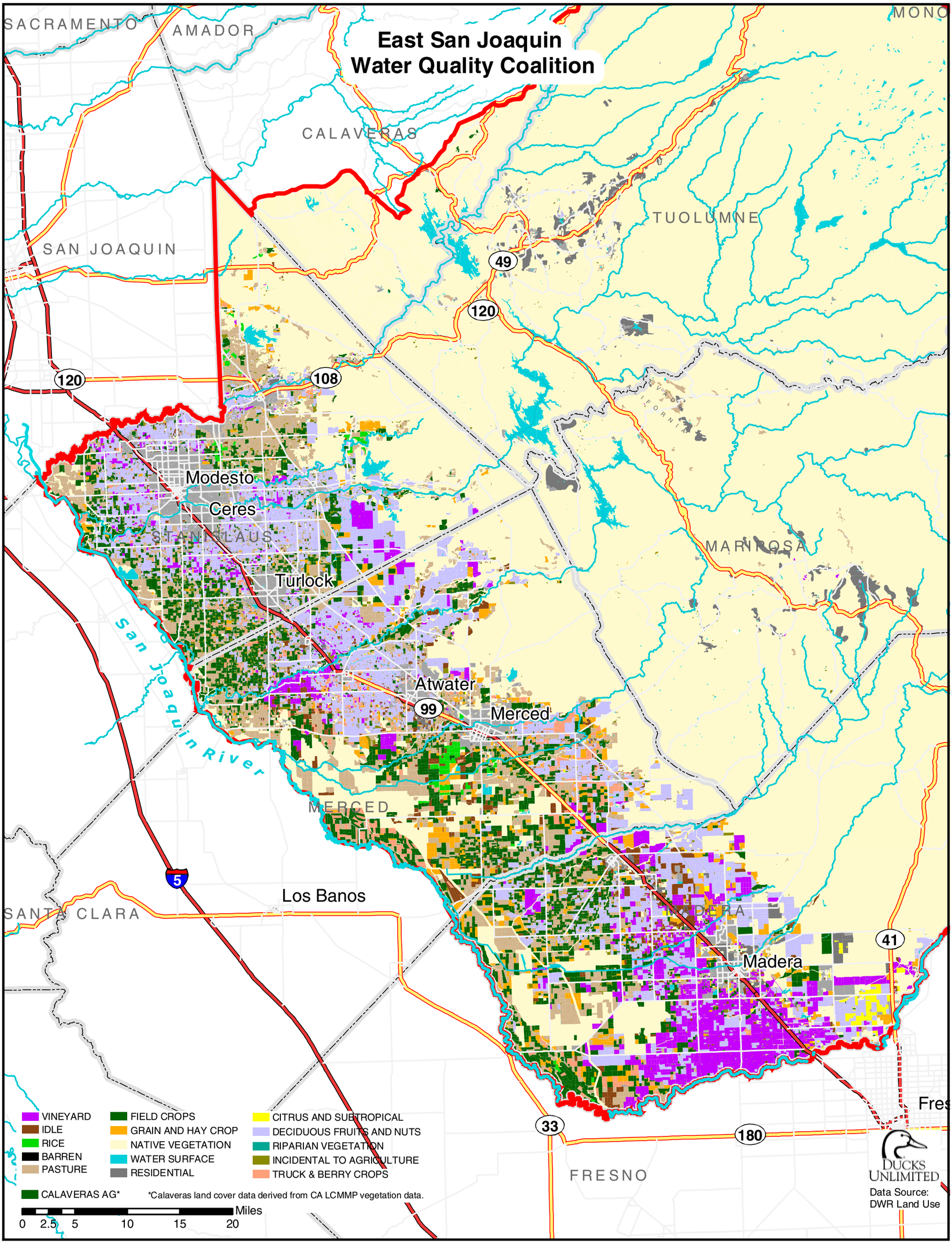
SUMMARY ANNUAL REPORT

2006

Including Data from 2004-2005


East San Joaquin
Water Quality Coalition
SACRAMENTO
AMADOR
CALAVERAS
SAN JOAQUIN
TUOLUMNE
MONO
MARIPOSA
STANISLAUS
MERCED
SANTA CLARA
FRESNO
Modesto
Ceres
Turlock
Atwater
Merced
Los Banos
Madera
San Joaquin River
49
120
108
99
5
33
180
41
VINEYARD
IDLE
RICE
BARREN
PASTURE
FIELD CROPS
GRAIN AND HAY CROP
NATIVE VEGETATION
WATER SURFACE
RESIDENTIAL
CITRUS AND SUBTROPICAL
DECIDUOUS FRUITS AND NUTS
RIPARIAN VEGETATION
INCIDENTAL TO AGRICULTURE
TRUCK & BERRY CROPS
CALAVERAS AG*
*Calaveras land cover data derived from CA LCMMP vegetation data.
Miles
0 2.5 5 10 15 20
DUCKS UNLIMITED
Data Source:
DWR Land Use

East San Joaquin Water Quality Coalition Map


East San Joaquin
Water Quality Coalition

East San Joaquin Water Quality Coalition
Summary Annual Report 2006

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2006 Year in Review

2006 marks the third year of water monitoring for the East San Joaquin Water Quality Coalition (Coalition). After three years, we are beginning to see trends in the sampling results in waterways monitored by the Coalition. Most significant is the repeated exceedances of State standards for *E. coli*. In an effort to better understand the sources of *E. coli* causing these exceedances, the Coalition funded a study that shows human DNA to be the most common source of contamination (see report page 8). A complete report has been submitted to the Central Valley Water Board.

The Central Valley Water Board passed a requirement in August 2006 that a Management Plan must be developed by the Coalition when water sampling indicates two or more exceedances of State water standards for any constituent. Eighteen (18) waterways sampled by the Coalition are now required to have Management Plans prepared by us (see summary of exceedances page 9).

These mandatory Management Plans hold significant responsibilities for the Coalition and its members. Initially, members are required to fill out Management Practice Surveys that will help develop information to better understand potential sources of the problem. Ultimately, landowners will be required to adopt management practices to mitigate the problem should their farm drainage be contributing to a problem.

Requirements of the Irrigated Lands Program dictate that new waterways be sampled throughout the Coaliton region in 2007. Subsequently, the Coalition will be adding three to five sites in 2007 and because of Management Plan sampling requirements, we must continue sampling in sites where those plans are in place.

This additional water sampling has put a severe strain on our budget. Fortunately, more than 200,000 acres were added to the Coalition member rosters because of the December 31 deadline for joining set by the State. This increase in membership has enabled the Coalition to keep membership dues at $1.50 per acre for 2007 (plus $50 per landowner). See page 7 for a review of our 2007 budget.

See page 5 for a current list of sampling sites locations. Maps starting on page 10 show shaded lands that likely drain into the sampled waterway during heavy storm events, have potential for irrigation discharges or the possibility of spray drift reaching the waterway. Maps with no corresponding data page are sites where no water quality standards were exceeded or pesticides were detected.

The Coalition Board of Directors thanks you for your participation in this program.

Coalition Membership
As of February 1, 2007, the East San Joaquin Water Quality Coalition (Coalition) membership stood at 2671 landowner/operators and 647,522 irrigated acres.

Coalition Boundaries
The Coalition includes Madera County and portions of Stanislaus, Merced, Tuolumne, Mariposa and Calaveras counties. Coalition borders are the crest of the Sierra Nevada on the east and the San Joaquin River on the west and south, and the Stanislaus River on the north. There are four major tributaries in the watershed: Chowchilla River, Merced River, Tuolumne River and Stanislaus River.

Coalition Structure
The Coalition was formed in compliance with the Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Land. In November 2005, the Coalition was granted non-profit status as a 501 c5 organization by the Internal Revenue Service. The Coalition is managed by a Board of Directors.

Board of Directors
A Board of Directors was formed to manage Coalition affairs. The **Board Chairman** is Parry Klassen, a fruit grower and also Executive Director of the Coalition for Urban/Rural Environmental Stewardship (CURES).
Board members include:

- Julia Berry, Madera County Farm Bureau
- Lee Erickson, Madera almond, grape, pistachio grower
- Richard Gemperle, Gemperle Enterprises, Turlock; almonds
- Bill McKinney, almond grower **(secretary/treasurer)**
- Bruce Pace, A.L. Gilbert Co.; corn, row crops
- Diana Westmoreland Pedrozo, Merced County Farm Bureau
- Alan Reynolds, Gallo Vineyards, Inc.
- Jim Wagner, Hughson Chemical Co., Hughson
- Wayne Zipser, Stanislaus County Farm Bureau **(vice-chairman)**

Ex-officio
- Dennis Gudgel, Stanislaus County Agricultural Commissioner
- David Robinson, Merced County Agricultural Commissioner
- Bob Rolan, Madera County Agricultural Commissioner

Coalition Goals
- To operate an efficient, economical program that enables members to comply with the Irrigated Lands Waiver.
- File required reports with the Central Valley Regional Water Quality Control Board to maintain conditional waiver coverage for Coalition members.
- Implement an economical and scientifically valid water monitoring program for area rivers and agricultural drains (as required by the waiver).
- Spread costs equitably among owners/operators who are Coalition members.
- Communicate to landowners where water monitoring indicates problems and work to solve those problems.

Water Monitoring Program Overview

Monitoring Program Objectives

- Characterize discharge from irrigated agriculture in the Coalition region
- Identify locations where water quality objectives are violated
- Identify potential source(s) of the exceedances
- Promote to landowners the implementation of management practices to eliminate water quality problems.

Monitoring Program Manager

- Michael Johnson LLC, Davis, CA.

