



CITY OF PHOENIX

# STORMWATER MANAGEMENT PLAN

---

FISCAL YEAR 2025-2026







**City of Phoenix**  
LAW DEPARTMENT



# CONTENTS

1.	Executive Summary	1
2.	Introduction to the Stormwater Management Plan	2
2.1.	Program Overview	2
2.2.	Regulatory Framework	4
2.3.	Phoenix Area Water Quality Concerns	5
3.	Program Management	8
3.1.	Permittee and Permittee Responsibilities	8
3.2.	Funding Sources	9
3.3.	Legal Authority and Enforcement	9
3.4.	Best Management Practices/Control Measures	11
4.	Public Education and Outreach	12
4.1.	Introduction	12
4.2.	Implementation	13
5.	Public Involvement	16
5.1.	Public Reporting of Stormwater Issues	16
5.2.	Municipal Programs	16
6.	Illicit Discharge Detection and Elimination	18
6.1.	Measures to Control Illicit Connections and Illegal Dumping to MS4	18
6.2.	Outfall Inventory, Inspections and Field Screening Procedures	19
6.3.	Investigating Potential Illicit Discharges	20
6.4.	Illicit Discharge Public Awareness and Reporting Program	22
7.	Municipal Facilities and Activities	23
7.1.	City Hazardous Materials Management Program	23
7.2.	Proper Management of Used Oils and Toxics	24
7.3.	Controls for Pesticides, Herbicides and Fertilizers	24
7.4.	Spill Prevention and Response	24
7.5.	Other Municipal Facilities and Activities	25

8.	MS4 Maintenance	27
8.1.	Drainage System (Structural Controls) Maintenance	27
8.2.	Operation and Maintenance of Public Streets, Roads, and Highways	28
9.	Industrial Sites	30
9.1.	Measures to Control Pollutants	30
9.2.	Priorities and Implementing Controls	30
9.3.	Inspections and Monitoring of Industrial Facilities	36
9.4.	Other Measures to Control Pollutants from Landfills, Transfer Stations, and Industrial Facilities	38
10.	Construction Sites	39
10.1.	Measures to Control Pollutants from Construction Sites	39
10.2.	Construction Site Plans	39
10.3.	Construction Best Management Practices	40
10.4.	Site Inspections and Enforcement	41
11.	Post-Construction Controls	45
11.1.	Green Stormwater Infrastructure	45
11.2.	Plan Review	47
11.3.	Inventory	47
11.4.	Inspection Program	48
11.5.	Enforcement Strategy/Actions	48
11.6.	Design and maintenance Standards Applicable to Post-Construction	48
12.	Stormwater Training Program	50
12.1.	Field Staff Training	50
12.2.	Municipal Employees with Specific Job Responsibilities	50
12.3.	Inspector and Stormwater Field Staff Training	51
13.	Wet Weather Monitoring Program	53
13.1.	Overview of the Program for Water Quality Monitoring	53
13.2.	Qualifying Storm Event	53
13.3.	Water Quality Assessment	53

13.4.	Discharge Monitoring Reports	54
14.	Program Evaluation, Reporting and Revision	55
14.1.	Annual Reporting	55
14.2.	Program Evaluation	55
14.3.	SWMP Revisions	56

## List of Tables

Table 3-1:	Permittee and Permittee Responsibilities.....	8
Table 4-1:	Five Year Outreach Plan .....	15
Table 9-1:	Municipal Facilities and Activities in the City of Phoenix Inventory .....	34
Table 9-2:	Potential Pollutants of Concern .....	35

## List of Figures

Figure 2-1:	Program Elements of SWMP .....	3
Figure 4-1:	Development Process Overview .....	14

## Appendices

A	Certification Statement
B	Drainage System Maps
C	Inventory of Major Outfalls
D	Enforcement Response Plan
E	Inventory of Municipal Facilities and Operations
F	Municipal MSGP Facilities
G	Citywide Stormwater Training Plan

