

**AGENDA
GROUNDWATER BANKING JOINT POWERS AUTHORITY
BOARD OF DIRECTORS
SPECIAL MEETING**

December 7, 2023
10:00AM

Rosedale Rio-Bravo Water Storage District
849 Allen Road
Bakersfield, CA 93314

Irvine Ranch Water District
15600 Sand Canyon Avenue
Irvine, CA 92618

This meeting will be made available to the public telephonically/electronically.

To virtually attend the meeting and to be able to view any presentations or additional materials provided at the meeting, please join online using the link and information below:

Via Web: <https://zoom.us/j/83815086560>
Meeting Number (Access Code): 838 1508 6560
Meeting Password: 982590
Telephone Dial In: (669) 900-6833

As courtesy to the other participants, please mute your phone when you are not speaking.

PLEASE NOTE: Participants joining the meeting will be placed into the lobby when the Board enters closed session. Participants who remain in the “lobby” will automatically be returned to the open session of the Board once the closed session has concluded. Participants who join the meeting while the Board is in closed session will be placed in the waiting room. When the Board has returned to open session, the participants will be automatically added to the meeting.

CALL TO ORDER 10:00 a.m.

ROLL CALL Directors Pierucci, Selvidge, Reinhart, Swan

**PUBLIC COMMENT
NOTICE**

If you wish to address the Board of Directors on any item, please submit a request to speak via the “chat” feature available when joining the meeting virtually. Remarks are limited to three minutes per speaker on each subject. You may also submit a public comment in advance of the meeting by emailing mmisuraca@rbwdsd.com before 5:00 p.m. on December 6, 2023.

ALL VOTES SHALL BE TAKEN BY A ROLL CALL VOTE

1. COMMUNICATIONS TO THE BOARD

- a) Written:
- b) Oral:

2. ITEMS RECEIVED TOO LATE TO BE AGENDIZED

3. CONSENT ITEMS

- a) Meeting Minutes September 7, 2023

4. JPA ADMINISTRATIVE AND FINANCIAL REPORT

- a) Consideration of FYE June 30, 2023 Audit and Financial Report (Eileen)
- b) Consideration of 1st Quarter Budget to Actual- FYE June 30, 2024 and Cash Call (Eileen)
- c) Consideration of Appointment of Treasurer and Authorized Signer Changes (Kent)
- d) Consideration of Emergency Action (Dan/Doug)

5. KERN FAN GROUNDWATER STORAGE PROJECT

- a) Engineering (Dan)
 - i. Design Update
 - ii. Conveyance Alternatives
 - iii. West Enos Pilot Project
- b) Grant Funding Update (Fiona)
- c) State Agreements Update- SEIR Pulse Flows (Fiona)
- d) Consideration of Resolution No. 2023-04 USBR Small Storage Grant (Fiona)
- e) Consideration of West Enos Construction Initiation (Dan)

6. GENERAL MANAGER'S REPORT

7. OTHER BUSINESS

Pursuant to Government Code Section 54954.2, members of the Board of Directors or staff may ask questions for clarification, make brief announcements, and make brief reports on his/her own activities. The Board or a Board member may provide a reference to staff or other resources for factual information, request staff to report back at a subsequent meeting concerning any matter, or

direct staff to place a matter of business on a future agenda. Such matters may be brought up under the General Manager's Report or Directors' Comments.

8. CLOSED SESSION

a) CLOSED SESSION CONFERENCE WITH REAL PROPERTY
NEGOTIATORS – Pursuant to Government Code Section 54956.8:

Property: Parcels 103-270-07; 104-270-01,06; 104-260-09,15; 104-280-08,29,30,31,32,33,34,35; 104-260-08;104-270-28;104-291-07;104-240-31,22,30; 104-250-20,21; 104-280-01,02,07,19,24,25,27; 104-240-18;104-292-09; 103-170-09,12,14,15 25-32; 160-010-66, 71; 104-280-18 and possible others all in County of Kern

Agency negotiators: Dan Bartel

Negotiating parties: Various parties and Groundwater Banking Joint Powers Authority

Under negotiation: Price and Terms of Payment

9. OPEN SESSION

General Counsel may announce any reportable actions taken during Closed Session.

10. ADJOURN

Availability of agenda materials: Agenda exhibits and other writings that are disclosable public records distributed to all or a majority of the members of the above-named Board in connection with a matter subject to discussion or consideration at an open meeting of the Board are available for public inspection by contacting Megan Misuraca at mmisuraca@rbwsd.com. If such writings are distributed to members of the Board less than 72 hours prior to the meeting, they will be available to the public at the same time as they are distributed to Board Members, except that if such writings are distributed one hour prior to, or during, the meeting, they will be available electronically during the meeting.

Accommodations: Upon request, the Authority will provide for written agenda materials in appropriate alternative formats, and reasonable disability-related modification or accommodation to enable individuals with disabilities to participate in and provide comments at the meeting. Please submit a request, including your name, phone number and/or email address, and a description of the modification, accommodation, or alternative format requested at least two days before the meeting. Requests should be emailed to mmisuraca@rbwsd.com. Requests made by mail must be received at least two days before the meeting. Requests will be granted whenever possible and resolved in favor of accessibility.

DECLARATION OF POSTING: I, Megan Misuraca, declare under penalty of perjury, that I am employed by the Rosedale-Rio Bravo Water Storage District and I posted the foregoing Agenda

at the District Office on or before December 4, 2023. I, Kristine Swan, declare under penalty of perjury, that I am employed by the Irvine Ranch Water District and I posted the foregoing Agenda at the District Office on or before December 4, 2023.

**BOARD OF DIRECTORS
GROUNDWATER BANKING JOINT POWERS AUTHORITY
MINUTES OF THE SPECIAL BOARD MEETING**

September 7, 2023
10:00 AM

DIRECTORS AND ALTERNATES PRESENT

Roy Pierucci
Peer Swan
Doug Reinhart
Jason Selvidge

DIRECTORS ABSENT

OTHERS PRESENT

Doug Gosling- JPA Legal Counsel
Dan Bartel- RRBWSD
Megan Misuraca- RRBWSD
Dan Raytis- RRBWSD
Fiona Sanchez- IRWD
Eileen Lin- IRWD
Paul Weghorst- IRWD
Trent Taylor- RRBWSD
Herbert Ng- IRWD
Kent Morris- IRWD
Paul Cook- IRWD
Wyatt Clarke- IRWD
Eric Robinson- Legal Counsel
Randall Crane- MWDOC
Robert Huang- IRWD

CALL TO ORDER

President Pierucci called the meeting to order at approximately 10:00 a.m.

PUBLIC COMMENT NOTICE

There were no public comments.

1. COMMUNICATIONS TO THE BOARD

- a). Written: None.
- b). Oral: None.

2. ITEMS RECEIVED TOO LATE TO BE AGENDIZED

None.

3. CONSENT ITEMS

- a) Meeting Minutes May 1, 2023

A motion was made by Director Swan with a second by Director Selvidge to adopt the consent items. A roll call vote was taken and the motion unanimously passed.

4. JPA ADMINISTRATIVE AND FINANCIAL REPORT

- a) Consideration of Unaudited Financial Report- FYE June 30, 2023 and Cash Call
- b) Consideration of Resignation of Treasurer and Authorized Signer Changes

A motion was made by Director Swan with a second by Director Reinhart to approve the FYE June 30, 2023 unaudited financial report with no cash call; to remove Cheryl Clary and add Paul Cook as an authorized signer for the Groundwater Banking Joint Powers Authority bank account effective September 6, 2023. A roll call vote was taken and the motion unanimously passed.

5. KERN FAN GROUNDWATER STORAGE PROJECT

- a) Engineering
 - i. Design Update- Mr. Bartel briefed the Board on the latest design efforts.
 - ii. Conveyance Alternatives- Mr. Bartel reviewed the DWR HEC-RAS model and report with the Board.
 - iii. West Enos Pilot Project- Mr. Bartel briefed the Board on operations of the West Enos Pilot Project and noted staff will need to extend lease agreement if operations will continue past the termination date.
- b) Grant Funding Update- Ms. Sanchez briefed the Board on the latest grant funding request efforts noting staff is currently working through the NEPA process.
- c) State Agreements Update- Ms. Sanchez briefed the Board on most recent efforts to obtain agreements with the Department of Water Resources.
- d) Consideration of CEQA Agreements- Ms. Sanchez briefed the Board on the CEQA Agreements and Mr. Robinson reviewed each agreement in detail with the Board. A motion was made by Director Swan with a second by Director Selvidge to approve and authorize the General Manger to execute the CEQA Lead Agency Agreement between the California Department of Water Resources and Groundwater Banking Joint Powers Authority regarding the Kern Fan Groundwater Storage Project and authorize the General Manager to execute the Common Interest and Joint Defense Agreement. A roll call vote was taken and the motion unanimously passed.

6. GENERAL MANAGER'S REPORT

None.

7. OTHER BUSINESS

None.

8. CLOSED SESSION

Mr. Gosling reported that there were no items for closed session and the Board remained in open session.

9. OPEN SESSION

None.

10. ADJOURN

Director Pierucci adjourned the meeting at 11:12 a.m.

FY 2022-23 FINANCIAL REPORT

DISCUSSION:

The Groundwater Banking Joint Powers Authority (GBJPA) hired Davis Farr, LLP, an outside audit firm, to conduct an audit of GBJPA's financial statements for the Fiscal Year (FY) ended June 30, 2023. Davis Farr has completed its audit and concluded that in all material aspects, the statements fairly present GBJPA's financial position as of June 30, 2023 and conform with generally accepted accounting principles. The FY 2022-23 Financial Report was prepared by GBJPA as required by the California Government Code Section 6505. The Financial Report, including audited financial statements, accompanying auditor's report, and Management's Discussion and Analysis of significant changes, is provided as Exhibit "A".

Provided as Exhibit "B" is the required Auditor Communication pursuant to the Statement on Auditing Standards 114 *The Auditor's Communication with Those Charged with Governance*. The letter reflects the auditor's understanding of key management assumptions and practices, and notes that there were no disagreements with management during the scope of the audit. However, the letter identified a past audited adjustment as an uncorrected misstatement on not implementing the Governmental Accounting Standards Board (GASB) Statement Number 87: Leases. Davis Farr concluded that the uncorrected misstatement is immaterial to the financial statements for the fiscal year ended June 30, 2023. Davis Farr has also provided a *Report on Internal Control over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with Government Auditing Standards*, which is provided as Exhibit "C". The report states that the GBJPA does not have any material weakness deficiencies in internal control. In addition, the audit disclosed no instances of noncompliance or other matters that were required to be reported under *Government Auditing Standards*.

RECOMMENDATION:

Approve and file.

LIST OF EXHIBITS:

Exhibit "A" – FY 2022-23 Financial Report

Exhibit "B" – SAS 114 Auditor's Communication with Those Charged with Governance from Davis Farr LLP

Exhibit "C" – Report on Internal Control over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with Government Auditing Standards from Davis Farr LLP

EXHIBIT "A"

Groundwater Banking Joint Powers Authority

Financial Statements

Fiscal Year Ended June 30, 2023

Groundwater Banking Joint Powers Authority

Financial Statements

Fiscal Year Ended June 30, 2023

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Independent Auditor's Report

Board of Directors
Groundwater Banking Joint Powers Authority
Irvine, California

Report on the Audit of the Financial Statements

Opinion

We have audited the financial statements of the Groundwater Banking Joint Powers Authority **(the "GBJPA")** as of and for the year June 30, 2023, and the related notes to the financial statements, which collectively comprise the GBJPA's **basic financial statements as listed in the table of contents.**

In our opinion, the accompanying financial statements present fairly, in all material respects, the respective financial position of the GBJPA, as of June 30, 2023, and the respective changes in financial position and cash flows thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinion

We conducted our audit in accordance with auditing standards generally accepted in the United States of America (GAAS) and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Our **responsibilities under those standards are further described in the Auditor's Responsibilities** for the Audit of the Financial Statements section of our report. We are required to be independent of the GBJPA and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Responsibilities of Management for the Financial Statements

The GBJPA's management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the GBJPA's **ability to** continue as a going concern for one year after the date that the financial statements are issued.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an **auditor's report that includes our opinions. Reasonable assurance is a high level of assurance** but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the GBJPA's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the GBJPA's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit.

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the **management's discussion and analysis** be presented to supplement the basic financial statements. Such information is the responsibility of management and, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the **information for consistency with management's responses to our inquiries, the basic financial statements**, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Report on Summarized Comparative Information

We have previously audited the GBJPA's 2022 financial statements, and we expressed an unmodified audit opinion on those audited financial statements in our report dated October 28, 2022. In our opinion, the summarized comparative information presented herein as of and for the year ended June 30, 2022 is consistent, in all material respects, with the audited financial statements from which it has been derived.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated October 24, 2023 on our consideration of the GBJPA's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the GBJPA's internal control over financial reporting and compliance.

Davis Farr LLP

Irvine, California
October 24, 2023

MANAGEMENT'S DISCUSSION AND ANALYSIS

The following discussion and analysis of the financial performance of the Groundwater Banking Joint Powers Authority (GBJPA) provides an overview of GBJPA's financial activities for the fiscal year ended June 30, 2023. This section should be read in conjunction with the basic financial statements and notes to the basic financial statements, which follow this analysis.

Financial Highlights:

- Total assets exceeded total liabilities by \$13.9 million (net position), consisting of \$11.7 million in investment in capital assets and \$2.2 million unrestricted net position. This is an increase of \$1.8 million over the prior fiscal year's net position of \$12.1 million.
- Total assets are \$14.1 million, an increase of \$1.9 million over the prior fiscal year. This is due primarily to a \$1.4 million increase in cash, and \$0.5 million in additional pre-construction related capital expenditures for the Kern Fan Groundwater capital project.
- Total liabilities are \$181,654, an increase of \$124,666 over the prior fiscal year. The increase is due primarily to a \$128,574 increase in the West Enos Recharge Facility expenses and a \$3,791 increase in administrative costs, partially offset by a \$7,699 decrease in accruals for the Kern Fan Groundwater capital project.
- Total revenues are \$199,547, an increase of \$149,703 or 300.3 percent over the prior fiscal year. Total operating revenues are \$196,190, an increase of \$146,346 over the prior fiscal year. This is primarily due to a \$147,419 increase in member agencies' contributions for funding the current fiscal year's operating expenses.
- Total operating expenses are \$199,547, an increase of \$149,703 over the prior fiscal year. This is due primarily to a \$151,902 increase in contractual services for the West Enos Recharge Facility.
- Capital contributions are \$1.8 million, a decrease of \$8.6 million over the prior fiscal year. This is primarily due to prior fiscal year's cash contributions from the member agencies for land acquisitions for the Kern Fan Groundwater capital project.

More detailed analysis about the overall GBJPA's financial position and operations is provided in the following sections.

Overview of the Financial Statements:

The basic financial statements of the GBJPA consist of the financial statements (Statement of Net Position, Statement of Revenues, Expenses and Changes in Net Position, and Statement of Cash Flows) and notes to the basic financial statements. The basic financial statements are prepared using the accrual basis of accounting.

Statement of Net Position depicts GBJPA's financial position as of June 30, the end of GBJPA's fiscal year. The statement of net position shows all financial assets and liabilities of the GBJPA. Net position represents GBJPA's residual interest after liabilities are deducted from assets. Net position is displayed in two components: net investment in capital assets and unrestricted net position.

Statement of Revenues, Expenses and Changes in Net Position provides information on GBJPA's operations and can be used to determine whether the GBJPA has recovered all of its costs through operating and non-operating revenues.

Statement of Cash Flows provides information on GBJPA's cash receipts, cash payments and changes in cash resulting from operations and investments activities.

MANAGEMENT’S DISCUSSION AND ANALYSIS (Continued)

Overview of the Financial Statements (Continued):

Notes to the Basic Financial Statements provide additional information essential to a full understanding of the data provided in the basic financial statements.

Financial Analysis of the GBJPA:

The following condensed schedules contain summary financial information extracted from the basic financial statements to assist general readers in evaluating GBJPA’s overall financial position and results of operations as described in this Management’s Discussion and Analysis (MD&A).

Financial Position Summary:

The Statement of Net Position reflects GBJPA’s financial position as of June 30. A condensed summary of the total net position as of June 30 is set forth below:

Table 1 – Summary of Net Position

	2023	2022	Increase/(Decrease)	
			Amount	Percentage
Assets				
Current assets	\$ 2,381,383	\$ 961,129	\$ 1,420,254	147.8%
Noncurrent assets	11,744,969	11,204,572	540,397	4.8%
Total assets	14,126,352	12,165,701	1,960,651	16.1%
Liabilities				
Current liabilities	181,654	56,988	124,666	218.8%
Total liabilities	181,654	56,988	124,666	218.8%
Net position				
Investment in capital assets	11,744,969	11,204,572	540,397	4.8%
Unrestricted	2,199,729	904,141	1,295,588	143.3%
Total net position	\$ 13,944,698	\$ 12,108,713	\$ 1,835,985	15.2%

As shown in Table 1, GBJPA’s total assets increased \$2.0 million during the current fiscal year. Current assets were \$2.4 million, an increase of \$1.4 million compared to the prior fiscal year. This is primarily due to contributions from the member agencies to fund various capital and operating activities which were subsequently deferred.

Noncurrent assets, which include land and construction in progress, were \$11.7 million, an increase of \$0.5 million from the prior fiscal year. The increase was due primarily to \$0.5 million of pre-construction related capital expenditures for the Kern Fan Groundwater capital project.

GBJPA’s total liabilities were \$181,654, an increase of \$124,666 from the prior fiscal year. The increase is due primarily to a \$128,574 increase in the West Enos Recharge Facility expenses and a \$3,791 increase in administrative costs, partially offset by a \$7,699 decrease in accruals for the Kern Fan Groundwater capital project.

MANAGEMENT'S DISCUSSION AND ANALYSIS (Continued)

Financial Position Summary (Continued):

Net position at the end of the current fiscal year is \$13.9 million representing the excess of total assets over total liabilities. Net position increased \$1.8 million from the prior fiscal year. Net position consists of investment in capital assets of \$11.7 million and an unrestricted net position for water services of \$2.2 million. The increase in net position is primarily due to \$1.3 million in unrestricted net position and \$0.5 in capital assets additions.

Activities and Changes in Net Position:

The Statement of Revenues, Expenses and Changes in Net Position summarizes GBJPA's operations during the current fiscal year. A summary of GBJPA's changes in net position for the fiscal year ended June 30, 2023, is included in Table 2 below:

Table 2 – Revenues, Expenses and Changes in Net Position

	2023	2022	Increase/(Decrease)	
			Amount	Percentage
Operating revenues				
Member agency fees:				
Irvine Ranch Water District	\$ 82,008	\$ 8,298	\$ 73,710	888.3%
Rosedale-Rio Bravo Water Storage District	82,007	8,298	73,709	888.3%
Lease revenue	32,175	33,248	(1,073)	-3.2%
Total operating revenues	196,190	49,844	146,346	293.6%
Nonoperating revenues				
Interest revenue	3,357	-	3,357	100.0%
Total non-operating revenues	3,357	-	3,357	100.0%
Total revenues	199,547	49,844	149,703	300.3%
Operating expenses				
Contractual services	151,902	-	151,902	100.0%
General and administrative	47,645	49,844	(2,199)	-4.4%
Total operating expenses	199,547	49,844	149,703	300.3%
Income (loss) before capital contributions	-	-	-	0.0%
Capital contributions				
Irvine Ranch Water District	917,992	5,208,726	(4,290,734)	-82.4%
Rosedale-Rio Bravo Water Storage District	917,993	5,208,726	(4,290,733)	-82.4%
Total capital contributions	1,835,985	10,417,452	(8,581,467)	-82.4%
Changes in net position	1,835,985	10,417,452	(8,581,467)	-82.4%
Beginning net position	12,108,713	1,691,261	10,417,452	616.0%
Ending net position	\$ 13,944,698	\$ 12,108,713	\$ 1,835,985	15.2%

Revenues: As shown in Table 2, GBJPA's operating revenues total \$196,190 or 98.3 percent of total revenues. Operating revenues increased by \$146,346 from the prior fiscal year. Member agency fees contributed \$164,015 or 83.6 percent to total operating revenues. Lease revenue contributed \$32,175 or 16.4 percent to total operating revenues. The increase in total operating revenues is primarily due to \$147,419 more in member agencies' contributions to fund operating expenses.

Nonoperating revenue total \$3,557 and account for 1.7 percent of the total revenues. This is an increase of \$3,557 or 100.0 percent from the prior fiscal year. The increase is due to interest revenue earned on the bank deposits.

MANAGEMENT’S DISCUSSION AND ANALYSIS (Continued)

Activities and Changes in Net Position (Continued):

Expenses: As shown in Table 2, \$199,547 operating expenses consisted of 76.1 percent contractual services and 23.9 percent general and administrative costs. Operating expenses increased \$149,703 due primarily to:

- An increase of \$151,902 in contractual services for the West Enos Recharge Facility.
- A decrease of \$2,199 in general and administration expense due to lower administration costs.

Capital Contributions:

Capital contributions total \$1.8 million consisting of \$0.9 million in contributions from the Irvine Ranch Water District and \$0.9 million in contributions from the Rosedale-Rio Water Storage District for capital expenditures of the Kern Fan Groundwater capital project.

Capital Assets:

GBJPA’s investment in capital assets consists of the following as of June 30, 2023:

Table 3 – Capital Assets

	2023	2022	Increase/(Decrease)	
			Amount	Percentage
Land	\$ 8,996,494	\$ 8,996,494	\$ -	0.0%
Construction in progress	2,748,475	2,208,078	540,397	24.5%
Total	<u>\$ 11,744,969</u>	<u>\$ 11,204,572</u>	<u>\$ 540,397</u>	<u>4.8%</u>

As shown in Table 3, capital assets increased \$0.5 million in the current fiscal year. Construction in progress added \$0.5 million during the current fiscal year for additional pre-construction related capital expenditures for the Kern Fan Groundwater capital project. Additional information on GBJPA’s capital assets can be found in Note 3 of the Notes to the Basic Financial Statements.

Contacting the District’s Financial Management:

This financial report is designed to provide a general review of the GBJPA’s finances to show accountability for the money it receives. If you have questions about this report or need additional financial information, contact the Treasurer at the Groundwater Banking Joint Powers Authority, 849 Allen Road, Bakersfield, California 93314.

Groundwater Banking Joint Powers Authority

Statement of Net Position

June 30, 2023

(with comparative data as of June 30, 2022)

	<u>2023</u>	<u>2022</u>
ASSETS		
Current assets:		
Cash	\$ 2,367,383	\$ 957,962
Prepaid items	14,000	3,167
Total current assets	<u>2,381,383</u>	<u>961,129</u>
Noncurrent assets:		
Capital assets, non-depreciable	11,744,969	11,204,572
Total noncurrent assets	<u>11,744,969</u>	<u>11,204,572</u>
TOTAL ASSETS	<u>14,126,352</u>	<u>12,165,701</u>
 LIABILITIES		
Current liabilities:		
Accounts payable	181,654	56,988
TOTAL LIABILITIES	<u>181,654</u>	<u>56,988</u>
 NET POSITION		
Investment in capital assets	11,744,969	11,204,572
Unrestricted	2,199,729	904,141
TOTAL NET POSITION	<u>\$ 13,944,698</u>	<u>\$ 12,108,713</u>

See accompanying notes to the basic financial statements.

Groundwater Banking Joint Powers Authority
Statement of Revenues, Expenses and Changes in Net Position
For the Fiscal Year Ended June 30, 2023
(with comparative data for the Fiscal Year Ended June 30, 2022)

	2023	2022
OPERATING REVENUES		
Member agency fees:		
Irvine Ranch Water District	\$ 82,008	\$ 8,298
Rosedale-Rio Bravo Water Storage District	82,007	8,298
Lease revenue	32,175	33,248
Total operating revenues	196,190	49,844
OPERATING EXPENSES		
Contractual services	151,902	-
General and administrative		
Administration	31,750	38,820
Audit	5,000	5,000
Bank charges	3,482	1,582
Insurance	5,542	2,781
Website maintenance	900	1,150
Other	971	511
Total operating expenses	199,547	49,844
Operating income (loss)	(3,357)	-
NONOPERATING REVENUES		
Interest revenue	3,357	-
Total nonoperating revenues	3,357	-
Income (loss) before capital contributions	-	-
CAPITAL CONTRIBUTIONS FROM MEMBER AGENCIES		
Irvine Ranch Water District	917,992	5,208,726
Rosedale-Rio Bravo Water Storage District	917,993	5,208,726
Total capital contributions	1,835,985	10,417,452
Increase (decrease) in net position	1,835,985	10,417,452
NET POSITION AT BEGINNING OF YEAR	12,108,713	1,691,261
NET POSITION AT END OF YEAR	\$ 13,944,698	\$ 12,108,713

See accompanying notes to the basic financial statements.

Groundwater Banking Joint Powers Authority

Statement of Cash Flows

For the Fiscal Year Ended June 30, 2023

(with comparative data for the Fiscal Year Ended June 30, 2022)

	2023	2022
CASH FLOWS FROM OPERATING ACTIVITIES		
Cash received from member agencies and others	\$ 196,190	\$ 49,844
Cash paid to suppliers of goods and services	(78,015)	(124,647)
Net cash provided by (used for) operating activities	118,175	(74,803)
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES		
Acquisition and construction of capital assets	(548,096)	(9,392,244)
Capital contributions	1,835,985	10,417,452
Net cash provided by (used for) capital and related financing activities	1,287,889	1,025,208
CASH FLOWS FROM INVESTING ACTIVITIES		
Cash received from interest earned on bank deposits	3,357	-
Net cash provided by (used for) investing activities	3,357	-
Net increase (decrease) in cash	1,409,421	950,405
Cash at beginning of year	957,962	7,557
Cash at end of year	\$ 2,367,383	\$ 957,962
RECONCILIATION OF OPERATING INCOME (LOSS) TO NET CASH PROVIDED BY (USED FOR) OPERATING ACTIVITIES		
Operating income (loss)	\$ (3,357)	\$ -
Adjustments to reconcile operating income to net cash provided by (used for) operating activities:		
(Increase) decrease in prepaid items	(10,833)	(3,167)
Increase (decrease) in accounts payable	132,365	(71,637)
Net cash provided by (used for) operating activities	\$ 118,175	\$ (74,803)

See accompanying notes to the basic financial statements.

Groundwater Banking Joint Powers Authority

Notes to the Basic Financial Statements

For the Fiscal Year Ended June 30, 2023

(1) Summary of Significant Accounting Policies

A. Reporting Entity

The Groundwater Banking Joint Powers Authority (GBJPA) was formed in July 2020 as a joint owners authority under the California Government Code section 6500. The GBJPA was formed to finance, construct and operate the Kern Fan Groundwater Storage Project which will recharge and store up to 100,000 acre-feet (AF) of water, primarily during wet periods, in the Kern County Groundwater Sub-basin of the San Joaquin Valley Groundwater Basin for subsequent recovery and use for public and non-public benefit. GBJPA's member agencies are the Irvine Ranch Water District and the Rosedale-Rio Bravo Water Storage District with each agency having a 50% share in the GBJPA.

B. Basic Financial Statements

The basic financial statements are comprised of the Statement of Net Position, the Statement of Revenues, Expenses and Changes in Net Position, the Statement of Cash Flows, and the Notes to the Basic Financial Statements.

C. Basis of Accounting and Measurement Focus

GBJPA's financial activities are accounted as an enterprise fund (proprietary fund type). A fund is an accounting entity with a self-balancing set of accounts established to record the financial position and results of operations of a specific governmental activity. The activities of the enterprise fund closely resemble those of ongoing businesses in which the purpose is to conserve and add to basic resources while meeting operating expenses from current revenues. The enterprise fund accounts for operations that provide services on a continuous basis and are substantially financed by revenues derived from water sales and member charges. The enterprise fund utilizes the accrual basis of accounting. Revenues are recognized in the accounting period in which they are earned and expenses are recognized in the period incurred, regardless of when the related cash flow takes place.

The GBJPA distinguishes operating revenues and expenses from nonoperating items. Until completion of the construction, the operating revenues and expenses of the project represent contributions by the member agencies to fund operating expenses. All revenues and expenses not meeting this definition will be reported as nonoperating revenues and expenses. Capital contributions will consist of contributions from member agencies and any grant funding for the capital assets. When both restricted and unrestricted resources are available for use, the GBJPA uses restricted resources and then unrestricted resources.

D. Cash

GBJPA's cash is considered to be demand deposits with a bank.

E. Prepaid Items

Certain payments to vendors reflect costs applicable to future accounting periods and are recorded as prepaid items.

F. Capital Assets

Capital assets, which include construction in progress and land, are valued at cost. The cost of normal maintenance and repairs that do not add to the value of the assets or materially extend asset lives are not capitalized. Donated assets are valued at their estimated acquisition value on the date received.

Groundwater Banking Joint Powers Authority

Notes to the Basic Financial Statements, Continued

For the Fiscal Year Ended June 30, 2023

(1) Summary of Significant Accounting Policies (Continued)

G. Net Position

Net position is categorized as follows:

- **Net Investment in Capital Assets** – This component of net position consists of capital assets, net of accumulated depreciation reduced by any debt outstanding against the acquisition, construction or improvement of those assets.
- **Restricted Net Position** – This component of net position consists of constraints placed on net position use through external constraints imposed by creditors, grantors, contributors, or laws or regulations of other governments or constraints imposed by law through constitutional provisions or enabling legislation.
- **Unrestricted Net Position** – This component of net position consists of net position that does not meet the definition of restricted or net investment in capital assets.

H. Use of Estimates

The preparation of the basic financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results could differ from those estimates.

I. Comparative Financial Statements and Reclassifications

The information included in the accompanying financial statements for the prior year has been presented for comparison purposes only and does not represent a complete presentation in accordance with generally accepted accounting principles. Certain amounts presented in the prior year financial statements have been reclassified in order to be consistent with the current year's presentation.

(2) Cash and Investments

Cash as of June 30, 2023 consists of \$2,367,383 demand deposits with a bank.

Investments Authorized by the California Government Code

The following table identifies the investment types that are authorized for the GBJPA by the California Government Code, although as of June 30, 2023, the GBJPA does not have any of these types of investments. The table also identifies certain provisions of the California Government Code that address interest rate risk and concentration of credit risk.

<u>Authorized Investment type</u>	<u>Maximum Maturity</u>	<u>Maximum Percentage Allowed</u>	<u>Maximum Investment In One Issuer</u>
Local Agency Bonds	5 years	None	None
U.S. Treasury Obligations	5 years	None	None
U.S. Agency Securities	5 years	None	None
Commercial Paper	270 days	25%	10%
Negotiable Certificates of Deposit	5 years	30%	None
Medium-Term Notes	5 years	30%	None
Local Agency Investment Fund (LAIF)	N/A	None	None

Groundwater Banking Joint Powers Authority

Notes to the Basic Financial Statements, Continued

For the Fiscal Year Ended June 30, 2023

(2) Cash and Investments (Continued)

Custodial Credit Risk

The custodial credit risk for *investments* is the risk that, in the event of the failure of the counterparty (e.g., broker-dealer) to a transaction, a government will not be able to recover the value of its investment or collateral securities that are in the possession of another party. The California Government Code requires that a financial institution secure deposits made by state or local governmental units by pledging securities in an undivided collateral pool held by a depository regulated under state law (unless so waived by the governmental unit). The market value of the pledged securities in the collateral pool must equal at least 110% of the total amount deposited by the public agencies. California law also allows financial institutions to secure public agency deposits by pledging first trust deed mortgage notes having a value of 150% of the secured public deposits.

Disclosure Relating to Credit Risk

Generally, credit risk is the risk that an issuer of an investment will not fulfill its obligation to the holder of the investment. This is measured by assignment of a rating by a nationally recognized statistical rating organization.

Disclosures Relating to Interest Rate Risk

Interest rate risk is the risk that changes in market interest rates will adversely affect the fair value of an investment. Generally, the longer the maturity of an investment, the greater the sensitivity of its fair value is to changes in market interest rates.

(3) Capital Assets

Capital assets activity for the fiscal year ended June 30, 2023 is as follows:

	Balance at June 30, 2022	Additions	Deletions	Balance at June 30, 2023
Capital assets, non-depreciable:				
Land	\$ 8,996,494	\$ -	\$ -	\$ 8,996,494
Construction in progress	2,208,078	540,397	-	2,748,475
Total	\$11,204,572	\$ 540,397	\$ -	\$11,744,969

(4) Commitments and Contingencies – Legal Actions

The GBJPA is a defendant in various legal actions arising out of the conduct of the GBJPA's operations. Management believes that, based on current knowledge, the outcome of these matters will not have a material adverse effect on the GBJPA's financial position.

REQUIRED AUDIT COMMUNICATIONS

Board of Directors
Groundwater Banking Joint Powers Authority
Irvine, California

We have audited the financial statements of the Groundwater Banking Joint Powers Authority (the "GBJPA") as of and for the year ended June 30, 2023 and have issued our report thereon dated October 24, 2023. Professional standards require that we advise you of the following matters relating to our audit.

Our Responsibility in Relation to the Financial Statement Audit

As communicated in our engagement letter dated February 8, 2023, our responsibility, as described by professional standards, is to form and express an opinion about whether the financial statements that have been prepared by management with your oversight are presented fairly, in all material respects, in accordance with accounting principles generally accepted in the United States of America. Our audit of the financial statements does not relieve you or management of its respective responsibilities.

Our responsibility, as prescribed by professional standards, is to plan and perform our audit to obtain reasonable, rather than absolute, assurance about whether the financial statements are free of material misstatement. An audit of financial statements includes consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the **effectiveness of the entity's internal control over financial reporting. Accordingly, as part of** our audit, we considered the internal control of the GBJPA solely for the purpose of determining our audit procedures and not to provide any assurance concerning such internal control.

We are also responsible for communicating significant matters related to the audit that are, in our professional judgment, relevant to your responsibilities in overseeing the financial reporting process. However, we are not required to design procedures for the purpose of identifying other matters to communicate to you.

Planned Scope and Timing of the Audit

We conducted our audit consistent with the planned scope and timing we previously communicated to you.

Compliance with All Ethics Requirements Regarding Independence

The engagement team, others in our firm, as appropriate, and our firm have complied with all relevant ethical requirements regarding independence under the American Institute of **Certified Public Accountants ("AICPA") independence standards, contained in the** Code of Professional Conduct.

Significant Risks Identified

As a result of the new accounting pronouncement, Governmental Accounting Standards Board (GASB) 96: Subscription-Based Information Technology Arrangements, we identified the new standard as a significant risk as part of the audit risk assessment. Our procedures included evaluating transactions for potential applicability of the standard in addition to our standard audit approach. There were no subscriptions identified that qualified for reporting under GASB 96.

Qualitative Aspects of the Entity's Significant Accounting Practices

Significant Accounting Policies

Management has the responsibility to select and use appropriate accounting policies. A summary of the significant accounting policies adopted by the GBJPA is included in Note 1 to the financial statements. There has been no initial selection of accounting policies and no changes in significant accounting policies or their application during 2023. No matters have come to our attention that would require us, under professional standards, to inform you about (1) the methods used to account for significant unusual transactions and (2) the effect of significant accounting policies in controversial or emerging areas for which there is a lack of authoritative guidance or consensus.

Significant Accounting Estimates

Accounting estimates are an integral part of the financial statements prepared by **management and are based on management's current judgments. Those judgments are normally based on knowledge and experience about past and current events and assumptions about future events. Certain accounting estimates are particularly sensitive because of their significance to the financial statements and because of the possibility that future events affecting them may differ markedly from management's current judgments.**

The most sensitive accounting estimates affecting the financial statements are **management's** estimate of the useful life of capital assets.

Management's estimate of the useful life of capital assets is based on the **GBJPA's capitalization** policy. We evaluated the key factors and assumptions used to develop the capitalization policy and determined that it is reasonable in relation to the basic financial statements taken as a whole.

Financial Statement Disclosures

Certain financial statement disclosures involve significant judgment and are particularly sensitive because of their significance to financial statement users. The most sensitive disclosures affecting **the GBJPA's** financial statements relate to commitments and contingencies as communicated within the footnotes.

Significant Difficulties Encountered during the Audit

We encountered no difficulties in dealing with management relating to the performance of the audit.

Uncorrected and Corrected Misstatements

For purposes of this communication, professional standards also require us to accumulate all known and likely misstatements identified during the audit, other than those that we believe are trivial, and communicate them to the appropriate level of management. Further, professional standards require us to also communicate the effect of uncorrected misstatements related to prior periods on the relevant classes of transactions, account balances or disclosures, and the financial statements as a whole and each applicable opinion unit. There was one passed audit adjustment to record a lease receivable and related deferred inflow, whose effect in the current and prior periods, as determined by management, is immaterial to the financial statements taken as a whole. Uncorrected misstatements or matters underlying those uncorrected misstatements could potentially cause future-period financial statements to be materially misstated, even though the uncorrected misstatements are immaterial to the financial statements currently under audit.

Disagreements with Management

For purposes of this letter, professional standards define a disagreement with management as a matter, whether or not resolved to our satisfaction, concerning a financial accounting, reporting, or auditing matter, which could be significant to the **GBJPA's** financial statements or the auditor's report. **No such disagreements arose during the course of the audit.**

Representations Requested from Management

We have requested certain written representations from management, which are included in the management representation letter dated October 24, 2023.

Management's Consultations with Other Accountants

In some cases, management may decide to consult with other accountants about auditing and accounting matters. Management informed us that, and to our knowledge, there were no consultations with other accountants regarding auditing and accounting matters.

Other Significant Matters, Findings or Issues

In the normal course of our professional association with the GBJPA, we generally discuss a variety of matters, including the application of accounting principles and auditing standards, significant events or transactions that occurred during the year, operating conditions affecting the entity, and operating plans and strategies that may affect the risks of material misstatement. None of the matters discussed resulted in a condition to our retention as the **GBJPA's** auditors.

This report is intended solely for the information and use of the Board of Directors, and management of the GBJPA and is not intended to be and should not be used by anyone other than these specified parties.

Davis Farr LLP

Irvine, California
October 24, 2023

Report on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance With *Government Auditing Standards*

Independent Auditor's Report

Board of Directors

Groundwater Banking Joint Powers Authority
Irvine, California

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States the financial statements of the Groundwater Banking Joint Powers Authority (the "GBJPA") as of and for the year ended June 30, 2023, and the related notes to the financial statements, which collectively comprise the GBJPA's **basic financial statements**, and have issued our report thereon dated October 24, 2023.

Report on Internal Control over Financial Reporting

In planning and performing our audit of the financial statements, we considered the GBJPA's internal control over financial reporting (internal control) as a basis for designing audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the GBJPA's **internal control**. Accordingly, we do not express an opinion on the effectiveness of the GBJPA's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable **possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis**. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses and significant deficiencies may exist that have not been identified.

Report on Compliance and Other Matters

As part of obtaining reasonable assurance about whether the GBJPA's **financial statements** are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the financial statements. However, providing an

opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness **of the entity's internal control or on compliance. This report** is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the GBJPA's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Davis Farr LLP

Irvine, California
October 24, 2023

FY 2023-24 Quarterly Actual to Budget Results

DISCUSSION:

The quarterly unaudited actual to budget results for the three-month period ended September 30, 2023 is attached as Exhibit "A". The report separates capital and operating expenditures.

The three-month year to date total expenditures were \$180.5 thousand compared to a budget of \$1.3 million. Actual expenditures were \$1.1 million or 86% under budget. This is primarily due to delayed expenses in construction. The full year approved FY 2023-24 budget is also included. Exhibit "A" provides additional comments.

No cash call is required at this time.

RECOMMENDATION:

Receive and File.

LIST OF EXHIBITS:

Exhibit "A" – FY 2023-24 Actual to Budget Results (Unaudited)

Exhibit "A"
Groundwater Banking Joint Powers Authority

Actual to Budget Results (Unaudited)

Fiscal Year 2023-24

(in hundreds)

	Actual 9/30/23 (Unaudited)	Budget 9/30/23	Budget to Actual (Over)/Under	Budget Variance %	Approved FY2023-24 Budget	FY2023-24 Budget Variance Comment
Kern Fan Groundwater Capital Project						
Engineering - Planning and Design Staff	\$ 8,100	\$ 26,100	\$ 18,000	69%	\$ 104,400	Timing of expenditures.
Grant Administration and Reporting	200	1,700	1,500	88%	6,700	Timing of grant reporting and expenditures.
JPA Administration	12,100	14,400	2,300	16%	57,600	Expenditures lower than anticipated.
Supplemental Environmental Impact Report	-	1,000	1,000	100%	15,200	Timing of expenditures, anticipated 3rd or 4th quarter.
Agreements with State Agencies	10,700	5,100	(5,600)	-110%	20,400	Timing of expenditures; SWP analysis and aqueduct modeling.
Engineering Design - Outside	26,100	50,000	23,900	48%	310,000	Timing of expenditures.
Engineering CA&I - Outside	-	42,800	42,800	100%	108,400	Not anticipated until 3rd or 4th quarter.
Construction	-	942,600	942,600	100%	1,993,200	Not anticipated until 3rd or 4th quarter.
Legal JPA	2,400	16,200	13,800	85%	72,300	Timing of expenditures.
Development of Agreement with FWS	-	-	-	0%	7,500	Deferred pending pulse flow CEQA.
Development of Agreement with DWR	-	-	-	0%	10,000	Deferred pending conveyance alignment.
Environmental	10,300	8,400	(1,900)	-23%	8,400	NEPA for Phase 1 completed.
Permitting	-	20,000	20,000	100%	20,000	Timing of permitting expenditures.
Capital Project Total	69,900	1,128,300	1,058,400	94%	2,734,100	
Operating Expense						
West Enos Recharge Facility	96,900	159,900	63,000	39%	319,800	
Administration/Management	11,400	17,700	6,300	36%	70,900	Lower staff time than anticipated.
Audit	-	-	-	0%	5,800	
Bank Charges	1,500	800	(700)	-88%	3,200	Bank fees higher than anticipated.
Insurance	2,300	1,700	(600)	-35%	6,900	Change in insured persons.
Membership	-	-	-	0%	1,000	
Website Maintenance	-	-	-	0%	1,000	
Operating Expense Total	112,100	180,100	68,000	38%	408,600	
Revenue						
Interest Revenue	(1,500)	(800)	700	88%	(3,200)	Interest revenue higher than anticipated.
Revenue Total	(1,500)	(800)	700	88%	(3,200)	
Total	\$ 180,500	\$ 1,307,600	\$ 1,127,100	86%	\$ 3,139,500	

December 7, 2023
Prepared by: Kent Morris
Reviewed by: Fiona Sanchez
Agenda item:4c

Appointment of Treasurer

DISCUSSION:

Due to the retirement of the Treasurer Cheryl Clary on September 5, 2023, staff recommends that the Board appoint Ms. Neveen Adly, Executive Director of Finance & Administration at the Irvine Ranch Water District, as the Treasurer of the Groundwater Banking Joint Powers Authority effective immediately. Jennifer Davis and Kent Morris were appointed as Assistant Treasurers at the February 6, 2023 & May 1, 2023 Board meeting respectfully and will remain in those positions moving forward.

The current Resolution and Certificate of Incumbency names the Board of Directors, General Manager, Treasurer and Assistant Treasurers as Authorized Signers to establish new accounts, close accounts and to enter into agreements for treasury/cash management services.

RECOMMENDATION:

That the Board appoint Neveen Adly as a Groundwater Banking Joint Powers Authority Treasurer effective immediately.

TO: Groundwater Banking JPA Board of Directors
Agenda Item 4d

FROM: Doug Gosling

DATE: December 7, 2023

RE: Consideration of Resolution No. 2023-03– Declaration of Flood Emergency
Public Contract Code §22050(c)(1)

Discussion:

In March of 2023, Governor Newsom released Executive Order N-4-23 (see attached), which declared a state of emergency due to severe winter storms and flooding within California. In May of 2023, the Governor released Executive Order N-7-23 with additional emergency items. Additionally, on August 4, 2023, Governor Newsom signed another Executive Order, N-10-23, to prepare for the next wet season. The orders authorized state agencies to take necessary actions to protect public health, safety, and property, and directed state agencies to coordinate with local governments and assist in the response and recovery efforts. As storms bring more rain and snow to California, the Executive Order aims to temporarily lift regulations and set clear conditions for diverting flood waters without permits to boost groundwater recharge storage.

The California Governor’s office stated the following:

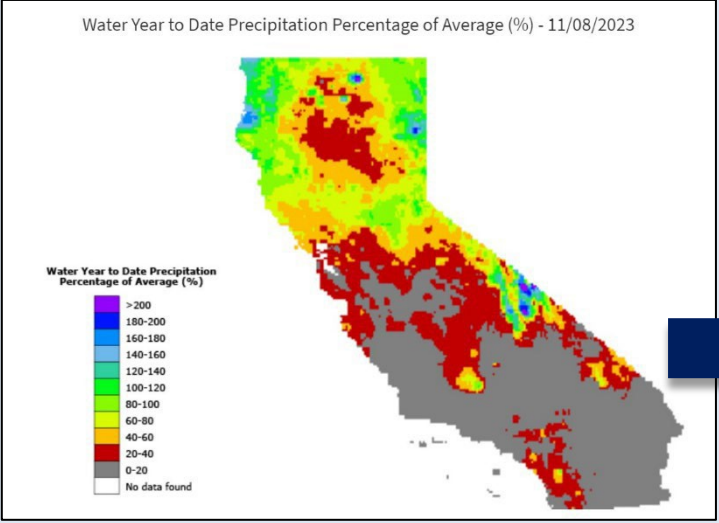
“The March 3, 2023, snow survey conducted by the Department of Water Resource found that most regions of the Sierra Nevada are above average for snow water content, and some regions are nearing record amounts of snow, with significant snow since March 3 and more snow forecast in the next week. The upcoming significant snowmelt runoff creates both risk, in the form of catastrophic flooding if warm storms and rising seasonal temperatures cause the snowpack to melt rapidly, and opportunity, in the form of groundwater recharge resulting from snowmelt runoff that can mitigate ongoing drought impacts on depleted groundwater aquifers.”

As of April 6, 2023, the Northern Sierra Precipitation Eight-Station Index had received 59.6 inches of precipitation, or 132 percent of average-to-date. As of April 6, 2023, the Northern Sierra Snow Water content was 196 percent of the April 1 average and 200 percent of average-to-date; the Central Sierra Snow Water content was 238 percent of the April 1 average and 242 percent of average-to-date; and the Southern Sierra Snow Water content was 296 percent of the April 1 average and 305 percent of average-to-date. As of April 6, 2023, the statewide average snow water equivalent in the Sierra Nevada was 61.7 inches, as compared to 14.7 inches on the same date in 2018. Similarly, Observed water year-to-date Kern River Basin flow is 230% of average, or 507,000-acre feet (af). Forecast April-July runoff of the Kern River is over 2,000,000 af and 318% of average. Lake Isabella storage is more than 300,000 af and climbing; the reservoir is expected to fill this year. Forecast peak North Fork and South Fork Kern River flow into Lake Isabella is 23,000 af on June 5. The Kern River Watermaster is expecting releases from the reservoir to exceed 8,000 cfs for a sustained period of time.

In light of these conditions, it is imperative and pertinent that the GBJPA address the flooding emergency and protect the interests of water users and farmers within the project area by improving and repairing facilities and obtaining equipment necessary to convey and store the

historically high flows expected in 2023. JPA staff has determined that the emergency conditions will not permit a delay resulting from the competitive solicitation of bids, and action is necessary to address to the emergency and the items subject to the declaration.

Resolution No. 2023-03 would authorize the General Manager to take all necessary actions to address the emergency, such as coordinating with state and federal emergency response agencies to provide necessary assistance and resources to affected water users and farmers, expediting recharge projects, allocating emergency funds, and working closely with stakeholders. The resolution also authorizes the General Manager to take necessary actions to replace, rebuild, repair, or otherwise modify conveyance and recharge facilities that experience any failure during groundwater recharge operations, or which are anticipated to experience failure as a result of major storms or flood conditions, and to take such actions as necessary to capture, convey and store all available water supplies. If the Resolution is adopted by a 4/5ths vote of the Board, the General Manager may take such actions without giving notice for bids to let contracts pursuant to Public Contract Code §22050. The Resolution also emphasizes the need for expedited permitting of recharge projects to ensure that the JPA can better withstand future drought and flood emergencies.




Water Year to Date Precipitation Percentage of Average (%) - 11/08/2023

Water Year to Date Precipitation Percentage of Average (%)

>200
180-200
160-180
140-160
120-140
100-120
80-100
60-80
40-60
20-40
0-20
No data found

Visit the Department of Water Resources California WATER WATCH website for the most current local and statewide water conditions by clicking [here](#) or using the QR code below.



Recommendation:

JPA staff requests that the Board of Directors adopt the proposed Resolution No. 2023-03 and find that an emergency exists due to the above-stated conditions.

**RESOLUTION OF THE BOARD OF DIRECTORS OF THE GROUNDWATER BANKING
JOINT POWERS AUTHORITY DECLARATION OF A FLOOD EMERGENCY**

AND TO

**AUTHORIZE PROCUREMENT OF EQUIPMENT, SERVICES & SUPPLIES FOR SUCH
EMERGENCY WITHOUT GIVING NOTICE FOR BIDS TO LET CONTRACTS**

RESOLUTION NO. 2023-03

WHEREAS, GROUNDWATER BANKING JOINT POWERS AUTHORITY (“Authority”) is an authority per the Joint Exercise of Powers Act of 1980 (Division 7, commencing with §6500 of the California Government Code); and

WHEREAS, the California Governor has declared a state of emergency due to historically wet conditions and flooding in our region, pursuant to Executive Order N-4-23, N-7-23, and N-10-23; and

WHEREAS, heavy rains and flooding have caused significant damage to water storage facilities, infrastructure, and crops in several counties, including within the project area of the Authority;

WHEREAS, as of April 6, 2023, the Northern Sierra Precipitation Eight-Station Index had received 59.6 inches of precipitation, or 132 percent of average-to-date. As of April 6, 2023, the Northern Sierra Snow Water content was 196 percent of the April 1 average and 200 percent of average-to-date; the Central Sierra Snow Water content was 238 percent of the April 1 average and 242 percent of average-to-date; and the Southern Sierra Snow Water content was 296 percent of the April 1 average and 305 percent of average-to-date. As of April 6, 2023, the statewide average snow water equivalent in the Sierra Nevada was 61.7 inches, as compared to 14.7 inches on the same date in 2018. Similarly, Observed water year-to-date Kern River Basin flow is 230% of average, or 507,000-acre feet (af). Forecast April-July runoff of the Kern River is over 2,000,000 af and 318% of average. Lake Isabella storage is more than 300,000 af and climbing; the reservoir is expected to fill this year. Forecast peak North Fork and South Fork Kern River flow into Lake Isabella is 23,000 af on June 5. The Kern River Watermaster is expecting releases from the reservoir to exceed 8,000 cfs for a sustained period of time;

WHEREAS, the state of emergency requires expedited actions to protect public health, safety, and property, including through expedited permitting of recharge projects and letting contracts without notice to invite bids;

WHEREAS, the safety and well-being of our water users and agricultural community is of utmost importance;

WHEREAS, due to the above-described hydrology, Staff anticipates that the Authority will have water supplies available for recharge this year that are in amounts not commonly available to the Authority;

WHEREAS, Authority staff has determined that the capacity utilized by and within the Authority’s project area—such preexisting conveyance and recharge facilities is not sufficient to convey and recharge the amount of water which the Authority may be entitled to take and use for such purposes during 2023, and that such water supplies will be lost to the Authority forever without the implementation of emergency measures;

WHEREAS, Authority staff has determined that the emergency conditions will not permit a delay resulting from the competitive solicitation of bids and action is necessary to respond to the emergency;

WHEREAS, California Public Contract Code sections 20586 and 22050 provide for and allow the Board of Directors, by at least four-fifths vote and resolution, to take immediate action required by an emergency to procure the necessary equipment, services and supplies for those purposes, without giving notice for bids to let contracts; and

WHEREAS, Authority staff requests that the Board of Directors find that an emergency exists due to the above-stated conditions.

NOW, THEREFORE, BE IT RESOLVED that an emergency does exist due to historically high hydrology in the State and County, and the associated availability of water supplies to the Authority this year that are not commonly available to the Authority, which are in excess of the capacity utilized by and within the Authority’s project area—such preexisting conveyance and recharge facilities;

1. The Board of Directors of the Groundwater Banking Joint Powers Authority declares a state of emergency due to historically high hydrological conditions and authorizes the General Manager to take all necessary actions to address the emergency and expedite recharge projects.
2. The General Manager is directed to coordinate with state and federal emergency response agencies to provide necessary assistance and resources to affected water users and farmers.
3. The General Manager is authorized to allocate emergency funds as necessary to address the flooding emergency, and to seek additional funds from state and federal sources as appropriate.
4. The General Manager is directed to work with local districts and farmers to minimize water losses and manage the flood flows in a way that reduces impacts while also maximizing recharge for future use.
5. The General Manager is directed to establish communication channels with water users and farmers to provide timely and accurate information on flood flows, water supply, and potential impacts on agricultural operations.
6. The General Manager is hereby nominated, authorized, and instructed to contract with third parties for the following work and equipment without notice for bids:
 - a. Replace, rebuild, repair or otherwise modify the the capacity utilized by and within the Authority’s project area—such preexisting conveyance and recharge facilities that experience any failure during groundwater recharge operations, or which are anticipated to experience failure as a result of major storms or flood conditions.
 - b. Replace, rebuild, repair or otherwise modify the such conveyance and recharge facilities that are insufficient to convey and recharge anticipated flows during 2023 (or until such time as the Board determines to terminate this emergency).
 - c. Construct new groundwater recharge facilities and related equipment on lands not previously owned by or available to the Authority for such purposes.
7. The General Manager is authorized to take any other actions necessary to address the flooding emergency and protect the interests of the Authority.

BE IT FURTHER RESOLVED that this resolution shall remain in effect until the General Manager determines that the flooding emergency has been fully addressed and that all necessary actions have been taken to protect the interests of water users and farmers within the Groundwater Banking Joint Powers Authority project areas.

DULY PASSED AND ADOPTED by the Board of Directors of the Groundwater Banking Joint Powers Authority, this _____ day of _____, _____, by the following roll call vote:

AYES:

NOES:

ABSENT:

ABSTAINED:

GROUNDWATER BANKING JOINT POWERS
AUTHORITY

Board of Directors, President

Attest:

Board of Directors, Secretary

GROUNDWATER BANK JOINT POWERS AUTHORITY

PLANS FOR CONSTRUCTION OF THE STOCKDALE NORTH RECHARGE BASIN FACILITIES



BENCH MARK

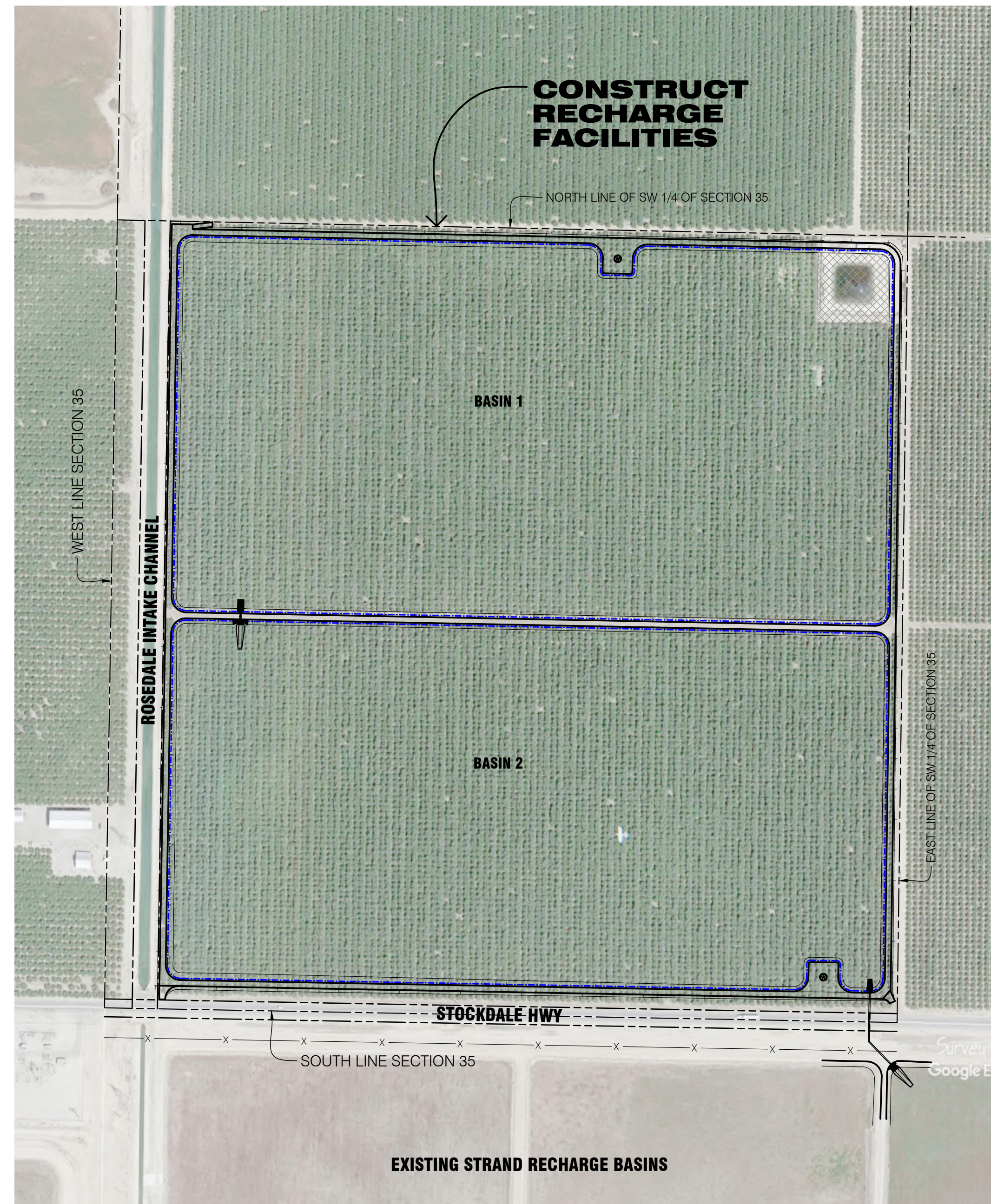
CHISELED "O" ON NORTHEAST CURB RETURN AT STOCKDALE HIGHWAY AND NORD ROAD PER KCS FIELD BOOK 1170, PG 25.
ELEVATION=345.90 NAVD88

BEARING BASIS

THE BASIS OF BEARING IS THE CALIFORNIA COORDINATE SYSTEM OF 1983 (NAD83), ZONE 5.

CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL CONTACT THE U.S.A. LOCATOR SERVICE AT 1-800-642-2444 48 HOURS PRIOR TO ANY EXCAVATION AND SHALL POTHOLE UTILITIES TO VERIFY LOCATION AND DEPTH PRIOR TO TRENCHING. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY CONFLICTS WITH THE PLANS PRIOR TO THE BEGINNING OF CONSTRUCTION.
2. THE CONTRACTOR MUST POSSESS A STATE OF CALIFORNIA CLASS "A" CONTRACTORS LICENSE TO PERFORM THE WORK CONTAINED WITHIN THESE PLANS AND SPECIFICATIONS.
3. HAZARDOUS WASTE IN EXCAVATION. SHALL COMPLY WITH SECTION 4.M "HAZARDOUS CONDITIONS" IN THE CONTRACT GENERAL CONDITIONS.