Analytical Laboratories

- Pacific Ecorisk Inc., Martinez, CA (water and sediment toxicity testing)
- APPL Inc., Fresno, CA (pesticide analysis)
- BSK Laboratories Inc., Fresno, CA (color, turbidity, Total Dissolved Solids, Total Organic Carbon, and *E. coli*. testing)

Coalition Sponsored Monitoring Sites

1. Ash Slough at Avenue 21
2. Bear Creek at Kirby Road
3. Berenda Slough along Ave 18 1/2
4. Black Rascal Creek at Yosemite Rd
5. Cottonwood Creek at Road 20
6. Deadman's Creek at Gurr Rd
7. Deadman's Creek at Highway 59
8. Dry Creek at Rd 18
9. Dry Creek at Wellsford Road
10. Duck Slough at Gurr Road
11. Duck Slough at Highway 99
12. Highline Canal at Highway 99
13. Highline Canal at Lombardy Avenue
14. Hilmar Drain at Central Avenue
15. Jones Drain at Oakdale Road
16. Merced River at Santa Fe Avenue
17. Mustang Creek at East Ave
18. Prairie Flower Drain at Crows Landing Road
19. Silva Drain at Meadow Dr
20. South Slough at Quinley Rd

Monitoring Site Selection Criteria

- Characterizes agricultural drainage of the area
- Drains irrigated lands
- No (or minimal) urban influence on flows

Sampling Frequency

- Monthly during irrigation season (May though October)
- Twice during winter rainy season (January, February or March)

Fees Assessed by the State Water Resources Control Board

In 2006, the Coalition paid the 12 cent per acre fee for its members to cover State Water Resources Control Board cost for implementing the Irrigated Lands Waiver program. The State established the following three-tiered annual fee structure for landowners seeking coverage by waivers:

- Member of water coalition w*ith* fee collected by coalition = $100 per coalition + 12 cents per irrigated acre
- Member of water coalition but coalition does not collect fee = $100 per landowner + 20 cents per irrigated acre
- Not member of coalition = $100 per farm + 30 cents per irrigated acre

The 12 cent per acre fee is included as part of Coalition membership dues. By paying the state fee for members, the Coalition collectively saved member growers more than $300,000.

Member Outreach and Best Management Practices

The Coalition is continuing its efforts to work with landowners in watersheds where monitoring indicates problems. Central to this effort will be promoting Best Management Practices (BMPs) with the best potential for solving the problem. When a problem is identified, the Coalition will:

- Contact landowners upstream of the monitoring site and inform them of the constituent(s) identified.
- Distribute BMP information through mailings, individual visits and local grower and crop advisor meetings.
- Give educational presentations on monitoring results and potential BMPs at commodity and farm group meetings in the coalition region.

Questions, Comments, Changes in Membership

Members are welcome to contact the coaliton Board of Directors or management with questions or to update membership information. The most efficient way to contact us is through the Coalition's website www.esjcoalition.org. Go to "Contact Us."

Outreach meeting dates and locations will be posted on the Coalition website and periodic announcements mailed to members.

Changes in membership information can be submitted to:

ESJWQC
1201 L Street
Modesto, CA 95354

Be sure to include your membership number.

You can also call the Stanislaus County Farm Bureau at 209-522-7278. Questions not answered will be forwarded to the appropriate contact in the Coaliton.

STATEMENT OF FINANCIAL ACTIVITIES
EAST SAN JOAQUIN WATER QUALITY COALITION

January – December, 2006
2007 Forecast Budget

	ACTUAL 2006	BUDGET 2007 (est.)	
	$ K, (Thousands)	$ K, (Thousands)	**DESCRIPTION**
INCOME			
Dues & Interest (TOTAL INCOME)	1,037.8	1,122.4	Membership dues and interest on bank accounts.
EXPENSES			
Organizational	80.6	118.5	Executive director, legal, accounting, management of membership records/ related communications, and miscellaneous business costs.
Program	717.6	1,494.1	Program manager, site monitoring/ special studies, quality control/assurance, data management, communications with Coalition members regarding monitoring results, and reports to RWQCB.
Travel and Meeting	6.5	7.5	Expenses for executive director and program manager, employees of the Coalition.
TOTAL EXPENSES	804.7	1,620.1	
UNEXPENDED FUNDS			
Net Income	233.1	(497.7)	Difference between TOTAL INCOME and TOTAL EXPENSES.
Retained	644.1	877.2	Funds carried over from previous year. (In 2006, $380k income resulted from RWQCB deadline of 12/31/06 to join coalition.)
Total	877.2	379.5	Total funds projected to be in reserve at end of 2007 fiscal year.

Bacterial Source Identification Study Summary

Michael L. Johnson
Lizabeth Bowen
Melissa A. Turner
University of California, Davis

For the East San Joaquin Water Quality Coalition

E. coli is a bacterium that is found in fecal material and is an indicator of fecal contamination of surface waters. However, *E. coli* can live in the environment for extended periods of time and may persist long after fecal contamination has occurred. Agriculture can be a source of *E. coli* from irrigated pasture and application of manure, but several additional sources of *E. coli* may be present including leaky sanitary sewer lines, leaky septic systems, application of biosolids to fields, discharges from dairies, or direct deposition of fecal material in the water from any animal including humans.

As a result of repeated exceedances of *E. coli* receiving water limitations during ESJWQC monitoring, the Coalition agreed to conduct a Bacterial Source Identification Study to identify the species responsible for the exceedances and to guide the implementation of management measures aimed at eliminating future exceedances. The primary objective of the study was to determine the species responsible for the fecal contamination of the water in the Coalition region.

Samples were collected at 27 sites across the Coalition region in August of 2006. These sites were selected because they were locations at which *E. coli* exceedances had been previously detected, or because they were upstream of locations of *E. coli* exceedances. All sites were monitored for total coliform bacteria, fecal coliform bacteria, *E. coli*, and DNA from bacteria found in fecal material of all animals. The study concentrated on humans, cows, and chickens since cows and chickens are potential sources from irrigated agriculture.

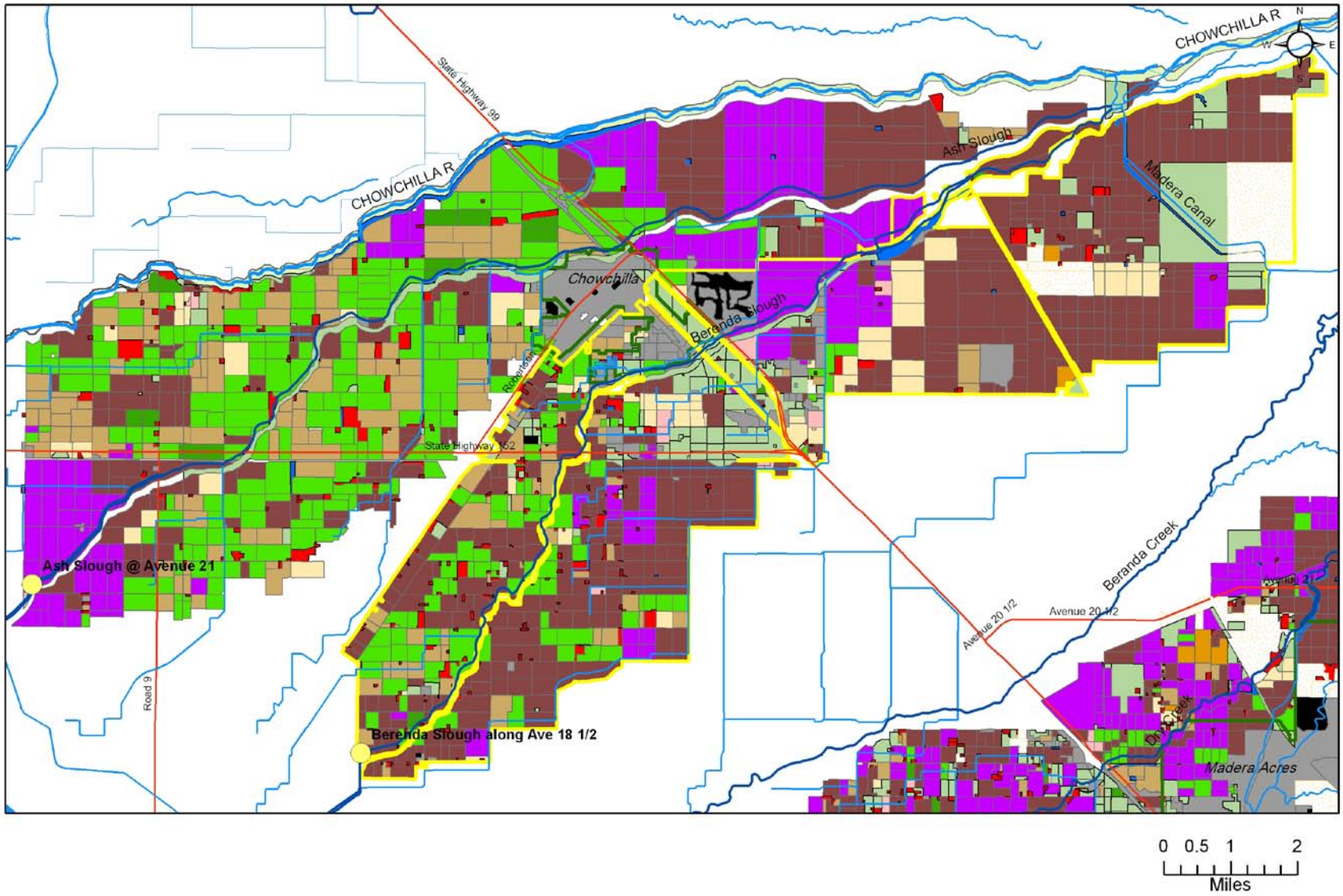
E. coli, fecal coliform, and total coliform were found at all sites and counts were generally high and above water quality standards. DNA from human fecal material was found at every site and DNA from cow and chicken fecal material was found at some sites. The results were provided as the percentage of DNA from each source, and the largest percentage at each site was from human sources. The variability of the results in space and time will require additional research to understand. The final caveat is that these results reflect samples collected at one point in time. These results may not reflect the DNA present in the water bodies at any other time of the year and extending any conclusions across the entire year is tenuous.

