

NONPOINT SOURCE SUMMARY PAGE

FY 00 CWA 319(h)

1/1/00 to 12/31/02

1. **TITLE OF PROJECT:** The North Central Texas Atrazine Remediation Project (519 SWCD)
2. **PROJECT GOALS/OBJECTIVES:** This project will provide corn and sorghum producers in the Lake Waxahachie, Bardwell Reservoir, Richland Chambers Reservoir, and Joe Pool Lake watersheds with an opportunity to participate in water quality educational activities, technical assistance, and financial assistance to implement BMPs to reduce the runoff of atrazine; thus restoring these drinking water lakes allowing them to be removed from the State of Texas §303(d) List.
3. **PROJECT TASKS:** (1) To provide producers with water quality educational opportunities which pertain to the reduction of runoff from atrazine. (2) To provide corn and sorghum producers with technical and financial assistance to aid in the development and implementation of WQMPs to reduce the runoff of atrazine. (3) To compile information on the number, types, and locations of BMPs implemented. (4) Inventory land use practices.
4. **MEASURES OF SUCCESS:** (1) Implementation of 5 WQMPs. (2) Provide 2 education programs describing methods to reduce atrazine runoff. (3) Reduction in percentage of samples exceeding §303(d) list screening criteria (1.5 ug/L) to less than 10%. (4) Removal of lakes from §303(d) list.
5. **PROJECT TYPE:** Statewide () Watershed (X) Demonstration ()
6. **WATERBODY TYPE:** River () Lake (X) Wetland () Ground Water () Other ()
7. **PROJECT LOCATION:** Basin: (X) Lake Waxahachie (watershed segment #0816), Bardwell Reservoir (watershed segment #815), Richland Chambers Reservoir (watershed segment #0836), and Joe Pool Lake (watershed segment #0838)
8. **NPS MANAGEMENT PROGRAM REFERENCE:** State of Texas Agricultural/Silvicultural Nonpoint Source Management Program – Approved February 15, 2000; to be updated FY04-05
9. **NPS ASSESSMENT REPORT STATUS:** Impaired () Impacted () Threatened (X)
10. **KEY PROJECT ACTIVITIES:** Hire Staff (X) Monitoring () Regulatory Assistance () Technical Assistance (X) Education (X) BMP Implementation (X) Demonstration Project () Other ()
11. **NPS MANAGEMENT PROGRAM ELEMENTS:** Milestones 15, 17, 20, 22, 24.
12. **PROJECT COSTS:** Federal: (\$93,849) Local Match: (\$62,566) Total Project: (\$156,415);
13. **PROJECT MANAGEMENT:** Texas State Soil and Water Conservation Board
14. **PROJECT PERIOD:** Three years from start date.

North Central Texas Atrazine Remediation Project

FY00 CWA Section 319(h)

WORKPLAN

Problem Need/Statement

Lake Waxahachie, Bardwell Reservoir, Richland Chambers Reservoir, and Joe Pool Lake are listed as threatened by atrazine on the 1999 State of Texas §303(d) List. These lakes are important drinking water supplies for North Central Texas. To remove this threat, the Texas State Soil and Water Conservation Board will work cooperatively with the Dal-worth Soil and Water Conservation District (SWCD), Ellis-Prairie SWCD, Navarro SWCD, Hill County-Blackland SWCD, Johnson County SWCD, Limestone-Falls SWCD, Natural Resources Conservation Service (NRCS), Texas Agricultural Extension Service (TAEX), Texas Department of Agriculture, and Texas Agricultural Experiment Station (TAES) to provide water quality education, BMP demonstration, technical assistance, and financial assistance to corn and sorghum producers to promote the implementation of BMPs to reduce the runoff of atrazine.

General Project Description

Following are actions that will be undertaken by this project to reduce atrazine runoff to these lakes:

- Provide technical assistance to corn and sorghum producers on appropriate BMPs to reduce atrazine runoff.
- Provide 2 educational events describing methods for reducing atrazine (pesticide/herbicide) runoff.
- Provide financial assistance funding to corn and sorghum producers that implement BMPs to reduce atrazine runoff.

Best management practices (BMPs) to reduce the runoff of atrazine will be implemented through the development of Water Quality Management Plans (WQMPs). The objective of WQMP implementation is to achieve a level of pollution prevention or abatement determined to be consistent with State water quality standards. Highest priorities will be given to the implementation of cost effective pollution abatement practices. TSSWCB and SWCDs will determine which landowners receive technical assistance for the development and implementation of WQMPs. Potential BMPs, which may be included, but not limited too, in the WQMPs, are:

- Buffer strips
- Integrated pest management (e.g., sprayer calibration, incorporation banding, follow label)
- Terraces and grassed waterways
- Conservation tillage
- Contour farming with strip cropping or buffer strips
- Conversion of cropland to grassland

The TNRC (Texas Natural Resource Conservation Commission) will evaluate the atrazine levels within each lake through monitoring.

Tasks, Objectives, Schedules, and Estimated Costs

Task 1: Program Coordination and Management

Costs: \$15,000(Federal), \$10,000 (State), \$25,000 (Total) This Task is 16% of Total.

Objective: Organize an integrated team among the multiple agencies and groups involved with the project to efficiently and effectively achieve project goals.

Subtask 1.1: Conduct semi-annual meetings with project participants to discuss technical assistance activities, project schedule, lines of responsibility, communication needs, and other required tasks. (Month 1 through month 36)

Subtask 1.2: Prepare quarterly and final reports. All progress reports will also be provided to the coordinating committee and project cooperators and participants. (Month 1 to Month 36)

Deliverables

- Quarterly and final reports documenting project status.

