

# NORTH SAN JOAQUIN WATER CONSERVATION DISTRICT

## STRATEGIC PLAN

Adopted by the Board of Directors  
on December 21, 2021

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# BACKGROUND

The North San Joaquin Water Conservation District ("District") covers 150,000 acres in northeastern San Joaquin County east of the City of Lodi. The District includes about 70,000 acres of irrigated farmland, including winegrapes, cherries, almonds, walnuts, and various other crops. The Mokelumne River runs through the center of the District. The District has a relatively junior water right to divert up to 20,000 acre-feet of water per year from the river. The District has never fully utilized this right due to a lack of efficient and functional water delivery infrastructure.

Most District growers rely exclusively on groundwater, pumping an average of 140,000 acre-feet from the critically overdrafted Eastern San Joaquin Groundwater Subbasin every year. Groundwater levels in the District have been declining an average of one foot per year, increasing costs for landowners. This trend will continue unless landowners reduce groundwater pumping by using alternate surface water supplies, or fallow land. In addition, the 2014 Sustainable Groundwater Management Act requires the District, and the 15 other agencies in the Eastern San Joaquin Groundwater Subbasin, to manage local groundwater sustainably or face state intervention. Fortunately, groundwater overdraft in the District can be significantly reduced, if not eliminated, if landowners use the surface water available from the District's Mokelumne River surface water right.



# PURPOSE

The District's ability to sustainably manage water to benefit the local environment, community and economy depends on the support and engagement of stakeholders to help avoid the following three threats:

- State intervention in local groundwater management and associated state fees on individual well owners if the District fails to sustainably manage groundwater.
- Groundwater pumping restrictions if the District fails to complete the projects identified in this Plan.
- Loss of the District's surface water right on the Mokelumne River if the District fails to implement projects to fully utilize the right.

The District developed the Strategic Plan to address these threats, identify and effectively implement priority initiatives, and provide the foundation to seek additional funding to augment existing resources. The District consulted with landowners and other stakeholders, including six small group meetings and two public workshops attended by over 100 people, to develop the Plan. The Plan contains seven goals to help achieve the District's mission, supported by measurable objectives to define clear projects necessary to achieve the goals. The District will use the priorities to guide development of annual budgets and efforts to secure additional funding. The District also developed a separate financing strategy to guide efforts to fund projects. The District expects to update the Strategic Plan every five years to address changing priorities and conditions.





# FUNDING

Success of the Strategic Plan depends on landowner willingness to help pay for implementation. The District is the only water district in the Eastern San Joaquin Groundwater Subbasin without a land or water-based revenue source to fund operations, planning, and projects. The District's only consistent revenue source is about \$300,000 per year in property taxes. The Plan therefore includes numerous projects for which no funding is available.

The District will need to obtain a landowner-based revenue source to implement the Strategic Plan, such as groundwater charges and/or acreage assessments. Landowner engagement in the Strategic Plan process helped guide the District's decision making. If the District is not successful in obtaining a landowner-based revenue source, the District cannot fulfill the Plan's objectives, and the threat of state intervention, fees, groundwater pumping restrictions, and loss of surface water rights will become reality.

If the District falls out of compliance with the Sustainable Groundwater Management Act, the minimum state fees for agricultural and industrial groundwater users are \$300 per well, plus \$10 per metered acre-foot and \$25 per unmetered acre-foot of groundwater pumped. Landowners would pay these fees directly to the state, so the funding would not help implement District projects. If the state has to implement a management plan, the fees increase to \$40-\$55 per acre-foot. More information is available from the State Water Resources Control Board page describing Groundwater Sustainability Plan compliance. Alternatively, if landowners agree to fund this Plan, the District believes it can build and operate projects to achieve groundwater sustainability for a fraction of what the state would charge in fees.

