



Disbursement of Federal Funds Pursuant to the Federal Water Pollution Control Act

2005 Update

(per Senate Bill 150, 1st Session of the 49th Legislature, 2003)



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Introduction

During the 1993 reorganization of Oklahoma's environmental agencies, the office of Secretary of the Environment was established by statute to serve, among other things, as the primary recipient of Federal Water Pollution Control Act ("Clean Water Act") grant funds in Oklahoma. The role of recipient of Clean Water Act funding provides the Secretary of the Environment with a unique opportunity to ensure that state agencies' water quality management activities are well-coordinated and of high quality.

Ten years after passage of the Environmental Quality Act of 1993, the Oklahoma Legislature sought minor changes to this oversight responsibility through passage of Senate Bill 150 (2003 Session). In addition to seeking increased coordination through consultation with the Secretary of Agriculture, the Legislature added the requirement of an annual report to heighten accountability and increase understanding of how Clean Water Act funds are disbursed throughout the state.

Funding is delivered to Oklahoma's Secretary of the Environment from the U.S. Environmental Protection Agency ("EPA") through five distinct grant programs that are defined by the section of the Clean Water Act in which each is established: Section 104(b)(3), Section 104(b)(3) Wetlands, Section 106, Section 319, and Section 604(b). Each grant program has its own priorities, guidance, and funding cycles. This report summarizes the Clean Water Act grant program funding received by the Secretary of the Environment during the 2005 Federal fiscal year of October 1, 2004 – September 30, 2005 (see Table 1 for overview) as well as the expenditures for the same period (see Table 2 for overview).

Table 1. Clean Water Act Funding Awarded to Subrecipients
(Federal Dollars for Federal Fiscal Year 2005).

	Association of Central Oklahoma Governments	Indian Nations Council of Governments	Oklahoma Conservation Commission	Oklahoma Department of Agriculture, Food and Forestry	Oklahoma Department of Environmental Quality	Oklahoma Water Resources Board	Office of the Secretary of the Environment
FY 05 104(b)(3) Water Quality Cooperative Agreement*						\$199,500	
FY 05 104(b)(3) Tribal Water Quality Cooperative Agreement*							\$61,460
FY 05 104(b)(3) Regional Environmental Monitoring and Assessment*						\$304,000	
FY 05 104(b)(3) Wetlands Protection*			\$266,393			\$113,132	
FY 05/06 106 Program				\$118,750	\$2,897,840		\$171,365
FY 05 319(h) NPS Program			\$3,056,300				\$117,000
FY 05 604(b) Water Quality Management Program	\$20,000	\$20,000				\$60,000	
TOTAL FUNDING	\$20,000	\$20,000	\$3,322,693	\$118,750	\$2,897,840	\$676,632	\$349,825

*Funds were awarded prior to September 30, 2005. The project(s), however, cannot begin until October 1, 2005.

Section §104(b)(3) Program

Section 104(b)(3) authorizes funding to State agencies, Tribes, other public or nonprofit private agencies, institutions, organizations and individuals to conduct and promote the coordination and acceleration of research, investigations, experiments, training, demonstrations, surveys and studies relating to causes, effects, extent, prevention, reduction and elimination of pollution. Funding is available annually through both EPA Headquarters and EPA Region 6 and usually requires a 5% match. The funding is normally competitive on a regional basis. However, at times, EPA may offer provisional funding to states or regions for a specific purpose. The funding period for this program is approximately three (3) years.

FY 05 §104(b)(3) Water Quality Cooperative Agreement

Project 1 – Probabilistic Monitoring of the Illinois River Sub-basin – OWRB ... \$199,500
The objective of this project will allow for a statistically valid assessment of the condition of all stream/river miles within the Illinois River Sub-basin which will provide a water quality baseline. It will assist in long- and short- range planning and resource allocation within the basin as well as refinement of both numerical and narrative water quality standards.

