



**La Jolla Band of Luiseno Indians  
CWA 106**

# Topics

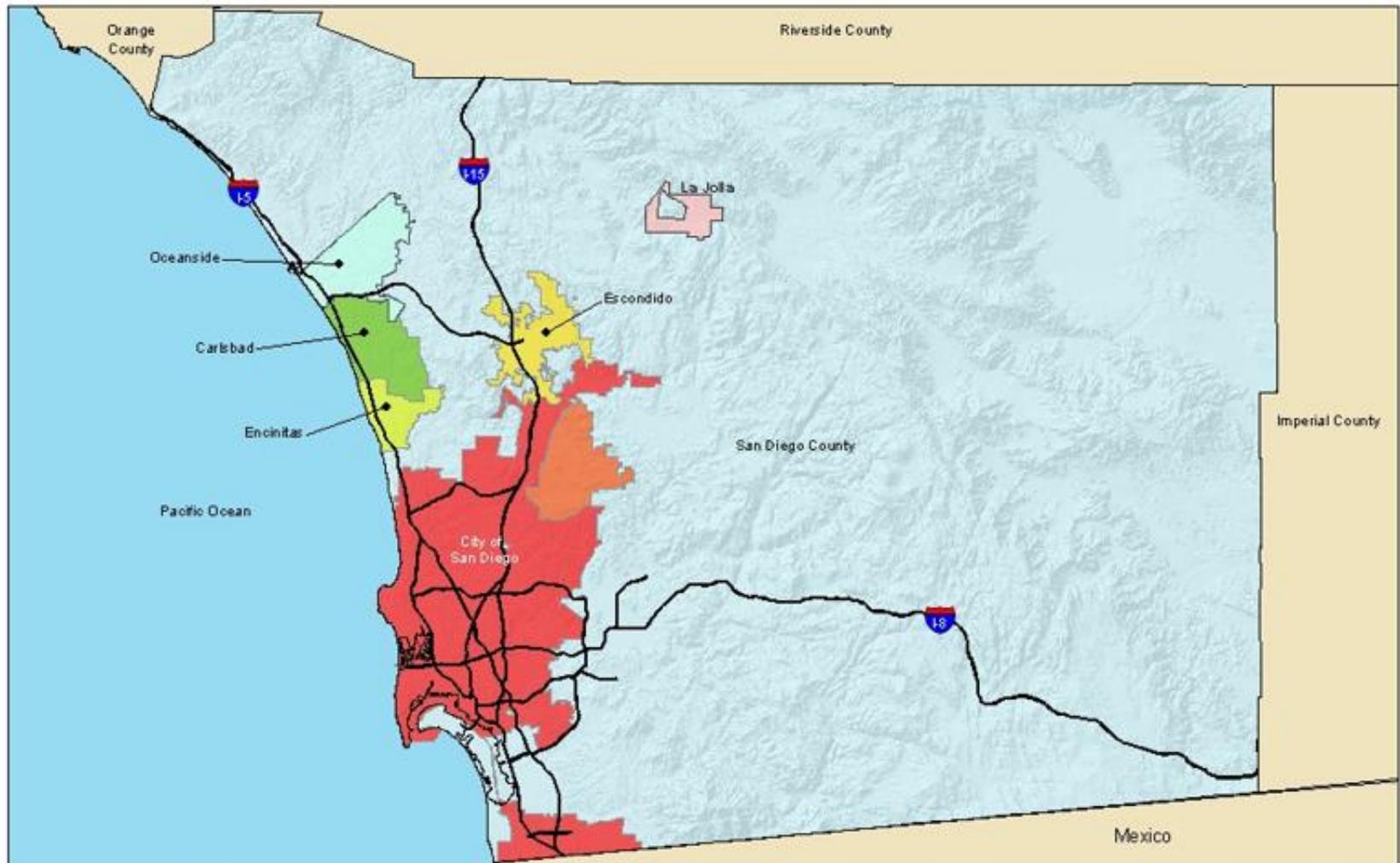
- La Jolla Reservation Watershed
- Program Funding
- Program Tasks & Activities
- Data Management & Reporting
- Outreach & Collaborative Efforts
- So Cal Inter Tribal BMI Stream Team
- Deficiencies

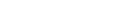
# La Jolla Indian Reservation

- Southern California
- 10,000 acres
- Average rainfall 23-43 inches
- Mountainous terrain, elevation from 800 – 5200 ft
- San Luis Rey River supports only Tribal Enterprise, (seasonal)
- 14 miles of streams and river monitored
- Approximately 30 -38 miles of waterways



# La Jolla Indian Reservation in San Diego County, California



- |  |  |
|--|--|
|  La Jolla Reservation |  Escondido          |
| <b>San Diego Cities</b>  |  |
| <b>Name</b>  |  Oceanside          |
|  Carlsbad             |  Poway              |
|  Encinitas            |  San Diego          |
|  |  San Diego Freeways |



This map was prepared by the California Department of Transportation (Caltrans) for the purpose of providing information to the public. It is not intended to be used as a legal document. For more information, please contact Caltrans at (916) 947-3400.