# MISSION

TO SUSTAINABLY MANAGE WATER IN THE NORTH SAN JOAQUIN WATER CONSERVATION DISTRICT TO BENEFIT THE LOCAL ENVIRONMENT, COMMUNITY AND ECONOMY

## GOALS

### GOAL 1

ENSURE FISCAL  
SUSTAINABILITY

### GOAL 4

PROTECT THE  
MOKELUMNE  
RIVER WATER  
RIGHT

### GOAL 2

IMPROVE  
COMMUNICATION  
AND TRANSPARENCY

### GOAL 5

BUILD FACILITIES  
TO DELIVER  
SURFACE WATER

### GOAL 3

SUSTAINABLY  
MANAGE  
GROUNDWATER  
TO MAINTAIN  
LOCAL CONTROL

### GOAL 6

DEVELOP  
SUSTAINABLE  
GOVERNANCE  
AND STAFFING  
STRUCTURE

### GOAL 7

INCREASE THE  
TOTAL WATER  
SUPPLY  
AVAILABLE

# GOAL 1

## ENSURE FISCAL SUSTAINABILITY

The District must maintain a sustainable, stable source of funding to implement projects necessary to improve the surface water irrigation system and increase groundwater recharge, as well as operate the system. The District cannot achieve the other goals in this plan without first achieving fiscal sustainability. The District plans to ensure fiscal sustainability by completing the following three objectives:

### OBJECTIVE 1

**ESTABLISH A SUFFICIENT DISTRICT-WIDE REVENUE SOURCE TO FUND THE NEXT 10 YEARS OF THE DISTRICT'S PLANNING, CAPITAL AND OPERATIONS EXPENSES FOR ALL ACTIVITIES WHICH BENEFIT THE DISTRICT AS A WHOLE**

#### Action 1

Complete Strategic Plan process and associated 10-year financing strategy

#### Action 2

Develop plan to impose groundwater charges or land-based assessments to fund 10-year financing strategy

#### Action 3

Legal process to impose groundwater charge or land-based assessments

#### Action 4

Establish and update assessment roll and collect funds

# GOAL 1 (CONTINUED)

## OBJECTIVE 2

**ESTABLISH AN ADDITIONAL REVENUE SOURCE FROM LANDOWNERS WHO WANT TO USE SURFACE WATER FROM THE NORTH SYSTEM OR SOUTH SYSTEM TO COVER A FAIR SHARE OF THE COST OF CAPITAL FACILITIES THAT DELIVER SURFACE WATER**

### Action 1

Identify landowners willing to form a North System Improvement District

### Action 2

Define scope and budget for North System Improvement District

### Action 3

Establish and fund North System Improvement District

### Action 4

Add land to South System Improvement District No. 3

## OBJECTIVE 3

**ACTIVELY SEEK GRANT FUNDING**

### Action 1

Develop three-year grant strategy for District projects

### Action 2

Submit grant applications annually

### Action 3

Update grant strategy as needed

# GOAL 2

## IMPROVE COMMUNICATION AND TRANSPARENCY

The District believes communication with landowners, local agencies, and other stakeholders is critical to achieving the District's mission and goals as outlined in the Strategic Plan. The District aims to increase the frequency and professionalism of communication with the public, as well as improve planning associated with implementation of priority projects. The District's first-ever Strategic Plan is the first step in this effort to improve communication and transparency, but the District is also committed to providing regular updates on progress towards meeting the District's goals and objectives.

### OBJECTIVE 1

#### DEVELOP AND MAINTAIN A STRATEGIC PLAN

##### Action 1

Develop Strategic Plan

##### Action 2

Hold Strategic Plan landowner workshop

##### Action 3

Adopt Strategic Plan

##### Action 4

Update Strategic Plan



# GOAL 2 (CONTINUED)

## OBJECTIVE 2

IMPROVE COMMUNICATION AND EDUCATION FOR  
LANDOWNERS AND RESIDENTS IN THE DISTRICT

### Action 1

Maintain website

### Action 2

Complete regular newsletters

### Action 3

Partner with other organizations for water issues workshops

# GOAL 3

## SUSTAINABLY MANAGE GROUNDWATER TO MAINTAIN LOCAL CONTROL

The District is a member of the Eastern San Joaquin Groundwater Authority, formed to help implement the 2014 Sustainable Groundwater Management Act requirement to achieve groundwater sustainability by 2040. In 2020, the Authority submitted the Eastern San Joaquin Groundwater Subbasin Groundwater Management Plan for California Department of Water Resources review. The District's irrigation system improvements and recharge projects will help implement the Plan. The District also will participate in Plan updates, monitor groundwater levels, and coordinate with neighboring subbasins.

