



City of Chandler
*Small Municipal Separate Storm Sewer System
Annual Report*

July 1, 2011 through June 30, 2012





Chandler + Arizona
Where Values Make The Difference

September 20, 2012

Arizona Department of Environmental Quality
Surface Water Section/Stormwater & General Permits Unit (5415A-1)
1110 West Washington Street
Phoenix, AZ 85007

RE: City of Chandler Small MS4 Annual Report: July 1, 2011 – June 30, 2012

Please find enclosed one (1) copy of the City of Chandler's Small Municipal Separate Storm Sewer System (MS4) Annual Report for the reporting period July 1, 2011 through June 30, 2012. Also, enclosed is a check in the amount of \$7,500 as payment for the annual fee. The City of Chandler looks forward to your comments and a continuing effort to address stormwater quality. Should you have questions, please don't hesitate to call me at (480) 782-3503.

Sincerely,

Dave Verhelst
Stormwater Program Coordinator
City of Chandler

Cc: Dan Cook, Transportation Manager
Cc: R.J. Zeder, Transportation & Development Director

Mailing Address
Mail Stop 909
PO Box 4008
Chandler, Arizona 85244-4008

Public Works Department
Street Division
Telephone (480) 782-3500
Fax (480) 782-3495
www.chandleraz.gov

Location
Building C
975 East Armstrong Way
Chandler, Arizona 85249

Small MS4 Annual Report Form

Please refer to the attached instructions as you prepare your annual report.

A. General Information

Name of MS4: City of Chandler

Contact Name: Dave Verhelst

Telephone Number: (480)782-3503 Email Address: david.verhelst@chandleraz.gov

Annual Report Period: July 1, 2011 through June 30, 2012

B. SWMP Modifications and Additional Information. Attach a brief explanation if you check "yes" to any of the following statements.

- | | | |
|---|---|--|
| 1. Changes have been made or are proposed to the SWMP since the last annual report, including changes in response to ADEQ's review. | YES <input type="checkbox"/> | NO <input checked="" type="checkbox"/> |
| 2. The MS4 has annexed lands. | YES <input checked="" type="checkbox"/> | NO <input type="checkbox"/> |
| 3a. The MS4 discharges directly to an impaired water. | YES <input type="checkbox"/> | NO <input checked="" type="checkbox"/> |
| 3b. A water within 10 miles of the MS4's jurisdiction has been identified as impaired. | YES <input type="checkbox"/> | NO <input checked="" type="checkbox"/> |
| 4a. The MS4 discharges directly to water for which a TMDL has been established. | YES <input type="checkbox"/> | NO <input checked="" type="checkbox"/> |
| 4b. A TMDL has been established for a water within 10 miles of the MS4's jurisdiction. | YES <input type="checkbox"/> | NO <input checked="" type="checkbox"/> |
| 5. The MS4 has conducted analytical monitoring of stormwater quality. | YES <input type="checkbox"/> | NO <input checked="" type="checkbox"/> |
| 6. The MS4 is relying on another government entity to satisfy some permit obligations. | YES <input type="checkbox"/> | NO <input checked="" type="checkbox"/> |

Section B Part 1: No changes have been made to the SWMP since the last annual report.

New Best Management Practices:

No new best management practices have been implemented during the reporting period. ADEQ has not requested that changes to the City's SWMP were necessary.

Updated/Changed Best Management Practices

No best management practices have been changed or updated during the reporting period.

Section B – Part 2: The City Has Annexed Lands

During the reporting period, the City of Chandler annexed 70.01 acres of land. The 6 annexations include undeveloped and former agricultural properties and County rights-of-way. A map has been included detailing the location of the properties annexed. If necessary during and post development, the following BMPs will be implemented in these areas:

- Public Meetings
- Stormwater System Map
- Plan Review
- Spill Prevention and Detection
- Grading and Drainage Permits
- Construction Site Inspections
- Construction Stormwater Handbook
- Property Owner's Manual
- Storm Drainage System Technical Design Manual
- Final and One-Year Warranty Inspections
- Street Cleaning
- Illegal Dumping Response

