

# FOX CANYON GROUNDWATER MANAGEMENT AGENCY

800 S. Victoria Avenue | Ventura, CA 93009-1610 | Tel: (805) 654-2014 | FCGMA-GSP@ventura.org



## Project Evaluation Checklist

BACKGROUND INFORMATION	
<b>Project Name:</b>	Extraction Barrier and Brackish Water Treatment Project
<b>Purpose of Project:</b>	Water Supply
<b>Project Type:</b>	Project Update
<b>Sponsoring Agency:</b>	United Water Conservation District
<b>Groundwater Basin:</b>	Oxnard and Pleasant Valley
<b>Location:</b>	NBVC Point Mugu, Saline Intrusion Management Area, Oxnard Pumping Depression Management Area, Pleasant Valley Pumping Trough Management Area, and Oxnard
<b>Project Description:</b>	Construct extraction barrier wells (near Mugu Lagoon and possibly Port Hueneme), a reverse-osmosis treatment plant, and conveyance infrastructure to 1) develop a
<b>Implementation Trigger (if applicable):</b>	None
Evaluation Criteria	Response (Applicant to Complete)
<b>Water Supply</b>	
Annual increase in Sustainable Yield (AFY):	10,000 or more, depending on final design
Annual increase in supplemental water in lieu of pumping (AFY):	5,000 or more, depending on final design
Groundwater demand reduction (AFY):	0
Sustainability indicators addressed:	Seawater intrusion, chronic declines in groundwater levels/change in storage, groundwater quality, subsidence
Project documentation included?	Yes
<b>Timing/Feasibility</b>	
<b>Project Implementation Timeframe</b>	
Current Project status:	Initial Feasibility Study complete
Estimated time to Project completion (years):	3 years for Phase 1, 7 to 10 years for Phase 2
Timeline / feasibility documentation included?	Yes
<b>Environmental</b>	
CEQA/NEPA type:	Both CEQA/NEPA
Status of CEQA/NEPA review and permitting:	Underway and approvals expected in less than 3 years
Will the Project likely be permitted?	Yes
Sensitivity of location:	Well sites and pipeline routes are being selected to avoid areas of sensitive ecological and cultural resources to the extent
<b>Permitting</b>	
Permits required:	CA Division of Drinking Water, County transportation ROW, CalTrans encroachment, VCWPD stream crossings, NPDES
Status / time required:	years, Phase 2 expected to take 6 to 9 years
Likelihood of Project being permitted:	Medium

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## Project Evaluation Checklist

Project Complexity	
Does the Project use new technology:	No
Does the Project require land acquisition:	Yes
Status of the land acquisition process:	Process started, less than 25% complete
Is the Project dependent on other unbuilt or unfunded projects:	No
Is the Project dependent on funded projects currently under construction:	No
Description of Operation and Maintenance (if applicable):	Operation of brackish-water treatment plant (additional staff, electrical and chemical demand), conveyance via pipeline to
Project Lifespan	
What is the projected lifespan of the Project:	50+ years
Project Phasing	
<i>Please provide documentation of anticipated project phasing, including schedules and costs (capital and O&amp;M) for each phase, as an attachment to this form.</i>	
Does Project require multiple phases of construction?	Yes
No. of anticipated construction phases:	2
Description of phases:	Phase 1 is being designed to extract approximately 3,500 AFY and discharge the extracted brackish water to Mugu Lagoon or
Phasing timeline:	Phase 1 is expected to be completed and begin operation in 2026. Data obtained during the first year or more of operation
Total cost per phase:	\$330,000,000
Project phasing documentation attached?	(Please select one)
Cost and Funding	
Total capital cost:	\$361,000,000
Total annual Operations & Maintenance (O&M) Cost:	\$13,000,000
Is the project Proponent providing a funding match to construct the project?	Yes, 100% of construction costs will be paid for by United and by grants from agencies other than FCGMA.
Is there a funding source other than FCGMA for ongoing operation and maintenance costs?	Yes, O&M costs will be paid for by United.
Additional Benefits	
Does the project benefit disadvantaged or under-represented communities:	Yes
If yes, please describe the benefit(s):	Both phases of this project will halt or reverse seawater intrusion, reducing the threat of declining water quality to DACs
Project Proponent Contact Information	Response (Applicant to Complete)
Name:	Dr. Maryam Bral
Title:	Chief Engineer
Organization:	United Water Conservation District
Email:	MaryamB@UnitedWater.org
Phone:	805-525-4431
Date:	9/29/2023

<https://www.unitedwater.org/wp-content/uploads/2022/08/Extraction-Barrier-and-Brackish-Water-Treatment-Project-Feasibility-Study-GW-Modeling-UWCD-2021-December.pdf>

<https://www.unitedwater.org/wp-content/uploads/2022/08/Phase-1-Extraction-Barrier-and-Brackish-Water-Treatment-Project-Feasibility-Study-GW-Modeling.pdf>

