

July 30, 2026

Stockton East Water Dist.

P.O. Box 5157
Stockton, CA 95205

Description : PC-1
Project : Surface Water Monitoring

Lab ID : STK2650623-001

Customer : 3008528

Sampled On : July 16, 2026

Sampled By : NP

Received On : July 16, 2026

Matrix : Surface Water

General Irrigation Suitability Analysis

Test Description	Result				Graphical Results Presentation				
Cations	mg/L	Meq/L	% Meq	Lbs/AF	Good	Possible Problem	Moderate Problem	Increasing Problem	Severe Problem
Calcium	17	0.85	49	46	**				
Magnesium	7	0.58	33	19	**				
Potassium	2	0.051	3	5	**				
Sodium	6	0.26	15	16					
Anions									
Carbonate	<10	0	0	0					
Bicarbonate	90	1.5	71	240	**				
Sulfate	22.2	0.46	22	60	**				
Chloride	4	0.11	5	11					
Nitrate	1.4	0.023	1	4					
Fluoride	0.1	0.0053	0	0.3					
Minor Elements									
Boron	<0.1			0					
Copper	<0.01			0					
Iron	0.040			0.11					
Manganese	<0.01			0					
Zinc	<0.02			0					
TDS by Summation	150			410					
Other									
pH	7.0	units							
E. C.	0.167	dS/m							
SAR	0.300								
Crop Suitability									
No Amendments	Good								
With Amendments	Good								
Amendments									
Gypsum Requirement	0.0400	Tons/AF			Or 12 oz/1000Gal of urea Sulfuric Acid(15/49)				
Sulfuric Acid (98%)	4.90	oz/1000Gal							
Leaching Requirement	1.2	%							

Good  Problem

Note: Color coded bar graphs have been used to provide you with 'AT-A-GLANCE' interpretations.

** Used in various calculations; mg/L = Milligrams Per Liter (ppm) meq/L = Milliequivalents Per Liter.



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Stockton East Water Dist.

Description : PC-1

Project : Surface Water Monitoring

Lab ID : STK2650623-001

Customer : 3008528

Sampled By : NP

Matrix : Surface Water

Micro Irrigation System Plugging Hazard

Test Description	Result		Graphical Results Presentation		
Chemical			Slight	Moderate	Severe
Manganese	<0.01	mg/L			
Iron	0.04	mg/L			
TDS by Summation	150	mg/L			
No Amendments					
pH	7.0	units			
Alkalinity (As CaCO3)	70	mg/L			
Total Hardness	71.2	mg/L			
With Amendments					
Alkalinity (As CaCO3)	14	mg/L			
Total Hardness	14	mg/L			
pH	5.4 - 6.7	units			

Good Problem

Note: Color coded bar graphs have been used to provide you with 'AT-A-GLANCE' interpretations.

Water Amendments Application Notes:

The Amendments recommended on the previous pages include:

Gypsum:

This should be applied at least once a year to the irrigated soil surface area. Gypsum can also be applied in smaller quantities in the irrigation water. Apply the smaller (bracketed) amount of gypsum when also applying the recommended amount of Sulfuric Acid and the larger amount when applying only Gypsum.

Sulfuric Acid:

These products should be applied as needed to prevent emitter plugging in micro irrigation systems and/or as a soil amendment to adjust soil pH to improve nutrient availability and to facilitate leaching of salts. Please exercise caution when using this material as excesses may be harmful to the system and/or the plants being irrigated. The reported Acid requirement is intended to remove approximately 80 % of the alkalinity. The final pH should range from 5.4 to 6.7. We recommend a field pH determination to confirm that the pH you designate is being achieved. This application is based upon the use of a 98% Sulfuric Acid product. The application of Urea Sulfuric Acid is based upon the use of a product that contains 15% Urea (1.89 lbs Nitrogen), 49% Sulfuric Acid and has a specific gravity of 1.52 at 68 °F.

Please contact us if you have any questions.

BRW:DMB

Reviewed and
Approved By

Ben Waddell



Digitally signed by Ben Waddell
Title: Director of Ag. Services
Date: 2026-07-30

July 30, 2026

Stockton East Water Dist.

