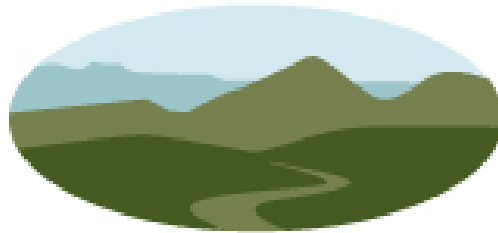


PINAL COUNTY
STORMWATER
MANAGEMENT PROGRAM
(SWMP)



P I N A L • C O U N T Y
wide open opportunity

To fulfill requirements in the
Small Municipal Separate Storm Sewer System (MS4)
General Permit (AZG2016-002)

Pinal County Department of Public Works
Flood Control Section
June 19, 2017

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Introduction:

The purpose of this Storm Water Management Program (SWMP) is to outline Pinal County’s efforts to reduce surface water pollution in accordance with Arizona Pollutant Discharge and Elimination System (AZPDES). Only the portion of a Municipal Separate Storm Sewer System (MS4) that is within the urbanized area (as identified in the decennial census) is regulated by the Small MS4 NPDES Program (40 CFR 122.32). Therefore, the SWMP, as developed for compliance with the MS4 General Permit, does not apply to unregulated areas (non-urbanized areas) of Pinal County, or to areas within incorporated municipalities.

In general, five sub-areas constitute the Pinal County MS4 (see MS4 maps on pages 10-12):

- The northern and eastern portions of the Apache Junction area
- The Gold Canyon area
- The San Tan Valley area
- The far northern part of the Casa Grande area
- The Saddlebrooke area in southeastern Pinal County

Authorization

Pinal County’s stormwater management program is authorized by Ordinance Number 050615-SMO – Pinal County Stormwater Management Ordinance, effective June 5, 2015.

Program Implementation

The Stormwater Coordinator will take the lead in implementing the Pinal County Stormwater Management Plan. He/she will be assisted by other Pinal County staff.

Receiving Waters

<u>MS4 Sub-Area</u>	<u>Receiving Waters</u>	<u>Outfalls</u>
Apache Junction	Un-named washes to the East Maricopa Floodway (EMF)	0
Gold Canyon	Un-named washes to the EMF	13
San Tan	Un-named washes to the Sonoqui Wash	35
	Queen Creek	2
Saddlebrooke	Un-named washes to the Canada Del Oro	0
Casa Grande	Un-named washes to the North Branch Santa Cruz Wash	0

None of these segments of receiving waters are Arizona Outstanding or Impaired waters. To date, no discharges have been detected that caused or contributed to an exceedance of an applicable surface water quality standard.

Sharing Responsibility

Pinal County will be responsible to implement all measures within this SWMP. Pinal County is a member of, and will be assisted by, the STormwater Outreach for Regional Municipalities (STORM)

organization with outreach efforts. STORM is a collaboration of twenty-five plus public entities in the Phoenix metro area that are working together to promote stormwater quality.

Reviewing and Updating the SWMP

Pinal County will review the SWMP in June of each year and evaluate the implementation status of the SWMP components as well as the effectiveness of each component or combination of components. Pinal County will determine how the SWMP needs to be revised, if at all. If the SWMP needs to be revised, Pinal County will notify ADEQ of any additions. If components of the SWMP need to be replaced, Pinal County will submit to ADEQ the proposed revisions with an explanation of why the practice is ineffective and why the replacement is expected to achieve the goals of the management practice.

Annual Reports

Pinal County will submit annual reports to the Arizona Department of Environmental Quality (ADEQ) by September 30th of each year for the preceding period of July 1st through June 30th.

Map Updates

Stormwater system maps (stormwater infrastructure, outfalls, receiving waters) will be maintained in the County's GIS system and updated annually during the first quarter of the calendar year (January – March) and, as necessitated by field inspections / investigations. Decennial census changes to the MS4 area will be integrated within six (6) months of receiving the census data.

