



### Notice of Preparation

Date: September 24, 2013

To: Responsible and Trustee Agencies and Interested Parties

Subject: Notice of Preparation of an Environmental Impact Report

Project: Stockdale Integrated Banking Project

Lead Agency: Rosedale Rio-Bravo Water Storage District

This Notice of Preparation (NOP) has been prepared to notify agencies and interested parties that the Rosedale-Rio Bravo Water Storage District (Rosedale), as the Lead Agency, in consultation with the Irvine Ranch Water District (IRWD), as a Responsible Agency, is beginning preparation of an Environmental Impact Report (EIR) pursuant to the California Environmental Quality Act (CEQA) for the proposed Stockdale Integrated Banking Project (proposed project). The proposed project would allow both agencies to utilize available storage in the local San Joaquin Valley Groundwater Basin by developing groundwater banking facilities on up to three properties located approximately six miles west of the City of Bakersfield in western Kern County. As shown in **Figure 1**, the proposed project would include the Stockdale East property, which is owned by Rosedale, the Stockdale West property, which is owned by IRWD, and a potential third property that would be located within a designated radius around both properties. Operation of the proposed project would be coordinated with Rosedale's existing Groundwater Storage, Banking, Exchange, Extraction & Conjunctive Use Program, which includes the existing Rosedale-IRWD Strand Ranch Integrated Banking Project. The proposed project would provide greater operational flexibility for Rosedale and would enhance water supply reliability for IRWD by providing contingency storage to augment supplies during dry-year periods when other supply sources may be limited or not available. A description of the proposed project and its potential environmental impacts are included as Attachment A to this NOP.

Rosedale and IRWD are soliciting the views of responsible and trustee agencies and interested persons as to the scope and content of the environmental information to be evaluated in the EIR. In accordance with CEQA, agencies are requested to review the project description provided in this NOP and provide comments on environmental issues related to the statutory responsibilities of the agency. The EIR will be used by Rosedale and IRWD when considering approval of the proposed project.

**Comment Period.** In accordance with the time limits mandated by CEQA, comments on the NOP must be received no later than 30 days after publication of this notice. Please send your comments to the contact person shown below, by **5:00 p.m. on October 24, 2013**. Please include a return address and contact name with your comments.

Contact:	Eric Averett
	General Manager
	Rosedale-Rio Bravo Water Storage District
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**Scoping Meetings.** Two public meetings will be held to receive public comments and suggestions on the project. The scoping meetings will be open to the public as follows:

	Rosedale-Rio Bravo Water Storage District	Irvine Ranch Water District
DATE:	October 16, 2013	October 15, 2013
TIME:	2:00 PM	6:30 PM
Location:	849 Allen Road Bakersfield, California	15600 Sand Canyon Avenue Irvine, California



SOURCE: Bing Maps

Stockdale Integrated Banking Project . 211181 Figure 1 Proposed Project Components

# ATTACHMENT A Stockdale Integrated Banking Project

### 1. Project Background

#### Rosedale-Rio Bravo Water Storage District

Rosedale-Rio Bravo Water Storage District (Rosedale) is located west of Bakersfield and encompasses approximately 44,000 acres in Kern County, with 27,500 acres developed as irrigated agriculture and approximately 7,500 acres developed for urban uses. Rosedale's service area overlies the Kern County Sub-Basin of the San Joaquin Valley Groundwater Basin. Rosedale was established in 1959 to develop a groundwater recharge program to offset overdraft conditions in the underlying basin. Rosedale's Groundwater Storage, Banking, Exchange, Extraction & Conjunctive Use Program (Conjunctive Use Program) currently manages approximately 470,000 acre feet (AF) of stored groundwater in the underlying basin, which has an estimated total storage capacity in excess of 1.7 million acre-feet. Water supplies for the Conjunctive Use Program are supplied by the participating water agencies and include high-flow Kern River water and supplies from the Central Valley Project (CVP) and State Water Project (SWP). Currently, the infrastructure for the Conjunctive Use Program includes over one thousand acres of recharge basins and several recovery wells. The current Program provides for maximum annual recharge of approximately 252,000 acre-feet per year (AFY) and maximum annual recovery of approximately 62,500 AFY.