KEY MAP

SCALE: 1"=300'

SUBMITTED BY:

RICHARD D. MEYER, R.C.E. NO. 28104 DATE

File Name: GBJ22001TS2.DWG



RECORD DRAWING CERTIFICATION	
APPROVED BY: SIGNATORY _____ DATE _____ TITLE _____ GROUNDWATER BANK JOINT POWERS AUTHORITY	GROUNDWATER BANK JOINT POWERS AUTHORITY STOCKDALE NORTH RECHARGE BASIN FACILITIES COVER AND TITLE SHEET
NO 1 OF 8 SHEETS	SHEET 1 COVER AND TITLE SHEET SHEET 2 GENERAL PLAN - PHASE 2 BASINS SHEET 3 GRADING PLAN - PHASE 2 NORTH BASIN SHEET 4 GRADING PLAN - PHASE 2 SOUTH BASIN SHEET 5 BASIN 13 TO BASIN 2 TURNOUT SHEET 6 INTERBASIN STRUCTURE PLAN-PROFILE SHEET 7 INTERBASIN STRUCTURE DETAILS SHEET 8 EXISTING TOPOGRAPHY

LEGEND - TOPOGRAPHY

<ul style="list-style-type: none"> --- CENTER LINE --- RIGHT-OF-WAY OR PROPERTY LINE --- OH --- OVERHEAD LINES W/POWER POLE --- G --- EXISTING GAS LINE --- U --- EXISTING UTILITIES --- T --- EXISTING TELEPHONE LINE --- --- EXISTING EASEMENT --- X --- EXISTING FENCE --- --- EXISTING CONTOURS TOP OF SLOPE TOE OF SLOPE SECTION DESIGNATION: SECTION LETTER SHEET WHERE SECTION IS SHOWN 	<ul style="list-style-type: none"> NEW LOCATION OF SALVAGED SIGN RIPRAP/ROCK SLOPE PROTECTION EDGE OF PAVEMENT EXISTING GATE VALVE EXISTING AIR VENT EXISTING TELE. PEDESTAL EXISTING SIGN EXISTING MONUMENT FINISHED GRADE 2.00% FINISHED GRADE SLOPE
---	--

ABBREVIATIONS

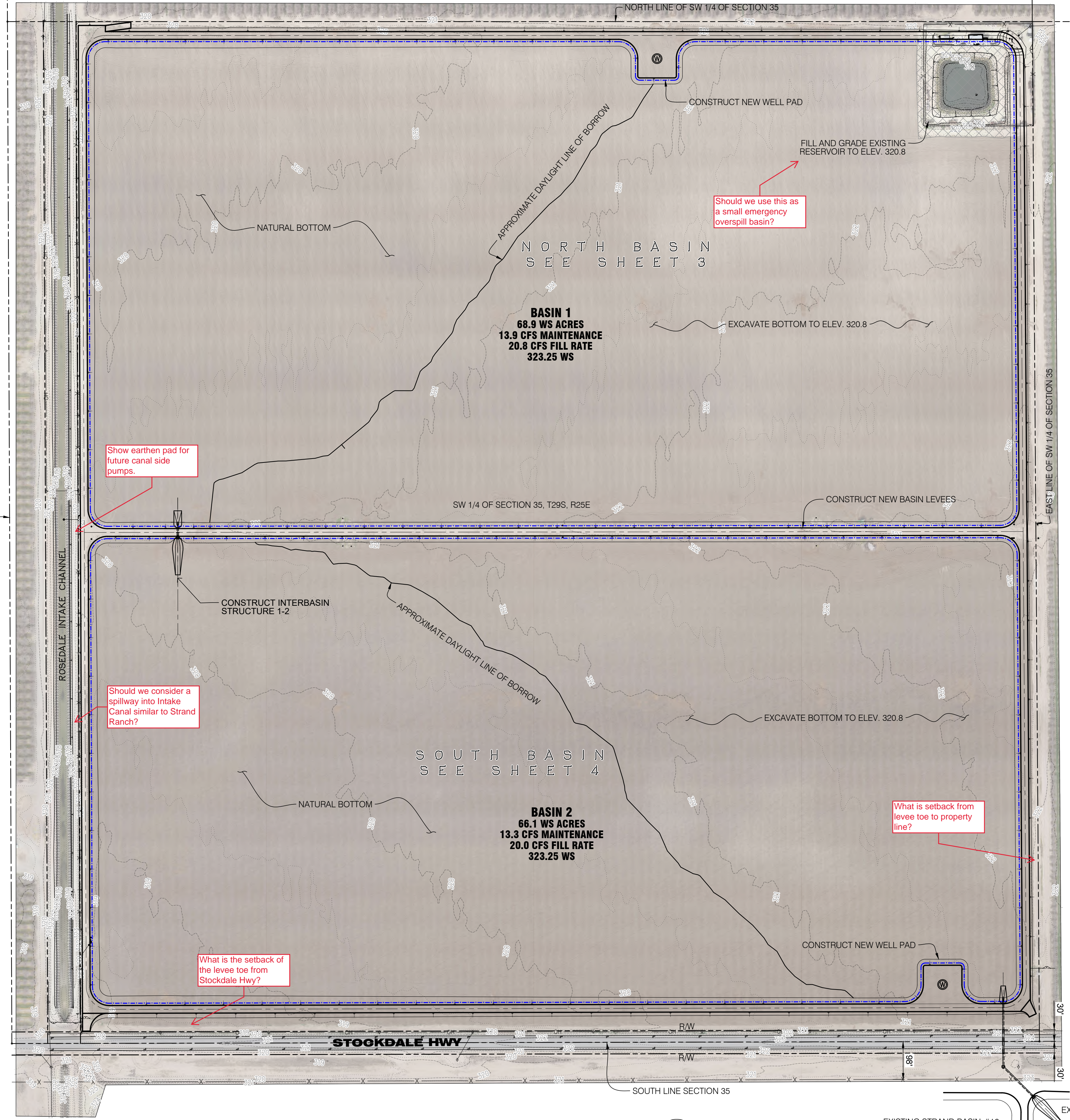
PI POINT OF INTERSECTION	POVC POINT ON VERTICAL CURVE	EVC END VERTICAL CURVE
R/W RIGHT OF WAY	BVC BEGIN VERTICAL CURVE	TAN TANGENT LINE
EP EDGE OF PAVEMENT	STA STATION	O/S OFFSET
INV INVERT	EW EACH WAY	EF EACH FACE
C/L CENTERLINE	NF NEAR FACE	FF FAR FACE
ELEV ELEVATION	BF BOTTOM FACE	TF TOP FACE
FG FINISHED GRADE	LF LINEAR FEET	LF LINEAR FEET
AC ASPHALT CONCRETE	MON MONUMENT	LCW LONG CREST WEIR
AGG AGGREGATE		
O.G. ORIGINAL GROUND		
GBJPA GROUNDWATER BANK JOINT POWERS AUTHORITY		
GB GRADE BREAK		
PVC POINT OF INTERSECTION, VERTICAL CURVE		

60% PLAN SUBMITTAL

10-18-23

Rev. No.	Date	Revision Description	Approved By

PHASE 2 RECHARGE BASIN FACILITIES



Should we use this as a small emergency overspill basin?

Show earthen pad for future canal side pumps.

Should we consider a spillway into Intake Canal similar to Strand Ranch?

What is the setback of the levee toe from Stockdale Hwy?

What is setback from levee toe to property line?

Where will borrow come from? Should we lower the basin bottoms more?

ESTIMATED EARTHWORK QUANTITIES (CY)	
Fill in place:	115660
Estimate 20% shrinkage:	23130
Required Volume for Fill:	138790
Excavation:	-22170
Required Borrow:	116620

LEGEND - TOPOGRAPHY

--- C	CENTER LINE	▲	NEW LOCATION OF SALVAGED SIGN
--- R/W	RIGHT-OF-WAY OR PROPERTY LINE	▨	RIPRAP/ROCK SLOPE PROTECTION
--- OH	OVERHEAD LINES W/POWER POLE	---	EDGE OF PAVEMENT
--- G	EXISTING GAS LINE	⊗	EXISTING GATE VALVE
--- U	EXISTING UTILITIES	□	EXISTING AIR VENT
--- T	EXISTING TELEPHONE LINE	⊞	EXISTING TELE. PEDESTAL
---	EXISTING EASEMENT	⊕	EXISTING SIGN
---	EXISTING FENCE	⊙	EXISTING MONUMENT
---	EXISTING CONTOURS	---	FINISHED GRADE
TOP OF SLOPE	EMBANKMENT SIDESLOPE	2.00%	FINISHED GRADE SLOPE
TOE OF SLOPE			

SECTION DESIGNATION: SECTION LETTER **A**
SHEET WHERE SECTION IS SHOWN **2**

DETAIL DESIGNATION: DETAIL LETTER **A**
SHEET WHERE DETAIL IS SHOWN **2**

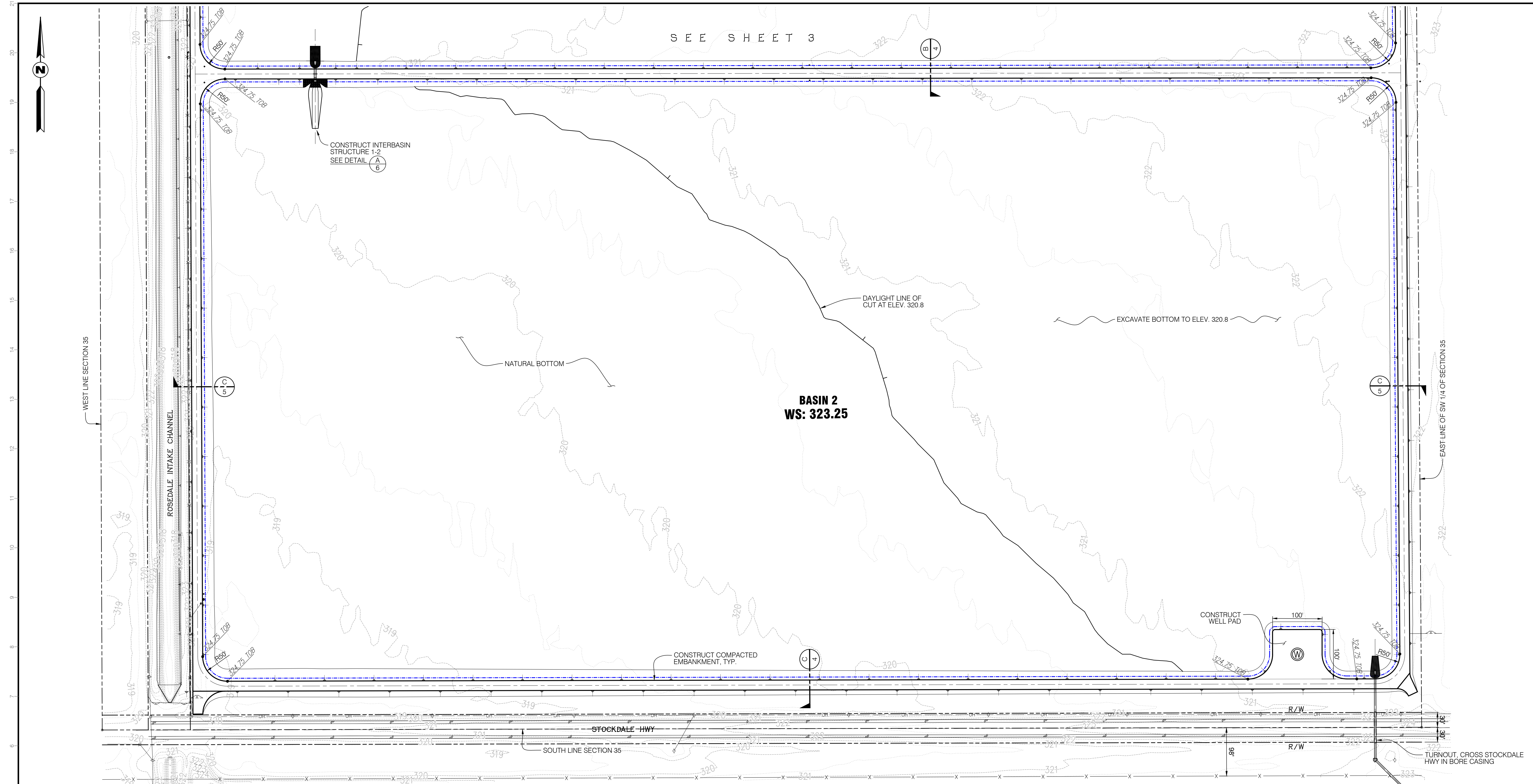
ABBREVIATIONS

PI	POINT OF INTERSECTION	POVC	POINT ON VERTICAL CURVE
R/W	RIGHT OF WAY	EVC	END VERTICAL CURVE
EP	EDGE OF PAVEMENT	BVC	BEGIN VERTICAL CURVE
INV	INVERT	TAN	TANGENT LINE
C/L	CENTERLINE	STA	STATION
ELEV	ELEVATION	O/S	OFFSET
FG	FINISHED GRADE	EW	EACH WAY
AC	ASPHALT CONCRETE	EF	EACH FACE
AGG	AGGREGATE	NF	NEAR FACE
O.G.	ORIGINAL GROUND	FF	FAR FACE
GBJPA	GROUNDWATER BANK	FF	FAR FACE
	JOINT POWERS	BF	BOTTOM FACE
	AUTHORITY	TF	TOP FACE
GB	GRADE BREAK	LF	LINEAR FEET
PVC	POINT OF INTERSECTION, VERTICAL CURVE	MON	MONUMENT
		LCW	LONG CREST WEIR

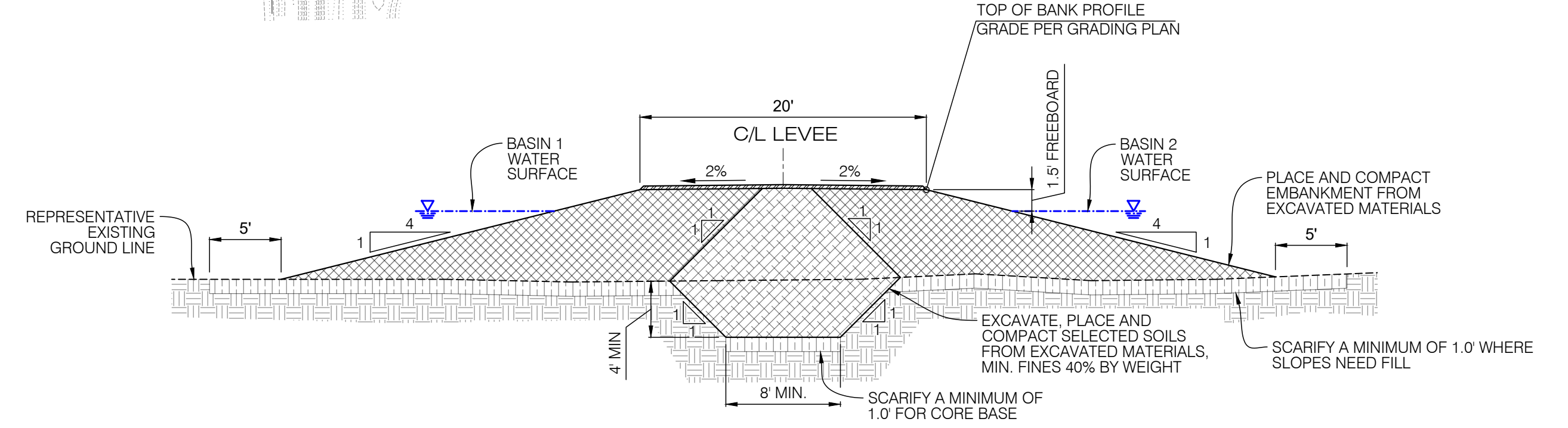


PLAN - PHASE 2 BASINS **A**
SCALE: 1" = 160' **2**

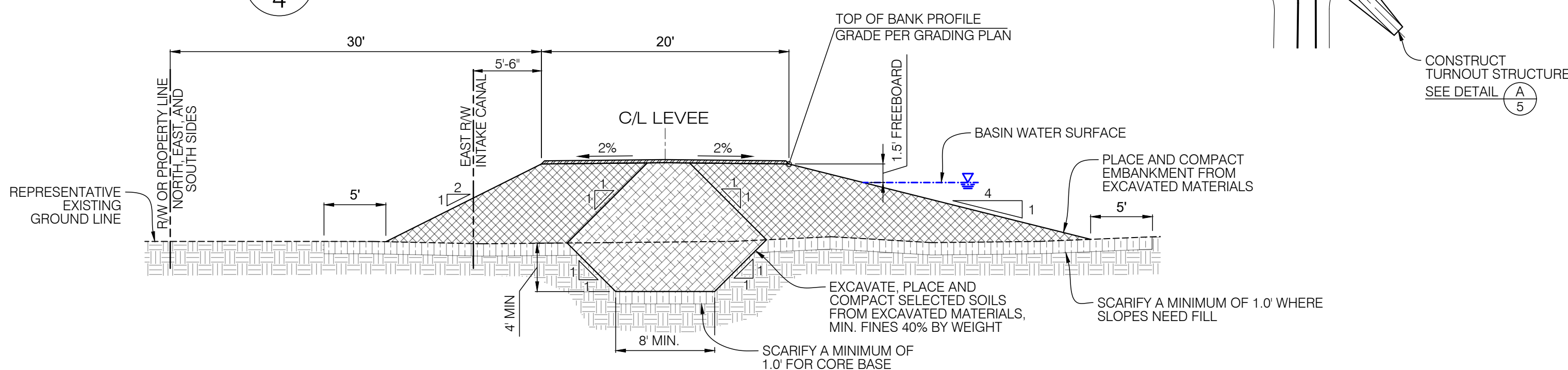
Richard D. Meyer, PCE 28104
Date
Approved By
Revision Description
Rev. No. Date



PLAN - SOUTH BASIN
SCALE: 1" = 100'



SECTION - INTERBASIN LEVEE
SCALE: 1/8" = 1'-0"



SECTION - PERIMETER LEVEES
SCALE: 1/8" = 1'-0"

Richard D. Meyer, P.E. FCE 28104
Date

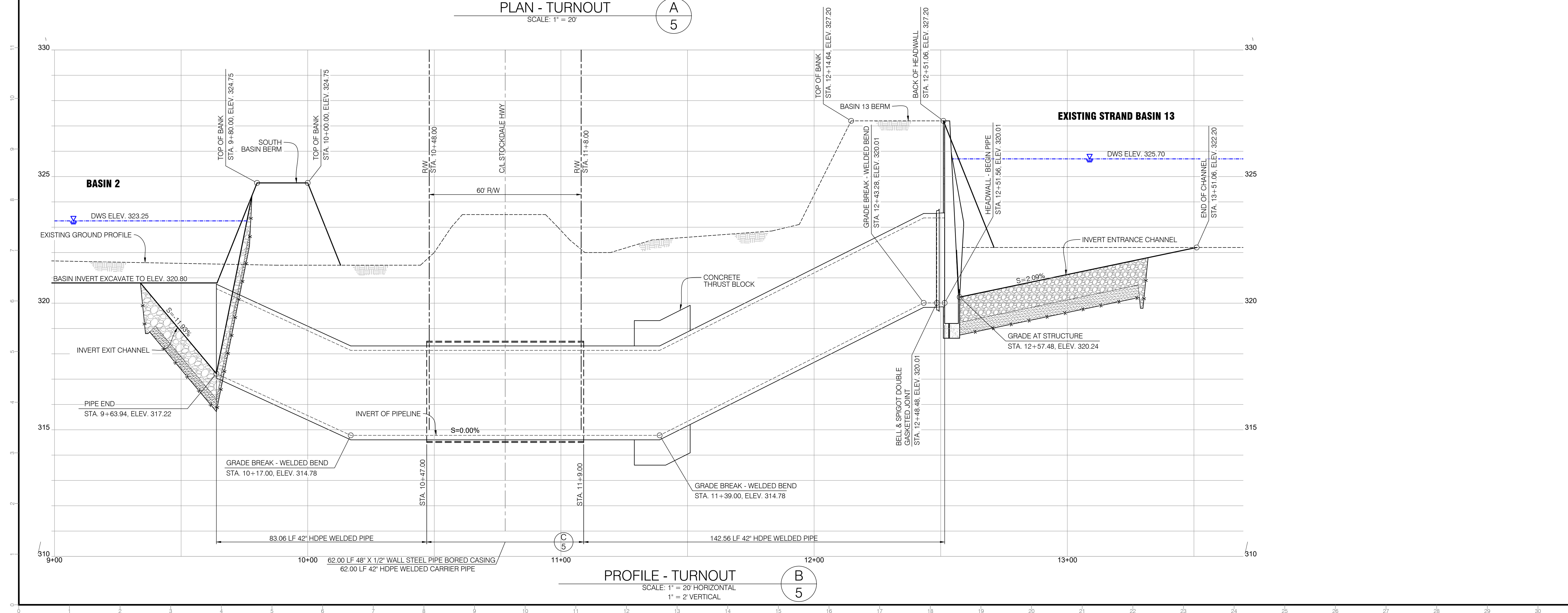
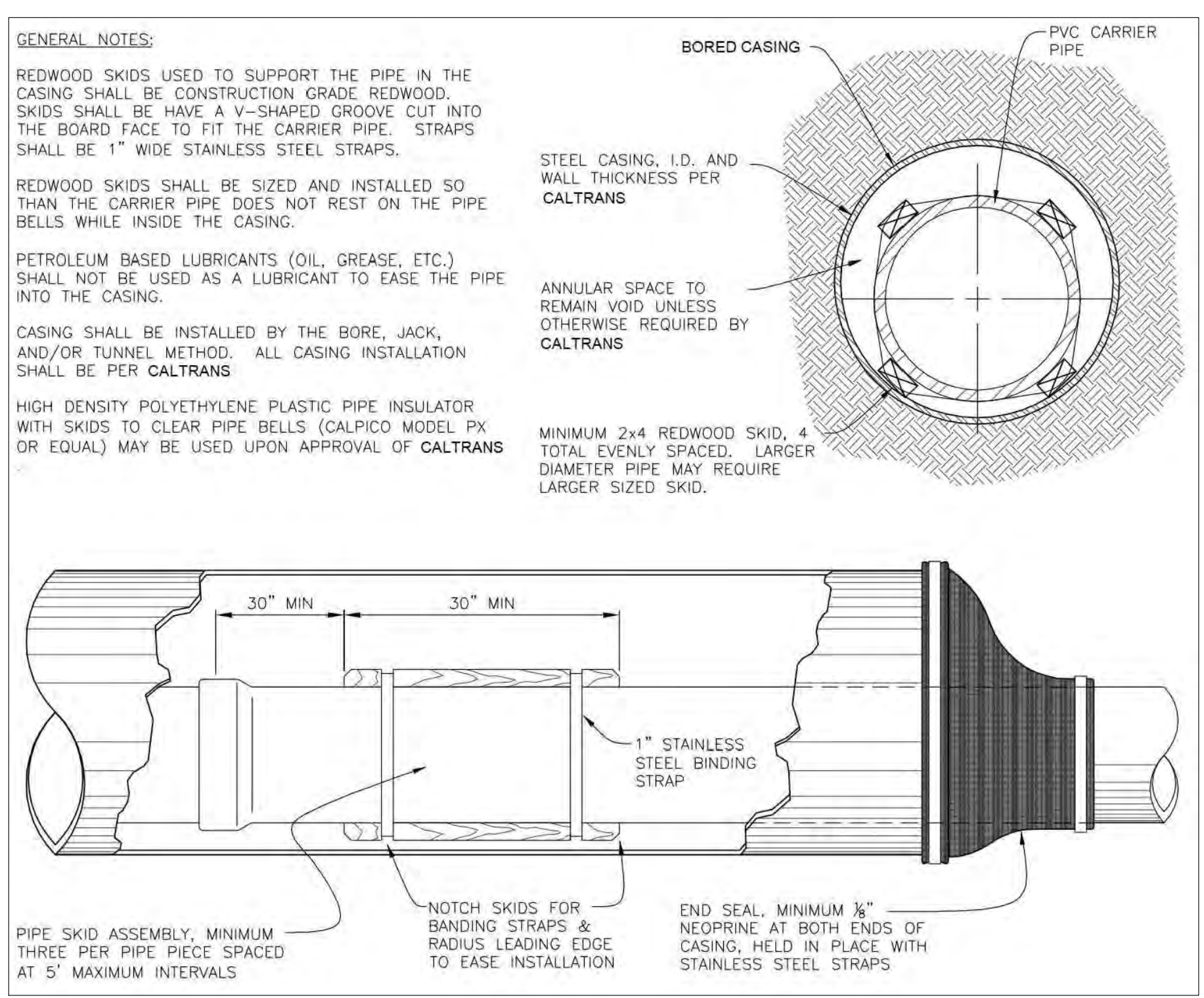
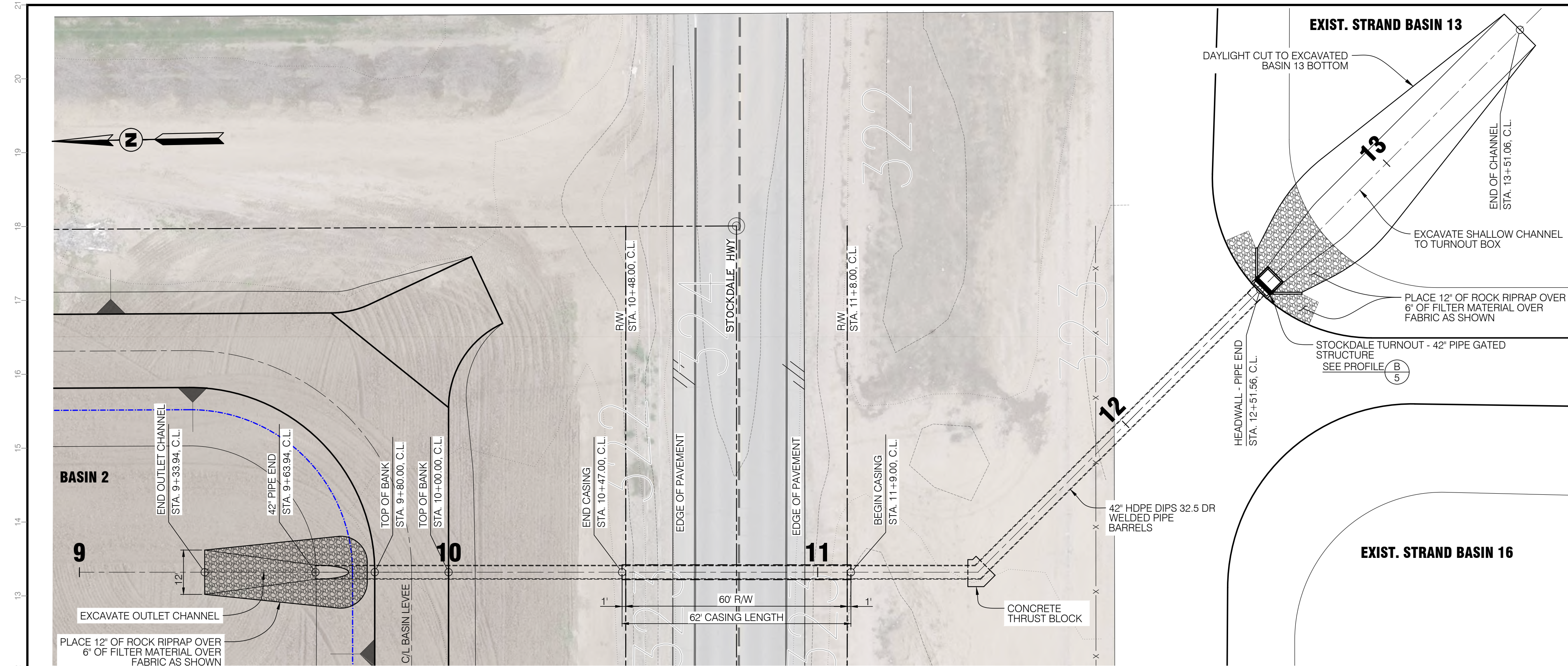
Meyer
Civil Engineering, Inc.
11200 River Run Blvd, Ste 102, Bakersfield, CA 93311
Phone 661-836-9834
MeyerCE.net

Rev. No.	Date	Revision Description	Approved By

PWT: RDM
 Drawn By: CJA
 AutoCAD File: C:\2220\B22
 File No: 22-001
 Date: 10-18-23

GROUNDWATER BANK JOINT POWERS AUTHORITY
 STOCKDALE NORTH RECHARGE BASIN
 FACILITIES
 GRADING PLAN - PHASE 2 SOUTH BASIN

SHEET NO. 4 OF 8



Richard D. Meyer, P.E. FCE 28104

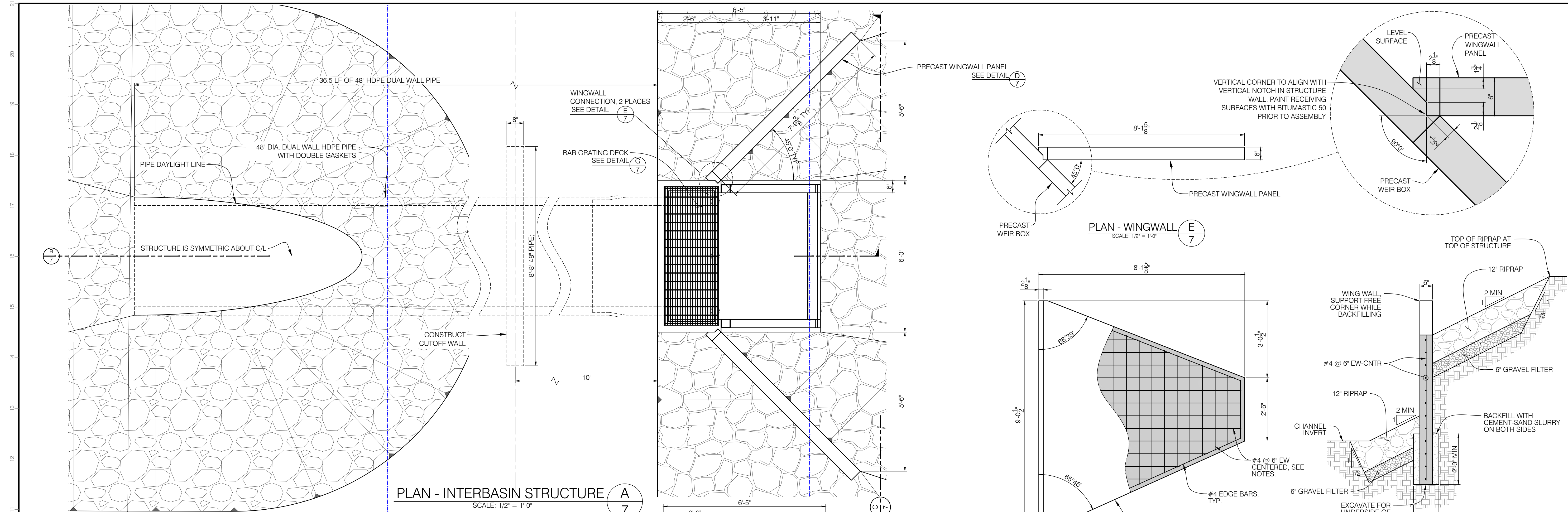
Meyer Civil Engineering, Inc.
11200 River Run Blvd, Ste 102, Bakersfield, CA 93311
Phone 661-836-9834
MeyerCE.net

Rev. No.	Date	Revision Description
1	10-18-23	

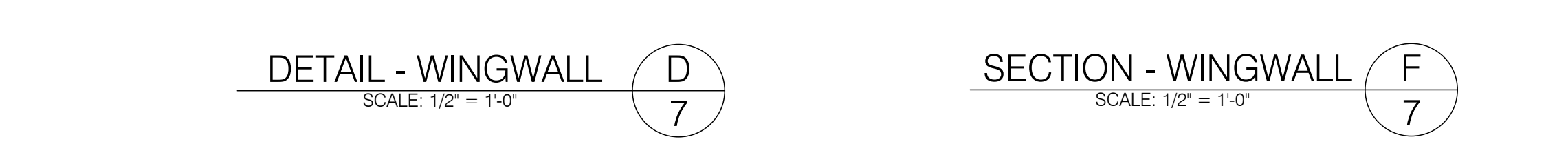
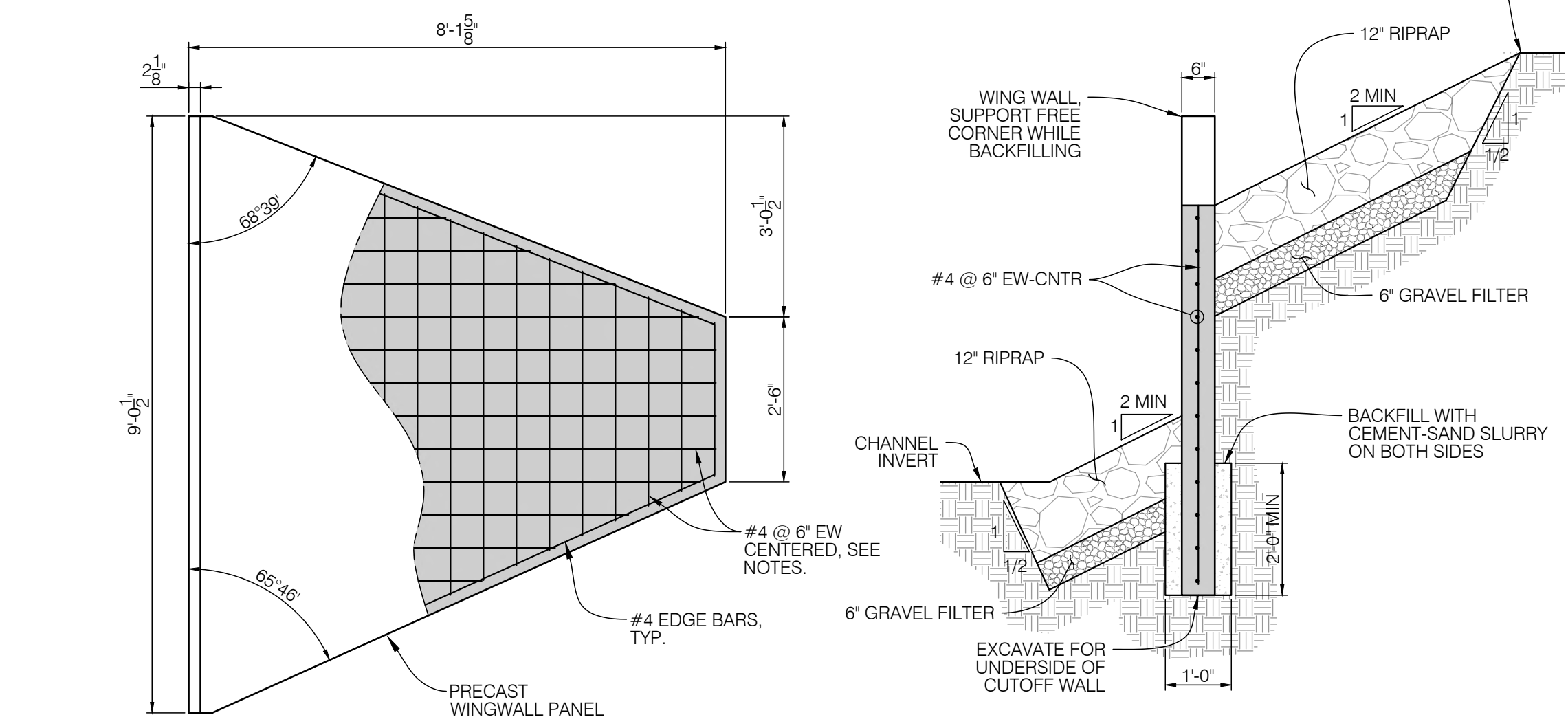
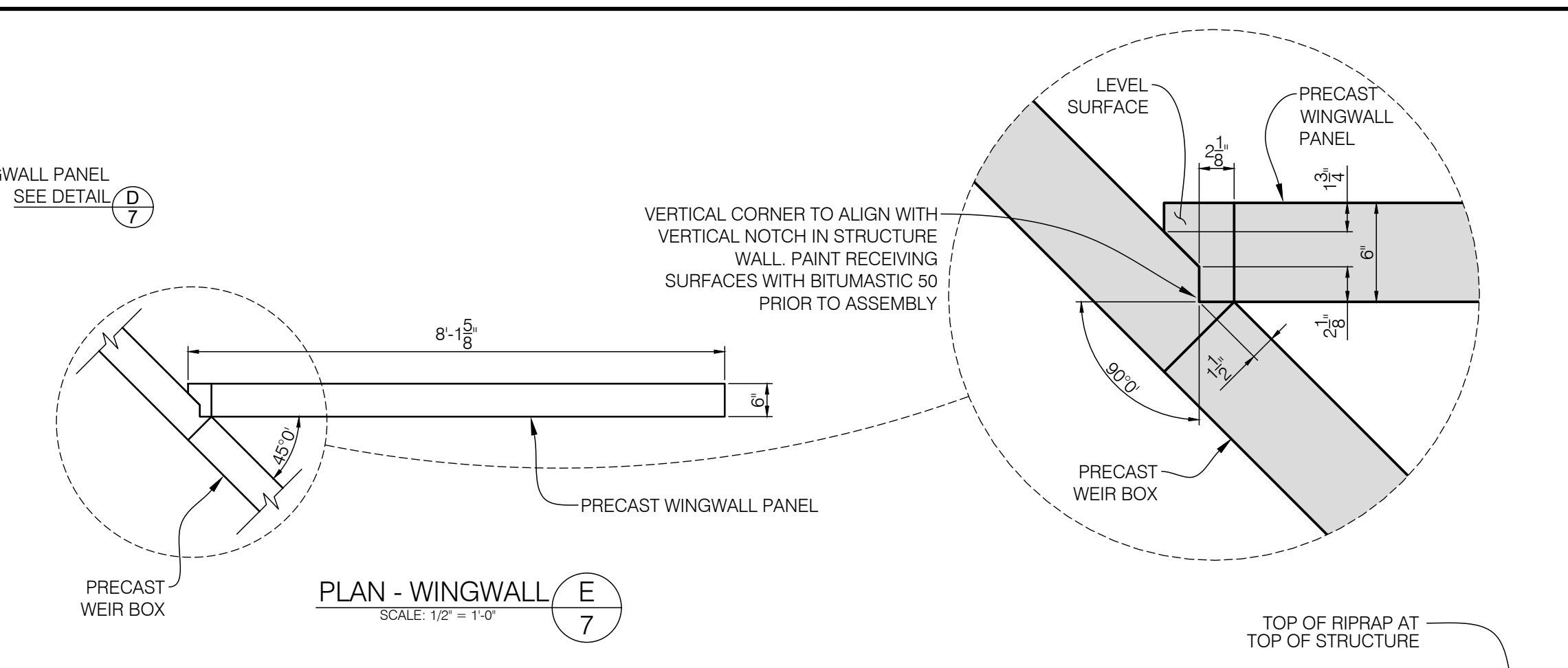
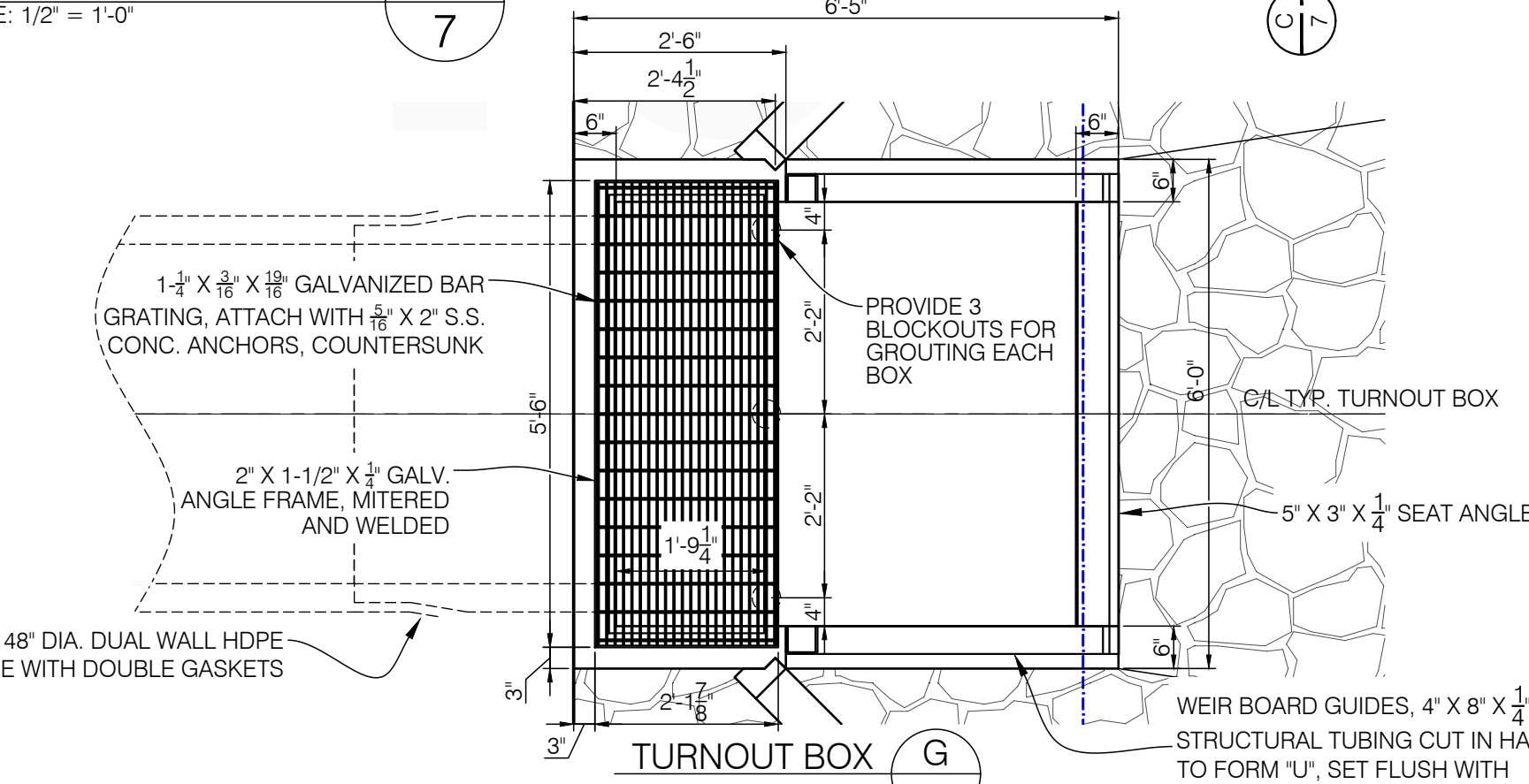
Approved By: _____

PROJECT: GROUNDWATER BANK JOINT POWERS AUTHORITY
STOCKDALE NORTH RECHARGE BASIN FACILITIES
BASIN 13 TO BASIN 2 TURNOUT

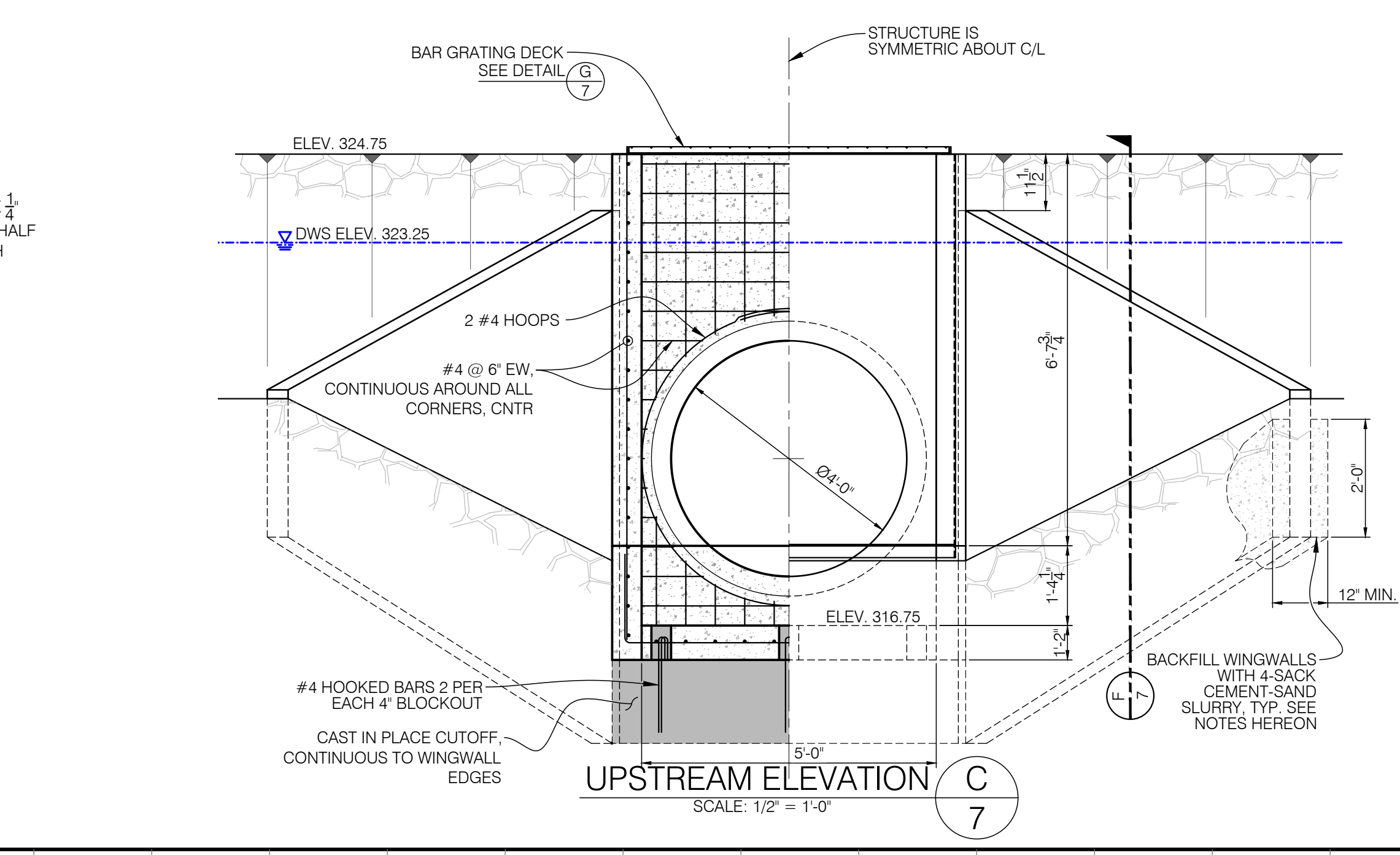
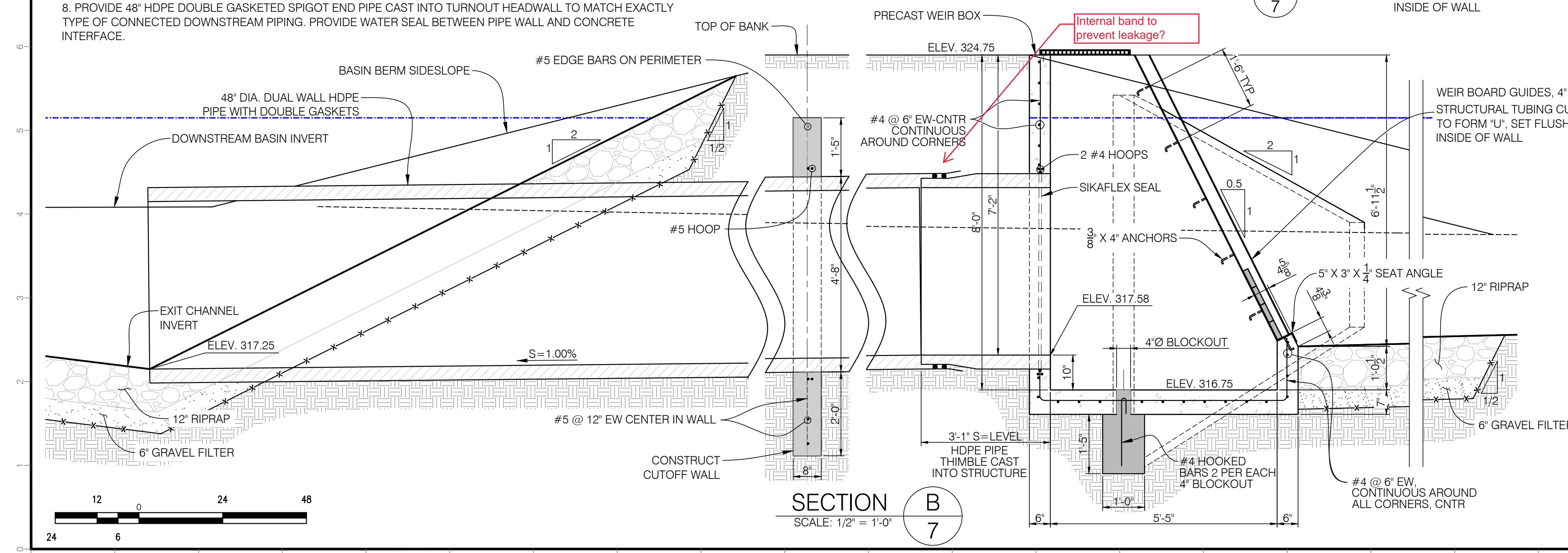
SHEET NO. 8

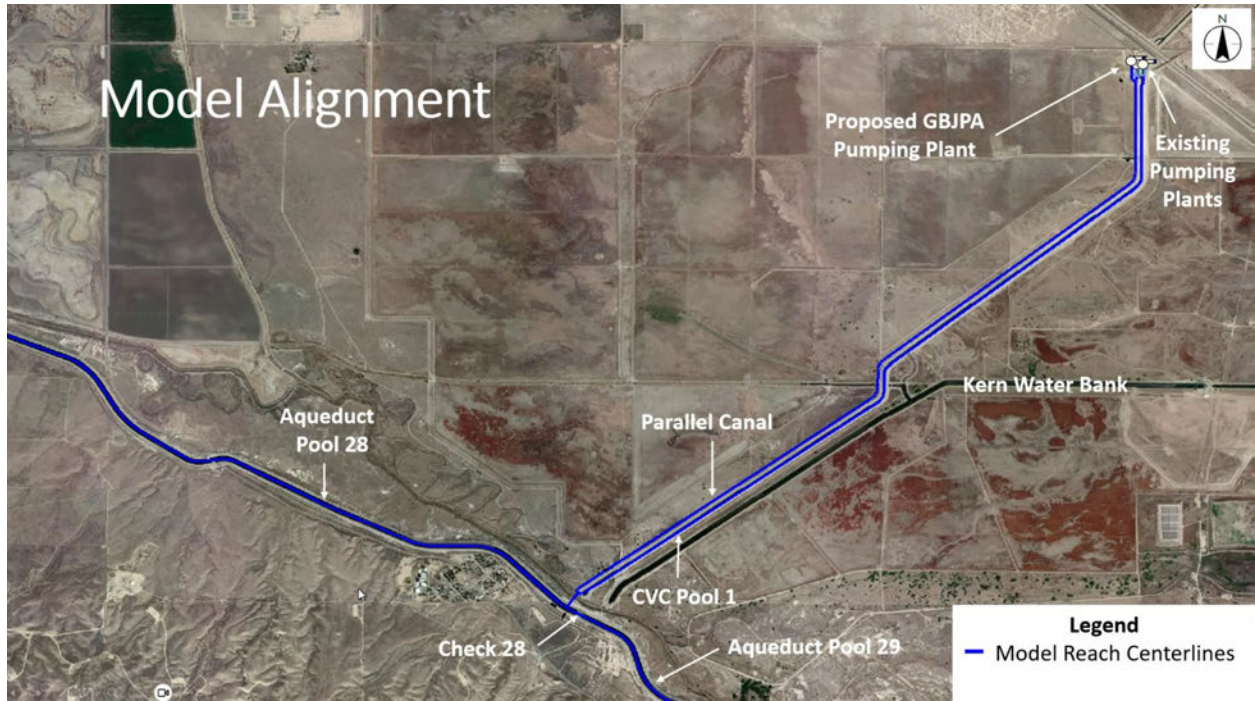


- PRECAST TURNOUT STRUCTURE:
1. WALL AND FLOOR THICKNESS DIMENSIONS SHOWN ARE MINIMUMS. ALL EXPOSED WALL EDGES ARE TO BE TOOLED OR CHAMFERED.
 2. REINFORCING THROUGHOUT STRUCTURE AND WINGWALLS IS TO BE #4 BARS AT 6" MINIMUM SPACING VERTICAL, HORIZONTAL, LONGITUDINAL AND TRANSVERSE BARS AND SHALL BE CENTERED IN WALLS AND FLOOR. REINFORCING SHALL BE CONTINUOUS AROUND ALL CORNERS. EDGE BARS SHALL BE PROVIDED ALONG ALL EDGES. A #4 HOOP SHALL BE PROVIDED AROUND THE STUBBED PIPE SECTION END.
 3. CONCRETE SHALL HAVE AN ULTIMATE STRENGTH (f_c) OF 5000 PSI.
 4. THE TURNOUT STRUCTURE SHALL BE SET ON COMPACTED SUBGRADE WITH A CUTOFF TRENCH FILLED WITH CONCRETE AND TIE TO THE STRUCTURE AS SHOWN. COMPACT TO 92% OF MAX. REL. DENSITY.
 5. WINGWALLS SHALL BE SET IN PRE-EXCAVATED 12" WIDE TRENCHES NO SHALLOWER THAN 24" DEEP AND BACKFILLED WITH 4-SACK CEMENT-SAND SLURRY. WALLS SHALL BE HELD PLUMB AND PROPERLY ALIGNED WITH THE STRUCTURE. 'SIKAFLEX' 1" X 1" CONTINUOUS SEALANT SHALL BE PROVIDED IN THE INTERLOCKING GROOVES BETWEEN THE STRUCTURE AND THE WINGWALLS.
 6. PROGRESSIVE BACKFILL OF WALLS AND STRUCTURE SHALL BE BALANCED AROUND THE STRUCTURE AS TO HEIGHT.
 7. ROCK RIPRAP IS TO BE CAREFULLY PLACED AGAINST THE STRUCTURE SO AS NOT TO DAMAGE IN ANY WAY.
 8. PROVIDE 48" HDPE DOUBLE GASKETED SPIGOT END PIPE CAST INTO TURNOUT HEADWALL TO MATCH EXACTLY TYPE OF CONNECTED DOWNSTREAM PIPING. PROVIDE WATER SEAL BETWEEN PIPE WALL AND CONCRETE INTERFACE.

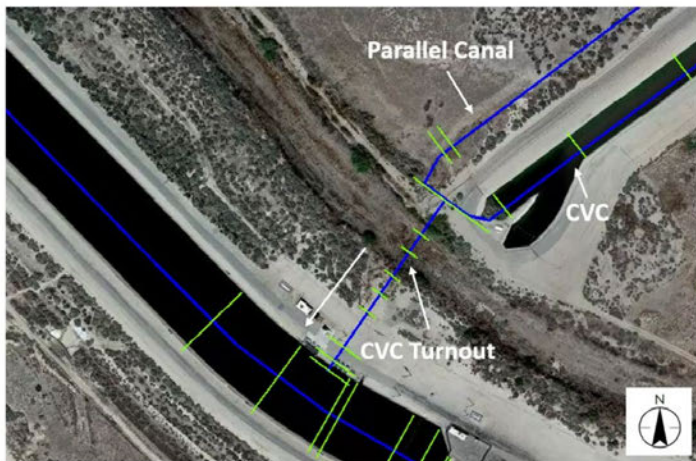


INTERBASIN STRUCTURE DIMENSION DATA				
NAME	PIPE SIZE	PIPE LENGTH	US PIPE INVERT	DS PIPE INVERT
'1 to 2'	48"	37'-0"	322.33	322.12





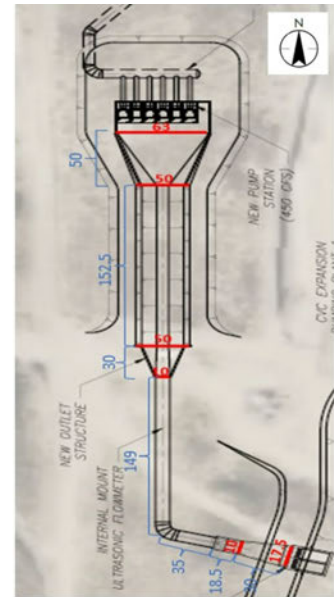
Model Geometry



Model Cross Sections —

Model Assumptions

- Configuration provided by Stantec and Dahl Consultants
- Assumptions made to fill data gaps
- Simulations included normal operating range in CVC Pumping Plant 1A and 1B
- Cross section and lateral structure geometry was assumed for the GBJPA turnout reach
 - Pipe diameter: 10 ft
 - Open Channel Width: 50-63 ft
 - Channel slope: 0.002 ft/ft



Legend
■ Length of cross section
■ Distance between cross sections
*All values are in feet

⏪ ⏩ ⏴ ⏵ 🔍 🔄

Findings

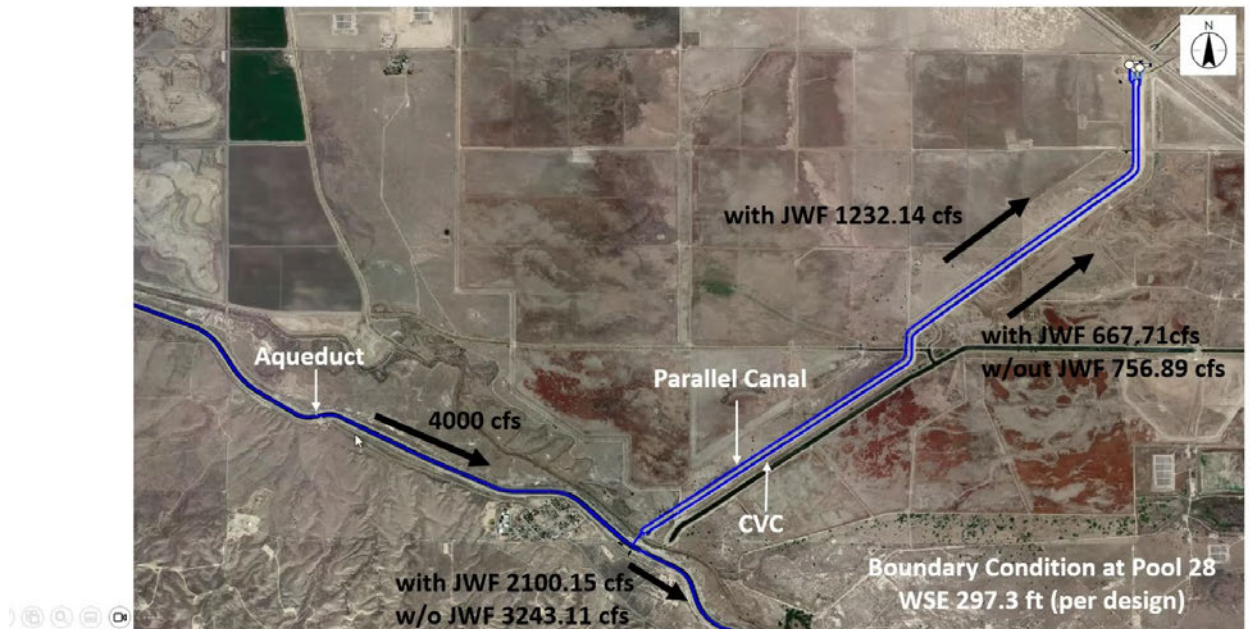
- Modeling disclaimer: *The model results presented herein are preliminary test runs. No design or performance decisions should be based on the limited information provided herein.*
- Manning's n sensitivity analysis was completed to assess the flow split and evaluate impacts of channel roughness

Model Test Runs

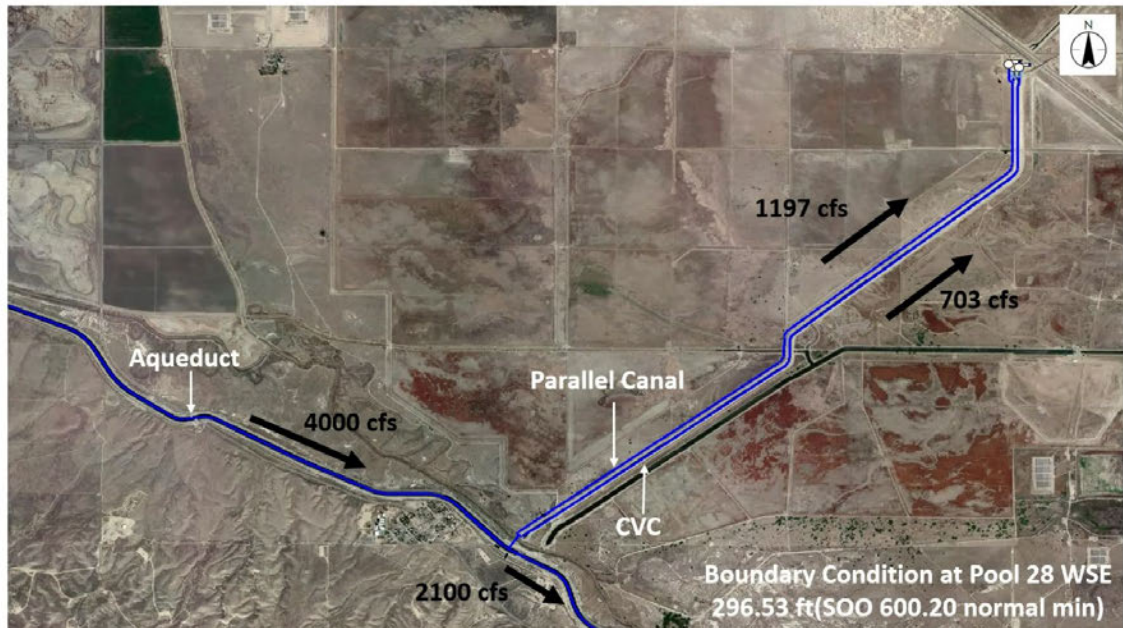
Test simulations performed to check model functionality
Not intended to provide definitive results

1. Joint Works Alternative 5A – WSE and Q Comp - with and w/out JWF
2. Downstream boundary/Pool 28 at low water surface elevation – WSE and Q Comp w/ Pool 28 WSE at the low end of operating WSE range
3. Manning's n Sensitivity Analysis – Varied Manning n in Parallel Canal to assess flow split
 - a) -10%
 - b) +10%
 - c) +5%

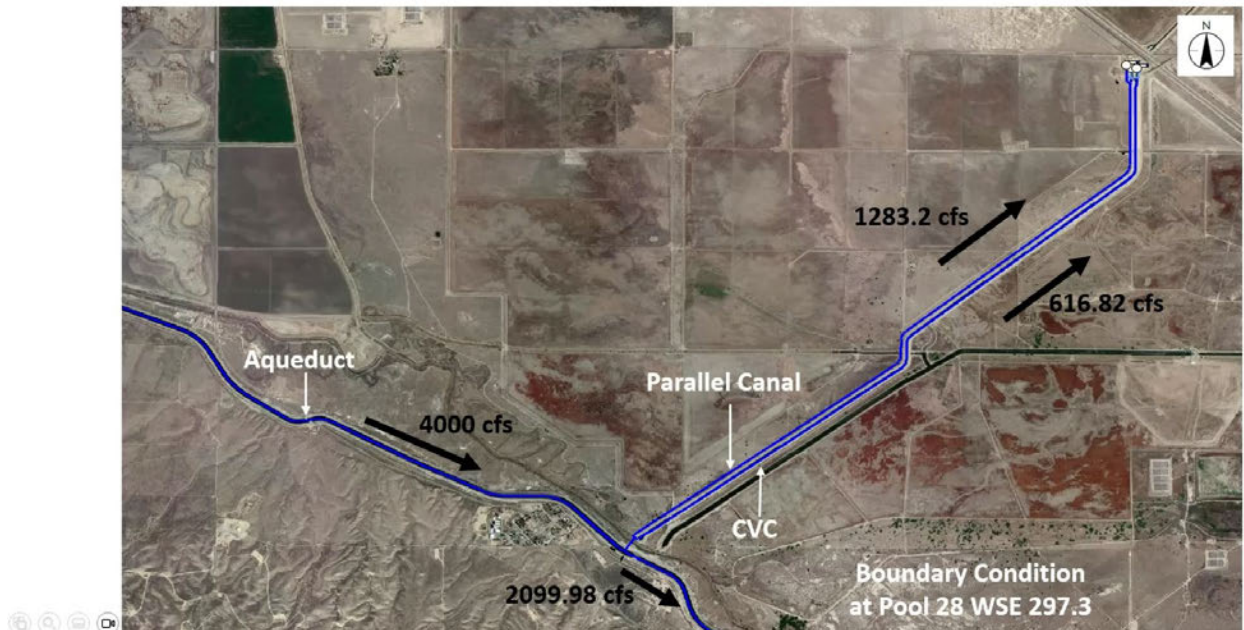
1. Joint Works Alternative 5A (with & w/out)



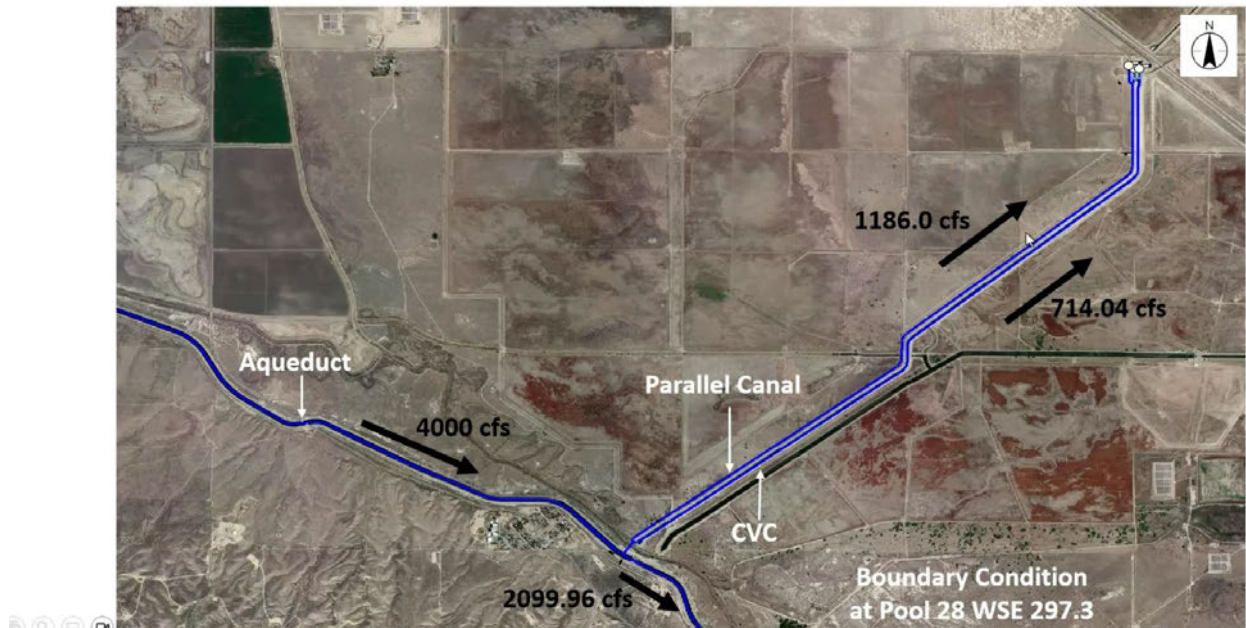
2. Pool 28 DS Boundary at Low WSE



3.A Manning's n Sensitivity Analysis: -10%



3.B Manning's n Sensitivity Analysis: +10%



Model Scenarios

Are there specific scenarios you would like to see?