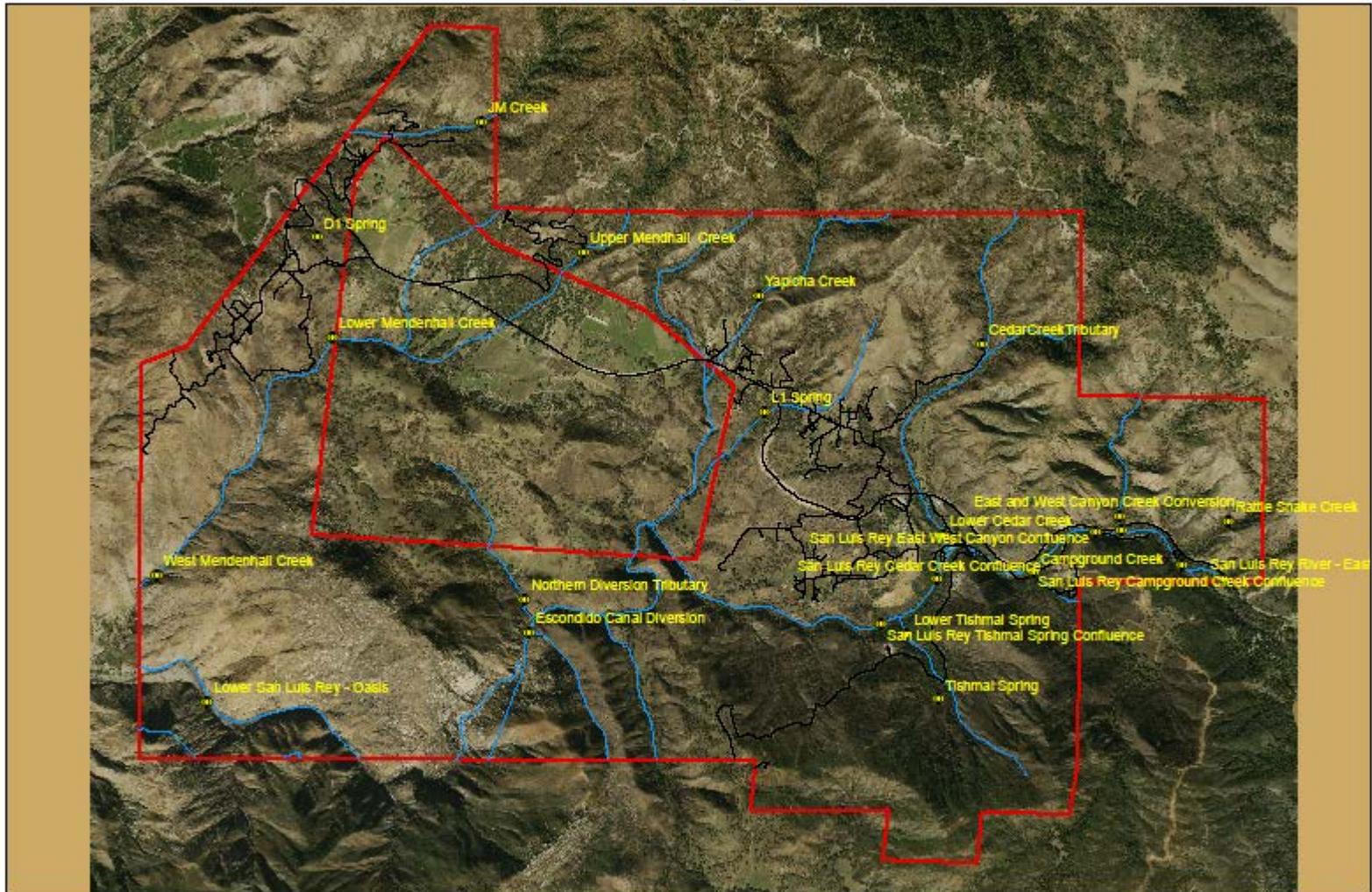








# 106 Sampling Sites



● 106 Sample Sites — Roads — Streams □ La Jolla Boundary

0 0.25 0.5 1 Miles





# CWA 106 Program Funding

- USEPA CWA 106 Funding
- 2011 PPG with NPS
- Native Environmental Protection Coalition (NAEPC)
- USEPA GAP / 319 NPS can assist with minimal activities to support CWA 106
- PPG can open up for funding to be shared amongst programs

