

ARIZONA VOLUNTEER MONITORING PROGRAM

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Nonpoint Sources of Polluted Runoff

Dissolved oxygen

Fecal coliform

Nutrients

Turbidity

Nitrogen

Phosphorus



Watershed Planning

The Vision:

Arizona's water bodies meet water quality standards & are safe enough for basic uses such as swimming or fishing

The Key:



Water Quality Improvement Plans

The Strategy:

- TMDL implementation plans for impaired waters
- Watershed plans to protect and restore watersheds

The Assessment

Assessment

April 1, 2004

Due to EPA - 5

November



Public Process - 4

September



Internal Review - 3

March – July



Review Data - 2

1998-2002

Water Quality Monitoring - 1

*Arizona's Integrated
305(b) Water Quality
Assessment & 303(d)
Listing Report*



Arizona's Integrated 305(b) Water Quality Assessment & 303(d) Listing Report

- **Surface and ground water quality in Arizona**
- **Based on numeric or narrative standards**
- **Possible causes and sources of impairment**
- **Identify and prioritize TMDLs**

ADEQ VOLUNTEER MONITORING PROGRAM

VOLUNTEER GROUPS CAN:

- MONITOR THE CONDITIONS OF STREAMS, RIVERS, ETC.
- MEASURE PHYSICAL AND CHEMICAL CHARACTERISTICS OF WATERS
- CLEANUP GARBAGE-STREWN WATERS
- HELP RESTORE DEGRADED HABITATS

VOLUNTEERS WILL:

- COLLECT WATER QUALITY DATA
- SUPPLEMENT DATA COLLECTED BY ADEQ

VOLUNTEER DATA CAN BE USED BY ADEQ TO:

- SCREENING PURPOSES
- FURTHER RESEARCH OR RESTORATION
- ESTABLISH BASELINE CONDITIONS OR TRENDS
- EVALUATE SUCCESS OF BMPs FOR MITIGATION



ADEQ COORDINATION WITH VOLUNTEER GROUPS

- **CREDIBLE AND DEFENSIBLE WQ DATA**
 - **STATE LEGISLATURE MANDATE**
- **ASSIST IN DEVELOPING STRONG QAPPS**
- **ASSIST IN DEVELOPING SAMPLE AND ANALYSIS PLANS**
- **SHARE FIELD EQUIPMENT**
- **PROVIDE REQUIRED TRAINING**



VOLUNTEER GROUPS IN ARIZONA

- **The Nature Conservancy in Arizona**
 - Hassayampa River Preserve
 - Lower San Pedro River
- **Friends of Oak Creek**
- **Prescott Creeks Preservation Association**
- **Nutrioso Creek**
- **Friends of the Santa Cruz River**



Nutriosos Creek Success Story

Reduce turbidity in Nutriosos Creek to meet total maximum daily load standards



Master Watershed Steward Program

University of Arizona

- *The Master Watershed Steward Program (MWS) is an adult education program designed to increase the capacity of community members to identify and address water resource issues at local levels.*
- *The MWS program provides educational sessions and materials to help individuals understand how their watershed works.*
- <http://ag.arizona.edu/watershedsteward/>
- <E:\nwqmc\Master Watershed Steward.htm>
- <E:\nwqmc\Master Watershed Steward-volunteers.htm>



Master Watershed Steward Program

- 40 hours of course work and two full-day field trips.
- Upon successful completion of the course, including a comprehensive final examination, participants are given Associate Master Watershed Steward Status.
- After contributing 40 hours of volunteer service to their community, delivering pre-approved, watershed-related education, they become Certified Master Watershed Stewards



ADEQ-GateWay-U of A PARTNERSHIP

- **FOR WATER-QUALITY
BASED PROJECTS:**

- **ADDITIONAL 1-CREDIT
COURSE (TWO FULL DAYS)
PROVIDED BY GateWay
Community College)**

- **ADDITIONAL SUPPORT TO
THE VOLUNTEER GROUP**

- **USE OF ADEQ-OWNED
FIELD EQUIPMENT HOUSED
AND MAINTAINED BY
GateWay**



First GateWay Class – Feb 2004



First GateWay Class – Feb 2004



Working together to protect our State's waters

The purpose of the Water Quality Improvement Grant Program is to implement on the ground water quality improvement projects to control nonpoint source pollution.

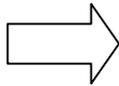


Photo courtesy of Tetra Tech, Inc.



Specific Activities

- Implementation of BMPs
- TMDL implementation
- Demonstration projects
- Riparian area protection



Photo courtesy of Tetra Tech, Inc.

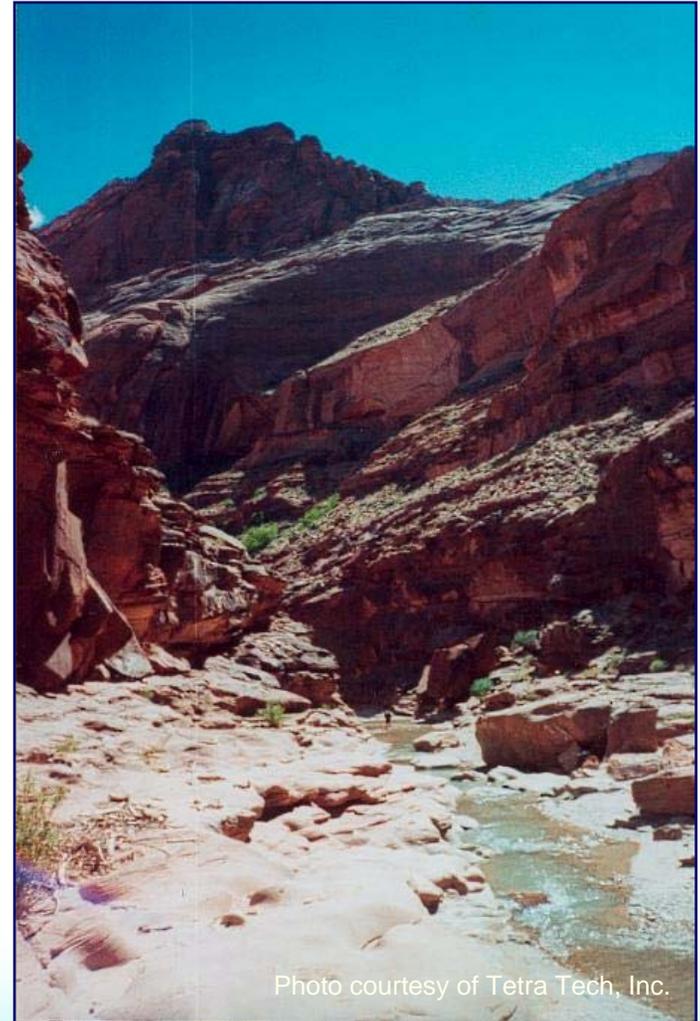


Photo courtesy of Tetra Tech, Inc.



What are we doing in Arizona?

- Excessive sediment
- Excessive pathogens
- Wildcat dumping



QUESTIONS?

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