency Regulations Section 354.44