# CWA 106 Program Funding

- Tribal match can be comprised of in kind services. In Kind can be Tribal Council Meetings, internet, office rental, water services, donations, volunteers,
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# CWA 106 Program Budget

- Salary / Fringe
- Indirect
- Supplies
- Lab Supplies
- Outreach
- Travel
- Mileage
- Training
- Monitoring
- Equipment
- Instrument maintenance
- Consumables
- Office / internet / utilities / phone
- Audit
- Building / Vehicle R&M

# CWA 106 Program Tasks

- Consider amount of funds to support the tasks
- Consider completing documents in another Program, (GAP / NPS / SWAP )
- Create tasks that can be accomplished, some tasks may be on going for more than one FY
- Water monitoring
- Data management
- Training
- Reporting

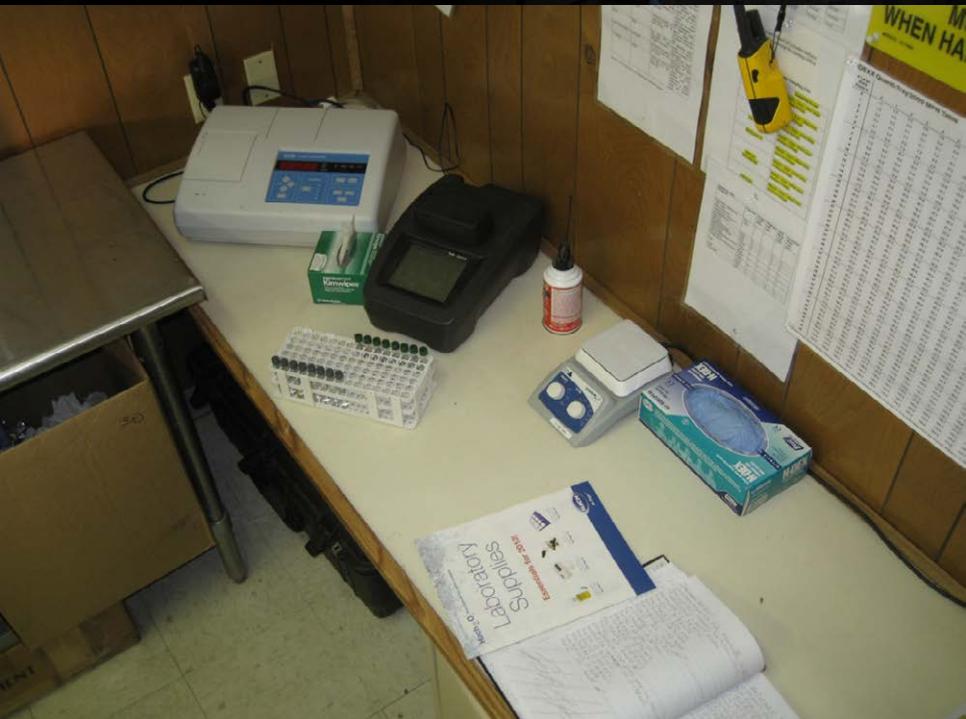
# CWA 106 Program Activities

- CWA 106 Water Pollution Control Program (WPCP) for 10 years
- Training
- Equipment
- Acquiring baseline data
- Tribal Lab established 2010
- Conduct data reports in WQX format
- Completed USEPA Approved Quality Assurance Project Plan (QAPP)
- Annual Water Quality Assessment Report (WQAR) for USEPA
- Established collaborative Inter Tribal Benthic Macroinvertebrate (BMI) Stream Team















### On Reservation

	Total	Monitored
STREAM MILES:	36	15.2
LAKE AND RESERVOIR ACRES:	0	0
WETLAND ACRES:	20.6+	0
ESTUARY OR COASTAL WATER SQUARE MILES:	N/A	N/A
NUMBER OF SPRINGS:	3	2
NUMBER OF GROUNDWATER MONITORING WELLS (optional):	(Type number here)	(Type number here)