For the complete report, go to www.esjcoalition.org; News; *E. coli* information

Summary of Exceedances

Sample Site	DO	pH	EC	E. coli	TDS	Boron	Copper	Lead	Arsenic	Nitrite	Zinc	Selenium	Chlorpyrifos	Cyhalothrin, lambda	Diazinon	Esfenvalerate/ Fenvalerate	Thiobencarb	DDD	DDT	Biphenthrin	Malathion	Ceriodaphnia	Hyallela	Pimephales	Selenastrum	Management Plan Due Date
Highline Canal at Hwy 99	1	1	-	1	-	-	-	**2**	-	-	-	-	1	-	-	-	-	-	-	-	-	**4**	**3**	-	1	**11/17/2006, 4/2/2007**
Highline Canal at Lombardy Rd	-	**2**	1	**2**	-	-	-	**4**	-	-	1	-	**2**	-	-	-	-	-	-	-	-	**2**	**3**	-	**2**	
Dry Creek at Wellsford Road	**5**	**3**	-	**8**	-	-	-	-	-	-	-	-	**3**	-	-	-	1	-	-	-	-	**2**	1	-	-	**4/2/2007**
Duck Slough at Gurr Rd	**2**	1	1	**10**	1	-	**2**	1	-	-	-	-	1	1	-	1	**2**	-	-	**2**	-	**3**	**4**	-	1	**11/17/2006, 4/2/2007**
Duck Slough at Hwy 99	1	1	-	**6**	-	-	**2**	**3**	-	-	-	-	**2**	-	-	-	-	-	-	-	-	1	-	-	1	
Ash Slough at Ave 21	-	-	-	**3**	-	-	**5**	**2**	-	-	-	1	**4**	-	-	-	-	-	-	-	-	-	-	-	1	**11/17/2006, 4/13/2007**
Berenda Slough along Rd 18 1/2	**2**	-	-	1	-	-	-	-	-	-	-	-	**2**	-	-	-	-	-	-	-	-	1	-	-	-	**4/13/2007**
Jones Drain at Oakdale Rd	**6**	1	-	**11**	-	-	**5**	**2**	-	-	-	-	**3**	-	-	-	-	-	1	-	-	1	-	-	1	**4/13/2007**
Silva Drain at Meadow Drive	**2**	-	-	**4**	-	-	-	-	-	-	-	-	**2**	-	-	-	-	-	-	-	-	1	1	-	-	**4/13/2007**
Cottonwood Creek at Road 20	**9**	-	-	**6**	-	-	**3**	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	**4/27/2007**
Bear Creek at Kibby Rd	**2**	1	-	**3**	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	**2**	-	-	-	**4/27/2007**
Merced River at Santa Fe	1	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**3**	-	-	1	**11/17/2006, 4/27/2007**
Dry Creek at Rd 18	1	1	-	**2**	-	-	**6**	**3**	-	-	1	-	1	-	-	-	-	-	-	-	-	1	1	-	-	**4/27/2007**
Aug Rd Drn upstrm Crows Landing	-	-	**3**	**3**	**3**	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	**5/11/2007**
Black Rascal Crk at Yosemite Rd	**4**	-	-	**2**	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	**5/11/2007**
Deadman Creek at Gurr Rd	**6**	-	-	**8**	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-	-	1	-	**5/11/2007**
Deadman Creek at Hwy 59	**3**	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	1	1	-	-	-	-	-	**5/11/2007**
Mustang Creek at East Ave	**3**	-	-	**3**	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	**5/11/2007**
South Slough at Quinley Road	-	-	-	**2**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**5/11/2007**
Hilmar Drain at Central Ave	**3**	**2**	**13**	**10**	**11**	-	1	-	-	-	-	-	1		-		-	1	-	-	-	1	**2**	-	1	**5/11/2007**
Prairie Flower Drn at Crows Landing	**6**	**2**	**17**	**13**	**13**	-	-	-	-	1	-	-	**3**		-		-	-	-	1	-	1	**3**	**2**	-	**5/11/2007**

Ash Slough at Ave 21 & Berenda Slough along Ave 18 1/2



Ash Slough at Avenue 21

Date Sampled	Chlorpyrifos (Lorsban) 0.015 µg/L*	E. coli 235 MPN/ 100mL*	Selenium 5 µg/L*	Algae toxicity based on survival *	Hardness mg/L*	Copper µg/L (based on hardness)*	Lead µg/L (based on hardness)*
14-Jun-05							
12-Jul-05	0.018	500					
16-Aug-05	0.046						
28-Feb-06	0.016	500		toxic			
15-Mar-06	0.029						
16-May-06					22	4.8	0.68
13-Jun-06		770			30	17	1.6
11-Jul-06					38	6.7	
8-Aug-06					28	6.3	
12-Sep-06			5		30	9.3	

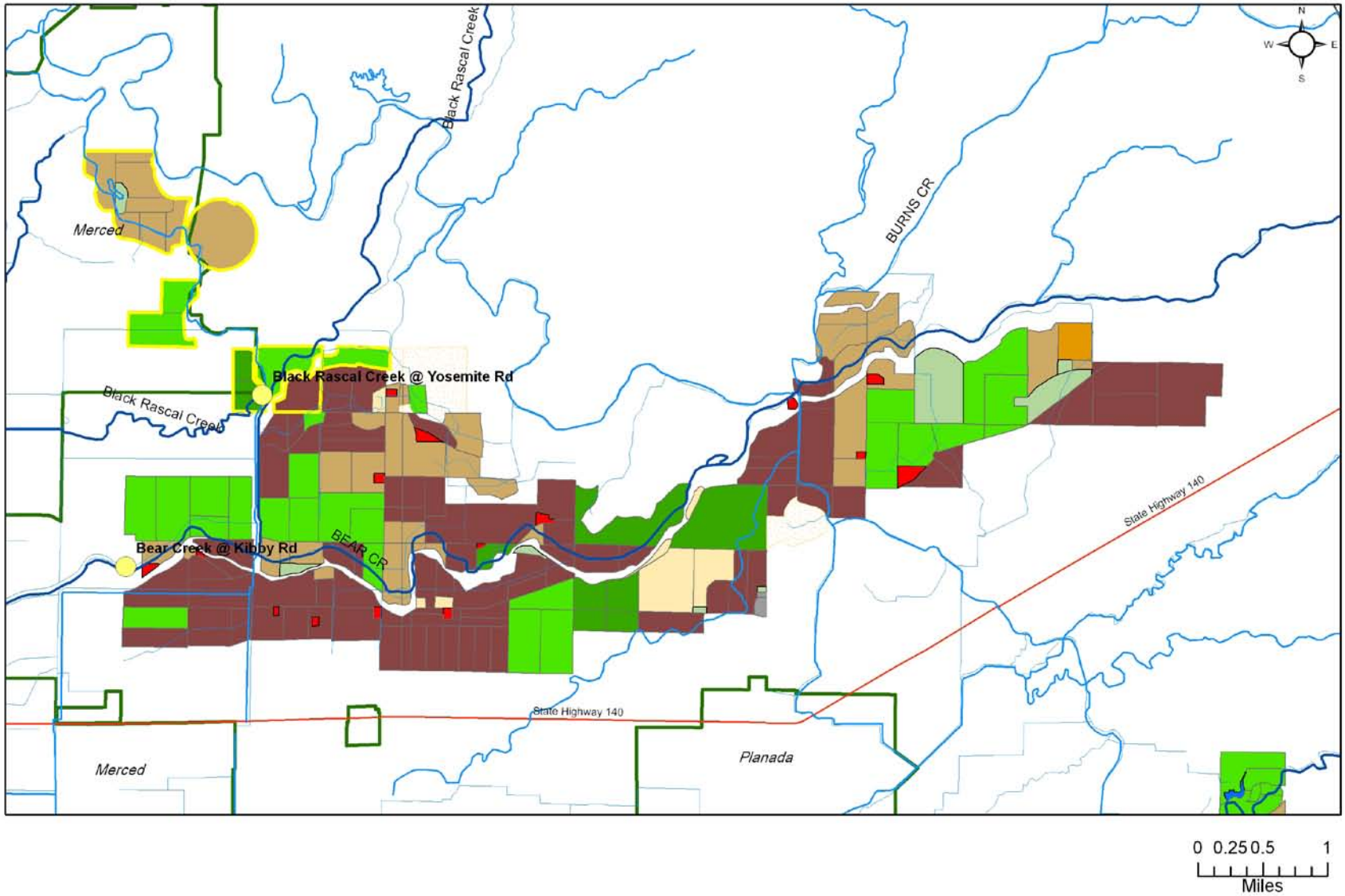
*Indicates a State of California Standard

Berenda Slough along Avenue 18 1/2

Date Sampled	Oxygen, Dissolved 7 mg/L*	0.015 µg/L*	E. coli 235 MPN/ 100mL*	Waterflea toxicity based on survival*
13-Jun-06	5.49		460	
11-Jul-06	6.54	0.043		
8-Aug-06				
12-Sep-06		0.14		toxic

*Indicates a State of California Standard

Bear Creek at Kibby Rd & Black Rascal Creek at Yosemite Rd



Bear Creek at Kibby Road

Date Sampled	Oxygen, Dissolved 7 mg/L*	pH 6.5 - 8.5 units*	Chlorpyrifos (Lorsban) 0.015 µg/L*	E. coli 235 MPN/ 100mL*	Waterflea toxicity based on survival*
21-Mar-05	4.4			1600	
10-May-05				280	toxic
14-Jun-05					
12-Jul-05					
16-Aug-05					
20-Sep-05					
28-Feb-06					
15-Mar-06				1600	
17-May-06			0.52		toxic
13-Jun-06	6.99	8.69			
12-Jul-06					
9-Aug-06					
12-Sep-06					