# ACRONYMS

ACDC	Arizona Canal Diversion Channel	NOV	Notice of Violation
ADEQ	Arizona Department of Environmental Quality	NPDES	National Pollutant Discharge Elimination System
A.R.	Administrative Regulation	OAW	Outstanding Arizona Water
AST	Aboveground Storage Tank	OEP	Office of Environmental Programs
AZPDES	Arizona Pollutant Discharge Elimination System	PAM	Pollution Awareness Marker
B&R	Budget and Research Department	PAYS	Phoenix At Your Service
BMP	Best Management Practice	P.C.C.	Phoenix City Code
CFR	Code of Federal Regulations	PDD	Planning and Development Department
City	City of Phoenix	PHXYou	Phoenix You (University)
CWA	Clean Water Act	PRD	Parks and Recreation Department
DMR	Discharge Monitoring Report	PSW	Protected Surface Water
EFA	Environmental Facility Assessment	PSWL	Protected Surface Water List
EPA	Environmental Protection Agency	PWD	Public Works Department
ESD	Environmental & Safety Division	RCRA	Resource Conservation and Recovery Act
G&D	Grading and Drainage	SARA	Superfund Amendments and Reauthorization Act
GIS	Geographic Information System	SDS	Safety Data Sheet
GSI	Green Stormwater Infrastructure	SIC	Standard Industrial Classification
HHW	Household Hazardous Waste	SOP	Standard Operating Procedure
HMMP	Hazardous Materials Management Program	STORM	Stormwater Outreach for Regional Municipalities
HOA	Homeowner's Association	STR	Street Transportation Department
HR	Human Resources Department	SWM	Stormwater Management Section
IDDE	Illicit Discharge Detection and Elimination	SWMP	Stormwater Management Plan
IPM	Integrated Pest Management	SWPP	Surface Water Protection Program
IPP	Industrial Pretreatment Program	SWPPP	Stormwater Pollution Prevention Plan
KPB	Keep Phoenix Beautiful	SWQS	Surface Water Quality Standard
LEED	Leadership in Energy and Environmental Design	TMDL	Total Maximum Daily Load
LID	Low Impact Development	TRT	Technical Review Team
MEP	Maximum Extent Practicable	TSDF	Treatment, Storage, or Disposal Facility
MFI	Municipal Facility Inventory	UST	Underground Storage Tank
MS4	Municipal Separate Storm Sewer System	WOTUS	Waters of the United States
MSGP	Multi-Sector General Permit	WSD	Water Services Department
NEC	No Exposure Certificate	WU	Walkable Urban
NOI	Notice of Intent	WWTP	Wastewater Treatment Plant

# 1. Executive Summary

The City of Phoenix (City) Stormwater Management Plan (SWMP) is a detailed plan that identifies the major programs, policies, and procedures implemented by the City to minimize the impact of urban activities on the quality of stormwater. The City is required to develop this plan as a large Municipal Separate Storm Sewer System (MS4) under the Arizona Pollutant Discharge Elimination System (AZPDES) permit program administered by the Arizona Department of Environmental Quality (ADEQ). The City's MS4 Permit was issued by ADEQ on December 21, 2020, became effective July 1, 2021, and is the driving force behind the development and content of this document. A permit modification to incorporate the new State Surface Waters Protection Program (SWPP) was issued May 12, 2022. A subsequent modification was issued on February 3, 2023, to address 24-hour reporting time frames.

The SWMP has been written to reflect the requirements of the current permit in addition to providing the details of the major programmatic areas; the SWMP includes an introduction and regulatory overview, a description of how the stormwater program is managed, sections addressing the major programmatic areas, sections describing the training program, the monitoring program, and the approach to evaluating program effectiveness. It also specifically addresses the major programmatic areas including Public Education and Outreach, Public Involvement, Illicit Discharge Detection and Elimination (IDDE), Municipal Facilities, Industrial Sites, Construction Sites, Post-Construction, and the wet weather monitoring program.

A copy of this document and the most recent Stormwater Annual Report is available on the City's website ([Water Services Stormwater Program \(phoenix.gov\)](https://www.phoenix.gov/water-services/stormwater-program)).

## 2. Introduction to the Stormwater Management Plan

The SWMP is the principal document that translates the MS4 Permit requirements into City programs and procedures. The SWMP is used by the City in development of individual ordinances, plans, policies, and procedures to protect stormwater quality. It covers the geographic boundary of the City of Phoenix MS4, and addresses stormwater quality concerns related to urbanization, construction activities, and non-stormwater discharges.

The initial SWMP was prepared to comply with the requirements of the MS4 Permit issued by the United States Environmental Protection Agency (EPA) Region 9 in 1997. The SWMP evolves as requirements and programmatic practices within the City change and as MS4 permit requirements change.