P.O. Box 5157
Stockton, CA 95205

Description : CR-1
Project : Surface Water Monitoring

Lab ID : STK2650623-002

Customer : 3008528

Sampled On : July 16, 2026

Sampled By : NP

Received On : July 16, 2026

Matrix : Surface Water

General Irrigation Suitability Analysis

Test Description	Result				Graphical Results Presentation				
Cations	mg/L	Meq/L	% Meq	Lbs/AF	Good	Possible Problem	Moderate Problem	Increasing Problem	Severe Problem
Calcium	17	0.85	50	46	**				
Magnesium	7	0.58	34	19	**				
Potassium	2	0.051	3	5	**				
Sodium	5	0.22	13	14					
Anions									
Carbonate	<10	0	0	0					
Bicarbonate	90	1.5	80	240	**				
Sulfate	11.5	0.24	13	31	**				
Chloride	4	0.11	6	11					
Nitrate	1.0	0.016	1	3					
Fluoride	<0.1	0	0	0					
Minor Elements									
Boron	<0.1			0					
Copper	<0.01			0					
Iron	<0.03			0					
Manganese	<0.01			0					
Zinc	<0.02			0					
TDS by Summation	138			380					
Other									
pH	7.9	units							
E. C.	0.181	dS/m							
SAR	0.300								
Crop Suitability									
No Amendments	Fair								
With Amendments	Good								
Amendments									
Gypsum Requirement	0.0400	Tons/AF							
Sulfuric Acid (98%)	4.90	oz/1000Gal							
Leaching Requirement	1.3	%							

Good  Problem

Note: Color coded bar graphs have been used to provide you with 'AT-A-GLANCE' interpretations.

** Used in various calculations; mg/L = Milligrams Per Liter (ppm) meq/L = Milliequivalents Per Liter.



July 30, 2026

Stockton East Water Dist.

Description : CR-1
Project : Surface Water Monitoring

Lab ID : STK2650623-002
Customer : 3008528

Sampled By : NP
Matrix : Surface Water

Micro Irrigation System Plugging Hazard

Test Description	Result		Graphical Results Presentation		
Chemical			Slight	Moderate	Severe
Manganese	<0.01	mg/L			
Iron	<0.03	mg/L			
TDS by Summation	138	mg/L			
No Amendments					
pH	7.9	units			
Alkalinity (As CaCO3)	70	mg/L			
Total Hardness	71.2	mg/L			
With Amendments					
Alkalinity (As CaCO3)	14	mg/L			
Total Hardness	14	mg/L			
pH	5.4 - 6.7	units			

Good  Problem

Note: Color coded bar graphs have been used to provide you with 'AT-A-GLANCE' interpretations.

Water Amendments Application Notes:

The Amendments recommended on the previous pages include:

Gypsum:

This should be applied at least once a year to the irrigated soil surface area. Gypsum can also be applied in smaller quantities in the irrigation water. Apply the smaller (bracketed) amount of gypsum when also applying the recommended amount of Sulfuric Acid and the larger amount when applying only Gypsum.

Sulfuric Acid:

These products should be applied as needed to prevent emitter plugging in micro irrigation systems and/or as a soil amendment to adjust soil pH to improve nutrient availability and to facilitate leaching of salts. Please exercise caution when using this material as excesses may be harmful to the system and/or the plants being irrigated. The reported Acid requirement is intended to remove approximately 80 % of the alkalinity. The final pH should range from 5.4 to 6.7. We recommend a field pH determination to confirm that the pH you designate is being achieved. This application is based upon the use of a 98% Sulfuric Acid product. The application of Urea Sulfuric Acid is based upon the use of a product that contains 15% Urea (1.89 lbs Nitrogen), 49% Sulfuric Acid and has a specific gravity of 1.52 at 68 °F.

Please contact us if you have any questions.

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Title: Director of Ag. Services
Date: 2026-07-30

July 30, 2026

Stockton East Water Dist.