1. Turnout Assumptions/Loading
2. Peak years
3. With / Without Scenarios
4. Seasonal data
5. What if scenarios?
6. More sensitivity

***Data needs may apply to additional scenarios*

Potential Simulations

1. Model runs/simulations

1. We can look at simulations that we already performed w/ and w/out new facility
2. At 298, 297.3, and at 296.5 WSE at Check 28 how much does this affect flows through know choke points
 1. Understanding the benefits of drawing down Pool 28 (vs. keeping it at a high WSE)
 2. Develop a couple fixed scenarios upstream
 1. no deliveries through 25, and
 2. deliveries through 25
3. Simple worse case scenario and simple best-case scenario
 1. Best high demand in Pool 21 and Pool 25 but nowhere else, not much going to BVPP
 2. No demand in Pool 21 or 25 and getting as much water to BVPP as possible
4. Timing of drawdown
5. Evaluating another turnout configuration (model geometry)
 1. New turnout upstream of the CVC

2. Data Needs

1. Reasonable turnout loading distribution
2. HDR to provide WSE profiles and tables for scenarios simulated to date
 1. Verify vertical datum for model simulations

Phase 1 Small Storage Program Funding

DISCUSSION:

Background:

In December 2022, the Groundwater Banking Joint Powers Authority (GBJPA) submitted a request for Small Surface Water and Groundwater Storage Projects (Small Storage Program) grant funding for Phase 1 of the Kern Fan Groundwater Storage Project in the amount of \$9.8 million to the Bureau of Reclamation (Reclamation). The project was awarded funding in the amount of \$4.7 million. Compliance with the National Environmental Policy Act (NEPA) was completed in October 2023 and the grant funding agreement, provided as Exhibit "A" has been fully executed. Staff is preparing a new grant funding application, for a second round of Small Storage Program funding, in the amount of \$3.9 million. Staff recommends the Board adopt a resolution authorizing submittal of a grant application under the Small Storage Program, confirming the Groundwater Banking Joint Powers Authority's ability to provide its specified cost share, and authorizing the General Manager to execute an agreement to receive the grant funding.

2023 Small Storage Program Funding:

In September 2022 Reclamation released a Notice of Funding Opportunity (NOFO) under the Bipartisan Infrastructure Law Small Storage Program. The Small Storage Program provides up to 25% of the total cost of planning, design and/or construction incurred after November 15, 2021 and completed by the end of 2026, up to a maximum of \$30 million per project. Applicants must fund the other 75% of the project cost.

In December 2022, the GBJPA submitted an application requesting \$9.8 million in federal funding to develop and construct Phase 1 of the Kern Fan Groundwater Storage Project (Kern Fan Project). The total estimated project cost was \$39.1 million. The Phase 1 Project includes the following components:

- Construction of approximately 300 acres of recharge basins on the West Enos and Stockdale North properties;
- Well drilling and equipping of four conjunctive use recovery wells. Two would be located on West Enos and two on Stockdale North; and
- New water conveyance and turnout facilities to connect the new wells with existing delivery facilities.

On April 6, 2023, Reclamation notified the GBJPA that the project was one of only four projects selected for a funding award in the amount of \$4.7 million, subject to meeting requirements for the funding agreement. Those requirements included compliance with NEPA and demonstration of the GBJPA's financial capability to fund the non-federal cost share of \$29.3 million. Those requirements have been met, and the funding agreement,

in the initial amount of \$4.6 million was fully executed on October 26, 2023. Reclamation withholds \$75,000 of the funding, which would be released pending project completion.

2024 Small Storage Funding Opportunity

In September 2023, Reclamation released a Notice of Funding Opportunity (NOFO) for a second round of Small Storage Program funding. Reclamation staff has stated that while there are no assurances, the Phase 1 Project would be a strong candidate to receive the balance of the original funding request. In response to the NOFO, staff is preparing a new grant application, which is due November 30, 2023. As part of the process, staff has updated the overall project costs to \$34.8 million. The new funding application will request \$3.9 million from Reclamation, which is 25% of the revised cost, less the previous funding award of \$4.7 million.

Project Schedule

The proposed schedule for the development and construction of the Phase 1 Project is to initiate construction of the recharge basins in January 2024 and complete construction by January 2025. Well drilling and equipping would begin in January 2025 and be completed in February 2026. Construction of conveyance and interties would begin in June 2025 and be completed by the end of 2026.

Resolution

Reclamation requires that applicants submit a resolution that identifies the representative legally authorized to execute a funding agreement, confirms the applicant's ability to provide its 75% cost share, and acknowledges that the applicant will work with Reclamation on a timely basis to meet agreement schedules. Staff recommends that the Board adopt the resolution, provided as Exhibit "B" to support the Small Storage Program grant application for Phase 1 of the Kern Fan Project.

RECOMMENDATION:

Staff recommends the Board adopt a resolution authorizing submittal of a grant application under the Bureau of Reclamation Surface Water and Groundwater Storage Projects, confirming the Groundwater Banking Joint Powers Authority's ability to provide its required cost share, authorizing the General Manager to execute an agreement to receive the grant funding, and confirming that the GBJPA will work with Reclamation to meet established deadlines.

LIST OF EXHIBITS:

Exhibit "A" – Executed Small Storage Program Agreement

Exhibit "B" – Resolution 2023-04

NOTICE OF AWARD



AUTHORIZATION (Legislation/Regulations)

Infrastructure Investment and Jobs Act Title IX – Western Water Infrastructure, Section 40903, Public Law 117-58, 43 US Code 3203

1. DATE ISSUED MM/DD/YYYY 10/26/2023		1a. SUPERSEDES AWARD NOTICE dated except that any additions or restrictions previously imposed remain in effect unless specifically rescinded	
2. CFDA NO. 15.074 - Small Surface Water and Groundwater Storage Projects (SSWGP)			
3. ASSISTANCE TYPE Project Grant			
4. GRANT NO. R23AP00368-00 Originating MCA #		5. TYPE OF AWARD Other	
4a. FAIN R23AP00368		5a. ACTION TYPE New	
6. PROJECT PERIOD From MM/DD/YYYY 10/26/2023		Through MM/DD/YYYY 12/31/2026	
7. BUDGET PERIOD From MM/DD/YYYY 10/26/2023		Through MM/DD/YYYY 12/31/2026	

8. TITLE OF PROJECT (OR PROGRAM)
Phase 1 - Kern Fan Groundwater Storage Project

9a. GRANTEE NAME AND ADDRESS
GROUNDWATER BANKING JOINT POWERS AUTHORITY
849 Allen Rd
Bakersfield, CA, 93314-9402

9b. GRANTEE PROJECT DIRECTOR
Ms. Fiona Sanchez
15600 Sand Canyon Avenue
Irvine, CA, 92618
Phone: 949-453-5325

10a. GRANTEE AUTHORIZING OFFICIAL
Dan Bartel
849 Allen Road
Bakersfield, CA, 93314-9402
Phone: 6615896045

10b. FEDERAL PROJECT OFFICER
Glen Josephson
Bureau of Reclamation
P.O. Box 25007
Denver, CO, 80225
Phone: 303-445-2662

ALL AMOUNTS ARE SHOWN IN USD

11. APPROVED BUDGET (Excludes Direct Assistance)	
I Financial Assistance from the Federal Awarding Agency Only	
II Total project costs including grant funds and all other financial participation	
a. Salaries and Wages	0.00
b. Fringe Benefits	0.00
c. Total Personnel Costs	0.00
d. Equipment	0.00
e. Supplies	0.00
f. Travel	0.00
g. Construction	25,602,016.00
h. Other	8,995,398.00
i. Contractual	0.00
j. TOTAL DIRECT COSTS	\$ 34,597,414.00
k. INDIRECT COSTS	\$ 0.00
l. TOTAL APPROVED BUDGET	\$ 34,597,414.00
m. Federal Share	\$ 4,667,929.00
n. Non-Federal Share	\$ 29,929,485.00

12. AWARD COMPUTATION	
a. Amount of Federal Financial Assistance (from item 11m)	\$ 4,667,929.00
b. Less Unobligated Balance From Prior Budget Periods	\$ 0.00
c. Less Cumulative Prior Award(s) This Budget Period	\$ 0.00
d. AMOUNT OF FINANCIAL ASSISTANCE THIS ACTION	\$ 4,667,929.00
13. Total Federal Funds Awarded to Date for Project Period	\$ 4,667,929.00

14. RECOMMENDED FUTURE SUPPORT
(Subject to the availability of funds and satisfactory progress of the project):

YEAR	TOTAL DIRECT COSTS	YEAR	TOTAL DIRECT COSTS
a. 2	\$	d. 5	\$
b. 3	\$	e. 6	\$
c. 4	\$	f. 7	\$

15. PROGRAM INCOME SHALL BE USED IN ACCORD WITH ONE OF THE FOLLOWING ALTERNATIVES:

- a. DEDUCTION
- b. ADDITIONAL COSTS
- c. MATCHING
- d. OTHER RESEARCH (Add / Deduct Option)
- e. OTHER (See REMARKS)

e

16. THIS AWARD IS BASED ON AN APPLICATION SUBMITTED TO, AND AS APPROVED BY, THE FEDERAL AWARDING AGENCY ON THE ABOVE TITLED PROJECT AND IS SUBJECT TO THE TERMS AND CONDITIONS INCORPORATED EITHER DIRECTLY OR BY REFERENCE IN THE FOLLOWING:

- a. The grant program legislation
- b. The grant program regulations.
- c. This award notice including terms and conditions, if any, noted below under REMARKS.
- d. Federal administrative requirements, cost principles and audit requirements applicable to this grant.

In the event there are conflicting or otherwise inconsistent policies applicable to the grant, the above order of precedence shall prevail. Acceptance of the grant terms and conditions is acknowledged by the grantee when funds are drawn or otherwise obtained from the grant payment system.

REMARKS (Other Terms and Conditions Attached - Yes No)
See next page

GRANTS MANAGEMENT OFFICIAL:

Glen Josephson, Grants Officer
Bureau of Reclamation
P.O. Box 25007
Denver, CO, 80225
Phone: 303-445-2662

Digitally signed by
GLEN JOSEPHSON
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2	0051041717-00010	\$4,667,929.00	10/26/2023	12/31/2026	0680	Phase 1 - Kern Fan Groundwater Storage P	

NOTICE OF AWARD (Continuation Sheet)

PAGE 2 of 3	DATE ISSUED 10/26/2023
GRANT NO. R23AP00368-00	

REMARKS:

No program income authorized.

Recipients are NOT required to sign the Notice of Award or any other award document. Recipients indicate their acceptance of an award, including award terms and conditions, by starting work, drawing down funds, or accepting the award via electronic means. Recipient acceptance of an award carries with it the responsibility to be aware of and comply with all terms and conditions applicable to the award. Recipients are responsible for ensuring that their subrecipients and contractors are aware of and comply with applicable award statutes, regulations, and terms and conditions. Recipient failure to comply with award terms and conditions can result in Reclamation taking one or more of the remedies and actions described in 2 CFR 200.339343.

Section 11, Approved Budget, on Notice of Award is not representative of the entire agreed upon funding amount. See section I.7, Budget for the full project cost.

NOTICE OF AWARD (Continuation Sheet)

PAGE 3 of 3	DATE ISSUED 10/26/2023
GRANT NO. R23AP00368-00	

Federal Financial Report Cycle			
Reporting Period Start Date	Reporting Period End Date	Reporting Type	Reporting Period Due Date
10/26/2023	03/31/2024	Semi-Annual	04/30/2024
04/01/2024	09/30/2024	Semi-Annual	10/30/2024
10/01/2024	03/31/2025	Semi-Annual	04/30/2025
04/01/2025	09/30/2025	Semi-Annual	10/30/2025
10/01/2025	03/31/2026	Semi-Annual	04/30/2026
04/01/2026	09/30/2026	Semi-Annual	10/30/2026
10/01/2026	12/31/2026	Final	04/30/2027

Performance Progress Report Cycle			
Reporting Period Start Date	Reporting Period End Date	Reporting Type	Reporting Period Due Date
10/26/2023	03/31/2024	Semi-Annual	04/30/2024
04/01/2024	09/30/2024	Semi-Annual	10/30/2024
10/01/2024	03/31/2025	Semi-Annual	04/30/2025
04/01/2025	09/30/2025	Semi-Annual	10/30/2025
10/01/2025	03/31/2026	Semi-Annual	04/30/2026
04/01/2026	09/30/2026	Semi-Annual	10/30/2026
10/01/2026	12/31/2026	Final	04/30/2027

AWARD ATTACHMENTS

GROUNDWATER BANKING JOINT POWERS AUTHORITY

R23AP00368-00

1. Terms and Conditions

UNITED STATES DEPARTMENT OF THE INTERIOR

ASSISTANCE AGREEMENT

R23AP00368

Between
Bureau of Reclamation
And
Groundwater Banking Joint Powers Authority
For
Kern Fan Groundwater Storage Project

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I. OVERVIEW AND SCHEDULE

1. AUTHORITY

This Financial Assistance Agreement (Agreement) is entered into between the United States of America, acting through the Department of the Interior, Bureau of Reclamation (Reclamation) and Groundwater Banking Joint Powers Authority (Recipient), pursuant to The Infrastructure Investments and Jobs Act, Section 40903 of Title IX—Western Water Infrastructure, Public Law 117-58, as amended (43 United States Code [U.S.C.] 3203). The Infrastructure Investments and Jobs Act is commonly referred to as the Bipartisan Infrastructure Law (BIL). The referenced section that authorized Reclamation to award this Agreement is provided in full text below:

SEC. 40903. SMALL WATER STORAGE AND GROUNDWATER STORAGE PROJECTS.

(a) ESTABLISHMENT OF A COMPETITIVE GRANT PROGRAM FOR Small Water Storage and Groundwater Storage Projects. —

The Secretary shall establish a competitive grant program, under which the non-Federal project sponsor of any project in a Reclamation State, including the State of Alaska or Hawaii, determined by the Secretary to be feasible under subsection (b)(2)(B) shall be eligible to apply for funding for the planning, design, and construction of the project.

(b) ELIGIBILITY AND SELECTION.—

(1) Submission to the Secretary. —

(A) IN GENERAL. —A non-Federal project sponsor described in subsection (a) may submit to the Secretary a proposal for a project eligible to receive a grant under this section in the form of a completed feasibility study.

(B) ELIGIBLE PROJECTS. —A project shall be considered eligible for consideration for a grant under this section if the project—

(i) has water storage capacity of not less than 200 acre-feet and not more than 30,000 acre-feet; and

(ii)(I) increases surface water or groundwater storage; or

(II) conveys water, directly or indirectly, to or from surface water or groundwater storage.

(C) GUIDELINES. —Not later than 60 days after the date of enactment of this Act, the Secretary shall issue guidelines for feasibility studies for small storage projects to provide sufficient information for the formulation of the studies.

(2) REVIEW BY THE SECRETARY. —The Secretary shall review each feasibility study received under paragraph (1)(A) for the purpose of determining whether—

(A) the feasibility study, and the process under which the study was developed, each comply with Federal laws (including regulations) applicable to feasibility studies of small storage projects:

(B) the project is technically and financially feasible, in accordance with—

(i) the guidelines developed under paragraph (1)(C); and

(ii) the reclamation laws; and

- (C) the project provides a Federal benefit, as determined by the Secretary.
- (3) SUBMISSION TO CONGRESS. —Not later than 180 days after the date of receipt of a feasibility study received under paragraph (1)(A), the Secretary shall submit to the Committee on Energy and Natural Resources of the Senate and the Committee on Natural Resources of the House of Representatives a report that describes—
 - (A) the results of the review of the study by the Secretary under paragraph (2), including a determination of whether the project is feasible and provides a Federal benefit;
 - (B) any recommendations that the Secretary may have concerning the plan or design of the project; and
 - (C) any conditions the Secretary may require for construction of the project.
- (4) Eligibility for funding. —
 - (A) IN GENERAL. —The Non-Federal project sponsor of any project determined by the Secretary to be feasible under paragraph (3)(A) shall be eligible to apply to the Secretary for a grant to cover the Federal share of the costs of planning, designing, and constructing the project pursuant to subsection (c).
 - (B) REQUIRED DETERMINATION. —Prior to awarding grants to a small storage project, the Secretary shall determine whether there is sufficient non-Federal funding available to complete the project.
 - (5) PRIORITY. —In awarding grants to projects under this section, the Secretary shall give priority to projects that meet 1 or more of the following criteria:
 - (A) Projects that are likely to provide a more reliable water supply for States, Indian Tribes, and local governments, including subdivisions of those entities.
 - (B) Projects that are likely to increase water management flexibility and reduce impacts on environmental resources from projects operated by Federal and State agencies.
 - (C) Projects that are regional in nature.
 - (D) Projects with multiple stakeholders.
 - (E) Projects that provide multiple benefits, including water supply reliability, ecosystem benefits, groundwater management and enhancements, and water quality improvements.
 - (C) CEILING ON FEDERAL SHARE. —The Federal share of the costs of each of the individual projects selected under this section shall not exceed the lesser of—
 - (1) 25 percent of the total project cost; or
 - (2) \$30,000,000.
 - (D) ENVIRONMENTAL LAWS. —In providing funding for a grant for a project under this section, the Secretary shall comply with all applicable environmental laws, including the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.).
 - (E) TERMINATION OF AUTHORITY. —The authority to carry out this section terminates on the date that is 5 years after the date of enactment of this Act.

2. PUBLIC PURPOSE OF SUPPORT OR STIMULATION

The U.S. Department of the Interior, through the Bureau of Reclamation, administers the Small Surface and Groundwater Storage Program (Small Storage Program) to promote Federal assistance to enhance water storage opportunities for future generations in support of the Department’s priorities. Reclamation leverages Federal and non-Federal funding to support stakeholder efforts to stretch scarce water supplies and avoid conflicts over water.

The Kern Fan Groundwater Storage Project (Project) achieves the public purpose of the Act by conserving water and improving water management.

3. BACKGROUND AND OBJECTIVES

Congress enacted the BIL on November 15, 2021. Title IX—Western Water Infrastructure was enacted to address water storage infrastructure that is critical to the Nation’s economic growth, health, and competitiveness. Section 40903 authorizes Reclamation to provide funding for small surface water storage and groundwater storage projects.

Surface water and groundwater storage are essential tools in stretching the limited water supplies in the Western United States. Water storage projects enhance and make more reliable municipal and irrigation water supplies as well as provide opportunities to enhance groundwater management abilities and to provide water quality improvements and ecosystem benefits. These projects will provide Western communities with new sources of water and increase water management flexibility, making water supply more reliable. Water storage projects are an important part of Reclamation and the Department’s priorities.

4. PERIOD OF PERFORMANCE AND FUNDS AVAILABILITY

This Agreement becomes effective on the issue date shown in block 1 of the United States of America, Department of the Interior, Notice of Award (NOA). The Agreement’s project period (period of performance) shall remain in effect through the date shown in block 6 of the NOA and may only be changed through written amendment of the Agreement by a Reclamation Grants Officer (GO).

No legal liability on the part of the Government for any payment may arise until funds are made available, in writing, to the Recipient by a Reclamation GO. The total estimated project cost for this Agreement is **\$34,597,414.00** and the total estimated amount of federal funding is **\$4,742,929.00**. The initial amount of federal funds available is limited to **\$4,667,929.00**, as indicated by “Amount of Financial Assistance This Action” within block 12 of the NOA. Subject to the availability of Congressional appropriations, subsequent funds will be made available for payment through written amendments to this Agreement by a Reclamation GO.

5. SCOPE OF WORK AND MILESTONES

The recipient will construct recharge basins, recovery wells, and conveyance infrastructure and interconnections. Primary Project activities are summarized below:

1. West Enos and North Stockdale Recharge Basins - Construction of approximately 300 net wetted acres (85% of total acres) of direct recharge basins on the West Enos property (approximately 201 acres) and the Stockdale North property (approximately 147 acres) on previously acquired land.

2. West Enos and North Stockdale Recovery Wells - Well drilling and equipping of four (4) conjunctive use recovery wells. Two wells will be located on the West Enos property, and two wells will be located on the Stockdale North property.

Additional detail on Project activities is provided below:

1. Recharge Basins – The recipient will construct approximately 300 net acres (85% of total acres) of direct recharge basins via the placement of 320,000 cubic yards (CY) of compacted levees that are approximately 2-5 feet in height. Upwards of 14,000 acre-feet per year (AFY) (on average wet year 120 days/year) of recharge water will be conveyed from recharge basin to recharge basin via inter-basin check structures once completed. During flood years, when water supplies are abundant throughout the year, the Project could provide approximately 28,000 acre-feet of storage into the Kern Subbasin. Water will be conveyed to the recharge facilities using the existing Cross Valley Canal and Gooselake Channel conveyance facilities and subsequently diverted through two separate inverted siphons with sluice gates.
2. Well Drilling – The recipient will drill four (4) conjunctive use recovery wells. Two wells will be located on the West Enos Property and the Stockdale North property will accommodate the other two wells. At an estimated 5 cfs per well, these wells can recover a total of 20 cfs, which correlates to a maximum of 14,425 acre-feet per year (AFY). The recipient will perform a groundwater impact analysis to study any negative effects on current facilities as well as local landowner wells. The recipient will use previous logs from nearby wells, historical water levels in the area, zone water quality sampling data, and local knowledge to assist with well design and water quality implications. Wells will be drilled to an approximate depth of 650-850 feet, with perforations from approximately 400-700 feet.
3. Well Equipping - The recipient will use a standardized design to equip the recovery wells. Each facility will have variable frequency drives, vacuum relief valve, sleeve coupling with joint harness, high-pressure switch, pressure transmitter, sample port, check valve, pressure gauge, flowmeter, butterfly valve, pipe supports, and a combination air vent. Well discharge piping will be 12-inch fusion bonded epoxy lined and coated steel piping.
4. Water Conveyance Connections - The recipient will connect the new wells with current delivery facilities so that the water can be accessible for both the State and Federal Water Contractors in dry years. The return pipeline from the West Enos recovery facility will run under Enos Lane (Hwy 43) through the same crossing as the delivery box and will run parallel to existing conveyance until it connects to the existing Central Intake Pipeline, running south to the Cross Valley Canal, through approximately 10,000 feet (ft) of 24” PVC pipe. The two recovery wells on the Stockdale North property will tie back into Rosedale Turnout No. 2 where the water is conveyed south to the Cross Valley Canal, approximately 2,500 ft of 18” PVC pipe, and 1,200 ft. of 24” PVC pipe.

Milestone / Task / Activity	Planned Start Date	Planned Completion Date
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(04/2023)

Task 1. Environmental Compliance (CEQA & NEPA)	10/3/2022	11/3/2023
Task 2. Permitting	5/8/2023	12/30/2025
Task 3. Design Phase	6/1/2022	6/30/2025
Task 4. Construction Bid Phase	1/9/2023	1/31/2026
Task 5. Construction Phase	1/31/2024	9/30/2026
5.1 Recharge Basin Construction	1/3/2024	6/30/2025
5.2 Well Drilling and Equipping	1/2/2025	2/28/2026
5.3 Water Conveyance Connections and Interties	6/1/2025	12/30/2026
Project Completion		12/31/2026

The Project is located in Kern County, California, approximately 5 miles west of the City of Bakersfield, and within the boundaries of the Rosedale-Rio Bravo Water Storage District. The Project locations are as follows:

1. The West Enos property latitude is {35°22'35.33''N} and longitude is {119°15'24.90''W} (approximately 201 acres).

2. The Stockdale North property latitude is {35°21'29.24"N} and longitude is {119°15'57.02"W} (approximately 149 acres).

Figure 1. RRBWSD and IRWD Boundaries and Location



6. RESPONSIBILITY OF THE PARTIES

6.1 Recipient Responsibilities

6.1.1 The Recipient shall carry out the Scope of Work (SOW) in accordance with the terms and conditions stated herein. The Recipient shall adhere to Federal, state, and local laws, regulations, and codes, as applicable, and shall obtain all required approvals and permits. If the SOW contains construction activities, the Recipient is responsible for construction inspection, oversight, and acceptance. If applicable, the Recipient shall also coordinate and obtain approvals from site owners and operators.

6.1.2 National Environmental Policy Act (NEPA) and other associated environmental and cultural compliance analyses must be completed before construction, or any other ground disturbing activities can begin. If project activities that require environmental and cultural compliance approval begin prior to receipt of a written notice (Notice to Proceed Letter) from

Reclamation that all such clearances have been obtained, the costs of such activities will not be eligible for reimbursement or application as non-Federal cost share.

6.1.3 Provide Reclamation the necessary information to conduct a financial capability analysis in accordance with Reclamation Directive and Standard, *Title XVI Financial Capability Determination Process* (WTR 11-02) or equivalent. A determination of financial capability must be made by Reclamation before construction, or any other ground disturbing activities can begin. Reclamation will not issue a Notice to Proceed until the financial capability determination has been shared with the GO consistent with Reclamation policy.

6.1.4 Recognize, through inclusion in planned signage, public ceremonies, public outreach documents, and other appropriate methods, the contribution of Reclamation through the Small Storage Program toward completion of the Project.

6.1.5 Provide Reclamation with manuscripts published in scientific journals, as data warrant. Promptly provide to Reclamation, at the Recipient's sole cost, electronic files of all field data, photographs, and research products including reports, analyses, databases, and models, as applicable, that are produced by the Recipient in connection with the investigations undertaken through this Agreement, whether published or not.

6.1.6 Program Specific Reporting Requirements

The interim performance reports should include the following information:

- A comparison of actual accomplishments to the milestones established by the financial assistance agreement for the period.
- The reasons why established milestones were not met, if applicable.
- The status of milestones from the previous reporting period that were not met, if applicable.
- Whether the Project is on schedule and within the original cost estimate.
- Any additional pertinent information or issues related to the status of the Project.
- Photographs documenting the Project are appreciated. Reclamation may print photos with appropriate credit to the applicant.

The final performance report must include, but is not limited to, the following information:

- A brief description of the components of the Project and the work completed, including each element of the scope of work and the work completed at each stage of the Project.
- The goals and objectives of the Project and whether each of these was met, the reasons why goals and objectives were not met (if appropriate), and any problems, delays encountered in completing the Project, and whether or not the Project was completed within cost.
- Future tracking of Project benefits.
- A description of how the Project demonstrates continued collaboration, stakeholder involvement, and/or the formation of partnerships.
- Any other pertinent issues involving the Project, if applicable.

6.2 Reclamation Responsibilities

6.2.1 Reclamation will monitor and provide Federal oversight of activities performed under this Agreement. Monitoring and oversight includes review and approval of financial status and performance reports, payment requests, and any other deliverables identified as part of the SOW. Additional monitoring activities may include site visits, conference calls, and other on-site and off-site monitoring activities. At the Recipient's request, Reclamation may also provide technical assistance to the Recipient in support of the SOW and objectives of this Agreement.

7. BUDGET

7.1 Budget Estimate. The following is the estimated budget for this Agreement. As Federal financial assistance agreements are cost-reimbursable, the budget provided is for estimation purposes only. Final costs incurred under the budget categories listed may be either higher or lower than the estimated costs. All costs incurred by the Recipient under this Agreement must be in accordance with any pre-award clarifications conducted between the Recipient and Reclamation, as well as with the terms and conditions of this Agreement. Final determination of the allowability, allocability, or reasonableness of costs incurred under this Agreement is the responsibility of the GO. Recipients are encouraged to direct any questions regarding allowability, allocability or reasonableness of costs to the GO for review prior to incurrence of the costs in question.

BUDGET ITEM DESCRIPTION	TOTAL COST
SALARIES, WAGES, FRINGE BENEFITS	
	\$0.00
TRAVEL	
	\$0.00
EQUIPMENT	
	\$0.00
SUPPLIES/MATERIALS	
	\$0.00
CONTRACTUAL/ CONSTRUCTION	
Contractual	\$ 8,995,398.00
Construction	\$25,602,016.00
OTHER	
	\$0.00
TOTAL DIRECT COSTS	\$34,597,414.00
INDIRECT COSTS	
	\$0.00
TOTAL ESTIMATED PROJECT COST	\$34,597,414.00

7.2 Cost Sharing Requirement

At least 75% non-Federal cost-share is required for costs incurred under this Agreement. If pre-award costs are authorized, reimbursement of these costs is limited to federal cost share percentage identified in this Agreement.

The Federal share of allowable costs shall not be expended in advance of the Recipient's non-Federal share. It is expected that expenditure of Federal and non-Federal funds based upon the cost share percentage above shall occur concurrently. If a bona fide need arises which requires the expenditure of Federal funds in advance of the Recipient share, then the Recipient must request written approval from the GO prior to the expenditure. Recipients may expend their agreed upon share of costs in advance of the expenditure of Federal funds without prior written approval.

7.3 Pre-Award Incurrence of Costs

The Recipient shall be entitled to reimbursement for costs incurred on or after **November 15, 2021**, which if had been incurred after this Agreement was entered into, would have been allowable, allocable, and reasonable under the terms and conditions of this Agreement.

7.4 Allowable Costs

Costs incurred for the performance of this Agreement must be allowable, allocable to the project, and reasonable. The following regulations, codified within the Code of Federal Regulations (CFR), governs the allowability of costs for Federal financial assistance:

2 CFR 200 Subpart E, "Cost Principles"

Expenditures for the performance of this Agreement must conform to the requirements within this CFR. The Recipient must maintain sufficient documentation to support these expenditures. Questions on the allowability of costs should be directed to the GO responsible for this Agreement.

The Recipient shall not incur costs or obligate funds for any purpose pertaining to operation of the program or activities beyond the expiration date stated in the Agreement. The only costs which are authorized for a period of up to 120 days following the project period are those strictly associated with closeout activities for preparation of the final reports.

7.5 Revision of Budget and Program Plans

In accordance with 2 CFR 200.308(h) the recipient must request prior written approval for any of the following changes:

- (a) A change in the approved scope of work or associated tasks, even if there is no associated budget revisions.
- (b) Revisions which require additional Federal funds to complete the project.

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- (c) Revisions which involve specific costs for which prior written approval requirements may be imposed consistent with OMB cost principles listed in 2 CFR 200 Subpart E “Cost Principles”.

7.6 Prior Approval Required for Use of Contingency Cost Line-Item

Prior approval is required, in writing, from the GO to transfer funds (of any amount) from the contingency cost line-item to other cost categories in the budget. The request for approval from the recipient must be in writing and identify the reason(s) why the transfer is necessary and identify the cost overruns in other budget line-items. If there are no cost-overruns during the performance of construction under the agreement, funds obligated under the contingency cost line-item may be de-obligated by the GO.

7.7 Amendments

Any changes to this Agreement shall be made by means of a written amendment. Reclamation may make changes to the Agreement by amendment to address changes in address, no-cost time extensions, changes to Key Personnel, the addition of previously agreed upon funding, administrative corrections which do not impact the terms and conditions of the Agreement, or it should become necessary to suspend or terminate the Agreement in accordance with 2 CFR 200.340.

No oral statement made by any person, or written statement by any person other than the GO, shall be allowed in any manner or degree to amend, modify or otherwise effect the terms of the Agreement. Acceptance of an amendment is indicated by starting work, drawing down funds, or electronic acceptance.

All requests for amendment of the Agreement shall be made in writing, provide a full description of the reason for the request, and be sent to the attention of the GO. Any request for project period extension shall be made at least 45 days prior to the end of the project period of the Agreement or the project period date of any extension that may have been previously granted. Any determination to extend the project period or to provide follow-on funding for continuation of a project is solely at the discretion of Reclamation.

8. KEY PERSONNEL

8.1 Recipient’s Key Personnel.

The Recipient's Project Manager for this Agreement shall be:

Fiona Sanchez
 Director of Water Resources
 15600 Sand Canyon Avenue
 Irvine CA. 92618

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 (04/2023)

949-453-5325
Sanchezf@irwd.com

9. LIMITATION OF AUTHORITIES

9.1 Grants Officer (GO).

The Reclamation GO is the only official with legal delegated authority to represent Reclamation. The Reclamation GO's responsibilities include, but are not limited to, the following:

- (a) Formally obligate Reclamation to expend funds or change the funding level of the Agreement;
- (b) Approve through formal amendment changes in the scope of work and/or budget;
- (c) Approve through formal amendment any increase or decrease in the period of performance of the Agreement;
- (d) Approve through formal amendment changes in any of the expressed terms, conditions, or specifications of the Agreement;
- (e) Be responsible for the overall administration, management, and other non-programmatic aspects of the Agreement including, but not limited to, interpretation of financial assistance statutes, regulations, circulars, policies, and terms of the Agreement; Where applicable, ensures that Reclamation complies with the administrative requirements required by statutes, regulations, circulars, policies, and terms of the Agreement.

9.2 Grants Management Specialist (GMS).

The Reclamation Grants Management Specialist (GMS) is the primary administrative point of contact for this agreement and should be contacted regarding issues related to the day-to-day management of the agreement. Requests for approval regarding the terms and conditions of the agreement, including but not limited to amendments and prior approval, may only be granted, in writing, by a Reclamation GO. Please note that for some agreements, the Reclamation GO and the Reclamation GMS may be the same individual.

10. REPORTING REQUIREMENTS AND DISTRIBUTION

10.1 Noncompliance. Failure to comply with the reporting requirements contained in this Agreement may be considered a material noncompliance with the terms and conditions of the award. Noncompliance may result in withholding of payments pending receipt of required reports, denying both the use of funds and matching credit for all or part of the cost of the activity or action not in compliance, whole or partial suspension or termination of the Agreement, recovery of funds paid under the Agreement, withholding of future awards, or other legal remedies in accordance with 2 CFR 200.339-340.

10.2 Financial Reports. Federal Financial Reports shall be submitted by means of the SF-425 and shall be submitted according to the Report Frequency and Distribution schedule below. All financial reports shall be signed by an Authorized Certifying Official for the Recipient's organization.

10.3 Monitoring and Reporting Program Performance.

- (a) Monitoring by the non-Federal entity. The non-Federal entity is responsible for oversight of the operations of the Federal award supported activities. The non-Federal entity must monitor its activities under Federal awards to assure compliance with applicable Federal requirements and performance expectations are being achieved. Monitoring by the non-Federal entity must cover each program, function or activity. See also 2 CFR 200.332 Requirements for pass-through entities.
- (b) Non-construction performance reports. The Federal awarding agency must use standard, OMB-approved data elements for collection of performance information (including performance progress reports, Research Performance Progress Report, or such future collections as may be approved by OMB and listed on the OMB Web site).
 - (1) The non-Federal entity must submit performance reports at the interval required by the Federal awarding agency or pass-through entity to best inform improvements in program outcomes and productivity. Intervals must be no less frequent than annually nor more frequent than quarterly except in unusual circumstances, for example where more frequent reporting is necessary for the effective monitoring of the Federal award or could significantly affect program outcomes. Annual reports must be due 90 calendar days after the reporting period; quarterly or semiannual reports must be due 30 calendar days after the reporting period. Alternatively, the Federal awarding agency or pass-through entity may require annual reports before the anniversary dates of multiple year Federal awards. The final performance report will be due 120 calendar days after the period of performance end date. If a justified request is submitted by a non-Federal entity, the Federal agency may extend the due date for any performance report.
 - (2) The non-Federal entity must submit performance reports using OMB-approved governmentwide standard information collections when providing performance information. As appropriate in accordance with above mentioned information collections, these reports will contain, for each Federal award, brief information on the following unless other collections are approved by OMB:
 - (i) A comparison of actual accomplishments to the objectives of the Federal award established for the period. Where the accomplishments of the Federal award can be quantified, a computation of the cost (for example, related to units of accomplishment) may be required if that information will be useful. Where performance trend data and analysis would be informative to the Federal awarding agency program, the Federal awarding agency should include this as a performance reporting requirement.

- (ii) The reasons why established goals were not met, if appropriate.
 - (iii) Additional pertinent information including, when appropriate, analysis and explanation of cost overruns or high unit costs.
- (c) Construction performance reports. For the most part, onsite technical inspections and certified percentage of completion data are relied on heavily by Federal awarding agencies and pass-through entities to monitor progress under Federal awards and subawards for construction. The Federal awarding agency may require additional performance reports only when considered necessary.
- (d) Significant developments. Events may occur between the scheduled performance reporting dates that have significant impact upon the supported activity. In such cases, the non-Federal entity must inform the Federal awarding agency or pass-through entity as soon as the following types of conditions become known:
- (1) Problems, delays, or adverse conditions which will materially impair the ability to meet the objective of the Federal award. This disclosure must include a statement of the action taken, or contemplated, and any assistance needed to resolve the situation.
 - (2) Favorable developments which enable meeting time schedules and objectives sooner or at less cost than anticipated or producing more or different beneficial results than originally planned.

Reclamation requires Performance reporting for all financial assistance awards, both Construction and non-Construction. Performance reports for Construction agreements shall meet the same minimum requirements outlined in paragraph (b)(2) above.

10.4 Report Frequency and Distribution. The following table sets forth the standard reporting requirements for this Agreement. Please note the first report due date listed for each type of report.

Required Reports	Interim Reports	Final Report
Performance Report		
Format	No specific format required. See content requirements within Section 10.3 and any program specific reporting requirements identified in Section 6.1 of this Agreement.	Summary of activities completed during the entire period of performance is required. See content requirements within Section 10.3 and any program specific reporting requirements identified in Section 6.1 of this Agreement.
Reporting Frequency	Semi-Annual	Final Report due within 120 days after the end of the period of performance.
Reporting Period	October 1 through March 31 and April 1 through September 30.	Entire period of performance
Due Date	Within 30 days after the end of the Reporting Period.	Final Report due within 120 days after the end of the period of performance or completion of the project.
First Report Due Date	The first performance report is due for reporting period ending 03/31/2024 .	N/A
Submit to:	GrantSolutions.gov	GrantSolutions.gov
Federal Financial Report		
Format	SF-425 (all sections must be completed)	SF-425(all sections must be completed)
Reporting Frequency	Semi-Annual	Final Report due within 120 days after the end of the period of performance or completion of the project.
Reporting Period	October 1 through March 31 and April 1 through September 30.	Entire period of performance
Due Date	Within 30 days after the end of the Reporting Period.	Final Report due within 120 days after the end of the period of performance or completion of project.
First Report Due Date	The first Federal financial report is due for reporting period ending 03/31/2024 .	N/A
Submit to:	GrantSolutions.gov	GrantSolutions.gov

11. REGULATORY COMPLIANCE

The Recipient agrees to comply or assist Reclamation with all regulatory compliance requirements and all applicable state, Federal, and local environmental and cultural and paleontological resource protection laws and regulations as applicable to this project. These may include, but are not limited to, NEPA, including the Council on Environmental Quality and Department of the Interior regulations implementing NEPA, the Clean Water Act, the Endangered Species Act, consultation with potentially affected Tribes, and consultation with the

State Historic Preservation Office. If the Recipient begins project activities that require environmental or other regulatory compliance approval prior to receipt of written notice from a Reclamation GO that all such clearances have been obtained, then Reclamation reserves the right to initiate remedies for non-compliance as defined by 2 CFR 200.339-340 up to and including unilateral termination of this agreement.

12. BUY AMERICA DOMESTIC PROCUREMENT PREFERENCE, Public Law 117-58, Sec. 70911-70917 of IIJA

As required by Section 70914 of the Bipartisan Infrastructure Law (also known as the Infrastructure Investment and Jobs Act), P.L. 117-58, on or after May 14, 2022, none of the funds under a federal award that are part of Federal financial assistance program for infrastructure may be obligated for a project unless all of the iron, steel, manufactured products, and construction materials used in the project are produced in the United States, unless subject to an approved waiver. The requirements of this section must be included in all subawards, including all contracts and purchase orders for work or products under this program.

Recipients of an award of Federal financial assistance are hereby notified that none of the funds provided under this award may be used for a project for infrastructure unless:

1. all iron and steel used in the project are produced in the United States--this means all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States;
2. all manufactured products used in the project are produced in the United States—this means the manufactured product was manufactured in the United States; and the cost of the components of the manufactured product that are mined, produced, or manufactured in the United States is greater than 55 percent of the total cost of all components of the manufactured product, unless another standard for determining the minimum amount of domestic content of the manufactured product has been established under applicable law or regulation; and
3. all construction materials are manufactured in the United States—this means that all manufacturing processes for the construction material occurred in the United States.

The Buy America preference only applies to articles, materials, and supplies that are consumed in, incorporated into, or affixed to an infrastructure project. As such, it does not apply to tools, equipment, and supplies, such as temporary scaffolding, brought to the construction site and removed at or before the completion of the infrastructure project. Nor does a Buy America preference apply to equipment and furnishings, such as movable chairs, desks, and portable computer equipment, that are used at or within the finished infrastructure project, but are not an integral part of the structure or permanently affixed to the infrastructure project.

For further information on the Buy America preference, please visit www.doi.gov/grants/BuyAmerica. Additional information can also be found at the White House Made in America Office website: www.whitehouse.gov/omb/management/made-in-america/.

Waivers

When necessary, recipients may apply for, and the Department of the Interior (DOI) may grant, a waiver from these requirements, subject to review by the Made in America Office. The DOI may waive the application of the domestic content procurement preference in any case in which it is determined that one of the below circumstances applies:

1. Non-availability Waiver: the types of iron, steel, manufactured products, or construction materials are not produced in the United States in sufficient and reasonably available quantities or of a satisfactory quality;
2. Unreasonable Cost Waiver: the inclusion of iron, steel, manufactured products, or construction materials produced in the United States will increase the cost of the overall project by more than 25 percent; or
3. Public Interest Waiver: applying the domestic content procurement preference would be inconsistent with the public interest.

There may be instances where an award qualifies, in whole or in part, for an existing DOI general applicability waiver as described at:

www.doi.gov/grants/BuyAmerica/GeneralApplicabilityWaivers. If the specific financial assistance agreement, infrastructure project, or non-domestic materials meets the criteria of an existing general applicability waiver within the limitations defined within the waiver, the recipient is not required to request a separate waiver for non-domestic materials.

If a general applicability waiver does not already apply, and a recipient believes that one of the above circumstances applies to an award, a request to waive the application of the domestic content procurement preference may be submitted to the financial assistance awarding officer in writing. Waiver requests shall include the below information. The waiver shall not include any Privacy Act information, sensitive data, or proprietary information within their waiver request. Waiver requests will be posted to www.doi.gov/grants/buyamerica and are subject to public comment periods of no less than 15 days.

Waiver requests will also be reviewed by the Made in America Office.

1. Type of waiver requested (non-availability, unreasonable cost, or public interest).
2. Requesting entity and Unique Entity Identifier (UEI) submitting the request.
3. Department of Interior Bureau or Office who issued the award.
4. Federal financial assistance listing name and number (reference block 2 on DOI Notice of Award)
5. Financial assistance title of project (reference block 8 on DOI Notice of Award).
6. Federal Award Identification Number (FAIN).
7. Federal funding amount (reference block 11.m. on DO Notice of Award).
8. Total cost of Infrastructure expenditures (includes federal and non-federal funds to the extent known).
9. Infrastructure project description(s) and location(s) (to the extent known).
10. List of iron or steel item(s), manufactured goods, and construction material(s) the recipient seeks to waive from Buy America requirements. Include the name, cost, countries of origin (if known), and relevant [PSC](#) or [NAICS](#) code for each.

11. A certification that the recipient made a good faith effort to solicit bids for domestic products supported by terms included in requests for proposals, contracts, and nonproprietary communications with the prime contractor.
12. A statement of waiver justification, including a description of efforts made (e.g., market research, industry outreach) by the recipient, in an attempt to avoid the need for a waiver. Such a justification may cite, if applicable, the absence of any Buy America-compliant bids received in response to a solicitation.
13. Anticipated impact if no waiver is issued.

Approved waivers will be posted at www.doi.gov/grants/BuyAmerica/ApprovedWaivers; recipients requesting a waiver will be notified of their waiver request determination by an awarding officer.

Questions pertaining to waivers should be directed to the financial assistance awarding officer.

Definitions

“Construction materials” includes an article, material, or supply that is or consists primarily of:

- non-ferrous metals;
- plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables);
- glass (including optic glass);
- lumber; or
- drywall.

“Construction Materials” does **not** include cement and cementitious materials, aggregates such as stone, sand, or gravel, or aggregate binding agents or additives.

“Domestic content procurement preference” means all iron and steel used in the project are produced in the United States; the manufactured products used in the project are produced in the United States; or the construction materials used in the project are produced in the United States.

“Infrastructure” includes, at a minimum, the structures, facilities, and equipment for, in the United States, roads, highways, and bridges; public transportation; dams, ports, harbors, and other maritime facilities; intercity passenger and freight railroads; freight and intermodal facilities; airports; water systems, including drinking water and wastewater systems; electrical transmission facilities and systems; utilities; broadband infrastructure; and buildings and real property. Infrastructure includes facilities that generate, transport, and distribute energy.

“Project” means the construction, alteration, maintenance, or repair of infrastructure in the United States

13. WAGE RATE REQUIREMENTS, Public Law 117-58, Sec. 41101

Section 41101 of the Bipartisan Infrastructure Law (also known as the Infrastructure Investment and Jobs Act), P.L. 117-58, requires that all laborers and mechanics employed by contractors or subcontractor in the performance of construction, alteration, or repair work on a project assisted in whole or in part by funding made available under BIL shall be paid wages at rates not less

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than those prevailing on similar projects in the locality, as determined by the Secretary of Labor in accordance with Subchapter IV of Chapter 31 of Title 40, United States Code (commonly referred to as the Davis-Bacon Act).

14. REAL PROPERTY, 2 CFR §200.311

Real property, equipment, and intangible property that are acquired or improved with a Federal award must be held in trust by the non-Federal entity as trustee for the beneficiaries of the project or program under which the property was acquired or improved (2 CFR §200.316). Title to real property acquired or improved under a Federal award will vest upon acquisition in the non-Federal entity. Except as otherwise provided by Federal statutes or by the Federal awarding agency, real property will be used for the originally authorized purpose as long as needed for that purpose, during which time the non-Federal entity must not dispose of or encumber its title or other interests. When real property is no longer needed for the originally authorized purpose, the non-Federal entity must obtain disposition instructions from the Federal awarding agency or pass-through entity. As required by 2 CFR §200.329, Reporting on real property, recipient is required to submit reports on the status of real property acquired or improved under a this financial assistance agreement.

II. RECLAMATION STANDARD TERMS AND CONDITIONS

1. REGULATIONS

The regulations at [2 CFR Subtitle A, Chapter II, Part 200](#) “Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards”, are hereby incorporated by reference as though set forth in full text. Failure of a Recipient to comply with any applicable regulation or circular may be the basis for withholding payments for proper charges made by the Recipient and/or for termination of support.

2. PAYMENT

2.1 Payment (2 CFR 200.305).

(a) For states, payments are governed by Treasury-State Cash Management Improvement Act (CMIA) agreements and default procedures codified at 31 CFR part 205 and Treasury Financial Manual (TFM) 4A-2000, “Overall Disbursing Rules for All Federal Agencies”.

(b) For non-Federal entities other than states, payments methods must minimize the time elapsing between the transfer of funds from the United States Treasury or the pass-through entity and the disbursement by the non-Federal entity whether the payment is made by electronic funds transfer, or issuance or redemption of checks, warrants, or payment by other means. See also §200.302(b). Except as noted elsewhere in this part, Federal agencies must require recipients to use only OMB-approved, governmentwide information collection requests to request payment.

- (1) The non-Federal entity must be paid in advance, provided it maintains or demonstrates the willingness to maintain both written procedures that minimize the time elapsing between the transfer of funds and disbursement by the non-Federal entity, and financial management systems that meet the standards for fund control and accountability as established in this part. Advance payments to a non-Federal entity must be limited to the minimum amounts needed and be timed to be in accordance with the actual, immediate cash requirements of the non-Federal entity in carrying out the purpose of the approved program or project. The timing and amount of advance payments must be as close as is administratively feasible to the actual disbursements by the non-Federal entity for direct program or project costs and the proportionate share of any allowable indirect costs. The non-Federal entity must make timely payment to contractors in accordance with the contract provisions.
- (2) Whenever possible, advance payments must be consolidated to cover anticipated cash needs for all Federal awards made by the Federal awarding agency to the recipient.
 - (i) Advance payment mechanisms include, but are not limited to, Treasury check and electronic funds transfer and must comply with applicable guidance in 31 CFR part 208.
 - (ii) Non-Federal entities must be authorized to submit requests for advance payments and reimbursements at least monthly when electronic fund transfers are not used, and as often as they like when electronic transfers are used, in accordance with the provisions of the Electronic Fund Transfer Act (15 U.S.C. 1693-1693r).
- (3) Reimbursement is the preferred method when the requirements in this paragraph (b) cannot be met, when the Federal awarding agency sets a specific condition per §200.208, or when the non-Federal entity requests payment by reimbursement. This method may be used on any Federal award for construction, or if the major portion of the construction project is accomplished through private market financing or Federal loans, and the Federal award constitutes a minor portion of the project. When the reimbursement method is used, the Federal awarding agency or pass-through entity must make payment within 30 calendar days after receipt of the billing, unless the Federal awarding agency or pass-through entity reasonably believes the request to be improper.
- (4) If the non-Federal entity cannot meet the criteria for advance payments and the Federal awarding agency or pass-through entity has determined that reimbursement is not feasible because the non-Federal entity lacks sufficient working capital, the Federal awarding agency or pass-through entity may provide cash on a working capital advance basis. Under this procedure, the Federal awarding agency or pass-through entity must advance cash payments to the non-Federal entity to cover its estimated disbursement needs for an initial period generally geared to the non-Federal entity's disbursing cycle. Thereafter, the Federal awarding agency or pass-through entity must reimburse the non-Federal entity for its actual cash disbursements. Use of the working capital advance method of payment requires that the pass-through entity provide timely advance payments to any subrecipients in order to meet the subrecipient's actual cash disbursements. The working capital advance method of payment must not be used by the pass-through entity if the reason for using this method is the unwillingness or inability of the pass-through entity to

provide timely advance payments to the subrecipient to meet the subrecipient's actual cash disbursements.

- (5) To the extent available, the non-Federal entity must disburse funds available from program income (including repayments to a revolving fund), rebates, refunds, contract settlements, audit recoveries, and interest earned on such funds before requesting additional cash payments.
- (6) Unless otherwise required by Federal statutes, payments for allowable costs by non-Federal entities must not be withheld at any time during the period of performance unless the conditions of §200.208, subpart D of this part, including §200.339, or one or more of the following applies:
 - (i) The non-Federal entity has failed to comply with the project objectives, Federal statutes, regulations, or the terms and conditions of the Federal award.
 - (ii) The non-Federal entity is delinquent in a debt to the United States as defined in OMB Circular A-129, "Policies for Federal Credit Programs and Non-Tax Receivables." Under such conditions, the Federal awarding agency or pass-through entity may, upon reasonable notice, inform the non-Federal entity that payments must not be made for financial obligations incurred after a specified date until the conditions are corrected or the indebtedness to the Federal Government is liquidated.
 - (iii) A payment withheld for failure to comply with Federal award conditions, but without suspension of the Federal award, must be released to the non-Federal entity upon subsequent compliance. When a Federal award is suspended, payment adjustments will be made in accordance with §200.343.
 - (iv) A payment must not be made to a non-Federal entity for amounts that are withheld by the non-Federal entity from payment to contractors to assure satisfactory completion of work. A payment must be made when the non-Federal entity actually disburses the withheld funds to the contractors or to escrow accounts established to assure satisfactory completion of work.
- (7) Standards governing the use of banks and other institutions as depositories of advance payments under Federal awards are as follows:
 - (i) The Federal awarding agency and pass-through entity must not require separate depository accounts for funds provided to a non-Federal entity or establish any eligibility requirements for depositories for funds provided to the non-Federal entity. However, the non-Federal entity must be able to account for funds received, obligated, and expended.
 - (ii) Advance payments of Federal funds must be deposited and maintained in insured accounts whenever possible.
- (8) The non-Federal entity must maintain advance payments of Federal awards in interest-bearing accounts, unless the following apply:

- (i) The non-Federal entity receives less than \$250,000 in Federal awards per year.
 - (ii) The best reasonably available interest-bearing account would not be expected to earn interest in excess of \$500 per year on Federal cash balances.
 - (iii) The depository would require an average or minimum balance so high that it would not be feasible within the expected Federal and non-Federal cash resources.
 - (iv) A foreign government or banking system prohibits or precludes interest-bearing accounts.
- (9) Interest earned amounts up to \$500 per year may be retained by the non-Federal entity for administrative expense. Any additional interest earned on Federal advance payments deposited in interest-bearing accounts must be remitted annually to the Bureau of Reclamation through an electronic medium using either Automated Clearing House (ACH) network or a Fedwire Funds Service payment.
- (i) For returning interest on Federal awards paid through ASAP, the refund should:
 - (A) Provide an explanation stating that the refund is for interest;
 - (B) List the ASAP Account
 - (C) List the Federal award number(s) for which the interest was earned; and
 - (D) Make returns payable to: Bureau of Reclamation.
 - (ii) For returning interest on Federal awards not paid through ASAP, the refund should:
 - (A) Provide an explanation stating that the refund is for interest;
 - (B) List the Federal award number(s) for which the interest was earned; and
 - (C) Make returns payable to: Bureau of Reclamation
- (10) Funds, principal, and excess cash returns must be directed to the original Federal agency payment system. The non-Federal entity should review instructions from the original Federal agency payment system. Returns should include the following information:
- (i) Agency information to indicate whom to credit the funding if the payment originated from ASAP, NSF, PMS, or another Federal agency payment system.
 - (ii) Relevant ASAP account numbers.
 - (iii) The reason for the return (e.g., excess cash, funds not spent, interest, part interest part other, etc.)
- (11) When returning funds or interest to Reclamation you must include the following as applicable:
- (i) For ACH Returns:
 ABA Routing Number: 051036706
 Account number: 312018

Bank Name and Location: Credit Gateway, Federal Reserve Bank, Richmond, VA

Agreement Number: Reclamation Grant or Cooperative Agreement Number

(ii) For Fedwire Returns¹:

ABA Routing Number: 021030004

ABA Short Name: TREAS NYC

Account number: 14060905

Beneficiary Name: Bureau of Reclamation

Bank Name and Location: Federal Reserve Bank, 33 Liberty Street, Federal Reserve Post Office Station, New York, NY 10045

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¹Please note that the organization initiating payment is likely to incur a charge from their Financial Institution for this type of payment.

(iii) For International ACH Returns:

Beneficiary Account: Federal Reserve Bank of New York/ITS (FRBNY/ITS)

Bank: Citibank N.A. (New York)

Swift Code: CITIUS33

Account Number: 36838868

Bank Address: 388 Greenwich Street, New York, NY 10013 USA

Payment Details (Line 70): Agency Name (abbreviated when possible) and Agency Locator Code (ALC): 75010501

(iv) For recipients that do not have electronic remittance capability, please make check payable to: “Bureau of Reclamation” and **include** the award number and ASAP account number in the memo lines of the check.

Please note it can take up to three weeks to process once received.

Mail (by USPS only) the check to Treasury approved lockbox:

DOI-BOR-Region: Denver

P.O. Box 6200-21

Portland, OR

97228-6200

2.2 Payment Method.

Recipients must utilize the Department of Treasury Automated Standard Application for Payments (ASAP) payment system to request advance or reimbursement payments. ASAP is a Recipient-initiated payment and information system designed to provide a single point of contact for the request and delivery of Federal funds. ASAP is the only allowable method for request and receipt of payment. Recipient procedures must minimize the time elapsing between the drawdown of Federal funds and the disbursement for agreement purposes.

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In accordance with 2 CFR 25.200(b)(2)(3) the Recipient shall “Maintain an active SAM registration with current information, including information on a recipient's immediate and highest level owner and subsidiaries, as well as on all predecessors that have been awarded a Federal contract or grant within the last three years, if applicable, at all times during which it has an active Federal award or an application or plan under consideration by a Federal awarding agency; and provide its unique entity identifier in each application or plan it submits to the Federal awarding agency. If the Recipient allows their SAM registration to lapse, the Recipient’s accounts within ASAP will be automatically suspended by Reclamation until such time as the Recipient renews their SAM registration.