### 2.1 Program Overview

The SWMP program elements are organized into six major categories the program elements are identified in Figure 2-1.

Each City department with stormwater management responsibilities maintains documentation of their internal procedures. Examples of this documentation include the following:

- The City's stormwater ordinance
- Illicit Connection/Illegal Discharge investigation, enforcement, and response procedures
- Field screening procedures (dry weather outfall monitoring)
- Industrial/commercial inspection procedures, database, and checklist
- City of Phoenix facility assessment program
- Hazardous Materials Management Program
- Drainage system maintenance schedule for the MS4
- Development review, approval and permitting
- Construction site inspection program
- Post-construction program

These documents are reviewed and updated as necessary to stay current with changes within the City and with evolving local, state, and federal regulations. Departments are responsible for distributing the documents to staff members who perform the related tasks.



# SWMP PROGRAM ELEMENTS

## PROGRAM OVERSIGHT

Stormwater Executive Committee &  
Stormwater Working Group

Public Education & Outreach	Public Involvement	Illicit Discharge Detection and Elimination (IDDE)	Municipal Facilities	Industrial Sites	Construction Sites & Post Construction Controls
Public Education	Spill Reporting	Employee Training	Employee Training	Employee Training	Employee Training
Business Education	Illegal Dumping	Spill Investigation	HMMP	Inventory	Inventory
	Litter Control/ Cleanup Events	Major Outfall Inspections	City Owned & Operated Facilities	Inspections	Plan Review & Approval
	Household Hazardous Waste	IDDE Investigations	Inspections	Compliance & Enforcement	Inspections
		Compliance & Enforcement	System Maintenance		Post-Construction Control Tracking
			System Maps		Compliance & Enforcement

Figure 2-1: Program Elements of SWMP

## 2.2 Regulatory Framework

### NPDES Permitting for Stormwater Discharges

The Water Quality Act of 1987, Clean Water Act (CWA) Section 402(p), required the EPA to regulate stormwater discharges under the National Pollutant Discharge Elimination System (NPDES) using a phased approach. The CWA authorizes the discharge of pollutants to Waters of the United States (WOTUS) from a point source only if the discharge is in compliance with an NPDES permit. EPA's program includes NPDES applications and corresponding permits for stormwater discharges associated with industrial and construction activities and for stormwater discharges from MS4s. The requirements of Section 402(p) applicable to MS4 NPDES permits include:

- A requirement to effectively prohibit non-stormwater discharges into the MS4, and
- A mandate to implement controls to reduce the pollutants in stormwater discharges to the maximum extent practicable (MEP). Controls may include management practices, control techniques and systems, design and engineering methods, maintenance/repair activities, and other provisions deemed appropriate by the administering authority for the control of such pollutants.

EPA's Final Rule for NPDES Permit Application Regulations was effective December 17, 1990, and is commonly referred to as the "Phase I stormwater regulations." These regulations are administered nationwide through the EPA's NPDES program and apply to MS4s serving a population of 100,000 or more.

MS4s are comprised of conveyances that are owned by a state, city, town, county, district, association, or other public body, which may include streets, channels, pipes, basins, etc. The Phase I stormwater regulations require that the MS4 reduce the discharge of pollutants to the MEP using management practices, control systems, design and engineering methods, maintenance/repair activities, and other appropriate techniques. The Phase I stormwater regulations include requirements for specified industrial operations and construction activities and outlines required planning, recordkeeping, and reporting activities, and a defined compliance schedule.

In 2002, the EPA granted NPDES permitting authority to the State of Arizona. ADEQ administers the program as the AZPDES permit program. Arizona passed the State Surface Water Protection (SWPP) Rule in May 2021. ADEQ is administering this program as the SWPP which includes both WOTUS and non-WOTUS protected surface waters (PSWs), and provides protection for certain non-WOTUS waters. A modification to the City's MS4 permit included state protected surface waters (PSWs) which are cataloged in ADEQ's PSW List (PSWL). The final PSWL and surface water quality standards (SWQS) were promulgated by ADEQ on January 27, 2023, and became effective February 20, 2023.

### Impaired and Not-Attaining Water Bodies

Section 303(d) of the CWA requires that states, territories, and authorized tribes develop lists of impaired waters in their jurisdiction. The lists are required to be updated every other year. Water bodies included on the 303(d) list are considered impaired because they do not meet water quality standards for at least one designated use. The current 303(d) List for Arizona can be accessed from the following website: [WQD | Surface Water Monitoring & Assessment | ADEQ \(\[azdeq.gov\]\(https://www.azdeq.gov\)\)](#).