P.O. Box 5157
Stockton, CA 95205

Description : CR-5
Project : Surface Water Monitoring

Lab ID : STK2650623-003

Customer : 3008528

Sampled On : July 16, 2026

Sampled By : NP

Received On : July 16, 2026

Matrix : Surface Water

General Irrigation Suitability Analysis

Test Description	Result				Graphical Results Presentation				
Cations	mg/L	Meq/L	% Meq	Lbs/AF	Good	Possible Problem	Moderate Problem	Increasing Problem	Severe Problem
Calcium	17	0.85	50	46	**				
Magnesium	7	0.58	34	19	**				
Potassium	2	0.051	3	5	**				
Sodium	5	0.22	13	14					
Anions									
Carbonate	<10	0	0	0					
Bicarbonate	90	1.5	81	240	**				
Sulfate	11.6	0.24	13	32	**				
Chloride	4	0.11	6	11					
Nitrate	<0.4	0	0	0					
Fluoride	<0.1	0	0	0					
Minor Elements									
Boron	<0.1			0					
Copper	<0.01			0					
Iron	<0.03			0					
Manganese	<0.01			0					
Zinc	<0.02			0					
TDS by Summation	137			370					
Other									
pH	8.0	units							
E. C.	0.177	dS/m							
SAR	0.300								
Crop Suitability									
No Amendments	Fairly Poor								
With Amendments	Good								
Amendments									
Gypsum Requirement	0.0400	Tons/AF							
Sulfuric Acid (98%)	4.90	oz/1000Gal							
Leaching Requirement	1.3	%							

Good  Problem

Note: Color coded bar graphs have been used to provide you with 'AT-A-GLANCE' interpretations.

** Used in various calculations; mg/L = Milligrams Per Liter (ppm) meq/L = Milliequivalents Per Liter.



July 30, 2026

Stockton East Water Dist.

Description : CR-5
Project : Surface Water Monitoring

Lab ID : STK2650623-003
Customer : 3008528

Sampled By : NP
Matrix : Surface Water

Micro Irrigation System Plugging Hazard

Test Description	Result		Graphical Results Presentation		
Chemical			Slight	Moderate	Severe
Manganese	<0.01	mg/L			
Iron	<0.03	mg/L			
TDS by Summation	137	mg/L			
No Amendments					
pH	8.0	units			
Alkalinity (As CaCO3)	70	mg/L			
Total Hardness	71.2	mg/L			
With Amendments					
Alkalinity (As CaCO3)	14	mg/L			
Total Hardness	14	mg/L			
pH	5.4 - 6.7	units			

Good  Problem

Note: Color coded bar graphs have been used to provide you with 'AT-A-GLANCE' interpretations.

Water Amendments Application Notes:

The Amendments recommended on the previous pages include:

Gypsum:

This should be applied at least once a year to the irrigated soil surface area. Gypsum can also be applied in smaller quantities in the irrigation water. Apply the smaller (bracketed) amount of gypsum when also applying the recommended amount of Sulfuric Acid and the larger amount when applying only Gypsum.

Sulfuric Acid:

These products should be applied as needed to prevent emitter plugging in micro irrigation systems and/or as a soil amendment to adjust soil pH to improve nutrient availability and to facilitate leaching of salts. Please exercise caution when using this material as excesses may be harmful to the system and/or the plants being irrigated. The reported Acid requirement is intended to remove approximately 80 % of the alkalinity. The final pH should range from 5.4 to 6.7. We recommend a field pH determination to confirm that the pH you designate is being achieved. This application is based upon the use of a 98% Sulfuric Acid product. The application of Urea Sulfuric Acid is based upon the use of a product that contains 15% Urea (1.89 lbs Nitrogen), 49% Sulfuric Acid and has a specific gravity of 1.52 at 68 °F.

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July 30, 2026

Stockton East Water Dist.

P.O. Box 5157
Stockton, CA 95205

Description : MS-1
Project : Surface Water Monitoring

Lab ID : STK2650623-004

Customer : 3008528

Sampled On : July 16, 2026

Sampled By : NP

Received On : July 16, 2026

Matrix : Surface Water

General Irrigation Suitability Analysis

Test Description	Result				Graphical Results Presentation				
Cations	mg/L	Meq/L	% Meq	Lbs/AF	Good	Possible Problem	Moderate Problem	Increasing Problem	Severe Problem
Calcium	17	0.85	50	46	**				
Magnesium	7	0.58	34	19	**				
Potassium	2	0.051	3	5	**				
Sodium	5	0.22	13	14					
Anions									
Carbonate	<10	0	0	0					
Bicarbonate	90	1.5	81	240	**				
Sulfate	11.2	0.23	13	30	**				
Chloride	4	0.11	6	11					
Nitrate	<0.4	0	0	0					
Fluoride	<0.1	0	0	0					
Minor Elements									
Boron	<0.1			0					
Copper	<0.01			0					
Iron	<0.03			0					
Manganese	<0.01			0					
Zinc	<0.02			0					
TDS by Summation	136			370					
Other									
pH	6.5	units							
E. C.	0.175	dS/m							
SAR	0.300								
Crop Suitability									
No Amendments	Fairly Good								
With Amendments	Good								
Amendments									
Gypsum Requirement	0.0400	Tons/AF			Or 12 oz/1000Gal of urea Sulfuric Acid(15/49)				
Sulfuric Acid (98%)	4.90	oz/1000Gal							
Leaching Requirement	1.3	%							

Good  Problem

Note: Color coded bar graphs have been used to provide you with 'AT-A-GLANCE' interpretations.