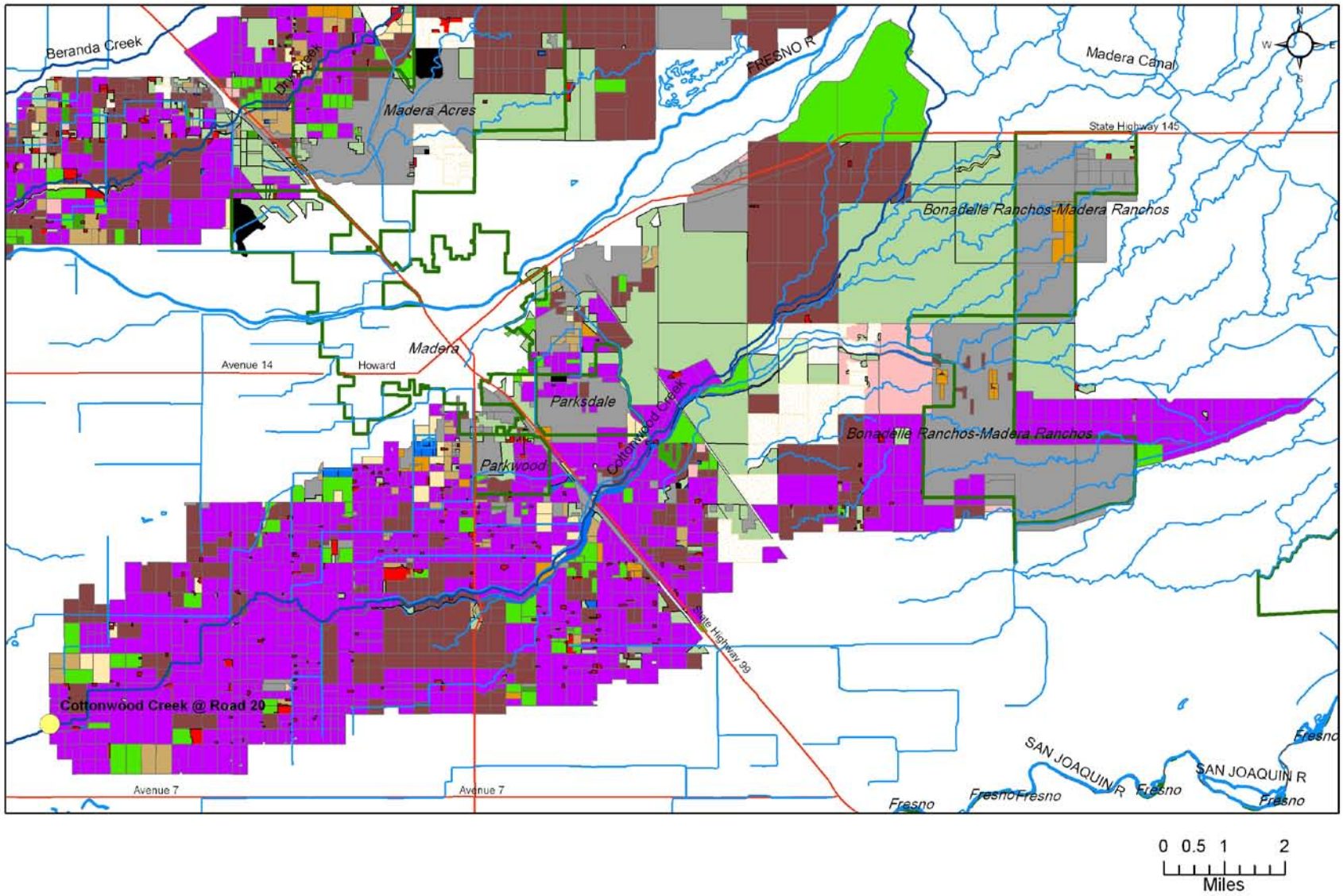
*Indicates a State of California Standard

Black Rascal Creek at Yosemite Road

Date Sampled	Oxygen, Dissolved 7 mg/L*	Chlorpyrifos (Lorsban) 0.015 µg/L*	E. coli 235 MPN/ 100mL*
18-May-06	5.41	0.033	2400
14-Jun-06			490
12-Jul-06	5.53		
9-Aug-06	5.65		
12-Sep-06	5.56		

*Indicates a State of California Standard

Cottonwood Creek at Rd 20

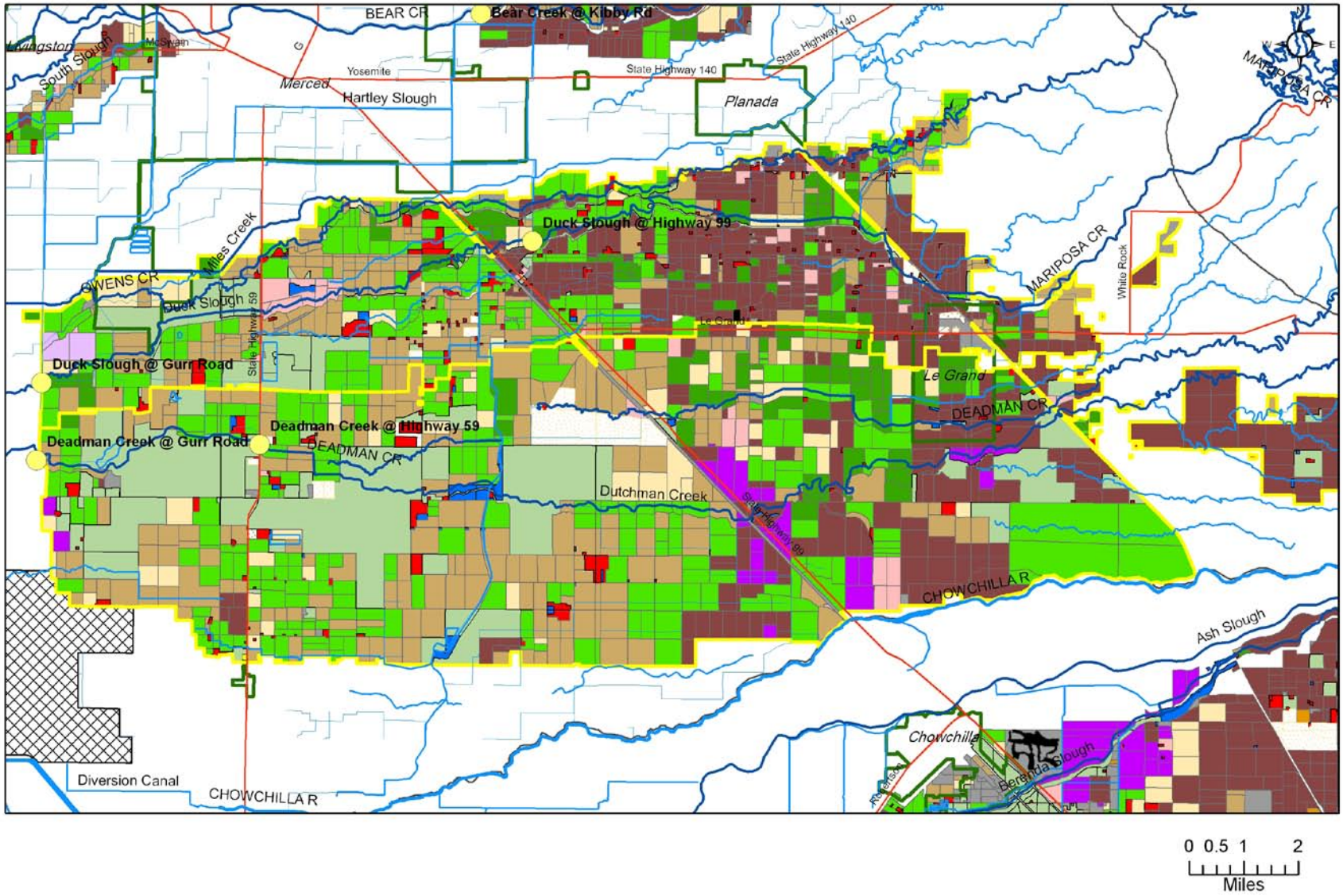


Cottonwood Creek at Road 20

Date Sampled	Oxygen, Dissolved 7 mg/L*	E. coli 235 MPN/ 100mL*	Sediment toxicity based on survival*	Hardness mg/L*	Copper µg/L (based on hardness)*	Lead µg/L (based on hardness)*
16-Feb-05		1600				
21-Mar-05	5.6	1600				
10-May-05		540	toxic			
14-Jun-05	5.7					
12-Jul-05	5.17					
16-Aug-05		300				
20-Sep-05	6.5					
28-Feb-06		300				
15-Mar-06		1600				
16-May-06	5.71			32	4.4	
13-Jun-06	6.9			28	8	0.73
11-Jul-06	6.51					
8-Aug-06	6.95					
12-Sep-06	6.11			42	5.5	

*Indicates a State of California Standard

Duck Slough at Gurr Rd & Deadman Creek at Gurr Rd



Deadman Creek

Site Name	Date Sampled	Oxygen, Dissolved	Bifenthrin	Chlorpyrifos (Lorsban)	DDD	DDT	Malathion	E. coli	Fathead minnow toxicity
		7 mg/L*	0.0004 µg/L*	0.015 µg/L*	0.00083 µg/L	0.00059 µg/L*	prohibited discharge*	235 MPN/ 100mL*	based on survival*
at Highway 59	17-May-06								
at Highway 59	13-Jun-06	5.65			0.0053	0.05			
at Highway 59	11-Jul-06								
at Highway 59	8-Aug-06	6.55	0.011						
at Highway 59	12-Sep-06	6.53		0.059					
at Gurr Rd	31-Jul-04	6.85						1600	
at Gurr Rd	31-Aug-04							1600	
at Gurr Rd	29-Sep-04	6.7						500	
at Gurr Rd	17-May-06							1200	
at Gurr Rd	13-Jun-06	5.01						310	toxic
at Gurr Rd	11-Jul-06	6.5						490	
at Gurr Rd	8-Aug-06	6.96					0.19	390	
at Gurr Rd	12-Sep-06	6.08		0.027				2400	