While the City's MS4 does not currently discharge to an impaired water or not-attaining water, if a PSW becomes impaired, the City will monitor for any 303(d) listed parameter(s) at a representative outfall discharging to the impaired water. In addition, the City will review and revise the SWMP to incorporate best management practices (BMPs) to minimize discharges of the listed parameter(s) to the MEP. The City will also evaluate mechanisms to monitor BMP effectiveness.

The MS4 permit could be reopened and modified by ADEQ to include additional permit conditions if one or more of the receiving waters become classified as impaired or not-attaining during the permit term.

A Total Maximum Daily Load (TMDL) will be developed by ADEQ when an impaired water is classified as not-attaining. A TMDL provides the maximum amount of a pollutant that a water body can receive and still meet water quality standards. A TMDL also apportions pollutant loadings between point and nonpoint pollutant sources. To comply with CWA requirements, priority rankings must be established for impaired waters and TMDLs must be determined. The extent of pollution in the water body and the beneficial uses of the water (fishing, swimming, municipal water supply, etc.) are factors in the TMDL calculation. The City's MS4 does not discharge to any surface waters with an established TMDL. However, if a TMDL is established in the future, the SWMP will be revised to incorporate BMPs to address waste load allocations and monitoring requirements.

## **Outstanding Arizona Waters**

Surface waters identified by ADEQ as an outstanding water resource are protected in the State of Arizona. None of the receiving waters within the City's jurisdiction have been classified as Outstanding Arizona Waters (OAWs). The MS4 permit could be reopened and modified to include additional permit conditions if one or more of the receiving waters receive the classification of OAW during the permit term.

## **2.3 Phoenix Area Water Quality Concerns**

### **Stormwater Runoff and Urbanization**

As an area becomes more urbanized, the capacity of the land to naturally infiltrate stormwater is lowered. When buildings, roads, parking lots, driveways, and sidewalks are constructed, the quantity of impervious surface area increases. Stormwater washing over these surfaces picks up pollutants, increases in volume, flows more quickly, and increases in temperature compared with stormwater flowing over areas consisting of natural vegetation (EPA, 1997). Larger quantities of pollutants are generated by the growing population resulting in stormwater runoff with higher pollutant loads. Pollutant sources include tailpipe emissions and fluids from vehicles, fertilizers, pesticides, litter, pet wastes, and household chemicals. Receiving waters can be impacted by contaminated stormwater runoff and by pollutants illegally dumped into storm drains, and by soils that are windblown or destabilized.

### **Construction Impacts and Stormwater Runoff**

Construction activities can impact stormwater quality if measures are not implemented to prevent erosion and sediment transport. Pollutants (including phosphorus, metals, and organic compounds), are often absorbed into fine sediment particles and transported to receiving water bodies.

## Non-Stormwater Discharges

MS4s frequently receive non-stormwater discharges. Most non-stormwater discharges are prohibited by the MS4 permit unless authorized separately under the AZPDES Program. Exceptions are included in the permit for discharges of emergency fire-fighting activities and other allowable non-stormwater discharges, including potable water, air conditioning condensate, irrigation water, individual residential car washing, dechlorinated swimming pool water, street wash water, and discharges authorized by another NPDES or AZPDES permit (See Section 6.1).

Non-stormwater discharges that are not exempt or covered by another permit are considered illicit discharges in the City's stormwater program. Sources of illicit discharges can include process water, sanitary and industrial wastewater, and improperly handled spills or material disposal. Unauthorized discharges can occur when materials that were spilled or improperly handled or stored are washed into the storm drain system during a storm event, or when materials are intentionally dumped into a storm drain. These illicit discharges may contain heavy metals, toxins, oil and grease, solvents, household hazardous materials, radiator fluids, litter, viruses, and bacteria.

## Climate

The climate of the Phoenix area consists of hot, dry summers and mild winters. Average annual precipitation ranges from 5 to 8 inches per year in the urban desert. Most of the precipitation occurs between July and September during the summer monsoon season, and between December and March, as winter storms move inland from the west.