Visual Discharge Monitoring

In order to better detect illicit discharges, visual discharge monitoring will occur twice during the two wet seasons (Summer: June 1 – October 31; Winter: November 1 – May 31) at the following five representative outfall locations:

- 1) 33^o 22' 33.636" N, 111^o 27' 47.664" W (Gold Canyon area near Don Donnelly and Hackberry)
- 2) 33^o 21' 8.892" N, 111^o 26' 35.124" W (Gold Canyon area near Sleepy Hollow and Anasazi)
- 3) 33^o 13' 51.024" N, 111^o 33' 47.448" W (San Tan area at Queen Creek Wash and Gantzel)
- 4) 33^o 11' 13.92" N, 111^o 34' 38.676" W (San Tan area near Stonecreek and Vineyard Plains)
- 5) 33^o 10' 29.2296" N, 111^o 35' 34.116" W (San Tan area near Saratoga Meadow and Jasper Butte)

Stormwater Management Plan

The plan will address the six minimum control measures.

1. Public Education and Outreach on Stormwater Impacts.
2. Public Involvement/Participation.
3. Illicit Discharge Detection and Elimination.
4. Construction Site Stormwater Runoff Control.
5. Post-Construction Stormwater Management in New Development and Redevelopment.
6. Pollution Prevention/Good Housekeeping for Municipal Operations.

Minimum Control Measures

1. Public Education and Outreach

Permit Condition	BMP	Measurable Goal(s)
Part 6.4.1.	Direct mailing of information to commercial and industrial properties in the MS4 area.	Pinal County staff will annually direct mail stormwater pollution prevention information to all commercial and industrial properties in the MS4 area (identified by the County Assessor's Office) prior to the summer rainy season. Measure: Information produced and list of commercial / industrial properties the information was sent to.
Part 6.4.1.	Web page for the Stormwater Management Program.	Pinal County staff will develop and maintain a Stormwater web page. The web page will include the SWMP, NOI, AMDP, Drainage Manual and Drainage Ordinance. Measure: Track monthly web page hits
Part 6.4.1.	Provide brochures, fact sheets, and other educational materials on relevant Stormwater matters.	Pinal County staff will collect/produce materials and distribute the materials in public access areas, e.g. libraries, Pinal County Offices, etc. Pinal County staff will update these materials as needed and redistribute. Measure: Number of brochures / materials distributed.
Part 6.4.1	Respond to verbal or written public inquiries, comments, or concerns, about illicit disposal of wastes, etc., and/or requests for information.	The Stormwater Coordinator is the principal contact for the public. Appropriate responses may include: providing information over the phone, email or mail, and referring information to Pinal County inspectors for follow-up. Measure: Log of contacts and actions taken.
Part 6.4.1	Participate in coordinated, regional stormwater education outreach	Pinal County will continue its active participation in the STormwater Outreach for Regional Municipalities (STORM) organization to leverage its resources in providing and promoting educational opportunities to the public. STORM produces an annual report of outreach activities. Measure: STORM annual report

2. Public Involvement/Participation

Permit Citation	BMP	Measurable Goal(s)
Parts 6.4.2	Public access to and review of the Pinal County SWMP	The SWMP will be made available for public review and comment on the web site and in hard copy. In response to public comments, constructive changes will be made as part of the annual SWMP review process. Measure: Record of comments received and actions taken.
Parts 6.4.2	Create activities for volunteer groups such as free disposal days / community cleanups	Pinal County staff will provide Free Dump Days (typically twice per year) and sponsor Community Clean-Up dumpsters. The County will also host and participate in House Hold Hazardous Waste / Waste Tire pick up events typically twice per year. Measure: Events / Free Dump Days held and materials collected for proper disposal.