#### Irvine Ranch Water District

Irvine Ranch Water District (IRWD) was established in 1961 as a California Water District pursuant to the California Water District Law (California Water Code, Division 13). IRWD provides potable and recycled water, sewage collection and treatment, and urban runoff treatment to municipal and industrial (M&I) and agricultural customers within an 115,531-acre service area in Orange County, California. Currently, 65 percent of the water IRWD provides for its customers comes from local sources, including groundwater (produced from the groundwater basin managed by Orange County Water District), surface water, and reclaimed water. The remaining 35 percent of IRWD's water supply is imported by the Metropolitan Water District of Southern California (Metropolitan or MWD) and purchased by IRWD through the Municipal Water District of Orange County (MWDOC).

IRWD currently participates in Rosedale's Conjunctive Use Program through its Strand Ranch Integrated Banking Project (see Figure 1). The Strand Ranch Project includes approximately 502 acres of groundwater recharge basins and seven production wells. IRWD has the ability to store up to 50,000 AF and to recover 17,500 AFY in accordance with its banking project terms with Rosedale.

# 2. Project Objectives

The proposed project would allow both Rosedale and IRWD to utilize available storage in the local San Joaquin Valley Groundwater Basin by developing groundwater banking facilities on up to three properties located approximately six miles west of the City of Bakersfield in western Kern County. As shown in **Figure 1**, the proposed project would include the Stockdale East property, which is owned by Rosedale, the Stockdale West property, which is owned by IRWD, and a potential third property that would be located within a designated radius around both properties. The objectives of the proposed project are as follows:

- Integrate the proposed project facilities and coordinate the proposed project operations with Rosedale's Conjunctive Use Program, including the Strand Ranch Integrated Banking Project, to provide for maximum operational flexibility between the various programs and facilities.
- Provide additional groundwater recharge, storage, and recovery capacity in the Kern River Fan region to augment and provide operating flexibility for Rosedale's existing and future programs.
- Develop recharge and recovery capacities for each of IRWD's and Rosedale's respective properties to be available for its priority use and for the other agency's use to the extent not used on an annual basis.
- Develop additional groundwater recharge, storage, and recovery capacity to provide IRWD customers with increased water supply reliability through redundancy and diversification.

# 3. Purpose and Need for the Project

There is approximately 1.7 million acre-feet (AF) of storage available within the aquifer underlying the Rosedale service area. Rosedale has sufficient storage capacity for its agricultural customers and banking partners and also has considerable unused storage capacity. The proposed project would augment the recharge, storage, and extraction capabilities of the Conjunctive Use Program and provide greater operational flexibility to allow Rosedale to fulfill its mission to maintain groundwater levels within its service area.

In addition, the proposed project would enhance water supply reliability for IRWD by providing contingency storage to augment supplies during dry-year periods when other supply sources may be limited or unavailable. IRWD currently has 50,000 AF of storage associated with the neighboring Strand Ranch Integrated Banking Project (Strand Ranch). IRWD's use of unbalanced exchange programs at Strand Ranch has effectively reduced the amount of storage available to IRWD from 50,000 AF to 25,000 AF. The District desires to maintain a storage capacity of approximately 88,000 AF for its own use, and therefore it is necessary to develop or acquire additional storage and associated recharge and recovery capacity. The proposed project would

augment IRWD's contingency storage allowing it to achieve its storage goals to provide the desired amount of reliability for its water supply portfolio.

Utilizing existing storage capacity in the underlying aquifer avoids the need to construct extensive surface water storage facilities elsewhere to perform the same function. In addition, the proposed project avoids overdraft conditions by eliminating the unbalanced extraction of groundwater for agricultural production. Stockdale East and West are currently not within the boundaries of a public water agency, and thus water extracted historically for agricultural irrigation has not been replenished. The proposed project is consistent with Department of Water Resources (DWR) water management goals. In the *California Water Plan Update 2009*, DWR recognizes the benefits of conjunctive water management, which include improving water supply reliability, reducing groundwater overdraft and land subsidence, and protecting water quality and environmental conditions.

## 4. Project Location

The proposed project would be located in western Kern County, approximately six miles west of the City of Bakersfield, 10 miles southwest of the Friant-Kern Canal, 2.50 miles south of the City of Shafter, and six miles east of the California Aqueduct (see Figure 1). The project sites would consist of Stockdale East, Stockdale West, and a third property that may be acquired by either agency within a site radius shown in Figure 1 (collectively referred to as the "Stockdale Properties"). Specifically, Stockdale East consists of approximately 230 acres of agricultural land and is located adjacent to and north of the Cross Valley Canal (CVC). Currently the crops grown on Stockdale East are cotton and alfalfa. There is a small pilot groundwater banking facility on Stockdale East as well. Stockdale West consists of approximately 323 acres of land and is located north of the Pioneer Canal and the CVC. Existing conditions at Stockdale West include four recharge basins and one overflow basin that cover 265 acres, built as part of a one-year Pilot Recharge Project in year 2011.

