



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

July 1, 2012 through June 30, 2013



Chandler • Arizona
Where Values Make The Difference



Chandler · Arizona
Where Values Make The Difference

August 21, 2013

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, 2012 – June 30, 2013

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, 2012 through June 30, 2013. 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: Rex Hartmann, Streets Superintendent
Cc: Dan Cook, Transportation Manager
Cc: R.J. Zeder, Transportation & Development Director



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

Transportation and Development
Street Division
Telephone (480) 782-3500
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Location
Building C
975 East Armstrong Way
Chandler, Arizona 85286

Printed on recycled paper ♻️

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, 2012 through June 30, 2013

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 84.5 acres of land. The 13 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 2012-2013 Annexations

Ordinance Number	Adoption Date	Effective Date	Annexed Acreage	Location	Parcel #
4374	6/28/2012	7/28/2012	5.51	Ocotillo and Lindsay	N/A
4390	9/27/2012	10/28/2012	0.03	Certain Gilbert Road Rights-of-Way at the Southeast Corner of Pecos Road	N/A
4384	9/27/2012	10/28/2012	(- 2.65)	Certain Gilbert Road Rights-of-Way between Chandler Boulevard and Pecos Road	DEANNEXATION
4380	11/5/2012	12/5/2012	33.50	Northwest and West of the Southwest Corner of Appleby and Gilbert Roads	30377559 TO 30377668
4395	12/10/2012	1/9/2013	0.39	Chandler Heights Road Right-of-Way between the Consolidated Canal and Crossbow Way	N/A
4414	1/10/2013	2/9/2013	0.97	Certain County Rights-of-Way along Ocotillo Road between McQueen Road and Arizona Avenue	N/A
4414	1/10/2013	2/9/2013	1.23	Certain County Rights-of-Way along Ocotillo Road between McQueen Road and Arizona Avenue	N/A
4420	2/14/2013	3/16/2013	12.21	West of the Northwest Corner of Lindsay and Riggs Road	30382017G,017J,0 17K,017Q,017R,01 7S
4421	2/14/2013	3/16/2013	1.61	East of the Southeast Corner of McQueen and Willis Roads	30329032G
4422	2/28/2013	3/30/2013	2.07	Southeast Corner of Arizona Avenue and Riggs Road	303558980, 30358980
4436	3/28/2013	4/24/2013	24.44	West of the Southwest Corner of Chandler Heights and Gilbert Roads	30355012R,012W, 012X,012Y,303556 81,687,690
4407	4/28/2013	5/25/2013	1.62	Portions of Arizona Avenue Right-of-Way North and South of Riggs Road	N/A
4407	4/28/2013	5/25/2013	0.92	Portions of Arizona Avenue Right-of-Way North and South of Riggs Road	N/A
		Total	84.5		

C. Stormwater Management Program Status. Provide the status of every BMP and measurable goal in your SWMP as 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	2012 Annual Drinking Water Quality Report including information on stormwater runoff and pollution prevention was distributed via mail to approximately 101,062 households in June 2013. CityScope Newsletter articles <i>Dispose of your HHW safely</i> (July-August 2012), <i>Help prevent "hot loads"</i> (September-October 2012), <i>Only rain in the storm drain</i> (December 2012-January 2013), <i>Responsible Pet Ownership Reminders</i> (March-April 2013), <i>Spring Cleaning Tips</i> (April-May 2013) were distributed via utility bills and at City facilities. Distribution is approximately 68,000. 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 are distributed at City events, various neighborhood meetings, HOA board meetings and during illicit discharge response inspections. A pool draining utility bill insert was distributed via mail and during illicit discharge response inspections. 370 brochures and 63,855 utility bill inserts were distributed during the reporting period. A copy of the brochure and bill insert are 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. 2,844 visits to the webpage, with 4,386 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. 46 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.
Public Education	Landscape and Lawn Care	Assist in the management of irrigation runoff. 46 new residential low water use landscape installations, 42 low water use landscape conversions and 35 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)

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 / Public Involvement	Conservation Calendar	Held 4th grade Environmental Art Contest. Created calendar and poster incorporating the winning artwork. 4,000 calendars and 300 posters were printed and distributed in December 2012 to January 2013. 671 entries from 38 schools were received in April 2013. 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: 100 rain gauges, 102 magnetic clips, 110 brochures, 115 wristbands, 75 key chains, 125 Bags-on-Board dispensers, 100 recycled content bags, and 15 Storm Drain Dan activity books, 100 slap bands and 80 magnetic notepads.		February 2004	Completed. The City expects to participate in the next Hamilton High Science Fair in February 2014. 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 and movie theatre 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	185 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 Invitational Science & Engineering Fair, Chandler Artwalk: An Evening of Art & Science, 10th Annual 4th Grade Environmental Art Contest Awards Ceremony, and Freescale Live Green Expo.		April 2005	Completed. Distribution of rain gauges will continue as funding allows. Distribution will be tracked during next reporting period.

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)
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	There were no public meetings associated with Capital Improvement Projects that included information or discussions related to stormwater drainage structures during the reporting period.		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 28 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 2,662 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 196 incidents/spills were responded to and resolved. The Streets Division responded to 187 calls associated with spills or debris clean-up. Environmental Management staff responded to 9 calls during the reporting period. Summaries of the spills and incidents responded to and spill response forms are included in Appendix G.		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	Nine discharge points were inspected. Arrowhead and Denver Basins were inspected weekly. Inspection forms are included in Appendix H.		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. 61 permits were issued during the reporting period. A list of the Grading and Drainage Permits issued is included in Appendix I.		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. 18 final inspections were completed. 95 erosion and sediment control inspections were completed. A copy of the final inspection list and stormwater site inspection list are included in Appendix J.		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 (UDM) 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. 8,533 visits and 15,658 page views occurred since the previous server was decommissioned. (refer to note in right column for details). There were 246 visits and 648 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. Note: Statistics for the prior UDM are no longer available due to decommissioning of the old server as of March 13, 2013. Reported values for visits and page views are only available from March 13, 2013 to June 30, 2013. Documents from the old UDM site were migrated to Chandleraz.gov and will be tracked for FY 14
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 K.		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. 5 one-year warranty Inspections were completed. A copy of the one-year warranty list is included in Appendix J.		March 2003	Completed. The number of inspections will be tracked during the next reporting period
Pollution Prevention and Good Housekeeping	Street Cleaning	67,549 total miles of streets were swept with 1,970 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	64 illicit discharge or illegal dumping calls were responded to and abated. Summary Report Included in Appendix L.		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	239 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 7 City Departments that comprised 18 Divisions. Report included in Appendix M.		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	13,903 catch basins, scuppers, inlets, outfalls and drywells inspected. 2,177 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 N.		March 2003	Completed. The number of inspections and structures maintained will be tracked during the next reporting period.

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)
Pollution Prevention and Good Housekeeping	Hazardous Material Storage	113 employees received training for 8-hour HazWOpER refresher. 3 employees received 40-hour HazWOpER certification. Report included in Appendix M.		March 2003	Completed. The City will continue tracking HazWOpER training.
Pollution Prevention and Good Housekeeping	Household Hazardous Waste Collection Facility	Approximately 2,807 vehicles/residents dropped off over 109,600 pounds of material that was reused, recycled or properly managed for disposal. Approximately 70,730 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

9-9-13

Signature

Date

Daniel W Cook

Name (printed)

Transportation Manager / Acting City Engineer

Title