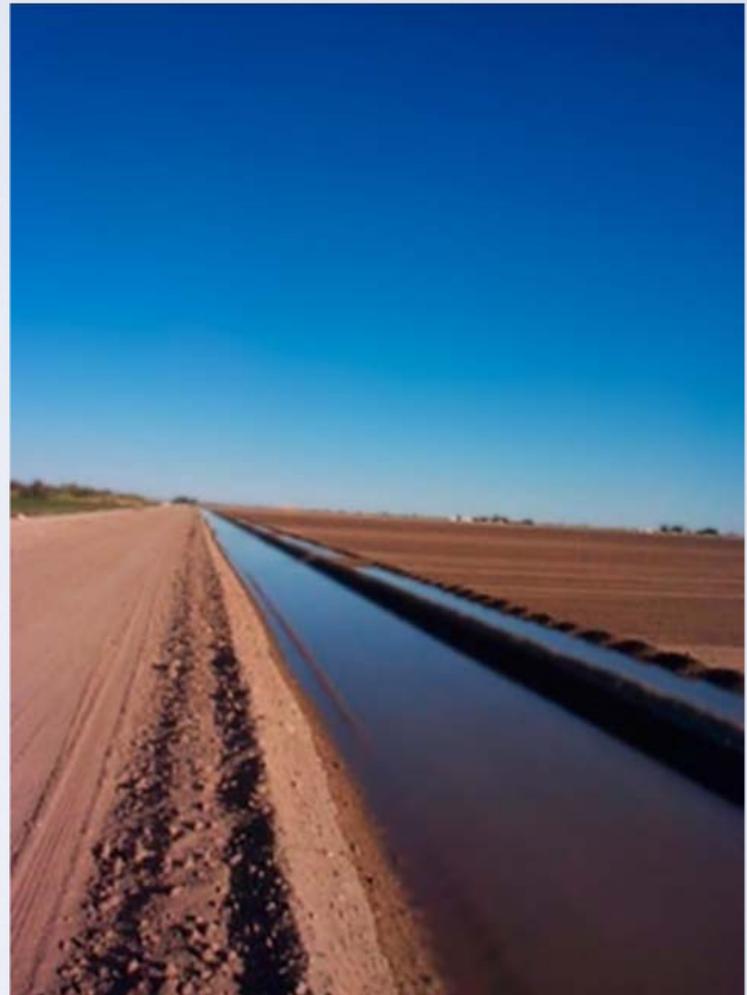


# Imperial County Farm Bureau Voluntary TMDL Compliance Program

2008-2009 319(h) Nonpoint Source (NPS) Grant Application

# Voluntary TMDL Compliance Program

- Initially implemented in 2001 with a 205(j) Water Quality Planning Grant.
- Maintained through a series of four 319(h) grants.
- Current funding is secured through December 31, 2009.



# Voluntary TMDL Compliance Program

- Project encompasses 500,000 acres of farmland, farmed by close to 500 farmers and entities.
- 99% of acreage is enrolled and actively participates in this voluntary Project.
- Project has resulted in sediment load reductions to 144mg/L in the New River and 255mg/L in the Alamo River.
- Within 3 years, achieved Phase 2 goals for TSS reduction.
- Have met final numeric TMDL target for New River.  
On track to meet final numeric TMDL target for Alamo River.

# Voluntary TMDL Compliance Program

## Requirements of Project Participants

- Participate in annual drainshed meetings.
- Report and update implementation data on each field every year, including:
  - current crop,
  - field location & soil type,
  - potential water quality problems being addressed,
  - BMP combinations currently implemented on the field to address those problems.
- All activities, including education, outreach and technical assistance, culminate in on-the-ground BMP implementation.

The data from these updates is reported to RWQCB two times per year. All regulatory agencies, including SWRCB, can mine this data to identify which BMPs are implemented where, with what crops and in what field conditions.

# Voluntary TMDL Compliance Program

## Statistical Trend Analysis Completed by University of Redlands

- Study completed in 2008 by University of Redlands, statistically analyzed the trending of TSS loads.
- Report was submitted to SWRCB and stated:
  - “The various best management practices in use within the southern section of the IID are having a net positive effect.”
  - “The New river can already be judged to be in full compliance of Region 7 TMDL regulations. Additionally, although the same cannot yet be said for the Alamo river, the mean and trend estimates... suggest that substantial progress is being made towards this compliance goal.”