FY 05 §104(b)(3) Regional Environmental Monitoring and Assessment Program

Project 1 – Continuation of a Stream/River Probabilistic Sampling Network for the State of Oklahoma - OWRB \$304,000
The purpose of this project is to determine the overall health of Oklahoma's streams and rivers through a statistically valid approach; to assist the development and validation of statewide biocriteria and nutrient criteria; to provide an additional data layer for determining localized monitoring needs and developing short- and long-term monitoring goals; and to evaluate the feasibility of using land use and land cover data to predict biological integrity and target monitoring efforts.

FY 05 §104(b)(3) Tribal Water Quality Cooperative Agreement

Project 1 - Water Quality Monitoring Training for Tribal Environmental Staff within U.S. EPA Region 6 \$61,640
The Office of the Secretary of Environment, in cooperation with our sister agencies, proposes to provide a series water quality monitoring workshops for tribal environmental staff from within Region 6. The primary objective of the workshops is to provide comprehensive water quality monitoring training. The secondary objective of the workshops is to provide the opportunity for those attending the training to interact with state agencies staff, staff from other tribal governments, and U.S. EPA.

Section §104(b)(3) Wetlands Program

Section 104(b)(3) Wetlands authorizes funding for the development and implementation of activities to protect state wetlands. The goal of the program is to build the capacity of all levels of government to develop and implement effective, comprehensive programs for wetland protection and management. This grant program is competitive on a regional basis and requires a 25% match. A funding level of approximately \$1.2 million is available per year at the regional level. The funding period for this program is approximately three (3) years.

FY 05 §104(b)(3) Wetlands Protection Workplan

Project 1 – Creation of a Vegetated Wetland Throughout the Littoral Zone of Lake Stanley Draper - OWRB..... \$113,132

The objective of this project is to demonstrate the restoration of the shoreline of Lake Stanley Draper to lacustrine wetlands. The longterm results will be reduced turbidity, enhanced fish nursery habitat, and improved water quality.

Project 2 – Wetlands Monitoring Program Development – OCC..... \$266,393

The goal of this project is to further develop Oklahoma’s wetlands monitoring program through the creation of a probabilistic monitoring design and interactive wetland mapping system. The result will be the ability to estimate wetland gains/losses and eventually wetland quality statewide, with increased analytical opportunities for the public as well as private sectors.

Section §106 Program

Section 106 of the Clean Water Act authorizes assistance to the State in administering programs for the prevention, reduction, and elimination of water pollution including programs for the development and implementation of groundwater protection strategies. The state receives approximately \$2,100,000 for surface water and groundwater activities. The state is required to set forth a minimum level of effort towards the §106 program of \$257,655. All base surface and groundwater activities are included in the FOCUS document, which is part of DEQ’s Performance Partnership Grant. By including the activities in the FOCUS document, EPA allows DEQ flexibility and the ability to cross fund programs. Activities and projects under this grant program are reviewed and awarded on an item-by-item basis. The Workplan includes new projects as well as projects not completed within the previous grant cycle. The program period for the §106 grants is two years.

Please note: \$644,062 of the two-year program was awarded to OSE prior to October 1, 2004 and accounted for in the 2004 SB 150 Update. Dollar amounts listed below for the FY 05/06 §106 Workplan are for the two-year period.

FY 05/06 §106 Program (July 1, 2004 – June 30, 2006)

FY 05/06 Core Activities - ODEQ \$3,078,102

- Administration – The agency will monitor its finance, personnel and data processing operations. Surveys will evaluate customer satisfaction with major program activities.
- Enforcement – The agency will ensure compliance with the law through an enforcement program that will include issuing orders and assessing fines.
- Permitting – Permitting, along with rulemaking, provides the basic tool for controlling pollutant discharges. Particular emphasis will be placed on the issuance of high quality permits in a timely manner.
- Planning – The agency will implement a planning process called “FOCUS” to integrate budget, planning, personnel evaluation and reporting based on measuring for results.
- Sludge –The agency will review and respond to all sludge management plans within 60 days of receipt of all necessary information to ensure that construction is performed.
- TMDL – The agency will develop and/or review TMDL/WLA models in accordance with schedules established in the 1998 303(d) list and submit these models to EPA for approval
- Groundwater Monitoring – The agency will continue to conduct both environmental and programmatic monitoring to determine the effectiveness of its programs