** Used in various calculations; mg/L = Milligrams Per Liter (ppm) meq/L = Milliequivalents Per Liter.



July 30, 2026

Stockton East Water Dist.

Description : MS-1
Project : Surface Water Monitoring

Lab ID : STK2650623-004
Customer : 3008528

Sampled By : NP
Matrix : Surface Water

Micro Irrigation System Plugging Hazard

Test Description	Result		Graphical Results Presentation		
Chemical			Slight	Moderate	Severe
Manganese	<0.01	mg/L			
Iron	<0.03	mg/L			
TDS by Summation	136	mg/L			
No Amendments					
pH	6.5	units			
Alkalinity (As CaCO3)	70	mg/L			
Total Hardness	71.2	mg/L			
With Amendments					
Alkalinity (As CaCO3)	14	mg/L			
Total Hardness	14	mg/L			
pH	5.4 - 6.7	units			

Good  Problem

Note: Color coded bar graphs have been used to provide you with 'AT-A-GLANCE' interpretations.

Water Amendments Application Notes:

The Amendments recommended on the previous pages include:

Gypsum:

This should be applied at least once a year to the irrigated soil surface area. Gypsum can also be applied in smaller quantities in the irrigation water. Apply the smaller (bracketed) amount of gypsum when also applying the recommended amount of Sulfuric Acid and the larger amount when applying only Gypsum.

Sulfuric Acid:

These products should be applied as needed to prevent emitter plugging in micro irrigation systems and/or as a soil amendment to adjust soil pH to improve nutrient availability and to facilitate leaching of salts. Please exercise caution when using this material as excesses may be harmful to the system and/or the plants being irrigated. The reported Acid requirement is intended to remove approximately 80 % of the alkalinity. The final pH should range from 5.4 to 6.7. We recommend a field pH determination to confirm that the pH you designate is being achieved. This application is based upon the use of a 98% Sulfuric Acid product. The application of Urea Sulfuric Acid is based upon the use of a product that contains 15% Urea (1.89 lbs Nitrogen), 49% Sulfuric Acid and has a specific gravity of 1.52 at 68 °F.

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Title: Director of Ag. Services
Date: 2026-07-30

July 30, 2026

Stockton East Water Dist.

P.O. Box 5157
Stockton, CA 95205

Description : MS-2
Project : Surface Water Monitoring

Lab ID : STK2650623-005

Customer : 3008528

Sampled On : July 16, 2026

Sampled By : NP

Received On : July 16, 2026

Matrix : Surface Water

General Irrigation Suitability Analysis

Test Description	Result				Graphical Results Presentation				
Cations	mg/L	Meq/L	% Meq	Lbs/AF	Good	Possible Problem	Moderate Problem	Increasing Problem	Severe Problem
Calcium	17	0.85	50	46	**				
Magnesium	7	0.58	34	19	**				
Potassium	2	0.051	3	5	**				
Sodium	5	0.22	13	14					
Anions									
Carbonate	<10	0	0	0					
Bicarbonate	90	1.5	81	240	**				
Sulfate	10.8	0.22	12	29	**				
Chloride	4	0.11	6	11					
Nitrate	<0.4	0	0	0					
Fluoride	<0.1	0	0	0					
Minor Elements									
Boron	<0.1			0					
Copper	<0.01			0					
Iron	0.090			0.24					
Manganese	<0.01			0					
Zinc	<0.02			0					
TDS by Summation	136			370					
Other									
pH	7.4	units							
E. C.	0.179	dS/m							
SAR	0.300								
Crop Suitability									
No Amendments	Good								
With Amendments	Good								
Amendments									
Gypsum Requirement	0.0400	Tons/AF			Or 14 oz/1000Gal of urea Sulfuric Acid(15/49)				
Sulfuric Acid (98%)	5.60	oz/1000Gal							
Leaching Requirement	1.3	%							

Good  Problem

Note: Color coded bar graphs have been used to provide you with 'AT-A-GLANCE' interpretations.