[https://www.unitedwater.org/wp-content/uploads/2022/11/2022-02\\_OFR-OptimizationModelingResults-Protected.pdf](https://www.unitedwater.org/wp-content/uploads/2022/11/2022-02_OFR-OptimizationModelingResults-Protected.pdf)

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## Project Ranking Sheet

Extraction Barrier and Brackish Water

**Project Name** Treatment **Project Type** Project Update 805-525-4431

**Sponsoring Agency** United Water Conservation District **Basin** Oxnard and Pleasant Valley

### WATER SUPPLY

#### 1. Total Sustainable Yield / Supplemental Water / Reduced Demand

Total additional water supplied by the project for the benefit of the basin through increase to sustainable yield, supplemental water to be delivered in lieu of pumping, or reduction in groundwater demand.

10,000+ AFY increased sustainable yield

5,000+ AFY supplemental water in lieu of pumping

         AFY groundwater demand reduction

Points Awarded

5	10	15	20	25
<500 AFY	≤500 AFY <2,500 AFY	≤2,500 to AFY <5,000 AFY	≤5,000 AFY <7,500 AFY	≥7,500 AFY

25 pts

#### 2. Sustainable Yield / Supplemental Water / Reduced Demand Documentation

Project documentation includes verifiable quantified estimate of increased sustainable yield, supplemental water, and/or reduced groundwater demand.

Points Awarded

5	10	15	20	25
No supporting documentation	Conceptual estimate - limited supporting documentation	Initial feasibly study supporting estimate	Preliminary design and/or modeling supporting estimate	Detailed design and/or modeling supporting estimate

20 pts

### TIMING / FEASIBILITY

#### 3. Project Implementation Timeframe

What is the project implementation timeframe?

Points Awarded

1	5	10	15	20
Cannot be implemented prior to 2040	May be operational by 2040, but uncertain	Can be operational by 2040	Can be operational in 10 years or less	Can be operational in 5 years or less

15 pts



## 4. Development Phase

How far long is the definition, feasibility, design, and development of the project?

Points Awarded

1	2	3	4	5
Conceptual – no feasibility or design, project not well defined	Feasibility study in progress, project well defined	Initial feasibility study completed	30% engineering design	60% or greater engineering design

3

## 5. Status of Approvals, Permits, and Environmental Review

What is the status of NEPA/CEQA review and permitting?

Points Awarded **Phase 1 permits expected in <3 years; Phase 2 will require >5 years to permit**

1	2	3	4	5
Permit requirements not identified or unknown	Expected to take >5 years	Underway and approvals expected <3 years	Underway and approvals expected ≤1 year	Permitting and CEQA / environmental review complete

2-3

## 6. Project Complexity

How complex is the project? For example, does it require multiple phases of construction; does it use proven technology; does it require land acquisition; is dependent upon other projects; and/or does it require complex permitting?

Points Awarded

1	2	3	4	5
Very complex, relies on unproven technology		Moderately complex		Low complexity, uses readily available proven technology

3

## 7. Land Acquisition

Does the project require land acquisition or easements, and if so, what is the status?

Points Awarded

1	2	3	4	5
Required, not started and/or potential eminent domain	Process started, but less than 25% complete	>25% but <50% complete	More than 50% complete	Not required or all acquisitions and/or easements complete

3

## 8. Dependency on Other Projects

Is the project dependent upon other projects?

Points Awarded

1	2	3	4	5
Project is dependent on other unbuilt and unfunded projects		Project is dependent on funded projects under construction		Not dependent on other unbuilt projects

5

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## 9. Project Lifespan

What is the projected lifespan of the project?

Points Awarded

1	2	3	4	5
≤5 years		10 years		≥20 years

5

## COST & FUNDING

### 10. Water Cost

Projected total cost of water produced, saved, or increase in sustainable yield.

\$361 m Total capital cost

\$ 13 m Total annual O&M cost

\$ 870 Annual O&M cost per AF

\$ 2,000 Annual cost (all costs including capital and O&M) per AF

Points Awarded

1	5	10	15	20
≥\$3,000 / AF	≤\$2,000 / AF <\$3,000 / AF	≤\$1,000 / AF <\$2,000 / AF	>\$500 / AF <\$1,000 / AF	≤\$500 / AF

5

### 11. Funding Match for Construction

Is the project proponent providing a funding match to construct the project?

Points Awarded

1	4	8	12	15
No match	<10% match	10 to 25% match	25 to 50% match	>50% match

15

### 12. O&M Funding

Is there a funding source other than FCGMA for ongoing operation & maintenance costs?

Points Awarded

1	4	8	12	15
No funding identified	25%	50% of funding committed	75%	100% of funding committed

15

## ADDITIONAL BENEFITS

### 13. DAC

Project benefits disadvantaged or under-represented communities.

Points Awarded

1				5
No				Yes

5

Ranked by \_\_\_\_\_

Date \_\_\_\_\_