Task 2: Water Quality Education and Demonstration of Best Management Practices to Reduce Atrazine

Costs: \$10,000 (Federal), \$6,666 (State), \$16,666 (Total) This Task is 11% of Total.

Objective: To promote the implementation of cost effective BMPs that reduce atrazine runoff by informing and educating corn and sorghum producers about appropriate BMPs. To demonstrate these techniques on local farms within Dal-Worth SWCD. Demonstrations will be fully publicized, including on-site signs as appropriate.

Subtask 2.1: Cooperate with the Dal-worth SWCD, Ellis-Prairie SWCD, Navarro SWCD, Hill County-Blackland SWCD, Johnson County SWCD, Limestone-Falls SWCD, NRCS, TAEX, TAEX, and Texas Department of Agriculture to provide 2 educational/training events describing methods for reducing atrazine (pesticide/herbicide) runoff. (Month 1 through month 36)

Subtask 2.2: Select appropriate agricultural BMPs practices for reducing atrazine runoff and implement at least one demonstrations each year of the project in each watershed with assistance from the NRCS, county extension agent, local SWCD, and TAEX. (Month 1 through month 36)

Deliverables:

- Training and workshop schedules, agendas, and participants.
- Status update of progress will be included in quarterly progress reports.
- All educational materials distributed.
- Report describing all relative educational activities performed within the watershed.

Task 3: Development and Implementation of WQMPs

Costs: \$63,849 (Federal), \$42,566 (State), \$106,415 (Total) This Task is 68% of Total.

Objective: To encourage agricultural landowners to comply with state water quality laws through a traditional voluntary based incentive program and assistance to producers in developing and implementing WQMPs.

Subtask 3.1: The Dal-Worth SWCD. The SWCD will each hire a technician to provide technical assistance to corn and sorghum producers and develop WQMPs (Month 1 to month 6)

Subtask 3.2: The SWCDs, with assistance from NRCS, TAES and TAEX, will send out notifications announcing the availability of assistance for implementing WQMPs/BMPs, prioritize the WQMP applications and rank landowners based on greatest need of BMP implementation. (Month 1 to Month 36)

Subtask 3.3: The SWCD technicians and NRCS will provide landowners information on appropriate BMPs and will work with TSSWCB Regional Office in developing and implementing WQMPs. (Month 1 to Month 36)

Subtask 3.4: The Dal-Worth SWCD. The technicians will develop approximately 5 WQMPs. All WQMPs will be completed by the SWCD technician with assistance from the NRCS as needed. (Month 1 to Month 36)

Subtask 3.5: TSSWCB will provide technical review and certification of WQMPs. During this process, TSSWCB will ensure that all WQMPs are consistent with state water quality standards and certify those that meet that criteria. (Month 1 to Month 36)

Subtask 3.6: The TSSWCB, with assistance from each SWCD, will ensure that the landowners implement the WQMPs as specified and agreed to in the WQMP implementation schedule. The SWCD technicians will conduct annual status reviews on all WQMPs developed to ensure the implementation schedule is followed and funds are used. (Month 1 to Month 36)

Deliverables:

- 5 WQMPs developed and implemented within the Dal-Worth SWCD
- The SWCD Planners will submit records of BMPs implemented to date by each producer.
- Annual status reviews will be submitted to the TSSWCB

Task 4: Inventory of landuse practices and BMPs implemented in the Dal-Worth SWCD.

Costs: \$5,000 (Federal), \$3,334 (State), \$8,334 (Total) This Task is 5% of Total.

Objective: To compile and document information on the amount and types of BMPs implemented through WQMPs, Conservation Plans, EQIP contracts, CRP contracts, WHIP contracts, and WRP contracts.

Subtask 4.1: The SWCDs, and NRCS will compile information on the location, numbers, and types of BMPs implemented within the each watershed annually. (Month 1 to Month 36)

Deliverables:

- Annual reports on all BMPs implemented through WQMPs, Conservation Plans, EQIP contracts, CRP contracts, WHIP contracts, and WRP contracts.

Coordination, Roles and Responsibilities:

Participating Agencies and Organizations along with their roles in this project include:

- Texas State Soil and Water Conservation Board: Lead agency responsible for technical review and certification of WQMPs. Provide assistance to the local SWCD in the implementation and development of WQMPs. Also assist the local SWCD in inventorying current BMPs and land use practices and the implementation of WQMPs.
- Soil and Water Conservation District: Oversee technician during the development and implementation of WQMPs/BMPs.
- Natural Resources Conservation Service: Work with and assist local SWCD and TSSWCB in development and implementation of WQMPs.
- Texas Department of Agriculture: License applicators. Ensure compliance with label. Assist with education on proper application of atrazine.

Measures of Success:

- Implementation of approximately 5 WQMPs in the Dal-Worth SWCD.
- Conduct 2 education programs for local corn and sorghum producers.
- Reduce detections of atrazine concentrations in Lake Waxahachie, Bardwell Reservoir, Richland Chambers Reservoir, and Joe Pool Lake to levels which remain below the established target level (1.5 ug/L) in >90% of the samples.
- Removal of Lake Waxahachie, Bardwell Reservoir, Richland Chambers Reservoir, and Joe Pool Lake from the State of Texas §303(d) List.

Project Lead:

Name: Kevin Canfield
Address: Texas State Soil and Water Conservation Board
311 North 5th Street
Temple Texas 76502
Phone #: 254-773-2250
E-Mail: kevinc@tsswcb.state.tx.us