FY 05/06 §106 Workplan

Project 1 – Management and Coordination - OSE \$410,371

This project provides for maintenance of federal responsibility/accountability of funds to support all Clean Water Act programs. The Governor has initiated, and will continue to initiate, activities for the protection of water quality through the Office of the Secretary of Environment. This project provides staff assistance to facilitate progress in these activities.

Project 2 - Statistical Analysis - ODEQ \$1,943

The purpose of this project is to 1) compile information on water quality collected by various divisions of ODEQ over the years into a single database, 2) determine if the quality of the data are sufficient to preform statistical analyses of the information, 3)

perform statistical analyses on the data, 4) do 305(b) reports and 5) make information available to the public.

Project 3 - Water Quality, Flow, and Sediment Monitoring Plan for Tar Creek Basin – ODEQ..... \$119,835

This project will 1) initiate flow weighted stream/mine water monitoring at established wadable sites in Tar Creek basin; 2) monitor high flow at six sites in the watershed area; 3) calculate metals loading in Tar Creek, including sediment load, and analysis of bed material and estimate the impact immediately below its confluence with the Neosho River due to dilution (and other) factors; 4) verify the quality of water flowing to Grand Lake; and 5) evaluate damage to biota at three individual monitoring sites (above, within and below mine discharge).

Project 4 – Surface-Water Quality in the Grand-Neosho River Basin, Northeastern Oklahoma – ODEQ..... \$92,540

The objectives of this project are to (1) analyze high-flow water samples from Tar Creek, the Spring River, and the Neosho River for general water properties, trace elements, and major ions; (2) utilize continuous stream flow data and water quality data from Tar Creek, Neosho River, and Spring River to estimate water and sediment quality entering Grand Lake; and (3) quantify the sediment movement and composition in Tar Creek, the Neosho River, and the Spring River under high flow conditions. The project will also enhance the current stream-monitoring network in the Picher-Miami-Commerce area. Data collected will provide information to aid Federal, State, Tribal and local officials in the remediation of the area.

Project 5 - TMDL Development for the Washita River Below Foss Reservoir Phase I (part 2) – ODEQ..... \$150,000

The purpose of this project is to produce a TMDL for the targeted watershed and to support Watershed Restoration Action Strategy development.

Project 6 - TMDL Monitoring – Washita River Watershed above Foss Dam – ODEQ..... \$36,000

The purpose of this project is to collect water quality data to verify waterbody impairment and to support TMDL development for all pollutants of concern. The data collection will be designed to assist in identifying the source(s) and extent of impairment to the waterbodies.

Project 7 - Blue River Watershed TMDL Phase I Water Quality Monitoring – ODEQ..... \$4,250

The purpose of this project is to collect water quality data to verify waterbody impairment and to support TMDLs for nutrients, suspended solids and noxious aquatic plants. The data collection will be designed to assist in identifying the source(s) and extent of impairment to the waterbodies

Project 8 - TMDL Development – Wister Lake – ODEQ..... \$13,011

The intent of this project is to develop the Total Maximum Daily Load for the pollutant of concern for Wister Lake. The data for the TMDL will be the existing data collected by various agencies.

Project 9 - Illinois River Watershed TMDL Phase I Water Quality Monitoring for Metals & Pesticides – ODEQ..... \$42,345

The objective of this project is to collect water quality data to verify waterbody impairment and to support a TMDL for metals and pesticides. The data collection will be designed to assist in identifying the source(s) and extent of impairment to the waterbodies.

Project 10 - TMDL Monitoring – Atoka Lake Watershed - ODEQ..... \$56,476

The objective of this project is to collect water quality data to verify waterbody impairment and to support TMDL development for all pollutants of concern. The data collection will be designed to assist in identifying the source(s) and extent of impairment to the waterbodies.