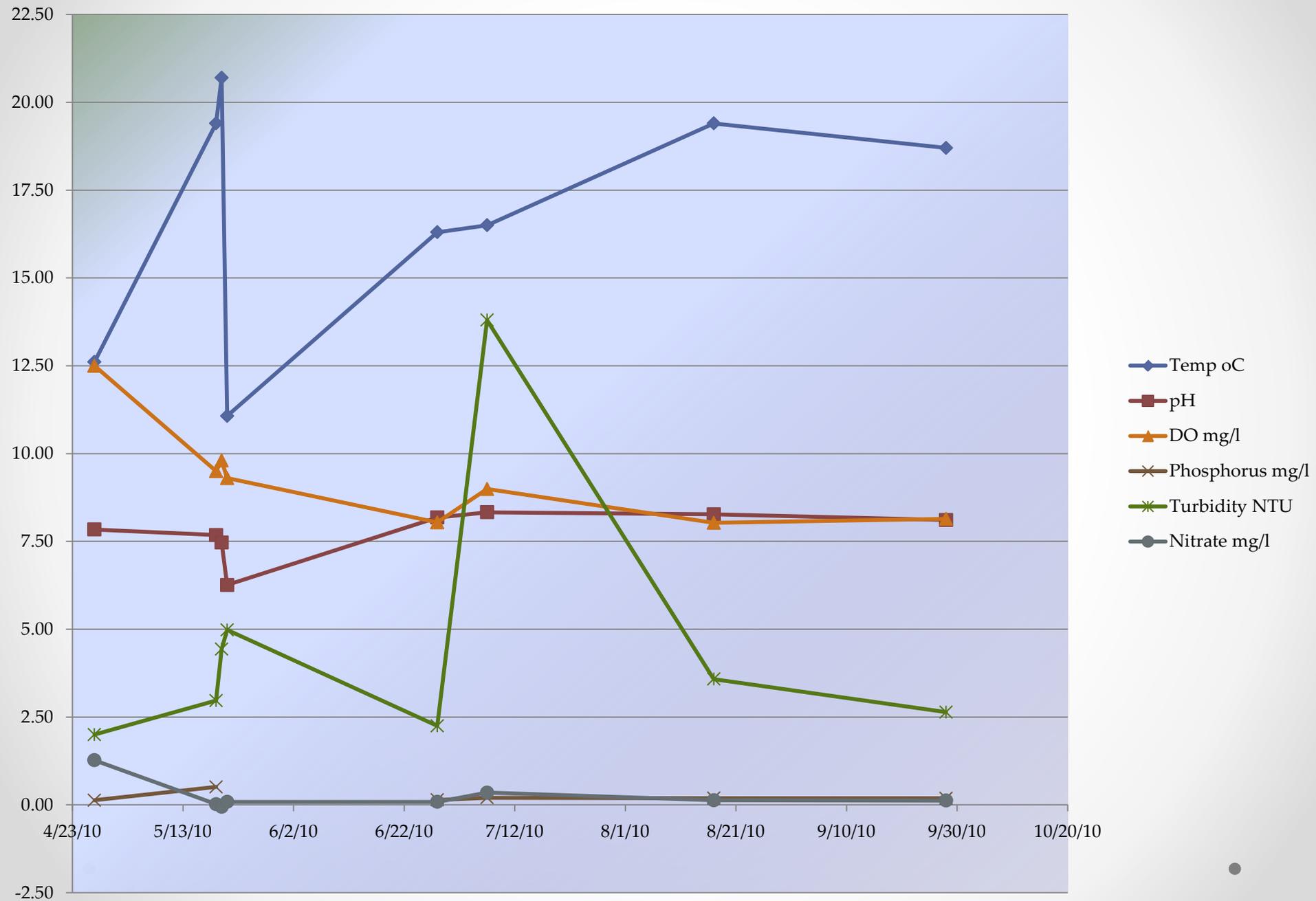
SWUSLR	SWUSLR FIELD 08/17/2010	Field Msr/Obs	Water	2010-08-17	09:47:00
SWEWCC	SWEWCC FIELD 08/17/2010	Field Msr/Obs	Water	2010-08-17	10:42:00
SWSLREWCCC	SWSLREWCCC FIELD / / 2010	Field Msr/Obs	Water		
SWSLRCGC	SWSLRCGC FIELD / / 2010	Field Msr/Obs	Water		
SWCGC	SWCGC FIELD 08 /17 / 2010	Field Msr/Obs	Water	2010-08-17	11:06:00
SWSLRTSC	SWSLRTSC FIELD / /2010	Field Msr/Obs	Water		
LJLTS	LJLTS FIELD / / 2010	Field Msr/Obs	Water		
LJUTS	LJUTS FIELD 00/00/2010	Field Msr/Obs	Water		
SWSLRRV	SWSLRRV FIELD / / 2010	Field Msr/Obs	Water		
LJSL1	LJSL1 FIELD //2010	Field Msr/Obs	Water		
SWYC	SWYC FIELD 08/16/2010	Field Msr/Obs	Water	2010-08-16	13:07:00
SWRC	SWRC FIELD 08/17/2010	Field Msr/Obs	Water	2010-08-17	10:16:00
SWSLRRCCC	SWSLRRCCC FIELD / / 2010	Field Msr/Obs	Water		
SWCC	SWCC FIELD 08/17/2010	Field Msr/Obs	Water	2010-08-17	12:05:00
SWLCC	SWLCC FIELD 08/17/ 2010	Field Msr/Obs	Water	2010-08-17	11:28:00
SWSLRCCC	SWSLRCCC FIELD 08 / 17 / 2010	Field Msr/Obs	Water	2010-08-17	11:35:00
LJSD1	LJSD1 FIELD	Field Msr/Obs	Water		
SWUM	SWUM FIELD 08/16/2010	Field Msr/Obs	Water	2010-08-16	12:40:00
SWLM	SWLM FIELD 08/16/2010	Field Msr/Obs	Water	2010-08-16	10:23:00
SWWM	SWWM FIELD / / 2010	Field Msr/Obs	Water		
SWJM	SWJM FIELD 08/16/2010	Field Msr/Obs	Water	2010-08-16	10:59:00
SWNDT	SWNDT FIELD / / 2010	Field Msr/Obs	Water		
SWK	SWK FIELD 08/18/2010	Field Msr/Obs	Water	2010-08-18	12:27:00
SWSLRO	SWSLRO FIELD 08/18/2010	Field Msr/Obs	Water	2010-08-18	10:38:00