- Winter storms generally originate over the Pacific Ocean as a result of the interaction between polar Pacific and tropical Pacific air masses and move eastward over the basin. These storms can last for several days and are accompanied by widespread precipitation in the form of rain.
- Summer monsoon storms are usually associated with an influx of tropical maritime air originating over the Gulf of Mexico or the South Pacific Ocean and entering the area from a southeast to a southwest direction. Storms typically consist of highly localized heavy precipitation falling in a short period of time, accompanied by high winds, and blowing dust.

## Receiving Waters

The City's MS4 Permit authorizes stormwater discharges to WOTUS and non-WOTUS PSWs, including portions of the Salt River, Indian Bend Wash, Skunk Creek Wash, New River, and Cave Creek Wash. The MS4 also discharges to constructed distribution systems, including the Grand Canal, Arizona Canal, Arizona Canal Diversion Channel (ACDC), Cross Cut Canal, Old Cross Cut Canal, and the Papago Diversion Channel. Most of these distribution systems are included in the PSWL as PSWs under the generic listing "Phoenix Area Canals" or are considered conveyances to a WOTUS or non-WOTUS PSW. Runoff from the central part of the City flows to the Papago Diversion Channel, the Grand Canal, and the Arizona Canals, which discharge to Skunk Creek and New River, which discharge to the Agua Fria River. Stormwater runoff from the northern part of the City, including Cave Creek Wash, flows to the ACDC, to Skunk Creek, and then to the Agua Fria River. The Agua Fria River discharges to the Salt River west of the City. Stormwater from the northeastern area of the City flows from the Indian Bend Wash and drains to the Salt River. Stormwater from the central and southern part of the City flows to the Salt River.

There are numerous other smaller washes in the Phoenix area that may receive stormwater through MS4 connections. Some examples are Scatter Wash in northwest Phoenix, Dreamy Draw Wash in north-central Phoenix, and Echo Canyon Wash in east-central Phoenix. ADEQ maintains a database that lists the waters on the PSWL and a map of a selection of those waters (AZPDES [eMaps](#)).



## 3. Program Management

### 3.1 Permittee and Permittee Responsibilities

The MS4 permit is administered by the City Water Services Department (WSD); however, multiple departments are involved in the day-to-day responsibilities of implementing the stormwater program. The Stormwater Working Group) is tasked with overseeing and assessing progress on the elements of the program. It is comprised of representatives from multiple City departments with direct stormwater responsibilities. A summary is provided below in Table 3-1.

*Table 3-1 Permittee and Permittee Responsibilities*

DEPARTMENT	RESPONSIBILITIES
Water Services Department (WSD)	Public Education & Outreach Public Involvement (Hotline & Workshops) Illicit Discharge Detection and Elimination Industrial Inspections Outfall Inspections Enforcement & Compliance Wet Weather Monitoring Municipal Construction Inspections (WSD Projects) Municipal Construction Plan Review (WSD Projects) Reporting
Street Transportation Department (STR)	Drainage System Maintenance Roadway Maintenance Roadway/Utility Plan Review & Inspections Mapping Municipal Construction Inspection coordination Municipal Construction Plan Review (STR Projects) Floodplain Management
Office of Environmental Programs (OEP)	Municipal Facility Inspections Municipal Construction Inspections (AVN and STR horizontal projects) Training Program Oversight Hazardous Materials Mgmt. Program Coordination
Planning and Development Department (PDD)	Public Education & Outreach Construction Plan Review Construction Inspections Post Construction Inventory & Inspections Enforcement & Compliance
Public Works Department (PWD)	Public Education & Outreach Public Involvement (Household Hazardous Waste)
Parks Department (PRD)	Public Involvement (River Cleanup Events)

The Stormwater Working Group meets monthly for cross-departmental coordination of the overall MS4 Permit compliance program. They also provide technical assistance and support to the WSD when changes to legislative initiatives and regulatory requirements occur.

The Stormwater Executive Committee, which includes executive members from the departments engaged in MS4 Permit compliance (WSD, STR, PWD, PDD, OEP, and Law), provides oversight of the program. The Stormwater Executive Committee meets quarterly to review the budget, progress toward meeting permit *requirements*, and to review and approve certain proposed stormwater improvement projects.