### OBJECTIVE 1

**FUND DISTRICT'S PROPORTIONAL SHARE OF  
SUBBASIN WIDE MANAGEMENT ACTIVITIES  
THROUGH THE EASTERN SAN JOAQUIN  
GROUNDWATER AUTHORITY**

#### Action 1

Fund share of Eastern San Joaquin Groundwater Authority Sustainable Groundwater Management Act activities

#### Action 2

Improve measurement or estimates of District groundwater pumping

### OBJECTIVE 2

**ACTIVELY PARTICIPATE IN THE COORDINATION OF  
SUBBASIN GROUNDWATER MANAGEMENT ACTIVITIES  
AND COORDINATE WITH ADJACENT SUBBASINS ON  
GROUNDWATER AND MANAGEMENT AS REQUIRED BY  
LAW**

#### Action 1

To be determined as adjacent subbasins complete their plans

# GOAL 4

## PROTECT THE MOKELUMNE RIVER WATER RIGHT

Like all water rights in California, the District's Mokelumne River water right faces increasing pressure from other water users and interest groups. In addition to building and operating projects to use the water right, the District must actively participate in regulatory and legal proceedings to protect the right.

### OBJECTIVE 1

#### FULLY OPERATE THE DISTRICT'S EXISTING DIRECT RECHARGE PROJECTS

##### Action 1

Fund recharge activities for Cal Fed system

##### Action 2

Fund recharge activities for Tracy Lakes

##### Action 3

Fund recharge activities for North System projects

# GOAL 4 (CONTINUED)

## OBJECTIVE 2

### FULLY OPERATE THE DISTRICT'S SURFACE WATER IRRIGATION DELIVERY SYSTEMS

#### Action 1

Expand South System Improvement District No. 3 to include 4,000 acres using surface water for irrigation when available

#### Action 2

Conduct public outreach meetings and complete public hearings to create a North System Improvement District

#### Action 3

Add 1,000 acres to the North System Improvement District to use surface water for irrigation when available

## OBJECTIVE 3

### PARTICIPATE IN REGULATORY AND LEGAL PROCEEDINGS TO PROTECT THE WATER RIGHT

#### Action 1

Participate in State Water Resource Control Board proceedings which impact the District water right

#### Action 2

Participate in any litigation which impacts the District water right

#### Action 3

Monitor state legal and regulatory proceedings which may impact the water right

# GOAL 5

## BUILD FACILITIES TO USE SURFACE WATER

The District must plan, design and improve its surface water delivery facilities to: (1) allow the District to conduct groundwater recharge for the benefit of the District as a whole; and (2) deliver surface water to farmers to reduce groundwater pumping. Fulfilling this goal is critical to using and protecting the District's full Mokelumne River water right and achieving groundwater sustainability. The District's Tracy Lake Recharge Project is fully operable but has limited capacity (1,500-2,000 AFA), the Cal—Fed Recharge Project is fully operable but has limited capacity (500-1,000 AFA), the North System is inoperable, and the South System is only partially operable.

## OBJECTIVE 1

### ACHIEVE FULL OPERABILITY OF THE SOUTH SYSTEM TO MAXIMIZE DELIVERY OF SURFACE WATER FOR IRRIGATION AND GROUNDWATER RECHARGE

#### Action 1

Complete new South Pump Station with one pump, VFD, and meter

#### Action 2

Automate South Pump Station and include SCADA system

#### Action 3

Add second pump to South Pump Station

#### Action 4

Rebuild Brandt/Tretheway valve box and add meters



# GOAL 5 (CONTINUED)

## OBJECTIVE 1 (CONTINUED)

### Action 5

Rebuild Handel valve box and add meters

### Action 6

Rebuild Manor Lane valve box and add meters

### Action 7

Rebuild Pixley discharge and add meters

### Action 8

Add pipeline and second pump off Pixley Pump Station

### Action 9

New pipeline from Handel to Pixley discharge

### Action 10

Repair/replace or slip-line portions of concrete pipeline as needed to improve efficiency of operation

### Action 11

Evaluate and add facilities to create sufficient pressure for landowner turnouts off pipeline

### Action 12

Employ SCADA system for landowner scheduling and diversions

# GOAL 5 (CONTINUED)

## OBJECTIVE 1

(CONTINUED)

### Action 13

Implement landowner and District training for SCADA system

### Action 14

Fully operate South System

## OBJECTIVE 2

**ACHIEVE FULL OPERABILITY OF THE NORTH SYSTEM  
TO MAXIMIZE DELIVERY OF SURFACE WATER FOR  
IRRIGATION AND GROUNDWATER RECHARGE**