*Indicates a State of California Standard

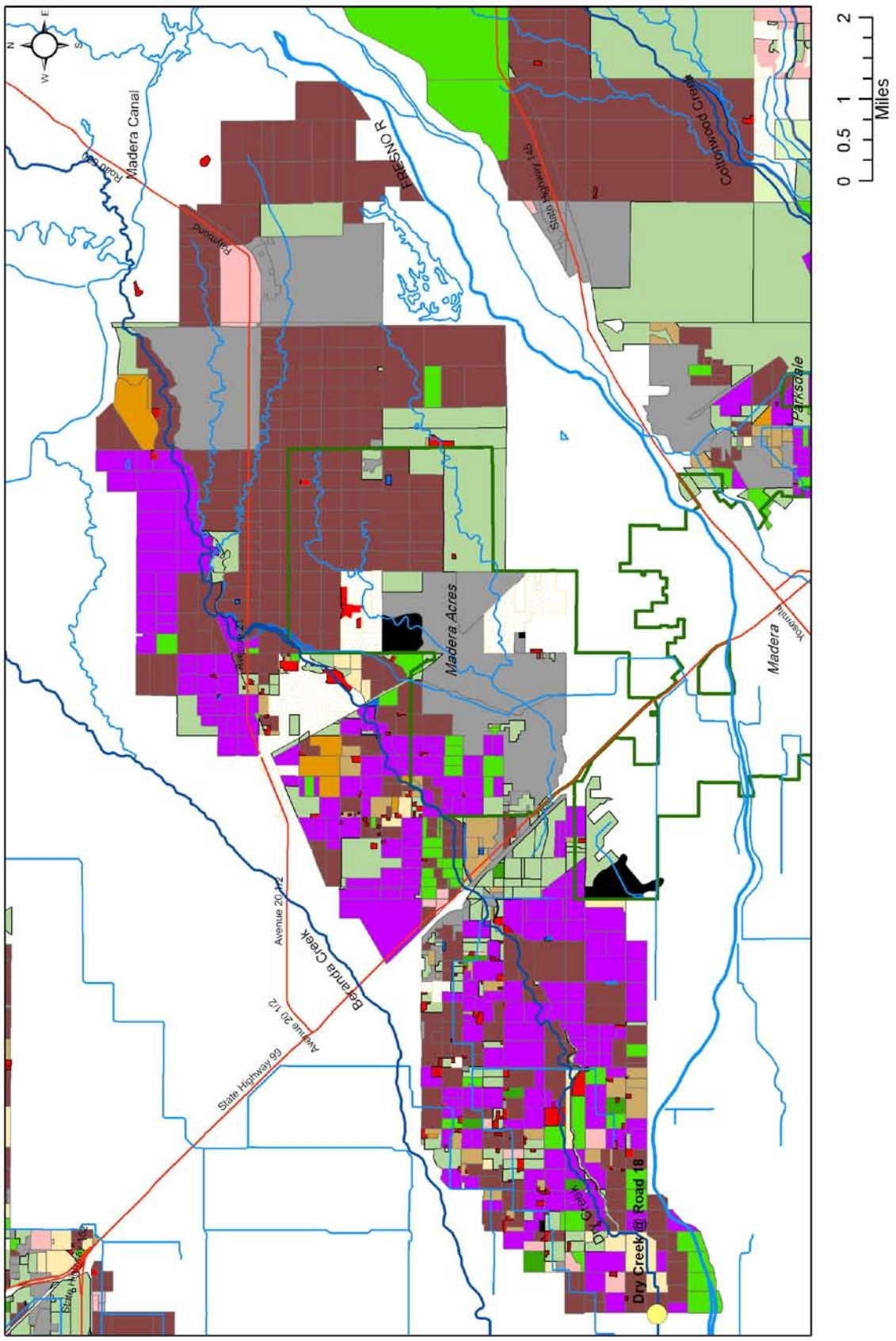
Duck Slough

Site Name	Date Sampled	Oxygen, Dissolved	pH	Specific Conductivity	Bifenthrin	Chlorpyrifos (Lorsban)	Cyhalothrin, lambda	Esfenvalerate/ Fenvalerate
		7 mg/L*	6.5 - 8.5 units*	700 umhos/ cm*	0.0004 µg/L*	0.015 µg/L*	0.00041 µg/L*	0.007 µg/L*
@ Gurr Road	31-Jul-04					0.045		
@ Gurr Road	31-Aug-04							
@ Gurr Road	29-Sep-04			701				0.05
@ Gurr Road	16-Feb-05							
@ Gurr Road	21-Mar-05							
@ Gurr Road	10-May-05							
@ Gurr Road	14-Jun-05							
@ Gurr Road	12-Jul-05							
@ Gurr Road	16-Aug-05							
@ Gurr Road	20-Sep-05							
@ Gurr Road	28-Feb-06							
@ Gurr Road	10-Mar-06							
@ Gurr Road	15-Mar-06							
@ Gurr Road	17-May-06		8.6					
@ Gurr Road	14-Jun-06				0.025		0.011	
@ Gurr Road	12-Jul-06	6.18			0.009			
@ Gurr Road	8-Aug-06							
@ Gurr Road	13-Sep-06	5.53						
@ Highway 99	16-Feb-05							
@ Highway 99	21-Mar-05							
@ Highway 99	10-May-05							
@ Highway 99	14-Jun-05							
@ Highway 99	12-Jul-05					0.026		
@ Highway 99	16-Aug-05							
@ Highway 99	20-Sep-05							
@ Highway 99	28-Feb-06							
@ Highway 99	15-Mar-06							
@ Highway 99	17-May-06		8.57			0.27		
@ Highway 99	14-Jun-06							
@ Highway 99	12-Jul-06							
@ Highway 99	8-Aug-06							
@ Highway 99	13-Sep-06	6.72						

*Indicates a State of California Standard

Thiobencarb	E. coli	Total Dissolved Solids	Waterflea toxicity	Algae toxicity	Sediment toxicity	Hardness	Copper	Lead
prohibited dishcharge*	235 MPN/ 100mL*	500 µg/L*	based on survival*	based on survival*	based on survival*	mg/L*	µg/L (based on hardness)*	µg/L (based on hardness)*
	350							
					toxic			
		540		toxic				
	1600							
	1600							
	1600				toxic			
	300							
	300				toxic			
	240							
					toxic			
			toxic					
			toxic					
	300		toxic					
	2000							
5.8	690					120	120	
0.29						100	14	2.7
	1600							
	1600							
				toxic				
	900							
	280		toxic			96		5.2
	260							
						20	3.4	2.3
	340					48	19	24

Dry Creek at Rd 18

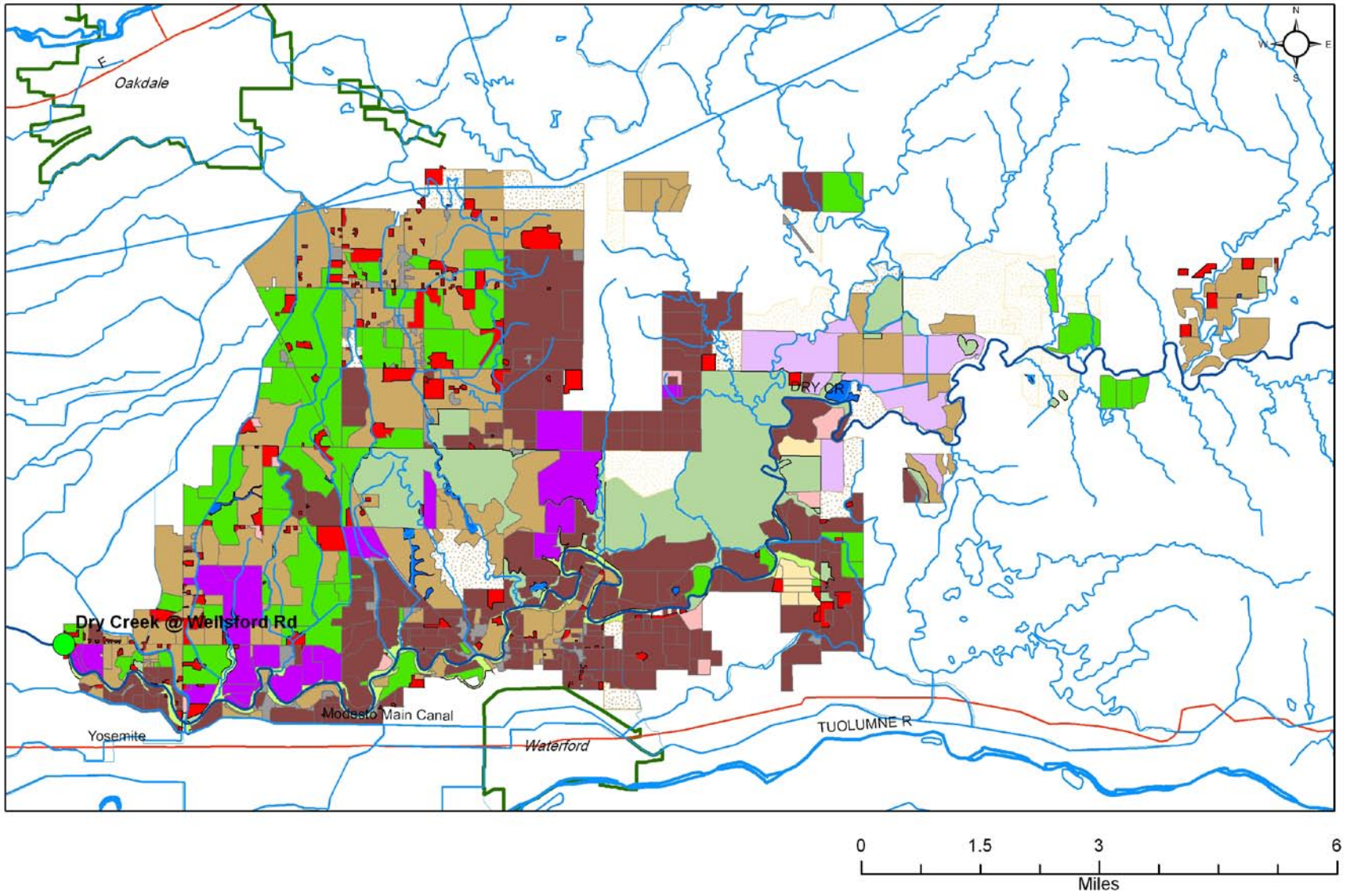


DRY CREEK AT ROAD 18

Site Name	Date Sampled	Oxygen, Dissolved	pH	Chlorpyrifos (Lorsban)	Thiobencarb	E. coli	Waterflea toxicity	Sediment toxicity	Hardness	Copper	Lead	Zinc
		7 mg/L*	6.5 - 8.5 units*	0.015 µg/L*	prohibited discharge*	235 MPN/ 100mL*	based on survival*	based on survival*	mg/L*	µg/L (based on hardness)*	µg/L (based on hardness)*	µg/L (based on hardness)*
at Road 18	16-Aug-05		6.48									
at Road 18	20-Sep-05					500						
at Road 18	3-May-06							toxic				
at Road 18	16-May-06					1600			16	4.3	0.36	
at Road 18	13-Jun-06						toxic		12	6.3	0.27	
at Road 18	11-Jul-06			0.077					20	4.1		
at Road 18	8-Aug-06								18	4.6		
at Road 18	12-Sep-06	5.61							8	6.1	0.31	18