## 3.2 Funding Sources

Implementation of the SWMP is funded through the following resources:

- **Stormwater Management Excise Tax:** A monthly excise tax assessed on all City Services bills to fund MS4 permit-required programs. Single-family residential accounts are charged a set fee with all other water accounts charged a graduated rate by meter size using the equivalent dwelling unit methodology. The City funds most direct MS4 Permit compliance program activities through this tax.
- **General Fund/Other Revenues:** The City departments utilize general fund revenues to finance a portion of MS4 Permit compliance activities.
- **Permit Fees:** The City charges fees for services such as construction inspections, plan review checks, permit issuance, report reviews, and other recoverable costs relative to the MS4 Permit.

## 3.3 Legal Authority and Enforcement

### Legal Authority

Although ADEQ and EPA may have overlapping legal authority over some discharges to and from MS4s (i.e., through the State's General Permits for stormwater discharges associated with industrial facilities or construction activities), the City must still independently establish, maintain and enforce adequate legal authority to control discharges to the MS4 (40 Code of Federal Regulations (CFR) §122.26(d)(2)(i)(A-F)). Conversely, ADEQ and EPA are independently responsible for enforcing their own legal authorities. The City's legal authority utilizes ordinances, permits, and procedures or similar means, as necessary. At minimum, an MS4 Permittee's legal authority must authorize the City to:

- Control the contribution of pollutants to the MS4 by stormwater discharges associated with industrial activity and the quality of stormwater discharged from sites of industrial activity,
- Control the contribution of pollutants to the MS4 by stormwater discharges associated with construction activity and the quality of stormwater discharged from construction sites,
- Prohibit illicit connections and discharges to the MS4,
- Control discharges to the MS4 of spills, dumping, or disposal of materials other than stormwater,

- Require compliance with conditions in ordinances, permits, contracts, or orders,
- Carry out all inspection, surveillance and monitoring procedures necessary to determine compliance and noncompliance with permit conditions, including the prohibition on illicit discharges to the MS4, and
- Establish requirements for post-construction stormwater controls.

Proper legal authority is necessary for the City to effectively implement compliance programs to reduce pollutants in discharges of stormwater runoff to the MEP. This is provided through local stormwater, floodplain, and erosion control ordinances, known as Phoenix City Codes (P.C.C.). The City details these rules and regulations through stormwater quality ordinance (P.C.C. Chapter 32C), a floodplain management ordinance (P.C.C. Chapter 32B), and a grading and drainage (G&D) ordinance (P.C.C. Chapter 32A). Copies of these ordinances are available online at [phoenix.municipal.codes](http://phoenix.municipal.codes).

The City does not have the authority to enforce the provisions of Arizona's General Permit for Stormwater Discharges Associated with Industrial Activities, Arizona's General Permit for Stormwater Discharges Associated with Construction Activity, Arizona's Pesticide General Permit, or Arizona's De Minimis General Permit, all of which are administered by ADEQ. However, City Stormwater and G&D ordinances may address items similar to those identified in some of these statewide permits.

## Enforcement

The goal of the City's Enforcement Program is to document the enforcement of stormwater ordinances fairly and consistently throughout the City's jurisdiction. The City periodically reviews ordinances to verify that they include measures to address compliance expectations for construction sites, commercial establishments, and industrial facilities. The City has also developed policies and procedures to determine if facilities are operating in compliance with the applicable stormwater G&D ordinances. It is recognized that there is no clear, standard approach to handling all the enforcement situations that may be encountered and that the professional judgment of individual inspectors will guide the appropriate level of response.

Enforcement measures have been integrated into the appropriate elements of this SWMP and those sections provide guidelines on how City departments implement enforcement actions appropriate for a given violation.

## Prioritizing Violations

The prioritization of violations is based on many factors, including the type of violation, whether there is a threat to human health and the environment, duration of the violation, good faith efforts to comply, and compliance history. City staff have policies, SOPs, or guidance documents to respond to and prioritize violations.

## Recordkeeping and Reporting

The City maintains records of enforcement activities, including:

- Inspection notes or reports
- Copies of communications with the parties in violation of applicable rules and requirements

- Documentation of follow-up actions
- Responses received from violators
- Correspondence with other agencies, if applicable.

### 3.4 Best Management Practices/Control Measures

The City has developed and implemented BMPs, also referred to as control measures, that can be implemented to help prevent pollutants from entering stormwater.