## 5. Project Description

The proposed project would construct and operate groundwater banking facilities at the Stockdale Properties. Rosedale and IRWD would each retain priority rights to the recharge and recovery capacities identified for their respective properties. Each agency would also retain for their primary use the defined storage capacities associated with their respective properties. Each agency would have equivalent access to available and unused recharge and recovery capacities in each other's facilities not used on an annual basis through each agency's priority rights. In addition to storage capacity tied to Stockdale West, IRWD also would have access to an additional 50,000 AF of storage in Rosedale's Conjunctive Use Program under a proposed Program Agreement between Rosedale and IRWD.

The proposed project would integrate facilities at the Stockdale Properties with Rosedale's existing Conjunctive Use Program and the Strand Ranch Integrated Banking Project. The proposed project would allow for coordinated operation of recharge and recovery facilities at the Stockdale Properties with the Strand Ranch and Conjunctive Use Programs. Rosedale may

provide IRWD access to unused recharge and recovery capacity from its Conjunctive Use Program subject to the annual recharge and recovery limits previously analyzed in accordance with CEQA. The Conjunctive Use Program and Strand Ranch facilities have already been evaluated in accordance with CEQA.

#### Water Supplies

Source waters for recharge would be secured and acquired by Rosedale and IRWD from various sources, including federal, state, and local suppliers through unbalanced exchange agreements, purchase, temporary transfers, permanent transfers or other water exchange and management programs as may be developed. Specifically, water supply sources could include, but are not limited to, the State Water Project (SWP), the Kern River, and Central Valley Project (CVP).

#### **Recharge Facilities**

In 2011, IRWD constructed four recharge basins and one overspill containment basin on the Stockdale West property as part of the one-year Pilot Recharge Project. The Pilot Recharge Project facilities include basins and earthen berms consisting of varying shape, size and depth covering 265 acres (or 82 percent) of the property. The existing basin layout avoids the edges of the Pioneer Canal and the CVC. The proposed project would utilize the existing recharge basins on Stockdale West. No other recharge basins would be constructed on Stockdale West. However, embankments may be constructed to divide the existing basins into smaller impoundments as may be necessary in the future.

Stockdale East currently has small pilot groundwater banking facilities onsite. The proposed project would construct new recharge and conveyance facilities on the Stockdale East property, including basins and berms that would occupy approximately 200 acres (or 87 percent) of the property. Recharge facilities would consist of up to eight recharge basins of varying shape, size, and depth. The third Stockdale Property also may be developed with new recharge facilities, similar to those described for Stockdale East and Stockdale West. It is anticipated that recharge capacity at the third property would be comparable to neighboring banking projects.

Recharge basins and conveyance facilities at the Stockdale Properties would be constructed, operated and maintained in a manner to prevent high groundwater conditions that would impact CVC operations. It is anticipated that a groundwater monitoring program, similar to that developed for the Kern Water Bank Authority and Strand Ranch, would be developed for the proposed project.

#### **Extraction Facilities**

The proposed recovery facilities at all three Stockdale Properties would be designed to minimize impacts to wells pumping on adjacent properties. Recovery capacity and the number of wells to be constructed at the Stockdale Properties will be determined based on modeling of specific subsurface conditions at each site. IRWD will reserve priority use of all recovery facilities and capacities located on the Stockdale West property while Rosedale will reserve priority use of the recovery facilities and capacities located on the Stockdale Capacities and capacities located on the Stockdale Capacities locat

Similar to the Strand Ranch Project, the proposed project would provide flexibility for IRWD and Rosedale to pump from existing off-site wells within Rosedale's service area when unused capacity is available. In addition, the proposed project includes the opportunity for IRWD and Rosedale to construct and pump from up to three new additional wells within the Rosedale service area. These wells would be joint-use wells providing recovery capacity for both agencies in support of the proposed project or to meet other recovery obligations. The proposed project would provide the flexibility to combine the use of the wells on the Stockdale Properties with these joint-use wells to meet pumping obligations.