### Action 1

Meet with North System landowners to develop needs assessment

### Action 2

Complete engineering evaluation of North System pump station and pipeline

### Action 3

Complete project design and cost estimate for North System improvements

### Action 4

Develop financing plan for North System improvements

### Action 5

Solicit competitive bids for North System improvements

# GOAL 5 (CONTINUED)

## OBJECTIVE 2

(CONTINUED)

### Action 6

Complete North System improvements

### Action 7

Fully operate North System

## OBJECTIVE 3

**BUILD NEW DIRECT RECHARGE FACILITIES TO  
DIRECTLY RECHARGE SURFACE WATER**

### Action 1

Complete engineering evaluations of direct recharge project options  
(Cal Fed expansion, Lakso, Tecklenberg)

### Action 2

Complete project design and cost estimates for direct recharge project  
options

### Action 3

Complete financing plan for direct recharge projects (capital and O&M  
costs)

### Action 4

Acquire land for direct recharge projects

### Action 5

Solicit competitive bids for direct recharge project #1

# GOAL 5 (CONTINUED)

## OBJECTIVE 3 (CONTINUED)

### Action 6

Complete direct recharge project #1

### Action 7

Operate direct recharge project #1

### Action 8

Solicit competitive bids for direct recharge project #2

### Action 9

Complete direct recharge project #2

### Action 10

Operate direct recharge project #2

# GOAL 6

## DEVELOP SUSTAINABLE GOVERNANCE AND STAFFING STRUCTURE

The District is managed by a volunteer Board of Directors and independent contractors who assist with day-to-day operations, including the General Counsel, District Engineer, and Deputy Secretary. The District does not have any permanent, full-time staff. To operate the District facilities properly and efficiently, and to implement the objectives in this Strategic Plan, the District needs to develop a sustainable governance and staffing structure. This structure is dependent on also achieving the sustainable financial structure described in Goal 1. The Board will include staffing costs in the financing strategy and decide how much of the District's property tax revenue will be allocated to staffing.

### OBJECTIVE 1

#### EVALUATE STAFFING NEEDS

##### Action 1

Contract with a human resources professional to work with the Board of Directors and General Counsel to conduct an assessment of District operations to determine appropriate staffing and organizational policies

##### Action 2

Develop job description, salary range, benefit and recruitment strategy for General Manager and/or Watermaster for operations



# GOAL 6 (CONTINUED)

## OBJECTIVE 2

### FILL STAFFING NEEDS

#### Action 1

Release request for qualifications for outside engineer

#### Action 2

Work with a professional recruiter to hire a General Manager

#### Action 3

Release request for qualifications, interview, and hire South System Watermaster

#### Action 4

Work with General Manager to determine additional staffing needs (e.g. outside legal counsel, support staff)

## OBJECTIVE 3

### FINALIZE DISTRICT POLICIES AND PROCEDURES

#### Action 1

Develop bylaws

#### Action 2

Develop employee handbook

#### Action 3

Update Board Policy Manual

# GOAL 7

## INCREASE THE TOTAL WATER SUPPLY AVAILABLE

The District is working with other local agencies to increase the total water supply available in Eastern San Joaquin County. The DREAM Pilot Project, for example, is a proposed pilot scale groundwater storage project that will allow the East Bay Municipal Utility District to temporarily store Mokelumne River water in an underground basin and recover up to half of the banked water in the future. This project would provide supplemental dry year supply for East Bay Municipal Utility District and additional water for the local groundwater basin.

### OBJECTIVE 1

**COMPLETE THE PILOT DREAM PROJECT (RECHARGE, BANKING AND RECOVERY) FOR 1,000 AFA**

#### Action 1

Complete delivery of 1,000 AFA to District lands

#### Action 2

Complete DREAM Pilot Project (easements, permits, pipeline, etc.)

#### Action 3

Work with San Joaquin County and East Bay Municipal Utility District to return water under project

# GOAL 7 (CONTINUED)

## OBJECTIVE 2

**DESIGN AND PERMIT THE FULL EAST BAY MUNICIPAL UTILITY DISTRICT BANKING PROJECT TO OBTAIN ADDITIONAL WATER SUPPLIES OF UP TO 8,000 AFA**

### Action 1

Work with East Bay Municipal Utility District on project description

### Action 2

Complete contract with East Bay Municipal Utility District to address financing project

### Action 3

Complete environmental review and permitting process for project

### Action 4

Build facilities for project

### Action 5

Operate project and use additional water (up to 8,000 AFA)