3. PROCUREMENT STANDARDS (2 CFR 200.317 through 200.327)

§200.317 Procurements by States.

When procuring property and services under a Federal award, a State must follow the same policies and procedures it uses for procurements from its non-Federal funds. The State will comply with §§200.321, 200.322, and 200.323 and ensure that every purchase order or other contract includes any clauses required by §200.327. All other non-Federal entities, including subrecipients of a State, must follow the procurement standards in §§200.318 through 200.327.

§200.318 General procurement standards.

- (a) The non-Federal entity must use its own documented procurement procedures which reflect applicable State, local, and tribal laws and regulations, provided that the procurements conform to applicable Federal law and the standards identified in this part.
- (b) Non-Federal entities must maintain oversight to ensure that contractors perform in accordance with the terms, conditions, and specifications of their contracts or purchase orders.
- (c)
 - (1) The non-Federal entity must maintain written standards of conduct covering conflicts of interest and governing the actions of its employees engaged in the selection, award and administration of contracts. No employee, officer, or agent may participate in the selection, award, or administration of a contract supported by a Federal award if he or she has a real or apparent conflict of interest. Such a conflict of interest would arise when the employee, officer, or agent, any member of his or her immediate family, his or her partner, or an organization which employs or is about to employ any of the parties indicated herein, has a financial or other interest in or a tangible personal benefit from a firm considered for a contract. The officers, employees, and agents of the non-Federal entity may neither solicit nor accept gratuities, favors, or anything of monetary value from contractors or parties to subcontracts. However, non-Federal entities may set standards for situations in which the financial interest is not substantial or the gift is an unsolicited item of nominal value. The standards of

conduct must provide for disciplinary actions to be applied for violations of such standards by officers, employees, or agents of the non-Federal entity.

- (2) If the non-Federal entity has a parent, affiliate, or subsidiary organization that is not a state, local government, or Indian tribe, the non-Federal entity must also maintain written standards of conduct covering organizational conflicts of interest. Organizational conflicts of interest means that because of relationships with a parent company, affiliate, or subsidiary organization, the non-Federal entity is unable or appears to be unable to be impartial in conducting a procurement action involving a related organization.
- (d) The non-Federal entity's procedures must avoid acquisition of unnecessary or duplicative items. Consideration should be given to consolidating or breaking out procurements to obtain a more economical purchase. Where appropriate, an analysis will be made of lease versus purchase alternatives, and any other appropriate analysis to determine the most economical approach.
- (e) To foster greater economy and efficiency, and in accordance with efforts to promote cost-effective use of shared services across the Federal Government, the non-Federal entity is encouraged to enter into state and local intergovernmental agreements or inter-entity agreements where appropriate for procurement or use of common or shared goods and services.
- (f) The non-Federal entity is encouraged to use Federal excess and surplus property in lieu of purchasing new equipment and property whenever such use is feasible and reduces project costs.
- (g) The non-Federal entity is encouraged to use value engineering clauses in contracts for construction projects of sufficient size to offer reasonable opportunities for cost reductions. Value engineering is a systematic and creative analysis of each contract item or task to ensure that its essential function is provided at the overall lower cost.
- (h) The non-Federal entity must award contracts only to responsible contractors possessing the ability to perform successfully under the terms and conditions of a proposed procurement. Consideration will be given to such matters as contractor integrity, compliance with public policy, record of past performance, and financial and technical resources. See also 200.212 Suspension and debarment.
- (i) The non-Federal entity must maintain records sufficient to detail the history of procurement. These records will include, but are not necessarily limited to the following: rationale for the method of procurement, selection of contract type, contractor selection or rejection, and the basis for the contract price.
- (j)
- (1) The non-Federal entity may use a time and materials type contract only after a determination that no other contract is suitable and if the contract includes a

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ceiling price that the contractor exceeds at its own risk. Time and materials type contract means a contract whose cost to a non-Federal entity is the sum of:(i) The actual cost of materials; and

- (ii) Direct labor hours charged at fixed hourly rates that reflect wages, general and administrative expenses, and profit.
- (2) Since this formula generates an open-ended contract price, a time-and-materials contract provides no positive profit incentive to the contractor for cost control or labor efficiency. Therefore, each contract must set a ceiling price that the contractor exceeds at its own risk. Further, the non-Federal entity awarding such a contract must assert a high degree of oversight in order to obtain reasonable assurance that the contractor is using efficient methods and effective cost controls.
- (k) The non-Federal entity alone must be responsible, in accordance with good administrative practice and sound business judgment, for the settlement of all contractual and administrative issues arising out of procurements. These issues include, but are not limited to, source evaluation, protests, disputes, and claims. These standards do not relieve the non-Federal entity of any contractual responsibilities under its contracts. The Federal awarding agency will not substitute its judgment for that of the non-Federal entity unless the matter is primarily a Federal concern. Violations of law will be referred to the local, state, or Federal authority having proper jurisdiction.

§200.319 Competition.

- (a) All procurement transactions for the acquisition of property or services required under a Federal award must be conducted in a manner providing full and open competition consistent with the standards of this section and §200.320.
- (b) In order to ensure objective contractor performance and eliminate unfair competitive advantage, contractors that develop or draft specifications, requirements, statements of work, or invitations for bids or requests for proposals must be excluded from competing for such procurements. Some of the situations considered to be restrictive of competition include but are not limited to:
 - (1) Placing unreasonable requirements on firms in order for them to qualify to do business;
 - (2) Requiring unnecessary experience and excessive bonding;
 - (3) Noncompetitive pricing practices between firms or between affiliated companies;
 - (4) Noncompetitive contracts to consultants that are on retainer contracts;
 - (5) Organizational conflicts of interest;
 - (6) Specifying only a “brand name” product instead of allowing “an equal” product to be offered and describing the performance or other relevant requirements of the procurement; and
 - (7) Any arbitrary action in the procurement process.

- (c) The non-Federal entity must conduct procurements in a manner that prohibits the use of statutorily or administratively imposed state, local, or tribal geographical preferences in the evaluation of bids or proposals, except in those cases where applicable Federal statutes expressly mandate or encourage geographic preference. Nothing in this section preempts state licensing laws. When contracting for architectural and engineering (A/E) services, geographic location may be a selection criterion provided its application leaves an appropriate number of qualified firms, given the nature and size of the project, to compete for the contract.
- (d) The non-Federal entity must have written procedures for procurement transactions. These procedures must ensure that all solicitations:
 - (1) Incorporate a clear and accurate description of the technical requirements for the material, product, or service to be procured. Such description must not, in competitive procurements, contain features which unduly restrict competition. The description may include a statement of the qualitative nature of the material, product or service to be procured and, when necessary, must set forth those minimum essential characteristics and standards to which it must conform if it is to satisfy its intended use. Detailed product specifications should be avoided if at all possible. When it is impractical or uneconomical to make a clear and accurate description of the technical requirements, a “brand name or equivalent” description may be used as a means to define the performance or other salient requirements of procurement. The specific features of the named brand which must be met by offers must be clearly stated; and
 - (2) Identify all requirements which the offerors must fulfill and all other factors to be used in evaluating bids or proposals.
- (e) The non-Federal entity must ensure that all prequalified lists of persons, firms, or products which are used in acquiring goods and services are current and include enough qualified sources to ensure maximum open and free competition. Also, the non-Federal entity must not preclude potential bidders from qualifying during the solicitation period.
- (f) Noncompetitive procurements can only be awarded in accordance with §200.320(c).

§200.320 Methods of procurement to be followed.

The non-Federal entity must have and use documented procurement procedures, consistent with the standards of this section and §§200.317, 200.318, and 200.319 for any of the following methods of procurement used for the acquisition of property or services required under a Federal award or sub-award.

- (a) Informal procurement methods. When the value of the procurement for property or services under a Federal award does not exceed the simplified acquisition threshold (SAT), as defined in §200.1, or a lower threshold established by a non-Federal entity, formal procurement methods are not required. The non-Federal entity may use informal procurement methods to expedite the completion of its transactions and minimize the

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associated administrative burden and cost. The informal methods used for procurement of property or services at or below the SAT include:

- (1) Micro-purchases—(i) Distribution. The acquisition of supplies or services, the aggregate dollar amount of which does not exceed the micro-purchase threshold (See the definition of micro-purchase in §200.1). To the maximum extent practicable, the non-Federal entity should distribute micro-purchases equitably among qualified suppliers.
- (ii) Micro-purchase awards. Micro-purchases may be awarded without soliciting competitive price or rate quotations if the non-Federal entity considers the price to be reasonable based on research, experience, purchase history or other information and documents it files accordingly. Purchase cards can be used for micro-purchases if procedures are documented and approved by the non-Federal entity.
- (iii) Micro-purchase thresholds. The non-Federal entity is responsible for determining and documenting an appropriate micro-purchase threshold based on internal controls, an evaluation of risk, and its documented procurement procedures. The micro-purchase threshold used by the non-Federal entity must be authorized or not prohibited under State, local, or tribal laws or regulations. Non-Federal entities may establish a threshold higher than the Federal threshold established in the Federal Acquisition Regulations (FAR) in accordance with paragraphs (a)(1)(iv) and (v) of this section.
- (iv) Non-Federal entity increase to the micro-purchase threshold up to \$50,000. Non-Federal entities may establish a threshold higher than the micro-purchase threshold identified in the FAR in accordance with the requirements of this section. The non-Federal entity may self-certify a threshold up to \$50,000 on an annual basis and must maintain documentation to be made available to the Federal awarding agency and auditors in accordance with §200.334. The self-certification must include a justification, clear identification of the threshold, and supporting documentation of any of the following:
 - (A) A qualification as a low-risk auditee, in accordance with the criteria in §200.520 for the most recent audit;
 - (B) An annual internal institutional risk assessment to identify, mitigate, and manage financial risks; or,
 - (C) For public institutions, a higher threshold consistent with State law.
- (v) Non-Federal entity increase to the micro-purchase threshold over \$50,000. Micro-purchase thresholds higher than \$50,000 must be approved by the cognizant agency for indirect costs. The non-federal entity must submit a request with the requirements included in paragraph (a)(1)(iv) of this section. The increased threshold is valid until there is a change in status in which the justification was approved.

(2) Small purchases—(i) Small purchase procedures. The acquisition of property or services, the aggregate dollar amount of which is higher than the micro-purchase threshold but does not exceed the simplified acquisition threshold. If small purchase procedures are used, price or rate quotations must be obtained from an adequate number of qualified sources as determined appropriate by the non-Federal entity.

(ii) Simplified acquisition thresholds. The non-Federal entity is responsible for determining an appropriate simplified acquisition threshold based on internal controls, an evaluation of risk and its documented procurement procedures which must not exceed the threshold established in the FAR. When applicable, a lower simplified acquisition threshold used by the non-Federal entity must be authorized or not prohibited under State, local, or tribal laws or regulations.

(b) Formal procurement methods. When the value of the procurement for property or services under a Federal financial assistance award exceeds the SAT, or a lower threshold established by a non-Federal entity, formal procurement methods are required. Formal procurement methods require following documented procedures. Formal procurement methods also require public advertising unless a non-competitive procurement can be used in accordance with §200.319 or paragraph (c) of this section. The following formal methods of procurement are used for procurement of property or services above the simplified acquisition threshold or a value below the simplified acquisition threshold the non-Federal entity determines to be appropriate:

(1) Sealed bids. A procurement method in which bids are publicly solicited and a firm fixed-price contract (lump sum or unit price) is awarded to the responsible bidder whose bid, conforming with all the material terms and conditions of the invitation for bids, is the lowest in price. The sealed bids method is the preferred method for procuring construction, if the conditions.

(i) In order for sealed bidding to be feasible, the following conditions should be present:

(A) A complete, adequate, and realistic specification or purchase description is available;

(B) Two or more responsible bidders are willing and able to compete effectively for the business; and

(C) The procurement lends itself to a firm fixed price contract and the selection of the successful bidder can be made principally on the basis of price.

(ii) If sealed bids are used, the following requirements apply:

(A) Bids must be solicited from an adequate number of qualified sources, providing them sufficient response time prior to the date set for opening the

- bids, for local, and tribal governments, the invitation for bids must be publicly advertised;
- (B) The invitation for bids, which will include any specifications and pertinent attachments, must define the items or services in order for the bidder to properly respond;
 - (C) All bids will be opened at the time and place prescribed in the invitation for bids, and for local and tribal governments, the bids must be opened publicly;
 - (D) A firm fixed price contract award will be made in writing to the lowest responsive and responsible bidder. Where specified in bidding documents, factors such as discounts, transportation cost, and life cycle costs must be considered in determining which bid is lowest. Payment discounts will only be used to determine the low bid when prior experience indicates that such discounts are usually taken advantage of; and
 - (E) Any or all bids may be rejected if there is a sound documented reason.
- (2) Proposals. A procurement method in which either a fixed price or cost-reimbursement type contract is awarded. Proposals are generally used when conditions are not appropriate for the use of sealed bids. They are awarded in accordance with the following requirements:
- (i) Requests for proposals must be publicized and identify all evaluation factors and their relative importance. Proposals must be solicited from an adequate number of qualified offerors. Any response to publicized requests for proposals must be considered to the maximum extent practical;
 - (ii) The non-Federal entity must have a written method for conducting technical evaluations of the proposals received and making selections;
 - (iii) Contracts must be awarded to the responsible offeror whose proposal is most advantageous to the non-Federal entity, with price and other factors considered; and
 - (iv) The non-Federal entity may use competitive proposal procedures for qualifications-based procurement of architectural/engineering (A/E) professional services whereby offeror's qualifications are evaluated and the most qualified offeror is selected, subject to negotiation of fair and reasonable compensation. The method, where price is not used as a selection factor, can only be used in procurement of A/E professional services. It cannot be used to purchase other types of services through A/E firms that are a potential source to perform the proposed effort.
- (c) Noncompetitive procurement. There are specific circumstances in which noncompetitive procurement can be used. Noncompetitive procurement can only be awarded if one or more of the following circumstances apply:
- (1) The acquisition of property or services, the aggregate dollar amount of which does not exceed the micro-purchase threshold (see paragraph (a)(1) of this section);

- (2) The item is available only from a single source;
- (3) The public exigency or emergency for the requirement will not permit a delay resulting from publicizing a competitive solicitation;
- (4) The Federal awarding agency or pass-through entity expressly authorizes a noncompetitive procurement in response to a written request from the non-Federal entity; or
- (5) After solicitation of a number of sources, competition is determined inadequate.

§200.321 Contracting with small and minority businesses, women's business enterprises, and labor surplus area firms.

- (a) The non-Federal entity must take all necessary affirmative steps to assure that minority businesses, women's business enterprises, and labor surplus area firms are used when possible.
- (b) Affirmative steps must include:
 - (1) Placing qualified small and minority businesses and women's business enterprises on solicitation lists;
 - (2) Assuring that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources;
 - (3) Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority businesses, and women's business enterprises;
 - (4) Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority businesses, and women's business enterprises;
 - (5) Using the services and assistance, as appropriate, of such organizations as the Small Business Administration and the Minority Business Development Agency of the Department of Commerce; and
 - (6) Requiring the prime contractor, if subcontracts are to be let, to take the affirmative steps listed in paragraphs (b)(1) through (5) of this section.

§200.322 Domestic preferences for procurements.

- (a) As appropriate and to the extent consistent with law, the non-Federal entity should, to the greatest extent practicable under a Federal award, provide a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States (including but not limited to iron, aluminum, steel, cement, and other manufactured products). The requirements of this section must be included in all subawards including all contracts and purchase orders for work or products under this award.
- (b) For purposes of this section:

- (1) “Produced in the United States” means, for iron and steel products, that all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States.
- (2) “Manufactured products” means items and construction materials composed in whole or in part of non-ferrous metals such as aluminum; plastics and polymer-based products such as polyvinyl chloride pipe; aggregates such as concrete; glass, including optical fiber; and lumber.

§200.323 Procurement of recovered materials.

A non-Federal entity that is a state agency or agency of a political subdivision of a state and its contractors must comply with section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act. The requirements of Section 6002 include procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at 40 CFR part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds \$10,000 or the value of the quantity acquired during the preceding fiscal year exceeded \$10,000; procuring solid waste management services in a manner that maximizes energy and resource recovery; and establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines.

§200.324 Contract cost and price.

- (a) The non-Federal entity must perform a cost or price analysis in connection with every procurement action in excess of the Simplified Acquisition Threshold including contract amendments. The method and degree of analysis is dependent on the facts surrounding the particular procurement situation, but as a starting point, the non-Federal entity must make independent estimates before receiving bids or proposals.
- (b) The non-Federal entity must negotiate profit as a separate element of the price for each contract in which there is no price competition and in all cases where cost analysis is performed. To establish a fair and reasonable profit, consideration must be given to the complexity of the work to be performed, the risk borne by the contractor, the contractor's investment, the amount of subcontracting, the quality of its record of past performance, and industry profit rates in the surrounding geographical area for similar work.
- (c) Costs or prices based on estimated costs for contracts under the Federal award are allowable only to the extent that costs incurred or cost estimates included in negotiated prices would be allowable for the non-Federal entity under subpart E of this part. The non-Federal entity may reference its own cost principles that comply with the Federal cost principles.
- (d) The cost plus a percentage of cost and percentage of construction cost methods of contracting must not be used.

§200.325 Federal awarding agency or pass-through entity review.

- (a) The non-Federal entity must make available, upon request of the Federal awarding agency or pass-through entity, technical specifications on proposed procurements where the Federal awarding agency or pass-through entity believes such review is needed to ensure that the item or service specified is the one being proposed for acquisition. This review generally will take place prior to the time the specification is incorporated into a solicitation document. However, if the non-Federal entity desires to have the review accomplished after a solicitation has been developed, the Federal awarding agency or pass-through entity may still review the specifications, with such review usually limited to the technical aspects of the proposed purchase.
- (b) The non-Federal entity must make available upon request, for the Federal awarding agency or pass-through entity pre-procurement review, procurement documents, such as requests for proposals or invitations for bids, or independent cost estimates, when:
 - (1) The non-Federal entity's procurement procedures or operation fails to comply with the procurement standards in this part;
 - (2) The procurement is expected to exceed the Simplified Acquisition Threshold and is to be awarded without competition or only one bid or offer is received in response to a solicitation;
 - (3) The procurement, which is expected to exceed the Simplified Acquisition Threshold, specifies a “brand name” product;
 - (4) The proposed contract is more than the Simplified Acquisition Threshold and is to be awarded to other than the apparent low bidder under a sealed bid procurement; or
 - (5) A proposed contract amendment changes the scope of a contract or increases the contract amount by more than the Simplified Acquisition Threshold.
- (c) The non-Federal entity is exempt from the pre-procurement review in paragraph (b) of this section if the Federal awarding agency or pass-through entity determines that its procurement systems comply with the standards of this part.
 - (1) The non-Federal entity may request that its procurement system be reviewed by the Federal awarding agency or pass-through entity to determine whether its system meets these standards in order for its system to be certified. Generally, these reviews must occur where there is continuous high-dollar funding, and third-party contracts are awarded on a regular basis;
 - (2) The non-Federal entity may self-certify its procurement system. Such self-certification must not limit the Federal awarding agency's right to survey the system. Under a self-certification procedure, the Federal awarding agency may rely on written assurances from the non-Federal entity that it is complying with these standards. The non-Federal entity must cite specific policies, procedures, regulations, or standards as being in compliance with these requirements and have its system available for review.

§200.326 Bonding requirements.

For construction or facility improvement contracts or subcontracts exceeding the Simplified Acquisition Threshold, the Federal awarding agency or pass-through entity may accept the bonding policy and requirements of the non-Federal entity provided that the Federal awarding agency or pass-through entity has made a determination that the Federal interest is adequately protected. If such a determination has not been made, the minimum requirements must be as follows:

- (a) A bid guarantee from each bidder equivalent to five percent of the bid price. The “bid guarantee” must consist of a firm commitment such as a bid bond, certified check, or other negotiable instrument accompanying a bid as assurance that the bidder will, upon acceptance of the bid, execute such contractual documents as may be required within the time specified.
- (b) A performance bond on the part of the contractor for 100 percent of the contract price. A “performance bond” is one executed in connection with a contract to secure fulfillment of all the contractor's requirements under such contract.
- (c) A payment bond on the part of the contractor for 100 percent of the contract price. A “payment bond” is one executed in connection with a contract to assure payment as required by law of all persons supplying labor and material in the execution of the work provided for in the contract.

§200.327 Contract provisions.

The non-Federal entity's contracts must contain the applicable provisions described in [appendix II](#) to this part.

[78 FR 78608, Dec. 26, 2013, as amended at 79 FR 75885, Dec. 19, 2014, and 85 FR 49506]

4. EQUIPMENT (2 CFR 200.313)

See also §200.439 Equipment and other capital expenditures.

- (a) Title. Subject to the obligations and conditions set forth in this section, title to equipment acquired under a Federal award will vest upon acquisition in the non-Federal entity. Unless a statute specifically authorizes the Federal agency to vest title in the non-Federal entity without further obligation to the Federal Government, and the Federal agency elects to do so, the title must be a conditional title. Title must vest in the non-Federal entity subject to the following conditions:
 - (1) Use the equipment for the authorized purposes of the project during the period of performance, or until the property is no longer needed for the purposes of the project.
 - (2) Not encumber the property without approval of the Federal awarding agency or pass-through entity.

- (3) Use and dispose of the property in accordance with paragraphs (b), (c) and (e) of this section.
- (b) A state must use, manage and dispose of equipment acquired under a Federal award by the state in accordance with state laws and procedures. Other non-Federal entities must follow paragraphs (c) through (e) of this section.
- (c) Use.
- (1) Equipment must be used by the non-Federal entity in the program or project for which it was acquired as long as needed, whether or not the project or program continues to be supported by the Federal award, and the non-Federal entity must not encumber the property without prior approval of the Federal awarding agency. When no longer needed for the original program or project, the equipment may be used in other activities supported by the Federal awarding agency, in the following order of priority:
 - (i) Activities under a Federal award from the Federal awarding agency which funded the original program or project, then
 - (ii) Activities under Federal awards from other Federal awarding agencies. This includes consolidated equipment for information technology systems.
 - (2) During the time that equipment is used on the project or program for which it was acquired, the non-Federal entity must also make equipment available for use on other projects or programs currently or previously supported by the Federal Government, provided that such use will not interfere with the work on the projects or program for which it was originally acquired. First preference for other use must be given to other programs or projects supported by Federal awarding agency that financed the equipment and second preference must be given to programs or projects under Federal awards from other Federal awarding agencies. Use for non-federally-funded programs or projects is also permissible. User fees should be considered if appropriate.
 - (3) Notwithstanding the encouragement in 200.307 Program income to earn program income, the non-Federal entity must not use equipment acquired with the Federal award to provide services for a fee that is less than private companies charge for equivalent services unless specifically authorized by Federal statute for as long as the Federal Government retains an interest in the equipment.
 - (4) When acquiring replacement equipment, the non-Federal entity may use the equipment to be replaced as a trade-in or sell the property and use the proceeds to offset the cost of the replacement property.
- (d) Management requirements. Procedures for managing equipment (including replacement equipment), whether acquired in whole or in part under a Federal award, until disposition takes place will, as a minimum, meet the following requirements:
- (1) Property records must be maintained that include a description of the property, a serial number or other identification number, the source of funding for the property (including the FAIN), who holds title, the acquisition date, and cost of the property, percentage of Federal participation in the project costs for the Federal award under which the property

- was acquired, the location, use and condition of the property, and any ultimate disposition data including the date of disposal and sale price of the property.
- (2) A physical inventory of the property must be taken and the results reconciled with the property records at least once every two years.
 - (3) A control system must be developed to ensure adequate safeguards to prevent loss, damage, or theft of the property. Any loss, damage, or theft must be investigated.
 - (4) Adequate maintenance procedures must be developed to keep the property in good condition.
 - (5) If the non-Federal entity is authorized or required to sell the property, proper sales procedures must be established to ensure the highest possible return.
- (e) Disposition. When original or replacement equipment acquired under a Federal award is no longer needed for the original project or program or for other activities currently or previously supported by a Federal awarding agency, except as otherwise provided in Federal statutes, regulations, or Federal awarding agency disposition instructions, the non-Federal entity must request disposition instructions from the Federal awarding agency if required by the terms and conditions of the Federal award. Disposition of the equipment will be made as follows, in accordance with Federal awarding agency disposition instructions:
- (1) Items of equipment with a current per unit fair market value of \$5,000 or less may be retained, sold or otherwise disposed of with no further obligation to the Federal awarding agency.
 - (2) Except as provided in 200.312 Federally-owned and exempt property, paragraph (b), or if the Federal awarding agency fails to provide requested disposition instructions within 120 days, items of equipment with a current per-unit fair-market value in excess of \$5,000 may be retained by the non-Federal entity or sold. The Federal awarding agency is entitled to an amount calculated by multiplying the current market value or proceeds from sale by the Federal awarding agency's percentage of participation in the cost of the original purchase. If the equipment is sold, the Federal awarding agency may permit the non-Federal entity to deduct and retain from the Federal share \$500 or ten percent of the proceeds, whichever is less, for its selling and handling expenses.
 - (3) The non-Federal entity may transfer title to the property to the Federal Government or to an eligible third party provided that, in such cases, the non-Federal entity must be entitled to compensation for its attributable percentage of the current fair market value of the property.
 - (4) In cases where a non-Federal entity fails to take appropriate disposition actions, the Federal awarding agency may direct the non-Federal entity to take disposition actions.

[78 FR 78608, Dec. 26, 2013, as amended at 79 FR 75884, Dec. 19, 2014]

5. SUPPLIES (2 CFR 200.314)

See also 200.453 Materials and supplies costs, including costs of computing devices.

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- (a) Title to supplies will vest in the non-Federal entity upon acquisition. If there is a residual inventory of unused supplies exceeding \$5,000 in total aggregate value upon termination or completion of the project or program and the supplies are not needed for any other Federal award, the non-Federal entity must retain the supplies for use on other activities or sell them, but must, in either case, compensate the Federal Government for its share. The amount of compensation must be computed in the same manner as for equipment. See 200.313 Equipment, paragraph (e)(2) for the calculation methodology.
- (b) As long as the Federal Government retains an interest in the supplies, the non-Federal entity must not use supplies acquired under a Federal award to provide services to other organizations for a fee that is less than private companies charge for equivalent services, unless specifically authorized by Federal statute.

6. INSPECTION

Reclamation has the right to inspect and evaluate the work performed or being performed under this Agreement, and the premises where the work is being performed, at all reasonable times and in a manner that will not unduly delay the work. If Reclamation performs inspection or evaluation on the premises of the Recipient or a sub-Recipient, the Recipient shall furnish and shall require sub-recipients to furnish all reasonable facilities and assistance for the safe and convenient performance of these duties.

7. AUDIT REQUIREMENTS (2 CFR 200.501)

- (a) Audit required. A non-Federal entity that expends \$750,000 or more during the non-Federal entity's fiscal year in Federal awards must have a single or program-specific audit conducted for that year in accordance with the provisions of this part.
- (b) Single audit. A non-Federal entity that expends \$750,000 or more during the non-Federal entity's fiscal year in Federal awards must have a single audit conducted in accordance with 200.514 Scope of audit except when it elects to have a program-specific audit conducted in accordance with paragraph (c) of this section.
- (c) Program-specific audit election. When an auditee expends Federal awards under only one Federal program (excluding R&D) and the Federal program's statutes, regulations, or the terms and conditions of the Federal award do not require a financial statement audit of the auditee, the auditee may elect to have a program-specific audit conducted in accordance with 200.507 Program-specific audits. A program-specific audit may not be elected for R&D unless all of the Federal awards expended were received from the same Federal agency, or the same Federal agency and the same pass-through entity, and that Federal agency, or pass-through entity in the case of a subrecipient, approves in advance a program-specific audit.
- (d) Exemption when Federal awards expended are less than \$750,000. A non-Federal entity that expends less than \$750,000 during the non-Federal entity's fiscal year in Federal awards is exempt from Federal audit requirements for that year, except as noted in 200.503 Relation to other audit requirements, but records must be available for review or audit by appropriate

officials of the Federal agency, pass-through entity, and Government Accountability Office (GAO).

- (e) Federally Funded Research and Development Centers (FFRDC). Management of an auditee that owns or operates a FFRDC may elect to treat the FFRDC as a separate entity for purposes of this part.
- (f) Subrecipients and Contractors. An auditee may simultaneously be a recipient, a subrecipient, and a contractor. Federal awards expended as a recipient or a subrecipient are subject to audit under this part. The payments received for goods or services provided as a contractor are not Federal awards. Section 200.331 Subrecipient and contractor determinations sets forth the considerations in determining whether payments constitute a Federal award or a payment for goods or services provided as a contractor.
- (g) Compliance responsibility for contractors. In most cases, the auditee's compliance responsibility for contractors is only to ensure that the procurement, receipt, and payment for goods and services comply with Federal statutes, regulations, and the terms and conditions of Federal awards. Federal award compliance requirements normally do not pass through to contractors. However, the auditee is responsible for ensuring compliance for procurement transactions which are structured such that the contractor is responsible for program compliance or the contractor's records must be reviewed to determine program compliance. Also, when these procurement transactions relate to a major program, the scope of the audit must include determining whether these transactions are in compliance with Federal statutes, regulations, and the terms and conditions of Federal awards.
- (h) For-profit subrecipient. Since this part does not apply to for-profit subrecipients, the pass-through entity is responsible for establishing requirements, as necessary, to ensure compliance by for-profit subrecipients. The agreement with the for-profit subrecipient must describe applicable compliance requirements and the for-profit subrecipient's compliance responsibility. Methods to ensure compliance for Federal awards made to for-profit subrecipients may include pre-award audits, monitoring during the agreement, and post-award audits. See also 200.332 Requirements for pass-through entities.

[78 FR 78608, Dec. 26, 2013, as amended at 79 FR 75887, Dec. 19, 2014; 85 FR 49571, Aug. 13, 2020]

8. REMEDIES FOR NONCOMPLIANCE (2 CFR 200.339)

200.339 Remedies for noncompliance.

If a non-Federal entity fails to comply with Federal statutes, regulations or the terms and conditions of a Federal award, the Federal awarding agency or pass-through entity may impose additional conditions, as described in 200.207 Specific conditions. If the Federal awarding agency or pass-through entity determines that noncompliance cannot be remedied by imposing additional conditions, the Federal awarding agency or pass-through entity may take one or more of the following actions, as appropriate in the circumstances.

- (a) Temporarily withhold cash payments pending correction of the deficiency by the non-Federal entity or more severe enforcement action by the Federal awarding agency or pass-through entity.
- (b) Disallow (that is, deny both use of funds and any applicable matching credit for) all or part of the cost of the activity or action not in compliance.
- (c) Wholly or partly suspend or terminate the Federal award.
- (d) Initiate suspension or debarment proceedings as authorized under 2 CFR part 180 and Federal awarding agency regulations (or in the case of a pass-through entity, recommend such a proceeding be initiated by a Federal awarding agency).
- (e) Withhold further Federal awards for the project or program.
- (f) Take other remedies that may be legally available.

9. TERMINATION (2 CFR 200.340)

- (a) The Federal award may be terminated in whole or in part as follows:
 - (1) By the Federal awarding agency or pass-through entity, if a non-Federal entity fails to comply with the terms and conditions of a Federal award;
 - (2) By the Federal awarding agency or pass-through entity, to the greatest extent authorized by law, if an award no longer effectuates the program goals or agency priorities;
 - (3) By the Federal awarding agency or pass-through entity with the consent of the non-Federal entity, in which case the two parties must agree upon the termination conditions, including the effective date and, in the case of partial termination, the portion to be terminated;
 - (4) By the non-Federal entity upon sending to the Federal awarding agency or pass-through entity written notification setting forth the reasons for such termination, the effective date, and, in the case of partial termination, the portion to be terminated. However, if the Federal awarding agency or pass-through entity determines in the case of partial termination that the reduced or modified portion of the Federal award or subaward will not accomplish the purposes for which the Federal award was made, the Federal awarding agency or pass-through entity may terminate the Federal award in its entirety; or
 - (5) By the Federal awarding agency or pass-through entity pursuant to termination provisions included in the Federal award.
- (b) When a Federal award is terminated or partially terminated, both the Federal awarding agency or pass-through entity and the non-Federal entity remain responsible for compliance with the requirements in 200.344 Closeout and 200.345 Post-closeout adjustments and continuing responsibilities.

10. DEBARMENT AND SUSPENSION (2 CFR 1400)

The Department of the Interior regulations at 2 CFR 1400—Governmentwide Debarment and Suspension (Nonprocurement), which adopt the common rule for the governmentwide system of debarment and suspension for nonprocurement activities, are hereby incorporated by reference and made a part of this Agreement. By entering into this grant or cooperative Agreement with the Bureau of Reclamation, the Recipient agrees to comply with 2 CFR 1400, Subpart C, and agrees to include a similar term or condition in all lower-tier covered transactions. These regulations are available at <http://www.gpoaccess.gov/ecfr/>.

11. DRUG-FREE WORKPLACE (2 CFR 182 and 1401)

The Department of the Interior regulations at 2 CFR 1401—Governmentwide Requirements for Drug-Free Workplace (Financial Assistance), which adopt the portion of the Drug-Free Workplace Act of 1988 (41 U.S.C. 701 et seq, as amended) applicable to grants and cooperative agreements, are hereby incorporated by reference and made a part of this agreement. By entering into this grant or cooperative agreement with the Bureau of Reclamation, the Recipient agrees to comply with 2 CFR 182.

12. ASSURANCES AND CERTIFICATIONS INCORPORATED BY REFERENCE

The provisions of the Assurances, SF 424B or SF 424D as applicable, executed by the Recipient in connection with this Agreement shall apply with full force and effect to this Agreement. All anti-discrimination and equal opportunity statutes, regulations, and Executive Orders that apply to the expenditure of funds under Federal contracts, grants, and cooperative Agreements, loans, and other forms of Federal assistance. The Recipient shall comply with Title VI or the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, the Age Discrimination Act of 1975, and any program-specific statutes with anti-discrimination requirements. The Recipient shall comply with civil rights laws including, but not limited to, the Fair Housing Act, the Fair Credit Reporting Act, the Americans with Disabilities Act, Title VII of the Civil Rights Act of 1964, the Equal Educational Opportunities Act, the Age Discrimination in Employment Act, and the Uniform Relocation Act.

Such Assurances also include, but are not limited to, the promise to comply with all applicable Federal statutes and orders relating to nondiscrimination in employment, assistance, and housing; the Hatch Act; Federal wage and hour laws and regulations and work place safety standards; Federal environmental laws and regulations and the Endangered Species Act; and Federal protection of rivers and waterways and historic and archeological preservation.

13. COVENANT AGAINST CONTINGENT FEES

The Recipient warrants that no person or agency has been employed or retained to solicit or secure this Agreement upon an Agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees or bona fide offices established and maintained by the Recipient for the purpose of securing Agreements or business. For breach or violation of this warranty, the Government shall have the right to annul this Agreement without

liability or, in its discretion, to deduct from the Agreement amount, or otherwise recover, the full amount of such commission, percentage, brokerage, or contingent fee.

14. TRAFFICKING VICTIMS PROTECTION ACT OF 2000 (2 CFR 175.15)

Trafficking in persons.

- (a) *Provisions applicable to a recipient that is a private entity.* You as the recipient, your employees, subrecipients under this award, and subrecipients' employees may not
- (1) Engage in severe forms of trafficking in persons during the period of time that the award is in effect;
 - (2) Procure a commercial sex act during the period of time that the award is in effect; or
 - (3) Use forced labor in the performance of the award or subawards under the award.
- (b) We as the Federal awarding agency may unilaterally terminate this award, without penalty, if you or a subrecipient that is a private entity —
- (1) Is determined to have violated a prohibition in paragraph a.1 of this award term; or
 - (2) Has an employee who is determined by the agency official authorized to terminate the award to have violated a prohibition in paragraph a.1 of this award term through conduct that is either:
 - (i) Associated with performance under this award; or
 - (ii) Imputed to you or the subrecipient using the standards and due process for imputing the conduct of an individual to an organization that are provided in 2 CFR part 180, “OMB Guidelines to Agencies on Governmentwide Debarment and Suspension (Nonprocurement),” as implemented by our agency at 2 CFR part 1400.
- (c) *Provision applicable to a recipient other than a private entity.* We as the Federal awarding agency may unilaterally terminate this award, without penalty, if a subrecipient that is a private entity—
- (1) Is determined to have violated an applicable prohibition in paragraph a.1 of this award term; or
 - (2) Has an employee who is determined by the agency official authorized to terminate the award to have violated an applicable prohibition in paragraph a.1 of this award term through conduct that is either:
 - (i) Associated with performance under this award; or
 - (ii) Imputed to the subrecipient using the standards and due process for imputing the conduct of an individual to an organization that are provided in 2 CFR part 180, “OMB Guidelines to Agencies on Governmentwide Debarment and Suspension (Nonprocurement),” as implemented by our agency at 2 CFR part 1400.

(d) *Provisions applicable to any recipient.*

- (1) You must inform us immediately of any information you receive from any source alleging a violation of a prohibition in paragraph a.1 of this award term.
- (2) Our right to terminate unilaterally that is described in paragraph a.2 or b of this section:
 - (i) Implements section 106(g) of the Trafficking Victims Protection Act of 2000 (TVPA), as amended (22 U.S.C. 7104(g)), and
 - (ii) Is in addition to all other remedies for noncompliance that are available to us under this award.
- (3) You must include the requirements of paragraph a.1 of this award term in any subaward you make to a private entity.

(e) *Definitions.* For purposes of this award term:

- (1) “Employee” means either:
 - (i) An individual employed by you or a subrecipient who is engaged in the performance of the project or program under this award; or
 - (ii) Another person engaged in the performance of the project or program under this award and not compensated by you including, but not limited to, a volunteer or individual whose services are contributed by a third party as an in-kind contribution toward cost sharing or matching requirements.
- (2) “Forced labor” means labor obtained by any of the following methods: the recruitment, harboring, transportation, provision, or obtaining of a person for labor or services, through the use of force, fraud, or coercion for the purpose of subjection to involuntary servitude, peonage, debt bondage, or slavery.
- (3) “Private entity”:
 - (i) Means any entity other than a state, local government, Indian tribe, or foreign public entity, as those terms are defined in 2 CFR 175.25.

(ii) Includes:

(A) A nonprofit organization, including any nonprofit institution of higher education, hospital, or tribal organization other than one included in the definition of Indian tribe at 2 CFR 175.25(b).

(B) A for-profit organization.

(4) “Severe forms of trafficking in persons,” “commercial sex act,” and “coercion” have the meanings given at section 103 of the TVPA, as amended (22 U.S.C. 7102).

15. NEW RESTRICTIONS ON LOBBYING (43 CFR 18)

The Recipient agrees to comply with 43 CFR 18, New Restrictions on Lobbying, including the following certification:

- (a) No Federal appropriated funds have been paid or will be paid, by or on behalf of the Recipient, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, and officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or amendment of any Federal contract, grant, loan, or cooperative agreement.
- (b) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, “Disclosure Form to Report Lobbying” in accordance with its instructions.
- (c) The Recipient shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify accordingly. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

16. UNIFORM RELOCATION ASSISTANCE AND REAL PROPERTY ACQUISITION POLICIES ACT OF 1970 (URA) (42 USC 4601 *et seq.*)

- (a) The Uniform Relocation Assistance Act (URA), 42 U.S.C. 4601 *et seq.*, as amended, requires certain assurances for Reclamation funded land acquisition projects conducted by a Recipient that cause the displacement of persons, businesses, or farm operations. Because Reclamation funds only support acquisition of property or interests in property from willing

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sellers, it is not anticipated that Reclamation funds will result in any “displaced persons,” as defined under the URA.

(b) However, if Reclamation funds are used for the acquisition of real property that results in displacement, the URA requires Recipients to ensure that reasonable relocation payments and other remedies will be provided to any displaced person. Further, when acquiring real property, Recipients must be guided, to the greatest extent practicable, by the land acquisition policies in 42 U.S.C. 4651.

(c) Exemptions to the URA and 49 CFR Part 24

(1) The URA provides for an exemption to the appraisal, review and certification rules for those land acquisitions classified as “voluntary transactions.” Such “voluntary transactions” are classified as those that do not involve an exercise of eminent domain authority on behalf of a Recipient, and must meet the conditions specified at 49 CFR 24.101(b)(1)(i)-(iv).

(2) For any land acquisition undertaken by a Recipient that receives Reclamation funds, but does not have authority to acquire the real property by eminent domain, to be exempt from the requirements of 49 CFR Part 24 the Recipient must:

- (i) provide written notification to the owner that it will not acquire the property in the event negotiations fail to result in an amicable agreement, and;
- (ii) inform the owner in writing of what it believes to be the market value of the property

(d) Review of Land Acquisition Appraisals. Reclamation reserves the right to review any land appraisal whether or not such review is required under the URA or 49 CFR 24.104. Such reviews may be conducted by the Department of the Interior’s Appraisal Services Directorate or a Reclamation authorized designee. When Reclamation determines that a review of the original appraisal is necessary, Reclamation will notify the Recipient and provide an estimated completion date of the initial appraisal review.

17. SYSTEM FOR AWARD MANAGEMENT and Universal Identifier Requirements (2 CFR 25, Appendix A)

A. Requirement for System for Award Management

Unless you are exempted from this requirement under 2 CFR 25.110, you as the recipient must maintain current information in the SAM. This includes information on your immediate and highest level owner and subsidiaries, as well as on all of your predecessors that have been awarded a Federal contract or Federal financial assistance within the last three years, if applicable, until you submit the final financial report required under this Federal award or receive the final payment, whichever is later. This requires that you review and update the

information at least annually after the initial registration, and more frequently if required by changes in your information or another Federal award term.

B. Requirement for unique entity identifier

If you are authorized to make subawards under this award, you:

1. Must notify potential subrecipients that no entity (see definition in paragraph C of this award term) may receive a subaward from you unless the entity has provided its unique entity identifier to you.
2. May not make a subaward to an entity unless the entity has provided its Unique Entity Identifier to you. Subrecipients are not required to obtain an active SAM registration, but must obtain a Unique Entity Identifier.

C. Definitions

For purposes of this award term:

1. System for Award Management (SAM) means the Federal repository into which an entity must provide information required for the conduct of business as a recipient. Additional information about registration procedures may be found at the SAM Internet site (currently at <http://www.sam.gov>).
2. Unique entity identifier means the identifier required for SAM registration to uniquely identify business entities.
3. Entity, as it is used in this award term, means all of the following, as defined at 2 CFR part 25, subpart C:
 - a. A Governmental organization, which is a State, local government, or Indian Tribe;
 - b. A foreign public entity;
 - c. A domestic or foreign nonprofit organization;
 - d. A domestic or foreign for-profit organization; and
 - e. A Federal agency, but only as a subrecipient under an award or subaward to a non-Federal entity.
4. Subaward has the meaning given in 2 CFR 200.1.
5. Subrecipient has the meaning given in 2 CFR 200.1.

18. PROHIBITION ON TEXT MESSAGING AND USING ELECTRONIC EQUIPMENT SUPPLIED BY THE GOVERNMENT WHILE DRIVING

Executive Order 13513, *Federal Leadership On Reducing Text Messaging While Driving*, was signed by President Barack Obama on October 1, 2009 (ref: <http://edocket.access.gpo.gov/2009/pdf/E9-24203.pdf>). This Executive Order introduces a Federal Government-wide prohibition on the use of text messaging while driving on official

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business or while using Government-supplied equipment. Additional guidance enforcing the ban will be issued at a later date. In the meantime, please adopt and enforce policies that immediately ban text messaging while driving company-owned or rented vehicles, government-owned or leased vehicles, or while driving privately owned vehicles when on official government business or when performing any work for or on behalf of the government.

19. REPORTING SUBAWARDS AND EXECUTIVE COMPENSATION (2 CFR 170 APPENDIX A)

I. Reporting Subawards and Executive Compensation.

a. Reporting of first-tier subawards.

1. **Applicability.** Unless you are exempt as provided in paragraph d. of this award term, you must report each action that equals or exceeds \$30,000 in Federal funds for a subaward to a non-Federal entity or Federal agency (see definitions in paragraph e. of this award term).
2. **Where and when to report.**
 - i. The non-Federal entity or Federal agency must report each obligating action described in paragraph a.1. of this award term to <http://www.fsrs.gov>.
 - ii. For subaward information, report no later than the end of the month following the month in which the obligation was made. (For example, if the obligation was made on November 7, 2010, the obligation must be reported by no later than December 31, 2010.)
3. **What to report.** You must report the information about each obligating action that the submission instructions posted at <http://www.fsrs.gov> specify.

b. Reporting total compensation of recipient executives for non-Federal entities.

1. **Applicability and what to report.** You must report total compensation for each of your five most highly compensated executives for the preceding completed fiscal year, if—
 - i. The total Federal funding authorized to date under this Federal award equals or exceeds \$30,000 as defined in 2 CFR 170.320;
 - ii. in the preceding fiscal year, you received—
 - (A) 80 percent or more of your annual gross revenues from Federal procurement contracts (and subcontracts) and Federal financial assistance subject to the Transparency Act, as defined at 2 CFR 170.320 (and subawards), and
 - (B) \$25,000,000 or more in annual gross revenues from Federal procurement contracts (and subcontracts) and Federal financial assistance subject to the Transparency Act, as defined at 2 CFR 170.320 (and subawards); and,
 - iii. The public does not have access to information about the compensation of the executives through periodic reports filed under section 13(a) or 15(d) of the

Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986. (To determine if the public has access to the compensation information, see the U.S. Security and Exchange Commission total compensation filings at <http://www.sec.gov/answers/execomp.htm>.)

2. Where and when to report. You must report executive total compensation described in paragraph b.1. of this award term:
 - i. As part of your registration profile at <https://www.sam.gov>.
 - ii. By the end of the month following the month in which this award is made, and annually thereafter.
- c. Reporting of Total Compensation of Subrecipient Executives.
1. Applicability and what to report. Unless you are exempt as provided in paragraph d. of this award term, for each first-tier non-Federal entity subrecipient under this award, you shall report the names and total compensation of each of the subrecipient's five most highly compensated executives for the subrecipient's preceding completed fiscal year, if—
 - i. in the subrecipient's preceding fiscal year, the subrecipient received—
 - (A) 80 percent or more of its annual gross revenues from Federal procurement contracts (and subcontracts) and Federal financial assistance subject to the Transparency Act, as defined at 2 CFR 170.320 (and subawards) and,
 - (B) \$25,000,000 or more in annual gross revenues from Federal procurement contracts (and subcontracts), and Federal financial assistance subject to the Transparency Act (and subawards); and
 - ii. The public does not have access to information about the compensation of the executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986. (To determine if the public has access to the compensation information, see the U.S. Security and Exchange Commission total compensation filings at <http://www.sec.gov/answers/execomp.htm>.)
 2. Where and when to report. You must report subrecipient executive total compensation described in paragraph c.1. of this award term:
 - i. To the recipient.
 - ii. By the end of the month following the month during which you make the subaward. For example, if a subaward is obligated on any date during the month of October of a given year (i.e., between October 1 and 31), you must report any required compensation information of the subrecipient by November 30 of that year.
- d. Exemptions.

If, in the previous tax year, you had gross income, from all sources, under \$300,000, you are exempt from the requirements to report:

- i. Subawards, and
 - ii. The total compensation of the five most highly compensated executives of any subrecipient.
- e. Definitions. For purposes of this award term:
1. Federal Agency means a Federal agency as defined at 5 U.S.C. 551(1) and further clarified by 5 U.S.C. 552(f).
 2. Non-Federal entity means all of the following, as defined in 2 CFR part 25:
 - i. A Governmental organization, which is a State, local government, or Indian tribe;
 - ii. A foreign public entity;
 - iii. A domestic or foreign nonprofit organization; and,
 - iv. A domestic or foreign for-profit organization
 3. Executive means officers, managing partners, or any other employees in management positions.
 4. Subaward:
 - i. This term means a legal instrument to provide support for the performance of any portion of the substantive project or program for which you received this award and that you as the recipient award to an eligible subrecipient.
 - ii. The term does not include your procurement of property and services needed to carry out the project or program (for further explanation, see 2 CFR 200.331).
 - iii. A subaward may be provided through any legal agreement, including an agreement that you or a subrecipient considers a contract.
 5. Subrecipient means a non-Federal entity or Federal agency that:
 - i. Receives a subaward from you (the recipient) under this award; and
 - ii. Is accountable to you for the use of the Federal funds provided by the subaward.
 6. Total compensation means the cash and noncash dollar value earned by the executive during the recipient's or subrecipient's preceding fiscal year and includes the following (for more information see 17 CFR 229.402(c)(2)).

[85 FR 49526, Aug. 13, 2020]

20. RECIPIENT EMPLOYEE WHISTLEBLOWER RIGHTS AND REQUIREMENT TO INFORM EMPLOYEES OF WHISTLEBLOWER RIGHTS (SEP 2013)

- (a) This award and employees working on this financial assistance agreement will be subject to the whistleblower rights and remedies in the pilot program on Award Recipient employee whistleblower protections established at 41 U.S.C. 4712 by section 828 of the National Defense Authorization Act for Fiscal Year 2013 (Pub.L. 112-239).

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- (b) The Award Recipient shall inform its employees in writing, in the predominant language of the workforce, of employee whistleblower rights and protections under 41 U.S.C 4712.
- (c) The Award Recipient shall insert the substance of this clause, including this paragraph (c), in all subawards or subcontracts over the simplified acquisition threshold. 48 CFR 52.203-17 (as referenced in 48 CFR 3.908-9).

21. REPORTING OF MATTERS RELATED TO RECIPIENT INTEGRITY AND PERFORMANCE (APPENDIX XII to 2 CFR Part 200)

1. General Reporting Requirement

If the total value of your currently active grants, cooperative agreements, and procurement contracts from all Federal awarding agencies exceeds \$10,000,000 for any period of time during the period of performance of this Federal award, then you as the recipient during that period of time must maintain the currency of information reported to the System for Award Management (SAM) that is made available in the designated integrity and performance system (currently the Federal Awardee Performance and Integrity Information System (FAPIIS)) about civil, criminal, or administrative proceedings described in paragraph 2 of this award term and condition. This is a statutory requirement under section 872 of Public Law 110-417, as amended (41 U.S.C. 2313). As required by section 3010 of Public Law 111-212, all information posted in the designated integrity and performance system on or after April 15, 2011, except past performance reviews required for Federal procurement contracts, will be publicly available.

2. Proceedings About Which You Must Report

Submit the information required about each proceeding that:

- a. Is in connection with the award or performance of a grant, cooperative agreement, or procurement contract from the Federal Government;
- b. Reached its final disposition during the most recent five-year period; and
- c. Is one of the following:
 - (1) A criminal proceeding that resulted in a conviction, as defined in paragraph 5 of this award term and condition;
 - (2) A civil proceeding that resulted in a finding of fault and liability and payment of a monetary fine, penalty, reimbursement, restitution, or damages of \$5,000 or more;
 - (3) An administrative proceeding, as defined in paragraph 5. of this award term and condition, that resulted in a finding of fault and liability and your payment of either a monetary fine or penalty of \$5,000 or more or reimbursement, restitution, or damages in excess of \$100,000; or
 - (4) Any other criminal, civil, or administrative proceeding if:
 - (i) It could have led to an outcome described in paragraph 2.c.(1), (2), or (3) of this award term and condition;

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- (ii) It had a different disposition arrived at by consent or compromise with an acknowledgment of fault on your part; and
- (iii) The requirement in this award term and condition to disclose information about the proceeding does not conflict with applicable laws and regulations.

3. Reporting Procedures

Enter in the SAM Entity Management area the information that SAM requires about each proceeding described in paragraph 2 of this award term and condition. You do not need to submit the information a second time under assistance awards that you received if you already provided the information through SAM because you were required to do so under Federal procurement contracts that you were awarded.

4. Reporting Frequency

During any period of time when you are subject to the requirement in paragraph 1 of this award term and condition, you must report proceedings information through SAM for the most recent five year period, either to report new information about any proceeding(s) that you have not reported previously or affirm that there is no new information to report. Recipients that have Federal contract, grant, and cooperative agreement awards with a cumulative total value greater than \$10,000,000 must disclose semiannually any information about the criminal, civil, and administrative proceedings.

5. Definitions

For purposes of this award term and condition:

- a. Administrative proceeding means a non-judicial process that is adjudicatory in nature in order to make a determination of fault or liability (e.g., Securities and Exchange Commission Administrative proceedings, Civilian Board of Contract Appeals proceedings, and Armed Services Board of Contract Appeals proceedings). This includes proceedings at the Federal and State level but only in connection with performance of a Federal contract or grant. It does not include audits, site visits, corrective plans, or inspection of deliverables.
- b. Conviction, for purposes of this award term and condition, means a judgment or conviction of a criminal offense by any court of competent jurisdiction, whether entered upon a verdict or a plea, and includes a conviction entered upon a plea of nolo contendere.
- c. Total value of currently active grants, cooperative agreements, and procurement contracts includes—
 - (1) Only the Federal share of the funding under any Federal award with a recipient cost share or match; and
 - (2) The value of all expected funding increments under a Federal award and options, even if not yet exercised.

[80 FR 43310, July 22, 2015, as amended at 85 FR 49582, Aug. 13, 2020]

22. CONFLICTS OF INTEREST

(a) Applicability.

- (1) This section intends to ensure that non-Federal entities and their employees take appropriate steps to avoid conflicts of interest in their responsibilities under or with respect to Federal financial assistance agreements.
- (2) In the procurement of supplies, equipment, construction, and services by recipients and by subrecipients, the conflict of interest provisions in 2 CFR 200.318 apply.

(b) Requirements.

- (1) Non-Federal entities must avoid prohibited conflicts of interest, including any significant financial interests that could cause a reasonable person to question the recipient's ability to provide impartial, technically sound, and objective performance under or with respect to a Federal financial assistance agreement.
- (2) In addition to any other prohibitions that may apply with respect to conflicts of interest, no key official of an actual or proposed recipient or subrecipient, who is substantially involved in the proposal or project, may have been a former Federal employee who, within the last one (1) year, participated personally and substantially in the evaluation, award, or administration of an award with respect to that recipient or subrecipient or in development of the requirement leading to the funding announcement.
- (3) No actual or prospective recipient or subrecipient may solicit, obtain, or use non-public information regarding the evaluation, award, or administration of an award to that recipient or subrecipient or the development of a Federal financial assistance opportunity that may be of competitive interest to that recipient or subrecipient.

(c) Notification.

- (1) Non-Federal entities, including applicants for financial assistance awards, must disclose in writing any conflict of interest to the DOI awarding agency or pass-through entity in accordance with 2 CFR 200.112, Conflicts of Interest.
- (2) Recipients must establish internal controls that include, at a minimum, procedures to identify, disclose, and mitigate or eliminate identified conflicts of interest. The recipient is responsible for notifying the Financial Assistance Officer in writing of any conflicts of interest that may arise during the life of the award, including those that have been reported by subrecipients.

(d) Restrictions on Lobbying. Non-Federal entities are strictly prohibited from using funds under this grant or cooperative agreement for lobbying activities and must provide the required certifications and disclosures pursuant to 43 CFR Part 18 and 31 USC 1352.

(e) Review Procedures. The Financial Assistance Officer will examine each conflict of interest disclosure on the basis of its particular facts and the nature of the proposed grant or

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cooperative agreement, and will determine whether a significant potential conflict exists and, if it does, develop an appropriate means for resolving it.

- (f) Enforcement. Failure to resolve conflicts of interest in a manner that satisfies the Government may be cause for termination of the award. Failure to make required disclosures may result in any of the remedies described in 2 CFR 200.338, Remedies for Noncompliance, including suspension or debarment (see also 2 CFR Part 180).

23. DATA AVAILABILITY

- (a) Applicability. The Department of the Interior is committed to basing its decisions on the best available science and providing the American people with enough information to thoughtfully and substantively evaluate the data, methodology, and analysis used by the Department to inform its decisions.
- (b) Use of Data. The regulations at 2 CFR 200.315 apply to data produced under a Federal award, including the provision that the Federal Government has the right to obtain, reproduce, publish, or otherwise use the data produced under a Federal award as well as authorize others to receive, reproduce, publish, or otherwise use such data for Federal purposes.
- (c) Availability of Data. The recipient shall make the data produced under this award and any subaward(s) available to the Government for public release, consistent with applicable law, to allow meaningful third party evaluation and reproduction of the following:
 - (i) The scientific data relied upon;
 - (ii) The analysis relied upon; and
 - (iii) The methodology, including models, used to gather and analyze data.

24. PROHIBITION ON PROVIDING FUNDS TO THE ENEMY

- (a) The recipient must—
 - (1) Exercise due diligence to ensure that none of the funds, including supplies and services, received under this grant or cooperative agreement are provided directly or indirectly (including through subawards or contracts) to a person or entity who is actively opposing the United States or coalition forces involved in a contingency operation in which members of the Armed Forces are actively engaged in hostilities, which must be completed through [2 CFR 180.300](#) prior to issuing a subaward or contract and;
 - (2) Terminate or void in whole or in part any subaward or contract with a person or entity listed in SAM as a prohibited or restricted source pursuant to subtitle E of Title VIII of the NDAA for FY 2015, unless the Federal awarding agency provides written approval to continue the subaward or contract.

- (b) The recipient may include the substance of this clause, including paragraph (a) of this clause, in subawards under this grant or cooperative agreement that have an estimated value over \$50,000 and will be performed outside the United States, including its outlying areas.
- (c) The Federal awarding agency has the authority to terminate or void this grant or cooperative agreement, in whole or in part, if the Federal awarding agency becomes aware that the recipient failed to exercise due diligence as required by paragraph (a) of this clause or if the Federal awarding agency becomes aware that any funds received under this grant or cooperative agreement have been provided directly or indirectly to a person or entity who is actively opposing coalition forces involved in a contingency operation in which members of the Armed Forces are actively engaged in hostilities.

25. ADDITIONAL ACCESS TO RECIPIENT RECORDS

- (a) In addition to any other existing examination-of-records authority, the Federal Government is authorized to examine any records of the recipient and its subawards or contracts to the extent necessary to ensure that funds, including supplies and services, available under this grant or cooperative agreement are not provided, directly or indirectly, to a person or entity that is actively opposing United States or coalition forces involved in a contingency operation in which members of the Armed Forces are actively engaged in hostilities, except for awards awarded by the Department of Defense on or before Dec 19, 2017 that will be performed in the United States Central Command (USCENTCOM) theater of operations.
- (b) The substance of this clause, including this paragraph (b), is required to be included in subawards or contracts under this grant or cooperative agreement that have an estimated value over \$50,000 and will be performed outside the United States, including its outlying areas.

26. PROHIBITION ON CERTAIN TELECOMMUNICATION AND VIDEO SURVEILLANCE SERVICES OR EQUIPMENT

Federal award recipients are prohibited from using government funds to enter contracts (or extend or renew contracts) with entities that use covered telecommunications equipment or services as described in section 889 of the 2019 National Defense Authorization Act. This prohibition applies even if the contract is not intended to procure or obtain, any equipment, system, or service that uses covered telecommunications equipment or services.

III. DEPARTMENT OF THE INTERIOR STANDARD AWARD TERMS AND CONDITIONS

The Department of the Interior (DOI) Standard Award Terms and Conditions found at <https://www.doi.gov/sites/doi.gov/files/uploads/doi-standard-award-terms-and-conditions-effective-december-2-2019-revised-june-19-2020.pdf> are hereby incorporated by reference as though set forth in full text. These terms and conditions are in addition to the assurances and certifications made as part of the award and terms, conditions or restrictions reflected on this Agreement. Recipient acceptance of this Agreement carries with it the responsibility to be aware of and comply with all DOI terms and conditions applicable to this Agreement. The Recipient is responsible for ensuring their subrecipients and contractors are aware of and comply with applicable statutes, regulations, and agency requirements.

Recipient and subrecipient failure to comply with the general terms and conditions outlined below and those directly reflected in this Agreement can result in the DOI taking one or more of remedies described in 2 Code of Federal Regulations parts 200.339 and 200.340. The DOI will notify the recipient whenever terms and conditions are updated to accommodate instances in the passage of a regulation or statute that requires compliance. Also, DOI will inform the Recipient of revised terms and conditions in the action of an Agreement amendment adding additional Federal funds. Reclamation will make such changes by issuing a Notice of Award amendment that describes the change and provides the effective date. Revised terms and conditions do not apply to the Recipient's expenditures of funds or activities the Recipient carries out before the effective date of the revised DOI terms and conditions.

RESOLUTION NO. 2023-04

**RESOLUTION OF THE BOARD OF DIRECTORS OF THE
GROUNDWATER BANKING JOINT POWERS AUTHORITY
SMALL SURFACE STORAGE AND GROUNDWATER STORAGE PROJECTS
GRANT APPLICATION**

WHEREAS, the Groundwater Banking Joint Powers Authority has prepared an application to apply for federal funding from the United States Department of the Interior, Bureau of Reclamation (Reclamation) to assist in the funding of Groundwater Storage Projects; and

WHEREAS, the funding opportunity provided by Reclamation through their Grant Program entitled “Small Surface Water and Groundwater Storage Projects” Funding Opportunity Announcement No. is R24AS00010; and

WHEREAS, the West Enos and Stockdale North Recharge and Recovery Project involves the drilling and equipping of 4 wells, construction of approximately 300 acres of recharge ponds, and construction of recovery well conveyance, pipelines, and turnout facilities to improve overall drought resiliency by increasing groundwater recharge during wet years and recovery in drought years.