#### **Conveyance Facilities**

Water would be conveyed to the proposed project via the CVC and Rosedale's Intake Channel. In addition, other regional facilities may be used to move water to/from the project, such as the Pioneer Canal, subject to any necessary approvals.

Water could be conveyed to Stockdale West through the existing Strand Ranch facility using an existing siphon and intake structure that connects the two properties. This conveyance strategy would utilize the existing CVC Strand Ranch North Turnout, and water would flow by gravity to Stockdale West. Additional improvements to the Rosedale Intake Channel or CVC turnouts may be modified or constructed to improve the ability to deliver water to Stockdale West.

Water could be conveyed to Stockdale East via the CVC and other regional facilities, such as the Pioneer Canal. Water could be conveyed to the Pioneer Canal through existing turnouts from the Strand Ranch Canal or the CVC. A new turnout or turnouts from the CVC and/or the Pioneer Canal to the Stockdale East Property may also be constructed. A low head lift station would be constructed to lift the water the few feet necessary to recharge on portions of the property.

Groundwater recovered from the production wells on Stockdale East and Stockdale West would be conveyed to the CVC through new recovery pipelines that would be below ground, running along the dirt roads between recharge basins or buried in the basin bottoms, with exact locations subject to final well placement. The recovery pipelines could connect to the Rosedale Intake Channel and/or the CVC. Groundwater recovered from the three off-site wells within Rosedale's service area also would be conveyed to the CVC through new or existing pipelines that would connect to the Rosedale Intake Channel. Construction and operation of these off-site recovery pipelines have already been evaluated in accordance with CEQA as part of Rosedale's Conjunctive Use Program.

# 6. Discussion of Impacts

In accordance with Section 15126 of the CEQA Guidelines, the EIR will assess the physical changes to the environment that would likely result from construction and operation of the proposed project, including direct, indirect and cumulative impacts and growth-inducing impacts. The EIR will provide an assessment of impacts at the project level for facilities and activities associated with Stockdale East and Stockdale West (CEQA Guidelines Section 15161) and at the program level for facilities and activities associated with the third Stockdale Property (CEQA Guidelines Section 15168). A subsequent assessment of impacts would be required in accordance

with CEQA prior to implementation of project facilities at the third Stockdale Property, once the location and project design have been identified.

Potential impacts of the proposed project are summarized below. The EIR will identify mitigation measures if necessary to reduce potentially significant impacts of the proposed project. The EIR also will discuss alternatives to the proposed project, including the no-project alternative.

#### Aesthetics

The existing aesthetic quality of the project area is dominated by rural agriculture. The proposed project would alter the visual character of the project sites and their surroundings by converting agricultural land uses to groundwater banking land uses. The EIR will evaluate the potential for the proposed project to impact aesthetic resources, including visual character, scenic vistas, and new sources of light and glare.

#### Agricultural Resources

The proposed project would increase the amount and reliability of groundwater supplies available for irrigated agriculture in the region and contribute beneficially to agricultural production. When not being used for groundwater recharge, the properties may be maintained by either grazing or irrigated agricultural activities. The EIR will determine if the Stockdale Properties include lands designated by the state's Farmland Mapping and Monitoring Program as Prime, Unique, or Important Farmland and if the project sites are located within Kern County agricultural preserves or under Williamson Act contracts. If necessary, mitigation measures will be developed to reduce impacts to agricultural resources.

#### Air Quality

Construction of the proposed project would generate emissions from construction equipment exhaust, earth movement, construction workers' commute, and material hauling. The EIR will estimate construction related emissions and long-term operational emissions of the proposed project. The EIR will also evaluate the proposed project's consistency with the regional air quality attainment plans. The EIR will develop mitigation measures if necessary to reduce impacts associated with the project.

#### **Biological Resources**

The proposed project is located on and surrounded by agricultural lands; natural habitat in the immediate vicinity is limited. The EIR will evaluate the potential for the proposed project to impact biological resources, such as sensitive species and critical habitats, and will evaluate the project's consistency with the Metropolitan Bakersfield Habitat Conservation Plan (HCP), Kern Water Bank HCP, local ordinances, and state and federal regulations governing biological resources.

#### **Cultural Resources**

Although the Stockdale Properties would be located in disturbed areas primarily used for agricultural production, excavation below the top soil could uncover previously unknown archaeological or paleontological resources. Historic resources also may exist in the area. The

EIR will assess the potential effects of the proposed project on cultural resources. Mitigation measures will be developed if necessary to reduce the level of impact where possible.