Turbidity	21.9	NTU
Turbidity	3.93	NTU
Turbidity		NTU
Turbidity		NTU
Turbidity	0.142	NTU
Turbidity		NTU
Turbidity	0.662	NTU
Turbidity	1.86	NTU
Turbidity		NTU
Turbidity	3.58	NTU
Turbidity	3.59	NTU
Turbidity	26.2	NTU
Turbidity		NTU
Turbidity	0.94	NTU
Turbidity	0.62	NTU
Turbidity		NTU
Turbidity	0.94	NTU
Turbidity		NTU
Turbidity	51.2	NTU
Turbidity	6.81	NTU

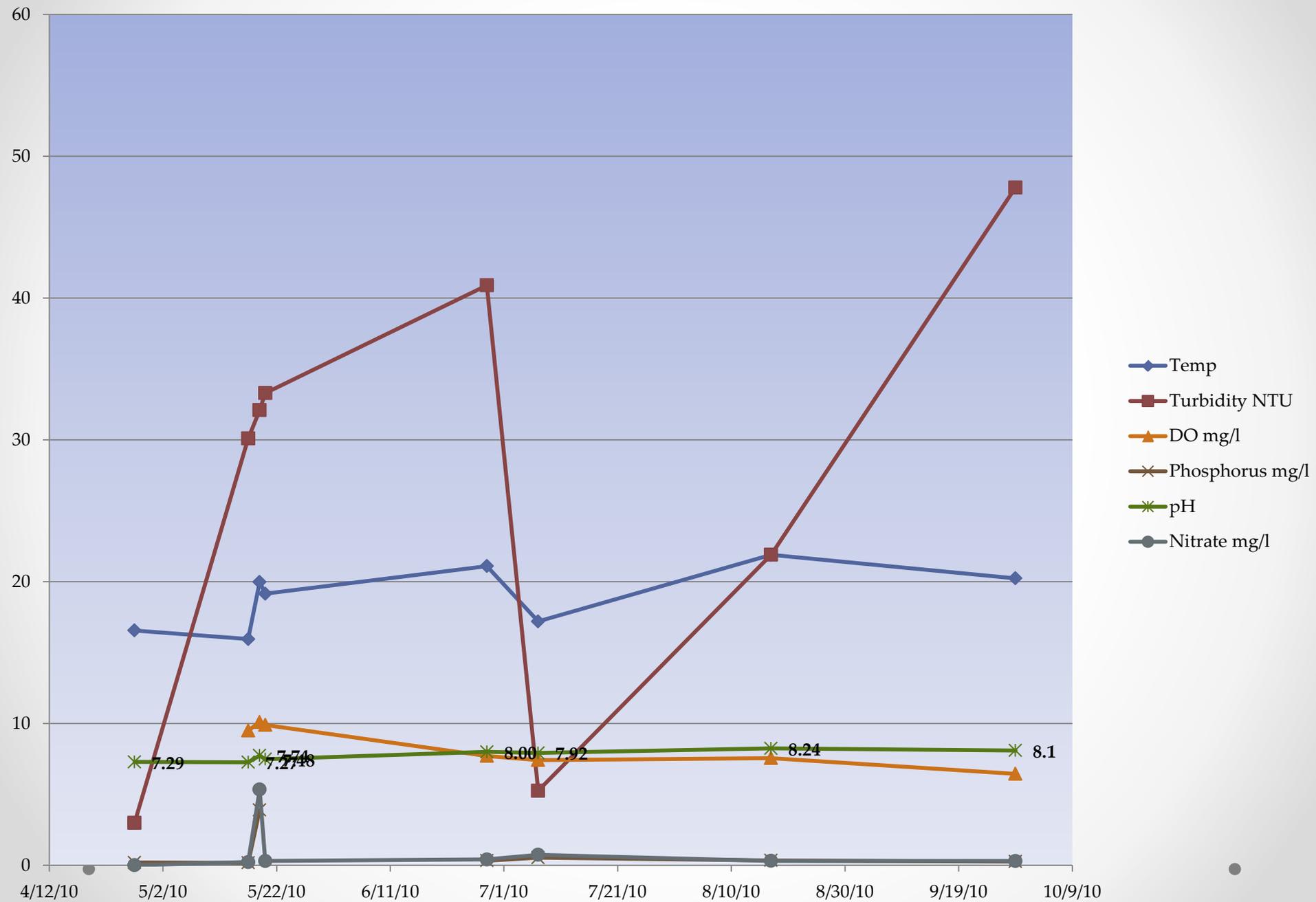
Waterbody Name/Identifier	Waterbody Type	Monitoring Station Located On Reservation	Monitoring Station ID (WQX)	Distance or Area Monitored or Assessed	Unit of Measure	Frequency of Monitoring	Parameters Monitored	Tribal Goal or Designated Use for this Waterbody		
San Luis Rey Watershed	River/Stream Perennial	Yes	SWUSLR	7.0	miles (mi)	Monthly	pH	Choose...		
							Temperature	Yes	Primary Contact	Yes
							Dissolved Oxygen	Yes	Secondary Contact	Yes
							Turbidity	Yes	Cultural Use	Yes
							Total Phosphorus	Yes	Drinking Water	N/A
							Total Nitrogen	Yes	Fish/Shellfish Safe To Eat	N/A
							E. coli	Yes	Agricultural Irrigation	No
							Enterococci	No	Aquatic Life and Wildlife	Yes
							Macroinvertebrates	No	Livestock Watering	Yes
							Basic Habitat	No	Rare And Endangered Species	N/A
							(Additional parameter)	Choose...	Groundwater Recharge	Yes
							(Additional parameter)	Choose...	(Fill in any additional uses)	Choose...
