

**SOUTHERN SANDOVAL COUNTY
ARROYO FLOOD CONTROL AUTHORITY
FISCAL YEAR 2009 STORMWATER MANAGEMENT PROGRAM
ANNUAL REPORT
(JULY 1st, 2008 THROUGH JUNE 30th, 2009)**

The Southern Sandoval County Arroyo Flood Control Authority (SSCAFCA) was created in 1990 as a quasi municipality to address regional flooding and stormwater drainage problems in the urbanized area of southern Sandoval County. Sandoval County is located just north of and abutting Bernalillo County in central New Mexico. SSCAFCA's jurisdiction includes the Village of Corrales, the Town of Bernalillo west of the Rio Grande and portions of the City of Rio Rancho and Sandoval County. SSCAFCA currently owns or operates stormwater facilities including dams, channels, ponds, piping systems and other stormwater related infrastructure within its jurisdiction. SSCAFCA's jurisdiction is approximately 225 square miles with an estimated population of 90,000.

SSCAFCA's Stormwater Management Plan (SWMP) was submitted on May 24, 2007. This is SSCAFCA's second annual report under the NPDES Phase II General Permit NMR040000. This report documents the progress achieved over the program year on the activities associated with the six Minimum Control Measures as indicated in the SWMP.

At SSCAFCA's October 16 and November 20, 2009 Board meetings, the public was invited to address the Board with any environmental concerns (See attached agenda and public announcement in Appendix A) and to provide input on the draft annual report.

Note: projects completed or actions taken by SSCAFCA are indicated in bold text after each section.

Certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

David Stoliker, PE
Executive Engineer

Date: _____

1. Public Education and Outreach

SSCAFCA believes that public education is fundamental to addressing stormwater pollution and therefore will implement the following practices. All activities related to public education and outreach will be documented in the annual report.

Proposed Best Management Practices:

BMP 1-A: Develop and distribute educational material concerning impacts of stormwater discharge to watershed.

BMP 1-B: Conduct outreach activities about the impacts of stormwater discharges on local water bodies and the steps that can be taken to reduce stormwater pollution.

Actions taken:

- **SSCAFCA continued to fund and participate in an intergovernmental Stormwater Quality Team. Other members include the City of Albuquerque, University of New Mexico, New Mexico Department of Transportation, Bernalillo County, Ciudad Soil and Water Conservation District, and AMAFCA. The primary objective of this team is to implement the goals of this minimum control measure. In development are updated and expanded education materials including brochures, rack cards, displays, website, locally produced videos, and consideration of appropriate venues and events to distribute or present this material. It is anticipated that this material will be ready for dissemination in the next program year.**

2. Public Participation/Involvement

SSCAFCA is particularly aware of the value of public involvement and acceptance of its mission as it is dependent on publicly voted bonds for funding. As such, SSSCAFCA takes every opportunity to understand and accommodate the public needs, which include protecting water quality.

Proposed Best Management Practices:

BMP 2-A: Provide notice to public of upcoming NOI submittal and subsequent annual BMP evaluations that result in changes or additions.

BMP 2-B: Investigate feasibility of supporting established anti-litter program(s) or initiating new programs seeking public participation in ensuring flood control facilities remain free of trash and debris.

Actions taken:

- **SSCAFCA has provided public notice and invited participation for preparation of this report on October 16, 2009 and November 20, 2009.**
- **SSCAFCA continued to support and participate with other governmental entities and citizen action groups to raise awareness of illegal dump sites within the local watersheds. This is primarily accomplished through the City sponsored Keep Rio Rancho Beautiful (KRRB) program. KRRB's mission is to educate, facilitate, and inspire our community to take pride and ownership in proper solid waste handling practices, recycling, litter prevention, beautification, and environmental education. KRRB has been an affiliate of Keep America Beautiful since 1989.**

3. Illicit Discharge Detection and Elimination (IDDE)

Under the authority granted to SSCAFCA (NMSA 1978: 72-19-22), connection to any stormwater drain or flood control facility of the authority must be approved. SSCAFCA has recently undertaken the process of setting up an in-house GIS system to be utilized for purposes such as maintaining information on all connections to SSCAFCA facilities. It is anticipated that control of potential illicit discharges from connected municipal stormwater infrastructure will fall under the purview of the respective municipality. SSCAFCA proposes the following practices seeking to minimize non-stormwater discharges within its facilities.