** Used in various calculations; mg/L = Milligrams Per Liter (ppm) meq/L = Milliequivalents Per Liter.



July 30, 2026

Stockton East Water Dist.

Description : MS-2
Project : Surface Water Monitoring

Lab ID : STK2650623-005
Customer : 3008528

Sampled By : NP
Matrix : Surface Water

Micro Irrigation System Plugging Hazard

Test Description	Result		Graphical Results Presentation		
Chemical			Slight	Moderate	Severe
Manganese	<0.01	mg/L			
Iron	0.09	mg/L			
TDS by Summation	136	mg/L			
No Amendments					
pH	7.4	units			
Alkalinity (As CaCO3)	80	mg/L			
Total Hardness	71.2	mg/L			
With Amendments					
Alkalinity (As CaCO3)	16	mg/L			
Total Hardness	16	mg/L			
pH	5.4 - 6.7	units			

Good  Problem

Note: Color coded bar graphs have been used to provide you with 'AT-A-GLANCE' interpretations.

Water Amendments Application Notes:

The Amendments recommended on the previous pages include:

Gypsum:

This should be applied at least once a year to the irrigated soil surface area. Gypsum can also be applied in smaller quantities in the irrigation water. Apply the smaller (bracketed) amount of gypsum when also applying the recommended amount of Sulfuric Acid and the larger amount when applying only Gypsum.

Sulfuric Acid:

These products should be applied as needed to prevent emitter plugging in micro irrigation systems and/or as a soil amendment to adjust soil pH to improve nutrient availability and to facilitate leaching of salts. Please exercise caution when using this material as excesses may be harmful to the system and/or the plants being irrigated. The reported Acid requirement is intended to remove approximately 80 % of the alkalinity. The final pH should range from 5.4 to 6.7. We recommend a field pH determination to confirm that the pH you designate is being achieved. This application is based upon the use of a 98% Sulfuric Acid product. The application of Urea Sulfuric Acid is based upon the use of a product that contains 15% Urea (1.89 lbs Nitrogen), 49% Sulfuric Acid and has a specific gravity of 1.52 at 68 °F.

Please contact us if you have any questions.

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Title: Director of Ag. Services
Date: 2026-07-30

July 30, 2026

Stockton East Water Dist.

P.O. Box 5157
Stockton, CA 95205

Description : CR-6
Project : Surface Water Monitoring

Lab ID : STK2650623-006

Customer : 3008528

Sampled On : July 16, 2026

Sampled By : NP

Received On : July 16, 2026

Matrix : Surface Water

General Irrigation Suitability Analysis

Test Description	Result				Graphical Results Presentation				
Cations	mg/L	Meq/L	% Meq	Lbs/AF	Good	Possible Problem	Moderate Problem	Increasing Problem	Severe Problem
Calcium	8	0.4	47	22	**				
Magnesium	3	0.25	29	8	**				
Potassium	1	0.026	3	3	**				
Sodium	4	0.17	21	11					
Anions									
Carbonate	<10	0	0	0					
Bicarbonate	50	0.82	81	140	**				
Sulfate	5.2	0.11	11	14	**				
Chloride	3	0.085	8	8					
Nitrate	<0.4	0	0	0					
Fluoride	<0.1	0	0	0					
Minor Elements									
Boron	<0.1			0					
Copper	<0.01			0					
Iron	<0.03			0					
Manganese	<0.01			0					
Zinc	<0.02			0					
TDS by Summation	74.2			200					
Other									
pH	7.0	units							
E. C.	0.092	dS/m							
SAR	0.300								
Crop Suitability									
No Amendments	Good								
With Amendments	Good								
Amendments									
Gypsum Requirement	0.0400	Tons/AF			Or 6.8 oz/1000Gal of urea Sulfuric Acid(15/49)				
Sulfuric Acid (98%)	2.80	oz/1000Gal							
Leaching Requirement	0.66	%							

Good Problem

Note: Color coded bar graphs have been used to provide you with 'AT-A-GLANCE' interpretations.

** Used in various calculations; mg/L = Milligrams Per Liter (ppm) meq/L = Milliequivalents Per Liter.

July 30, 2026

Stockton East Water Dist.