3. Illicit Discharge Detection and Elimination

Permit Citation	BMP	Measurable Goal(s)
Part 4.0	Storm Sewer Mapping	Maintain and update (annually) storm sewer mapping to help identify and isolate illicit discharges. Measure: Annual update of the storm sewer maps (GIS based).
Part 6.4.3.3	Written statement establishing responsibilities regarding IDDE	Establishment and updating of a document that indicates areas of responsibility for the IDDE program. Measure: Document and any updates to maintain accuracy and efficiency.
Part 6.4.3.4	IDDE education and reporting (public)	Pinal County will periodically run an illicit discharge educational video on its local government TV channel and provide links to the video on its web page. Measure: Viewership information
Part 6.4.3.8	Visual monitoring of outfalls in dry weather	All outfalls will be inspected/monitored a minimum of once annually in dry weather conditions. Measure: Documentation of inspections/monitoring.
Part 6.4.3.8	Visual monitoring of outfalls in wet weather	A minimum of five (5) representative outfalls will be identified and inspected/monitored in discharge conditions. A minimum of two (2) inspections/monitoring events shall during each of the two (2) wet seasons (per Permit No. AZG2016-002, Section 6.4.3.8 b)). If discharge monitoring is not possible, wet weather screening will occur as soon as practicable after the discharge event. Measure: Documentation of inspections/monitoring.
Part 6.6.3.10	IDDE training (Pinal County Public Works field staff)	A minimum of 80% of Pinal County Public Works field staff will receive annual training on Illicit Discharge Detection and Elimination (IDDE). Measure: Log of training attendance.

4. Construction Site Stormwater Runoff Control

Permit Citation	BMP	Measurable Goal(s)
Part 6.4.4.1	Legal authority to ensure compliance with construction activity stormwater management	Enforcement of Pinal County Stormwater Management Ordinance No. 050615-SMO
Part 6.4.4.2	Written procedures for site inspections	In addition to the inspection forms currently used, Pinal County will develop written procedures for site inspections by December 31, 2017. Measure: The written procedures for site inspections will be submitted as part of the 2017-2018 annual report.
Part 6.4.4.2	Written procedures for site plan review	The Stormwater Coordinator reviews all site plans for stormwater compliance. Pinal County will develop checklists to supplement the written procedures for site plan review by December 31, 2017. Measure: The written procedures for site plan review will be submitted as part of the 2017-2018 annual report.
Part 6.4.4.3	Training for staff who perform stormwater inspections.	Annual training will be conducted for a minimum of 80% of inspections staff by the Stormwater Coordinator or his/her designee. Measure: Training attendance logs
Part 6.4.4.4	Stormwater education for contractors	Pinal County will develop and provide educational stormwater brochures for contractors. Measure: Number of written materials distributed

5. Post Construction Stormwater Management in New Development and Redevelopment

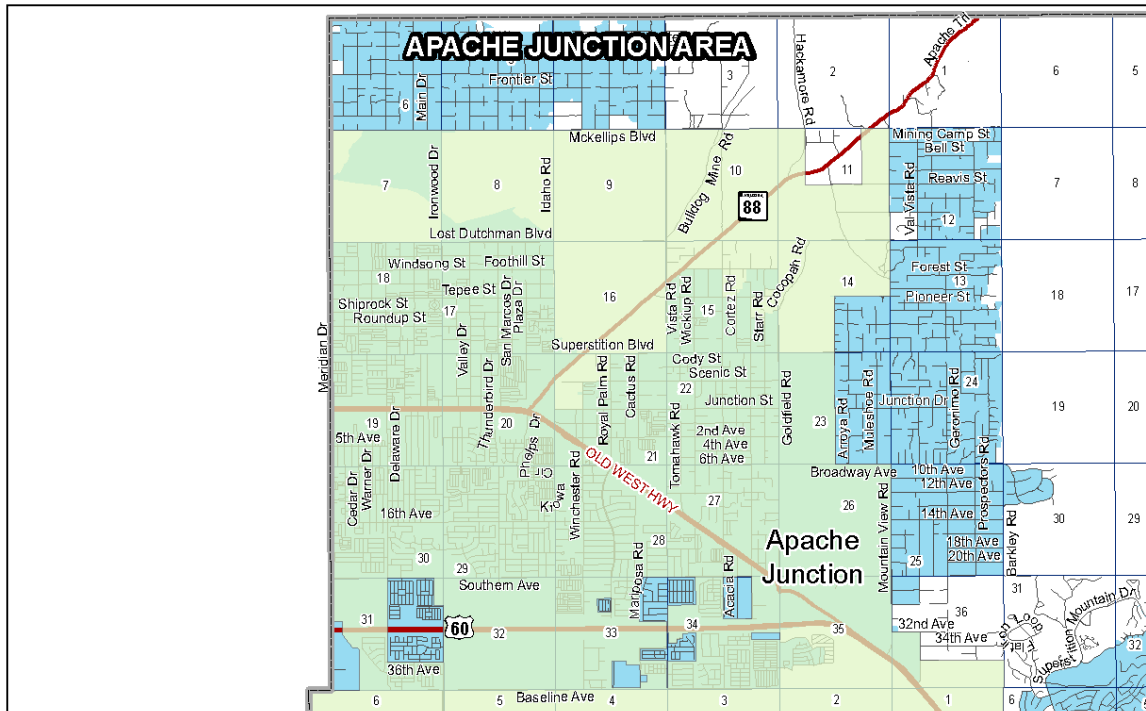
Permit Citation	BMP	Measurable Goal(s)
Part 6.4.5.1	Legal authority to ensure compliance with post-construction activity stormwater management	Enforcement of Pinal County Stormwater Management Ordinance No. 050615-SMO
Part 6.4.5.2	Written procedures for site plan review for post-construction stormwater control measures	The Stormwater Coordinator reviews all site plans for stormwater compliance. Pinal County will develop checklists to supplement the written procedures for site plan review by December 31, 2017. Measure: The checklists for site plan review will be submitted as part of the 2017-2018 annual report.
Part 6.4.5.3	Inventory of post-construction structural stormwater control measures	GIS based maps are used to identify stormwater structural control measures. These maps are updated annually. Measure: GIS mapping
Part 6.4.5.3	Inspection of post-construction structural stormwater control measures	A minimum of twenty-four (24) post-construction control measure inspections will be done annually. Measure: Documentation of inspections