Project 11 - North Canadian River Pathogens TMDL - ODEQ..... \$14,386

The objective of this project is to collect monitoring data and develop a Total Maximum Daily Load model for pathogens in the North Canadian River. The study area encompasses the North Canadian River in the Oklahoma City metropolitan area. The Association of Central Oklahoma Governments, with guidance from the ODEQ, will conduct project activities.

Project 12 - Arkansas River Metals TMDL - ODEQ..... \$40,517

The objective of this project is to collect existing data from recent studies by INCOG, the City of Tulsa and others and develop a TMDL model for the Arkansas River. The TMDL will include all Arkansas River segments between Sand Springs and Broken Arrow, Oklahoma. All eleven metals currently listed in the Oklahoma Water Quality Standards will be modeled. Mixing zone models will be developed for metals of concern that are identified in the TMDL modeling process. The Indian Nations Council of Governments will conduct project activities with guidance from the ODEQ.

Project 13 -Bacteria TMDL Development Using GIS Toolbox - ODEQ.....\$43,569

This project is intended to develop bacteria TMDLs using the tools being developed by Parsons Water & Infrastructure, Inc. in cooperation with EPA Region 6 and ODEQ. The “toolbox” comprises a load duration curve tool and a GIS spreadsheet tool. The load duration curve tool estimates relative point and nonpoint source loads indication bacteria based on instream flow and concentration data. The GIS spreadsheet tool predicts nonpoint and point source loading of indicator data.

Project 14 - TMDL Monitoring on Priority 1 and Priority 2 Waters Listed on the 1998 303(d) List - ODEQ..... \$83,603

The objective of the proposed sampling initiative is to 1) establish if listed waters are currently meeting their assigned beneficial uses, 2) gather historical data (if available) to be used in Phase 1 of the TMDL process and 3) support TMDL development. The Oklahoma Water Resources Board will conduct project activities with guidance from the ODEQ.

Project 15 - Basin 6 & 7 TMDL Water Quality Monitoring - ODEQ..... \$43,135

The objective of the proposed sampling initiative is to 1) determine if listed waters are currently meeting their assigned beneficial uses, 2) gather historical data (if available) to be used in Phase 1 of the TMDL process and 3) support TMDL development. The Oklahoma Water Resources Board will conduct project activities with guidance from the ODEQ.

Project 16 - Comparison Study of Water Quality from PWS Wells and other wells in Central Oklahoma Aquifer - ODEQ..... \$36,265

DEQ will use public water supply ("PWS") wells to characterize water quality in major aquifers. Specifically this study will compare the results of chemical analysis of PWS wells with other data from the Central Oklahoma Aquifer to evaluate the "equivalence" of information. USGS will reactivate portions of its former sampling program to establish if water quality of waters from non-PWS wells is comparable to water from PWS wells in the Central Oklahoma Aquifer. The United States Geological Survey will conduct project activities with guidance from the ODEQ.

Project 17 - Review of Monitoring and Assessment Data to Support Development of TMDL for Lake Tenkiller and Illinois River Watershed - ODEQ..... \$74,641

In conducting a Total Maximum Daily Load (TMDL) study for the Tenkiller Ferry Reservoir and its attendant watershed, the ODEQ Water Quality Division will use the Soil & Water Assessment Tool (SWAT) computer model simulation by Oklahoma State University to estimate a maximum allowable nutrient loading. Oklahoma State University will conduct project activities with guidance from the ODEQ.

Project 18 - Ground Water Monitoring FY03/04 – Continuation of Project 2 – ODEQ \$27,963

This project will continue the ambient groundwater monitoring program administered through the ODEQ. The primary objective of this project is to assess the quality of groundwater. In the long term, data will be analyzed for trends to identify areas where measures should be taken to preserve the beneficial uses of the groundwater. These objectives will be met by sampling a subset of Public Water Supply wells to determine current constituent levels.

