

**SOUTHERN SANDOVAL COUNTY  
ARROYO FLOOD CONTROL AUTHORITY  
FISCAL YEAR 2013 STORMWATER MANAGEMENT PROGRAM  
ANNUAL REPORT  
(JULY 1st, 2012 THROUGH JUNE 30th, 2013)**

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 **sixth** annual report under the NPDES Phase II General Permit NMR040000 which was administratively extended. 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 the August 9, 2013 meeting of the SSCAFCA Board of Directors, the public was invited to address the Board with any environmental concerns (See attached agenda in Appendix A) and to provide input on the draft annual report.

**Note: Actions taken by SSCAFCA during the program year 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.

\_\_\_\_\_  
Charles Thomas, 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 (SQT). Other members include the City of Albuquerque, University of New Mexico, New Mexico Department of Transportation, Bernalillo County, and AMAFCA. The primary objective of this team is to implement the goals of this minimum control measure. The following efforts and actions were conducted by the Team this program year:**
  - **Continued funding for water quality sampling/education program focused on the Rio Grande for public school students: Bosque Education Monitoring Program (BEMP) 2012-2013 BEMP Stormwater Science Education Overview and associated listing of programs delivered by BEMP (see Appendix B1)**
  - **Continued funding of the RiverXchange program in 5<sup>th</sup> grade classes throughout Albuquerque, Corrales, and Rio Rancho. The 2013 RiverXchange report is located in Appendix B2.**
- **SSCAFCA separately funded and developed a pilot Arroyo Classroom Education Program for delivery to third grade classrooms at Maggie Cordova Elementary School in Rio Rancho. This program combined arroyo safety with educational materials regarding the arroyo ecosystem. This program builds a greater understanding of healthy natural arroyo systems and the plants and animals that inhabit them. The report on this pilot program is located in Appendix B3.**
- **SSCAFCA was an event planner, committee member, and participant in the Rio Rancho Children's Water Festival. This program is based on fourth grade educational standards and promotes awareness of water in a desert environment. Students attend a day-long event with six breakout sessions. Each breakout session concentrates on one aspect of water in the desert, with one session specifically on stormwater and stormwater pollution prevention.**

- **SSCAFCA separately funded the RiverXchange program to increase the program's exposure within the SSCAFCA jurisdiction. A total of 22 of classes from Rio Rancho and Corrales participated with representatives from SSCAFCA directly participating as guest speakers regarding non-point source pollution issues. A watershed model was used to demonstrate the cumulative effects of NPS on the local watershed, highlighting what the students could actively do to prevent such pollution. The year-end summary report can be found in Appendix B2.**
- **SSCAFCA also participated in numerous public outreach events for both adults and children. These events ranged from participation in public events such as festivals to targeted educational efforts at public school events. These efforts reached an estimated 4,343 adults and school children. A summary table of SSCAFCA-attended events is located in Appendix B4.**
- **SSCAFCA was an active participant and proponent of the Biological Alternative to Spraying Program (BATS) in conjunction with the Rio Grande Basin Bat Collaborative. This program aims to reduce pesticide use in and around stagnant waters in SSCAFCA's jurisdiction. In 2013, several bat boxes (homes) were added around areas with stagnant water. The Rio Grande Basin Bat Collaborative is the process of performing a count of current bat box population to ascertain the effectiveness of the boxes. Additionally, educational programming is being delivered to students and adults discussing bats as natural predators of insect populations.**
- **Completed construction of Arid LID demonstration facility at Roskos Field in Rio Rancho, New Mexico. This project demonstrates a variety of Arid LID techniques that can be used by land owners for capturing rainwater and applying to landscape. A supplemental project for demonstrating rainwater harvesting off of a roof and storage for irrigation of landscaping is schedule for next fiscal year. Additionally, educational panels are being designed that discuss the rainwater harvesting features and are scheduled to be deployed in the 2013-2014 cycle. A project write-up and photographs for this project are located in Appendix B5.**
- **Completed Master Plan for the Black Arroyo Open Space Wildlife Park which incorporates an education oriented space for usage by the local Elementary School in studying site biology, ecology of arroyo systems, hydrology and geology.**