Description : CR-6
Project : Surface Water Monitoring

Lab ID : STK2650623-006
Customer : 3008528

Sampled By : NP
Matrix : Surface Water

Micro Irrigation System Plugging Hazard

Test Description	Result		Graphical Results Presentation		
Chemical			Slight	Moderate	Severe
Manganese	<0.01	mg/L			
Iron	<0.03	mg/L			
TDS by Summation	74.2	mg/L			
No Amendments					
pH	7.0	units			
Alkalinity (As CaCO3)	40	mg/L			
Total Hardness	32.3	mg/L			
With Amendments					
Alkalinity (As CaCO3)	10	mg/L			
Total Hardness	8	mg/L			
pH	5.4 - 6.7	units			

Good  Problem

Note: Color coded bar graphs have been used to provide you with 'AT-A-GLANCE' interpretations.

Water Amendments Application Notes:

The Amendments recommended on the previous pages include:

Gypsum:

This should be applied at least once a year to the irrigated soil surface area. Gypsum can also be applied in smaller quantities in the irrigation water. Apply the smaller (bracketed) amount of gypsum when also applying the recommended amount of Sulfuric Acid and the larger amount when applying only Gypsum.

Sulfuric Acid:

These products should be applied as needed to prevent emitter plugging in micro irrigation systems and/or as a soil amendment to adjust soil pH to improve nutrient availability and to facilitate leaching of salts. Please exercise caution when using this material as excesses may be harmful to the system and/or the plants being irrigated. The reported Acid requirement is intended to remove approximately 80 % of the alkalinity. The final pH should range from 5.4 to 6.7. We recommend a field pH determination to confirm that the pH you designate is being achieved. This application is based upon the use of a 98% Sulfuric Acid product. The application of Urea Sulfuric Acid is based upon the use of a product that contains 15% Urea (1.89 lbs Nitrogen), 49% Sulfuric Acid and has a specific gravity of 1.52 at 68 °F.

Please contact us if you have any questions.

BRW:DMB

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Title: Director of Ag. Services
Date: 2026-07-30

July 30, 2026

Stockton East Water Dist.

P.O. Box 5157
Stockton, CA 95205

Description : M-1
Project : Surface Water Monitoring

Lab ID : STK2650623-007

Customer : 3008528

Sampled On : July 16, 2026

Sampled By : NP

Received On : July 16, 2026

Matrix : Surface Water

General Irrigation Suitability Analysis

Test Description	Result				Graphical Results Presentation				
Cations	mg/L	Meq/L	% Meq	Lbs/AF	Good	Possible Problem	Moderate Problem	Increasing Problem	Severe Problem
Calcium	15	0.75	49	41	**				
Magnesium	6	0.49	32	16	**				
Potassium	3	0.077	5	8	**				
Sodium	5	0.22	14	14					
Anions									
Carbonate	<10	0	0	0					
Bicarbonate	90	1.5	82	240	**				
Sulfate	9.8	0.2	11	27	**				
Chloride	4	0.11	6	11					
Nitrate	<0.4	0	0	0					
Fluoride	0.1	0.0053	0	0.3					
Minor Elements									
Boron	<0.1			0					
Copper	<0.01			0					
Iron	<0.03			0					
Manganese	<0.01			0					
Zinc	<0.02			0					
TDS by Summation	133			360					
Other									
pH	6.5	units							
E. C.	0.169	dS/m							
SAR	0.300								
Crop Suitability									
No Amendments	Fairly Good								
With Amendments	Good								
Amendments									
Gypsum Requirement	0.0600	Tons/AF			Or 12 oz/1000Gal of urea Sulfuric Acid(15/49)				
Sulfuric Acid (98%)	4.90	oz/1000Gal							
Leaching Requirement	1.2	%							

Good  Problem

Note: Color coded bar graphs have been used to provide you with 'AT-A-GLANCE' interpretations.

** Used in various calculations; mg/L = Milligrams Per Liter (ppm) meq/L = Milliequivalents Per Liter.



July 30, 2026

Stockton East Water Dist.

Description : M-1
Project : Surface Water Monitoring

Lab ID : STK2650623-007
Customer : 3008528

Sampled By : NP
Matrix : Surface Water

Micro Irrigation System Plugging Hazard

Test Description	Result		Graphical Results Presentation		
Chemical			Slight	Moderate	Severe
Manganese	<0.01	mg/L			
Iron	<0.03	mg/L			
TDS by Summation	133	mg/L			
No Amendments					
pH	6.5	units			
Alkalinity (As CaCO3)	70	mg/L			
Total Hardness	62.1	mg/L			
With Amendments					
Alkalinity (As CaCO3)	14	mg/L			
Total Hardness	14	mg/L			
pH	5.4 - 6.7	units			

Good  Problem

Note: Color coded bar graphs have been used to provide you with 'AT-A-GLANCE' interpretations.