FY 2011-2012 Annexations

| Ordinance Number | Adoption Date | Effective Date | Annexed Acreage | Location | Parcel # |
|------------------|---------------|----------------|-----------------|--|---|
| 4325 | 11/14/2011 | 12/14/2011 | 3.43 | Gilbert Road Right-of-Way Between Chandler Auto Park Way and 1/4 Mile South of Germann Road. | N/A |
| 4329 | 12/12/2011 | 1/11/2012 | 0.06 | Gilbert Road Right-of-Way North of Pecos Road. | N/A |
| 4330 | 12/12/2011 | 1/11/2012 | 0.09 | Right-of-Way at Northeast Corner of Gilbert Road and Pecos. | N/A |
| 4331 | 12/15/2011 | 1/14/2012 | 23.21 | East of the Southeast Corner of Lindsay Road and Ocotillo Road. | 30475004Q |
| 4339 | 1/26/2012 | 2/25/2012 | 40.83 | Southwest Corner of Ocotillo Road and 148th Street. | 30475004K, 30475302 THRU 30475339 |
| 4363 | 5/10/2012 | 6/9/2012 | 2.39 | East of the Northeast Corner of Queen Creek and Gilbert Roads. | 30456007B |
| | | Total | 70.01 | | |

C. Stormwater Management Program Status. Provide the status of every BMP and measurable goal in your SWMP described in the instructions.

TABLE 1

| Minimum Control Measure(s) | BMP | Measurable Goal (steps to measure progress) | New or Revised | Start Date | Implementation Status/ Frequency/ Achievement Date (completed, in progress, not started) |
|---------------------------------------|-------------------------|---|----------------|--------------|--|
| Public Education and Outreach | Newsletter Articles | 2011 Annual Drinking Water Quality Report including information on stormwater runoff and pollution prevention was distributed via mail to approximately 99,860 households in May 31, 2012. CityScope Newsletter articles <i>Keep Your Water Clean</i> (July-August 2011), <i>Help Prevent "Hot Loads"</i> (September-October 2011), <i>Only Rain in the Storm Drain</i> (December 2011-January 2012), <i>Spring Cleaning Tips</i> (April-May 2012) were distributed via utility bills and at City facilities. Distribution is approximately 70,000. Copies of the newsletters are included in Appendix A. | | May 2003 | Completed. Newsletter articles such as the City's Annual Drinking Water Quality Report and other City sponsored newsletters will continue and will be distributed to residents by bulk mail or in utility bills, City employees and available at City facilities. |
| Public Education and Outreach | Storm Water Brochure | Brochures may be included in new resident packets and distributed at City kiosk at Chandler Fashion Square Mall, City libraries, and handed out at City events, various neighborhood meetings, HOA board meetings and special events. Distributed 576 brochures during the reporting period. Copy of brochure included in Appendix B. | | August 2003 | Completed. Distribution of brochures at City locations, events and meetings will continue. Distribution will be tracked during the next reporting period. |
| Public Education / Public Involvement | Storm Water Webpage | Developed webpage on City website. 4,014 visits to the webpage, with 4,955 page views reported. Copies of webpage content included in Appendix C. | | August 2003 | Completed. Website will be periodically updated with new information. Site visits and page views will continue to be tracked during the next reporting period. |
| Public Education | Storm Water Signage | 20 signs were originally purchased. No signs were installed during reporting period. | | January 2004 | Completed. Signs will be produced and installed in City retention basins when appropriate. Installation and location will be tracked during the next reporting period. |
| Public Education / Public Involvement | Storm Drain Placards | 6,000 cast aluminum placards were originally purchased. 259 placards were installed during the reporting period. | | July 2003 | Completed. Installation and/or replacement of placards on storm drain inlets will continue and will be tracked during the next reporting period. 400 more placards were purchased during the reporting period. Placards are replaced when necessary and have been added to scupper inlets. |
| Public Education | Landscape and Lawn Care | Assist in the management of irrigation runoff. 49 new residential low water use landscape installations, 57 low water use landscape conversions and 26 irrigation timer rebates. | | March 2003 | Completed. Conversions and timer rebates will continue as funding allows. Conversions and rebates will be tracked during the next reporting period. |

TABLE 1 (continued)