6. Pollution Prevention/Good Housekeeping for Municipal Operations

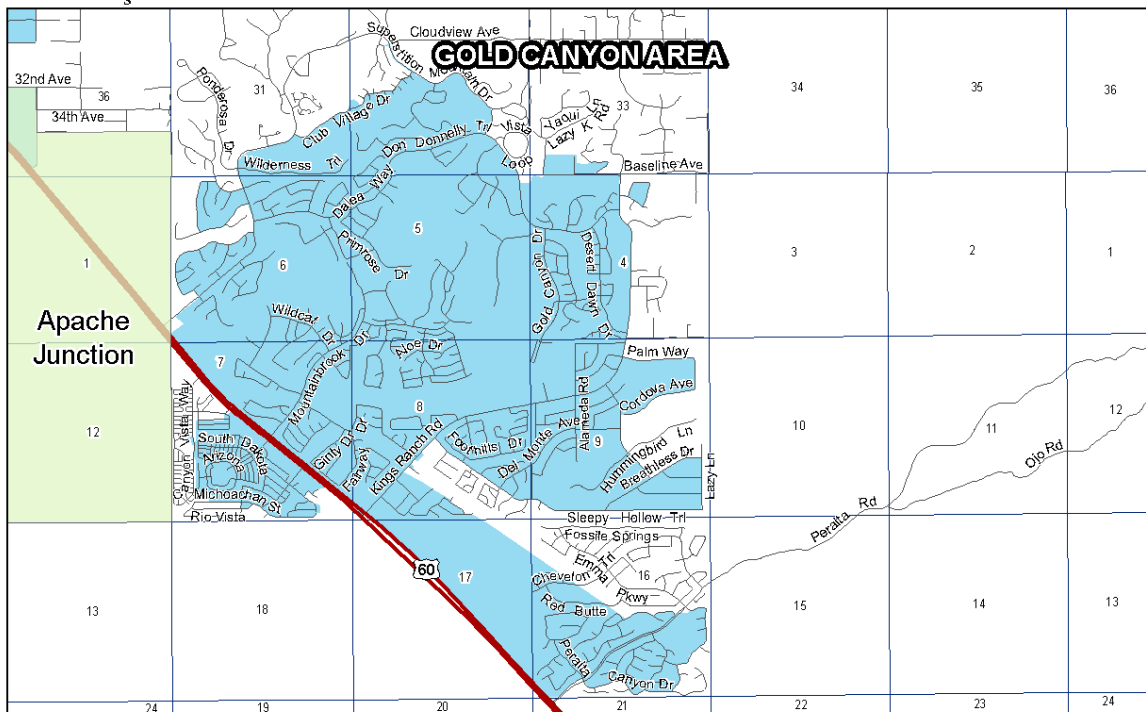
TABLE 6.1

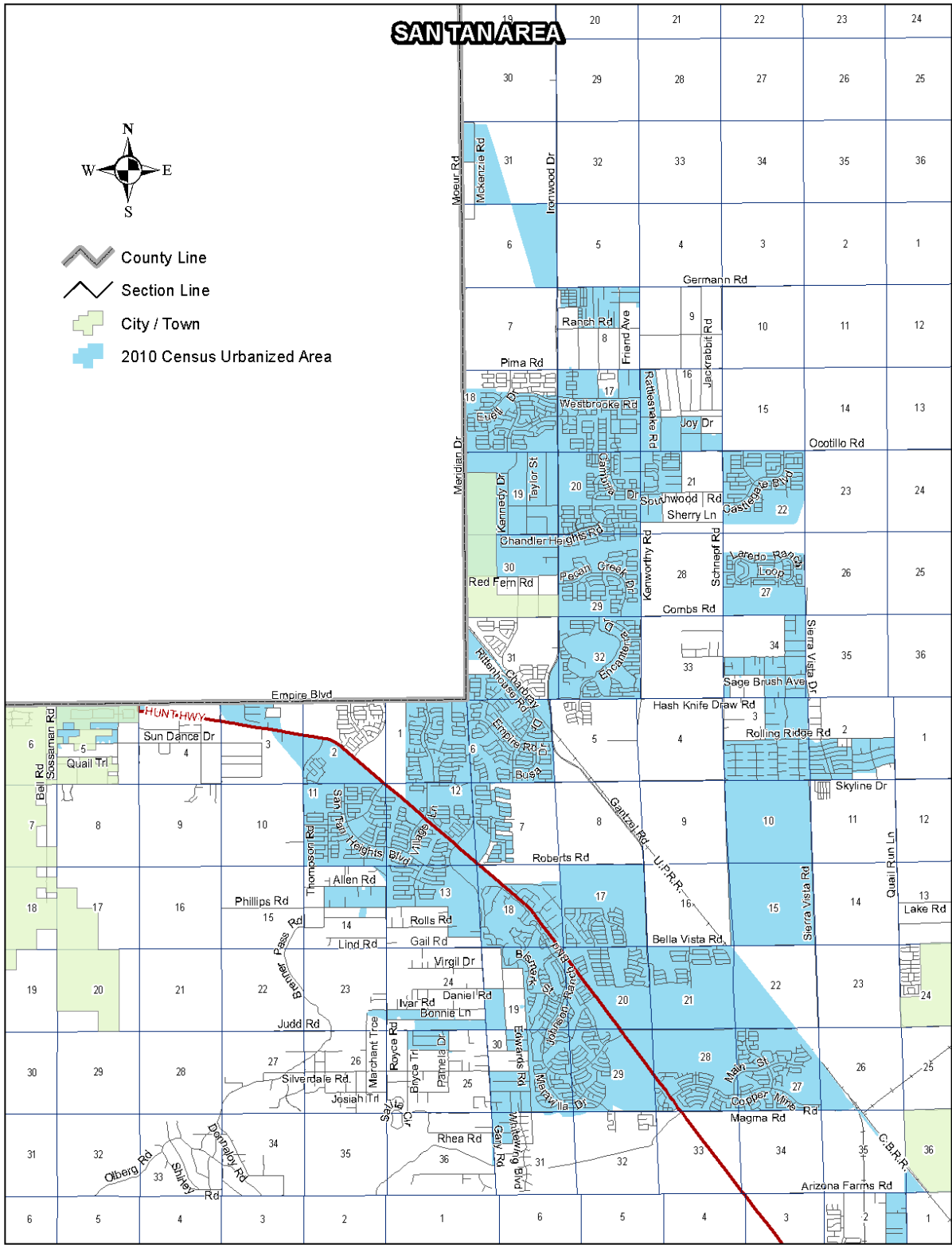
Permit Citation	BMP	Measurable Goal(s)
Part 6.4.6	Operations / Facility inspections	All Public Works operations / facilities that discharge to the MS4 will be inspected a minimum of annually. Measure: Inspection documentation
Part 6.4.6	Training of operations staff	A minimum of 80% of Public Works operations staff will be trained annually in pollution prevention and good housekeeping techniques. Measure: Log of training and attendance
Part 6.4.6	Good housekeeping program	Written reminders of good housekeeping practices (monthly schedules) will be produced and provided to all operations facilities in the MS4. Measure: Written reminder documentation
Part 6.4.6	Street sweeping	Curbed streets in the MS4 will be swept to reduce sediments and floatables. Measure: Monthly records of amount of sweepings collected
Part 6.4.6	Infrastructure Inspections	Minimum of 180 stormwater infrastructure inspections annually. Measure: Documentation of inspections.
Part 6.4.6	Infrastructure Repairs	Necessary repairs, cleaning, replacement of stormwater infrastructure identified in the inspection process. Measure: Documentation of repairs, cleaning, replacements of infrastructure