Project 19 - Statewide Groundwater Quality Analysis Using GIS FY03/04 – ODEQ \$4,999

State agencies have been gathering data on groundwater quality for many years. ODEQ wants to use this information to develop maps showing the quality of water in

the major aquifers in Oklahoma. Using new GIS software and more powerful hardware, ODEQ will be able to create layers over images of aquifers with isopleths of water quality data. These will help citizens of Oklahoma ascertain groundwater quality for every major aquifer area for many parameters.

Project 20 - Proposed Stream Gaging Program (Year 5) - ODEQ..... \$95,000 (FY 05 Based Funds)

The monitoring sites listed in this proposal for funding are all located in Unified Watershed Assessment Category I watersheds. These monitoring sites are critical to TMDL development and are also essential in tracking the progress of TMDL implementation procedures. Flow data will be used to assess the total pollutant loading, and the water quality data will be used to determine the degree of impairment to the water's beneficial use(s). Where appropriate, screening and review criteria developed for the 303(d) program will be utilized to assess impairment. The United States Geological Survey will conduct project activities with guidance from the ODEQ.

Project 21 – TMDL Guide Development..... \$2,665

This project seeks to impact all TMDL stakeholders statewide through the distribution of TMDL Guidance information in the form of a guidance document, pamphlets, and public meetings.

Project 22 - Licensed Managed Feeding Operations Monitoring Well Sampling for 2004 – ODAFF..... \$137,500

The Oklahoma Concentrated Animal Feeding Operations Act (2 O.S. § 9-205.4(F)(3)) and its implementing regulations (OAC 35:17-3-11(e)(6) (H)) both require that the Oklahoma Department of Agriculture, Food, and Forestry (ODAFF) annually sample monitoring wells at swine Licensed Managed Feeding Operations (LMFOs). This project will allow for the collection of groundwater samples at monitoring wells of LMFOs and a review of the analyzed data for indication of possible pollution. Determining the sources of pollutants in groundwater will aid ODAFF in assessing whether LMFOs negatively affect nearby groundwater quality and what actions are necessary to address such pollution.

Section § 319(h) Nonpoint Source Program

Section 319(h) of the CWA authorizes funding to designated State agencies to implement the State's NPS management program to control nonpoint source pollution. The state receives approximately \$3,000,000 annually and is required to provide a 40% match. The funds within this grant program are tied to priorities listed within Oklahoma's Nonpoint Source Management Plan and directed by the Nonpoint Source Working Group. The Oklahoma Conservation Commission serves as the technical lead agency for the program. The funding period for this program is five (5) years.

FY 05 319(h) Program

Project 1 - Coordination and Management of Oklahoma's NPS Program – OSE
..... \$117,000

Provide support for coordination and management of the FY 05 319 (h) grant and related activities, including departmental and technical review, coordination of interagency technical review, and management and maintenance of Oklahoma's Nonpoint Source Grants Reporting and Tracking System.

Project 2 - FY 2005-2006 319(h) Project 2 Oklahoma Conservation Commission Implementation of the NPS Management Program October 2005- June 2006 - OCC
..... \$925,439

The purpose of this project is to provide staff support and funding to implement Oklahoma's Comprehensive Nonpoint Source Pollution Program, including planning, assessment, education, and implementation activities between October 1, 2005 and June 30, 2006.

Project 3 - Rotating Basin Monitoring Program (Year 6) – OCC..... \$607,368

The purpose of this project is to implement year six of the Rotating Basin Monitoring Program. Through implementation of this program, it will be possible to ascertain the beneficial use support status of streams in the specified watersheds, to collect information of nonpoint sources of pollution, and to evaluate success of implementation and education efforts.

Project 4 – Statewide Blue Thumb Program – OCC..... \$278,979

The goals of the Statewide Blue Thumb program includes promoting the Blue Thumb Program throughout Oklahoma, particularly through conservation districts; organizing and supporting satellite programs; water quality education activities; volunteer water quality monitoring; and groundwater education/screening programs.