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| Public Education / Public Involvement | Conservation Calendar | Held 4th grade Environmental Art Contest. Created calendar and poster incorporating the winning artwork. 3,500 calendars and 300 posters were printed and distributed in December 2011 to January 2012. 985 entries from 32 schools were received in March 2012. Artwork is displayed on the City's waste and recycling trucks and on City websites. Calendar included in Appendix D. | | August 2003 | Completed. The conservation calendar will continue and will be distributed to schools and City events. Art contest and calendar production will continue as funding allows. |
| Public Education / Public Involvement | Classroom Presentations | No invites from teachers during this reporting period. | | May 2004 | Completed. Classroom presentations will continue to be available and encouraged. |
| Public Education / Public Involvement | Hamilton High School Science Fair | Approximately 4,000 spectators and 1,500 participants attended the fair. Discussed storm water pollution prevention and related information through use of STORM display boards and other information. The following items were distributed at the event: 90 rain gauges, 110 magnetic clips, 125 brochures, 136 wristbands, 87 key chains, 165 Bags-on-Board dispensers, 100 recycled content bags, and 75 Storm Drain Dan activity books. | | February 2004 | Completed. The City expects to participate in the next Hamilton High Science Fair in February 2012. Distribution and tracking of attendees and program promotional items will be tracked during the next reporting period. |
| Public Education | STORM Membership | STORM website (www.azstorm.org) with stormwater related information. Display boards illustrating the difference between sanitary and storm sewer system and pollution prevention are utilized at public events. Radio public service announcements and development and distribution of promotional items were completed. The STORM Annual Report is included in Appendix E. | | March 2003 | Completed. The City will continue yearly membership with STormwater Outreach for Regional Municipalities (STORM) as funding allows. |
| Public Education | Rain gauges | 263 rain gauges with "Please...only rain in the storm drain", city website address and contact information were distributed at City attended events. These events included the Hamilton High School Science Fair, 3rd Annual Fishing Clinic and Outdoor Safety Expo, Chandler Artwalk: An Evening of Art & Science, 9th Annual 4th Grade Environmental Art Contest Awards Ceremony, Earth Day Celebration and Intel Green-it Fair. | | April 2005 | Completed. Distribution of rain gauges will continue as funding allows. Distribution will be tracked during next reporting period. |

TABLE 1 (continued)

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|---|--------------------------------------|---|----------------|---------------|--|
| Public Education | Public Works @ Work, City cable show | A storm water pollution prevention video segment aired a minimum of 2 times per week. A storm water message slide "Keep Your Drinking Water Safe" aired throughout the year on the Channel 11 bulletin board. The message aired over 1,000 times. Copies of the video PSA and slide are included in Appendix F. | | March 2005 | Completed. Video segments and messages are updated and will be aired. Number of airings will be tracked during the next reporting period. |
| Public Participation | Public Meetings | During the reporting period, the City's Communications & Public Affairs Department worked with the Transportation & Development Department to hold three public meetings involving construction projects that included storm water collection and/or distribution components. A total of 62 individuals signed in at the meetings. Copies of the sign-in sheets are included in Appendix G. | | June 2003 | Completed. Public meetings associated with Capital Improvement Projects will continue and will be documented during the next reporting period. |
| Public Participation/Illicit Discharge Detection and Elimination | Storm Water Pollution Hotline | Phone number identified on City website, brochures and promotional items distributed. Residents can call with storm water related issues or concerns. Approximately 25 calls were received. | | November 2004 | Completed. The City will continue to track calls during the next reporting period. |
| Illicit Discharge Detection and Elimination | Storm Water System Map | Collect as-built information on storm drain system, identify new system components | | March 2003 | Completed. The City will continue to collect data and update data from as-built information, site inspections, etc. |
| Illicit Discharge Detection and Elimination | Storm Drain Video | Video storm drains for illicit connections and infrastructure condition. Approximately 260 linear feet of the storm drain system was inspected and recorded. | | May 2005 | Completed. The City will continue to utilize video services to inspect storm drains, connections and laterals when necessary. |
| Illicit Discharge Detection and Elimination/Post-Construction Stormwater Management | Plan Review | Plan reviews are completed to catch any illicit connections from wastewater discharge into the stormwater system. | | March 2003 | Completed. The City will continue plan review for any illicit connections from wastewater discharge into the stormwater system. |

TABLE 1 (Continued)