*Indicates a State of California Standard

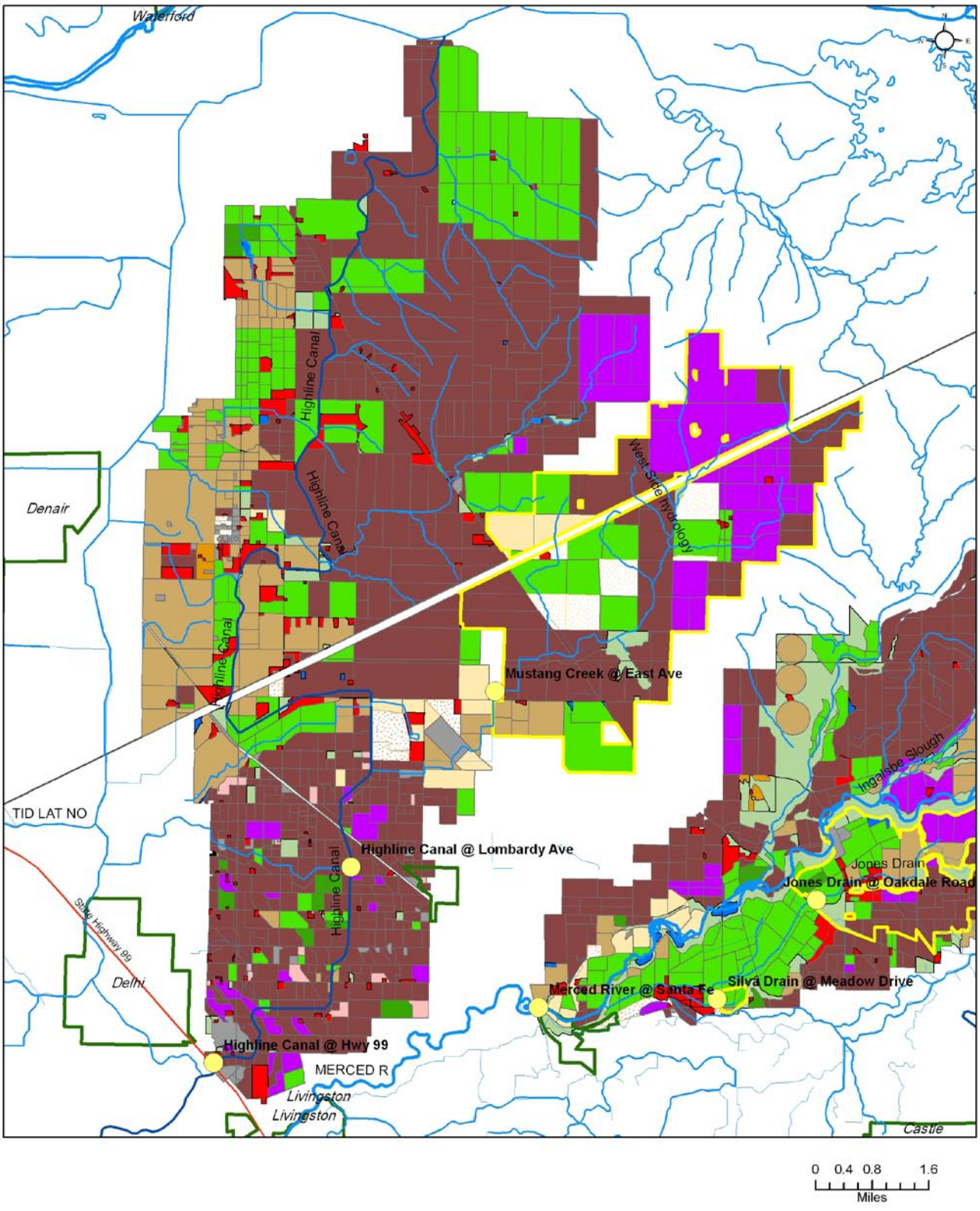
Dry Creek at Wellsford Rd



Dry Creek at Wellsford Road

Site Name	Date Sampled	Oxygen, Dissolved 7 mg/L*	pH 6.5 - 8.5 units*	Chlorpyrifos (Lorsban) 0.015 µg/L*	Thiobencarb prohibited discharge*	E. coli 235 MPN/ 100mL*	Waterflea toxicity based on survival*	Sediment toxicity based on survival*	 mg/L*	Copper µg/L (based on hardness)*	Lead µg/L (based on hardness)*	Zinc µg/L (based on hardness)*
at Wellsford Road	15-Feb-05						toxic					
at Wellsford Road	22-Mar-05		8.96			900						
at Wellsford Road	11-May-05		6.26					toxic				
at Wellsford Road	15-Jun-05	5.9				240						
at Wellsford Road	13-Jul-05	5.7										
at Wellsford Road	17-Aug-05		9.18	0.024		900						
at Wellsford Road	21-Sep-05	6.98				500						
at Wellsford Road	1-Mar-06					300						
at Wellsford Road	16-Mar-06					1600						
at Wellsford Road	18-May-06					280						
at Wellsford Road	15-Jun-06	6.08										
at Wellsford Road	13-Jul-06	6.69		0.026								
at Wellsford Road	10-Aug-06			0.024								
at Wellsford Road	14-Sep-06				0.1	310	toxic					

Highline Canal at Hwy 99 with upstream sampling site & Mustang Creek at East Ave



Highline Canal at Hwy 99

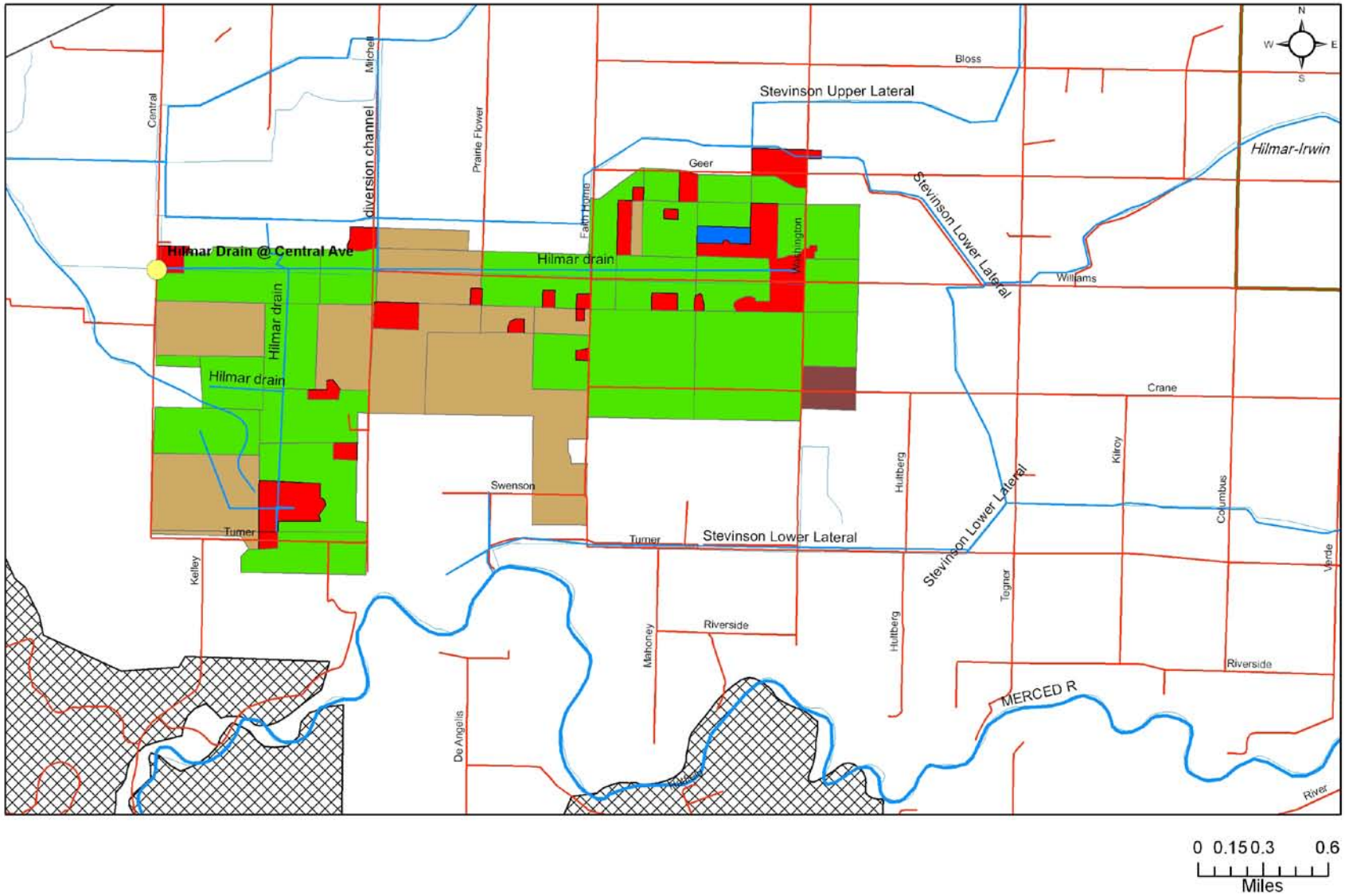
Site Name	Date Sampled	Oxygen, Dissolved 7 mg/L*	pH 6.5 - 8.5 units*	Chlorpyrifos (Lorsban) 0.015 µg/L*	E. coli 235 MPN/100mL*	Waterflea toxicity based on survival*	Algae toxicity based on survival*	Sediment toxicity based on survival*	Hardness mg/L*	Lead µg/L (based on hardness)*	Zinc µg/L (based on hardness)*
at Highway 99	10-May-05					toxic					
at Highway 99	19-May-05					toxic					
at Highway 99	15-Jun-05										
at Highway 99	13-Jul-05							toxic			
at Highway 99	17-Aug-05										
at Highway 99	20-Sep-05							toxic			
at Highway 99	1-Mar-06	5.6		0.021			toxic				
at Highway 99	16-Mar-06				300	toxic					
at Highway 99	2-May-06		8.73								
at Highway 99	17-May-06								18	0.42	
at Highway 99	14-Jun-06										
at Highway 99	12-Jul-06										
at Highway 99	9-Aug-06							toxic	16	0.39	
at Highway 99	13-Sep-06					toxic					
Lombardy Road	15-Feb-05										
Lombardy Road	21-Mar-05		8.56								
Lombardy Road	10-May-05				240			toxic			
Lombardy Road	14-Jun-05										
Lombardy Road	13-Jul-05							toxic			
Lombardy Road	17-Aug-05		6.46				toxic				
Lombardy Road	21-Sep-05										
Lombardy Road	1-Mar-06			0.027							
Lombardy Road	16-Mar-06			0.018	900		toxic				
Lombardy Road	2-May-06							toxic			
Lombardy Road	17-May-06								22	0.49	
Lombardy Road	14-Jun-06					toxic			24	0.55	
Lombardy Road	12-Jul-06										
Lombardy Road	9-Aug-06								16	0.34	
Lombardy Road	13-Sep-06					toxic			12	0.29	23

Mustang Creek at East Ave

Date Sampled	Oxygen, Dissolved 7 mg/L*	Chlorpyrifos (Lorsban) 0.015 µg/L*	E. coli 235 MPN/100mL*
18-May-06	5.82		2400
15-Jun-06	5		2400
10-Aug-06	2.61	0.015	980

