



City of Chandler
Small Municipal Separate Storm Sewer System
Annual Report

July 1, 2015 through June 30, 2016



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Chandler Arizona
Where Values Make The Difference

September 15, 2016

Mr. Christopher Henninger
Arizona Department of Environmental Quality
Water Quality Division, Surface Water Section
1110 West Washington Street, 5415A-1
Phoenix, Arizona 85007

RE: City of Chandler Small MS4 Annual Report: July 1, 2015 – June 30, 2016

Mr. Henninger:

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, 2015 through June 30, 2016. 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 Programs Coordinator
City of Chandler

Cc: Rex Hartmann, Streets Superintendent
Cc: Kevin Lair, Transportation Manager
Cc: R.J. Zeder, Transportation & Development Director
Cc: Marsha Reed, City Manager

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, 2015 through June 30, 2016

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:

The following best management practices were implemented and/or purchased during the reporting period. Such BMPs are considered to be temporary in nature and were not previously identified in the SWMP or requested by ADEQ.

- Transit Shelter Public Education and Outreach Posters (Implemented in FY 15-16)
- Display Boards for Public Education and Outreach Events (Implementation anticipated during FY 16-17)
- Tabletop Plinko Game for Public Education and Outreach Events (Implementation anticipated during FY 16-17)
- Purchased Network License's from Excal Visual for Intranet Based Employee Training (Implementation anticipated during FY 16-17)
- Custom City of Chandler Outdoor Canopy for Public Education and Outreach Events (Implementation anticipated during FY 16-17)

ADEQ has not requested that changes to the City's SWMP were necessary at this time. The City currently has a Consultant under contract and we anticipate revisions to the SWMP in the near future, following issuance of the new Phase II Small MS4 permit. Such revisions may include, but are not limited to addressing potential deficiencies and/or recommendations identified in the ADEQ MS4 Audit Report dated June 3, 2016, improvements or modifications to current BMPs and/or new BMPs that may be determined to enhance the effectiveness of the program.

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 46.30 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:

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

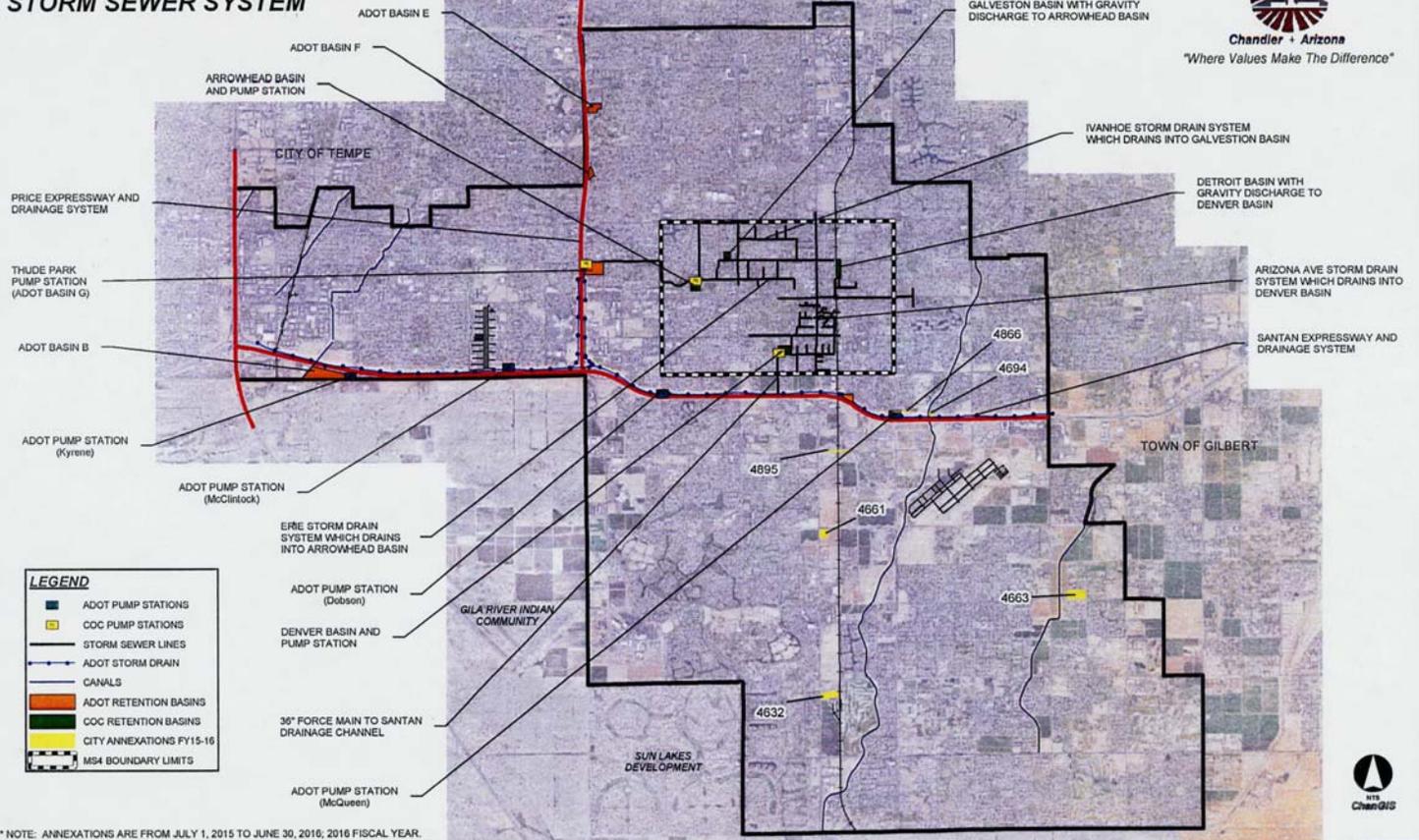
FY 2015-2016 Annexations

Ordinance Number	Adoption Date	Effective Date	Annexed Acreage	Location	Parcel #
4632	11/26/2015	12/16/2015	11.698660	South of the Southeast Corner of Arizona Avenue and Chandler Heights Road	30353012M 30353012U
4661	12/7/2015	1/6/2016	7.832015	Southeast Corner of Arizona Avenue and Queen Creek Road	30341010A
4663	11/26/2015	12/16/2015	18.798916	Northeast Corner of 138th Street and Ocotillo Road	30473198 30473199
4694	4/11/2016	5/11/2016	1.849597	Southeast Corner of the Consolidated Canal and the Wildhorse Place Alignment	30329008C
4866	6/11/2015	7/22/2015	1.525347	Certain Willis Road Rights-of-Way between McQueen Road and One Quarter Mile East of McQueen Road	N/A
4895	9/24/2015	11/18/2015	4.593962	Certain County Rights-of-Way on Germann Rd btw Arizona Ave and Hamilton St	N/A
TOTAL ACREAGE ANNEXED =			46.298497		

CITY OF CHANDLER MUNICIPAL STORM SEWER SYSTEM



Chandler + Arizona
"Where Values Make The Difference"



LEGEND	
	ADOT PUMP STATIONS
	COC PUMP STATIONS
	STORM SEWER LINES
	ADOT STORM DRAIN
	CANALS
	ADOT RETENTION BASINS
	COC RETENTION BASINS
	CITY ANNEXATIONS FY15-16
	MS4 BOUNDARY LIMITS

* NOTE: ANNEXATIONS ARE FROM JULY 1, 2015 TO JUNE 30, 2016, 2016 FISCAL YEAR.

F:\ENGINEERING\SERV\AccMap_Shared\Map Requests\Streets\STORM DRAIN MAPS\Annexations\FY2015-2016\COC MUNICIPAL STORM SEWER SYSTEM_FY_2015_2016_ANNEXATIONS.mxd 7/7/2016 RICHARDT