Project 5 - Fort Cobb Watershed TMDL Implementation Project..... \$1,244,514

This program will attempt to install 35,000 acres of no-till cropland in the Fort Cobb watershed to work towards the TMDL recommendation that 50% or approximately 51,000 of the 101,000 acres of cropland are no-till. This will accomplish approximately 69% of that TMDL goal. As a result, this implementation could eventually lead to a phosphorus load reduction of 12% for the Fort Cobb Watershed.

Section §604(b) Water Quality Management Program

Section 604(b) of the CWA authorizes assistance to States to carryout water quality management planning. The States must pass through 40% of these funds to regional planning agencies unless the Governor, in consultation with affected parties, determines

that regional planning agency participation will not significantly assist the State in its water quality management planning efforts.

The state receives approximately \$100,000 per year in funding (no state match is required). Forty percent of the annual funding goes to the sub-state planning districts - usually ACOG (Association of Central Oklahoma Governments - Oklahoma City area) and INCOG (Indian Nation Council of Governments - Tulsa area). The remaining 60% is allocated to the Oklahoma Water Resources Board (OWRB) for planning purposes. The funding period for this program is approximately three (3) years.

FY 05 604(b) Program

Project 1 – 2006 – 2007 Oklahoma Water Quality Standards Triennial Revision - OWRB
..... \$60,000

The objective of this project will be to meet the requirements of a triennial revision outlined in the Clean Water Act, Code of Federal Regulations, Oklahoma Administrative Procedures Act, and other applicable statutes and rules governing how water quality standards are revised and submitted. An additional objective of this project is to exceed the federal and state requirements for public participation and review of the standards with the informal public participation traditionally implemented by the OWRB prior to the required formal steps.

Project 2 – Lower Bird Creek Bacterial – INCOG \$20,000

The objective of this project is to provide resources for the INCOG to conduct chemical monitoring for bacterial source tracking concurrently with FY 04 104(b)(3) study of bacteria sources and TMDL development in the lower Bird Creek watershed.

Project 3 – Impact of Domestic Septic Tanks on Groundwater in Central Oklahoma– ACOG \$20,000

The objectives of this project are to locate areas of the Garber, Willington, Hennessey and Duncan Formations which are susceptible to nitrate loadings and to evaluate the impacts of septic systems in higher-density lot sizes.

Grant Expenditures October 1, 2004 through September 30, 2005

Table 2 shows the expenditure of Clean Water Act funds between October 1, 2004 and September 30, 2005. The expenditures were for activities completed in SFY 2005 and funded through current and previously awarded grant programs. Funds are distributed on a reimbursement basis as detailed in the Formal Agreement between EPA and OSE.

Table 2. SFY 2005 Clean Water Act Expenditures

	Association of Central Oklahoma Governments	Indian Nations Council of Governments	Oklahoma Conservation Commission	Oklahoma Corporation Commission	Oklahoma Department of Agriculture, Food, and Forestry	Oklahoma Department of Environmental Quality	Oklahoma Water Resources Board	Oklahoma State University	Oklahoma Scenic Rivers Commission	Office of the Secretary of the Environment
104(b)(3) Program-TMDL		\$123,627					\$5,080			
104(b)(3) Program-WQCA		\$59,675	\$55,207	\$118		\$57,201	\$153,047			\$3,651
104(b)(3) Program-Wetlands		\$10,399	\$106,901		\$2,663		\$50,570	\$47,824	\$2,599	\$897
106 Program					\$126,104	\$3,324,963				\$173,746
319(h) Nonpoint Source Program			\$2,833,677		\$397	\$14,360				\$97,574
604(b) Water Quality Management Program	\$36,929	\$17,156					\$55,697			
TOTAL Expenditures	\$36,929	\$210,857	\$2,995,785	\$118	\$129,164	\$3,396,524	\$264,394	\$47,824	\$2,599	\$275,868