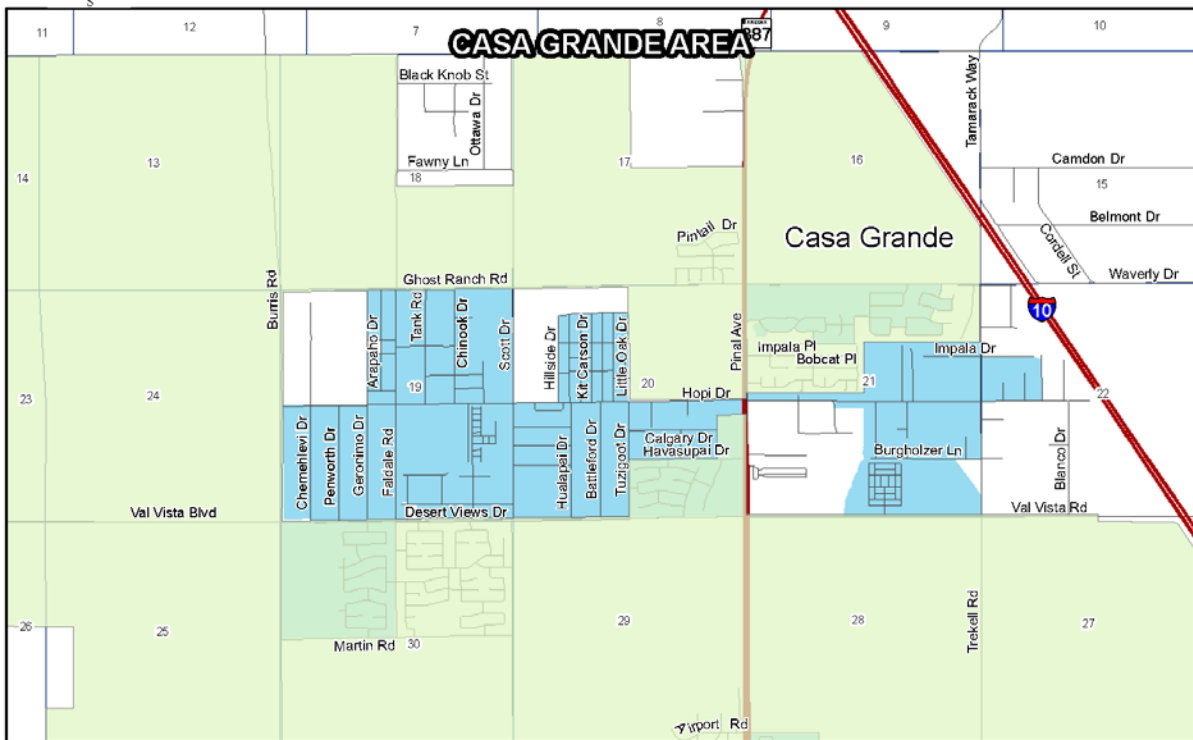
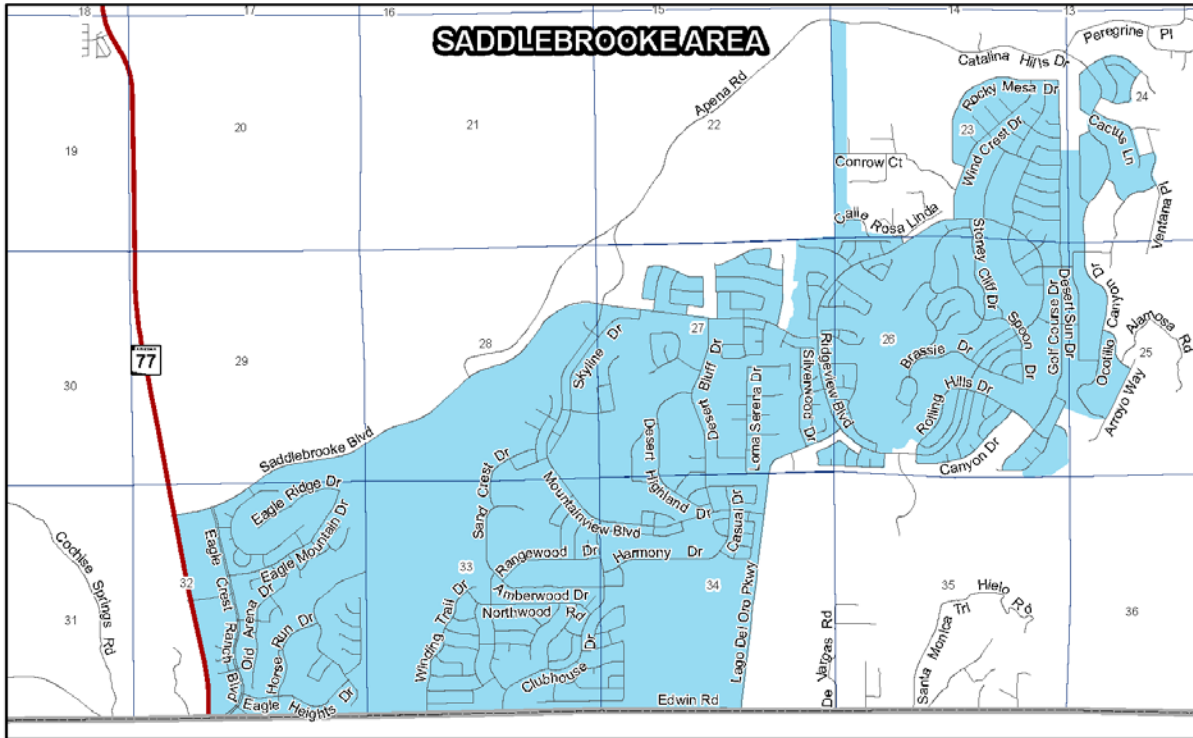
MS4 Maps