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	<p>106,451 post cards were mailed to residents in June 2016 notifying them that the 2015 Annual Drinking Water Quality Consumer Confidence Report (CCR) is available in English and Spanish. A URL to the Water Quality website and phone number was provided to receive a hard copy of the CCR. The CCR includes information on stormwater runoff and pollution prevention tips.</p> <p><i>Articles:</i> Wrangler News: <i>Draining or backwashing your pool the right way!</i> (July 2015); San Tan Sun News: <i>Draining or backwashing your pool the right way!</i> (July 2015); CityScope: <i>Dispose of your HHW safely</i> (July-August 2015); WaterSaver Newsletter: <i>Water Saving Tips for Pools</i> (August 2015); News for Neighbors: <i>Be the Solution to Storm Water Pollution</i> (Fall 2015); San Tan Sun News: <i>Stormwater Pollution Prevention</i> (October 2015); News for Neighbors: <i>Draining Pools the Right Way</i> (Winter 2015); CityScope: <i>Be the solution to stormwater pollution!</i> (December-January 2016); News for Neighbors: <i>Inspection & Maintenance of Storm Drains</i> (Spring 2016). CityScope: <i>Remember these helpful tips as you start your spring cleaning</i> (April-May 2016); Wrangler News: <i>What you need to know before draining your swimming pool</i> (April 2016); San Tan Sun News: <i>What you need to know before draining your swimming pool</i> (April 2016); CityScope: <i>Responsible pet ownership reminders</i> (May-June 2016); CityScope Distribution is approximately 70,000. Examples of the newsletters are included in Appendix A.</p>		May 2003	Completed. Newsletter articles such as the City's Annual Drinking Water Quality Consumer Confidence Report and other City sponsored or local neighborhood newsletters will continue and will be distributed to residents by bulk mail or in utility bills, City employees and available at City facilities. All newsletters are available to all via the internet.
Public Education and Outreach	Storm Water Brochure	<p>Brochures may be distributed via utility bills, at various City events, neighborhood meetings, outreach events, employee training sessions and/or IDDE related response calls. 590 residential pollution prevention brochures and 566 pool drainage brochures were distributed at outreach events. Additionally, 89 residential pollution prevention brochures and 70 pool drainage brochures were distributed during response to IDDE calls. 70,000 pool drainage brochures were printed, with approximately 65,000 of them mailed out with water bills in April 2016. Copies of the brochures are included in Appendix B.</p>		August 2003	Completed. Distribution of brochures at City locations, events and meetings will continue. Distribution 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	Storm Water Webpage	Developed webpage on City website. There were 856 visits to the webpage, with 1,289 page views reported. Copies of webpage content included in Appendix C. The website was reviewed and updated in September 2015. A new public outreach video was added to the page in April 2016.		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	2 new signs were designed, produced and installed on Hidalgo Street to address a localized illegal dumping concern. Examples of signage are included in Appendix D.		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 (inlet markers) were originally purchased. 1,000 new flat back placards were purchased during the reporting period. 133 placards were installed on new drainage structures by contractors or City staff. 782 placards were installed on existing (retrofit) drainage structures during the reporting period. (Appendix E).		July 2003	Completed. Installation and/or replacement of placards on storm drain inlets will continue and will be tracked during the next reporting period. Placards are replaced when necessary and installed during new construction per City detail C-508.
Public Education	Landscape and Lawn Care	Assist in the management of irrigation runoff. 42 new residential low water use landscape installations, 54 low water use landscape conversions and 74 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.
Public Education / Public Involvement	Conservation Calendar	Held 13 th Annual 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 2015 to January 2016. 641 entries from 27 charter, private and public schools from Kyrene, Mesa and Chandler School districts were received in March 2015. Artwork is displayed on the City's waste and recycling trucks and on City websites. Calendar included in Appendix F.		August 2003	Completed. The conservation calendar will continue and will be distributed to schools and at 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.

