



Santa Ynez Band of Chumash Indians Environmental Office



Water Quality Data Reporting and Management:

Our STORET / WebSIM Experience

Presented By:

Jesse Patterson – Environmental Management Specialist

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Today's Presentation: Outline

- Overview of our Water Quality Monitoring Program
- Understanding Data from the Lab
- Getting the Info You Need from the Lab
- Resource Needs for Using STORET / WebSIM
- Suggestions for Using STORET / WebSIM
- Questions?

Zanja De Cota Creek WQMP



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- Funded with CWA 106 Grant
- Contracted Tetra Tech, Inc.
 - Non-point Source Assessment
 - Non-point Source Management Plan
 - Water Quality Control Plan
- First Flush Samples (8 sites) Jan. 2005
- Monthly Monitoring Plan (4 sites) Dec 05 – Sept 06
- Field Samples
 - pH, turbidity, temp, DO, SC
- Lab Samples
 - organic / chemical constituents, bacteria





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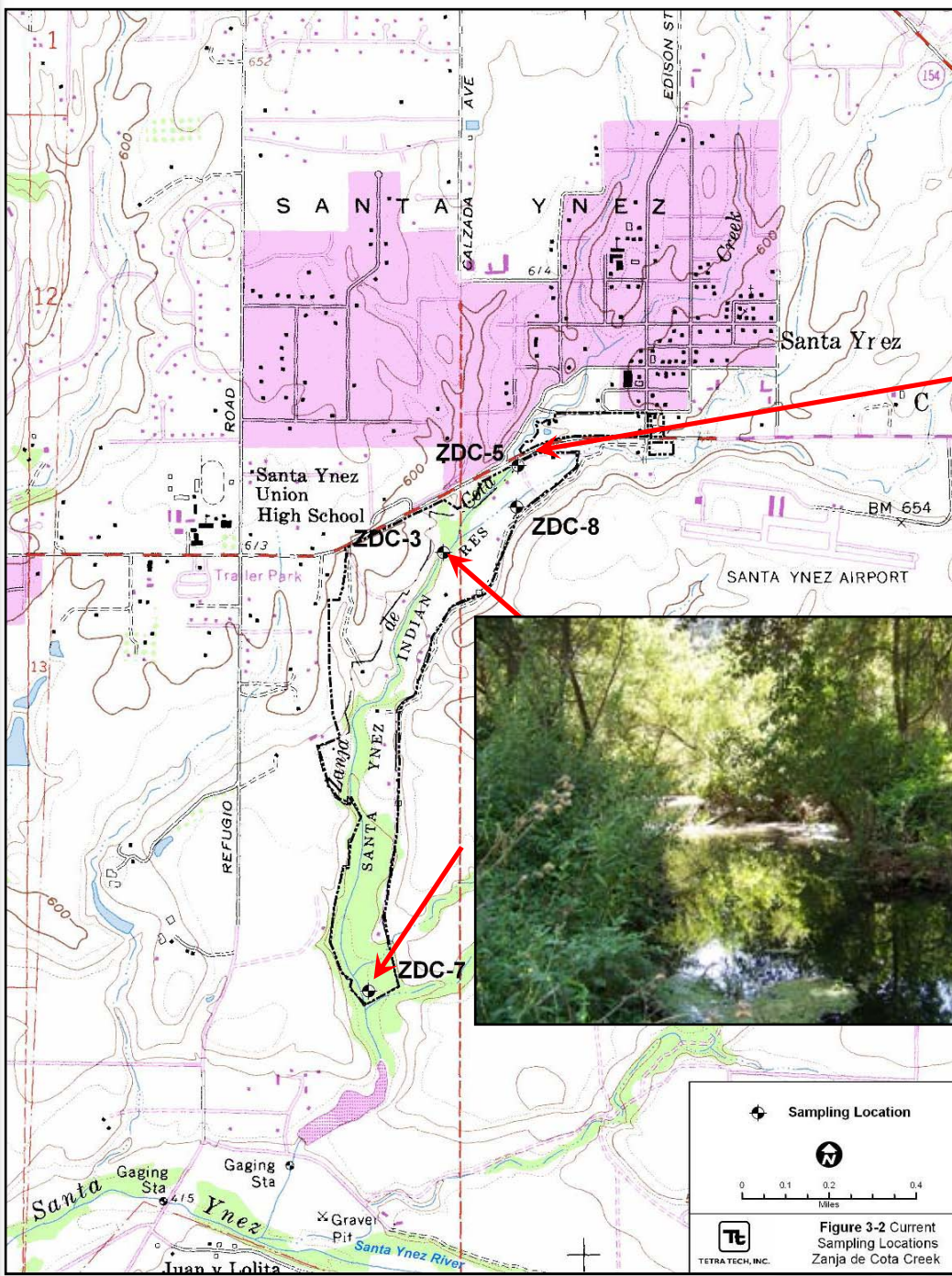