							(Additional parameter)	Choose...	(Fill in any additional uses)	Choose...
							(Additional parameter)	Choose...	(Fill in any additional uses)	Choose...
							(Additional parameter)	Choose...	(Fill in any additional uses)	Choose...

Impaired Parameters		Impaired Tribal Goals/Designated Uses		Source(s) of Impairment	Impairment Status	Watershed restoration project at this monitoring station	Additional Comments
pH	No		Choose...	1) Upstream Sources	Seasonal Impairment	No	When Lake Henshaw releases water into the San Luis Rey River at Request of Vista Irrigation District water quality is degraded. The Lake is upgradient of The La Jolla Indian Reservation. Lake Henshaw is shallow and turnover occurs daily when wind blows or temperature changes.
Temperature	Yes	Primary Contact	Yes				
Dissolved Oxygen	No	Secondary Contact	Yes				
Turbidity	Yes	Cultural Use	Yes				
Total Phosphorus	Choose...		Choose...				
Total Nitrogen	Choose...		Choose...				
E. Coli	Yes		Yes	2) Nonpoint Source	Seasonal Impairment		
	Choose...	Aquatic Life and Wildlife	No				
	Choose...	Livestock Watering	No				
	Choose...		Choose...	3) Choose...	Choose...		
	Choose...	Groundwater Recharge	Choose...				
	Choose...		Choose...				
	Choose...		Choose...				
	Choose...		Choose...				