*Indicates a State of California Standard

Hilmar Drain at Central Ave

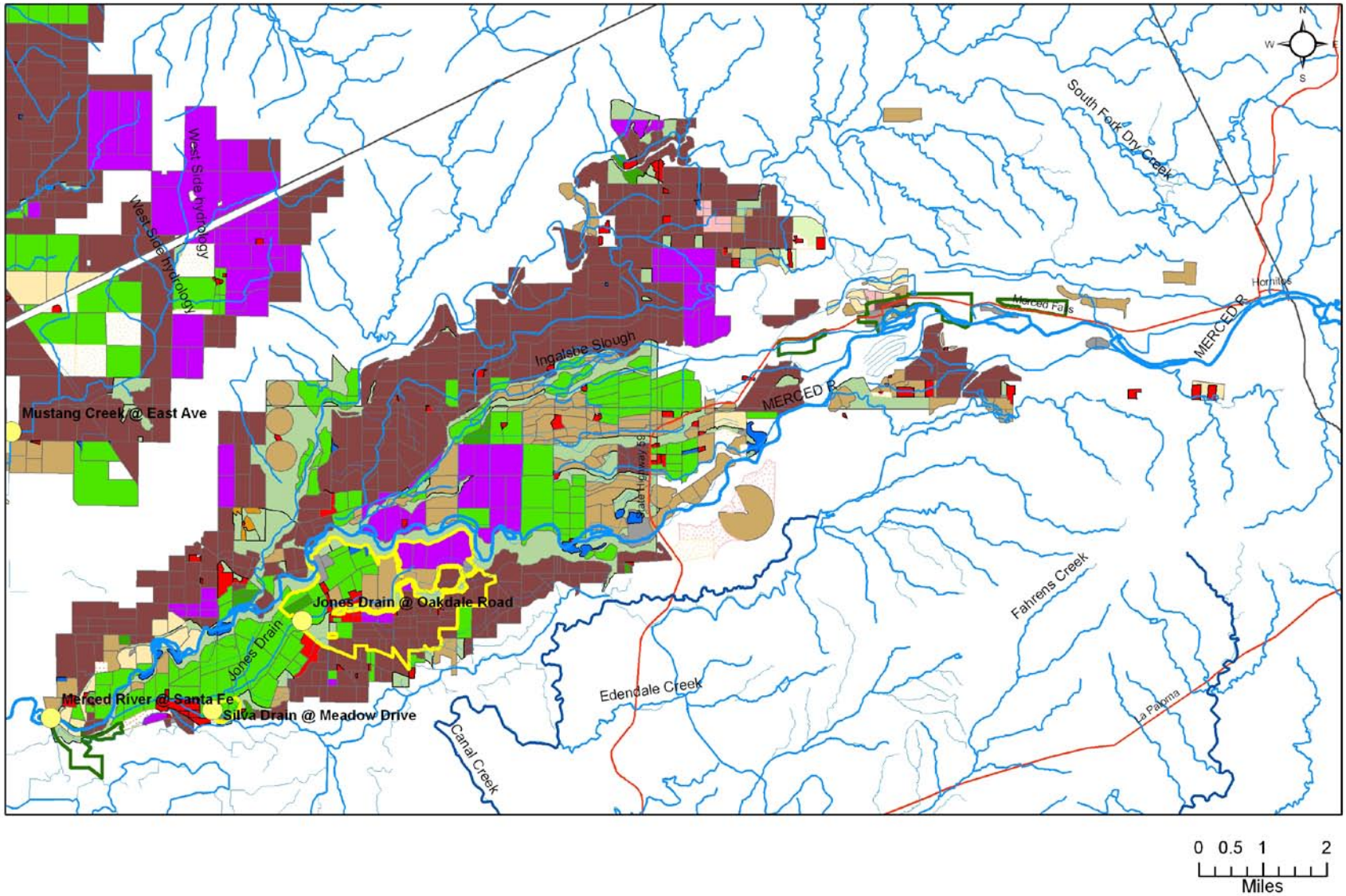


Hilmar Drain at Central Avenue

Date Sampled	Oxygen, Dissolved	pH	Specific Conductivity	Chlorpyrifos (Lorsban)	DDD	E. coli	Total Dissolved Solids	Waterflea toxicity	Algae toxicity	Sediment toxicity	Hardness	Copper
	7 mg/L*	6.5 - 8.5 units*	700 umhos/ cm*	0.015 µg/L*	0.00083 µg/L	235 MPN/ 100mL*	500 µg/L*	based on survival*	based on survival*	based on survival*	µg/L (based on hardness)*	µg/L (based on hardness)*
15-Feb-05			1102			240	740					
22-Mar-05			1157			900	760					
11-May-05			1354			1600	740	toxic		toxic		
19-May-05			1214									
15-Jun-05			855			500	720					
13-Jul-05	6.45		826			1600	600					
16-Aug-05			788			1600	500					
21-Sep-05						430	690			toxic		
1-Mar-06		9.55	1058				670					
16-Mar-06			1215				710					
24-Mar-06			1400									
2-May-06		8.58	794									
18-May-06	6.28					2400						
15-Jun-06	6.8											
13-Jul-06			1096	0.016		2400	610		toxic		230	31
10-Aug-06					0.003	1000						
14-Sep-06			773				510					

*Indicates a State of California Standard

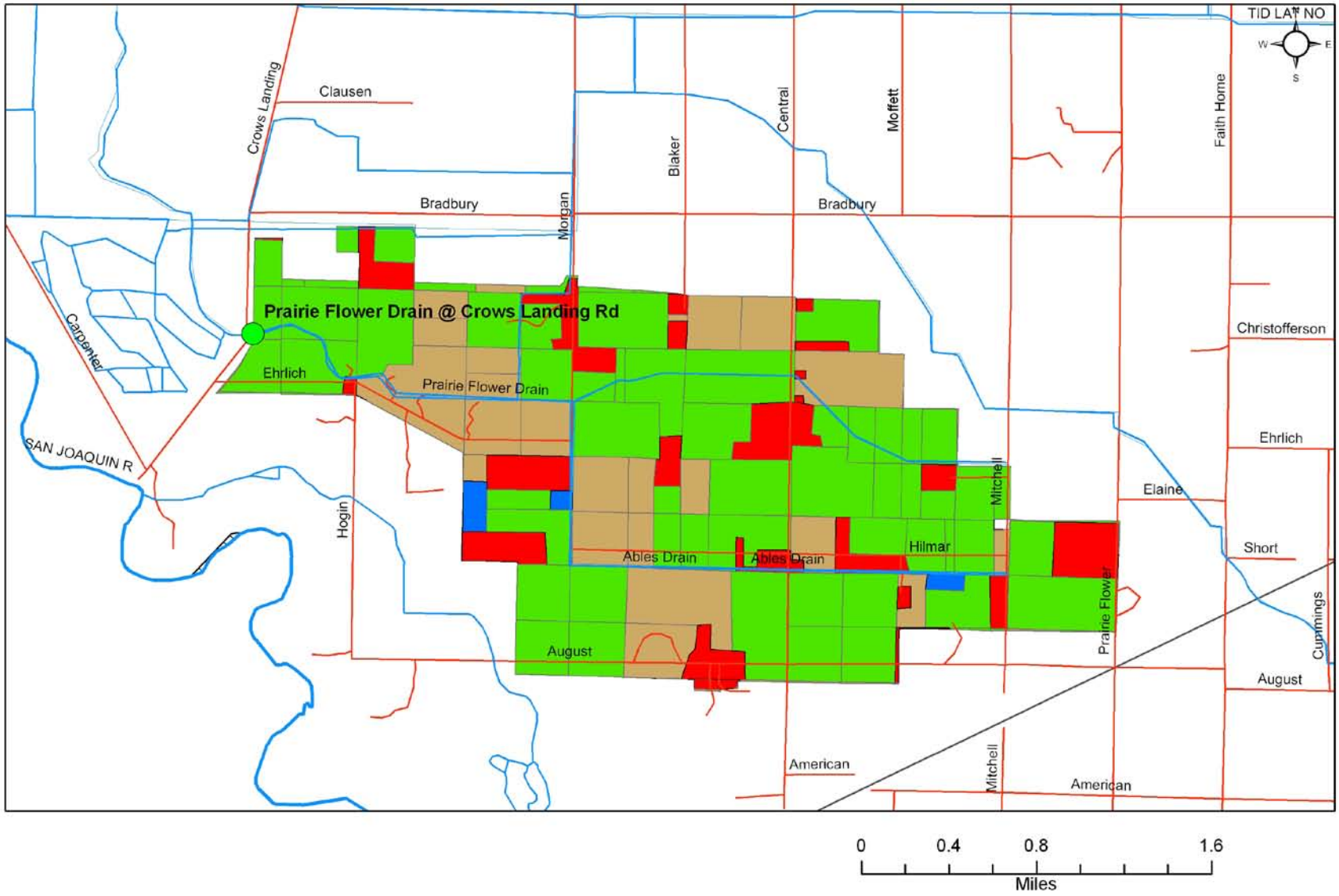
Merced River at Santa Fe



Merced River at Santa Fe					
	Oxygen, Dissolved	pH	E. coli	Waterflea toxicity	Algae toxicity
Date Sampled	7 mg/L*	6.5 - 8.5 units*	235 MPN/ 100mL*	based on survival*	based on survival*
31-Jul-04				toxic	
31-Aug-04				toxic	
16-Feb-05					
21-Mar-05					toxic
11-May-05					
15-Jun-05					
17-Aug-05		6.38			
21-Sep-05					
1-Mar-06			1600		
16-Mar-06				toxic	
14-Jun-06	6.4				
12-Jul-06					
9-Aug-06					
13-Sep-06					