THEREFORE, BE IT RESOLVED, the Groundwater Banking Joint Powers Authority Board of Directors have reviewed the application and support its submittal for Reclamation assisted funding. The Board of Directors approve Dan Bartel, General Manager, as the official with legal authority to enter into a cooperative agreement with Reclamation and confirm that the Groundwater Banking Joint Powers Authority is capable of providing the amount of funding specified in the application. The Groundwater Banking Joint Powers Authority will work with Reclamation to meet established deadlines for entering into a cooperative agreement.

PASSED APPROVED AND ADOPTED on this _____ day of _____, 20__ by the following roll-call vote:

AYES:
NOES:
ABSENT:
ABSTAINED:

**GROUNDWATER BANKING JOINT
POWERS AUTHORITY**

President/Board of Directors

ATTEST:

Secretary/Board of Directors



— BUREAU OF —
RECLAMATION

Notice of Funding Opportunity No. R24AS00010

Small Surface Water and Groundwater Storage Projects



Synopsis

Federal Agency Name:	Department of the Interior, Bureau of Reclamation, Policy and Programs
Funding Opportunity Title:	Small Surface Water and Groundwater Storage Projects
Announcement Type:	Notice of Funding Opportunity (NOFO)
Funding Opportunity Number:	R24AS00010
Assistance Listing Number:	15.074
Dates: (See NOFO Sec. D.4)	Application due date: November 30, 2023, 5 p.m Mountain Standard Time (MST)
Eligible Applicants: (See NOFO Sec. C.1)	Applicants eligible to receive financial assistance to fund activities under this NOFO include: Sponsors of small surface water and groundwater storage projects located in the Western United States as identified in the Reclamation Act of June 17, 1902 as well as Alaska and Hawaii that have been found to meet all of the requirements of Temporary Reclamation Manual Release CMP TRMR-127 no later than the posting date of the NOFO.
Recipient Cost-Share: (See NOFO Sec. C.2)	A non-Federal cost-share of at least 75% is required.
Federal Funding Amount: (See NOFO Sec. B.1)	Up to \$30,000,000 per applicant
Estimated Number of Agreements to be Awarded: (See NOFO Sec. B.1)	Approximately \$25,000,000 is available under this program. Approximately 2 to 6 awards per application submittal period, contingent on appropriations.
Intergovernmental Review: (See NOFO Sec. D.5)	This NOFO is not subject to Executive Order 12372, "Intergovernmental Review of Federal Programs." A list of states that have elected to participate in the intergovernmental review process is available on whitehouse.gov .

Small Surface Water and Groundwater Storage Projects

NOFO No. R24S00010

November 2023



Groundwater Banking Joint Powers Authority (GBJPA)

Phase 1 - Kern Fan Groundwater Storage Project

Fiona Sanchez

Project Manager, Groundwater Banking Joint Powers Authority

Director of Water Resources, Irvine Ranch Water District

(949) 453-5325

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1. Technical Proposal and Evaluation Criteria

1.1 Executive Summary

The executive summary should include:

- *the date, applicant name, city, county, and State,*
- *a one-paragraph summary that briefly describes the work for which the applicant requests funding, including how funds will be used to accomplish specific project activities.*
- *The length of time and estimated completion date for the proposed project (month/year).*
- *Whether or not the proposed planning efforts are focused on a Federal facility or will involve Federal land.*

The Phase 1 - Kern Fan Groundwater Storage Project (“Project”, “Phase 1”) is a joint effort between Irvine Ranch Water District (“IRWD”, “Irvine”) and the Rosedale-Rio Bravo Water Storage District (“RRBWSD”, “Rosedale”) operating collectively as the Groundwater Banking Joint Powers Authority (“GBJPA”). See **Figure 1** below to view Rosedale and Irvine service areas. The GBJPA is in the process of developing the Kern Fan Project, a regional groundwater bank in Kern County, California, immediately west of the City of Bakersfield that has the potential to store up to 100,000 acre-feet of surplus water made available during wet years. Due to the large scale of the Kern Fan Project, implementation has been broken up into multiple independent operational phases, with Phase 1 being a standalone project. Phase 1 includes the acquisition of 350 acres in Kern County for the construction and operation of recharge basins, recovery wells, and conveyance infrastructure and interconnections. The GBJPA proposes to utilize resources in a cost-share agreement with the United States Bureau of Reclamation (“Reclamation”, “USBR”) to implement the proposed Project. The Phase 1 project was awarded Small Storage Program 2022 funding, and the GBJPA executed an agreement in November 2023 (Agreement No. R23AP00368) in the amount of \$4,742,929, which provided partial funding based on eligible benefits to Reclamation. This application seeks additional Small Project Program funding up to the eligible funding amount.

Once implemented, the Project has the potential to provide approximately 28,000 acre-feet of new groundwater storage capacity and 14,480 acre-feet per year of drought year supply to provide long-term water supply reliability for agriculture, municipal and industrial (M&I) users, and disadvantaged communities. USBR funds would be used to accomplish the following Project activities:

- West Enos and North Stockdale Recharge Basins - Construction of approximately 300 net wetted acres (85% of total acres) of direct recharge basins on the West Enos property (approximately 201 acres) and the Stockdale North property (approximately 147 acres).
- West Enos and North Stockdale Recovery Wells - Well drilling and equipping of four (4) conjunctive use recovery wells. Two wells will be located on the West Enos property, and two wells will be located on the Stockdale North property.

The above-described Project facilities support the program requirements set forth by USBR. Phase 1 will be operated to meet the following planning objectives:

- Capture, recharge, and store water from the State Water Project (SWP) and Central Valley Project (“CVP”) and other available water supplies, for later use during dry periods;
- Provide Rosedale and IRWD customers and banking partners with increased water supply reliability;
- Provide ecosystem benefits through intermittent wetland habitat for migratory birds and other waterfowl along the Pacific Flyway;
- Provide ecosystem benefits by increasing operational flexibility for managing stored water pools throughout the state;
- Provide water supply benefits for agricultural, municipal, and industrial users
- Assist in achieving groundwater sustainability within the Kern Sub-basin
- Improve water management and increase operational flexibility.

Water supplies in California continue to be stressed due to over-pumping of groundwater basins, constraints on the State Water Project and Central Valley Project, increased competition for water supplies, and reoccurring droughts among other factors. The proposed Project is critical for enhancing water storage, creating a reliable water supply for future generations, and meeting landmark California Sustainable Groundwater Management Act (“SGMA”) goals. See **Table 1** below for Project and applicant information.

Table 1: Project and Applicant Information

Project Information	
Date	November 30, 2023
Project Name	Phase 1 - Kern Fan Groundwater Storage Project
Applicant Name	Groundwater Banking Joint Powers Authority (GBJPA)
City, County, State	Bakersfield, Kern County, California
Estimated Project timeline	10/3/2022-12/30/2026
Project focused on a Federal facility or	The Project is not focused on a Federal facility and does not involve Federal Land. However, the Project’s water can be conveyed to the Friant Kern Canal to satisfy Federal Water demands. A critical piece of the

involve Federal Land	Project is connecting the proposed new wells with pipelines to existing conveyance facilities so that the water can be accessible for both the State and Federal Water Contractors in dry years.
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Figure 1. RRBWSD and IRWD Boundaries and Location



1.1.1. Project Location

The Project is located in Kern County, California, approximately 5 miles west of the City of Bakersfield, and within the boundaries of the Rosedale-Rio Bravo Water Storage District. The Project locations are as follows:

1. The West Enos property latitude is {35°22'35.33''N} and longitude is {119°15'24.90''W} (approximately 201 acres).
2. The Stockdale North property latitude is {35°21'29.24''N} and longitude is {119°15'57.02''W} (approximately 149 acres).

See the technical project description and **Figure 2 below** for a more detailed description of the project sites.

1.1.2. Project Schedule

<u>Milestone/Task/Activity</u>	<u>Planned Start Date</u>	<u>Planned Completion Date</u>
Task 1. Environmental Compliance (CEQA & NEPA)	10/3/2022	11/3/2023
Task 2. Permitting	5/8/2023	12/30/2025
Task 3. Design Phase	6/1/2022	6/30/2025
Task 4. Construction Bid Phase	1/9/2023	1/31/2026
Task 5. Construction Phase	1/31/2024	9/30/2026
5.1 Recharge Basin Construction	1/3/2024	6/30/2025
5.2 Well Drilling	1/2/2025	2/28/2026
5.3 Well Equipping	6/1/2025	12/30/2026

See **Appendix C** for a more detailed Project Schedule.

1.2 Technical Project Description

The project description should describe the work, including any specific activities the work will accomplish. The goals and objectives of the project, and the approach to complete the work, should be included. This section is an opportunity for the applicant to provide a clear description of the technical nature of the project and to address any aspect of the project that reviewers may need additional information to understand.

Describe in detail the project tasks to substantial completion, if applicable. For each task, describe planned activities and expected outcomes and milestones. Information provided should be consistent with the Project Schedule. Describe the staff levels and expertise, the number of staff hours, and the schedule for completing each task.

The proposed Project is located in Kern County, California, approximately 5 miles west of the City of Bakersfield, and within the boundaries of the Rosedale-Rio Bravo Water Storage District. The Project includes the acquisition of 350 acres in Kern County for the construction and operation of recharge basins, recovery wells, conveyance infrastructure, and interconnections with existing conveyance facilities. The properties have been acquired by the GBJPA and include the West Enos property (sometimes referred to as “Bolthouse” in technical studies) and the Stockdale North property (sometimes referred to as “Diamond” in technical studies) to be converted from farmland to groundwater recharge basins. The West Enos property latitude is {35°22’35.33’’N} and longitude is {119°15’24.90’’W} (approximately 201 acres) and the Stockdale North property latitude is {35°21’29.24’’N} and longitude is {119°15’57.02’’W} (approximately 149 acres). The GBJPA intends to construct approximately 300 wetted acres of recharge basins on both properties and two (2) recovery wells on each property, for a total of four (4) recovery wells. Both the West Enos and Stockdale North properties are located adjacent to existing Rosedale and IRWD groundwater recharge basins and conveyance facilities, which provide advantages in the development of new water banking and recovery facilities. These facilities are shown in **Figure 2** below and referred to as ‘Existing Conjunctive Use Facilities’.

Figure 2. Project Location – West Enos (pink) and Stockdale North (green)

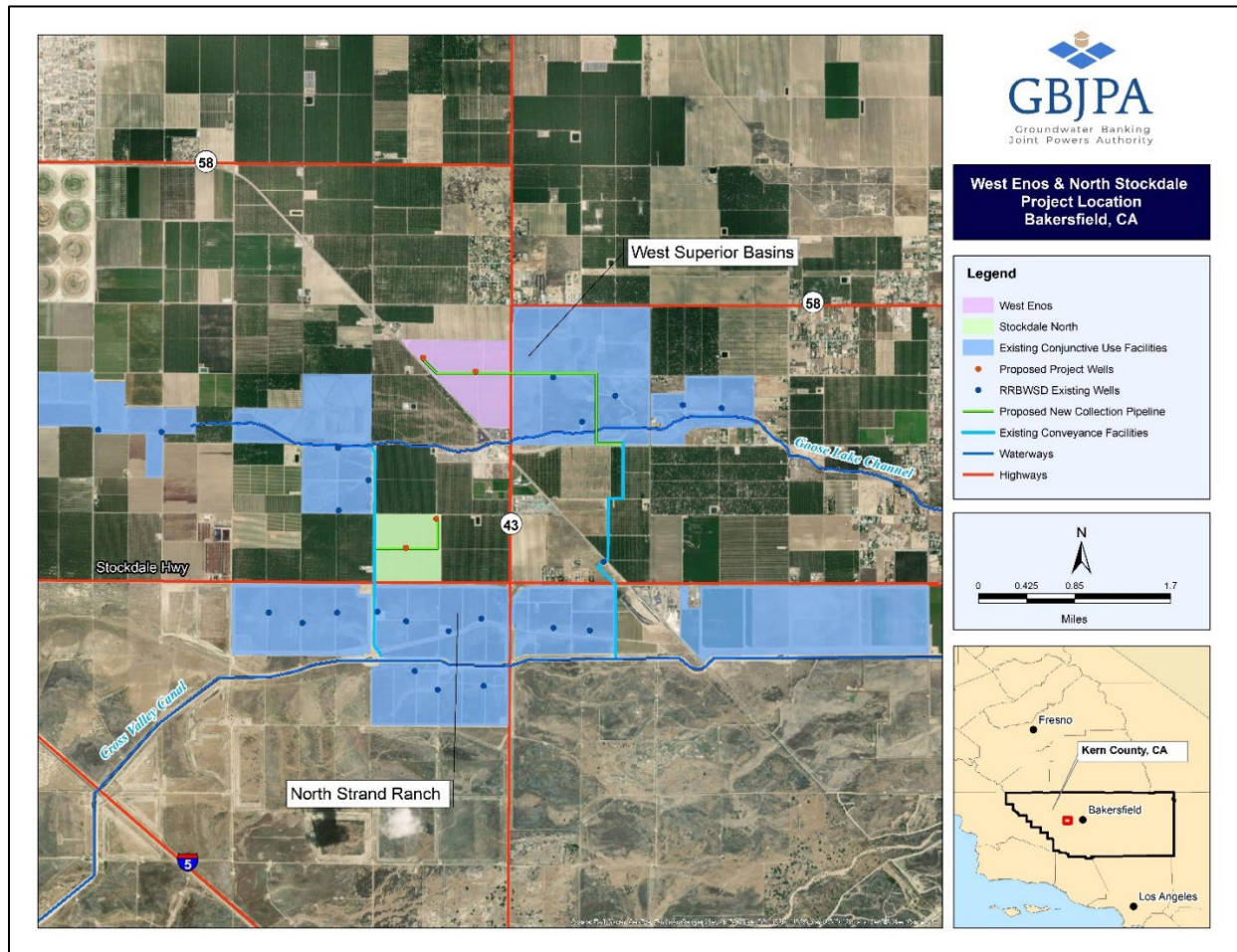


Figure 2 shows the location of the proposed West Enos and Stockdale North recharge basins as well as a preliminary estimate of the locations of the wells and conveyance facilities that will deliver water to and from the Stockdale North and West Enos Phase 1 project site.

Phase 1 is designed to improve the GBJPA’s water storage opportunities by increasing groundwater storage by capturing and storing wet year water supplies and recovering groundwater during periods of drought and limited water supply. The project tasks include:

1. Environmental Compliance
2. Permitting
3. Design Phase
4. Construction Bid Phase
5. Construction Phase

Environmental Compliance: As described further in Section 3, the proposed project’s impacts were analyzed in the Kern Fan Groundwater Storage Project Environmental Impact Report (EIR). The EIR and a Mitigation Monitoring Reporting Program (MMRP) were certified and adopted by the GBJPA on December 28, 2020. On October 23, 2023, Reclamation determined

the Project was excluded from the National Environmental Policy Act (NEPA) under exclusion category 43 CFR § 46.210(c).

Permitting: The proposed Project would comply with all federal, state, local laws and ordinances applicable to the Project. Anticipated permitting requirements are further described in Section 4. Permitting for the Project may be phased consistent with the project final design of the various components. All required permits for all of the project components are expected to be acquired by December 2025.

Design Phase: Technical memoranda based on a completed Preliminary Design Report have been prepared that evaluated the major design elements of the full Kern Fan Project, including the Phase 1 Project, and provided a basis for design. The technical memoranda include further details relating to the requirements for conveyance pipeline, recharge basins, recovery wells and other appurtenant facilities. The Phase 1 Project recharge, conveyance and recovery facilities will be designed based on the requirements set forth in the technical memoranda. Final design of all facilities is expected to be completed in June 2025.

Construction Bid Phase: Following completion of final design and acquisition of required permits, the Project will be advertised for competitive bidding to qualified contractors. The Construction Bid Phase will be over several years as the project will be constructed in phases. It is anticipated that the final bid phase will be completed by January 2026.

Construction Phase:

Recharge Basins: The first step in the construction phase will be the recharge basins. The GBJPA will construct recharge basins on the recently acquired West Enos property (201 acres) and Stockdale North property (149 acres). Current agricultural practices will be ceased, existing almond trees and other crops will be removed from the properties, and levees will be constructed to build approximately 2-3 separate recharge basins on each property. Precast concrete structures fitted with weir board slots or gates will be used to control flows between individual recharge basins but also to deliver high flows to the Stockdale North and West Enos recharge basins.

Well Drilling and Equipping: The second step will be the drilling and equipping of four (4) production wells, two on each of the project sites. Earthen well pads will be constructed as part of the recharge basin construction, serving as drill islands. Wells will be drilled approximately based on the hydrogeology of the area and local experience. Equipping will be done after the drilling is completed, see **Appendix A** for a layout of the well equipping facilities.

Conveyance Pipelines: The final major step will be the installation of the recovery conveyance pipelines which will deliver recovered groundwater to existing conveyance facilities. It will require jack and boring under state highways, as well as a significant amount of piping to provide connections to existing conveyance facilities. Fortunately, major pipelines and channels have already been constructed by Rosedale with capacity to deliver recovery flows from both the Stockdale North and West Enos properties. These existing facilities run north and south and convey water to and from the Cross Valley Canal which can run to or from the California Aqueduct (state water) and the Friant Kern Canal (federal water).

Additional details of the four project components are described below.

1. Recharge Basins – GBJPA seeks to construct approximately 300 net acres (85% of total acres) of direct recharge basins via the placement of 320,000 cubic yards (CY) of compacted levees that are approximately 2-5 feet in height. Upwards of 14,000 acre-feet per year (AFY) (on average wet year 120 days/year) of recharge water will be conveyed from recharge basin to recharge basin via inter-basin check structures. During wet years, when water supplies are abundant throughout the year, the Project could provide approximately 28,000 acre-feet of storage into the Kern Subbasin. Water would be conveyed to the recharge facilities using the existing Cross Valley Canal and Gooselake Channel conveyance facilities and subsequently diverted through inverted siphons with sluice gates. Approximately 60 cfs (cubic feet per second) of intake capacity would be required to serve the Stockdale North property from the existing North Strand Recharge Project, and 80 cfs of intake capacity to be built off the existing West Superior property. See **Figure 2** for project component locations.

2. Well Drilling – GBJPA seeks to drill four (4) conjunctive use recovery wells. Two wells will be located on the West Enos Property and the Stockdale North property will accommodate the other two wells. At an estimated 5 cfs per well, these wells can recover a total of 20 cfs, which correlates to a maximum of 14,425 acre-feet per year (AFY). The GBJPA has hired a hydrogeologist to perform a groundwater impact analysis using a groundwater model to study any negative effects on current facilities as well as local landowner wells. The GBJPA will use previous logs from nearby wells, historical water levels in the area, zone water quality sampling data, and local knowledge to assist with well design and water quality implications. Wells will be drilled to an approximate depth of 650-850 feet, with perforations from approximately 400-700 feet. The final design is subject to change based on field data collected during the pilot hole drilling, sampling, and the well development process. See **Appendix B** for an example of a similar well design in the area.

3. Well Equipping – The GBJPA uses a standardized design when equipping its wells. Apart from the pump, which is designed specifically for each well, each facility will have variable frequency drives (VFDs), vacuum relief valve, sleeve coupling with joint harness, high-pressure switch, pressure transmitter, sample port, check valve, pressure gauge, flowmeter, butterfly valve, pipe supports, and a combination air vent. Well discharge piping will be 12-inch fusion bonded epoxy lined and coated steel piping. See **Appendix A** for a typical well-equipping design.

4. Water Conveyance Connections – The GBJPA currently has 3 main ways to convey recovered groundwater, all of which run north-south and connect current recovery facilities to the Cross Valley Canal. The water then can be conveyed west to the California Aqueduct to satisfy State Water Project Contractor demands, or east to the Friant Kern Canal to satisfy Federal Water Contractor demands. A critical piece of the project is connecting the new wells with current delivery facilities so that the water can be accessible for both the State and Federal Water Contractors in dry years. The return pipeline from the West Enos recovery facility will run under Enos Lane (Hwy 43) through a newly constructed culver and will run parallel to existing conveyance until it connects to the existing Central Intake Pipeline, running south to the Cross Valley Canal, through approximately 10,000 feet (ft) of 24” PVC pipe. The Stockdale North property will have two recovery wells, both tying back into Rosedale Turnout No. 2 where the water is conveyed south to the Cross Valley Canal, approximately 2,500 ft of 18” PVC pipe, and 1,200 ft. of 24” PVC pipe.

As with most major projects, many project components from each of the listed steps require parallel progression and overlap is necessary to produce an efficient project schedule. It is estimated that the Project, including permitting, will be completed in approximately 39 months. Please see **Appendix C** for a preliminary Project Schedule.

IRWD and Rosedale staff will work with design and construction consultants to implement the Project. A brief description of the key personnel that will be working on the Project is provided below in **Table 2**. An estimate of staff hours and planned completion date for each task is also provided below in **Table 3**.

Table 2: Description of Key Personnel

Key Personnel	Description
GBJPA General Manager/ Rosedale Engineering Manager	Manages the entire GBJPA, the project manager and oversees the budget, design, and construction of each project component.
GBJPA Project Manager/ IRWD Director of Water Resources	Manages the project and facilitates communication between all main parties to secure necessary contracts, permits, agreements etc.
IRWD Engineer	Reviews design and construction plans submitted by design and construction consultants.
IRWD Water Resources Manager	Assists with project administration including environmental review work and grant administration.
Rosedale Engineer – Tech	Assist with design, bidding, procurement of material and projects, and construction management

Table 3: Estimated Staff Hours for Each Project Task

Task	Planned Completion Date	Estimate Number of Staff Hours
1. Environmental Compliance	Complete	0

2. Permitting	12/30/2025	75
3. Design Phase	6/30/2025	200
4. Construction Bid Phase	1/31/2026	50
5. Construction Phase	12/30/2026	300

With limited opportunities in California to develop and construct new above-ground water storage, the Phase 1 Project provides an achievable way to increase water storage opportunities in the State via groundwater banking. The Phase 1 Project facilities will be operated to meet the following goals and objectives:

- Capture, recharge, and store water from the SWP and CVP and other available water supplies for later use during dry periods.
- Provide Rosedale and IRWD customers and other banking and exchange partners with increased water supply reliability and drought resiliency during periods when other supply sources may be reduced or interrupted.
- Provide ecosystem benefits and water supply benefits for agricultural and M&I uses.
- Provide increased operating flexibility for Rosedale’s existing and future Conjunctive Use Programs.
- Assist in achieving groundwater sustainability within the Kern County Sub-basin of the San Joaquin Valley Groundwater Basin.

Additional project benefits include:

- Provide enhanced protection against extended drought and climate change;
- Reduce groundwater pumping lifts and resulting energy savings;
- Support third-party banking and transfer partners;
- Provide intermittent wetland habitat for wildlife environmental benefits;
- Provide intermittent upland habitat for wildlife environmental benefits;
- Preservation of permanent crops as result of increased agricultural water supply reliability; and
- Increased operational flexibility and improved water management.

1.3 Evaluation Criteria

E.1.1. Evaluation Criterion 1—Water Supply Reliability (35 points)

E.1.1.1. Sub-criterion No. 1a—Enhanced Water Supplies (20 points)

How much additional storage capacity does the project add to the system (relative to current system capacity)? How many additional acre-feet of water will the project make available, on average, each year upon completion? What percentage of the service area's overall water supply will the project's water provide upon project completion? Use the total average project water production over the anticipated life of the project.

Upon completion of the project, an additional 28,000 AF of additional storage capacity will be available within the aquifer. In a single year, an estimated 14,940 AF can be recharged, and approximately 14,480 AF can be recovered. Based on the existing recharge capacity of approximately 150,000 AF over a 4-month span, the project adds just below 10% of additional recharge capacity to the system. The calculation basis for each of these volumes is provided below.

Recharge Calculation:

The infiltration rate is the depth of the water that is banked in the aquifer per day. The infiltration rates used in this calculation are from a technical memorandum prepared by a professional hydrogeologist in the Kern Fan Project Final Environmental Impact Report (EIR) (see **Appendix O**), estimated at 0.5 ft/day (West Enos recharge basins) and 0.3 ft/day (Stockdale North recharge basins). In California, high-flow state and federal waters are typically available for four months (March-June) during wet years, so this analysis is being done for an average wet year. The wetted area, which is approximately 85% of the total acreage of each property, is also used for the calculation.

West Enos:

0.5 ft/day (infiltration rate) x 174 wetted acres (85% wetted area) x 120 days/year (4 months)
= 10,440 AF per year (AFY)

Stockdale North:

0.3 ft/day (infiltration rate) x 125 wetted acres (85% wetted area) x 120 days/year (4 months)
= 4,500 AF per year (AFY)

Total Phase 1 recharge = 14,940 AFY

Recovery Calculation:

Based on local knowledge and historical records, a conservative estimate of 5 cubic feet per second (cfs) was used for the flow rate at each recovery well. A conversion factor worth noting for the calculation is that 1 cfs = 1.983 acre-feet/day. Four wells, as stated in the project description will be drilled and equipped. In critical and some dry years these wells run continuously for the entire year.

West Enos:

5 cfs (flow rate) x 1 cfs/1.983 AFD (acre-feet/day) x 365 days/year x 2 wells
= 7,240 AF / year

Stockdale North:

5 cfs (flow rate) x 1 cfs/1.983 AFD (acre-feet/day) x 365 days/year x 2 wells

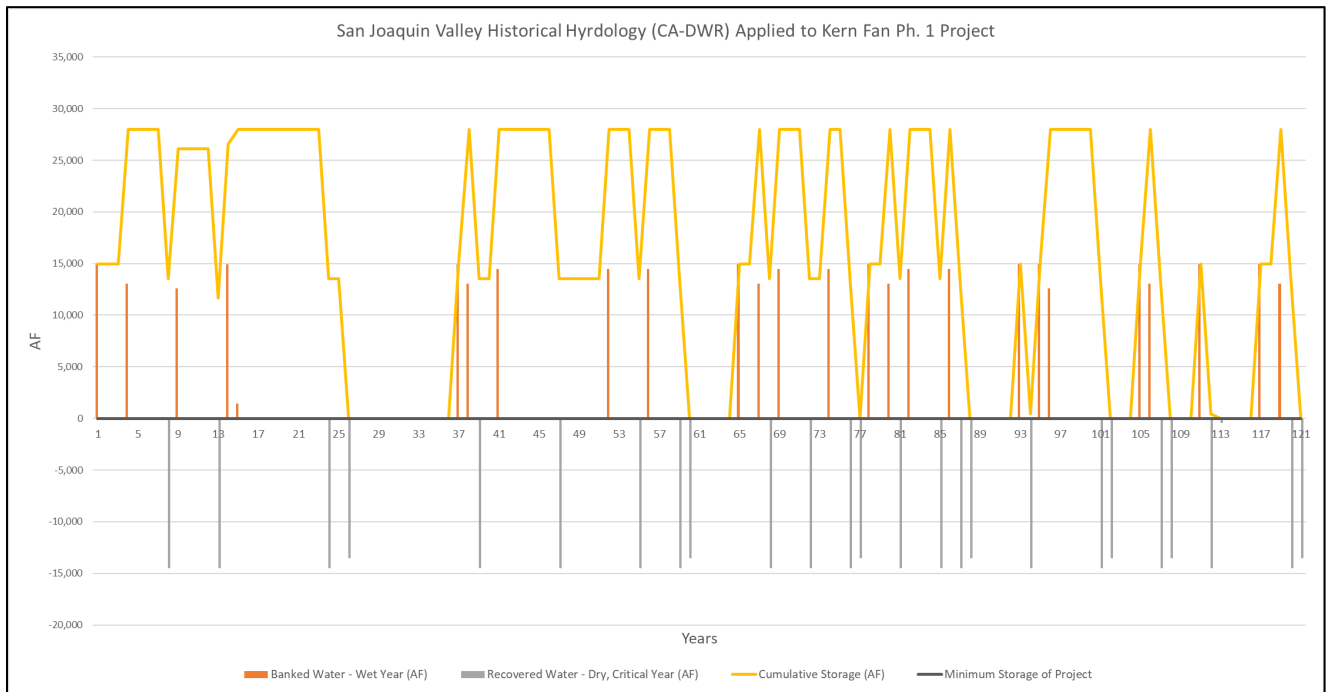
= 7,240 AF / year

Total Phase 1 recovery = 14,480 AFY

The expected recharge and recovery capacities for Phase 1 will allow the Project sponsor to recharge and recover water into and from the aquifer. This water will be stored in the 28,000 AF storage account assigned to Phase 1. Water recharged on Phase 1 will fill the 28,000 AF storage account assigned to Phase 1. Similarly, water recovered from Phase 1, will be withdrawn from the 28,000 AF storage account assigned to Phase 1.

The available recharge and recovery capacities given the 28,000 AF storage limitation were modeled for the 1901-2021 hydrology from DWR's Bulletin 120, for the San Joaquin Valley Watershed water year indices as shown in the graphic below (**Figure 3**). It shows that approximately **2,940 AFY (acre-ft/year)** of average annual water supply benefit (banked/recovered) is realized over the period. Using this model, water was stored for 26 of the 121 years (22% of the time) and likewise water was recovered in critically dry years, 26 of the 121 years (22% of the time). This 2,940 AFY was calculated by analyzing historical hydrology, utilizing recharge capacity in “wet” year and recovery capacity in “critical” and “dry” year.

Figure 3. San Joaquin Valley Historical Hydrology



The GBJPA also uses an alternative method to calculate the annual water supply benefit of the Project. In the Project Feasibility Study modeling results provided by consultants at MBK Engineers performed a hydrologic analysis using the CalSim II baseline Benchmark model with 2035 Central Tendency Climate data, published by Reclamation in March 2022. For purposes of this calculation, the results from MBK’s analysis attributed solely to the 100,000 AF storage of the full Kern Fan Project were scaled down proportionally to the 28,000 AF of groundwater

storage provided in Phase 1. The expected average annual water supply for the Phase 1 Project is approximately 2,482 AF per year, which is comparable to the other benefit calculation 2,940 AFY computed in the previous section.

The typical lifespan of wells is approximately 50 years. Motors, pumps, and electrical systems are about 10-20 years, while typical conveyance facilities are estimated to be about 50-100 years. For purposes of the application criteria, the proposed anticipated ‘life’ of the Project could provide water supply benefits for 50-plus years until facilities would need to be replaced and/or repaired. This timeframe for life cycle analysis was used in the Small Storage Program Feasibility Study.

RRBWSD’s average annual water supply (1993-2013) for agricultural use is about 85,000 AFY from various sources (i.e., Kern River, SWP, CVP, banked groundwater, and exchanges). Since RRBWSD is an equal participant in the Project, RRBWSD’s annual benefit during a dry year is half of the 14,480 AFY, which is **7,240 AFY**. This number divided by RRBWSD’s supply is the percent of the total water supply calculation, during a dry year.

IRWD’s average annual potable water supply from the last twenty years (2002 – 2021) is approximately 59,000 AFY. Unlike RRBWSD, a majority of IRWD’s demand is domestic/residential users, so only potable supply will be considered for this calculation. Since IRWD is an equal participant in the Project, IRWD’s annual benefit during a dry year is half of the 14,480 AFY, which is **7,240 AFY**. This number divided by IRWD’s potable water supply is the percent of the total water supply calculation, during a dry year.

RRBWSD Water Supply (dry year) -

Estimated Amount of Project Additional Water Supply	7,240 AFY
Average Annual Water Supply	85,000 AFY
Project Percentage of Total Water Supply	8.5%

IRWD Water Supply (dry year)-

Estimated Amount of Project Additional Water Supply	7,240 AFY
Average Annual Water Supply	58,810 AFY
Project Percentage of Total Water Supply	12.3 %

For the average annual water supply calculation, MBK’s modeling results were used. It is estimated that 1,375 AF/year average annual yield is available for Rosedale and 1,108 AF/year average annual yield is available for IRWD. The difference in average annual yields is due to different applicable loss factors for Rosedale and IRWD. Water recharged for IRWD is subject

to an additional 5% loss factor which is applied to water that is ultimately used outside of Kern County.

RRBWS Water Supply (average) -

Estimated Amount of Project Additional Water Supply	1,375 AFY
Average Annual Water Supply	85,000 AFY
Project Percentage of Total Water Supply	1.6%

IRWD Water Supply (average)-

Estimated Amount of Project Additional Water Supply	1,108 AFY
Average Annual Water Supply	58,810 AFY
Project Percentage of Total Water Supply	1.9 %

Will the project reduce or eliminate the reliance on imported water or other sources of surface water supplies that are less reliable? Explain.

Yes. The proposed Project will reduce the reliance on imported water supplies. The Project will capture, recharge, and store excess water from the SWP, CVP, and other available water supplies during wet years. During dry periods with limited water availability, the Project will be able to recover these previously stored wet-year water supplies for the water users; therefore, reducing the reliance on imported surface water supplies.

Will the project reduce groundwater overdraft and positively contribute to the sustainable yield of a groundwater basin or local aquifer? Explain.

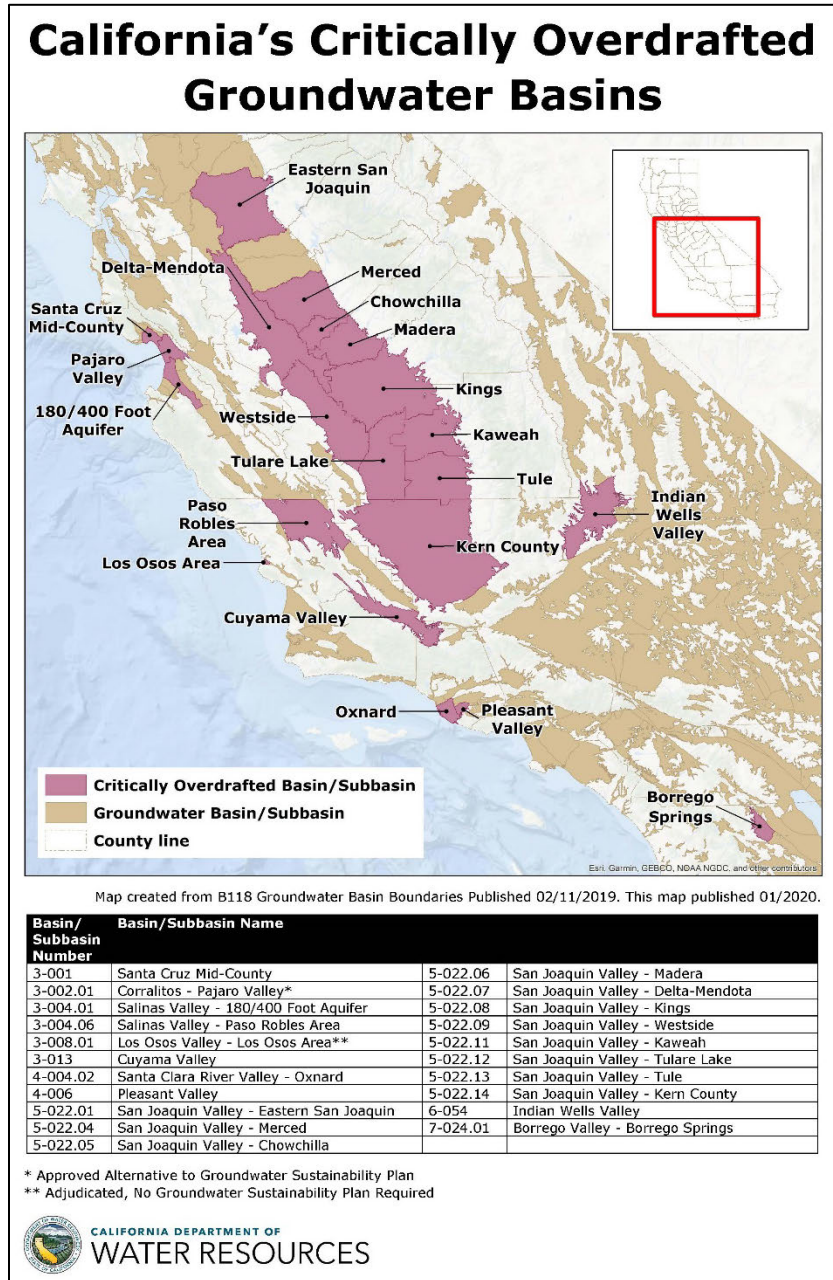
The Project will reduce groundwater overdraft and positively contribute to the sustainable yield of the Kern Sub-basin. The Sustainable Groundwater Management Act (SGMA) requires governments and water agencies of high and medium-priority basins to halt groundwater overdraft and bring groundwater basins into balanced levels of pumping and recharge. The California Department of Water Resources (“DWR”) has determined that the Kern Sub-basin, where the proposed Project is located, is a critically over-drafted sub-basin of high and medium priority (DWR, 2022). There is a critical need to develop additional groundwater recharge in the Kern Sub-basin area to improve sustainable water management. See **Figure 4** below.

Phase 1 would contribute to sustainable groundwater storage through the development of the West Enos and Stockdale North recharge basins, approximately 350 acres of recharge basins that would provide approximately 28,000 AF of new groundwater storage. The project will be a net

reduction of overlying water use in Rosedale's service area by converting irrigated land to recharge basins (a compatible agricultural use) to capture excess water supplies.

The full Kern Fan Project will consist of approximately 1,280 acres and has been allocated a maximum storage capacity of 100,000 AF in Rosedale's Conjunctive Use Program. Phase 1 of the Kern Fan Project is the first phase to implement the full Kern Fan Project. To estimate the storage capacity associated with Phase 1, the Project sponsor estimated the maximum storage capacity per acre based on the maximum storage capacity of the full Kern Fan Project and the total acres of land that will be acquired ($100,000 \text{ AF} / 1,280 \text{ acres} = 78.125 \text{ AF/acre}$). The maximum storage capacity per acre rate was then multiplied by the number of acres of land in Phase 1 to estimate an approximate storage capacity for Phase 1 ($78.125 \text{ AF/acre} \times 350 \text{ acres} = 27,344 \text{ AF}$). Using this approximation as a general basis, the Project sponsor has assigned 28,000 AF of the full Kern Fan Project's 100,000 AF maximum storage capacity to Phase 1. To confirm that there is at least 28,000 AF of storage capacity associated with Phase 1 lands, hydrogeologists at Thomas Harder & Co. prepared a technical memorandum, provided as **Appendix E**, that summarizes an analysis of aquifer storage potential beneath the Phase 1 properties. The aquifer storage capacity of Phase 1 properties was estimated as the volume of groundwater that can be stored in the aquifer directly beneath the sites. The aquifer storage capacity was estimated by multiplying the total aquifer volume beneath the sites by the specific yield of the aquifer sediments. Using this methodology, the estimated storage capacity for the Phase 1 properties is approximately 29,700 AF (Thomas Harder & Co., 2022).

Figure 4. SGMA Critically Overdrafted Basins



The Project is not expected to adversely impact the aquifer, overdraft, or cause land subsidence, as the GBJPA intends to replenish groundwater supplies via multiple existing and future aquifer recharge facilities and projects (see **Figure 5** for District facilities and nearby surface water supplies). The West Enos and Stockdale North properties will be converted from intensive agricultural activities to groundwater recharge facilities and will be utilized in conjunction with Rosedale and Irvine’s existing 2,200 acres of recharge facilities. As part of SGMA compliance, monitoring wells are measured monthly to ensure that water levels do not exceed established water level minimum thresholds and do not trigger undesirable results.

In addition, the Phase 1 Project will improve water levels in the Kern Sub-basin and provide local groundwater benefits based on a 2003 Memorandum of Understanding (MOU) between Rosedale and other adjacent water banking entities in Kern County. Per the MOU, a portion of banked groundwater, referred to as leave-behind water, is not recovered by the banking entity and remains in ground to bolster local groundwater levels. The Project is a planned supplemental water supply project and is not related to mitigation for basin overdraft.

Will the project alleviate pressure on existing water supplies and/or facilities? If so, please identify the supplies and/or facilities and explain how they will benefit from the project, including quantifications where applicable. Please include a description of the conditions that exist in the area and projections of the future with, and without, the project.

Yes. Due to California's highly variable hydrology, during wet years there are generally surplus surface supplies in the state and federal systems in excess of demands that are oftentimes lost to the ocean due to inadequate storage capacities. Conversely, during dry years, there are insufficient surface supplies to meet demands creating water shortages. Water supply shortages due to drought and the associated impacts of climate change are further exacerbated by increased competition for limited surface and groundwater supplies.

In recent years, water supplies in major reservoirs throughout the state have been at some of the lowest levels and legal and environmental restrictions have reduced the amount of water through the Delta, making dry-year surface supplies increasingly stressed and less reliable to users South of the Delta. Storage capacity south of the Delta, as provided by the proposed Project, is especially valuable as effects of climate change continue to affect reliability of dry-year supplies especially to users south of the Delta. By storing excess wet year water supplies, the Project will alleviate drought-year water supply demands on the SWP and CVP supply systems. A description of each source of water supply and how each water supply will benefit from the Project is included below.

State Water Project (SWP):

DWR delivers water to 29 SWP Contractors, including 21 contractors south of the Delta. The California Aqueduct is a primary part of the SWP and carries water from the Delta to the San Joaquin Valley and Southern California. SWP Contractors can request delivery of water up to their Table A amounts under a given allocation set by DWR based on hydrologic conditions. Rosedale currently receives SWP water for its Conjunctive Use Program through a water supply contract with the Kern County Water Agency ("KCWA"), one of the SWP Contractors. IRWD receives SWP from the Metropolitan Water District of Southern California (MWD) through the Municipal Water District of Orange County ("MWDOC").

IRWD is also a landowner in the Dudley Ridge Water District ("DRWD"), a SWP contractor located in Kings County. Through IRWD's land ownership in DRWD, IRWD is entitled to a portion of DRWD's Table A SWP allocation. IRWD has obtained approvals from DWR, DRWD, KCWA, and MWD to store its SWP water at its Water Bank on a 2-for-1 unbalanced exchange basis. Although the water belongs to IRWD, one half of all SWP supplies that are stored at the Strand Ranch are returned to and used on IRWD's lands in DRWD, per DRWD local rules and regulations.

Relieving Pressure on SWP Supplies:

The State of California's hydrology fluctuates from reoccurring wet and dry year cycles. During wet hydrologic years, DWR may declare Article 21 water available, which is uncontrolled water that exceeds SWP Contractors Table A requests and cannot be stored in State reservoirs. Article 21 supplies are usually available for a short duration and can be diverted and stored in non-SWP facilities for future use. If this water cannot be stored during this short period, it will ultimately be lost to the ocean. Article 21 water that will be captured and stored by the proposed Project can be used in dry years when the SWP supplies are short which will help to reduce demands and pressure on the SWP system.

Additionally, during dry years, Project operations will reduce impacts on threatened environmental resources in the Delta by recovering banked water from the Project and reducing water exports thus alleviating stress in the Delta during critical periods. The Project offers exceptional flexibility to better manage available supplies, which supports improved operations of the state and federal water systems.

Central Valley Project (CVP):

Reclamation delivers CVP supplies to federal contractors in California. The additional water that could be captured and stored by the Phase 1 Project is defined under Section 215 of the Reclamation Reform Act of 1982, as excess irrigation water to be released due to flood control criteria or un-managed, un-storable flood flows from the Delta. As a result of these flood flows occurring in short duration, Section 215 authorizes Reclamation to declare the availability of Section 215 water for CVP south-of-Delta contractors and enter into temporary water service contracts for this surplus water for south-of-Delta contractor use. Other federal water supplies could also be available for the Project.

Rosedale's service area is within the CVP place of use for banking and direct use of CVP water, and Rosedale has historically entered into contracts with Reclamation for Section 215 water. The availability period for Section 215 water delivery depends on hydrologic conditions and water demands. The excess Section 215 water made available to Rosedale is through the Friant-Kern Canal and Rosedale primarily takes delivery through its existing capacity rights and connections to the Cross Valley Canal (CVC) and Kern River conveyances. See **Figure 5** below for the Project's proximity to conveyance facilities. Rosedale currently has a turnout off the Kern River Channel with a capacity of 600 cfs. Rosedale can take delivery of both Friant-Kern and Kern River flows through this turnout. Currently, Rosedale has an obligation of 367 cfs, of its 600 cfs turnout capacity, for various banking partners and programs. The remaining 233 cfs of turnout capacity is available for other programs. Rosedale shares the Kern County Sub-Basin with many federal contract districts. The Project could be used to help fulfill obligations to both state and federal contractors. The Section 215 water and/or other available federal water supplies that could be captured would be stored by the project for the benefit of Rosedale and IRWD through exchanges that ensure the water is used in the CVP Place of Use.

Additionally, excess federal water supplies, such as Recovered Water Account ("RWA") water could be recharged and stored in the Phase 1 Project and then returned to federal contract districts via banking and exchange agreements. RWA water is available to Friant Division long-

term water contractors during wet hydrologic conditions when water is not required to meet other Federal obligations. The RWA water is available to long-term Friant Division contractors who experience a reduction in water deliveries due to requirements outlined in the San Joaquin River Settlement. See **Appendix F** for a list of historical banking and recovery exchanges/contracts within RRBWSD.

Project Benefits to CVP and SWP Systems:

Due to the variable nature of California's hydrology, there are often wet-year surplus flows in the SWP and CVP systems that could be diverted to storage. Currently, there is insufficient storage capacity and conveyance infrastructure to capture and store this water, which is then lost to the ocean. The proposed Project can help to improve water supply reliability and operational flexibility of the SWP and CVP systems. By integrating the SWP and CVP supplies with groundwater storage in the proposed Project, water supplies that would have been lost to the ocean can be made available for use in dry years. This integration will help to relieve stress of increased competition for imported water supplies from these systems during dry years. The Project will also provide opportunities to fulfill Reclamation's obligations by storing excess federal water supplies for increased reliability for Friant Division Contractors during dry years.

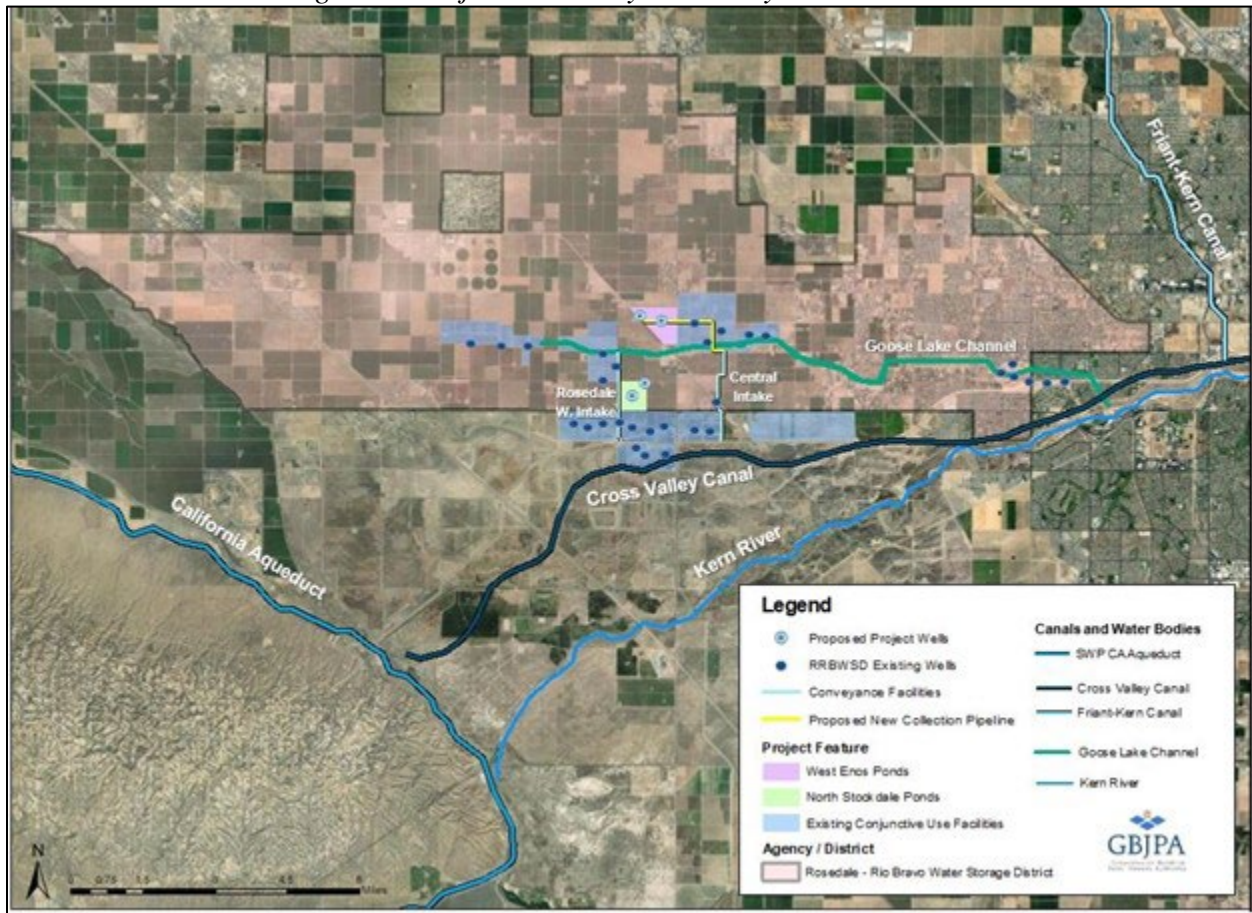
The GBJPA utilized modeling results provided by consultants at MBK Engineers to estimate the anticipated water supply that could be available for the Project. MBK Engineers performed a hydrologic analysis using the CalSim II baseline Benchmark model with 2035 Central Tendency Climate data, published by Reclamation in March 2022. The analysis looked at the availability of Article 21 and Section 215 water supplies that could be delivered to the full Kern Fan Project. The Phase 1 Project can operate as a stand-alone project. Therefore, the water supply yield results from MBK's analysis were scaled down proportionally from the full Kern Fan Project storage of 100,000 AF to the Phase 1 storage of 28,000 AF of groundwater storage (MBK, 2022). Projected water supplies from the SWP and CVP systems are quantified on an average annual basis for the Phase 1 Project presented in **Table 4** below.

While only Article 21 and Section 215 water supplies were used in the analysis, other SWP and Federal surplus water supplies could be delivered to the Project. MBK's analysis is included in **Appendix G**.

Table 4: Projected Water Supply for Phase 1

Water Supply Type	Amount (AF per year)
Article 21 (SWP)	1,737
Section 215 (CVP)	745
Total	2,482

Figure 5. Project Proximity to Conveyance Facilities



What performance measures will be used to quantify actual benefits upon completion of the project?

Performance measurements will be a key instrument for quantifying the water benefits of this Project. After Project completion, pertinent data will be included in the annual operations report with a monthly summary of recovery flow rates, the total volume of recharged water, and a summary of return obligations to state and federal contractors. The data will also include the calculated estimate of recharge water that would stay within the basin and comprises the

increased groundwater levels benefit from the Project. The data will be compared with the projected annual water recovered and recharged as calculated in this grant application.

For the intermittent wetland benefit, it is expected that performance measures would be included in an agreement for public benefits that is currently in development with the California Department of Fish and Wildlife. This agreement is expected to be required as a condition of state funding for the overall Kern Fan Project, although Phase 1 of the project is a standalone project that does not require state funding.

E.1.1.2. Subcriterion No.1b—Contributions to Water Supply Sustainability (15 points)

Explain the role of the project in addressing any of the below concerns and the extent to which the project will address them. Consider the number of acre-feet of water that the project will make available and the severity of the concerns addressed. Specific concerns may include, but are not limited to:

a) Water Supply Shortages

Water supplies in California continue to be stressed due to the over-pumping of groundwater basins, implementation of SGMA, increased competition for water supplies, shortages from the Colorado River, population growth, supply limitations from environmental constraints in the Delta, climate change, and recurrent droughts among other factors. Under such conditions, the GBJPA, along with countless other water agencies, are pursuing projects and/or programs that will address these challenges and allow for the acquisition and storage of water supplies. By capturing water during wet years when excess supplies are available, Rosedale and IRWD will be able to utilize the stored water during dry years when water supplies are extremely limited. Water supplies from the Project can also be utilized during other water supply shortages such as a Delta levee failure event. The Project is anticipated to provide approximately **28,000 AF** of additional groundwater storage and **14,480 AF** of annual water supply. (see section E.1.1.1. and **Appendix E** for further Project storage analysis).

b) Water Supply Reliability

Groundwater banking projects help to coordinate the management of surface water and groundwater resources to maximize the availability and reliability of water supplies. Additional groundwater storage and banked water supplies provided by the proposed Project are crucial for Rosedale and IRWD to meet future dry year demands and maintain long-term water supply reliability. As previously described under Section E.1.1.1, the Project is anticipated to make an additional **14,480 AFY** of water supplies available for the GBJPA and its beneficiaries that can be utilized during dry years. This dry year supply would provide Rosedale and IRWD customers with increased water supply reliability.

c) Groundwater Depletion

See **Appendix H** for groundwater level reports in Rosedale. After years of chronic regional over-pumping of groundwater supplies and the implementation of the landmark Sustainable Groundwater Management Act (SGMA), groundwater is no longer a reliable source of water supply without sufficient replenishment. SGMA requires governments and water agencies of high and medium-priority basins to halt overdraft and bring groundwater basins into balanced levels of pumping and recharge. DWR has determined the Kern County Subbasin, where the proposed Project is located, is a critically over-drafted subbasin of high priority (see **Figure 4**).

The additional water stored in Kern County as a result of the proposed Project will help to improve water levels in the Kern Sub-basin and support groundwater sustainability. The groundwater basin in Kern County is operated such that a portion of Rosedale's and IRWD's banked groundwater is not recovered by the banking entity and remains in the ground to bolster local groundwater levels. It is estimated that on average, nearly **200 AF per year** of additional water will accrue for the benefit of the groundwater basin as result of the Project. The improved groundwater level benefit in Kern County as a result of the Project's leave-behind water will help the Kern County Sub-basin comply with SGMA goals. Pursuant to SGMA compliance requirements, monitoring wells are measured monthly to ensure that water levels do not exceed established water level minimum thresholds to avoid undesirable results under SGMA.

d) Water Quality Issues

Water quality impacted by the Project has been analyzed in the Kern Fan Project Final Environmental Impact Report (EIR). The water quality of all the existing Rosedale recovery wells meets the DWR's Water Quality Policy for Acceptance of Non-Project Water into the SWP, except for a few naturally occurring constituents in a few wells. Impacts on water quality due to the Project were determined as less than significant with mitigation. It is the GBJPA's responsibility to ensure that all water quality is sufficient to meet applicable water quality requirements. Based on preliminary sampling results, the underlying groundwater is mostly within drinking water standards, and the only constituents that were found to be above the drinking water Maximum Contaminant Levels ("MCLs") were gross alpha, 1,2,3-TCP, and arsenic, which are known regional issues. Gross alpha concentrations detected were not substantially above the MCL and the underlying groundwater quality would likely benefit from the high-quality surface water used for recharging. The Project recharge water would not have elevated concentrations of arsenic and its addition would be expected to reduce the concentrations of arsenic in the deeper portions of the aquifer. Therefore, the addition of recharge water would have a beneficial impact on groundwater quality. Less is known about the extent of 1,2,3-TCP in the regional aquifer. With the recent adoption in 2017 of an MCL for 1,2,3-TCP, banking projects and water purveyors continue to learn the extent and mitigation techniques to best manage the contaminant. As stated above, water extracted for the proposed Project will meet applicable requirements for water quality. The proposed recharge water supply would not have elevated concentrations of 1,2,3-TCP (Kern Fan Project EIR, 2020). For more information regarding water quality and mitigation, please see **Appendix O** to access the Kern Fan Project EIR.

Additionally, before acquiring both the West Enos and Stockdale North properties, the GBJPA consulted with hydrogeologists at Thomas Harder & Co. to conduct a Recharge and Recovery

Suitability Report for both properties (See **Appendix I**). The analysis consisted of reviewing background documents, data, and reports associated with the parcels and the surrounding areas to evaluate whether managed recharge at the West Enos and Stockdale North properties were feasible and whether the Project would pose a risk to groundwater quality resulting from the proposed recharge activities (Thomas Harder & Co., 2021). A summary of findings from the reports is as follows:

- The proposed Project sites have historically been used for irrigated agriculture.
- Constituents of expected concern in the groundwater beneath the proposed Project sites include TDS, chloride, nitrate, arsenic, and pesticides (1,2,3-TCP and EDB/DBCP).
- Naturally occurring arsenic has been detected in groundwater samples from nearby wells at concentrations that exceed the MCL. This constituent can be avoided in future project wells through site-specific testing and designing the wells to avoid the aquifer zones that contain high arsenic concentrations.
- 1,2,3-TCP is a pesticide that has been detected in groundwater from wells throughout the Kern Fan area. Concentrations in the discharge of project recovery wells may be addressed through blending and may be reduced over time with the recharge of water that does not contain detectable 1,2,3-TCP.

e) Natural disasters that may impact water supply infrastructure

The natural disasters that most commonly affect the area of this project would be drought, flooding, and earthquakes. Specifically at risk is the Sacramento-San Joaquin Delta which contains vulnerable levees which could collapse in the event of a major earthquake and cause saltwater from the ocean to contaminate the freshwater in the Delta. This event could impact the availability of a critical source of water supply for up to 26 million people South of the Delta for up to two to three years. The Project will provide groundwater storage and banked water supplies south of the Delta which can be made available in the event of such a catastrophic natural disaster in the Delta.

The Project positively impacts the water supply in years of drought and flooding, by capturing extra flood water and adding supply in dry years. The operational flexibility that the Project provides by delivering water to either State (California Aqueduct) or Federal (Friant-Kern Canal) facilities can be used advantageously if an emergency happens to either facility via natural disaster. A 2016 IRWD Water Supply Reliability Evaluation, using a comprehensive distribution system simulation model, cited IRWD's water banking capabilities as essential to eliminating potable water shortages during simulated earthquake induced California Delta Levee failures.

f) Heightened Competition for Water Supplies

The Phase 1 Project will provide sustainable water management and offer noteworthy, measurable benefits. By storing excess water supplies when available, the Project will provide increased water supply reliability when water supplies are short, which will alleviate the stress of increased competition for water supplies from the state and federal systems.

g) Availability of Alternative Supplies

Due to the nature of California’s hydrology, during wet seasons there are often surplus flows in the SWP and CVP systems that may be diverted to storage. Currently, there is insufficient storage capacity and conveyance infrastructure to capture and store this water, which is then lost to the ocean. The Phase 1 Project can help to improve water supply availability and operational flexibility of the SWP and CVP systems during these high flow periods by capturing this surplus water and storing it in the ground for later use. As noted, dry year water supplies can be extremely inadequate to meet demands, so recovered water from the Project provides an alternative dry year supply to users across the basin and state.

h) Increasing Cost of Water Supplies

Increases in the cost of water supplies will be addressed by the proposed Project. Rosedale and IRWD customers are supportive of the Phase 1 Project as it will provide a cost-effective and reliable supplemental source of water. Since the Project will bank water during wet years when there is excess supply, these water supplies will be low-cost compared to purchasing water supplies in dry years when supplies are limited and are extremely high cost. During periods of drought, many farmers are forced to fallow their lands, which includes loss of permanent crops, due to the inability to purchase costly water supplies (up to \$2,000/AF). The Phase 1 Project will provide agricultural customers with an affordable water supply during periods of drought. See attached **Appendix J** for Stakeholder Support Letters.

EO 14008, focuses on increasing resilience to climate change and supporting climate resilient development. EO 14008 also emphasizes the need to prioritize and take robust actions to reduce climate pollution; increase resilience to the impacts of climate change; protect public health; and conserve our lands, waters, oceans, and biodiversity.

a) Will the project address climate change in the service area? Explain.

California’s climate has been trending toward one that cycles between periods of large amounts of precipitation and times of drought. The California Department of Water Resources estimates a 10% reduction in water supply by 2040 in a planning scenario that considers increased temperatures and decreased runoff. *California’s Water Supply Strategy – Adapting to a Hotter, Drier Future (Aug 2022)* identifies the need to expand average annual groundwater recharge by at least 500,000 AF, and specifically includes the overall Kern Fan Groundwater Storage Project, which the Project is a phase of, as a key component in meeting California’s expanded water storage objective and helping address climate change, and at the same time address local GBJPA climate change adaptation. While there are still uncertainties associated with the future impacts of climate change on California’s weather cycles, it is expected that changes to weather cycles will result in more rainfall and less snow in the mountains, earlier snowmelt, more intense rain events, and increasingly frequent droughts. These climate conditions will cause more intense periods of available excess supplies and longer periods of supply shortages. The Project will provide increased water supply reliability benefits for multiple stakeholders that are crucial in mitigating the effects of climate change. Groundwater storage provided by the Project will allow for these excess supplies to be captured and utilized when needed, increasing resilience to climate change and satisfying the demands within the Project’s service area. Additional Project

benefits include intermittent wetland habitat that will be created for waterfowl and migratory birds along the Pacific Flyway, improved groundwater levels in the Kern County Sub-Basin, and preservation of permanent agriculture crops.

b) Will water made available by this project be resilient to the impacts of climate change? Particularly in consideration of alternative water supply options that exist in the service area, to what extent does the project represent a resilient alternative? Explain.