# Cedar Creek



# Upper San Luis Rey Boundary



# Field Sheets / log book



La Jolla Band of Luiseño Indians  
Environmental Protection Office

Site ID	
Date / Time	
Field Technicians	
Site Description	
Field Instruments	
Sample Collection Time	
Weather Description	
Date Most Recent Precipitation	

## FIELD PARAMETERS

Ph	TEMP
DO (mg/l)	DO (%)
Conductivity	TDS
Ammonia (mg/l)	Nitrate (mg/l)
Bp	Elevation
Wind Speed	Ambient Temp
Wet Length	Wet Width
Water Depth	Water Flow

## LAB PARAMETERS

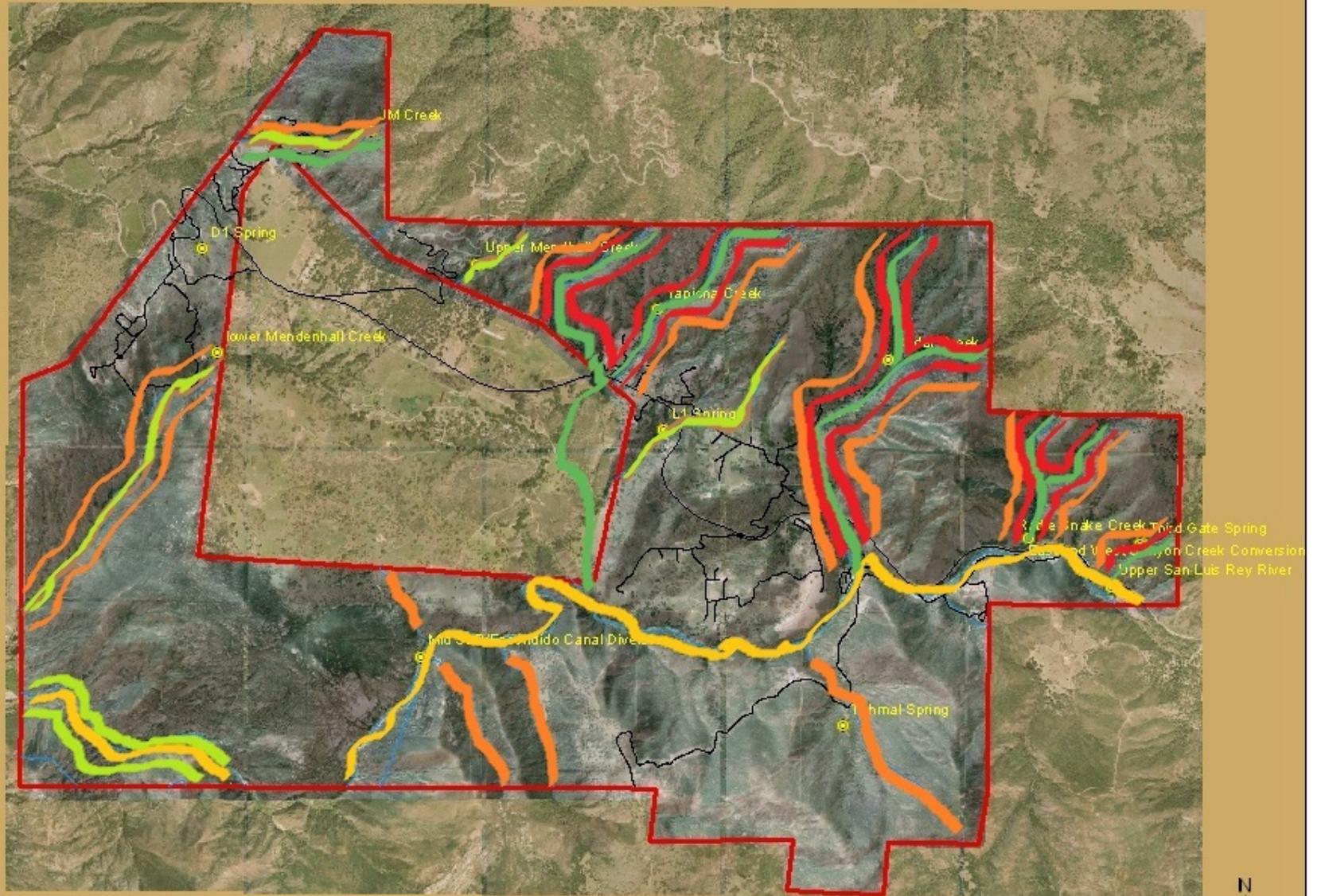
PARAMETER	RESULT	ANALYSIS TIME	INSTRUMENT
Turbidity NTU;s			HACH 2100N Turbidimeter
Nitrate mg/l			HACH DR2800
Phosphorus mg/l			HACH DR2800
Total Coliform MPN			Colilert
Fecal Coliform MPN			Colilert