Proposed Best Management Practices:

BMP 3-A: Development of a system-wide stormwater infrastructure map.

BMP 3-B: Develop program to identify unapproved connections to SSCAFCA conveyances/facilities, and potential sources of illicit discharge.

BMP 3-C: Review and update policy to prohibit non-stormwater discharges to SSCAFCA facilities.

BMP 3-D: Partner with local municipalities to support education concerning ordinances preventing unauthorized discharges to MS4s (ties in with MCM 1).

Actions taken:

- **SSCAFCA continued to rely on enforcement by the City of Rio Rancho of Municipal Code that prohibits specific discharges to public sewers. By extension, any connection to SSCAFCA facilities must be approved, further enabling protection of the downstream receiving water bodies from illicit discharges.**
- **Storm drain inlet marker program was investigated during attendance at the June 2009 MS4 operators conference in Huston, TX. Several marker styles were identified as desirable for use in the program. SSCAFCA intends to approach municipalities within its jurisdiction for funding contributions to initiate this program in the following program year.**

4. Construction Site Runoff Control

SSCAFCA recognizes the potential for excess sediment and other pollutants from construction site runoff to be transported to receiving watercourses and proposes the following mitigation measures.

Proposed Best Management Practices:

BMP 4-A: Evaluate adoption of enhanced erosion control policies for disturbed land areas of 1 acre or greater.

BMP 4-B: Conduct contractor training courses regarding stormwater management guidelines for construction practices.

BMP 4-C: Evaluate development of tracking program to monitor construction site runoff control implementation for projects within jurisdiction.

BMP 4-D: Evaluate training opportunities for SSCAFCA staff tasked with NPDES program management.

Actions taken:

- **SSCAFCA SWMP Coordinator presented at a Getting In Step With Phase II MS4 workshop on November 6 & 7, 2008: Construction Site Runoff Control – Case Study. Presentation dealt primarily with large, mass graded development sites that were not effectively managing offsite sediment migration and the need for improved practices with respect to the unique local soil conditions and hydrology. A copy of the presentation can be found in Appendix B.**
- **Both the City of Rio Rancho and SSCAFCA policies and procedures outline erosion control requirements for development:**
 - **Final Development Process Manual for SSCAFCA and City of Rio Rancho (7/31/09) – Section 5. Design Grading and Erosion Control**
 - **SSCAFCA Drainage Policy (6/20/08)**
 - **SSCAFCA Drainage Policy Ammendment 2004-1**
 - **City of Rio Rancho Ordinance - Chapter 153: Erosion Control; Storm Drainage**
 - **Sediment and Erosion Design Guide (November 2008)**

5. Post-Construction Runoff Control

SSCAFCA recognizes that many of its primary functions as a flood control agency also serve as ongoing controls on sediment transport to receiving waters. As such, SSCAFCA proposes to leverage flood control projects and practices to benefit the NPDES program.

Proposed Best Management Practices:

BMP 5-A: Review existing construction standard details regarding stormwater quality and evaluate promulgation of details for use in commercial and residential development projects.

BMP 5-B: Continue implementation of current policy DPA 2004-1.

BMP 5-C: Evaluate adoption of policy creating land conservancy areas.

BMP 5-D: Evaluate, develop, and implement O&M performance bond/administrative policy.

BMP 5-E: Develop, fund, and implement SSCAFCA capital improvement projects incorporating water quality features such as stormwater detention, erosion control, stream bank protection, and etcetera.