| Minimum Control Measure(s) | BMP | Measurable Goal (steps to measure progress) | New or Revised | Start Date | Implementation Status/ Frequency/ Achievement Date (completed, in progress, not started) |
|--|-----------------------------------|--|----------------|---------------|---|
| Illicit Discharge Detection and Elimination/Pollution Prevention Good Housekeeping | Spill Prevention and Containment | Prevention/containment of debris, materials and spills potentially entering the storm drain system. A total of 238 incidents/spills were responded to and resolved. The Streets Division responded to 228 calls associated with spills or debris clean-up. Environmental Management staff responded to 10 calls during the reporting period. Summaries of the spills and incidents responded to and spill response forms are included in Appendix H. | | March 2003 | Completed. The City will continue to report incidents/spills responded to during the next reporting period. |
| Illicit Discharge Detection and Elimination | Dry Weather Field Screening | Eight discharge points were inspected. Arrowhead and Denver Basins were inspected weekly. Inspection forms are included in Appendix I. | | March 2003 | Completed. The City will continue field screening inspections and completion of inspection forms. |
| Construction Site Runoff Control | Grading and Drainage Permits | A grading and drainage permit is required for new projects. These detail the City's requirements for runoff control. 125 permits were issued during the reporting period. A list of the Grading and Drainage Permits issued is included in Appendix J. | | March 2003 | Completed. The number of permits issued will be tracked during the next reporting period. |
| Construction Site Runoff Control | Construction Site Inspections | Sites are inspected for infractions to the Grading and Drainage Permit, State, County and/or City regulations and Standards. 17 final inspections were completed. 73 erosion and sediment control inspections were completed. A copy of the final inspection list and stormwater site inspection list are included in Appendix K. | | March 2003 | Completed. The number of inspections will be tracked during the next reporting period. |
| Construction Site Runoff Control | Construction Storm Water Handbook | City of Chandler Unified Development Manual is Available through the City's website. The Manual provides a single source for construction site BMPs, sediment control, permit applications, inspections, and non-stormwater and water management issues. 4,056 visits to the webpage, with 622,872 page views reported. There were 84 visits and 552 page views associated with the City of Chandler Manual on Stormwater Quality Protection. | | August 2003 | Completed February 2005. Site visits and page views will continue to be tracked during the next reporting period. |
| Post Construction Storm Water Management | Property Owner's Manual | Property Owner's Manual provides a means to inform property owners about stormwater management, pollution prevention and maintenance requirements. Copy of Manual included in Appendix L. | | November 2004 | Completed February 2005. Manual will be updated when necessary. The manual is distributed to Home Owner's Associations and other private property owners. |

TABLE 1 (continued)

| Minimum Control Measure(s) | BMP | Measurable Goal (steps to measure progress) | New or Revised | Start Date | Implementation Status/ Frequency/ Achievement Date (completed, in progress, not started) |
|--|---|--|----------------|------------|---|
| Post Construction Storm Water Management | Storm Drainage System Technical Design Manual | The manual outlines the design and policy for hydrology design, street drainage, storm drains, basins, and disposal of storm water and maintenance standards. Available as part of Unified Development Manual. | | March 2003 | Completed. Manual is reviewed and updated as needed. |
| Post Construction Storm Water Management | One-year Warranty Finals | A one-year warranty inspection is completed for developments and redevelopments to ensure that structures are constructed and operating properly. 13 one-year warranty Inspections were completed. A copy of the one-year warranty list is included in Appendix K. | | March 2003 | Completed. The number of inspections will be tracked during the next reporting period |
| Pollution Prevention and Good Housekeeping | Street Cleaning | 68,925 total miles of streets were swept with 2,053 tons of material removed. | | March 2003 | Completed. The City will continue street sweeping and will report miles and tonnage of material removed during the next reporting period. |
| Pollution Prevention and Good Housekeeping | Illegal Dumping / Illicit Discharge Response | 79 illicit discharge or illegal dumping calls were responded to and abated. Summary Report Included in Appendix M. | | March 2003 | Completed. Number of calls responded to and abated will be tracked during the next reporting period. |
| Pollution Prevention and Good Housekeeping | Employee Training | 214 employees attended training sessions associated with pollution prevention. Topics included; stormwater management program awareness, municipal stormwater pollution prevention, illicit discharge detection and elimination, dust control and hazardous spill response. The above mentioned sessions included 4 City Departments that comprised 15 Divisions. Report included in Appendix N. | | March 2003 | Completed. Employee training will continue and will be tracked and reported during the next reporting period. |
| Pollution Prevention and Good Housekeeping | Cleaning Catch Basins and Outfalls | 13,412 catch basins, scuppers, inlets, outfalls and drywells inspected. 1,527 catch basins and laterals, scuppers, spillways, inlets and outlets were cleaned. Arrowhead and Denver Basin Pump Stations were inspected weekly. A summary of work completed is Included in Appendix O. | | March 2003 | Completed. The number of inspections and structures maintained will be tracked during the next reporting period. |

TABLE 1 (continued)

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|--|---|--|----------------|------------|--|
| Pollution Prevention and Good Housekeeping | Hazardous Material Storage | 100 employees received training for 8-hour HazWOpER refresher. 7 employees received 40-hour HazWOpER certification. Report included in Appendix N. | | March 2003 | Completed. The City will continue tracking HazWOpER training. |
| Pollution Prevention and Good Housekeeping | Household Hazardous Waste Collection Facility | Approximately 2,675 vehicles/residents dropped off over 250,000 pounds of material that was reused, recycled or properly managed for disposal. Approximately 204,000 pounds of such material was reused or recycled. | | March 2003 | Completed. The City will continue tracking participation and material collected. |

D. 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.

Daniel W Cook

Signature

9-19-12

Date

Daniel W Cook

Name (printed)

Transportation Manager

Title