The Phase 1 Project will provide sustainable water management and offer noteworthy, measurable benefits. By storing excess water supplies when available, the Project will provide increased water supply reliability which will alleviate the stress of increased competition for water supplies from the Delta and climate change impacts. Environmental uncertainties relevant to the benefits provided by the Project include climate change, variation in snowpack, and periods of multi-year drought because the project benefits depend upon water supplies available for recharge and storage in the Project. The operations of the Project as a whole were modeled by MBK Engineers to demonstrate the ability to maintain benefits under a range of hydrologic conditions and climate change conditions (**Appendix G**). Climate change in California is expected to result in warmer winters with increased rainfall and less snowpack. Currently, much of California's water supply is stored within the snowpack and is slowly released into existing surface storage reservoirs over the springtime. As this shifts to increased rainfall, the wet periods with excess supplies will be more frequent and intense, and new groundwater storage will be needed to manage this change. The Kern Fan Project Phase 1 will help address this change, and store water that would otherwise be lost to ocean, for the expected more frequent and extended dry periods. As a result of storing water that would otherwise be lost, the Project will create a new, climate resilient water supply.

As further described in the Project Feasibility Study, the GBJPA developed alternatives that address defined resource challenges and achieve Reclamation requirements. The GBJPA analyzed an Existing Water Bank Alternative that would involve participation in the Willow Springs Water Bank ("WSWB"). WSWB is an existing facility located in the Antelope Valley in Southern California capable of storing 500,000 acre-feet of water underground. As part of this alternative plan, Rosedale and IRWD would pay WSWB to buy into the developed capacities (if available) of the WSWB to store up to 28,000 AF of water. The water stored by Rosedale and IRWD could consist of a mix of unallocated Article 21 and other SWP water. No Kern River water or federal water supplies would be able to be captured by the WSWB alternative since there is no federal conveyance to WSWB. Since the water would be stored in an existing water banking facility, only a portion of the benefits identified as part of the Project would be realized. Unlike the proposed Project, participation in the WSWB would not generate any new intermittent wetland benefits, agricultural benefits resulting from crop substitution, or improved groundwater level benefits in the Kern Fan area of Kern County. Therefore, the proposed Project represents a more resilient alternative to Climate Change than the WSWB alternative. Additionally, the alternative does not fully meet all of the Small Storage Program priorities such as projects with multiple stakeholders and projects that provide multiple benefits including ecosystem benefits and groundwater enhancements.

c) Does the project contribute to climate change resiliency in other ways not described above? Explain.

The Project will include sustainable infrastructure to improve community climate resilience. The Project will utilize high-efficiency electric motors and variable frequency drives (VFDs) to best match supply and demand and not waste energy via manually back-pressuring the system. Additionally, the Project would contribute to climate change resiliency benefits through the creation of intermittent wetland habitats for migratory birds along the Pacific Flyway, improved groundwater levels in the Kern County Sub-Basin, and preservation of permanent agriculture crops. The construction of recharge basins will promote healthy lands and soils, as well as protect water supplies and their associated users. Included in **Appendix K** is a visual representation of the multiple ecosystem benefits provided by groundwater recharge basins.

The severity of actual or potential drought impacts that the project will address is an important consideration in assessing its contribution to water supply resiliency. Describe recent, existing, or potential drought conditions in the project area, including the severity of actual or potential drought impacts that the project will address.

California regularly experiences water supply shortages due to reoccurring drought, aggravated by the effects of climate change and increased competition for limited surface and groundwater resources. Prior to the exceptional wet winter of 2023, when California experienced 7 atmospheric rivers, the state had been grappling with a multi-year drought. During that time, snowpack and rainfall levels fell significantly below normal, leading to challenges such as:

- State Water Project allocations reduced to only five percent of requested supplies.
- Major reservoirs across the state operating at critically low levels.
- Legal and environmental restrictions impeding the State Water Project's ability to transport water through the Delta, particularly impacting users south of the Delta, such as RRBWSD and IRWD.

The dramatic shift from extreme dry conditions to extreme wet conditions exemplifies the profound impact of climate change on California's hydrological system. To provide a clear contrast, **Figure 6** displays the U.S. Drought Monitor's assessment from October 2022, indicating severe to exceptional drought conditions, while **Figure 7**, from October 2023, shows a complete absence of drought conditions.

Given these extreme weather fluctuations and the uncertain outlook for water year 2024, it is of paramount importance to seize opportunities for water storage when they arise. The proposed project aims to proactively address potential drought conditions by capturing excess water during wet years and storing it for use during periods of drought. This strategic water management approach will significantly enhance the region's water supply resiliency and help mitigate the impacts of future droughts and climate change.

Figure 6. California Drought Monitor as of October 2022

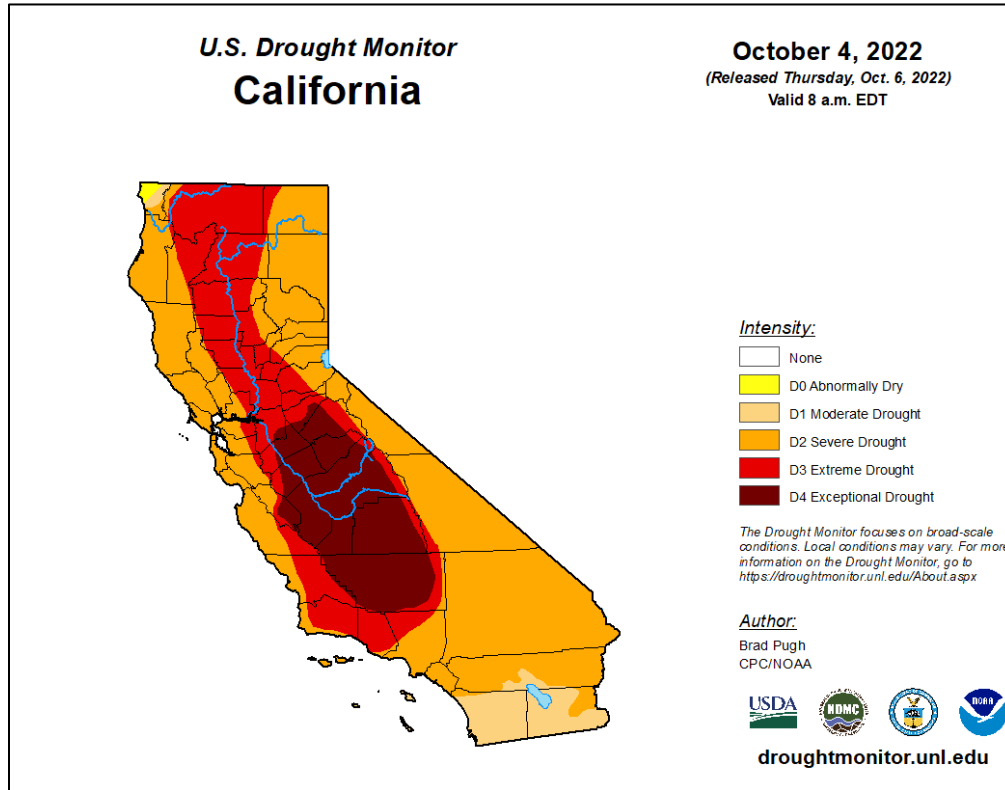
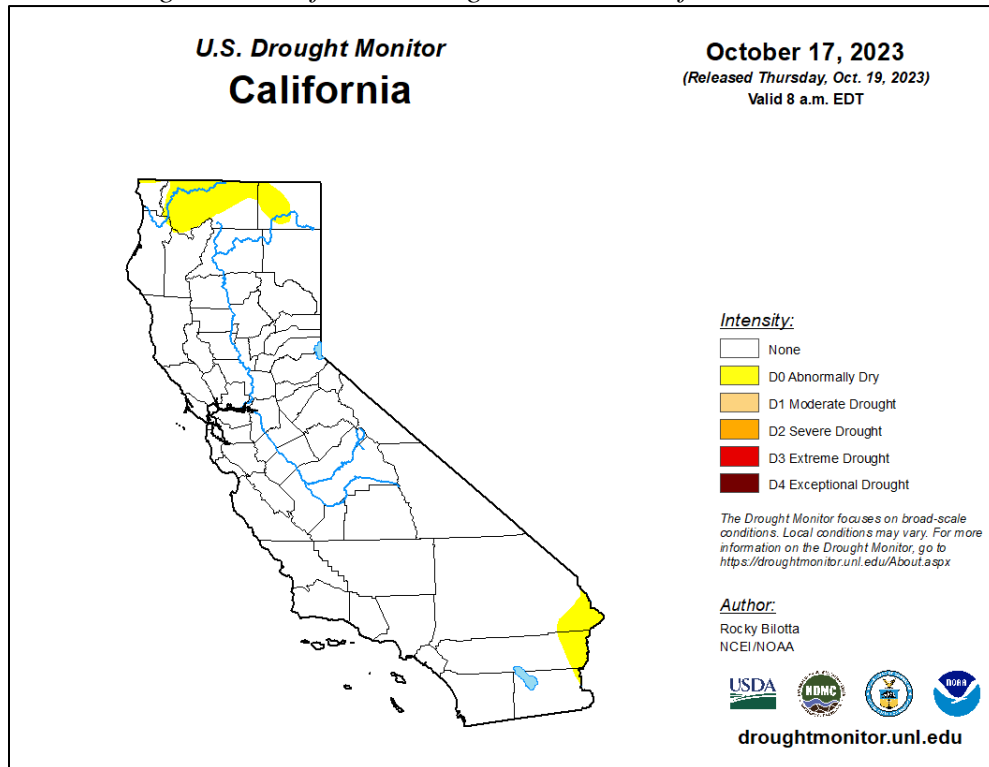


Figure 7. California Drought Monitor as of October 2023



a) Will the project help create additional flexibility to address drought? Will water made available by this project continue to be available during periods of drought? To what extent is the water made available by this project more drought resistant than alternative water supply options? Explain.

Phase 1 will help create additional flexibility to address drought. In response to the decreased reliability of water supplies due to reoccurring drought, the GBJPA is pursuing the proposed Project to capture and recharge water into groundwater storage when water supplies are available during wet year cycles. This stored water may then be extracted during dry years when needed to provide environmental, agricultural, and water supply benefits. Additional groundwater storage is needed because groundwater storage projects allow the coordinated management of surface water and groundwater resources to maximize the availability and reliability of water supplies.

As previously described in this application and further detailed in the Project Feasibility Study, the GBJPA analyzed a No Project Alternative and an Existing Water Bank Alternative that would involve participation in the Willow Springs Water Bank. Since the water would be stored in an existing water banking facility, only a portion of the benefits identified as part of the Project would be realized. Unlike the proposed Project, participation in the WSWB would not generate any new intermittent wetland benefits, agricultural benefits resulting from crop substitution, or improved groundwater level benefits in the Kern Fan area of Kern County. Therefore, the proposed Project would represent a more resilient alternative to Climate Change.

b) Has the area served by the project been identified by the United States Drought Monitor as experiencing extreme or exceptional drought for at least one consecutive year in the last four years? Explain.

Yes. The area served by the Project has experienced both extreme and exceptional drought conditions for at least one consecutive year in the last four years (from December 2020-December 2021). Please see **Appendix L** for the last four years of Kern County drought data (calculated via cumulative percent area) taken from the U.S. Drought Monitor website, as well as a fact sheet describing the calculation of the Drought Severity and Coverage Index. According to the data provided in **Appendix L**, from December 15, 2020, to December 28, 2021, Kern County experienced levels of both severe (D3) and exceptional (D4) drought conditions. See also **Figure 7** above for the most current drought conditions in the area. You may also use the following link for more information regarding drought conditions in Kern County via the United States Drought Monitor website: <https://droughtmonitor.unl.edu/DmData/DataTables.aspx?county,06029>.

c) Has the area served by the project been designated as a drought disaster area by the State in the last four years? Explain.

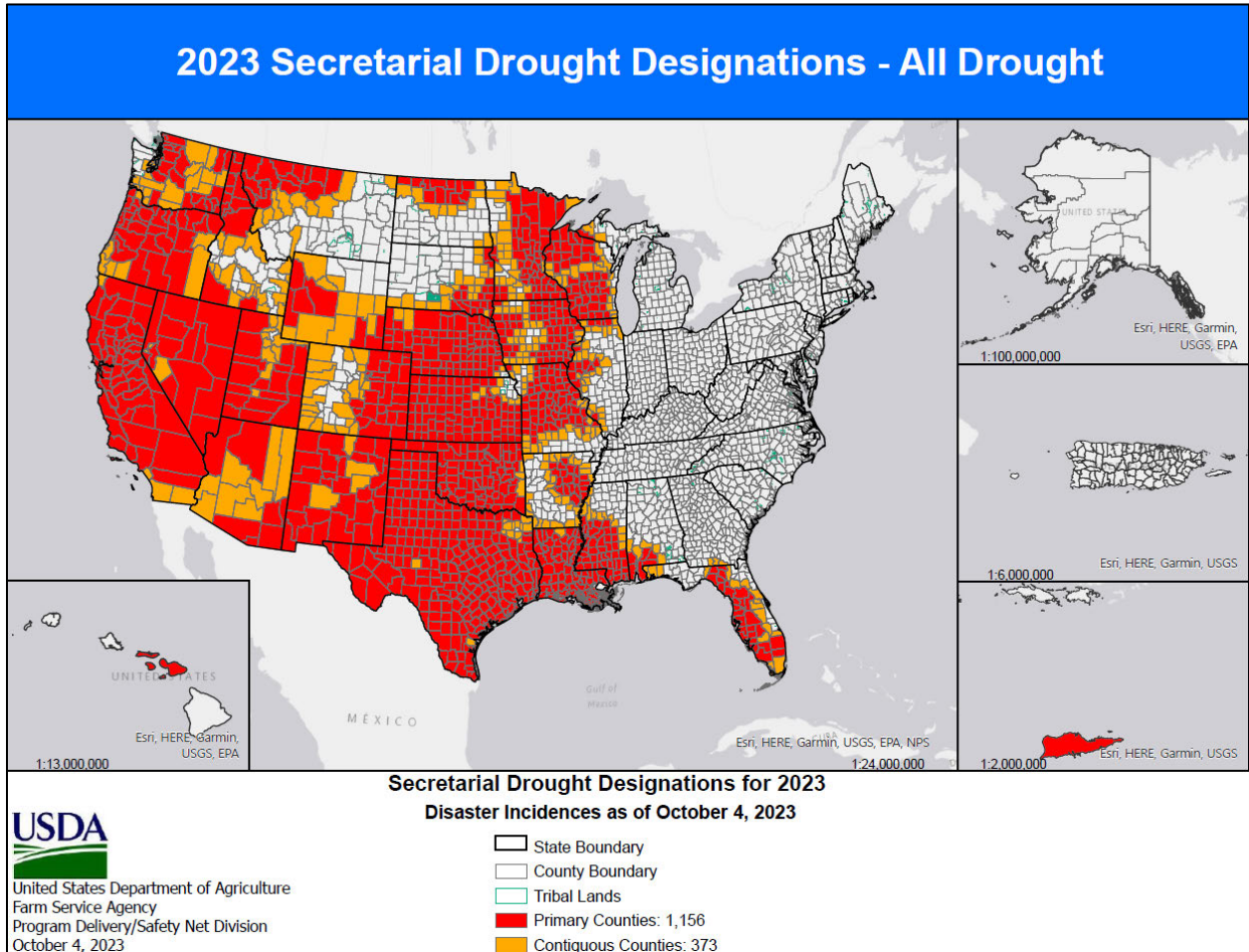
Yes. In the years leading up to the winter of 2023, California experienced an unprecedented drought, with the previous three years being the driest on record. In response to the escalating drought conditions, California Governor Gavin Newsom declared states of emergency in April, May, July, and October of 2021. He also issued Executive Order N-7-22 to enhance regional conservation efforts and protect against drought impacts. It is worth noting that these emergency

measures extended across the entire state of California, including the areas served by the Project. A copy of Newsom’s Proclamation and Executive order can be found using the following links:

- Proclamation of a State of Emergency: <https://www.gov.ca.gov/wp-content/uploads/2021/10/10.19.21-Drought-SOE-1.pdf>
- Executive Order N-7-22: <https://www.gov.ca.gov/wp-content/uploads/2022/03/March-2022-Drought-EO.pdf>

Within IRWD’s service area, consistent with the Governor’s Executive Order, IRWD implemented Level 2 of its Water Shortage Contingency Plan and continued to implement actions to reduce potable water demands during the drought. Moreover, Kern County, one of the areas served by the project, was designated as a Secretarial Drought Designated area by the United States Department of Agriculture (USDA). This designation allowed for emergency loans (EM loans) to be made available to producers facing losses in Kern County and contiguous counties. Kern County's inclusion in the Secretarial Disaster Designation Process was due to severe drought conditions. The fast-track process automatically designates an area when it reaches a certain level of drought intensity, as reported by the U.S. Drought Monitor. **Figure 8** depicts the Secretarial Drought Designations for 2023, with Kern County listed as a primary county. **Appendix M** provides information on the Secretarial Drought Designation maps for the last four years, where Kern County was consistently designated either as a primary or contiguous county. Additionally, the USDA's Disaster Assistance fact sheet in **Appendix M** offers more details about the disaster designation and declaration processes.

Figure 8. 2023 Secretarial Drought Designations



E.1.2. Evaluation Criterion 2—Water Management Flexibility (16 points)

E.1.2.1. Subcriterion No. 2a—Operational Flexibility (10 points)

Will the project help create additional operational flexibility to improve the management of water supplies? If so, how?

Yes, the project will create additional operational flexibility to improve the management of water supplies on a fundamental level, by storing excess water in wet years and calling upon those supplies during droughts. This project will also increase operational flexibility by allowing the GBJPA to meet return obligations and potentially form more exchanges and partnerships throughout the state, with both SWP and Federal supplies and obligations. See **Appendix F** for a historic log of exchanges/contracts that Rosedale has participated in. The project will also create operational flexibility throughout local and State entities by providing a dry year water supply, a beneficial tool for better water management during prolonged drought.

The Project is intended to be integrated with Rosedale's Conjunctive Use Program. The proposed Project will provide flexibility for the GBJPA to integrate the operation of the project recovery facilities within the project area with other recovery facilities in Rosedale's Conjunctive Use Program, including other existing Rosedale facilities, the Strand Ranch and Stockdale Projects' onsite and offsite facilities. As part of this project, to optimize the operational flexibility of groundwater and facility management, Rosedale could recover groundwater on behalf of itself and/or IRWD, at any facility available to Rosedale within its Conjunctive Use Program (Final EIR, 2021). Overall, the Project offers exceptional flexibility to better manage available supplies, utilizing the groundwater basin as storage and existing infrastructure for the conveyance of water, all of which supports improved operations of the state and federal water systems.

Will the project protect or improve the quality of surface water or groundwater? If so, explain how the project will accomplish this and the extent to which the project will do this.

In general, when groundwater levels stay high, lower arsenic levels are present in the groundwater. Testing will be done at the pilot well hole sites for certain constituents of concern and at the direction of a hydrogeologist to minimize water quality impacts. An extremely strenuous water quality testing procedure is also completed while recovering water back to the Cross Valley Canal and will be required of the four additional wells in this project. The recharge of high-quality water into the aquifer is also expected to improve groundwater quality in the vicinity of the recharge basins. See section E.1.1.2 (d) for more information regarding water quality in the Project area.

Will steps be taken to minimize the environmental impacts of source water acquisition (intakes or groundwater pumping) as part of the project? If so, explain.

Yes. Phase 1 of the Kern Fan Project is uniquely geographically located to take advantage of innovative water management actions that minimize the environmental impacts of source water acquisitions/diversions. Operational exchanges of source water types (i.e., surface water exchanges) limit the quantity of water needed to be diverted through canals or open stream systems, taking advantage of the infrastructure already in place. Operational exchanges of source water types for groundwater (i.e., surface water supplies for previous banked groundwater supplies) allow for groundwater that has been previously recharged within the aquifer to remain within the aquifer. These surface water supplies can subsequently be diverted and/or utilized to lessen the environmental impacts at the source water point of diversion. In addition, all diversions to the Project for groundwater recharge will create temporary wetland habitats for migratory birds within the Project vicinity.

Will the project provide water or habitat for non-listed species? If so, how?

Yes, as previously stated recharge basins act as a great source of habitat for a large variety of species due to the variable management of said recharge basins. During recharge years with water supply availability, ducks, herons, shorebirds, and various other non-listed species can nest and roost at the Project site. During dry years, the recharge basins with native grasses and weeds act as a great source of upland habitat for quail, dove, and various other birds, mammals, and reptiles. On the back end, providing additional surface water supplies will in part be directed to providing water and habitat for non-listed species during threatening droughts.

E.1.2.2. Subcriterion No. 2b—Legal and Contractual Water Supply Obligations (6 Points)

Does the project help fulfill any of Reclamation’s legal or contractual obligations such as providing water for Tribes, water right settlements, river restoration, minimum flows, legal court orders, or other obligations? Explain.

Yes. The Project will provide Rosedale and IRWD, both public water districts, with a more reliable water supply that can be utilized during drought or other periods of supply interruption. The project could provide opportunities to fulfill Reclamation’s obligations by storing excess federal water supplies for increased Federal water supply reliability in dry years.

Will the project provide water or habitat for Federally listed threatened or endangered species? If so, how?

Yes. The Project will provide intermittent wetland benefits for migratory birds along the Pacific Flyway and other waterfowl in Kern County. The Project area will also support suitable foraging and hunting habitat for several raptor species, reptiles, and mammals that are typical to the western Mojave Desert region. Several Federally listed threatened or endangered species that could be supported by such habitat include the San Joaquin kit fox, Tipton kangaroo rat, Nelson’s antelope squirrel and the American badger. These three species have a medium or high potential to occur on Project site based on past detections and observed suitable habitat.

Does the local area depend in whole or in part on imported water from the Colorado River Basin or other basins experiencing comparable levels of long-term drought? If so, will the project reduce reliance on imports specifically from the Colorado River or other basins experiencing severe drought? Explain.

Yes. IRWD receives imported water through the Municipal Water District of Orange County (MWDOC), which is a member agency of the Metropolitan Water District (MWD). MWD provides imported water to Orange County which consists of a blend of water from the Colorado River and the State Water Project. IRWD will utilize water stored within the Project to meet its imported needs when MWD is allocating water to its member agencies, potentially reducing the necessary supplies diverted from the Colorado River.

E.1.3. Evaluation Criterion 3—Disadvantaged Communities (12 points)

Will the proposed project deliver the anticipated water supply benefits to communities identified as disadvantaged by the CEJST? If so, please identify these communities and discuss the extent to which the additional water supply will benefit them (for example, are these communities served in whole or in part? How much of the overall water supply generated by the proposed project will be delivered to these communities). Please be sure to indicate whether the project will provide water supply to a Federally Recognized Tribe.

Yes, the project provides benefits to communities identified as disadvantaged by the Climate and Economic Justice Screening Tool (CEJST). Many landowners living in the Rosedale-Rio Bravo WSD boundary are not connected to public water lines and are reliant on groundwater and private or community wells to deliver drinking water to their households. During severe droughts, residential users of the groundwater have had wells go dry and lose access to clean drinking water. These communities are outside of the greater Bakersfield area and are identified as disadvantaged because they meet more than one burden threshold and the associated socioeconomic threshold per CEJST.

Additionally, the GBJPA has groundwater banking projects with agencies that serve areas that include disadvantaged communities such as Lamont, Arvin, Delano, Firebaugh, Dos Palos, Los Banos, Gustine, and Newman. The Project would be able to provide essential drought water supplies to these areas. All of the previously mentioned communities lie within the gray-blue areas of the map, see **Figure 9** below, representing census tracts classified as overburdened and underserved based on the CEJST criteria.

To provide a clear breakdown, **Table 5** below highlights the CEJST disadvantaged communities served by the Project, with categories exceeding CEJST thresholds marked in red.

Table 5: Climate and Economic Justice Screening Tool – Categories of Burden for Lamont, Arvin, Delano Firebaugh, Dos Palos, Los Banos, Gustine, and Newman

Climate and Economic Justice Screening Tool										
Categories of Burden			Communities							
			Lamont	Arvin	Delano	Firebaugh	Dos Palos	Los Banos	Gustine	Newman
Climate Change	Expected agriculture loss rate	<i>Economic loss to agricultural value resulting from natural hazards each year</i>	95th	95th	94th	86th	86th	86th	86th	85th
	Expected building loss rate	<i>Economic loss to building value resulting from natural hazards each year</i>	86th	86th	38th	87th	0th	2nd	24th	7th
	Expected population loss rate	<i>Fatalities and injuries resulting from natural hazards each year</i>	9th	9th	1st	88th	10th	10th	10th	7th
	Projected flood risk	<i>Projected risk to properties from projected floods, from tides, rain, riverine and storm surges within 30 years</i>	1st	6th	34th	96th	42nd	99th	90th	12th
	Projected wildfire risk	<i>Projected risk to properties from wildfire from fire fuels, weather, humans, and</i>	94th	88th	92nd	83rd	86th	74th	85th	95th

		<i>fire movement in 30 years</i>								
Energy	Energy Cost	<i>Average annual energy costs divided by household income</i>	77th	61st	90th	72nd	68th	59th	89th	46th
	PM2.5 in the air	<i>Level of inhalable particles, 2.5 micrometers or smaller</i>	96th	93rd	99th	95th	96th	94th	95th	96th
Health	Asthma	<i>Share of people who have been told they have asthma</i>	70th	75th	56th	75th	60th	63rd	60th	54th
	Diabetes	<i>Share of people ages 18 years and older who have diabetes other than diabetes during pregnancy</i>	81st	88th	84th	90th	69th	65th	68th	52nd
	Heart Disease	<i>Share of people ages 18 years and older who have been told they have heart disease</i>	41st	67th	59th	59th	49th	35th	72nd	31st
	Low life expectancy	<i>Average number of years a person can expect to live</i>	81st	56th	66th	66th	31st	46th	61st	32nd
Housing	Housing Cost	<i>Share of households making less than 80% of the area median family income and spending more than 30% of income on housing</i>	87th	75th	78th	77th	59th	73rd	56th	51st
	Lack of green space	<i>Amount of land, not including crop land, that is covered with artificial materials like concrete or pavement</i>	94th	93rd	88th	94th	93rd	92nd	45th	93rd
	Lack of indoor plumbing	<i>Share of homes without indoor kitchens or plumbing</i>	21st	86th	21st	21st	89th	21st	21st	64th
	Lead Paint	<i>Share of homes that are likely to have lead paint</i>	40th	46th	35th	22nd	61st	22nd	54th	49th
Legacy Pollution	Abandoned mine land	<i>Presence of one or more abandoned mine land within the tract</i>	No	No	No	No	No	No	No	No
	Formerly used defense sites	<i>Presence of one or more Formerly Used Defense Site within the tract</i>	No		No					

	Proximity to hazardous waste facilities	<i>Count of hazardous waste facilities within 5 kilometers</i>	65th	65th	45th	5th	9th	49th	28th	56th
	Proximity to Risk Management Plan facilities	<i>Count of Risk Management Plan (RMP) facilities within 5 kilometers</i>	95th	95th	93rd	59th	14th	78th	75th	81st
	Proximity to Superfund sites	<i>Count of proposed or listed Superfund (or National Priorities List (NPL)) sites within 5 kilometers</i>	65th	96th	25th	17th	21st	23rd	30th	36th
Transportation	Diesel particulate matter exposure	<i>Amount of diesel exhaust in the air</i>	46th	33rd	75th	28th	33rd	38th	27th	31st
	Transportation barriers	<i>Average of relative cost and time spent on transportation</i>	80th	83rd	49th	44th	88th	85th	87th	77th
	Traffic proximity and volume	<i>Count of vehicles at major roads within 500 meters</i>	57th	50th	44th	43rd	26th	33rd	28th	26th
Water and Wastewater	Underground storage tanks and releases	<i>Formula of the density of leaking underground storage tanks and number of all active underground storage tanks within 1500 feet of the census tract boundaries</i>	70th	35th	39th	81st	49th	69th	60th	28th
	Wastewater discharge	<i>Modeled toxic concentrations at parts of streams within 500 meters</i>		3rd		42nd			15th	
Workforce development	Linguistic isolation	<i>Share of households where no one over age 14 speaks English very well</i>	99th	99th	98th	98th	92nd	94th	94th	85th
	Low median income	<i>Comparison of median income in the tract to median incomes in the area</i>	64th	77th	84th	78th	59th	49th	31st	39th
	Poverty	<i>Share of people in households where income is at or below 100% of the Federal poverty level</i>	85th	82nd	93rd	86th	65th	65th	81st	30th
	Unemployment	<i>Number of unemployed people as a part of the labor force</i>	87th	84th	85th	98th	95th	93rd	81st	92nd
	High school education	<i>Percent of people ages 25 years or older whose high school education is less than a high school diploma</i>	64%	69%	44%	56%	34%	35%	27%	22%

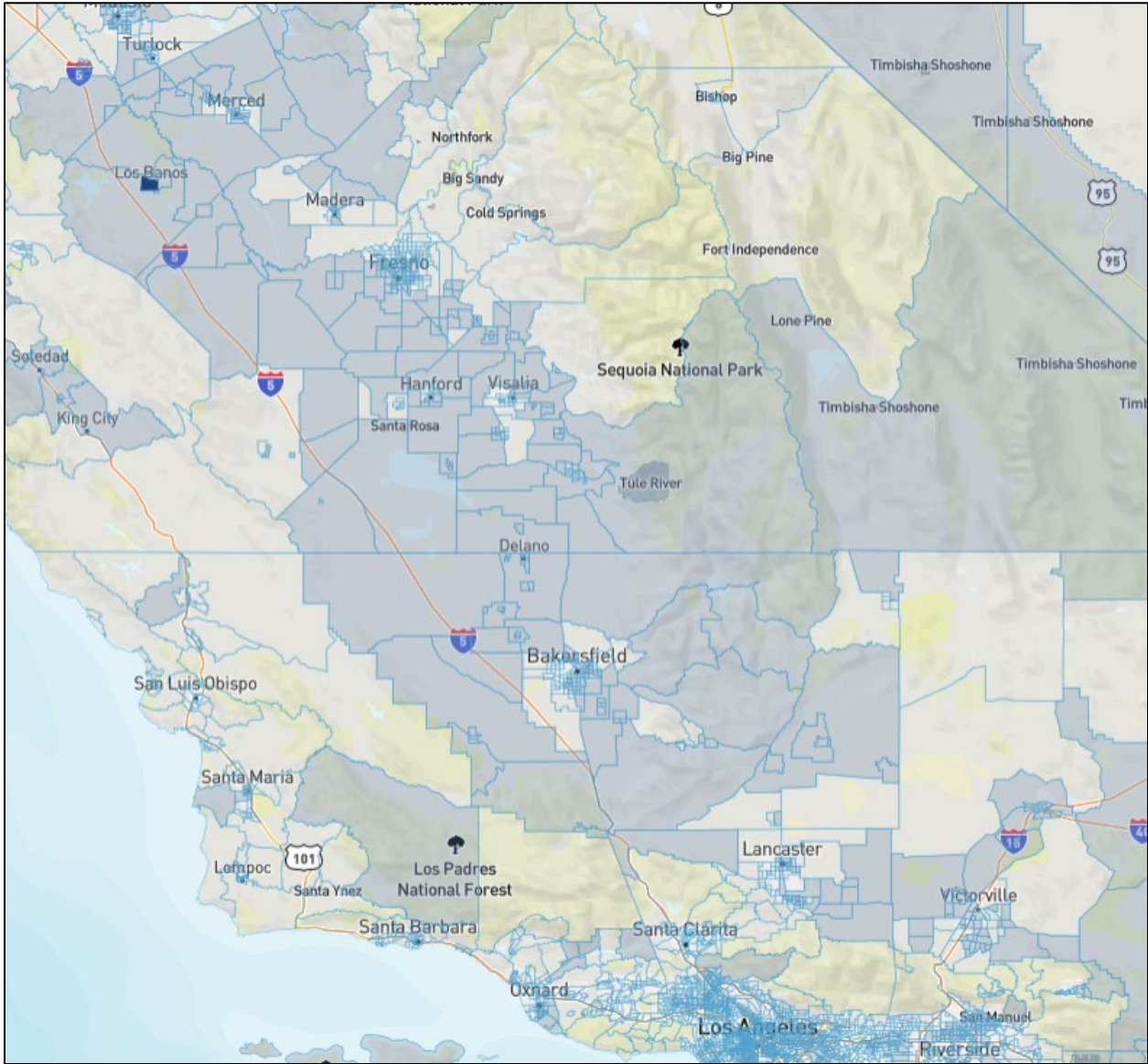
<p style="text-align: center;">Low Income</p>	<p><i>People in households where income is less than or equal to twice the federal poverty level, not including students enrolled in higher ed</i></p>	<p style="text-align: center;">93rd</p>	<p style="text-align: center;">93rd</p>	<p style="text-align: center;">88th</p>	<p style="text-align: center;">95th</p>	<p style="text-align: center;">74th</p>	<p style="text-align: center;">81st</p>	<p style="text-align: center;">72nd</p>	<p style="text-align: center;">67th</p>
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Will the proposed project provide any additional benefits (such as economic growth opportunities, increases to short or long-term local employment, water quality, etc.) to communities identified as disadvantaged by the CEJST. If so, please identify these communities and discuss the extent to which the project will realize these additional benefits (for example, are these communities served in whole in part?).

Yes. The proposed project will provide additional benefits to disadvantaged communities that extend beyond water supply reliability. The Project has the potential to promote economic growth opportunities for communities served by the GBJPA. Because the Project will be constructed and operated within RRBWSD’s boundaries, the Project would stimulate local economies by generating jobs and utilizing resources from local businesses. Additionally, the Project’s construction and long-term operation would increase short-term and long-term employment for local residents, ensuring that these communities have access to employment opportunities and supporting their socioeconomic well-being. The Project would also improve water quality. By addressing water supply resiliency and ensuring a consistent and reliable water supply, the Project directly contributes to improved water quality for disadvantaged communities.

The increased reliability for agricultural water supply also contributes to the preservation of permanent agricultural crops. By providing a reliable agricultural water supply, permanent agricultural crops could stay in production and would not need to be replaced with low-value crops that can be fallowed if water is not available. The preservation of permanent agriculture also results in secondary economic impacts. The additional permanent agriculture output would contribute positively to the agricultural industry’s increased purchase of goods and services from other local industries, as well as the impact on the local economy from an increase in household spending due to an increase in jobs.

Figure 9. Climate and Economic Justice Screening Tool – Disadvantaged Communities Designation (in gray-blue)



E.1.4. Evaluation Criterion 4—Stakeholder Support (12 points)

Does the project promote collaborative partnerships to address water and related issues? Please describe these partnerships and the nature of the collaboration.

Yes, the Project will promote collaborative partnerships throughout the State. For one, IRWD and Rosedale-Rio Bravo will be working together to maximize supplies banked in wet years and recover those supplies in years of drought for the benefit of both urban and agricultural sectors. The Project is a regional project that will also promote regional partnerships that will provide a reduced reliance on the Delta and Friant water systems during periods of drought. The Project will provide increased water supplies for multiple stakeholders including IRWD, Rosedale,

DRWD, and potentially federal water districts which will help to provide a more reliable supply for local agencies and communities, especially during dry years when surface water supplies are short. Lastly, the Project will build drought resiliency for local stakeholders by maintaining groundwater levels and creating opportunities for other water exchanges throughout the State. Please see attached **Appendix J** for Stakeholder support letters and support letters from other entities regarding the full Kern Fan Project.

Does the project implement a regional or State water plan or an integrated resource management plan? Explain.

Yes. The Project aligns with State and regional water plans. The California Water Plan is the State's strategic plan for sustainably and equitably managing, developing, and stewarding water resources. The California Water Plan is updated every 5 years and provides guidance on how elected officials, government agencies, tribes, water resource managers, businesses, academia, and the public can collaborate on findings and make informed decisions regarding California's water future. The Project also aligns with RRBWSD's regional and SGMA Groundwater Sustainability Plans (GSP). As required by SGMA, Groundwater Sustainability Agencies (GSAs) are required to implement comprehensive GSPs designed to ensure the sustainable management of groundwater resources. These plans outline strategies for maintaining sustainable groundwater levels, managing groundwater basins, and preventing overdraft. The Project is part of RRBWSD's GSP to meet its measurable objectives and achieve sustainability.

As mentioned, in 2020, California state agencies released the Water Resilience Portfolio that identified strategies to improve California's water resiliency along with corresponding actions. One of strategies of the Portfolio is to help regions secure groundwater supplies by supporting the transition to sustainable use. Recommended actions included in the Portfolio encourage groundwater recharge and banking efforts. The Project will directly implement the action identified in the Portfolio and support California state agencies' goals for improved water resiliency.

Does the project include outreach and opportunities for the public to learn about the project beyond what environmental compliance requires? Please describe these opportunities, including future opportunities, at the following phases of the project:

- a) planning and design,***
- b) construction, and***
- c) implementation.***

The project has included outreach and opportunities for the public/stakeholders to voice concerns and support for the project for the past two years. The construction on both of these project sites are adjacent to state highways and will be visible for stakeholders and the general public for the duration of the Project. The Project also has a website available to the public for more information on the project. (<https://www.kernfanproject.com/>)

Rosedale routinely encourages its Stakeholders to attend monthly Board meetings and Stakeholder Advisory Committee meetings that occur every other month. The Stakeholder Group is made up of representatives from four key interests within the Rosedale Groundwater

Sustainability Area (“RRBGSA”): Agricultural, Urban, areas outside of the Rosedale service area boundary, and Groundwater Banking entities. These meetings provide stakeholders within the RRBGSA an opportunity to participate in the development and implementation of the Groundwater Sustainability Plan.

To maintain groundwater sustainability, the RRBGSA plans to implement a combination of water banking projects and water management actions. The proposed overall Kern Fan Groundwater Storage Project is a planned supplemental water supply project included in the Groundwater Sustainability Plan. Rosedale works closely with its landowners to discuss the implementation of the Groundwater Sustainability Plan. The Stakeholder Group is made up of representatives from four key interests within the RRBGSA: Agricultural, Urban, areas outside of the Rosedale service area boundary, and Groundwater Banking entities. These meetings provide stakeholders an opportunity to participate in the development and implementation of the Groundwater Sustainability Plan. IRWD also encourages public participation and invites customers to attend Board meetings and comment on agenda items or other issues in front of their Board. The GBJPA gave a presentation regarding Kern Fan Project conveyance alternatives on October 26, 2022, where the public was invited to attend in person or via Zoom, provide comments, ask questions, and access and download presentation materials.

How has the project addressed competing or conflicting interests from either affected stakeholders and/or the public?

The Project has proactively addressed competing and conflicting interests from affected stakeholders and the public through an inclusive engagement process. This process has led to valuable insights and strong support for the project.

As previously mentioned, both the Rosedale-Rio Bravo Water Storage District and IRWD have taken steps to foster open communication and collaboration. RRBWSD consistently encourages its stakeholders to participate in monthly Board meetings, technical presentations, and Stakeholder Advisory Committee meetings. Similarly, IRWD actively promotes public participation and extends invitations to customers to attend Board meetings.

These inclusive forums have proven instrumental in identifying and addressing competing interests. They have enabled stakeholders to voice their concerns, provide feedback, and engage in constructive dialogue with the Project team. As a result, various viewpoints have been considered, and conflicts have been mitigated through transparent decision-making processes.

In **Appendix J**, you will find letters of support from stakeholders, underscoring the success of this engagement approach in building consensus and securing endorsements for the project.

Does the project have documented support from Tribes? If so, please identify these Tribes and describe the nature of their support for the project.

The Project does not have documented support from Tribes, as there are no tribes affected in the area.

E.1.5. Evaluation Criterion 5—Economic Benefits (25 points)

E.1.5.1. Subcriterion No. 5a—Cost Effectiveness (15 points)

1. Reclamation will calculate the cost per acre-foot of water produced by the project using information provided by project sponsors. Please provide the following information for this calculation:

(a) the total estimated construction costs, by year, for the project (include all previous and planned work) as shown in Table 6.

The estimated construction costs by year can be found in **Table 6** below and are backed up in **Appendix N**.

Table 6: Estimated Construction Costs by Fiscal Year

<i>Fiscal Year</i>	<i>Construction Cost</i>
1. 2022-23	\$9,525,398**
2. 2023-24	\$3,680,838
3. 2024-25	\$14,929,576
4. 2025-26	\$6,676,599

**** Please note the costs associated with 2022 and property acquisition costs
Costs are shown in 2022 dollars**

(b) total estimated or actual costs to plan and design the project.

\$1,245,000 for the design of the facilities for the project and an additional \$250,000 for the design of the SCADA components. As part of the environmental planning of the project an additional \$130,000 was estimated and \$75,000 for Reclamation’s costs associated with NEPA review. Total planning/design = \$1,700,000. Please note construction management and inspection services were not included in this. See **Appendix N** and the Budget Proposal (**Table 14**) for more detail and backup.

(c) the average annual operation and maintenance costs for the life of the project. Please do not include periodic replacement costs in the operation and maintenance costs. Periodic replacement costs should be provided separately in response to Question (f) below. Note: This is an annual cost, not total cost.

The average annual estimated operation and maintenance (O&M) costs for the Phase 1 Project is \$335,242 in 2022 dollars. The Project sponsor estimated the O&M annual costs of the Phase 1 Project based on the 2021 Preliminary Design Report prepared by Dee Jaspar & Associates for the full Kern Fan Project, which includes Phase 1 facilities (**Appendix S**). The Preliminary Design Report includes the estimated operation and maintenance costs for the Kern Fan Project for three types of operating years: Recharge, Recovery, and Idle. The estimated costs were based on Rosedale’s actual costs and extensive experience operating and maintaining recharge basins, recovery wells, and other appurtenant facilities. The number of Recharge, Recovery and Idle years expected over the life of the Project were based on the modeling results of MBK Engineers (**Appendix G**). The proportions of Recharge, Recovery and Idle years were used to calculate a weighted annual O&M cost. This annual value was applied to the 50 years of expected operation to determine an appropriate present value of O&M costs.

(d) the year the project will begin to deliver from stored water upon completion.

The GBJPA estimates that water deliveries to the Phase 1 Project for storage will be available by 2026.

(e) the projected life (in years) that the project is expected to last. Note: this should be measured from the time the project starts delivering water.

The typical lifespan of wells is approximately 50 years. Motors, pumps, and electrical systems are about 10-20 years, and typical conveyance facilities are estimated to be about 50-100 years. For purposes of the application criteria, the proposed anticipated ‘life’ of the Project could provide water supply benefits for 50-plus years until facilities would need to be replaced and/or repaired. The project sponsor estimated the replacement costs of the Phase 1 Project based on the 2021 Preliminary Design Report.

(f) all estimated replacement costs by year as shown in Table 7. If there are multiple replacement costs in 1 year, or at the same interval, please total them and put them on one line with the year or interval.

Table 7: Replacement Costs by Year

Description of Replacement Requirement	Year	Cost
Interbasin Recharge Basin Structures (West Enos)	2074	\$436,037
Interbasin Recharge Basin Structures (Stockdale North)	2075	\$290,692
Conveyance Pipeline and Crossings (West Enos)	2100	\$14,911,669

Conveyance Pipeline and Crossings (Stockdale North)	2101	\$17,425,991
(2) Well Replacement (West Enos)	2075	\$6,418,938
(2) Well Replacement (Stockdale North)	2076	\$6,220,464
(2) Pump, Motor, Well Appurtenances (West Enos)	2036	\$3,442,363
(2) Pump, Motor, Well Appurtenances (Stockdale North)	2036	\$3,442,363

The assumptions made in the table above closely follow a standard engineering lifespan calculation. The interbasin structures in the recharge basins typically last 50 years, the pipeline which will be PIP PVC pipe, an estimated 75 years, the well replacement approximately 50 years, and the pump and motor, and other well appurtenances every 10 years. Using an engineer’s recommendation, a flat 2% for inflation was applied to all replacement costs. See **Appendix R** for backup.

(g) The maximum volume of new water (in acre-feet) that will be available for delivery annually upon completion of the project. This volume of water must correspond to the costs provided above. If costs are only provided for a portion of the project, then only the water produced by that same portion or phase of the project will be considered.

The Project will be able to deliver water based on the availability of water supply which is dependent upon the hydrology of that year. The GBJPA utilized modeling results provided by consultants at MBK Engineers to estimate the anticipated water supply that could be available for the Project. MBK Engineers performed a hydrologic analysis using the CalSim II baseline Benchmark model with 2035 Central Tendency Climate data, published by Reclamation in March 2022. The results from MBK’s analysis attributed solely to the 100,000 AF storage of the full Kern Fan Project in the full project Feasibility Study were scaled down proportionally to the 28,000 AF of groundwater storage provided in Phase 1. The expected average annual water supply for the Phase 1 Project is approximately 2,482 AF per year (**Appendix G**). An alternative method of calculating the annual water supply, as shown in Evaluation Criteria E.1.1, produced a very comparable 2,940 AF per year.

In extremely wet years the Project sponsor could potentially use the recharge basins year-round to store water in the aquifer. The GBJPA estimates that in a typical wet year, the recharge basins will be used for 4 months out of the year and can recharge approximately 14,940 AF of water into the aquifer.

The total costs and estimated water supplies estimated for the Project are summarized in **Table 8** below.

2. *Reclamation will calculate the cost per acre-foot for the project using the information requested in Section E.1.5.1, Question 1, and compare it to any other water supply options identified by the applicant as a potential alternative to evaluate the cost effectiveness of the project. Please provide the following information for this comparison:*

(a) the cost per acre-foot of other water supply alternatives that could be implemented by the non-Federal project sponsor in lieu of the project.

The cost-effectiveness of the Project has been compared to IRWD and Rosedale purchasing alternative water supplies during dry years. Without the project, IRWD’s only alternative is to continue to purchase imported water from the Metropolitan Water District of Southern California (MWD) to supplement its water supply during dry periods to meet demands. Without the Project, Rosedale, and DRWD would have to purchase water through a water market, likely north of the Delta.

The GBJPA completed an analysis comparing the proposed Project supply costs to purchasing imported water from MWD and a water market north of the Delta. The “Other Water Supply Alternative” includes the cost to purchase MWD untreated water and the cost to purchase water north of the Delta through a water market over the same 50-year operating period. Under the “Other Supply Alternative, the Project sponsor would need to purchase at least 124,100 AF of imported water. For the Phase 1 Project supply, the GBJPA considered all costs associated with the Project supply including capital, interest during construction, O&M, and replacement costs. The GBJPA’s calculated cost per AF of these water supply alternatives is shown in **Table 8**.

Table 8: Cost/AF Comparison of Water Supply Alternatives

Description (Based on 50-year operating period)	Phase 1 Project Supply Alternative	Other Water Supply Alternative
Total imported water purchases from MWD (AF)	-	55,350
Total imported water purchases from north of the Delta (AF)	-	68,750
Net present value of imported water purchases from MWD	-	\$53.4 million
Net present value of imported water purchases from north of the Delta	-	\$34.5 million
Total avoided imported water purchases (AF)	124,100	-
Net present value of all project costs	\$45.9 million	-
Cost per AF (50 years, net present value basis)	\$370.23	\$708.56

The net present value of the cost of the “Other Water Supply Alternative” (imported water purchases) over the 50-year period is \$708.56 per AF. The net present value unit cost of the “Phase 1 Project Supply Alternative” is \$370.23 per AF, a savings of \$338 per AF. The analysis demonstrates that the Phase 1 Project is cost-effective as compared to the “Other Water Supply Alternative” (dollars per AF). The details and assumptions used to determine the cost of purchasing water from MWD and through a water market north of the Delta are described in the “Project Benefits” section below.

(b) if available, the cost per acre foot of one water supply project with similar characteristics to the project. This information does not have to be provided if it is not available. It is intended to provide another possible comparison to demonstrate the cost effectiveness of the project.

The GBJPA has evaluated the approximate cost per acre-foot of participating in an existing water bank, the Willow Springs Water Bank (WSWB). WSWB is an existing facility located in the Antelope Valley in Southern California capable of storing 500,000 AF of water underground. The WSWB is situated on highly permeable soils near three major water conveyance facilities (East Branch of the California Aqueduct, the Antelope Valley-East Kern West Feeder, and the Los Angeles Aqueduct) and offers water storage opportunities to both upstream and downstream water agencies.

If available, Rosedale and IRWD would pay WSWB to buy into the developed capacities (if available) of the WSWB to store up to 28,000 AF of water. The water stored by Rosedale and IRWD could consist of a mix of unallocated Article 21 and other SWP water. No Kern River water or federal water supplies such as Section 215 or RWA supplies would be able to be captured by the WSWB alternative since there is no federal conveyance to WSWB.

The cost to buy into a developed water bank was determined based on acquiring shares that would provide at least 28,000 AF of storage, approximately 14,940 AF of recharge capacity per year, and 14,480 AF of recovery capacity per year. The GBJPA would need to purchase shares where one share is equal to 5 AF of storage, 1/3 AF per year of recharge capacity, and 1 AF per year of recovery capacity. To acquire the minimum capacities stated, approximately 45,455 shares at a total cost of \$79.5 million would need to be purchased. The annual operations and maintenance (O&M) cost associated with the WSWB includes the additional cost of power to pump the available Article 21 and other SWP supplies to the project diversions off the California Aqueduct.

Participation in the WSWB would potentially allow the GBJPA to store approximately 1,730 AF of water on an average annual basis based on projected average annual Article 21 supplies. It should be noted that only Article 21 and other SWP supplies can be stored in the WSWB as the WSWB would not be able to store other available supplies such as Federal CVP or Section 215 water. The cost of project water on a dollar per AF basis was calculated based on the total cost to participate in WSWB divided by the projected water supply over the life of the Project (1,730 AF x 50 years).

Table 9 shows feasibility-level cost estimates for the Existing Water Bank Alternative Plan in 2022 dollars.

Table 9: Existing Water Bank Alternative Plan Cost Estimates

	<i>Existing Water Bank Participation</i>
Buy-in Cost for 45,455 Shares	\$79.5 million
Annual Operation and Maintenance Costs ¹	\$2.0 million
Total Annual Costs	\$4.63 million

Dollar per AF Cost	\$1,590
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Notes:

¹ O&M cost reflect an average annual put/take of 1,730 AFY associated with Article 21 and other water supplies

(c) discussion of the degree to which the project is cost-effective, including, where applicable, a discussion of why the project may be cost effective even if the overall project cost appears to be high.

The net present value of the cost of imported water purchases from MWD and through a water market north of the Delta over the 50-year period is \$708.56 per AF. The net present value unit cost for the Project is \$370.23 per AF, a savings of \$338 per AF.

Without the Project, the GBJPA’s estimated costs would be \$87.9 million (\$53.4 million + \$34.5 million) as shown in **Table 8** over the 50-year operating period. With the implementation of the Project, GBJPA’s estimated costs would be approximately \$45.9 million (see **Table 8**). The Phase 1 Project represents a net present value savings of \$42 million over the 50-year period. This demonstrates that the Project is highly cost-effective.

E.1.5.2. Subcriterion No. 5b—Economic Analysis and Project Benefits (10 points)

1. ***Summarize the economic analysis performed for the project, including information on the project’s estimated benefits and costs. Describe the methodologies used for the analysis that has been conducted. Points will be awarded based on a comparison of the benefits and costs of the project. The information provided should include:***
 - (a) quantified and monetized project costs, including capital costs and operations and maintenance costs.***
 - (b) quantified and monetized project benefits. This includes benefits that can be quantified and expressed as a monetized benefit per acre-foot. This may include, but is not limited to: benefits related to water supply quantity and water supply reliability, recreational benefits, ecosystem benefits, water quality, flood risk mitigation, and energy efficiency. Benefits may also include the avoided costs of no action (i.e., the costs that would be incurred if the project were not implemented), and the willingness of users or customers to pay for a benefit or to avoid a negative outcome (i.e., the willingness of households to pay for a water supply system that would reduce the chance of a drought emergency within a locality or State).***
 - (c) if quantified and/or monetized information for these benefits is not available, they may be addressed in response to Question 2 below.***
 - (d) A comparison of the project’s quantified and monetized benefits and costs. Note: applicants must include information in the proposal to be considered. Reclamation will not base scores on information provided in the project’s feasibility study if applicants do not include the information in the proposal.***
2. ***Describe any economic benefits of the project that are difficult to quantify and/or monetize. Provide a qualitative discussion of the economic impact of these benefits.***

Points will be awarded based on the potential economic impact of the project-related benefits. Some examples of benefits may include, but are not limited to, benefits to habitat or species, local impacts on residents and/or businesses, job creation, and regional impacts. This may also include benefits listed in Section E.5.1.2, Question 1, if they have not been monetized (e.g., water reliability, water quality, recreation, flood risk mitigation, etc.).

- 3. Reclamation will evaluate projects based on if the proposed project would provide multiple benefits, including water supply reliability, ecosystem benefits, groundwater management and enhancement, and water quality improvements. Does the project provide multiple benefits, or is it a single purpose facility? Explain.*

The GBJPA performed a comprehensive quantification and monetization evaluation of the costs and benefits of the Phase 1 Project. The following costs and benefits have been identified and quantified.

Project Costs

The GBJPA has quantified and monetized the Project costs, including operations, maintenance, and replacement costs. The capital cost estimate for the Phase 1 Project is considered a Class 3 Level Cost Estimate per the AACE International guidelines. The Class 3 estimate includes the contract costs which are the estimated construction costs; the field costs which include a twenty percent (20%) contingency and design contingencies for unlisted items; and the construction costs which include the land acquisition costs, easement procurement costs, mitigation costs fees, and the non-contract costs which include project management, engineering design, bid administration, and construction management and inspection. The 20% contingency utilized is consistent with the Class 3 estimate criteria per AACE International Practice No. 18R-97 and the Reclamation Manual Directives and Standards document FAC 09-01. The capital cost estimate for the Phase 1 Project Alternative Plan is \$34.9 million.

As mentioned, a Preliminary Design Report was prepared for the full Kern Fan Project, which includes the Phase 1 Project facilities. The Preliminary Design Report includes the estimated operation, maintenance, and replacement costs for the Kern Fan Project for three types of operating years: Recharge, Recovery, and Idle. The estimated costs were based on Rosedale's actual costs and extensive experience operating and maintaining recharge basins, recovery wells, and other appurtenant facilities. The operation, maintenance, and replacement costs for the Phase 1 Project were estimated using costs documented in the Kern Fan Project Preliminary Design Report. The estimated operations, maintenance, and replacement cost for the 50-year operations period starting in 2026 is \$11.06 million.

The net present value of the capital, operations, maintenance, and replacement costs for the Phase 1 Project is \$45.95 million (see **Table 8**).

Project Benefits

The Phase 1 Project is a regional project that will provide increased water supplies for multiple stakeholders including IRWD, Rosedale, DRWD, and potentially other federal water districts which will help to provide a more reliable supply for local agencies and communities, especially during dry years when surface water supplies are short. The Phase 1 Project is intended to be integrated with Rosedale's Conjunctive Use Program. The Project would provide flexibility for the GBJPA to integrate operations of the Project with existing IRWD and Rosedale recharge and recovery facilities, thereby maximizing operational efficiency and effectively managing water supplies. The Project could provide opportunities to fulfill Reclamation's obligations by storing excess federal water supplies for increased water supply reliability for many Friant federal water districts during dry years. In addition, during dry years, Project operations will reduce impacts on threatened environmental resources in the Delta by recovering banked water from the Project and reducing water exports thus alleviating stress in the Delta during critical periods. The Project offers exceptional flexibility to better manage available supplies, which supports improved operations of the state and federal water systems.

Additionally, the Phase 1 Project will provide increased water supply reliability benefits that are crucial in mitigating the effects of climate change in California. Climate change is expected to result in California becoming hotter and drier, with more periods of extended drought, a shift from snowfall to rainfall with significant potential for flooding, and the need for more storage to capture supplies during wet periods. Additional Project benefits include intermittent wetland habitat that will be created for waterfowl and migratory birds along the Pacific Flyway, improved groundwater levels in the Kern County Sub-Basin, and preservation of permanent agriculture crops.

The basis for the quantification of benefits provided by the Project is the modeled water supplies anticipated for the Project. MBK Engineers performed a hydrologic analysis, presented in **Appendix G**, using the CalSim II baseline Benchmark model with 2035 Central Tendency Climate data, published by Reclamation in March 2022. The Baseline scenario for this analysis is the Reclamation Benchmark Model dated March 3, 2022. Regulatory requirements in the model included all existing regulatory requirements, actions detailed in the 2019 United States Fish and Wildlife Service (USFWS) and the 2019 National Oceanic and Atmospheric Administration (NOAA) Fisheries Biological Opinions for delta smelt and listed salmonid species, as well as the March 31, 2020, Incidental Take Permit, issued by the California Department of Fish and Wildlife (CDFW) for the SWP. The benchmark model also included the changes to operating criteria and requirements put in place under the 2018 Coordinated Operations Agreement Addendum. The hydrologic analysis was performed for the full Kern Fan Project consisting of 100,000 AF of groundwater storage. The availability of Article 21 and Section 215 water supplies were modeled in this analysis, however additional water supplies may be available for recharge at the Project. The results from MBK's analysis were scaled proportionally to the 28,000 AF of groundwater storage provided by the Phase 1 Project. Based on previous investigations by MBK Engineers, project yield is more dependent on available water supply than groundwater storage capacity. Therefore, the Project Sponsors consider this approach acceptable, as it still depicts the availability of water supplies.

A spreadsheet model was prepared by consultants at M.Cubed to evaluate the economic benefits of the full Kern Fan Project. An accompanying technical memorandum detailing the methods

and assumptions used for calculating the economic benefits of the full Kern Fan Project was also prepared. For Phase 1 of the Project, the spreadsheet model was updated with water supply inputs and project capacities specific to the Phase 1 Project. The methods and assumptions detailed in the technical memorandum are applicable to the Phase 1 Project economic analysis. Further detail on the methods and assumptions used for calculating the economic benefits is provided in the Feasibility Study. The M.Cubed technical memorandum for the Phase 1 Project is included in **Appendix D** and described in the following sections.

M&I Water Supply Benefits

The Phase 1 Project would result in a net increase of M&I water supply due to increased capacity to capture and store surplus Article 21 and other sources of water supplies. It should be noted that Section 215 supplies are not considered M&I water supplies because they can only be used in the CVP Place of Use.

To quantify the benefits to M&I water users, consultant M.Cubed (**Appendix D**) performed an analysis utilizing an alternative cost approach to estimate the water supply benefits of the project. The Article 21 water supply from the project is divided between agricultural (75%) and M&I uses (25%), which have different alternative costs of water. The Phase 1 Project is expected to provide approximately 21,400 AF of SWP Article 21 water for M&I purposes over the life of the project.

For M&I uses by IRWD, the alternative supply cost is the Tier 1 untreated rate from the MWD, DWR variable OMPR component, and Pacific Gas and Electric (PG&E) pumping costs, which was approximately \$676 per AF in 2015. This rate was escalated over time using MWD's forecast of Tier 1 prices as found in their Ten-Year Financial Forecast provided at a February 9, 2016, MWD Board Meeting. According to the forecast of Full-Service Untreated Tier 1 water, prices are projected to increase by an average of 5.6% from 2016 to 2026. Over the same period, average CPI inflation is projected to be 2.3%, resulting in an average real price increase of 3.3%. This rate of increase was applied to the MWD Tier 1 rates over the life of the project. Conveyance costs in the SWP were applied using data provided by DRWD, which includes monthly conveyance costs from 2001 to 2017. Conveyance costs average \$17.10 per AF in 2015 dollars.

The net present value in 2022 dollars of the M&I water supply benefit over the life of the project is estimated to be \$21.14 million. The GBJPA estimates the M&I water supply benefit to be \$987.89 per AF (\$21.14 million divided by 21,400 AF of SWP Article 21 water). It should be noted that this benefit is attributed only to 25% of the Article 21 water from the Project for M&I uses.

Agricultural Water Supply Benefits

The incremental change in annual agricultural water supply provided by the Phase 1 Project is the basis for agricultural water supply benefits. As mentioned, the Article 21 water supply from the project is divided between agricultural (75%) and M&I uses (25%), and all Section 215 water is attributed to agriculture since it can only be used in a CVP Place of Use. The Phase 1 Project

is expected to provide approximately 124,100 AF of SWP Article 21 water and Section 215 water for agricultural purposes over the life of the project.