 County Line
  Township Line
  City / Town
  2010 Census Urbanized Area







Inspection and Site Plan Review Procedures

Procedures for site inspection

1. The Inspector will introduce him/herself as Pinal County inspector and communicate with the Operator the types of things the Inspector is looking for.
2. Locate and review the on-site copy of the SWPPP and become familiar with any changes that have been made to the SWPPP. At the Inspector's discretion, this step may be skipped for re-inspections and some inspection visits.
3. Walk (or slowly drive) the perimeter of the site and note discharge locations to waters and/or drainage channels.
4. Inspect discharge locations for signs of wastes and sediment.
5. Inspect active and inactive portions of the construction areas for properly installed BMPs and material storage.
6. Communicate with the operator the status of compliance.
7. Document the inspection on a "Stormwater Inspection Report" or in Accela.
8. Follow up as needed.

Procedures for Site Plan Reviews

Pre-Application Site Plan Review

1. The Stormwater Coordinator, or his/her designee, receives the pre-application site plan information from Planning and Development Department.
2. Review the site plan to see if it qualifies for stormwater controls (e.g. Is it in the MS4 area?, Is it one-acre or larger in size or part of a larger development?, etc.)
3. Provide comments to the Civil Plans Examiner (e.g. qualification for stormwater controls, submission of SWPPP with plans, etc.)