## **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, SSCAFCA 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 input on the preparation of this report on August 9, 2013 as well as posting the draft report on our website, [www.sscafca.com](http://www.sscafca.com). See Appendix A for Board meeting agenda opening up public comment period.**
- **SSCAFCA continued to support and participate with other governmental entities and citizen action groups to raise awareness and conduct cleanup operations 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. SSCAFCA participated with the City of Rio Rancho at the 2013 Great American Cleanup where 1,038 volunteers picked up 111 tons of trash from drainage facilities and the contributing watershed (see Appendix C1).**
- **SSCAFCA continued for a fourth year in a row to participate in the AridLID conference that was held in March 2013 in Albuquerque, New Mexico. This conference sought to bring together a wide array of technical and organizational knowledge concerning the implementation of Low Impact Development and Green Infrastructure techniques in an arid environment. SSCAFCA provided a sponsorship for this conference. Conference agenda is included in Appendix C2.**

### **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).

- **No incidences of illicit discharges were noted this program year.**
- **SSCAFCA continues to maintain and update a GIS-based map of all SSCAFCA drainage and water quality facilities**

#### **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:

- **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 Amendment 2004-1**
- **City of Rio Rancho Ordinance - Chapter 153: Erosion Control; Storm Drainage**
- **Sediment and Erosion Design Guide (November 2008)**
- **SSCAFCA had no agency-sponsored construction projects during the reporting cycle that would require construction site runoff management activities.**
- **SSCAFCA staff attended SWPPP training to ensure that staff was aware of changes that have occurred in the new Construction General Permit issued by EPA. The training event flier is located in Appendix D1.**

## **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 added a trash screen in the Tract 17 pond in the Black Arroyo watershed as an added feature in this facility to collect floatables at main pond intake structure. A picture of this feature is located in Appendix E1**
- **SSCAFCA added a trash screen at the Sportsplex Dam to help collect large debris as it leaves the dam. A picture of this feature is located in Appendix E2.**
- **Identified two projects for sediment reduction and floatable removal within the Montoyas Arroyo watershed and pursued funding for these projects. Both have been funded. The first project, the Lower Montoyas Water Quality facility is scheduled to be constructed by June 2014. The Lomitas Negras Water Quality facility is scheduled to be constructed by May 2015. A figure illustrating the location of these two projects is located in Appendix E3.**
- **Completed land acquisition at the Black Arroyo Open Space, a land conservancy project in the heart of Rio Rancho. Completed site master plan to facilitate bank/erosion protection by the prohibition of ATVs from the site, development of pedestrian trails to encourage users of the open space to stay on the trail and not traverse the arroyo banks, and provide educational opportunities to local elementary school bordering the Open Space. See Appendix E4 for the land planning element of the open space.**
- **Identified natural playa areas in the Callabacillas Arroyo watershed that should be preserved in order to maintain these natural land forms that serve as both groundwater recharge areas and retention ponds. Received Board of Directors approval to begin the purchasing of these properties. This land acquisition will include the purchase of approximately 200 acres in order to preserve these natural drainage features. See Appendix E5.**

## **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.**
- **Ongoing collection and disposal of gross debris captured in SSCAFCA water quality facilities was performed during the program year. Floatable debris included disposable plastic drinking bottles, miscellaneous trash, construction debris, and vegetation/foilage. Normal trash removal operations throughout the course of the year yielded 170, 55-gallon trash bags of debris collected from drainage facilities.**



## **List of Appendixes**

- Appendix A – Board Meeting Agenda: August 9, 2013**
- Appendix B1 – 2012/2013 Bosque Education Monitoring Program Summary Reports**
- Appendix B2 – 2012/2013 School Year RiverXchange Summary Report**
- Appendix B3 – Arroyo Classroom Education pilot program report**
- Appendix B4 – Summary table of public outreach events and attendance**
- Appendix B5 – Photos of Roskos Field Arid LID demonstration project**
- Appendix C1 – Keep Rio Rancho Beautiful Cleanup Participation**
- Appendix C2 – 2013 Arid LID Conference Agenda**
- Appendix D1 – Construction General Permit – SWPPP training event flier**
- Appendix E1 – Tract 17 trash screen photographs**
- Appendix E2 – Sportsplex Dam outlet trash screen for large floatables**
- Appendix E3 – Project map for Lower Montoyas and Lomitas Negras Water Quality Facility projects**
- Appendix E4 – Black Arroyo Wildlife Park land use management map (excerpt from Master Plan)**
- Appendix E5 – Callabacillas Watershed playa land acquisition project board meeting minutes and map**