Figure 3-2 Current Sampling Locations Zanja de Cota Creek

Understanding Data from the Lab



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STORET Field

- Station ID
- Medium
- Activity Start Date
- Characteristic Name
- Result Value
- Result Value Units
- Field/Lab Procedure
- Field/Lab Procedure Source
- Analysis Date
- Detection Limit
- Detection Limit Unit
- Sample Fraction (not reported)

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analytical
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Cal science
Environmental
Laboratories, Inc.

Analytical Report

Tetra Tech, Inc.
3201 Airpark Drive, Suite 108
Santa Maria, CA 93455-1834

Date Received: 09/06/06
Work Order No: 06-09-0153
Preparation: EPA 3010A Total / EPA 7470A Total
Method: EPA 6010B / EPA 7470A
Units: mg/L

Project: Chumash Indian Reservation 14562-056

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID			
ZDC-3	06-09-0153-1	09/05/06	Aqueous	09/07/06	09/11/06	060907L07			
Comment(s): -Mercury was analyzed on 9/6/2006 6:28:31 PM with batch 060906L04									
Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Cadmium	ND	0.00500	1		Nickel	ND	0.00500	1	
Chromium	0.0200	0.0050	1		Zinc	ND	0.0100	1	
Copper	ND	0.00500	1		Sodium	46.9	0.5	1	
Lead	ND	0.0100	1		Boron	0.178	0.020	1	
Mercury	ND	0.000500	1						
ZDC-5	06-09-0153-2	09/05/06	Aqueous	09/07/06	09/11/06	060907L07			
Comment(s): -Mercury was analyzed on 9/6/2006 6:28:47 PM with batch 060906L04									
Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Cadmium	ND	0.00500	1		Nickel	ND	0.00500	1	
Chromium	0.0213	0.0050	1		Zinc	ND	0.0100	1	
Copper	ND	0.00500	1		Sodium	40.4	0.5	1	
Lead	ND	0.0100	1		Boron	0.169	0.020	1	
Mercury	ND	0.000500	1						
ZDC-7	06-09-0153-3	09/05/06	Aqueous	09/07/06	09/11/06	060907L07			
Comment(s): -Mercury was analyzed on 9/6/2006 6:31:04 PM with batch 060906L04									
Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Cadmium	ND	0.00500	1		Nickel	ND	0.00500	1	
Chromium	0.0148	0.0050	1		Zinc	ND	0.0100	1	
Copper	ND	0.00500	1		Sodium	54.5	0.5	1	
Lead	ND	0.0100	1		Boron	0.183	0.020	1	
Mercury	ND	0.000500	1						
ZDC-00	06-09-0153-4	09/05/06	Aqueous	09/07/06	09/11/06	060907L07			
Comment(s): -Mercury was analyzed on 9/6/2006 6:33:17 PM with batch 060906L04									
Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Cadmium	ND	0.00500	1		Mercury	ND	0.000500	1	
Chromium	0.0140	0.0050	1		Nickel	ND	0.00500	1	
Copper	ND	0.00500	1		Zinc	ND	0.0100	1	
Lead	ND	0.0100	1						
Method Blank 099-04-008-2,638 N/A Aqueous 09/06/06 09/06/06 060906L04									
Parameter	Result	RL	DF	Qual					
Mercury	ND	0.000500	1						

RL - Reporting Limit DF - Dilution Factor Qual - Qualifiers

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Resource Needs

1 Year of Data (monthly sampling) for 3 sites

- Acquiring and organizing lab data
 - 1 person, (6 - 8 hours)
- Data entry into STORET template
 - **2 people**, (16 hours)
 - (Most time-consuming part → looking up entries)
- Reviewing and editing STORET template
 - **2 people**, (2-3 hours)
- Uploading data using WebSIM (without errors)
 - 1 person, (30 min - 1 hour)
- Uploading data using WebSIM (with errors)
 - 1 person and the EPA Help Desk, (1 - 48 hours)



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Suggestions for Using STORET / WebSIM



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- “Drag and Fill” feature in Excel
- “Find” feature in Excel (cut and paste)
- Date and time formats (mm/dd/yyyy)
 - Leading 0 must be present
- Use 2 people for data entry and checking
 - Paper → spreadsheet , Spreadsheet page →
- Tribal Education Program
- Interns
 - Local Universities, City Colleges, or High Schools
 - Familiar with Excel



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Questions?

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