The alternative cost approach described for the M&I water supply benefits is applied to estimate the benefits of improved agricultural water supply (**Appendix D**). Delta export unit values¹ are provided for the 2030 and 2045 years, which are re-weighted according to the water year types during which Rosedale and IRWD are expected to recover stored groundwater based on hydrologic modeling by MBK Engineers. Since Rosedale and IRWD are projected to accrue water supplies in different water year types (with Rosedale drawing on their supplies mainly in dry and critically dry years) two different water values are required – one weighted for IRWD’s supply and one weighted for Rosedale’s supply. Water cost anchor points were used for 2030, 2045, and 2070 – 2030 unit values weighted at 2030 recovery levels, 2045 unit values weighted at 2030 recovery levels, and 2045 unit values weighted at 2070 recovery levels. Unit values for 2026 to 2075 were determined by interpolating between these unit values. The full range of unit values ranges from \$293/AF for IRWD and \$305/AF for Rosedale in 2030 to \$744/AF for IRWD and \$797/AF for Rosedale in 2045, in 2015 dollars. Conveyance costs in SWP were also applied using data provided by DRWD, which includes monthly conveyance costs from 2001 to 2017. Conveyance costs average \$17.10/AF in 2015 dollars. The agricultural benefits were calculated in 2015 dollars and then escalated to 2022 dollars.

The net present value in 2022 dollars of the agricultural water supply benefit over the life of the project is estimated to be \$51.2 million. The GBJPA estimates the agricultural water supply benefit to be \$498.48 per AF (\$51.2 million divided by 102,700 of SWP Article 21 and Section 215 water).

Groundwater Level Improvement Benefit

The additional water stored in Kern County as a result of the proposed Phase 1 Project will improve water levels in the Kern Sub-basin and support groundwater sustainability. The Phase 1 Project would provide local groundwater benefits based on a 2003 Memorandum of Understanding (MOU) between Rosedale and other adjacent water banking entities in Kern County. Per the MOU, a portion of banked groundwater, referred to as leave-behind water, is not recovered by the banking entity and remains in the ground to bolster local groundwater levels. The Phase 1 Project is a planned supplemental water supply project to provide the GBJPA with additional water supplies and is not related to mitigation for basin overdraft.

For the Phase 1 Project, groundwater basin leave-behind percentages vary depending on the water supply account – 9% of water in the M&I account and 4% of water in the agricultural account will be left behind to help recharge local basins, according to groundwater modeling assumptions used by MBK Engineers. These percentages are consistent with the MOU. Based on

¹ The Delta export unit values were developed by the California Water Commission in their Water Storage Investment Program Technical Reference (November 2016). The unit values were developed from a statistical analysis based on water transfer prices from 1992 to 2015, the Statewide Agricultural Production Model (SWAP), and assumptions regarding groundwater sustainability requirements in California by 2045. The Technical Reference can be found here: <https://cwc.ca.gov/Water-Storage>

these values, a weighted average leave-behind rate of 6.5% was utilized to calculate the total groundwater level benefit.

For evaluating groundwater benefits from the project alternative plans, the alternative cost of recharging groundwater was considered to be the cost of purchasing water through a water market, likely north of the Delta. Average costs for purchasing Delta export water on the water market were based on unit values developed by the CWC in the WSIP Technical Reference. These unit values were developed from a statistical analysis based on water transfer prices from 1992 to 2015, the Statewide Agricultural Production Model (SWAP), and assumptions regarding groundwater sustainability requirements in the state by 2045. These unit values were developed for various water year types (wet, above normal, below normal, dry, and critical) for 2030 and 2045, the year it is assumed that groundwater basins will reach sustainable levels. Delta export costs used for the analysis were weighted according to historic water year type frequency according to the San Joaquin River Water Year Index to arrive at benchmark values for 2030 and 2045. SWP conveyance costs were also added to Delta Export costs.

The net present value in 2022 dollars of the groundwater level improvement benefit over the life of the project is estimated to be \$4.0 million. The GBJPA estimates the groundwater level improvement benefit to be \$32.31 per AF (\$4.0 million divided by 124,100 AF of the Project water supply).

Agricultural Impact Benefit

The Phase 1 Project would provide a greater degree of reliability for agricultural water supply, which creates benefits to local agriculture that go beyond the value of the water supply itself. Not only would the project capture and store water for the benefit of agricultural uses, but an additional agricultural benefit is the preservation of permanent crops that would need to be replaced with low-value crops that could be fallowed if water was not available. The Phase 1 Project firms up the dry year supplies available for agricultural use by storing water that can be withdrawn for irrigation use in dry years and thus providing a greater degree of reliability for permanent crops. Permanent crops such as nuts and fruit require irrigation in all years and cannot be fallowed during dry years. So, without a reliable dry year water supply, the probable alternative is to switch to row crops, which may be fallowed when water supplies are short. With increased reliability, it is estimated that this acreage could instead be converted to higher-value permanent crops, such as fruit or nut trees. While the value of agricultural water to the existing mix of crops is already included under the calculation of agricultural water supply benefit, the positive effects of preserving permanent agriculture are a separate benefit.

Without water provided through the Phase 1 Project, it is estimated that the alternative plans would prevent impacts to approximately 570 acres of crops from being fallowed in critically dry years when supplies are low. Per the Kern Groundwater Authority, the Groundwater Sustainability Agency in the Kern County Sub-Basin, an average annual native yield of 0.15 AF is allocated per acre to developed irrigated lands. The average annual precipitation for Rosedale's service area is estimated at 0.44 AF per acre, as described in the Groundwater Sustainability Plan Chapter. Permanent crops, such as almonds, require approximately 3 AF of water per year per farmed acre. The total of Project water, plus the native yield of the Kern

County Sub-Basin, plus precipitation provides 3 AF of water which is enough to irrigate approximately 570 acres, as shown below in **Table 10**.

Table 10: Agricultural Benefit Calculation Assumptions (Annual Water Demands per Crop)

Water Supplied by the Project per acre:	2.41 AF per acre (1,375 AF / 570 acres)
Native (safe) yield of basin:	0.15 AF per acre
Average annual precipitation:	0.44 AF per acre
Total AF per acre available for permanent crops:	3.00 AF per acre

Only Rosedale’s water supply from the Phase 1 Project was considered when calculating the agricultural impact benefit. With 1,375 AF of Rosedale’s annual water supply provided by the project, it is estimated that 570 acres of permanent crops could stay in production in Kern County. Impact Analysis for Planning (IMPLAN) data for Kern County was used to estimate the effects of crop conversion. IMPLAN is an input-output modeling software that allows users to estimate how economic changes in particular sectors impact the local economy. The value of cotton and permanent tree crops was used as an input into the IMPLAN model. The IMPLAN results estimate the direct impacts of crop conversion. It should be noted that only the direct benefits measured from IMPLAN were used in the benefit calculation and the indirect and induced benefits were excluded.

The net present value in 2022 dollars of the agricultural impact benefit over the life of the project is estimated to be \$32.2 million. Backup can be found in the M.Cubed technical memorandum in **Appendix D**. The GBJPA estimates the agricultural impact benefit to be \$467.75 per AF (\$32.2 million divided by Rosedale’s water supply over the life of the Project, 68,750 AF).

Intermittent Wetland Habitat Benefit

The Phase 1 Project would provide important intermittent wetland habitat for migratory birds during the years that the Project takes and recharges water into storage. During those years, the approximately 300 acres of wetted area that comprise the project’s recharge basins will be inundated with water to percolate into the groundwater basin. The Pacific Flyway is a major migration route for waterfowl that extends from Alaska to South America, passing through Canada, California, and Mexico. In California, 95% of historic wetlands have been lost. The Central Valley in California is the most important waterfowl wintering area along the Pacific Flyway. The open water and vegetation that will be provided as intermittent wetland habitat by the Phase 1 Project will provide substantial benefits to wintering waterfowl, shorebirds, raptors, and other native and migrating birds. Water will typically be recharged at the Phase 1 Project during the winter and spring months and will provide temporary habitat during wet and normal years when recharge activity occurs. The intermittent wetland habitat that will be provided by the Phase 1 Project will be approximately 300 acres.

Per the USFWS classification of wetlands in the United States, the Project will provide a wetland habitat that will most closely resemble a classification of Intermittent Flooded Riverine Wetlands with Unconsolidated Sandy Bottoms. Accordingly, the recharge basins constructed for the Project will be designed to meet intermittent wetland requirements during recharge operations.

The recharge basins will provide intermittent wetland habitat to support waterfowl, shorebirds, raptors, and other migratory bird species along the Pacific Flyway.

Rosedale has been working with the Environmental Defense Fund (EDF) to construct and operate recharge facilities that have multiple benefits, including intermittent wetlands and bird habitats. EDF partnered with Point Blue Conservation Science, Audubon California, and Sustainable Conservation to develop a guide on how to build this kind of preferred recharge basin that provides operational benefits to basin management while also creating valuable water bird habitats. **Appendix K** is the guide prepared by EDF that describes the wildlife benefits associated with the multi-uses of recharge basins as intermittent wetlands.

To estimate the benefits associated with the creation of intermittent wetland habitat, an alternative cost approach was utilized. Under this approach, it is assumed that the GBJPA would purchase the land to create an equivalent acreage of wetlands over a similar period as those created by the Phase 1 Project and deliver the same volume of water through water purchases. To estimate the value of land required, the cost of a permanent easement for the wetlands and a long-term easement for constructing water conveyance facilities to the wetland was determined. Costs were estimated for a canal connection to the California Aqueduct, a conveyance canal to the site, canal siphons, and lift stations in addition to significant earthwork and interbasin structures to keep water in the recharge basins. Also included were the costs of restoring the land to its pre-wetland condition at the end of the project, based on a subset of costs from the project budget. For this approach, since the alternative project would only take excess water in wet years, the Delta Export unit value for wet years provided in the WSIP Technical Reference was utilized, which ranges from \$204 in 2030 to \$414 in 2045. Conveyance costs were added in from the period from 2001 to 2017 – \$17.10 per AF. The annual benefit was estimated by interpolating between these values and leaving prices beyond 2045 at \$414/AF to be conservative.

The net present value in 2022 dollars of the intermittent wetland benefit over the life of the project is estimated to be \$62.2 million. See benefit summary in **Table 11**. The GBJPA estimates the intermittent wetland benefit to be \$500.98 per AF (\$62.2 million divided by 124,100 AF of the Project water supply).

The total cost per acre foot for the project, including replacement, is approximately \$370.23 per AF. The total sum of benefits is approximately \$1,375.28 per AF demonstrating that the project is highly cost-effective.

Table 11: Monetized Project Costs and Benefits Per AF

COSTS	
Project Capital Costs:	\$ 34,887,412
NPV of O&M Costs:	\$ 10,001,746
NPV of Replacement Costs:	\$ 1,056,138
Total Costs:	\$ 45,945,295
Total AF Water Supplied:	124,100
Cost/AF:	\$ 370.23

BENEFITS		
M&I Water Supply Benefit:	\$	21,140,855
Agricultural Water Supply Benefit:	\$	51,193,439
Groundwater Level Improvement Benefit:	\$	4,009,057
Agricultural Impact Benefit:	\$	32,157,933
Intermittent Wetland Benefit:	\$	62,171,008
Total Benefits:	\$	170,672,292
Total AF Water Supplied:		124,100
Benefits/AF:	\$	1,375.28
Benefit-Cost Ratio		3.7

Project benefits that are difficult to quantify or monetize include:

- Climate change resiliency;
- Flood control;
- Secondary economic impacts from the preservation of permanent agricultural crops; and
- Increased operational flexibility.

Climate Change Resiliency

California’s climate has been trending toward one that cycles between periods of large amounts of precipitation and times of drought. The California Department of Water Resources estimates a 10% reduction in water supply by 2040 in a planning scenario that considers increased temperatures and decreased runoff². While there are still uncertainties associated with the future impacts of climate change on California’s weather cycles, it is reasonable to expect that changes to weather cycles will result in more rainfall and less snow in the mountains, earlier snowmelt, more intense rain events, and increasingly frequent droughts. These climate conditions will cause shorter periods of available excess supplies and longer periods of supply shortages. Groundwater storage provided by the Project will allow for these excess supplies to be captured and utilized when needed, increasing IRWD, Rosedale, and DRWD’s resiliency to climate change. The additional benefits of climate change resiliency provided by the Project have not been quantified, but the Project sponsor recognizes the importance of mitigating the effects of climate change. Potable water system simulation models, used in a 2016 IRWD Water Supply Reliability Evaluation, demonstrated that IRWD’s water banking capabilities were essential to maintaining a potable water supply during severe simulated climate change conditions.

Flood Control

In the event of a large flood event on the Kern River, the Phase 1 Project could potentially divert sufficient flood flows to avoid damage to federally insured crops downstream on the Kern River. The Phase 1 Project does offer some flood control protections in the form of reducing peak cfs flow on the Kern River during large flooding events downstream of the Project. Expected benefits include reduced flood damage on crops bordering the Kern River (e.g.,

² California’s Water Supply Strategy – Adapting to a Hotter, Drier Future, Aug 2022

potatoes, carrots, lettuce, and alfalfa) and the potential for fewer affected crops overall in the broader floodplain as well as the Buena Vista and Tulare Lake beds downstream – depending on the event and peak flow distribution. Although exceedingly rare, in the case of a 100 to 500-year flood event with upwards of 10,000 cfs in peak flow (before the Project site), the additional diversion capacity offered by the Project has the potential to reduce damage to federally insured crops in contribution with other diversions and efforts in the area. These benefits were not quantified as part of the Feasibility Study and are described here as a qualitative benefit of the Project.

Secondary Economic Impacts from the Preservation of Permanent Agricultural Crops

The expected benefit from preserving permanent agriculture will also result in secondary economic impacts. Although not monetized in the Feasibility Study, the additional permanent agriculture output is expected to contribute positively to the agricultural industry's increased purchase of goods and services from other local industries, as well as the impact on the local economy from an increase in household spending due to an increase in jobs.

Increased Operational Flexibility

In 2017, the Association of California Water Agencies (ACWA) completed a Storage Integration Study (June 2017). The purpose of this study was to define and quantify the benefits of integrating the operations of new storage projects with the existing SWP and the CVP. The study also analyzed how improved Delta conveyance capability could increase the benefits of integrated operations of proposed and existing storage facilities to help fulfill statewide water supply needs and priorities.

The ACWA study shows that significant surplus water was available almost every year, which could be stored for later use during water-short years. Due to the nature of California's hydrology, there are often surplus flows in the SWP and CVP systems that may be diverted to storage. Surplus water in the ACWA report is defined as flow above what is necessary to satisfy all current water demands, including existing environmental mitigation measures and compliance obligations. This water cannot all be captured and stored with existing storage and conveyance infrastructure. Per the study, the Delta has the greatest availability of surplus flows, with an average annual of over 10 million AF. In wet years, there is an average of over 22 million AF of Delta surplus water. If there are no uses or demands for the surplus water and it cannot be diverted into storage, flooding can occur, and then ultimately this water is lost to the ocean.

ACWA identified the Kern Fan Groundwater Storage Project, as proposed by the GBJPA, as a means improve water supply reliability and operational flexibility of the SWP and CVP systems during periods of drought. By integrating the operation of SWP and CVP surface reservoirs with groundwater banking in the Kern River Fan Project, water supply reliability could be improved at a minimum cost. The Phase 1 Project will provide greater operational flexibility by utilizing up to 28,000 AF of contingency groundwater storage to augment supplies during periods when other water sources may be limited or unavailable.

2. Project Budget

2.1 Funding Plan

Describe how the non-Federal share of project costs will be provided. Reclamation will use this information in making a determination of financial capability

The GBJPA, which is made up of Irvine Ranch Water District and Rosedale-Rio Bravo Water Storage District, have different ways of funding the GBJPA’s contribution to the cost share requirement of this funding opportunity. Rosedale’s cost-match will be covered by the District’s capital facility improvement portion of the regular budget. Rosedale-Rio Bravo maintains a capital improvement account and receives revenue through water sales and banking operations as well as land assessments. Irvine Ranch Water District will be contributing through a reserve account. The approved Project Feasibility Study includes more information on Rosedale and IRWD’s Funding Plan for Capital, Operation, Maintenance and Replacement Costs.

Please identify the sources of the non-Federal cost share contribution for the project, including: any monetary contributions by the applicant towards the cost-share requirement and source of funds (e.g., reserve account, tax revenue, and/or assessments)

The sources of the non-Federal cost share contribution are broken down in the paragraph above. Rosedale-Rio Bravo’s contribution will come from a capital improvement account, revenue through existing water sales and banking operations, and land assessments. Irvine Ranch Water District will be contributing through a reserve account. The approved Project Feasibility Study includes more information on Rosedale and IRWD’s Funding Plan for Capital, Operation, Maintenance and Replacement Costs.

Please identify any costs that will be contributed by the applicant.

The GBJPA will be contributing just over 75% of the costs towards the project or \$26,165,559. See **Table 12** below for the breakdown of the funding sources.

Table 12. Funding Sources

Funding Source	Funding Amount
Non-Federal Entities	
Groundwater Banking Joint Powers Authority	\$26,165,559
Groundwater Banking Joint Powers Authority (in-kind)	\$ 0
Non-Federal Subtotal	\$26,165,559

Requested Reclamation Funding	\$ 8,721,853
<i>Total Project Funding</i>	<i>\$34,887,412</i>

The Phase 1 project was awarded Small Storage Program 2022 funding, and the GBJPA executed an agreement with Reclamation in November 2023 in the amount of \$4,742,929, which provided partial funding based on eligible benefits to the Bureau. This application seeks additional Small Project Program funding up to the full eligible funding amount of \$8,721,853, less the prior award.

Please identify any third-party contribution costs (i.e., goods and services provided by a third party)

There will be no third-party contribution costs associated with the project funding.

Please identify any cash requested or received from other non-Federal entities and any pending funding requests (i.e., grants or loans) that have not yet been approved and explain how the project will be affected if such funding is denied.

There will be no third-party contribution costs to this project. At this time there are no other pending funding requests for the proposed Project.

Please identify whether the budget proposal includes any project costs that have been or may be incurred prior to award. For each cost, describe:

- ***the project expenditure and amount,***
- ***the date of cost incurrence, and***
- ***how the expenditure benefits the project.***

Included in the budget proposal are the property acquisition costs, which between both properties totaled \$8,995,398. The West Enos property was acquired in January 2022 and the Stockdale North property was acquired in December 2021. These expenditures were necessary for the project because the acquisition of the land is critical for the construction of the facilities. These properties were ideally located near existing conveyance as well as to other existing recovery wells. Along with property acquisition costs the GBJPA has incurred feasibility, environmental permitting, and conceptual design/consultant costs from Dee Jaspar and Associates, Meyers Civil Engineering and Harder Company, and Environmental Science Associates for approximately \$350,000. These costs were incurred in 2021-2022 and were critical work for analyzing the proposed location of the recovery wells, environmental impacts, and the effectiveness of the recharge ground.

Please refer to **Table 13** (below) for a summary of all funding sources.

Table 13: Summary of Funding Sources

Funding Sources	Percent of Total Project Cost	Total Cost by Source
------------------------	--------------------------------------	-----------------------------

Recipient Funding	75%	\$ 26,165,559
Reclamation Funding	11.4%	\$ 3,978,924
Other Federal Funding	13.6%	\$ 4,742,929
Total	100%	\$ 34,887,412

The Phase 1 project was awarded Small Storage Program 2022 funding, and the GBJPA executed an agreement in November 2023 in the amount of \$4,742,929, which provided partial funding based on the eligible benefits. This application seeks additional Small Project Program funding in the amount of \$3,978,924 which together represents funding up to the full eligible amount of \$8,721,853.

2.2 Budget Proposal

The estimated cost of the project including feasibility study, environmental assessments, all associated construction costs, and permitting is **\$34,887,412**. (See **Table 14 - Budget Proposal**). A detailed and itemized breakdown of each facility and component of the project in **Table 14** can be found in **Appendix N**. The GBJPA is requesting approximately **\$8,721,853** (or just less than 25% of total project costs) in federal funding from the Reclamation for this Project. The GBJPA is estimated to provide 75% of project funding if the requested award amount is granted. At this time, the GBJPA is solely responsible for the funding of the Project. Additionally, the GBJPA submitted detailed documentation to support the Project costs as part of the Reclamation’s previous funding award.

Table 14. Budget Proposal

Groundwater Banking Joint Power Authority										
R24AS00010 Phase 1 - Kern Fan Groundwater Storage Project										
		GBJPA Project Costs			Budget					
Item	Budget Item Description	\$/Unit	Unit	QTY	GBJPA Funding	USBR Agreement No. R23AP00368	Reclamation Funding (NOFO R23AS00010)	Total	Explanation of Estimate	
1	Contractual / Construction								31,687,412	
	a	Land Acquisition	8,995,398	LS	1	8,995,398			8,995,398	engineer's est.
	b	Well Drilling	1,173,973	LS	4	2,817,534	1,878,356		4,695,890	engineer's est.
	c	Well Equipping	1,411,968	LS	4	3,388,724	2,259,149		5,647,873	engineer's est.
	d	Conveyance	7,323,113	LS	1	3,863,444	530,424	2,929,245	7,323,113	engineer's est.

	e	Recharge Ponds	12,706	Ac.	360	3,524,459		1,049,679	4,574,138	engineers est.
	f	SCADA and PLC Programming	451,000	LS	1	451,000			451,000	engineers est.
2	Environmental and Regulatory Compliance								205,000	
	a	Reclamation NEPA Review (Agreement No.	75,000	LS	1		75,000		75,000	Per Agreement No. R23AP00368
	b	Environmental studies, surveys, groundwater impact analysis, and biological education	130,000	LS	1	130,000			130,000	prior project
3	E&R percent of total cost									
	Engineering and Administration								2,995,000	
	a	Engineering Design	1,245,000	LS	1	1,245,000			1,245,000	past project
	b	Construction Management & Inspection	1,500,000	LS	1	1,500,000			1,500,000	past project
	c	Communication Design & Equipment	250,000	LS	1	250,000			250,000	past project
4	Total								\$34,887,411.81	
	a	GBJPA Contribution				\$26,165,558.86				
	b	USBR Agreement No. R23AP00368					\$4,742,929.00			
	c	Reclamation Contribution						\$3,978,923.95		
	d	Percent Funded by GBJPA							75%	

2.3 Budget Narrative

Table 15. Budget Narrative Form

Summary
Figures in this summary table are calculated from entries made in subsequent categories, only blank white cells require data entry.

6. Budget Object Category	Total Cost	Federal Estimated Amount	Non-Federal Estimated Amount
a. Personnel	\$0		
b. Fringe Benefits	\$0		
c. Travel	\$0		
d. Equipment	\$0		
e. Supplies	\$0		
f. Contractual	\$8,995,398		
g. Construction	\$25,892,014		
h. Other Direct Costs	\$0		
i. Total Direct Costs	\$34,887,412		
i. Indirect Charges	\$0		
Total Costs	\$34,887,412	\$8,721,853	\$26,165,559
Cost Share Percentage		25%	75%

The following is a description of the line items in **Table 14** in the budget proposal and the required Budget Narrative Form in **Table 15**.

Contractual / Construction – Work in this section will be done by contractors and consultants. All required materials as shown in detailed project budgets from the Project and Capital Budget are shown in **Appendix N**.

Environmental and Regulatory Compliance - The GBJPA has worked with Reclamation to determine the potential environmental effects the proposed Project may have with the National Environmental Policy Act (NEPA), National Historic Preservation Act (NHPA), Endangered Species Act (ESA), and the Clean Water Act to ensure compliance with all applicable environmental laws. The proposed project’s impacts were analyzed in the Kern Fan Groundwater Storage Project Environmental Impact Report (EIR). The EIR and a Mitigation Monitoring Reporting Program (MMRP) was adopted by the GBJPA on December 28, 2020. On October 23, 2023, Reclamation determined the Project was excluded from the National Environmental Policy Act (NEPA) under exclusion category 43 CFR § 46.210(c). The MMRP contains mitigation measures that RRBWSD and its contractors would adhere to during construction, to ensure impacts to Air Quality, Water Quality and Quantity, and any sensitive animal species would be mitigated and reduced to a less-than-significant level.

The GBJPA provided all funding related to environmental and regulatory compliance for the Project regarding CEQA and NEPA compliance requirements.

Engineering and Administration - This is the estimated cost for engineering design and specifications for facility design, surveying, and construction management (including inspection) as well as contractor construction activities for each component. Design is estimated at 5% of total project costs, surveying and testing 1%, and inspection 2% for a combined 8% of project costs. This is consistent with prior RRB and IRWD projects.

Total Costs – These are the totals for GBJPA contribution, Reclamation contribution, and the total estimated cost of the project. See **Tables 12, 13, and 14** for the total Federal and Non-Federal cost-share amounts.

2.4 Letters of Commitment

No project funding will be provided by a source other than the GBJPA, thus, no letters of commitment were necessary.

3. Environmental and Cultural Resources Compliance

Submission of the environmental and regulatory compliance within the application is recommended, but not required. Submission of environmental and cultural resources compliance is mandatory prior to issue of an award. Please answer the questions from Section H.1., Environmental and Cultural Resource Considerations, in this section.

To allow Reclamation to assess the probable environmental and cultural resources impacts and costs associated with each application, all applicants must respond to the following list of questions focusing on NEPA, ESA, and NHPA requirements. Applicants are to answer the following questions to the best of their knowledge. If any question is not applicable to the project, please explain why. The application should include the answers to the following questions.

Will the proposed project impact the surrounding environment (e.g., soil [dust], air, water [quality and quantity], animal habitat)? Please briefly describe all earth-disturbing work and any work that will affect the air, water, or animal habitat in the project area. Please also explain the impacts of such work on the surrounding environment and any steps that could be taken to minimize the impacts.

The proposed Project components are both near and within developed agriculture and recharge basins. The proposed Project will require significant earth-disturbing activities. When considering the potential surface area to be disturbed the most surface area. This would require clearing and grubbing of approximately 360 acres of area that is currently heavily disturbed with ongoing intensive farming activities. The installation of the conveyance would also be a ground-disturbing activity that would occur primarily on or next to the existing recharge ground. The drilling and equipping of the wells, as well as the installation of interbasin structures, would require minimal excavation to construct. RRBWSD, as well as local contractors, have extensive experience with excavating activities and utilize best management practices concerning dust and erosion control.

The proposed project's impacts were analyzed in the Kern Fan Groundwater Storage Project Environmental Impact Report (EIR). The EIR and a Mitigation Monitoring Reporting Program (MMRP) was adopted by the GBJPA on December 28, 2020. On October 23, 2023,

Reclamation determined the Project was excluded from the National Environmental Policy Act (NEPA) under exclusion category 43 CFR § 46.210(c). The MMRP contains mitigation measures that RRBWSD and its contractors would adhere to during construction, to ensure impacts from the Project are mitigated and reduced to a less-than-significant level. Additionally, RRBWSD or its contractor would follow all state, county, and air pollution control board requirements to minimize dust on to the surrounding areas.

All earth-disturbing activities will be done absent of local irrigation or drain water in the canals or drains. Disturbed earth will have no contact with flowing water and therefore will have no impact on irrigation supply water or drain water. Project activities would not occur on natural streams or river channels. The presence of working facilities along with routine RRBWSD and farmer activities make it unlikely for animals to use project sites as habitats. Potential impacts have been analyzed and relevant mitigation measures have been adopted by the GBJPA. All necessary compliance required for both CEQA and NEPA has and will continue to be implemented.

Is the applicant aware of any species listed or proposed to be listed as a Federal threatened or endangered species, or designated critical habitat in the project area? If so, would they be affected by any activities associated with the proposed project?

Although all Project activities are going to be conducted on land that is routinely disturbed by farming operations and existing recharge basin land cover, Kern County is known to have a habitat that can support endangered and threatened species. The project areas contain suitable habitats for three special-status mammal species, including an additional special-status species that were observed on-site during the reconnaissance survey. San Joaquin kit fox, Tipton kangaroo rat, and Nelson's antelope squirrel are three species that have a medium or high potential to occur on-site based on past detections and observed suitable habitat in the area. The additional special-status species observed on-site is the American badger. The proposed project could result in adverse impacts on migratory birds protected under the MBTA and special-status bird species, including the Burrowing owl, Swainson's hawk, California horned-lark, and Tricolored blackbird. However, the proposed Project's impacts were analyzed in the Kern Fan Project EIR which was adopted along with the MMRP which includes mitigation measures that would reduce impacts to less-than-significant levels for Federally listed or proposed to be listed endangered species or designated critical habitats during construction and operation of the proposed Project. Please see **Appendix O** for access to the Kern Fan Project DEIR and FEIR.

In addition, the GBJPA provided Project-specific information to Reclamation pursuant to Section 7 Endangered Species Act consultation with the United States Fish and Wildlife Service (USFWS). Reclamation's review of the proposed Project information and available data resulted in a "No Effect" determination to the USFWS which then concluded the Section 7 Endangered Species Act consultation process.

Are there wetlands or other surface waters inside the project boundaries that potentially fall under CWA jurisdiction as "Waters of the United States?" If so, please describe and estimate any impacts the proposed project may have.

According to the U.S. Fish and Wildlife Service National Wetlands Inventory, there are no wetlands within Project boundaries. There are, however, wetlands indicated in the nearby vicinity of the Project site, but they are not expected to be negatively impacted by the Project due to the limited nature of the ground disturbance.

When was the water delivery system constructed?

RRBWSD operates a surface water delivery system with more than 25 miles of earthen canals. The water delivery system was developed in the 1970s. Many of the canal alignments have been realigned or modified over that time. Additionally, almost all of the check and gate structures have been replaced or updated over the same period to maintain a working water delivery system. Due to increases in water demand over time, additional water delivery features and enlargements have been constructed for better water management and increased operational flexibility.

Will the proposed project result in any modification of or effects to, individual features of an irrigation system (e.g., headgates, canals, or flumes)? If so, state when those features were constructed and describe the nature and timing of any extensive alterations or modifications to those features completed previously.

There will be no modifications to an existing irrigation distribution system.

Are any buildings, structures, or features in the irrigation district listed or eligible for listing on the National Register of Historic Places? A cultural resources specialist at the applicant's local Reclamation office or the State Historic Preservation Office can assist in answering this question.

There are no registered historical landmarks within the project boundaries. The GBJPA retained cultural resources management consultant ASM Affiliates to conduct a Class III Inventory/Phase I Survey within a 350-acre Area of Potential Effect. The report prepared by ASM Affiliates was used to facilitate a State Historic Preservation Officer consultation pursuant to the National Historic Preservation Act. Reclamation made a finding of *No Historic Properties Affected* and prepared a memorandum to the State Historic Preservation Officer.

Are there any known archeological sites in the proposed project area?

The GBJPA does not have any knowledge of known archeological sites within or in the vicinity of the proposed Project sites. A Class III Inventory/Phase I Survey was conducted within a 350-acre Area of Potential Effect and found no previously recorded sites identified in the Area of Potential Effect. Prior to construction, the GBJPA will contract with a qualified archaeologist to prepare a Cultural Resources Mitigation and Monitoring Program.

Will the proposed project have a disproportionately high and adverse effect on low income or minority populations?

The proposed Project will not have a disproportionately high and adverse effect on low income or minority populations. Construction of the Project will support the agricultural-based economy in the Southern San Joaquin Valley.

Will the proposed project limit access to and ceremonial use of Indian sacred sites or result in other impacts on tribal lands?

The proposed Project will not limit access to the ceremonial use of Indian sacred sites or result in other impacts on tribal lands.

Will the proposed project contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area?

The proposed Project will not contribute to the introduction, continued existence, or spread of noxious weeds or non-native species in the region.

4. Required Permits or Approvals

There are multiple required permits for a Project with this many components. For environmental compliance, all CEQA and NEPA requirements have been satisfied. Other project approvals and permits that will be obtained prior to construction include:

1. A California State Water Resources Control Board approved Stormwater Pollution Prevention Plan (SWPPP) is required to be filed through the Stormwater Multiple Application and Report Tracking System (SMARTS).
2. Caltrans permits will be required for the crossing underneath Stockdale Highway and State Highway 43.
3. County of Kern Environmental Health Department well drilling permits are required for any drilling or construction of new wells in Kern County.
4. In compliance with Executive Order N-7-22, coordination with the applicable Groundwater Sustainability Agency will also be required.

5. Overlap or Duplication of Effort Statement

Applicants must also state if the proposal submitted for consideration under this program does or does not in any way duplicate any proposal or project that has been or will be submitted for funding consideration to any other potential funding source—whether it be Federal or non-Federal. If such a circumstance exists, applicants must detail:

- ***when the other duplicative proposal(s) were submitted,***
- ***to whom (agency name and Financial assistance program), and***
- ***when funding decisions are expected to be announced. If at any time a proposal is awarded funds that would be duplicative of the funding requested from***

Reclamation, applicants must notify the NOFO point of contact or the program coordinator immediately.

This grant application submitted for consideration under the USBR's Small Storage Projects does duplicate a similar proposal that was submitted by the GBJPA on June 15, 2022, to the Bureau of Reclamation. The previous application was submitted for consideration under the WaterSMART Drought Response Program: Drought Resiliency Projects for the Fiscal Year 2023 (R23AS00005). Grant funds were anticipated to be used towards the construction of the West Enos and Stockdale North Recharge and Recovery Project. The GBJPA was notified a few months after submission that the proposal was not awarded any federal funds, due to the size of the project. Because no funds were awarded, the GBJPA was encouraged to submit a similar proposal under the USBR's Small Surface Water and Groundwater Storage Project funding opportunity No. R23AS00019.

In December 2022, the GBJPA applied for funding under opportunity No. R23AS00019 for the Phase 1 Project. A notice of award for the funding opportunity was received in April 2023, and a funding agreement was executed (No. R23AP00368). The GBJPA received a notice to proceed on October 26, 2023. Due to additional funding being made available within USBR's Small Surface Water and Groundwater Storage Projects program, the GBJPA is seeking further financial support under funding opportunity No. R24AS00010 for the same Phase 1 Project that was awarded earlier this year (Agreement No. R23AP00368). The previous award only provided partial funding based on the total eligible federal benefits. This application seeks additional Small Project Program funding up to the full eligible funding amount.

Additionally, the GBJPA has been conditionally awarded state funding through the Water Storage Investment Program administered by the California Water Commission. Since a final funding agreement has not been executed with the California Water Commission yet, state funding will not be used to construct the proposed Phase 1 Project. It is expected that once a final funding agreement is executed, state funding will be used for later phases of the Kern Fan Project.

6. Letters of Support

Please see **Appendix J** for Letters of Support for the Kern Fan Project and Phase 1 of the Kern Fan Project.

7. Official Resolutions

The GBJPA intends to adopt an official resolution at its December 7, 2023, Board Meeting. Since the resolution will be adopted after the submission of this grant application, the applicant will submit the official resolution to the Reclamation Small Storage Program Coordinator. Since this project is similar to last year's application under NOFO R23AS00019, that Board Resolution is attached in **Appendix P**.

8. Conflict of Interest Disclosure

Per the Financial Assistance Interior Regulation (FAIR), 2 CFR §1402.112, no actual or potential conflict of interest exists.

9. Uniform Audit Reporting Statement

Please see **Appendix Q** for the GBJPA's Auditor's Report.

10. References

ASM Affiliates. Class III Inventory/Phase I Survey, Groundwater Banking JPA, West Enos and North Stockdale Recharge Ponds Project, Kern County, California. July 2023, PN 30580.03.

California Department of Water Resources (DWR), 2022. *Critically Overdrafted Basins Map*. Retrieved from DWR: <https://water.ca.gov/programs/groundwater-management/bulletin-118/critically-overdrafted>

California, State of. "California Water Plan Update 2023." Department of Water Resources, water.ca.gov/Programs/California-Water-Plan/Update-2023. Accessed 26 Oct. 2023.

California's Water Supply Strategy – Adapting to a Hotter, Drier Future, August 2022.

Climate and Economic Justice Screening Tool, screeningtool.geoplatform.gov/en/#3/33.47/-97.5. Accessed 26 Oct. 2023.

Curtis M. Skaggs, PE, 2022. Preliminary Design Report. *Kern Fan Groundwater Storage Project – Proposed Projects and Capital Budget for 2022-23 through 2024-25*

Groundwater Banking JPA (GBJPA), 2020. Kern Fan Groundwater Storage Project Draft Environmental Impact Report SCH No. 2020049019. Prepared by Environmental Science Associates (ESA), 2020.

M. Cubed, 2022. Technical Memorandum. Estimate of Benefits from the Kern Fan Groundwater Storage Project – Phase 1 for the Small Surface Water and Groundwater Storage Projects Program

MBK Engineers, 2022. Technical Memorandum. *Updated Analysis of Kern Fan Groundwater Storage Project*

Thomas Harder & Co., 2021. Technical Memorandum. *Recharge and Recovery Suitability Report for the Bolthouse Property*.

Thomas Harder & Co., 2021. Technical Memorandum. *Recharge and Recovery Suitability Report for the Diamond Property*.

Thomas Harder & Co., 2022. Technical Memorandum. *Aquifer Storage Potential for the West Enos and North Stockdale Portions of the Kern Fan Storage Project*

U.S. Drought Monitor, droughtmonitor.unl.edu/CurrentMap/StateDroughtMonitor.aspx?West. Accessed 26 Oct. 202

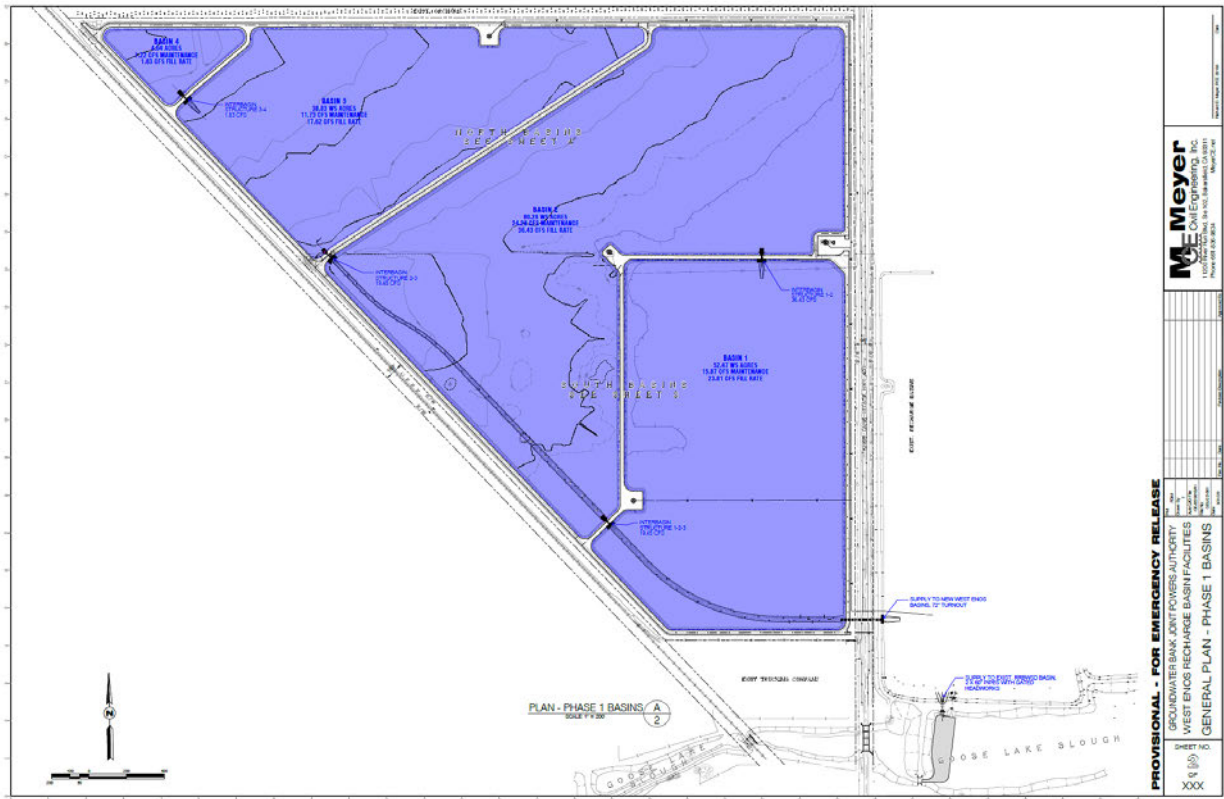
West Enos Project

DISCUSSION:

Prior to deciding to implement a pilot project the GBJPA had prepared for construction of the recharge facilities. Efforts were made to expedite construction in response to the wet 2023 conditions per emergency declaration including applying for Caltrans permits, ordering of check structures, and executing of construction contracts. In April 2023 we were notified that we were awarded a \$4.7M grant towards the construction. It became clear that the USBR process would not be completed in time to take advantage of 2023 water supplies so the Pilot Project was initiated and construction was put on hold pending NEPA and contract completion. The USBR has now completed these efforts.

RECOMMENDATION:

Authorize the General Manager to initiate recharge project construction as described under attached memorandum dated April 12, 2023.



Kern Fan Groundwater Storage Project – Task No. 2
WEST ENOS RECHARGE FACILITY PROJECT
Engineering Professional Services

DISCUSSION

The Design Package #1 (DP#1) “Recharge Basins & Infrastructure” is being designed by Meyer Civil Engineering/AECOM. A sixty-percent (60%) level design has been completed for the West Enos Recharge Facility which is approximately 200 acres located on the west side of Enos Lane and north of the Goose Lake Channel in Section 26, T29S, R25E also being APN’s 104-240-22, 104-240-30, and 104-240-31. The engineering team was asked to finalize these plans to the point where they could be utilized to construct the West Enos Recharge Facility under an emergency declaration.

The scope of work and the associated costs are outlined below:

<u>Earthwork</u>	<u>Lonnie A. Cross Land Leveling, Inc.</u>
• Mobilization, Demobilization, & Cleanup	\$82,350.00
• Clearing & Grubbing	\$21,230.00
• Scarification & Recompaction beneath Embankments	\$135,150.00
• Existing Irrigation Pipe Removal & Disposal	\$14,976.00
• Keyway beneath Levee Embankments	\$110,695.00
• Levee Embankment Fill	\$606,490.70
• Low Water Channel – Borrow Area	\$6,000.00
• Well Pads	\$38,816.00
• Excavate Boring & Receiving Pits	\$6,420.00
• Ripping and Floating Pond Bottoms	\$39,600.00
• Performance & Payment Bonds	<u>\$21,234.55</u>
Total Budget:	\$1,082,962.25

Lonnie A. Cross Land Leveling has performed similar projects to this one for the District and performed well. They are familiar with the plans and specifications and can commence construction activity immediately. They are estimating approximately 100 working days or 5 months to complete the scope of work noted above. The estimated completion date is the middle of September 2023.

Lonnie A. Cross Land Leveling could also expedite the earthwork by working five (5) 10 hour days per week or working six (6) days per week. This would add approximately \$150,000 to \$200,000 to the cost proposal, but would reduce the duration of the project by approximately

one month. Therefore, the estimated completion date would be around the middle of August if overtime work were implemented.

Highway Crossing

- Install Four 48"x5/8" Steel Casings
- Performance & Payment Bonds

All-State Boring

	\$628,168.00
	<u>\$10,500.00</u>
Total Budget:	\$638,668.00

All-State Boring has performed similar projects to this one on numerous occasions and performed well. They are familiar with the plans and specifications and can commence construction activity immediately. They are proposing to install the four casings using the hammer method due to the extremely sandy nature of existing soils and wanting to protect the highway. They are estimating approximately 30 working days or 1-1/2 months to complete the scope of work noted above. This work will require an encroachment permit from Caltrans and the work cannot proceed until that is approved. The encroachment permit application is being submitted to Caltrans and as soon as the permit is received this work can commence.

Pipelines and Conveyance Structures

- Mobilization, Demobilization, & Cleanup
- Install Two Interbasin Structures
- Install Three 42" HDPE Carrier Pipelines
- Performance & Payment Bonds

Nicholas Construction, Inc.

	\$35,000.00
	\$80,000.00
	\$100,000.00
	<u>\$5,000.00</u>
Total Budget:	\$220,000.00

Nicholas Construction, Inc. will be the General Engineering Contractor to install the conveyance structures and pipelines to convey water to the property. They have performed similar projects for the District and performed well. The District is still working to get budget costs from Nicholas and the costs noted above are merely placeholders.

Materials Testing

- Compaction Testing

Soils Engineering, Inc.

\$51,590.00

Total Budget: \$51,590.00

Soils Engineering, Inc. (SEI) will provide materials testing services. This will include full-time compaction testing at the beginning to establish compaction efforts, proper moisture levels, and methods and then the compaction testing will be reduced to once per day.

Project Management & Construction Inspection

- Engineering Services

Dee Jaspar & Associates, Inc.

\$98,378.00

Total Budget: \$98,378.00

Dee Jaspar & Associates, Inc. (DJA) will provide project management and construction inspection for the contracts noted above. The work will include:

- General Correspondence and Communication with Contractors and District
- Submittal and RFI Review and Responses
- Review Proposed Change Orders and Provide Recommendations
- Review Monthly Progress Payments and Provide Approval for Payment
- Site Inspection, Quality Control, and Daily Reporting and Monthly Progress Reports
- Permitting Compliance and Coordination
- Project Close-Out

In addition, DJA has prepared a preliminary cash-flow forecast for the project duration beginning in May 2023 and running through October 2023. This forecast is attached as Exhibit A.

LIST OF EXHIBITS

- Exhibit A: Cash-Flow Forecast
- Exhibit B: Lonnie A. Cross Land Leveling, Inc. Cost Proposal dated April 7, 2023
- Exhibit C: All-State Boring Cost Proposal dated April 4, 2023
- Exhibit D: Soils Engineering, Inc. Cost Proposal dated April 11, 2023
- Exhibit E: Dee Jaspar & Associates, Inc. Cost Proposal dated April 10, 2023

EXHIBIT A
PROJECT CASH-FLOW FORECAST

**Groundwater Banking Joint Powers Authority
West Enos Recharge Facility Project**

Cash-Flow Forecast

<i>Earthwork - Lonnie Cross</i>								
Item No.	Description of Work	May	June	July	August	September	October	Totals
1	Mobilization	\$62,409.55						
2	Clearing & Grubbing	\$21,230.00						
3	Scarification & Recompaction	\$135,150.00						
4	Irrigation Pipe Removal	\$14,976.00						
5	Keyway Overexcavation & Recompaction	\$83,021.25	\$27,673.75					
6	Levee Embankment Fill	\$121,298.14	\$121,298.14	\$121,298.14	\$121,298.14	\$121,298.14		
7	Low Water Channel					\$6,000.00		
8	Well Pads				\$38,816.00			
9	Excavate Boring Pit		\$6,420.00					
10	Ripping and Floating Pond Bottoms					\$39,600.00		
11	Demobilization					\$41,175.00		
	Subtotals:	\$438,084.94	\$155,391.89	\$121,298.14	\$160,114.14	\$208,073.14		\$1,082,962.25
<i>Highway Crossings - All State Boring</i>								
Item No.	Description of Work	May	June	July	August	September	October	Totals
1	Mobilization	\$10,500.00						
2	Install Four 48" Cased Crossings	\$157,042.00	\$157,042.00	\$314,084.00				
3	Demobilization			\$0.00				
	Subtotals:	\$167,542.00	\$157,042.00	\$314,084.00				\$638,668.00
<i>General Contractor - Nicholas Construction</i>								
Item No.	Description of Work	May	June	July	August	September	October	Totals
1	Mobilization				\$20,000.00			
2	Install Interbasin Structures					\$80,000.00		
3	Install Carrier Pipes beneath Enos Lane				\$100,000.00			
4	Demobilization					\$20,000.00		
	Subtotals:				\$120,000.00	\$100,000.00		\$220,000.00
<i>Materials Testing - Soils Engineering (SEI)</i>								
Item No.	Description of Work	May	June	July	August	September	October	Totals
1	Compaction Testing and Materials Observation	\$16,000.00	\$8,530.00	\$8,530.00	\$8,530.00	\$10,000.00		\$51,590.00
<i>Project Management and CM - Dee Jaspar & Associates, Inc. (DJA)</i>								
Item No.	Description of Work	May	June	July	August	September	October	Totals
1	Project Management and Construction Inspection	\$16,396.35	\$16,396.33	\$16,396.33	\$16,396.33	\$16,396.33	\$16,396.33	\$98,378.00
2	Caltrans & Cal OSHA Permitting	\$10,000.00	\$10,000.00					\$20,000.00
		May	June	July	August	September	October	Totals
	Monthly Cash Flow Forecast:	\$648,023.29	\$347,360.22	\$460,308.47	\$305,040.47	\$334,469.47	\$16,396.33	\$2,111,598.25

EXHIBIT B
LONNIE A. CROSS LAND LEVELING, INC.
COST PROPOSAL

PROPOSAL TO

GROUNDWATER BANKING JOINT POWERS AUTHORITY

WEST ENOS RECHARGE FACILITIES
EMERGENCY PROJECT

Name of Bidder: Lonnie A. Cross Land Leveling, Inc.

Business Address: 14711 McCaffrey Street

in the City of Bakersfield, County of Kern,

State of California, Zip Code 93313.

Phone No. 661-808-0760.

TO: BOARD OF DIRECTORS,
GROUNDWATER BANKING JOINT POWERS AUTHORITY (GBJPA)

Pursuant to and in compliance with your notice inviting sealed proposals (the "Bids") and the other documents relating thereto, the undersigned bidder, having familiarized himself with the terms of the Contract Documents, local conditions affecting the performance of the Work, and the cost of the Work at the place where the Work is to be done, hereby proposes and agrees to perform within the time stipulated in the Agreement, including all of its component parts and everything required to be performed, and to provide and furnish any and all of the labor, material, tools, expendable equipment, and all utility and transportation services necessary to perform the Work and complete in a workmanlike manner, all of the work required in connection with the construction and other Contract Documents, including Addenda, for the prices hereinafter set forth.

The undersigned, as bidder, declares that the only persons or parties interested in this proposal as principals are those named herein; that this proposal is made without collusion with any person, firm, or corporation; and bidder proposes and agrees, if the proposal is accepted, that bidder will execute an Agreement with GBJPA in the form set forth in the Contract Documents and that bidder will accept in full payment thereof the following prices, to wit:

SCHEDULE OF WORK ITEMS

**WEST ENOS RECHARGE FACILITIES
EMERGENCY PROJECT**

<u>Base Bid Items</u>			<u>Unit Price</u>	<u>Total</u>
<u>Item</u>	<u>Approx.</u>	<u>Description</u>	<u>Dlrs./Cts.</u>	<u>Amount</u>
<u>No.</u>	<u>Quantity</u>			<u>Dlrs./Cts.</u>
1	Lump Sum	Mobilization, Demobilization, & Cleanup	<u>\$82,350.00</u>	<u>\$82,350.00</u>
2	193 Acres	Clearing & Grubbing Project Site and Beneath Levee Embankments	<u>\$110.00</u>	<u>\$21,230.00</u>
3	26.5 Acres	Scarification & Re-compaction Beneath Levee Embankments	<u>\$5,100.00</u>	<u>\$135,150.00</u>
4	1,300 LF	Existing Irrigation Pipe Removal and Disposal	<u>\$ 11.52</u>	<u>\$14,976.00</u>
5	34,060 CY	Keyway Beneath Levee Embankment Over-Excavation	<u>\$3.25</u>	<u>\$110,695.00</u>
6	92,594 CY	Levee Embankment Fill	<u>\$6.55</u>	<u>\$606,490.70</u>
7	Lump Sum	Low Water Channel – Borrow Areas	<u>\$6,000.00</u>	<u>\$6,000.00</u>
8	Lump Sum	Well Pad – 4 Total	<u>\$9,704.00</u>	<u>\$38,816.00</u>
9	Lump Sum	Excavate Boring & Receiving Pits	<u>\$6,420.00</u>	<u>\$6,420.00</u>
10	176 Acres	Ripping and Floating Pond Bottoms	<u>\$225.00</u>	<u>\$39,600.00</u>
11	Lump Sum	Performance & Payment Bonds	<u>\$21,234.55</u>	<u>\$21,234.55</u>
SUBTOTAL, Base Bid Items				<u>\$1,082,962.25</u>
ADDITION (+) OR				\$+ _____
DEDUCTION (-)*				\$- _____
TOTAL AMOUNT OF BID				<u>\$1,082,962.25</u>



 Signature of Bidder

It is understood that the foregoing quantities are approximate only and are solely for the purpose of facilitating the comparison of bids, and that the Contractor's compensation will be computed upon the basis of the actual quantities in the completed work whether they be more or less than those shown.

GBJPA reserves the right to award the Work to the lowest responsible bidder based on any single schedule or combination of schedules of bid items deemed by GBJPA in its sole discretion, to be in GBJPA's best interest.

*Provision is made here for the bidder to include an addition or deduction in their Bid, if bidder wishes, to reflect any last-minute adjustments in price. The addition or deduction, if made, will be proportionately applied to the progress payments for items _____, _____, _____, _____, and _____. (If no items are listed, the addition or deduction shall be treated as a separate bid item, and payment or deduction for this item shall be proportionate to the percentage payment for completed work).

STATEMENTS BY BIDDER

**WEST ENOS RECHARGE FACILITIES
EMERGENCY PROJECT**

Bidder shall indicate opposite each item listed below the name of the manufacturer or supplier and location of plant proposed to be used under the Agreement. Award of an Agreement under this proposal (bid) will not imply approval by GBJPA of a manufacturer or supplier listed by the bidder. However, if a manufacturer or supplier is acceptable to GBJPA, the successful bidder shall furnish the items from the manufacturer or supplier indicated. Any manufacturer or supplier listed in the Agreement may be substituted, changed, or omitted by the successful bidder, subject to the approval of GBJPA, without subjecting GBJPA to any liability for the substitution, change or omission.

The listing of any manufacturer or supplier in the Agreement does not, and is not intended to, grant any right, title, or interest in the Agreement for the benefit of the named manufacturer or supplier. Each bidder shall inform in writing each named manufacturer or supplier that the so named manufacturer or supplier is listed for information purposes only and they may be substituted, changed, or omitted by the successful bidder, subject to the approval of GBJPA, without subjecting GBJPA to any liability for the substitution, change or omission. The successful bidder shall reimburse GBJPA for any expenses incurred by GBJPA as a result of the successful bidder's failure to so notify each named manufacturer or supplier.

The listing of lead times for delivery is for informational purposes only and will not affect the Contract Time(s) specified herein or entitle the successful bidder to an extension(s) of time. The successful bidder is responsible for obtaining delivery of all items at times that will ensure completion within the Contract Time(s).

A. Lead time for delivery from date of signing the Agreement shall be as follows:

<u>Item</u>	<u>Calendar Days</u>
N/A	

- B. The bidder intends to furnish materials supplied by the following manufacturers: (Bidder to list one manufacturer only for each item.)

<u>Item</u>	<u>Manufacturer</u>
N/A	

- C. The name and location of place of business of each subcontractor who will perform work or labor or render service to the bidder in or about the construction of the Work, or improvements, in an amount in excess of 1/2 of 1 percent (0.5%) of the bidder's total Bid, and the portion of the Work which will be done by each subcontractor is set forth as follows:

<u>Name of Subcontractor</u>	<u>Address of Offices</u>	<u>Portion of Work to be Subcontracted</u>
N/A		

- D. Except as hereinabove provided, the bidder acknowledges and agrees that the bidder will perform all required work in accordance with Section 4106 of the California Public Contract Code.

- E. Person who inspected site of the proposed Work for the bidder:

Name: Kreg Cross Date of Inspection: 04/04/2023

Name: _____ Date of Inspection: _____

- F. It is agreed that, if requested by GBJPA, the bidder shall furnish a notarized financial statement, references, and other information, sufficiently comprehensive to permit an appraisal of their current financial condition.

G. The undersigned shall furnish the following information. Failure to comply with this requirement will render the Bid informal and may cause its rejection. Additional sheets may be attached if necessary.

(1) Address: Physical: 14711 McCaffrey Street Bakersfield, CA 93313
Mailing: P.O. Box 10149 Bakersfield, CA 93389

(2) Type of firm: Individual _____
 Partnership _____
 Joint Venture _____
 Corporation Secretary of State # C-2329916
FEIN # 77-0565551

(3) Telephone: 661-808-0760

(4) Contractor's license: Primary class. C-12 Lic. No. 547565
 Supplemental classifications held, if any: DIR # 1000033525

(5) Number of years as a contractor in construction work of this type: 45 years

(6) Three projects of this type and complexity recently constructed by bidder:

<u>Contract Amount</u>	<u>Type of Project</u>	<u>Date Completed</u>	<u>Owner's Name & Address</u>
<u>\$1,128,063.48</u>	<u>Grading</u>	<u>Ongoing</u>	<u>Kern Delta Water District</u> <u>Old River Ponds</u>
<u>\$1,096,152</u>	<u>Grading</u>	<u>12/23/2022</u>	<u>Southern San Joaquin</u> <u>Municipal Utility District</u> <u>Giumarra Spreading Basin</u>
<u>\$2,121,818</u>	<u>Grading</u>	<u>11/09/2020</u>	<u>Homer LLC Kecks Corner</u>

BID SECURITY DECLARATION

**WEST ENOS RECHARGE FACILITIES
EMERGENCY PROJECT**

ACCOMPANYING THIS PROPOSAL IS _____
(Insert the words "cash", "bidder's bond", "cashier's check", or "certified check", as the case may be) in an amount equal to at least ten percent (10%) of the total amount of the bid, payable in lawful money of the United States of America to the

GROUNDWATER BANKING JOINT POWERS AUTHORITY (GBJPA)

The undersigned deposits the security in the form set forth above as a proposal guarantee and agrees that it shall be forfeited to GBJPA in case this is accepted by GBJPA and the undersigned fails to execute an Agreement with GBJPA as specified in the Contract Documents accompanied by the required payment and faithful performance bonds with sureties satisfactory to GBJPA, and accompanied by the required certificates of insurance coverage and endorsements. Should GBJPA be required to engage the services of an attorney(s) in connection with the enforcement of this Bid, bidder promises to pay all of GBJPA's reasonable attorneys' fees and costs incurred with or without suit. The bidder's liability to GBJPA for failure to do any of the foregoing shall not be limited to the amount of the deposited security in the form set forth above.

The names of all persons interested in the foregoing proposal as principals are as follows:

(NOTICE: If bidder or other interested person is a **corporation**, state legal name of corporation also names of the president, secretary, treasurer and manager thereof; if a **general partnership**, state true name of firm, also names of all individual partners and limited partners; if bidder or other interested person is an **individual**, state first and last names in full; if the bidder is a **joint venture**, state the complete name of each venturer).

Lonnie A. Cross Land Leveling, Inc.

President - Kreg Cross

Vice President - Nathan Fallgatter

CFO / Treasurer - Nicolette Cross

Secretary - Karen Fallgatter

ADDENDA ACKNOWLEDGMENT

**WEST ENOS RECHARGE FACILITIES
EMERGENCY PROJECT**

Bidder shall signify receipt of all addenda (if any) here:

Addenda Nos.

N/A

Respectfully submitted,

JM NW

Contractor or Authorized Representative

By LONNIE A. CROSS

LANDEUERLING INC.

P. O. BOX 10149

BAKERSFIELD, LA
93389

Complete Business Address

(661) 808-0760

(661) 809-2013

Telephone Number

✓
FAX Number

547565

Contractor's License Number

Dated: 4/7/23

NOTE: If bidder is a **corporation**, the legal name of the corporation shall be set forth above, together with the signature of the officer or officers authorized to sign contracts on behalf of the corporation, and the corporate seal shall be affixed; if bidder is a **partnership**, the true name of the firm shall be set forth above, together with the signature of the partner or partners authorized to sign contracts on behalf of the partnership; and if the bidder is an **individual**, his signature shall be placed above; if the bidder is a **joint venture**, the name of the joint venture shall be set forth above with the signature of an authorized representative of each venturer.

CERTIFICATION OF BIDDERS AND QUALIFICATIONS

WEST ENOS RECHARGE FACILITIES EMERGENCY PROJECT

The undersigned bidder certifies that bidder is, at the time of bidding, and shall be, throughout the period of the Contract, licensed by the State of California to do the type of work required under the terms of the Contract Documents. Bidder further certifies that bidder is skilled and regularly engaged in the general class and type of work called for in the Contract Documents.

The undersigned bidder certifies that it is not an ineligible contractor for the purposes of California Labor Code Section 1777.1 or 1777.7. The undersigned further certifies that no subcontractor to be used for the performance of the Work is an ineligible contractor for the purposes of Labor Code Section 1777.1 or 1777.7.

The bidder represents that bidder is competent, knowledgeable and has special skills regarding the nature, extent and inherent conditions of the Work to be performed. Bidder further acknowledges that there are certain peculiar and inherent conditions existent in the construction of the Work which may create, during the Work, unusual or peculiar unsafe conditions hazardous to persons and property.

Bidder expressly acknowledges that bidder is aware of such peculiar risks and that they have the skill and experience to foresee and to adopt protective measures to adequately and safely perform the Work with respect to such hazards.

Furthermore, Bidder hereby certifies to GBJPA that all representations, certifications, and statements made by Bidder, as set forth in this bid, are true and correct and are made under penalty of perjury.

Signed this 07 day of April, 2023

Lonnie A. Cross Land Leveling, Inc.

Name of Bidder

547565

Contractor's License No.

June 30, 2023

Contractor's License Expiration Date



Signature of Bidder

President

Title of Signatory

SAFETY PROGRAM CERTIFICATION

**WEST ENOS RECHARGE FACILITIES
EMERGENCY PROJECT**


CONTRACTOR acknowledges that CONTRACTOR has read Section 01410 of Division 1 – General Requirements, Construction Safety Procedures.