## RIPARIAN DESCRIPTION:

## COMMENTS:

## SITE PHOTOS:

# 106 Sampling Sites



106 Sample Sites — Roads — Streams — La Jolla Boundary

0 0.25 0.5 1 Miles



COLOR CODE rec1/2 gold; industrial service red; muni / gw recharge / fresh replen lime green; wildlife / endangered orange; agriculture green

# So Cal Inter Tribal BMI Stream Team

- Inter Tribal Collaborative Team of 6 Tribes
- Established August 11, 2010
- Training according to Source Water Ambient Monitoring Protocol, (SWAMP)
- On site trainings at various reservations
- Staff collected first sample in April on reservation





# Jamul Indian Village



# Rincon La Jolla Oasis



# Rincon La Jolla Oasis



# Reach Identification

**Transects Red**



**Inter Transects Blue**



# BMI Sample Collection

Rock / Cobble Cleaning



Rock / Cobble Cleaning



# Transects Assessments

Transect Substrate



Transect Substrate



# Riparian Vegetation

Trees and Saplings >5m High



All Vegetation



# Riparian Vegetation

Woody Shrubs & Saplings <5m



Barren Soil / Duff



# Riparian Vegetation

**Herbs & Grasses**



**Bare Soil & Duff**



# Instream Habitat Complexity

**Boulders, Woody Debris**



**Algae, Macrophytes**



# Instream Habitat Complexity

## Overhanging Vegetation



## Undercut Banks



# Densimeter Readings

Canopy



Canopy



# Human Influence

Walls, Rip Rap, Pipes



Road, Pasture, Mining



# Bank Stability

Vulnerable Eroded



Stable



# Flow Habitats

**Rapid, Cascade Falls**



**Riffle**



# Flow Habitats

Run



Glide



# Flow Habitats

**Pool**



**Dry**



# Pebble Counts



# Flow Measurements



# Slope Determination



# Slope Determination



# Training Video's



# USEPA Approved QAPP

March 3, 2011

Mr. John Parada, CWA-106 Program Manager  
La Jolla Band of Luiseno Indians  
22000 Highway 76  
Pauma Valley, California 92061

SUBJECT: Response-to-Comments Letter and Revised Quality Assurance Project Plan for La Jolla Band of Luiseno Indians CWA 106 Surface Water Quality Monitoring and Assessment (QA Office database document control number: WATR0725QV3)

Dear Mr. Parada:

A response-to-comments letter (RTC) and revised Quality Assurance Project Plan (QAPP) for La Jolla Band of Luiseno Indians CWA 106 Surface Water Quality Monitoring and Assessment, received in the QA Office on March 2, 2011, have been reviewed. The documents were reviewed against a QA Office letter dated December 28, 2010. The review was based on guidance provided in "EPA Requirements for Quality Assurance Project Plans," (EPA QA/R-5, March 2001) and "EPA Guidance for Quality Assurance Project Plans," (EPA QA/G-5, December 2002).

All remaining concerns have been addressed (see the attached RTC). The QAPP, which was conditionally approved in the December 28, 2010 letter, is now fully approved. EPA signatures will be obtained on the plan's title/approval page and the page will be returned to La Jolla Band CWA-106 Program.

Questions and comments concerning this review can be directed to Mark Kutnink, US EPA Region 9 Quality Assurance Office, (415) 972-3801, [kutnink.mark@epa.gov](mailto:kutnink.mark@epa.gov)

Sincerely,

Eugenia McNaughton, Ph.D.  
Quality Assurance Program Manager

Attachment

cc: Christopher Chen, WTR-10

LIBI CWA 106SWQMA0010V3QAP

1

final WATR0725QV3



Approved By:

EPA Project Officer:	<u><i>Christopher Chen</i></u>	<u>3/16/11</u>
	(Signature)	(Date)
EPA QA/QC Manager:	<u><i>Eugenia McNaughton</i></u>	<u>3/16/11</u>
	(Signature)	(Date)
La Jolla Program QA Manager:	_____	_____
	(Signature)	(Date)
La Jolla Program Manager:	<u><i>John Parada</i></u>	<u>4/29/11</u>
	(Signature)	(Date)

2

# CWA 106 Program Deficiencies

- Staff turnover
- Insufficient amount of legally valid, and baseline data
- Insufficient funding to conduct adequate monitoring
- Identified water quality concerns cannot be confirmed due to lack of funding
- Equipment unavailable to conduct analysis adequately for coliform

**John C. Parada**  
**La Jolla Band of**  
**Luiseno Indians**  
**CWA 106 / CAA 103**  
**Program Manager**  
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**760 742 3790 xt405**  
**john.parada@lajolla-**  
**nsn.gov**