Water Amendments Application Notes:

The Amendments recommended on the previous pages include:

Gypsum:

This should be applied at least once a year to the irrigated soil surface area. Gypsum can also be applied in smaller quantities in the irrigation water. Apply the smaller (bracketed) amount of gypsum when also applying the recommended amount of Sulfuric Acid and the larger amount when applying only Gypsum.

Sulfuric Acid:

These products should be applied as needed to prevent emitter plugging in micro irrigation systems and/or as a soil amendment to adjust soil pH to improve nutrient availability and to facilitate leaching of salts. Please exercise caution when using this material as excesses may be harmful to the system and/or the plants being irrigated. The reported Acid requirement is intended to remove approximately 80 % of the alkalinity. The final pH should range from 5.4 to 6.7. We recommend a field pH determination to confirm that the pH you designate is being achieved. This application is based upon the use of a 98% Sulfuric Acid product. The application of Urea Sulfuric Acid is based upon the use of a product that contains 15% Urea (1.89 lbs Nitrogen), 49% Sulfuric Acid and has a specific gravity of 1.52 at 68 °F.

Please contact us if you have any questions.

BRW:DMB

Reviewed and
Approved By

Ben Waddell



Digitally signed by Ben Waddell
Title: Director of Ag. Services
Date: 2026-07-30

July 30, 2026

Stockton East Water Dist.

P.O. Box 5157
Stockton, CA 95205

Description : PP-1
Project : Surface Water Monitoring

Lab ID : STK2650623-008

Customer : 3008528

Sampled On : July 16, 2026

Sampled By : NP

Received On : July 16, 2026

Matrix : Surface Water

General Irrigation Suitability Analysis

Test Description	Result				Graphical Results Presentation				
Cations	mg/L	Meq/L	% Meq	Lbs/AF	Good	Possible Problem	Moderate Problem	Increasing Problem	Severe Problem
Calcium	5	0.25	50	14	**				
Magnesium	2	0.16	33	5	**				
Potassium	<1	0	0	0	**				
Sodium	2	0.087	17	5.4					
Anions									
Carbonate	<10	0	0	0					
Bicarbonate	40	0.66	93	110	**				
Sulfate	2.2	0.046	7	6	**				
Chloride	<1	0	0	0					
Nitrate	<0.4	0	0	0					
Fluoride	<0.1	0	0	0					
Minor Elements									
Boron	<0.1			0					
Copper	<0.01			0					
Iron	<0.03			0					
Manganese	<0.01			0					
Zinc	<0.02			0					
TDS by Summation	51.2			140					
Other									
pH	6.0	units							
E. C.	0.065	dS/m							
SAR	0.200								
Crop Suitability									
No Amendments	Fair								
With Amendments	Good								
Amendments									
Gypsum Requirement	0.0400	Tons/AF							
Sulfuric Acid (98%)	2.10	oz/1000Gal							
Leaching Requirement	0.47	%							

Good  Problem

Note: Color coded bar graphs have been used to provide you with 'AT-A-GLANCE' interpretations.

** Used in various calculations; mg/L = Milligrams Per Liter (ppm) meq/L = Milliequivalents Per Liter.



July 30, 2026

Stockton East Water Dist.

Description : PP-1
Project : Surface Water Monitoring

Lab ID : STK2650623-008
Customer : 3008528

Sampled By : NP
Matrix : Surface Water

Micro Irrigation System Plugging Hazard

Test Description	Result		Graphical Results Presentation		
Chemical			Slight	Moderate	Severe
Manganese	<0.01	mg/L			
Iron	<0.03	mg/L			
TDS by Summation	51.2	mg/L			
No Amendments					
pH	6.0	units			
Alkalinity (As CaCO3)	30	mg/L			
Total Hardness	20.7	mg/L			
With Amendments					
Alkalinity (As CaCO3)	10	mg/L			
Total Hardness	6	mg/L			
pH	5.4 - 6.7	units			

Good  Problem

Note: Color coded bar graphs have been used to provide you with 'AT-A-GLANCE' interpretations.

Water Amendments Application Notes:

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