# Voluntary TMDL Compliance Program

## Challenges

- Highly varied soil types and slopes.
- Wide range of crops.
- Multiple crops per field per year.



Multiple BMPs implemented per field - an average of 5 BMPs per field - for a total of approximately 25,000 BMPs implemented throughout the system.

Given these complexities, and the desire of the Board to quantify the effectiveness of various BMPs, a testing and monitoring program was developed for the Project that would help determine the source of turbidity in drains.

# Voluntary TMDL Compliance Program

## Concerns Raised by Staff About the Project

- *“Project does not account for implementation of BMPs”*
- *“It is not clear where BMPs are to be implemented.”*

Approximately 99% of acreage is enrolled in the Project with growers currently implementing an average of 5 of the Project’s recommended BMPs on every field, for an estimated total of 25,000 BMPs implemented.

Records of BMPs implemented on each field are stored in a database that is accessed and utilized by the Regional Board, and accessible to the State Board.

# Voluntary TMDL Compliance Program

## Concerns Raised by Staff About the Project

- *“Why is EQIP funding not being used?”*

Natural Resources Conservation Service (NRCS) has worked extensively with Imperial County Farm Bureau on the TMDL Advisory Committee for a number of years, provided a computer kiosk to the Project for the purpose of disseminating information and easing the process of compliance, and wrote a letter of support for this Project identifying their involvement. This was also discussed in detail in the grant application.

# Voluntary TMDL Compliance Program

## Concerns Raised by Staff About the Project

- *“There was no Attachment I - Education & Outreach”*

Based upon the reviewer comments from the concept proposal, it was determined that the focus of this Project should be on the implementation that takes place throughout the Project area and the proposed monitoring program, rather than the education and outreach portion of the Project.

# Voluntary TMDL Compliance Program

## Concerns Raised by Staff About the Project

- *“Project fails to account for BMPs and Load Reductions.”*
- *“Project did not include Load Reductions, except for the BMP effectiveness study.”*

An average of 5 BMPs per field are in place on 99% of the acreage in the Project area at any time. Effectiveness of each BMP varies based on crop, soil type and slope, irrigation method, and potentially cumulative effects of BMP combinations. A new effectiveness study was developed and added to the Project specifically to address these concerns.

# Voluntary TMDL Compliance Program

## Concerns Raised by Staff About the Project

- *“The monitoring plan relies too heavily upon Imperial Irrigation District and RWQCB for monitoring.”*

These agencies provide this service to the Project at no additional cost to the Project, thus keeping overall costs to a minimum. Both agencies have vested interest in the success of the Project and have been strong supporters of the Project.

# Voluntary TMDL Compliance Program

## Concerns Raised by Staff About the Project

- *“Can the same results take place with less money?”*
- *“Only a small amount of the funds requested are budgeted for implementation.”*

Monitoring for the BMP study is to be completed by outside agencies at no additional cost to the Project.

BMPs are implemented by farmers on their property voluntarily and at their own expense (or with the assistance of EQIP funding). An average of 5 BMPs per field are currently implemented on 99% of the acreage in the Project area at no direct cost to the Project.

# Voluntary TMDL Compliance Program

## Stakeholders & Complementary Programs

### RWQCB

Oversees drainshed and sets TMDLs  
Utilizes data documented by Project

### RESULT

Measureable,  
documented reductions  
in sediment loads.