CONTRACTOR certifies to GBJPA that CONTRACTOR’s SAFETY PROGRAM includes the following elements:

- Safety Policy
- Incident Investigation Program
- Safety Meeting Program
- Statistical Injury and Illness Data
- Safety Training Program and Records
- Disciplinary Procedures
- Safety Inspection Program
- OSHA T1 Annual Trench Excavation Permit: Permit No. 2022-614827

Signed this 07 day of April, 2023

Lonnie A. Cross Land Leveling, Inc.
Name of Bidder


Signature of Bidder

Kreg Cross - President
Title

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

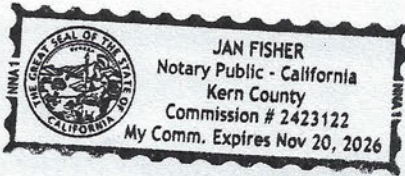
State of California

County of KERN

Subscribed and sworn to (or affirmed) before me on this 7 day of APRIL, 2023 by
Date Month Year

(1) KRIG CROSS

(and (2) _____),
Name(s) of Signer(s)



proved to me on the basis of satisfactory evidence to be the person(s) who appeared before me.

Signature: [Handwritten Signature]
Signature of Notary Public

Place Notary Seal and/or Stamp Above

OPTIONAL

Completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended document.

Description of Attached Document

Title or Type of Document: NON-COLLUSION AFFIDAVIT

Document Date: APRIL 7, 2023 Number of Pages: _____

Signer(s) Other Than Named Above: NONE



Lonnie A. Cross
LandLeveling Inc.

Mailing Address: P.O. Box 10149

Bakersfield, CA 93389

Admin Phone: 661-808-0760

Kreg Cross (661) 809-2013

Admin@crosslandleveling.com

Contractor's License #547565

4.7.23

West Enos Recharge Facilities
Explanation of bid items
Curtis Skaggs, Matt Hooker

Item 1: Mobilization, Demobilization & Cleanup

Included in this bid item: SWPPP, DCP, Insurance, Waver of Subrogation, GPS Model, Final As-built survey

Item 2: Clearing and grubbing project site and beneath Levee embankments:
Included in this bid item: Remove trees, pipes and debris from around sumps and dispose.

Item 3: Scarification and re-compaction beneath levee embankments:

Item 4: Existing Irrigation pipe removal and disposal:

Representing at least 12" PVC or concrete pipe. The concrete pipe will be stockpiled for use around structures. The PVC Will be disposed of. A reduction of \$ 6,000.00 (disposal fee & Trucking) in the price if it is concrete pipe.

Item 5: Keyway Beneath levee Embankment over-excavation:
Includes shrinkage.

Item 6: Levee embankment fill:

This includes water supply. Access through trucking yard or through railroad right of way or through is preferred. Possibly use a culvert under the railroad tracks if the adjacent property owner is agreeable for a temporary pipeline from the creek (pipeline rental Extra). If the water supply is across the road on Enos lane then add \$ 1.00 per CY because of extra precautions

crossing the road. If the well is used then cost and usage will be provided at no charge. Also includes a sheepsfoot to mix dissimilar materials in the compaction process.

Item 7: Low water channel- borrow areas:

Hold lines and grades as stated, clean up at the end. Volume is in the in-place fill.

Item 8: Well Pad- 4 total:

If the In-Place fill volume is in Item 6 then we would delete this bid item. If this is not in Item 6 or there are special circumstances regarding backfill around the conductor then a the dollar amount in the base bid would apply.

Item 9: Excavate boring and receiving pits:

Excavate and stockpile dirt. Does not include backfill or shoring. 30 x 30 x 10.5 deep 1.5/1 slopes

Item 10: Ripping and floating pond bottoms:

This item represents 24" deep approximately 3-4 ft apart one time over with the ripper with and 3 perimeter end passes. With one float pass.

An alternate price would be 5 ft deep 6 ft apart with a slip plow to mix and shatter the soil. \$ 725 per/ Acre x 176 acres = \$ 127,600.00 with one mobilization.

Item 11: Performance and payment bonds:

2% of project.

Notes:

Independent Compaction testing is not in this proposal. Surveys and Staking right of ways and GPS control is not in this proposal. We can possibly speed up the project by going 6 days a week but overtime rates would apply.

PROPOSAL

DOCUMENT CHECKLIST

**WEST ENOS RECHARGE FACILITIES
EMERGENCY PROJECT**

Bid proposals shall include the following documents:

- Bid Form
- Schedule of Work Items
- Statements by Bidder
- Bid Security Declaration
- Addenda Acknowledgement
- Certification of Bidders and Qualifications
- Safety Program Certification
- Non-Collusion Affidavit
- Bid Bond, Cash, or Certified Check
- Proposed Construction Schedule

EXHIBIT C
ALL-STATE BORING
COST PROPOSAL

PROPOSAL

DOCUMENT CHECKLIST

**WEST ENOS RECHARGE FACILITIES
EMERGENCY PROJECT**

Bid proposals shall include the following documents:

- Bid Form
- Schedule of Work Items
- Statements by Bidder
- Bid Security Declaration
- Addenda Acknowledgement
- Certification of Bidders and Qualifications
- Safety Program Certification
- Non-Collusion Affidavit
- Bid Bond, Cash, or Certified Check
- Proposed Construction Schedule

PROPOSAL TO

GROUNDWATER BANKING JOINT POWERS AUTHORITY

WEST ENOS RECHARGE FACILITIES
EMERGENCY PROJECT

Name of Bidder: CNSB, INC. DBA ALLSTATE BORING

Business Address: 7553 JENNING ST.

in the City of BAKERSFIELD, County of KERN,

State of CALIFORNIA, Zip Code 93314.

Phone No. 661-399-5000.

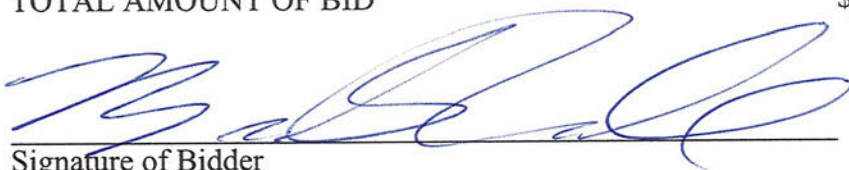
TO: BOARD OF DIRECTORS,
GROUNDWATER BANKING JOINT POWERS AUTHORITY (GBJPA)

Pursuant to and in compliance with your notice inviting sealed proposals (the "Bids") and the other documents relating thereto, the undersigned bidder, having familiarized himself with the terms of the Contract Documents, local conditions affecting the performance of the Work, and the cost of the Work at the place where the Work is to be done, hereby proposes and agrees to perform within the time stipulated in the Agreement, including all of its component parts and everything required to be performed, and to provide and furnish any and all of the labor, material, tools, expendable equipment, and all utility and transportation services necessary to perform the Work and complete in a workmanlike manner, all of the work required in connection with the construction and other Contract Documents, including Addenda, for the prices hereinafter set forth.

The undersigned, as bidder, declares that the only persons or parties interested in this proposal as principals are those named herein; that this proposal is made without collusion with any person, firm, or corporation; and bidder proposes and agrees, if the proposal is accepted, that bidder will execute an Agreement with GBJPA in the form set forth in the Contract Documents and that bidder will accept in full payment thereof the following prices, to wit:

SCHEDULE OF WORK ITEMS

**WEST ENOS RECHARGE FACILITIES
EMERGENCY PROJECT**

<u>Base Bid Items</u>			<u>Unit Price</u>	<u>Total</u>
<u>Item</u>	<u>Approx.</u>	<u>Description</u>	<u>Dlrs./Cts.</u>	<u>Amount</u>
<u>No.</u>	<u>Quantity</u>			<u>Dlrs./Cts.</u>
1	Lump Sum	Mobilization, Demobilization, & Cleanup	\$ <u>Ø</u>	\$ <u>Ø</u>
2	4 EA <i>100'</i>	48"x5/8" Steel Casing by Hammer Method from Enos Ln R/W to R/W	\$ <u>157,042</u>	\$ <u>628,168</u>
3	Lump Sum	Performance & Payment Bonds	\$ <u>10,500</u>	\$ <u>10,500</u>
SUBTOTAL, Base Bid Items				\$ <u>638,668</u>
ADDITION (+) OR				\$+ _____
DEDUCTION (-)*				\$- _____
TOTAL AMOUNT OF BID				\$ <u>638,668</u>
 _____ Signature of Bidder				

It is understood that the foregoing quantities are approximate only and are solely for the purpose of facilitating the comparison of bids, and that the Contractor's compensation will be computed upon the basis of the actual quantities in the completed work whether they be more or less than those shown.

GBJPA reserves the right to award the Work to the lowest responsible bidder based on any single schedule or combination of schedules of bid items deemed by GBJPA in its sole discretion, to be in GBJPA's best interest.

*Provision is made here for the bidder to include an addition or deduction in their Bid, if bidder wishes, to reflect any last-minute adjustments in price. The addition or deduction, if made, will be proportionately applied to the progress payments for items _____, _____, _____, _____, and _____. (If no items are listed, the addition or deduction shall be treated as a separate bid item, and payment or deduction for this item shall be proportionate to the percentage payment for completed work).

STATEMENTS BY BIDDER

**WEST ENOS RECHARGE FACILITIES
EMERGENCY PROJECT**

Bidder shall indicate opposite each item listed below the name of the manufacturer or supplier and location of plant proposed to be used under the Agreement. Award of an Agreement under this proposal (bid) will not imply approval by GBJPA of a manufacturer or supplier listed by the bidder. However, if a manufacturer or supplier is acceptable to GBJPA, the successful bidder shall furnish the items from the manufacturer or supplier indicated. Any manufacturer or supplier listed in the Agreement may be substituted, changed, or omitted by the successful bidder, subject to the approval of GBJPA, without subjecting GBJPA to any liability for the substitution, change or omission.

The listing of any manufacturer or supplier in the Agreement does not, and is not intended to, grant any right, title, or interest in the Agreement for the benefit of the named manufacturer or supplier. Each bidder shall inform in writing each named manufacturer or supplier that the so named manufacturer or supplier is listed for information purposes only and they may be substituted, changed, or omitted by the successful bidder, subject to the approval of GBJPA, without subjecting GBJPA to any liability for the substitution, change or omission. The successful bidder shall reimburse GBJPA for any expenses incurred by GBJPA as a result of the successful bidder's failure to so notify each named manufacturer or supplier.

The listing of lead times for delivery is for informational purposes only and will not affect the Contract Times(s) specified herein or entitle the successful bidder to an extension(s) of time. The successful bidder is responsible for obtaining delivery of all items at times that will ensure completion within the Contract Time(s).

A. Lead time for delivery from date of signing the Agreement shall be as follows:

<u>Item</u>	<u>Calendar Days</u>
<u>48" x .625" Casinets</u>	<u>8 calendar days</u>
<u> </u>	<u> </u>
<u> </u>	<u> </u>

B. The bidder intends to furnish materials supplied by the following manufacturers: (Bidder to list one manufacturer only for each item.)

<u>Item</u>	<u>Manufacturer</u>
48" CASING / CASING SALES COMPANY PREFLIGHT PIPE	DURA BOND

C. The name and location of place of business of each subcontractor who will perform work or labor or render service to the bidder in or about the construction of the Work, or improvements, in an amount in excess of 1/2 of 1 percent (0.5%) of the bidder's total Bid, and the portion of the Work which will be done by each subcontractor is set forth as follows:

<u>Name of Subcontractor</u>	<u>Address of Offices</u>	<u>Portion of Work to be Subcontracted</u>
NONE	—	—

D. Except as hereinabove provided, the bidder acknowledges and agrees that the bidder will perform all required work in accordance with Section 4106 of the California Public Contract Code.

E. Person who inspected site of the proposed Work for the bidder:

Name: BRIAN SHEPHERD Date of Inspection: 4-4-23

Name: KENNY SCOTT Date of Inspection: 4-4-23

F. It is agreed that, if requested by GBJPA, the bidder shall furnish a notarized financial statement, references, and other information, sufficiently comprehensive to permit an appraisal of their current financial condition.

G. The undersigned shall furnish the following information. Failure to comply with this requirement will render the Bid informal and may cause its rejection. Additional sheets may be attached if necessary.

- (1) Address: 7553 JENICO ST.
BOHERSFIELD, CO. 93314
- (2) Type of firm: Individual _____
 Partnership _____
 Joint Venture _____
 Corporation (S)CORP - CNSB, INC. DBA GULLSTATE BOREING
- (3) Telephone: 6061-978-8589
- (4) Contractor's license: Primary class. A Lic. No. 872946
 Supplemental classifications held, if any: CL01-DO9
- (5) Number of years as a contractor in construction work of this type: 17
- (6) Three projects of this type and complexity recently constructed by bidder:

<u>Contract Amount</u>	<u>Type of Project</u>	<u>Date Completed</u>	<u>Owner's Name & Address</u>
<u>\$ 2+ MILLION</u>	<u>Jack & Bore</u>	<u>2022</u>	<u>CHEYRON - KSI</u>
<u>\$ 750,000</u>	<u>Jack & Bore</u>	<u>2023</u>	<u>ORCO ENERGY - PCL</u>
<u>\$ 100,000+</u>	<u>PIPE BOM</u>	<u>2018</u>	<u>CITY OF BOHERSFIELD - LUM LYLES</u>

BID SECURITY DECLARATION

**WEST ENOS RECHARGE FACILITIES
EMERGENCY PROJECT**

ACCOMPANYING THIS PROPOSAL IS Bidders bond
(Insert the words "cash", "bidder's bond", "cashier's check", or "certified check", as the case may be) in an amount equal to at least ten percent (10%) of the total amount of the bid, payable in lawful money of the United States of America to the

GROUNDWATER BANKING JOINT POWERS AUTHORITY (GBJPA)

The undersigned deposits the security in the form set forth above as a proposal guarantee and agrees that it shall be forfeited to GBJPA in case this is accepted by GBJPA and the undersigned fails to execute an Agreement with GBJPA as specified in the Contract Documents accompanied by the required payment and faithful performance bonds with sureties satisfactory to GBJPA, and accompanied by the required certificates of insurance coverage and endorsements. Should GBJPA be required to engage the services of an attorney(s) in connection with the enforcement of this Bid, bidder promises to pay all of GBJPA's reasonable attorneys' fees and costs incurred with or without suit. The bidder's liability to GBJPA for failure to do any of the foregoing shall not be limited to the amount of the deposited security in the form set forth above.

The names of all persons interested in the foregoing proposal as principals are as follows:

(NOTICE: If bidder or other interested person is a **corporation**, state legal name of corporation also names of the president, secretary, treasurer and manager thereof; if a **general partnership**, state true name of firm, also names of all individual partners and limited partners; if bidder or other interested person is an **individual**, state first and last names in full; if the bidder is a **joint venture**, state the complete name of each venturer).

CNSB, Inc. DBA - Allstate Boring

Brian Sherrell - president, secretary, treasurer

ADDENDA ACKNOWLEDGMENT

**WEST ENOS RECHARGE FACILITIES
EMERGENCY PROJECT**

Bidder shall signify receipt of all addenda (if any) here:

Addenda Nos.

Respectfully submitted,



Contractor or Authorized Representative

By BRIAN SHERRELL

7553 JUNIPER DR. BAKERSFIELD, CA. 93314

Complete Business Address

661-399-5000

Telephone Number

661-399-4144

FAX Number

872940

Contractor's License Number

Dated: 4-4-23

NOTE: If bidder is a **corporation**, the legal name of the corporation shall be set forth above, together with the signature of the officer or officers authorized to sign contracts on behalf of the corporation, and the corporate seal shall be affixed; if bidder is a **partnership**, the true name of the firm shall be set forth above, together with the signature of the partner or partners authorized to sign contracts on behalf of the partnership; and if the bidder is an **individual**, his signature shall be placed above; if the bidder is a **joint venture**, the name of the joint venture shall be set forth above with the signature of an authorized representative of each venturer.

CERTIFICATION OF BIDDERS AND QUALIFICATIONS

WEST ENOS RECHARGE FACILITIES EMERGENCY PROJECT

The undersigned bidder certifies that bidder is, at the time of bidding, and shall be, throughout the period of the Contract, licensed by the State of California to do the type of work required under the terms of the Contract Documents. Bidder further certifies that bidder is skilled and regularly engaged in the general class and type of work called for in the Contract Documents.

The undersigned bidder certifies that it is not an ineligible contractor for the purposes of California Labor Code Section 1777.1 or 1777.7. The undersigned further certifies that no subcontractor to be used for the performance of the Work is an ineligible contractor for the purposes of Labor Code Section 1777.1 or 1777.7.

The bidder represents that bidder is competent, knowledgeable and has special skills regarding the nature, extent and inherent conditions of the Work to be performed. Bidder further acknowledges that there are certain peculiar and inherent conditions existent in the construction of the Work which may create, during the Work, unusual or peculiar unsafe conditions hazardous to persons and property.

Bidder expressly acknowledges that bidder is aware of such peculiar risks and that they have the skill and experience to foresee and to adopt protective measures to adequately and safely perform the Work with respect to such hazards.

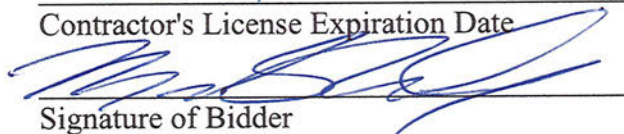
Furthermore, Bidder hereby certifies to GBJPA that all representations, certifications, and statements made by Bidder, as set forth in this bid, are true and correct and are made under penalty of perjury.

Signed this 4 day of APRIL, 2023

CNSB, INC. DBO ALLSTATE BORING
Name of Bidder

872946
Contractor's License No.

2-29-24
Contractor's License Expiration Date


Signature of Bidder

PRESIDENT
Title of Signatory

SAFETY PROGRAM CERTIFICATION

**WEST ENOS RECHARGE FACILITIES
EMERGENCY PROJECT**

CONTRACTOR acknowledges that CONTRACTOR has read Section 01410 of Division 1 – General Requirements, Construction Safety Procedures.

CONTRACTOR certifies to GBJPA that CONTRACTOR’s SAFETY PROGRAM includes the following elements:

- Safety Policy
- Incident Investigation Program
- Safety Meeting Program
- Statistical Injury and Illness Data
- Safety Training Program and Records
- Disciplinary Procedures
- Safety Inspection Program
- OSHA T1 Annual Trench Excavation Permit: Permit No. 918810

Signed this 4 day of APRIL, 2023

CNSB, INC. DBA ALLSTATE BORING
Name of Bidder


Signature of Bidder

PRESIDENT
Title

THE OHIO CASUALTY INSURANCE COMPANY

BOND NO.: CNSIN-001

BID BOND

KNOW ALL MEN BY THESE PRESENTS:

That we, CNSB, INC. DBA ALLSTATE BORING, (hereinafter called the Principal), and THE OHIO CASUALTY INSURANCE COMPANY, a corporation organized and doing business under and by virtue of the laws of the State of NEW HAMPSHIRE, and duly licensed for the purpose of making, guaranteeing or becoming sole surety upon bonds or undertakings required or authorized by the laws of the State of CALIFORNIA, as Surety, are held and firmly bound unto GROUNDWATER BANKING JOINT POWERS AUTHORITY, (hereinafter called the obligee) in the sum equal to 10% of the accompanying bid of the Principal, not, however, in excess of TEN PERCENT OF THE TOTAL AMOUNT OF THE BID Dollars (10% OF THE BID AMOUNT), for the payment of which, well and truly to be made, we hereby bind ourselves and our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH THAT WHEREAS, the above bounden Principal as aforesaid, is about to hand in and submit to the obligee a bid for WEST ENOS RECHARGE FACILITIES EMERGENCY PROJECT, in accordance with the plans and specifications filed in the office of the obligee and under the notice inviting proposals therefore.

NOW, THEREFORE, if the bid or proposal of said principal shall be accepted, and the contract for such work be awarded to the principal thereupon by the said obligee, and said principal shall enter into a contract and bond for the completion of said work as required by law, then this obligation to be null and void, otherwise to be and remain in full force and effect.

IN WITNESS WHEREOF, said principal and said Surety have caused these presents to be duly signed and sealed this 5TH day of APRIL, 2023.

CNSB, INC. DBA ALLSTATE BORING

BY: 

THE OHIO CASUALTY INSURANCE COMPANY

BY: 

MATTHEW R. DOBYNS, Attorney-in-Fact



This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated.

Liberty Mutual Insurance Company
The Ohio Casualty Insurance Company
West American Insurance Company

Certificate No: 8208425-969327

POWER OF ATTORNEY

KNOWN ALL PERSONS BY THESE PRESENTS: That The Ohio Casualty Insurance Company is a corporation duly organized under the laws of the State of New Hampshire, that Liberty Mutual Insurance Company is a corporation duly organized under the laws of the State of Massachusetts, and West American Insurance Company is a corporation duly organized under the laws of the State of Indiana (herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, constitute and appoint, Ashley M. Spohn, Hamilton Kenney, Matthew R. Dobyns, Randy Spohn

all of the city of Santa Ana state of CA each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper persons

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 26th day of July, 2022



Liberty Mutual Insurance Company
The Ohio Casualty Insurance Company
West American Insurance Company

By: David M. Carey, Assistant Secretary

State of PENNSYLVANIA
County of MONTGOMERY ss

On this 26th day of July, 2022 before me personally appeared David M. Carey, who acknowledged himself to be the Assistant Secretary of Liberty Mutual Insurance Company, The Ohio Casualty Company, and West American Insurance Company, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at King of Prussia, Pennsylvania, on the day and year first above written.



Commonwealth of Pennsylvania - Notary Seal
Teresa Pastella, Notary Public
Montgomery County
My commission expires March 28, 2025
Commission number 1126044
Member, Pennsylvania Association of Notaries

By: Teresa Pastella, Notary Public

This Power of Attorney is made and executed pursuant to and by authority of the following By-laws and Authorizations of The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company which resolutions are now in full force and effect reading as follows:

ARTICLE IV - OFFICERS: Section 12. Power of Attorney.

Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitation as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and execution of any such instruments and to attach thereto the seal of the Corporation. When so executed, such instruments shall be as binding as if signed by the President and attested to by the Secretary. Any power or authority granted to any representative or attorney-in-fact under the provisions of this article may be revoked at any time by the Board, the Chairman, the President or by the officer or officers granting such power or authority.

ARTICLE XIII - Execution of Contracts: Section 5. Surety Bonds and Undertakings.

Any officer of the Company authorized for that purpose in writing by the chairman or the president, and subject to such limitations as the chairman or the president may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the president and attested by the secretary.

Certificate of Designation - The President of the Company, acting pursuant to the Bylaws of the Company, authorizes David M. Carey, Assistant Secretary to appoint such attorneys-in-fact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations

Authorization - By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, wherever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

I, Renee C. Llewellyn, the undersigned, Assistant Secretary, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies, is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 5th day of April, 2023



By: Renee C. Llewellyn, Assistant Secretary

Not valid for mortgage, note, loan, letter of credit, currency rate, interest rate or residual value guarantees.

For bond and/or Power of Attorney (POA) verification inquiries, please call 610-832-8240 or email HOSUR@libertymutual.com.

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of CALIFORNIA

County of ORANGE

On 4/5/2023 before me, ERIKA G. MORGAN, NOTARY PUBLIC,

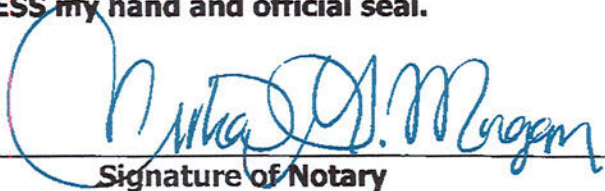
personally appeared MATTHEW R. DOBYNS,

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/~~she~~/they executed the same in his/~~her~~/their authorized capacity (ies), and that by his/~~her~~/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.



I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.



Signature of Notary

OPTIONAL

Though the data below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent reattachment of this form.

CAPACITY CLAIMED BY SIGNER	DESCRIPTION OF ATTACHED DOCUMENT
<input type="checkbox"/> INDIVIDUAL	_____
<input type="checkbox"/> CORPORATE OFFICER	_____
<input type="checkbox"/> PARTNER(S)	_____
<input checked="" type="checkbox"/> ATTORNEY-IN-FACT	_____
<input type="checkbox"/> TRUSTEE(S)	_____
<input type="checkbox"/> GUARDIAN/CONSERVATOR	_____
<input type="checkbox"/> OTHER: _____	_____
SIGNER IS REPRESENTING:	_____
NAME OF PERSON(S) OR ENTITY(IES)	_____

NON-COLLUSION AFFIDAVIT

**WEST ENOS RECHARGE FACILITIES
EMERGENCY PROJECT**

State of California)
County of Kern) ss.

Brian Sherrell, being first duly sworn, deposes and says that he or she is President of CNSB, Inc. DBA Allstate Boring the party making the foregoing bid that the bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the bid is genuine and not collusive or sham; that the bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or that anyone shall refrain from bidding; that the bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder, or to secure any advantage against the public body awarding the contract of anyone interested in the proposed contract; that all statements contained in the bid are true; and, further that the bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.

Witness my hand and official seal.


Signature Brian Sherrell 4/5/2023

(Corporate Seal)

Subscribed and sworn to before me on _____, 20__

(Notary Public)

See Attached Jurat

(Notary Seal)

Allstate Boring Schedule and Exclusions

Date: April 5th 2023

West Enos Recharge Facilities Emergency Project

JOB IS BID FOR 4 CROSSING @ 100 FEET EACH

Construction schedule

Description of task	Days
Mobilize	1
Delivery of 48" casing	3
Welding of 48"	9
Hammering of 48"	10
48" Casing clean out	3
Demob	2
Total	28 Days to Complete

Exclusions & Stipulations

Allstate is excluding: ground water, rock, wood, or unborable substructures.
Allstate will need water for lubricating casing. Water to be supplied on site.
All soil from inside the casing to be left in bore pit area.
Pits to be dug by others. All survey by others.
Since the job is under caltrans, it is bid with normal hours per week (40)
All traffic control related items by others.
Welding to be completed by AWS D1.1 welders.
Outside grout not included in this price and shouldn't be needed due to hammer bore process.
Due to hammer bore process, Allstate cannot guarantee line or grade

x 

Brian Sherrell - President

EXHIBIT D
SOILS ENGINEERING, INC. (SEI)
COST PROPOSAL



April 11, 2023

Proposal 23-242

Groundwater Bank Joint Powers Authority
C/O Rosedale-Rio Bravo Water Storage District
859 Allen Rd.
Bakersfield, CA 93314

Attn: Mr. Dan Bartel, General Manager

Subject: PROPOSAL: Inspection Services & Misc. Materials Testing
Project: West Enos Recharge Facility
Location: Enos Lane, North of Goose Lake Slough, Kern County, CA

Dear,

Thank you for contacting Soils Engineering, Inc. (SEI) to provide services for the above listed project. Our services will consist of engineering or inspection services and/or miscellaneous field and laboratory materials testing services based on a Time & Materials (T&M) basis per our 2023 Fee Schedule. Below is an estimate for the scope of work required per the provided drawings.

Soils and Grading

Special Inspector Mass Grading-Full time ([10] 8hr. days @ \$115/hr.).....	\$ 9,200.00
Special Inspector Mass Grading-Periodic ([80] 3hr. Visits @ \$115/hr.)	\$ 27,600.00
Soil Sieve Analysis (ASTM D422 (10 @ \$100/ea.).....	\$ 1,000.00
Maximum Densities (ASTM D1557 Method 'A' or 'B' (10 @ \$170/ea.).....	\$ 1,700.00
Maximum Densities (ASTM D1557 Method 'C' (2 @ \$220/ea.).....	\$ 440.00
..... Estimated Subtotal:	\$ 39,940.00

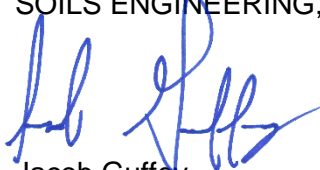
Project Management:

Project Manager (40 hrs. @ \$100/hr.)	\$ 4,000.00
Project Reporting (40 hrs. @ \$45/hr.)	\$ 1,800.00
Engineering Review (30 hrs. @ \$195/hr.)	\$ 5,850.00
..... Estimated Subtotal:	\$ 11,650.00

..... **Estimated Total: \$ 51,590.00**

The above listed hours and tests are only estimates for the requested project scope. Any additional services not listed above will also be billed on a T&M basis per our attached 2023 Fee Schedule. We appreciate the opportunity to provide our services. Should you have any questions, or would like additional information regarding our services, or to discuss our proposal in detail, please don't hesitate to contact our office.

Respectfully submitted,
SOILS ENGINEERING, INC.


Jacob Guffey
Field Manager


On Man Lau
Engineering Manager

SOILS ENGINEERING, INC. Terms for Engineering, Inspection Services and/ or Materials Testing

THIS AGREEMENT

SEI PROPOSAL NO. 23-242

This agreement is made by and between SOILS ENGINEERING, INC. (SEI), herein after referred to as Geotechnical Engineer, and **BGJPA c/o RRBWSD**, herein after referred to as Client. This agreement between the parties consists of these terms, the attached proposal identified as **23-242 (Inspection Services & Misc. Materials Testing for the West Enos Recharge Facility, located at Enos Lane, North of Goose Lake Slough, Kern County, CA)** dated April 11, 2023, and any exhibits or attachments noted in the proposal. Together these elements will constitute the entire agreement superseding any and all prior negotiations, correspondence, or agreements either written or oral. Any changes to this agreement must be mutually agreed to in writing.

STANDARD OF CARE: The client recognizes that subsurface conditions may vary from those observed at locations where borings, surveys, or explorations are made, and that site conditions may change with time. Data, interpretations, and recommendations by the Geotechnical Engineer will be based solely on information available to the geotechnical engineer. The geotechnical engineer is responsible for those data, interpretations, and recommendations, but will not be responsible for other parties' interpretations or use of the information developed.

Services performed by the geotechnical engineer under this agreement are expected by the client to be conducted in a manner consistent with the level of care and skill ordinarily exercised by members of the geotechnical engineering profession practicing contemporaneously under similar conditions in the locality of the project. No other warranty expressed or implied is made.

SITE ACCESS AND SITE CONDITIONS: Client will grant or obtain free access to the site for all equipment and personnel necessary for the geotechnical engineer to perform the work set forth in this agreement. The client will notify any and all possessors of the project site that client has granted geotechnical engineer free access to the site. The geotechnical engineer will take reasonable precautions to minimize damage to the site, but it is understood by client that, in the normal course of work, some damage may occur and the correction of such damage is not part of this agreement unless so specified in the proposal.

The client is responsible for the accuracy of locations for all subterranean structures and utilities. The Geotechnical Engineer will take reasonable precautions to avoid known subterranean structures, and the client waives any claim against Geotechnical Engineer, and agrees to defend, indemnify, and hold Geotechnical Engineer harmless from any claim or liability for injury or loss, including costs of defense, arising from damage done to subterranean structures and utilities not identified or accurately located. In addition, client agrees to compensate geotechnical engineer for any time spent or expenses incurred by Geotechnical Engineer in defense of any such claim with compensation to be based upon Geotechnical Engineer's prevailing fee schedule and expense reimbursement policy.

SAMPLE DISPOSAL: The geotechnical engineer will dispose of all remaining samples after the required testing is complete unless other arrangements are made. Further storage or transfer of samples can be made at client's expense upon client's prior written request.

CONSTRUCTION MONITORING: If the geotechnical engineer is retained by the client to provide a site representative for the purpose of monitoring specific portions of the construction work as set forth in the proposal then this phrase applies. For the specified assignment, the geotechnical engineer will report observations and professional opinions to the client. No action of the geotechnical engineer or geotechnical engineer's site representative can be construed as altering any agreement between the client and others. The geotechnical engineer will report any observed work to the client which, in the geotechnical engineer's professional opinion, does not conform with plans and specifications. The geotechnical engineer has no right to reject or stop work of any agent of the client. Such rights are reserved solely for the client. Furthermore, the geotechnical engineer's presence on site does not in any way guarantee the completion or quality of the performance or the work of any party retained by the client to provide construction related services.

The geotechnical engineer will not be responsible for and will not have control or charge of specific means, methods, techniques, sequences or procedures of construction selected by any agent or agreement of the client, or safety precautions and programs incident thereto.

BILLING AND PAYMENT: The services that are agreed upon are listed in SEI proposal 23-242 dated April 11, 2023. Client will pay the geotechnical engineer the lump sum amount indicated on SEI's Proposal. If an estimate for services was provided, then all services will be billed as Time & Materials (T&M) per our referenced fee schedule in SEI proposal 23-242. Invoices will be submitted to Client by Geotechnical Engineer and will be payable upon presentation. If client objects to all or any portion of any invoice, client will so notify geotechnical engineer in writing within fourteen (14) calendar days of the invoice date, identify the cause of disagreement, and pay when due that portion of the invoice, not in dispute. The parties will immediately make every effort to settle the disputed portion of the invoice. In the absence of written notification described above, the balance as stated on the invoice will be paid.

Invoices are delinquent if payment has not been received within thirty (30) days from the date of invoice. Client will pay an additional charge of one and one half (1.5) percent per month (or the maximum percentage allowed by law, whichever is lower) on any delinquent account, except any portion of the invoiced amount in dispute and resolved in favor of client. Payment thereafter will first be applied to accrued interest and then to the principal unpaid amount.

Client Initials _____

CONTRACT: Inspection Services & Misc. Materials Testing
Proposal: West Enos Recharge Facility
Location: Enos Lane, North of Goose Lake Slough, Kern County, CA

SEI Proposal No. 23-242
April 11, 2023
Page 2

All time spent and expenses incurred (including any attorney's fees) in connection with collection of any delinquent amount will be paid by the client to geotechnical engineer per geotechnical engineer's current fee schedules. In the event client fails to pay geotechnical engineer within sixty (60) days after invoices are rendered, client agrees that geotechnical engineer will have the right to consider the failure to pay the geotechnical engineer's invoice as a breach of this agreement.

TERMINATION: This agreement may be terminated by either party seven (7) days after written notice in the event of any breach of any provision of this agreement or in the event of substantial failure of performance by the other party, or if the client suspends the work for more than three (3) months. In the event of termination, geotechnical engineer will be paid for services performed prior to the date of termination plus reasonable termination expenses, including the cost of completing analyses, records and report necessary to document job status at the time of termination.

RISK ALLOCATION/RELEASE/INDEMNIFICATION: There are a variety of risks which potentially affect the Geotechnical Engineer by virtue of entering into an agreement to perform professional engineering services on the Client's behalf. One of these risks stems from the Geotechnical Engineer's potential for human error. In order for the Client to obtain the benefit of a fee which includes a lesser allowance for dealing with the Geotechnical Engineer's risks, the Client agrees to limit the Geotechnical Engineer's liability to the Client and to all other parties for claims arising out of the Geotechnical Engineer's performance of the services described in the agreement. The total aggregate liability of the Geotechnical Engineer will be limited to the insurance policy provided to the Client. The Client hereby releases Geotechnical Engineer for and from all claims, losses, liabilities, damages, actions, causes of action and remedies other than Client's remedy to claim and receive insurance proceeds as an additional insured under the insurance policy required by the provisions of this Agreement. Such release includes a waiver of all rights and benefits accorded by the provisions of California Civil Code Section 1542. The Client agrees to indemnify, defend and hold harmless Geotechnical Engineer, for all claims, losses, liabilities, damages, actions, causes of action and remedies arising from or in connection with Geotechnical Engineer's performance of its duties and obligations under this Agreement, including Geotechnical Engineer's acts or omissions, other than Client's remedy to claim and receive insurance proceeds as an additional insured under the insurance policy required by the provisions of this Agreement.

Limitations on liability, releases and indemnities in this agreement are business understandings between the parties and shall apply to all the different theories of recovery, including breach of contract or warranty, tort including negligence, strict or statutory liability, or any other cause of action, excepting only the sole negligence or willful misconduct of Geotechnical Engineer. The parties bound by the provisions of this Section include the Client and its officers, directors, owners, members, agents, employees, affiliates, subcontractors, successors and assigns. The parties benefited by the provisions of this Section include Geotechnical Engineer and its officers, directors, owners, members, agents, employees, affiliates, subcontractors, successors and assigns. The parties also agree that the Client shall not be entitled to seek or recover damages in excess of the above limitations indirectly through suits with other parties who may join the Geotechnical Engineer as a third party defendant.

Notwithstanding anything to the contrary contained in this Agreement, both Client and Geotechnical Engineer agree that neither party will be liable to the other, under any circumstances, for special, consequential, or punitive damages arising out of or related to this agreement or any acts or omissions of SEI.

DISCOVERY OF UNANTICIPATED HAZARDOUS MATERIALS: Client warrants that a reasonable effort to inform geotechnical engineer of known or suspected hazardous materials on or near the project site has been made. Hazardous materials may exist at a site where there is no reason to believe they could or should be present. Geotechnical engineer and client agree that the discovery of unanticipated hazardous materials constitutes a changed condition mandating a renegotiation of the scope of work or termination of services. Geotechnical engineer and client also agree that the discovery of unanticipated hazardous materials may make it necessary for geotechnical engineer to take immediate measures to protect health and safety. Client agrees to compensate geotechnical engineer for any equipment decontamination or other costs incident to the discovery of unanticipated hazardous waste.

The Geotechnical Engineer agrees to notify client when unanticipated hazardous materials or suspected hazardous materials are encountered. Client agrees to make any disclosures required by law to the appropriate governing agencies. Client also agrees to hold The Geotechnical engineer harmless for any and all consequences of disclosures made by The Geotechnical engineer which are required by governing law. In the event the project site is not owned by client, client recognizes that it is the client's responsibility to inform the property owner of the discovery of unanticipated hazardous materials or suspected hazardous materials.

Notwithstanding any other provision of the agreement, client waives any claim against geotechnical engineer, and to the maximum extent permitted by law, agrees to defend, indemnify, and hold geotechnical engineer harmless from any claim, liability, and/or defense costs for injury or loss arising from geotechnical engineer's discovery of unanticipated hazardous materials or suspected hazardous materials including any costs created by delay of the project and any cost associated with the possible reduction of the property's value. Client will be responsible of any samples secured by the geotechnical engineer which are found to be contaminated.

Client Initials _____

CONTRACT: Inspection Services & Misc. Materials Testing
Proposal: West Enos Recharge Facility
Location: Enos Lane, North of Goose Lake Slough, Kern County, CA

SEI Proposal No. 23-242
April 11, 2023
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DISPUTES RESOLUTION: All claims, disputes, and other matters in controversy between geotechnical engineer and client arising out of or in any way related to this agreement will be submitted to "alternative dispute resolution" (ADR) such as mediation and/or arbitration, before and as a condition precedent to other remedies provided by law. If and to the extent client and geotechnical engineer have agreed on methods for resolving such disputes, then such methods will be set forth in the "Alternative Dispute Resolution" which, if attached, is incorporated and made a part of this agreement.

If a dispute at law arises related to the services provided under this agreement and that dispute arises litigation instead of ADR as provided above, then:

- (1) the claim will be brought and tried in judicial jurisdiction of the court of the county where geotechnical engineer's principal place of business is located and client waives the right to remove the action to any other county or judicial jurisdiction, and
- (2) the prevailing party will be entitled to recovery of all reasonable costs incurred, including staff time, court costs, attorney's fees, and other related expenses.

GOVERNING LAW AND SURVIVAL: The law of the state of California will govern the validity of these terms, their interpretation and performance. If any of the provisions contained in this agreement are held illegal, invalid, or unenforceable, the enforceability of the remaining provisions will not be impaired. Limitations of liability and indemnities will survive termination of this agreement for cause.

NO THIRD-PARTY BENEFICIARIES: Nothing herein is intended to convey any rights to individuals or entities that are not parties to this Agreement.

The parties have read the foregoing, understand completely the terms, and willingly enter into this agreement which will become effective on the date signed by the client below.

Soils Engineering, Inc.

Groundwater Bank Joint Powers Authority
C/O Rosedale-Rio Bravo Water Storage District

Tony M. Frangie, Vice President

By: _____ Date: _____

Date:

(Please Print Name & Title Above)



2023

FEE SCHEDULE

**Geotechnical Engineering • Geological Engineering • Environmental Engineering
Surveying • Drilling Services • Materials Testing & Inspection**

Leadership Team

L. Thomas Bayne..... President
Tony Frangie Vice President
On Man Lau..... Engineering Manager
Robert Becker..... Environmental Manager
Darren McCaffrey..... Chief Surveyor
Jacob Guffey..... Field Manager
Andrew Lucas..... Laboratory Manager



INTRODUCTION

Since our inception in Bakersfield, California in 1966, Soils Engineering, Inc. has endeavored to provide our clients with the best in professional engineering consulting, materials testing, and drilling services for geotechnical and environmental exploration.

Listed herein are prices for engineering and testing services we most frequently perform.

Sampling and testing are conducted in accordance with the latest applicable specifications of the American Society for Testing and Materials, American Association of State Highway Officials, or other pertinent agencies.

Basis for charges for 2023

Test prices shown are for laboratory work only and include reporting of routine results not calling for recommendation or conclusion. The standard turn-around time for all laboratory testing is five (5) working days. For all expedited laboratory testing requests, an additional rush fee of fifty percent (50%) will be added. All soil samples will be discarded after test completion, unless prior arrangements have been made.

Services and inspection(s) within a radius of fifty (50) miles will incur a two-hour minimum with a one-hour block thereafter. Services and inspection(s) outside of fifty (50) miles will incur a four-hour minimum with a two-hour block thereafter. Service commenced between the hours of 7:00am and 4:00pm will be performed at the standard rates presented herein. Any services initiated outside of these hours will be billed at the appropriate rate. Services that are rendered more than eight-hours (and up to twelve) on any weekday and on Saturdays will be billed at time and a half. Services rendered more than twelve-hours on any weekday, on Holidays, on Sundays, or more than eight-hours on Saturdays will be charged at two-times the hourly rate.

Requests for copies of Geotechnical or Environmental Investigations previously completed and reported must be approved by the original client. Once approved by the client, the person requesting will be required to pay a one-time report charge of two-hundred dollars (\$200.00) prior to release of the report.

Miscellaneous expenses encountered in performance of services, such as printing and binding, permits, supplies not normally used to perform a specific job, etc. are billed at cost plus a twenty percent (20%) service charge. All heavy equipment rentals are based on a minimum charge of four hours, not including travel time.

Invoices are submitted at monthly intervals, or upon completion of the project, whichever is sooner. Engineering, project management and report preparation time will be added to invoices, as required. Payment for all work performed is due upon receipt of the invoice, unless otherwise agreed. A service charge of one and one-half percent (1.5%) per month will be added to overdue accounts thirty (30) days after the date of the original invoice.



PROFESSIONAL STAFF RATES

Senior Registered Engineer / Licensed Land Surveyor or Principal	\$195.00/hr.
Registered Engineer or Geologist, REA II	\$195.00/hr.
Project Professional	\$150.00/hr.
Staff Engineer	\$120.00/hr.
Staff Geologist.....	\$120.00/hr.
Expert Testimony and Special Consultation (4hr Minimum).....	\$500.00/hr.
Project Administrator/Coordinator	\$85.00/hr.
Administrative Assistant/Clerical.....	\$75.00/hr.
Report Preparation/Clerical	\$45.00/per report

TECHNICAL STAFF RATES

Field, Laboratory, & Project Manager.....	\$100.00/hr.
Engineering Technician (Field or Laboratory)	\$80.00/hr.
Deputy Inspector (Requires Certified Testers or Inspectors, i.e., ICC, AWS, Caltrans, etc.)	\$90.00/hr.

SURVEYING SERVICES

Survey Crew (1-Person)	\$160.00/hr.
Survey Crew (2-Person)	\$200.00/hr.
Dig Alert USA Ticket Staking / Layout	\$105.00/hr.
Surveyor Office Research & Calculations.....	\$125.00/hr.
Computer Aided Drafting (CAD).....	\$125.00/hr.
Trimble Handheld GPS Device, & Digital Optical Level	\$105.00/day
Trimble R8 GPS, & Trimble VX Total Station	\$260.00/day
Leica C10 3D Scanner.....	\$750.00/day

DRILLING SERVICES

Drilling Services (CME 75 HT) two-man crew	\$320.00/hr.
Drilling Services (CME 45 HT) two-man crew	\$270.00/hr.

In adverse drilling conditions, the client will be responsible for replacing lost or broken equipment.



PREVAILING WAGE RATES – SOUTHERN CALIFORNIA

This Fee Schedule was developed based on determination index SC-23-63-2-2020-2D, general prevailing wage journeyman. The billing rates are subject to revision at the time of issuance of a new Determination and subsequent Determinations or Predetermined Increases for the duration of the project. The rates in effect at the time of a Determination or Predetermination shall be increased proportionally with respect to any labor and benefits rate increases mandated by the California Department of Industrial Relations.

Group 1	\$115.00/hr.
<i>Field Soils & Materials Tester, Field Asphaltic Concrete, Field Earthwork, Roof Inspector, Water Proofer</i>	
Group 2	\$120.00/hr.
<i>AWS-CWI Inspector, Building/Construction Inspector, Licensed Grading Inspector, Reinforcing Steel, Reinforced Concrete, Pre/Post-Tension Concrete, Structural Steel & Welding Inspector, Glue-Lam & Truss Joints, Truss-Type Joint Construction, Shear Wall & Floor System, Concrete Batch Plant, Spray-Applied Fireproofing, Structural Masonry</i>	
Group 3	\$125.00/hr.
<i>Non-Destructive Testing (NDT)</i>	
Survey Crew (1-Person)	\$210.00/hr.
Survey Crew (2-Person)	\$300.00/hr.
Drilling Services (CME 75 HT) two-man crew	\$370.00/hr.
Drilling Services (CME 45 HT) two-man crew	\$345.00/hr.

PREVAILING WAGE RATES – NORTHERN CALIFORNIA

This Fee Schedule was developed based on determination index NC-63-3-9-2020-2, general prevailing wage journeyman. The billing rates are subject to revision at the time of issuance of a new Determination and subsequent Determinations or Predetermined Increases for the duration of the project. The rates in effect at the time of a Determination or Predetermination shall be increased proportionally with respect to any labor and benefits rate increases mandated by the California Department of Industrial Relations.

Group 1	\$125.00/hr.
<i>DSA Masonry, DSA Shotcrete, Lead Inspector, NICET Level IV & NDT Level II</i>	
Group 2	\$115.00/hr.
<i>AWS-CWI, ICC Certified Structural Inspector, NICET Level III, Shear Wall/Floor System Inspector, Building/Construction Inspector</i>	
Group 3	\$110.00/hr.
<i>Geotechnical Driller, Soils/Asphalt, Earthwork Grading, Excavation & Backfill, NICET Level II</i>	
Group 4	\$105.00/hr.
<i>ACI, Drillers Helper, ICC Fireproofing, NICET Level I, Proof-load Testing, Torque Testing, NACE, NDT Level I</i>	
Survey Crew (1-Person)	\$210.00/hr.
Survey Crew (2-Person)	\$300.00/hr.
Drilling Services (CME 75 HT) two-man crew	\$370.00/hr.
Drilling Services (CME 45 HT) two-man crew	\$345.00/hr.



TRAVEL AND EXPENSES

Travel Time Rates	Hourly Rates
Vehicle Mileage Rates.....	\$0.585/mile
Drill Rig Mileage Rates.....	\$2.50/mile
Per Diem Per Person.....	Cost plus 20%
Equipment Rental or Subcontracting Charges.....	Cost plus 20%

SOIL TESTING OR INSPECTIONS

RELATIVE COMPACTION TESTS

Nuclear Gauge Method - (ASTM D2922 Soil / ASTM D2950 Asphalt).....	\$10.00/test
Nuclear Gauge Method - (CTM-231 Soil / CTM-375 Asphalt).....	\$10.00/test
Sand Cone Method - (ASTM D1556)	\$10.00/test
Sand Calibration - (ASTM D1556)	\$100.00/test

DENSITY & MOISTURE DETERMINATIONS

Tube Density - (ASTM D2937).....	\$20.00/test
Native Soil Moisture - (ASTM D2216 / CTM-226).....	\$20.00/test
Maximum Density/Optimum Moisture (Proctor) (ASTM D1557 Method A or B)	\$170.00/test
Maximum Density/Optimum Moisture (Check Point) (ASTM D1557 Method A or B)	\$75.00/test
Maximum Density/Optimum Moisture (Proctor) (ASTM D1557 Method C)	\$220.00/test
Maximum Density/Optimum Moisture (Check Point) (ASTM D1557 Method C)	\$100.00/test
Maximum Density/Optimum Moisture w/ Rock Correction (ASTM D1557 & D4718)	\$350.00/test
California Impact (CTM-216)	\$250.00/test

SOIL TESTS

Sieve Analysis with # 200 Wash Test - (ASTM D422)	\$100.00/test
Hydrometer Method - (ASTM D422).....	\$200.00/test
# 200 Wash Test Only - (ASTM D422)	\$60.00/test
Plasticity Index - (ASTM D4318)	\$200.00/test
Expansion Index - (ASTM D4829)	\$150.00/test
Specific Gravity of Soils (Vacuum) (ASTM D854).....	\$200.00/test
Sand Equivalent (CTM-217)	\$100.00/test
Standard Resistance "R" Value (CTM-301).....	\$250.00/test
Aggregate Base Resistance "R" Value (CTM-301)	\$350.00/test
Dispersion Test (Pin Hole) (ASTM D4647).....	\$300.00/test
Permeability Coefficient (ASTM D2434)	\$150.00/test



Percolation Rate (Field Test).....	By Quote
SO ⁴ /pH/CL/EC (Sulfate/pH/Chloride)	\$150.00/set
Thermal Conductivity of Soils and Soft Rock by Thermal Needle Probe (ASTM D5334).....	\$250.00/test

SOIL STRENGTH, SHEAR AND CONSOLIDATION TEST

Consolidation (4-Points) (ASTM D2435)	\$150.00/test
Direct Shear (3-Point Curve) (ASTM D3080)	\$200.00/test
Unconfined Compression (ASTM D2166).....	\$200.00/test
Soil Strength Specimen Preparation & Testing (Cement / Lime) (Various Methods)	By Quote

ASPHALT & AGGREGATE TESTING OR INSPECTIONS

ASPHALTIC CONCRETE TESTING

HVEEM Method Max Density Compaction (CTM-304, Set of 3, Lab Mixed).....	\$300.00/set
HVEEM Method Max Density Compaction (CTM-304, Set of 3, Pre-Mixed)	\$200.00/set
Marshall Method Max Density Compaction (ASTM D1559, Set of 3, Lab Mixed).....	\$300.00/set
Marshall Method Max Density Compaction (ASTM D1559, Set of 3, Pre-Mixed)	\$200.00/set
Theoretical Maximum Specific Gravity/Density (RICE) (CTM-309)	\$175.00/test
Bitumen Content by Ignition Oven (CTM-382).....	\$200.00/test
Mix Design Ignition Oven Correction Factor Determination @ 538°C or 482°C(CTM-382)	\$720.00/ea.
Moisture Content of Bituminous Mixtures (CTM-370)	\$50.00/test
Reclaimed Asphalt Paving (RAP) Oil Content (CTM-LP9)	\$200.00/test
Reclaimed Asphalt Paving (RAP) Moisture Content (CTM-LP9)	\$30.00/test
Bulk Specific Gravity and Density of Asphalt Cores (CTM-308)	\$20.00/ea.
Test Preparation of Drilled Asphalt Cores (Saw Cuts for Layer Separation).....	\$10.00/ea.
Stabilometer “S” Value of Bituminous Mixtures (CTM-366 Set of 3 + Compaction)	\$200.00/set

AGGREGATE TESTING

Combined Aggregate Gradation (CTM-202) (ASTM C117 & C136)	\$200.00/test
Split Coarse Aggregate Gradation (CTM-202) (ASTM C117 & C136)	\$100.00/split
Sand Equivalent (CTM-217)	\$100.00/test
Percentage Crushed Particles (CTM-205)	\$150.00/test
Specific Gravity of Coarse Aggregate (CTM-206) (ASTM D127).....	\$100.00/test
Specific Gravity of Fine Aggregate (CTM-207) (ASTM D128).....	\$150.00/test
Durability Index (DI) (Coarse) (CTM-229)	\$220.00/test
Durability Index (DI) (Fine) (CTM-229)	\$220.00/test
Cleanness Value (CV) (CTM-227).....	\$210.00/test
Abrasion by use of LA Rattler Machine (CTM-211)	\$350.00/test
Organic Impurities (ASTM C40)	\$100.00/test



CONCRETE / MASONRY TESTING OR INSPECTIONS

CONCRETE TESTING

Compressive Strength of Concrete Cylinders (ASTM C39 / CTM-521) (Set of 4)	\$100.00/set
Compressive Strength of Concrete Cylinders (ASTM C39 / CTM-521) (Individual >4)	\$25.00/ea.
Flexural Test of Concrete Beams (ASTM C78)	\$150.00/ea.
Compressive Strength of Drilled Concrete Cores (ASTM C42)	\$50.00/ea.
Test Preparation of Drilled Cores or Cast Cylinders (Saw Cuts)	\$10.00/ea.
Compressive Strength of Lightweight Insulating Concrete Cylinders (ASTM C495)	\$50.00/ea.
Unit Weight of Structural Lightweight Concrete (ASTM C567)	\$100.00/test
Air Content of Freshly Mixed Concrete (ASTM C231)	\$100.00/test
Concrete Moisture/Alkali Test Kit (ASTM F1869)	\$75.00/test
Concrete Relative Humidity Probe (ASTM F2170)	\$75.00/test

MASONRY TESTING

Compressive Strength of Grout (ASTM C942) (Set of 3)	\$100.00/set
Compressive Strength of Mortar (ASTM C109) (Set of 3)	\$100.00/set
Compressive Strength of Drilled Masonry Cores (ASTM C42)	\$50.00/ea.
Masonry Core Shear Test	\$50.00/test
Compressive Strength of Grouted Masonry Prism (ASTM C1314)	\$450.00/set
Test Preparation of Grouted Masonry Prism (Saw Cutting)	By Quote
Compressive Strength of Concrete Masonry Unit (CMU) (3 Required) (ASTM C140)	\$300.00/set
Moisture, Absorption & Unit Weight of CMU (3 Required) (ASTM C140)	\$150.00/set
Shrinkage of CMU (3 Required) (ASTM C426)	\$450.00/set

STRUCTURAL TESTING OR INSPECTIONS

REINFORCING STEEL

Tensile Strength & Bend Test # 3 through # 8 (ASTM A615/A706)	\$100.00/test
Tensile Strength & Bend Test # 9 through # 11 (ASTM A615/A706)	\$200.00/test
Tensile Strength # 14 or #18 (ASTM A615/A706)	By Quote
Bend Test # 14 or #18 (ASTM A615/A706)	By Quote

WELDING INSPECTION

Visual Field or Shop Welding Inspection	\$85.00/hr.
Ultrasonic Field or Shop Testing	\$120.00/hr.



STRUCTURAL STEEL

Spray Applied Fireproofing Inspection	\$85.00/hr.
Spray Applied Fireproofing Density Tests	\$100.00/test
Spray Applied Fireproofing Adhesion Tests	\$50.00/test
Tensile Strength (ASTM A36)	By Quote
Bend Test (ASTM A36)	By Quote
Sample Preparation.....	By Quote

STRUCTURAL BUILDING (Shear Wall / Roofing)

Shear Panel Inspection.....	\$100.00/hr.
Roof Installation Inspection.....	By Quote
Glu-Lam Inspection.....	By Quote
Cut Analysis of Built-Up Roofs	\$200.00/ea.
Roof Tile Strength Test - Clay or Concrete (5 Required).....	\$100.00/test
Roof Tile Absorption Test - Clay or Concrete (5 Required)	\$60.00/test

STRUCTURAL BOLTING

Structural Bolts - Bolt/Nut/Washer (Proof Load, Tensile, Hardness)	\$600.00/set of 3
Structural Anchor Bolts - Bolt/Nut/Washer (Proof Load, Tensile, Hardness)	By Quote

BRINELL HARDNESS

Standard Indenter for Steel or Cast Iron (F Pins) (ASTM E10)	\$50.00/ea.
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EQUIPMENT & MATERIALS

MISCELLANEOUS EQUIPMENT

Service Truck / Flat Bed Truck (Mileage Charged Separately)	\$150.00/day
Concrete/Asphalt/Masonry Coring Rig	\$200.00/day
Hydraulic Pull Test Equipment (Up to 24 Tons).....	\$100.00/day
Hydraulic Pull Test Equipment (25 Tons to 50 Tons).....	\$200.00/day
“S” Beam Load Cell (0.5 Tons to 5 Tons).....	\$100.00/day
Auto-Read Floor Profiler (Floor Flatness Dipstick).....	\$400.00/day
Pachometer - Rebar Locator	\$100.00/day
Schmidt Hammer.....	\$100.00/day
Ultrasonic Testing Equipment	\$150.00/day
Skidmore-Wilhelm Device (Model MZ).....	\$250.00/day
Skidmore-Wilhelm Device (Model H)	\$300.00/day
Calibrated Torque Wrench (Large)	\$75.00/day
Calibrated Torque Wrench (Small)	\$25.00/day
Steam Cleaning Unit.....	\$200.00/day
Generator	\$100.00/day



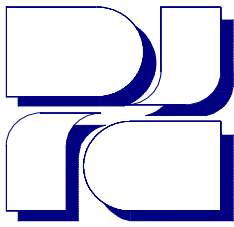
2023 FEE SCHEDULE

Roto Hammer / Demo Hammer.....	\$25.00/day
Submersible Pump.....	\$150.00/day
Water Level Meter.....	\$50.00/day
Water Quality Test Meter.....	\$50.00/day
Paint Thickness Meter.....	\$75.00/day

GEOPHYSICAL TESTING & EQUIPMENT

Ground Penetrating Radar (GPR) - Noggin 100.....	\$500.00/site/day
Utiliguard Locating System (Ditchwitch).....	\$200.00/site/day
Nimbus Seismograph.....	\$500.00/test
Resistivity Meter (A-Spacings).....	\$300.00/test
Ground Rod Resistivity Meter.....	\$100.00/day
Downhole Geophones.....	By Quote
Magnetometer.....	By Quote
Neutron Moisture Gauge.....	By Quote

EXHIBIT E
DEE JASPAR & ASSOCIATES, INC. (DJA)
COST PROPOSAL



DEE JASPAR & ASSOCIATES, INC.
CONSULTING CIVIL ENGINEERS
2730 UNICORN ROAD, BLDG A
BAKERSFIELD, CA 93308
PHONE (661) 393-4796
FAX (661) 393-4799

April 10, 2023

Dan Bartel
c/o Rosedale-Rio Bravo Water Storage District
849 Allen Road
Bakersfield, CA 93314

**RE: Kern Fan Groundwater Storage Project
West Enos Project Management and Assistance**

Mr. Bartel,

Attached is a cost proposal for providing project management and construction inspection services for the West Enos Earthwork Facility Project. The scope of work includes:

- General correspondence and communication with Contractors
- Submittal and RFI review and responses as appropriate
- Review proposed Change Orders and provide recommendations
- Review monthly progress payments and provide approval for payment
- Site Inspection, Quality Control, and Daily Reporting
- Permitting Compliance and Coordination
- Project Close-Out

The above noted items will be performed for multiple contracts that include the site earthwork, Enos Lane road crossing, and pipeline and conveyance structure installations. The budget for the project management and construction inspection work is approximately \$98,378.00.

The work will be billed on a time and material basis in accordance with our 2023 Rate Schedule.

Please let me know if you have any questions, concerns, or need anything else. Thank you for the opportunity to serve the District on this project.

Thanks,

Curtis Skaggs

Curtis M. Skaggs, PE

**Dee Jaspar Associates
Consulting Civil Engineers**

Groundwater Banking Joint Powers Authority West Enos Recharge Facility Project								
	Principal Engineer	Registered Engineer / Project Manager	Staff Engineer	Draftsperson	Survey Crew	Subconsultants	Miscellaneous	
Scope of Work	Estimated Time (hrs)	Estimated Time (hrs)	Estimated Time (hrs)	Estimated Time (hrs)	Estimated Time (hrs)	Estimated Cost (\$)	Estimated Cost (\$)	Total
1. Project Management and Construction Inspection	\$217/hr	\$169.50/hr	\$133/hr	\$120.50/hr	\$157.5/hr	\$150/hr	Fixed Fee	
Project Correspondence and Meetings		80	80					\$24,200
Submittal and RFI Review and Correspondence		12	16					\$4,162
Change Order Review and Correspondence		12	12					\$3,630
Progress Payment Review and Correspondence		12	12					\$3,630
Site Inspection, Quality Control, and Daily Reporting		80	300				1650	\$55,110
Project Close-Out and As-Builts		12	16					\$4,162
Permitting Compliance		8	16					\$3,484
Subtotal:	0	216	452	0	0	0	1650	\$98,378
Total Hours Estimated:	0	216	452	0	0	0	1650	
Total Engineering Estimate:	\$0	\$36,612	\$60,116	\$0	\$0	\$0	\$1,650	\$98,378