*Indicates a State of California Standard

Prairie Flower Drain at Crows Landing Rd

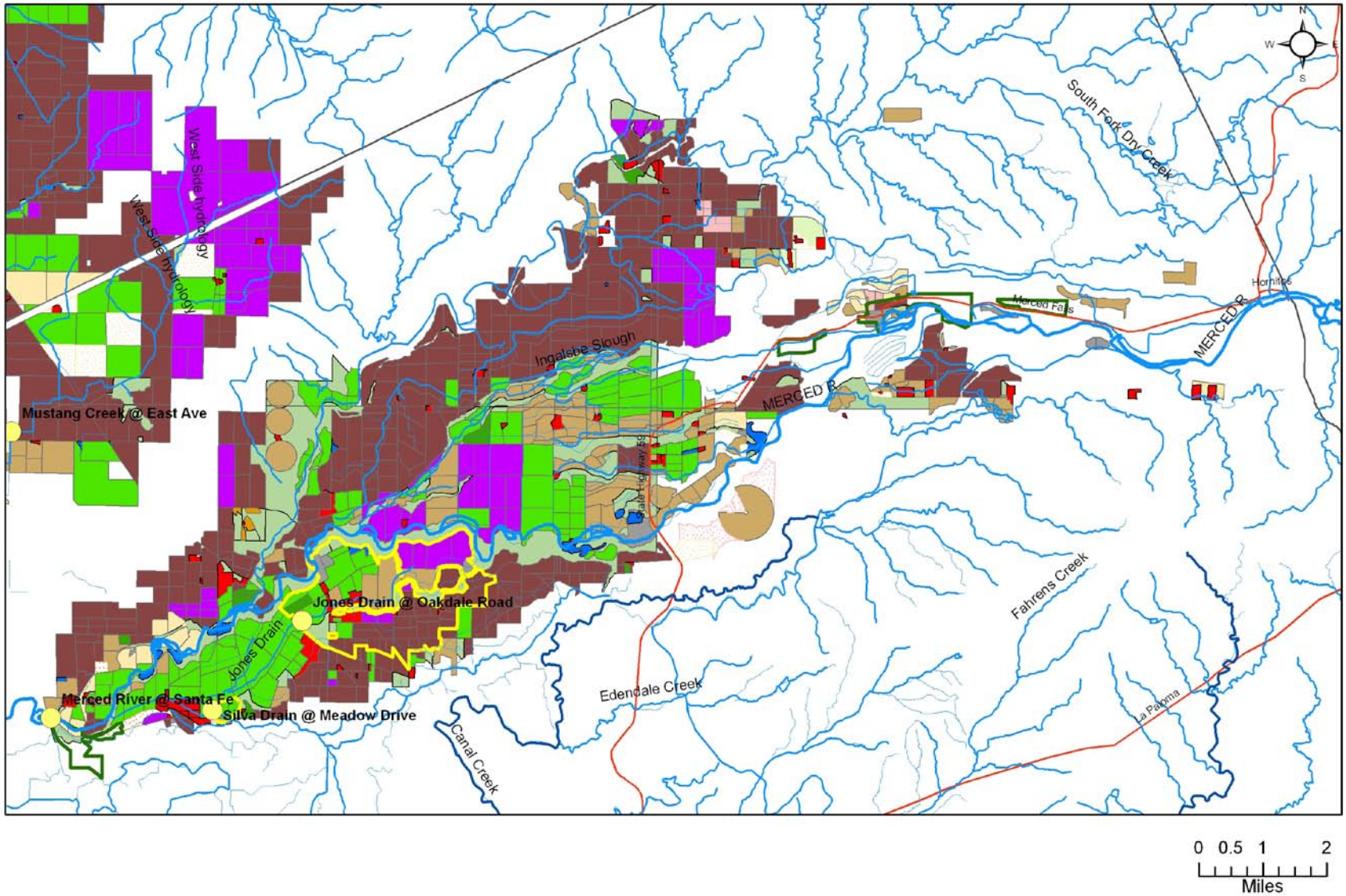


Prairie Flower Drain at Crows Landing Road

Date Sampled	Oxygen, Dissolved 7 mg/L*	pH 6.5 - 8.5 units*	Specific Conductivity 700 umhos/ cm*	Bifenthrin 0.0004 µg/L*	Chlorpyrifos (Lorsban) 0.015 µg/L*	E. coli 235 MPN/ 100mL*	Nitrite as Nitrogen 1 mg/L**	Total Dissolved Solids 500 µg/L*	Waterflea toxicity based on survival*	Fathead minnow toxicity based on survival*	Sediment toxicity based on survival*
15-Feb-05			2561					1600			
22-Mar-05	6.5		2568			1600		1600			
11-May-05			3168			500		1600			
15-Jun-05			1705			300		1300			
13-Jul-05	3.2		1723			1600		1100			toxic
17-Aug-05			1779		0.029	1600		990			
21-Sep-05	5.22		791		0.018	500					toxic
1-Mar-06			2419			900		1600			
16-Mar-06		8.77	2728			300		1600	toxic		
24-Mar-06			2782								
2-May-06			2724								toxic
18-May-06			2958			550		1700			
15-Jun-06			2660			1300		1700			
13-Jul-06	5.45	8.85	1560			790		720		toxic	
20-Jul-06	6.41		1950							toxic	
10-Aug-06			2302	0.037		820	1.1	1800			
14-Sep-06	6.01		1276			2400		760			

*Indicates a State of California Standard

Jones Drain at Oakdale Ave & Silva Drain at Meadow Dr



Jones Drain at Oakdale Road

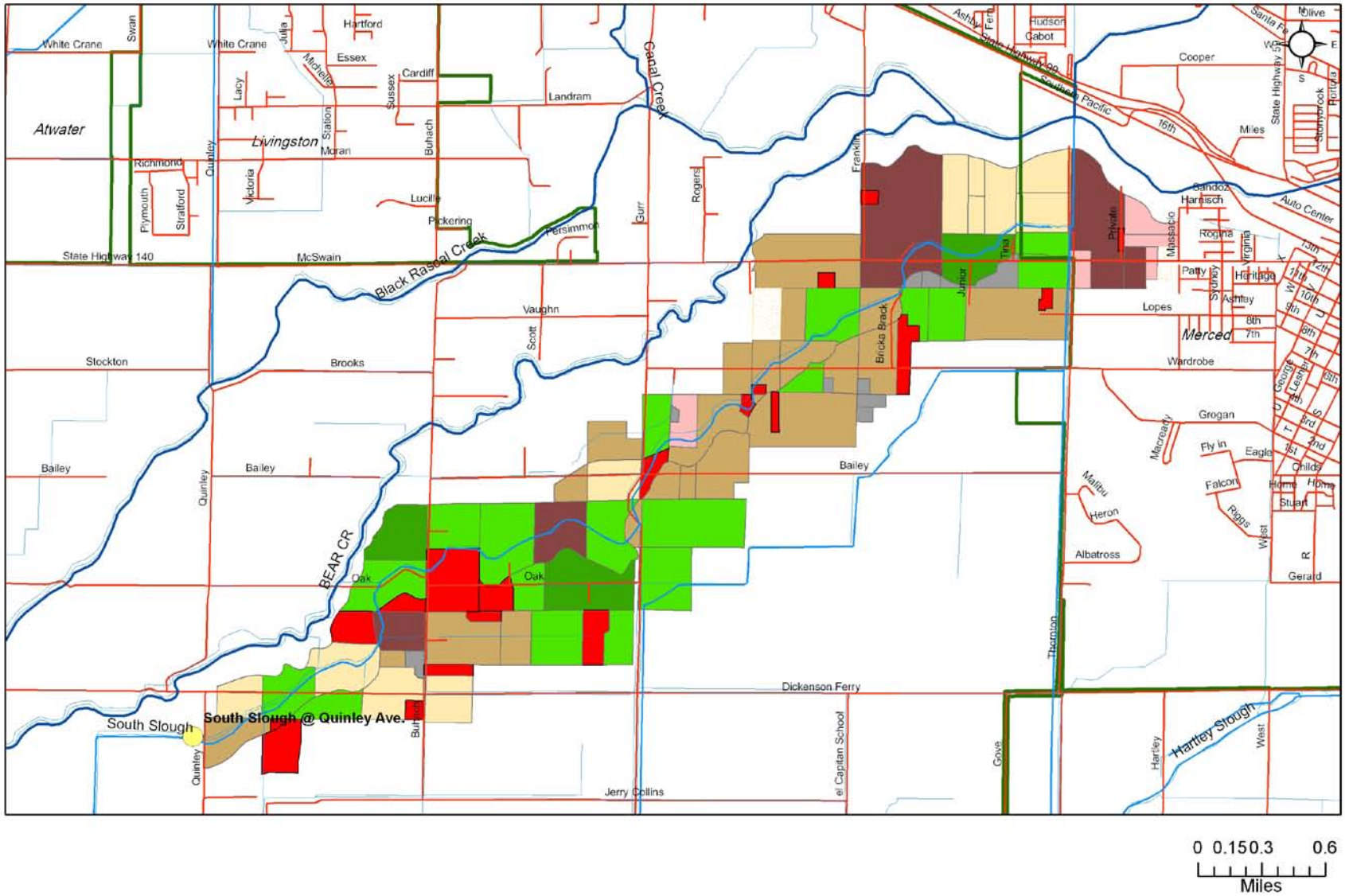
Date Sampled	Oxygen, Dissolved 7 mg/L*	pH 6.5 - 8.5 units*	Chlorpyrifos (Lorsban) 0.015 µg/L*	DDT 0.00059 µg/L*	E. coli 235 MPN/ 100mL*	Waterflea toxicity based on survival*	Algae toxicity based on survival*	Hardness mg/L*	Copper µg/L (based on hardness)*	Lead µg/L (based on hardness)*
16-Feb-05					1600		toxic			
22-Mar-05	4.9	8.58			300					
11-May-05					1600					
15-Jun-05										
12-Jul-05	5.98				1600					
17-Aug-05						toxic				
21-Sep-05	5.9				350					
1-Mar-06					900					
16-Mar-06										
17-May-06	6.8				2400			36	12	2
14-Jun-06					2400			22	2.7	
13-Jul-06	6.52				1300			54	11	
10-Aug-06			0.017		870			42	5.8	
13-Sep-06	6.29		0.018	0.013	2400			40	9.1	1.8

Silva Drain at Meadow Drive

Date Sampled	Oxygen, Dissolved 7 mg/L*	Chlorpyrifos (Lorsban) 0.015 µg/L*	E. coli 235 MPN/100mL*	Waterflea toxicity based on survival*	Sediment toxicity based on survival*
18-May-06			1300		
14-Jun-06					
13-Jul-06	5.75	0.015	690		
9-Aug-06		0.14	460	toxic	toxic
13-Sep-06	5.99		320		

*Indicates a State of California Standard

South Slough at Quinley Rd



South Slough at Quinley Road	
	E. coli
Date Sampled	235 MPN/ 100mL*
11-Jul-06	1200
9-Aug-06	580

*Indicates a State of California Standard