### IID

Monitors and measures load levels  
in the Imperial Valley Drains

### ICFB

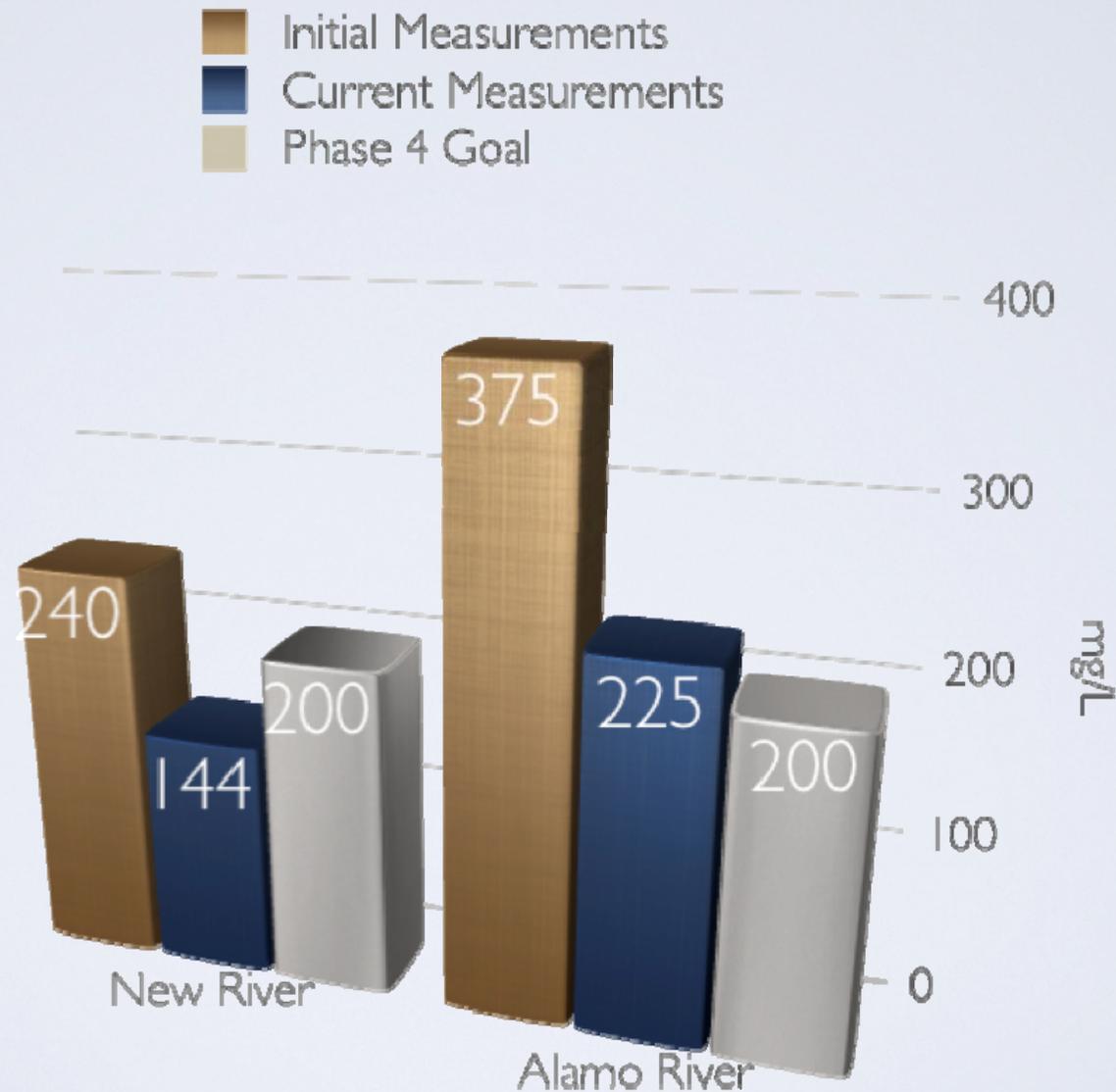
Provides education & technical assistance,  
Records, tracks and promotes  
BMP implementation.

# Voluntary TMDL Compliance Program

- Imperial Irrigation District (IID) is listed as a responsible party in the current Imperial Valley Sedimentation/Siltation TMDL.
- The IID's Drain Water Quality Improvement Plan and this Project form a symbiotic relationship in the effort to achieve TMDL goals within the drainshed.
- The result of the coordination between these Programs has been significant, documented water quality improvements.

# Voluntary TMDL Compliance Program

## Measured TSS Load Reductions



# Voluntary TMDL Compliance Program

- Featured in EPA brochure “TMDLs and Agriculture in the West”
- Recipient of Governor’s Environmental & Economic Development Award in 2004.
- Awarded EPA’s Environmental Leadership Award in 2006.