Actions taken:

- **SSCAFCA continued to mandate compliance with all of the policies and procedures outlined in MCM 4 with respect to post-construction runoff control through reviewing and approving all multi-unit residential and commercial construction within the jurisdiction.**
- **SSCAFCA continued to acquire property in the vicinity of an area identified for preservation as a natural habitat on the West Branch of the Black Arroyo. This area has been protected in perpetuity by covenant from being developed through a USACE mitigation action. This habitat area also serves the purpose of improving local stormwater quality by reducing impervious surface and creating a buffer space between development and the natural arroyo conveyance to the Rio Grande. A figure indicating the acquisitions performed last program year is included in Appendix C.**
- **Construction of the Sunset Pond was complete in late 2008. This \$3,000,000 flood control facility includes provisions for treatment of stormwater to remove debris and excess sediment from the stormwater prior to being conveyed downstream. This project also included an evaluation of different slope stabilization methods, specifically application of hydromulch to pond side slopes excavated from local soil material that is known to be highly erosive/easily disturbed. In addition, an educational monument sign was**

placed at the facility to help the public understand how the facility was designed to improve water quality. A copy of the monument sign is located in Appendix D.

- **A watershed management plan for the Unnamed Arroyo originating in the northeast portion of Rio Rancho and discharging to the Rio Grande in the Town of Bernalillo was initiated during the program year. This plan will include design for an extended detention water quality facility to treat the first flush for sediment, adsorbed micro-pollutants, hydrocarbons, and floatable debris. Completion of the plan is anticipated in the following program year, as well as initiation of land acquisition efforts by both SSCAFCA and the Town of Bernalillo. It is anticipated that capital improvement funding over several years is required to construct this facility. Once complete, all three outfalls to the Rio Grande under SSCAFCA control will have some form of treatment prior to discharging to the river. Excerpts from the approved plan are located in Appendix E.**
- **Future similar projects are programmed in the fiscal years 2010-2014 Capital Improvement Project list submitted to the State of New Mexico in September 2008, (previously submitted). Implementation is not assured due to budgetary uncertainty.**

6. Pollution Prevention/Good Housekeeping

Proposed Best Management Practices:

BMP 6-A: Review previous SSCACFA facility operations impact determination and make changes as appropriate.

BMP 6-B: Develop and implement standard operating procedure (SOP) for disposition of waste material recovered from flood control facilities.

BMP 6-C: Evaluate, develop and implement enhanced O&M program utilizing newly obtained GIS resources.

Actions taken:

- **An evaluation of SSCAFCA facility operations yielded no changes or improvements necessary.**
- **An expansion of the SSCAFCA office was initiated during the program year that will approximately double the office size. This building expansion is being constructed to achieve a LEED platinum certification and will have total capture of runoff generated by the increased roof surface.**
- **Evaluation of O&M and NPDES MS4 program administration software packages continued during the second program year. It is anticipated that request for proposals for consulting services or software package selection will occur in the next program year. Once implemented, tracking of sediment collection and refuse disposition from SSCAFCA facilities can become fully integrated with goals of the SWMP.**
- **Ongoing collection and disposal of waste debris captured in SSCAFCA water quality facilities was performed during the program year. Floatable debris including disposable plastic drinking bottles, trash, dumped waste, and vegetation/foilage was collected and quantified at the Black Arroyo, Montoyas Sportsplex, and Santa Fe Hills water quality ponds/dams. It is estimated that several hundred pounds of debris was collected during the first half of the 2009 monsoon season. A photograph of a debris pile is located in Appendix F.**

Appendix A

SSCAFCA Board Meeting Agendas

Appendix B

Construction Site Runoff Control – Case Study

Appendix C

Land Acquisition in Habitat Area

Appendix D

Sunset Pond Monument Sign

Appendix E

Unnamed Arroyo Watershed Management Plan - Excerpts

Appendix F

Waste Disposition Photograph