#### Geology, Soils, and Seismicity

The proposed project is located in a seismically active region. New project facilities could be subject to potential seismic hazards including ground shaking. In addition, ground-disturbing construction activities could expose soils to storm water erosion. The EIR will evaluate geologic hazards in the region and will develop mitigation measures if necessary to reduce potential effects of the proposed project.

#### **Greenhouse Gas Emissions**

Construction activities would require operation of equipment and vehicles that emit greenhouse gases (GHGs). Project facilities would be operated with electric power, the generation of which produces GHGs. The EIR will quantify GHG emissions associated with project construction and operation in terms of carbon dioxide equivalent (CO2e) emissions and compare project emissions to regional thresholds of significance. The analysis will consider the collective size of project facilities with respect to levels of CO2e emissions and the energy efficiency parameters of the project.

#### Hazards and Hazardous Materials

Construction of new project facilities would require excavation of the existing ground surface, which could uncover contaminated soils or hazardous substances that pose a substantial hazard to human health or the environment. The EIR will assess the potential for encountering hazardous materials and conditions and will develop mitigation measures if necessary to ensure that any hazards encountered during construction would be handled in accordance with applicable regulations. The EIR will also assess the potential for the environment to be affected by accidental release of hazardous materials due to project construction and operation and will develop mitigation measures if necessary to minimize potential effects. Operation of groundwater recharge basins could mobilize existing soil contamination. The EIR will assess the potential for project operations to affect the location of contamination plumes and subsequently affect groundwater quality.

#### Hydrology and Water Quality

The EIR will identify surface water and groundwater resources in the vicinity of the Stockdale Properties and will evaluate potential impacts posed by the project during construction and operation. The EIR will describe the recharge, storage, and recovery capacities of Stockdale East and Stockdale West and model potential impacts of recharge and extraction activities both onsite and offsite. The EIR will summarize the results of a groundwater drawdown analysis for proposed production well operations and a mounding analysis for proposed recharge operations. Cumulative impacts of operating the proposed project will include an assessment of incremental impacts to groundwater due to coordinated operation of the project facilities and facilities associated with the Conjunctive Use Program and Strand Ranch Project, and any other neighboring groundwater recharge or recovery facilities. The EIR will also provide existing groundwater quality data, analyze the differential project impacts to water quality based on source waters, and analyze the impact of project operations on any nearby groundwater contamination plumes. In addition, the EIR also will describe potential impacts associated with storm water runoff and develop mitigation measures if necessary to meet construction and operational storm water quality requirements and minimize impacts to receiving waters.

#### Land Use

The proposed project would be located in a rural area of Kern County. The EIR will identify the designated land uses for the Stockdale Properties. The EIR will evaluate consistency of the proposed project with existing land uses within the project area and develop mitigation measures to avoid inconsistencies if necessary.

#### **Mineral Resources**

Petroleum resources and oil production facilities are present in the western portion of Kern County where the proposed project would be located. Stockdale East currently has three operating oil wells with pumping units, one tank farm, one produced water injection well, three idle, and two plugged wellheads onsite. The status of oil operations will be described in the EIR. The EIR will identify impacts to mineral resources that would result from implementation of the proposed project and develop mitigation measures to avoid or substantially lessen impacts, if necessary.

#### Noise

Construction of the proposed project would generate noise that could be audible by nearby residents and other sensitive receptors in the vicinity of the Stockdale Properties. The EIR will evaluate the proximity of sensitive receptors to the project sites and recommend mitigation measures if necessary to ensure that the proposed project complies with local policies and ordinances and minimizes noise impacts.

#### Transportation and Traffic

Construction of the proposed project would temporarily add additional vehicle trips to local transportation corridors, including material haul trips and construction worker commutes. The EIR will evaluate the impact of the proposed project on traffic and circulation in the vicinity of the project sites and local and regional roadways. The EIR will develop mitigation measures if necessary to minimize any potential effects.

#### **Utilities and Energy**

Construction and operation of the proposed project could affect public utilities and regional energy requirements. The EIR will describe any potential need for water entitlements to operate the proposed project and identify potential impacts to local and regional energy supplies and capacity due to operation of pumps and wellheads. The EIR also will describe any potential impacts on storm water drainage systems and solid waste facilities, including regional landfill capacities and availability to accept construction debris.