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	Hamilton High School Science Fair	Approximately 4,000 spectators and 1,500 participants attended the fair. Discussed stormwater pollution prevention and related information through use of STORM display boards and other information. The following items were distributed at the event: 141 rain gauges, 175 magnetic clips, 116 brochures, 151 wristbands, 104 recycled content grocery bags, 35 frisbees, 110 key chains, 125 pet waste dispensers, 65 oil funnels, 200 mood pencils and 100 mood cups. Stormwater staff participated in a total of 11 events throughout the year, establishing direct contact with approximately 1,175 attendees out of an approximate total attendance of 13,526 which equates to 8.7% of the total attendance. Over \$3,475 was spent on promotional items during FY 15/16.(Appendix G)		February 2004	Completed. The City expects to participate in the next Hamilton High Science Fair in February 2017. 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. Development and distribution of promotional items, along with movie theatre and billboard campaigns were completed. The STORM Annual Report is included in Appendix H.		March 2003	Completed. The City will continue yearly membership with STormwater Outreach for Regional Municipalities (STORM) as funding allows.
Public Education	Rain gauges	329 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 9 th Annual Mayor's Day of Play, the Hamilton High School Science & Engineering Fair and the 13th Annual 4th Grade Environmental Art Contest Awards Ceremony.		April 2005	Completed. Distribution of rain gauges will continue as funding allows. Distribution will be tracked during next reporting period.
Public Education	Public Works @ Work, City cable show	A new storm water pollution prevention video has been airing on the Chandler Channel since April 12, 2016 and airs twice per day (Monday-Sunday) and on the City's YouTube channel. Two new slides on the channels bulletin board air several times throughout the day all week. They are on a regular rotation between shows. A link to the new video and a copy of the video PSA and slides are included in Appendix I.		March 2005	Completed. Video segments and messages are updated and will be aired. Number of airings 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 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 stormwater collection and/or distribution components. A total of 59 individuals signed in at the meetings. An HOA academy class was held on September 24, 2015 with a total of 46 attendees. Copies of the sign-in sheets are included in Appendix J.		June 2003	Completed. Public Meetings associated with Capital Improvement Projects and other public events or forums will continue and will be documented and reported accordingly.
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 stormwater related issues or concerns. Approximately 10 calls were received on hotline number. Additional calls may have been relayed to the Stormwater Program Specialist or administrative staff.		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 structures. 1,348 new public and private structures were collected during the reporting period. (Appendix K).		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. No video of storm drains was conducted during the reporting period.		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.
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 were addressed. A total of 292 incidents were resolved. Streets Division (283) and Environmental Management staff (9). (Appendix L).		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	Thirty eight discharge points were inspected. Arrowhead, Denver and Thude Basins were inspected weekly. Inspection forms are included in Appendix M.		March 2003	Completed. The City will continue field screening inspections and completion of inspection forms.

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)
Construction Site Runoff Control	Grading and Drainage Permits	A grading and drainage permit is required for new projects. The permit details the City's requirements for runoff control. 16 permits were issued during the reporting period. A list of the Grading and Drainage Permits issued is included in Appendix N.		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. 54 final inspections were completed. 141 erosion and sediment control inspections were completed. 52 Stormwater Pollution Prevention for Construction Sites brochures were distributed. A copy of the final inspection list and stormwater site inspection list are included in Appendix O.		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. 18,129 visits to the webpage, with 32,606 page views reported. There were 1,247 visits and 1,050 page views associated with the City of Chandler Manual on Stormwater Quality Protection. (Appendix P).		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 Q.		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.
Post Construction Storm Water Management	Storm Drainage System Technical Design Manual #3	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. (Appendix R).		March 2003	Completed. Manual is reviewed and updated as needed. The Manual was revised in January 2016.
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. Eight one-year warranty Inspections were completed. A copy of the one-year warranty list is included in Appendix S.		March 2003	Completed. The number of inspections 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	Street Cleaning	65,937 total miles of streets were swept with 2,216 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	108 illicit discharge or illegal dumping calls were responded to and abated. Summary Report included in Appendix T.		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	185 employees attended training sessions associated with pollution prevention. Topic's may include; stormwater management program awareness, municipal stormwater pollution prevention, construction and post-construction topics, MS4, illicit discharge detection and elimination, low impact development, hazardous spill response and MS4 audits. Training sessions included 5 City Departments that comprised 18 Divisions. Summary Report included in Appendix U.		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	8,347 catch basins, scuppers, inlets, outfalls and drywells were inspected. 770 storm drainage structures were maintained and/or repaired or replaced. A summary of work completed is included in Appendix V.		March 2003	Completed. The number of inspections and structures maintained will be tracked during the next reporting period.
Pollution Prevention and Good Housekeeping	Hazardous Material Storage	125 employees received training for 8-hour HazWOpER refresher and 2 employees received 40-hour HazWOpER certification during the reporting period. Report included in Appendix W.		March 2003	Completed. The City will continue tracking HazWOpER training and other applicable training activities.
Pollution Prevention and Good Housekeeping	Household Hazardous Waste Collection Facility	More than 3,000 residents dropped off 149,862 pounds of material that was reused, recycled or properly managed for disposal. Approximately 103,000 pounds (approximately 69%) of such material was reused or recycled.		March 2003	Completed. The City will continue tracking participation and material collected.

Temporary BMP

Public Education	Transit Shelter Posters	Seven "Only Rain in the Storm Drain" posters were posted at transit shelters throughout the City. More than 1.1 million opportunities for viewing the posters during weekdays over a four month period is practical. An example of the poster is included in Appendix XYZ.	New	January 2016	Completed.
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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.

Marsha Reed
Signature

9/14/16
Date

Marsha Reed
Name (printed)

City Manager
Title