Site Plan (commercial, industrial, residential) Review

1. The Stormwater Coordinator or Civil Plans Examiner will reference the pre-application site plan review requirements to ensure the site plan submittal contains the required information, etc.
2. The Stormwater Coordinator or Civil Plans Examiner will review the plans to ensure compliance with the current County Stormwater Management Ordinance.
3. If required, the Stormwater Coordinator or Civil Plans Examiner will ensure a SWPPP and NOI are included prior to final approval of the plans.

Procedures for Visual Monitoring of Outfalls

Dry Weather

1. Help ensure your safety and the public's safety by:
 - Wearing the proper protective clothing (e.g. reflective vest, reflective coat, gloves, non-slip shoes, etc.).
 - Parking the County vehicle in a location to minimize vehicular exposure and using emergency flashers / lights.
 - Being aware of traffic movements.
2. Observe the area upstream and downstream of the outfall for evidence of a discharge:
 - A. Moisture (wetness, ponding, flow, etc.)
 - Odor of the discharge
 - Petroleum Sheen
 - Color of the discharge
 - Clarity of the discharge
 - Suds
 - B. Other Floatables
3. If there is evidence of a discharge:
 - If possible, determine the source.
 - If the discharge is determined not to be a non-stormwater discharge that is included in AZDES General Permit AZG2016-002, Section 1.3.2, secure the site and call the County Sheriff's Office to investigate and assist them as needed.
4. Document findings on the "Infrastructure Inspection Report" form

Wet Weather (Stormwater Discharge)

1. Help ensure your safety and the public's safety by:
 - Not doing sampling in severe weather conditions (e.g. lightning, flooding, high winds, etc.)
 - Wearing the proper protective clothing (e.g. reflective vest, reflective rain gear, gloves, non-slip shoes, etc.).
 - Parking the County vehicle in a location to minimize vehicular exposure and using emergency flashers / lights.
 - Being aware of traffic movements.
2. Collect a visual sample of the discharge into a clear, glass container (e.g. 1-quart mason jar, etc.)
 - A. Observe the sample for:
 - Odor
 - Petroleum Sheen
 - Color
 - Clarity
 - Suds
 - Other Floatables

3. Determine the approximate flow of the discharge (if possible) in gallons/minute, cubic feet per second, etc.
4. Take a photo of the sample.
 - Write identifying information on a card (date, time, location, observations, etc.) and place it with the sample
 - Take a back-lit photo of the sample together with the information card
5. If there is evidence of a discharge:
 - If possible, determine the source.
 - If the discharge is determined not to be a non-stormwater discharge that is included in AZDES General Permit AZG2016-002, Section 1.3.2, secure the site and call the County Sheriff's Office to investigate and assist them as needed.
6. Document findings on the "Infrastructure Inspection Report" form and attach the photo to the form.

If a Hazardous Materials Spill / Dumping / Illicit Discharge Occurs in Pinal County ...

Where?

- ✓ State or Federal Roadway or State Owned Property → Call Arizona Department of Public Safety [602.223.2000] and Arizona Department of Environmental Quality [602.771.2330 or 602.390.7894]
- ✓ Incorporated Jurisdictions (e.g. Florence, Casa Grande, etc.) → Call their Police and Fire Departments
- ✓ Unincorporated Pinal County → Call Sheriff's Dept. [520.866.5111]



Sheriff's Dispatch will send HazMat Techs (2 on staff) to assess

They will:

- Identify material
- Secure site
- Determine, if possible, responsible party for clean-up
- Notify County Emergency Management
- If within a Fire DISTRICT boundary – notify the Fire District

They may:

- Call in assistance (Public Works, mutual aid from other jurisdictions, ADEQ, etc.)
- Ask for EOC activation if evacuations and/or additional resources are needed

Following are environmental contractors (hazardous material clean up) on the State Bid List and are set up in the Pinal County system as vendors.

Kary Environmental Services Inc. (480) 945-0009
Jeff Kary

Environmental Response Inc. (480) 967-2802
Greg Laney

Clean Harbors Environmental (800) 645-8265
Bob Seitz

Southwest Hazard Control Inc. (520) 622-3607
Bryce Montenegro

6 Oct 2015