The BMPs include but are not limited to:

- Public Education & Outreach
- Public Involvement
- Illicit Discharge Detection & Elimination
- Industrial Inspections
- Municipal Inspections
- Construction Inspections
- Post-Construction Controls
- Drainage System Maintenance
- Roadway Maintenance
- Employee Training
- The Hazardous Materials Management Program (HMMP)
- Green Stormwater Infrastructure
- Stormwater Infrastructure Retrofit

## 4. Public Education and Outreach

### 4.1 Introduction

The City has developed a strong area-wide Public Education and Outreach Program. Public education is an important element in any municipal stormwater program. Increasing public awareness and gaining public involvement is essential in controlling pollution associated with stormwater runoff.

Communicating the impacts of stormwater runoff to selected targets increases the likelihood that they will support and participate in program implementation.

To expand outreach opportunities, City has partnered with other local entities, including Stormwater Outreach for Regional Municipalities (STORM) and Keep Phoenix Beautiful (KPB) to promote conservation, pollution prevention, and environmental awareness.

### MS4 Permit Requirements

The City's MS4 Permit identifies target audiences and topics for the Public Education & Outreach Program. For the general public, residential audiences, schools, and homeowners, homeowner's associations (HOAs) topics may include, but are not limited to:

- Post-construction ordinances and long-term maintenance requirements for permanent stormwater controls,
- Stormwater runoff issues and residential stormwater management practices,
- Potential water quality impacts of application of pesticides, herbicides, fertilizer and BMPs to minimize runoff of pollutants in stormwater,
- Potential impacts of animal wastes on water quality and the need to clean up and properly dispose of pet waste to minimize runoff of pollutants in stormwater,
- Illicit discharges and illegal dumping, proper management of non-stormwater discharges, and providing information on reporting spills, dumping, and illicit discharges,
- Spill prevention, proper handling and disposal of toxic and hazardous materials, and measures to contain and minimize discharges to the storm sewer system,
- Installation of catch basin markers at storm sewer inlets to minimize illicit discharges and illegal dumping to the storm sewer system,
- Proper management and disposal of used oil, and
- Community activities (monitoring programs, environmental protection organization activities, etc.).

Topics identified for audiences in the development, construction, and business communities include:

- Planning ordinances and G&D design standards for stormwater management in new developments and significant redevelopments,



- Municipal stormwater requirements and stormwater management practices for construction sites,
- Illicit discharges and proper management of non-stormwater discharges,
- Spill prevention, proper handling of toxic and hazardous materials, and measures to contain and minimize discharges to the storm sewer system,
- Proper management and disposal of used oil and other hazardous or toxic materials, including practices to minimize exposure of materials/wastes to rainfall and minimize contamination of stormwater runoff,
- Stormwater management practices, pollution prevention plans, and facility maintenance procedures, and
- Water quality impacts associated with land development (including new construction and redevelopment)

The topics listed above are not exclusive, and the City may focus outreach efforts on target groups and topics most relevant to the MS4.

## 4.2 Implementation

### Stormwater Outreach

The City conducts a variety of stormwater-related public outreach activities including workshops and public service announcements for the general public, the business community, and schools. An Outreach/Marketing Plan is developed to outline specific activities each fiscal year. The City's stormwater website ([Water Services Stormwater Program \(phoenix.gov\)](http://www.phoenix.gov/water-services/stormwater-program)) provides information on residential, business, and construction stormwater management practices. The website also includes stormwater related videos and various stormwater handouts, including BMP brochures, activity books, and a link to report a violation.

Every year during the permit term, the City implements an annual Stormwater Awareness Week, which is a weeklong public outreach campaign to focus attention on stormwater pollution and pollution prevention activities. Other municipalities and organizations in the area have also joined the effort. The campaign includes social media posts, different adds and a live virtual presentation.

The City participates with STORM to provide coordinated stormwater outreach throughout the Phoenix metropolitan area. STORM members use social media, radio spots, videos, and their website ([Home - STORM- Stormwater Outreach for Regional Municipalities](http://www.stormwateroutreach.org)) to deliver stormwater education to members of the general public and select businesses.

### Pollution Awareness Markers

The City installs Pollution Awareness Markers (PAMs) on catch basin inlets as a visual reminder that dumping to the storm drain is prohibited. PAMs contain the stormwater management logo or mascot and the words "Storm Drain No Dumping." PAMs are made of recycled aluminum.

### Recycling Education

The PWD Zero Waste team provides presentations to schools, conducts tours of the City's material recovery facilities for residential communities and homeowners, and promotes City recycling programs at special events ([Zero Waste Team | City of Phoenix](#)).

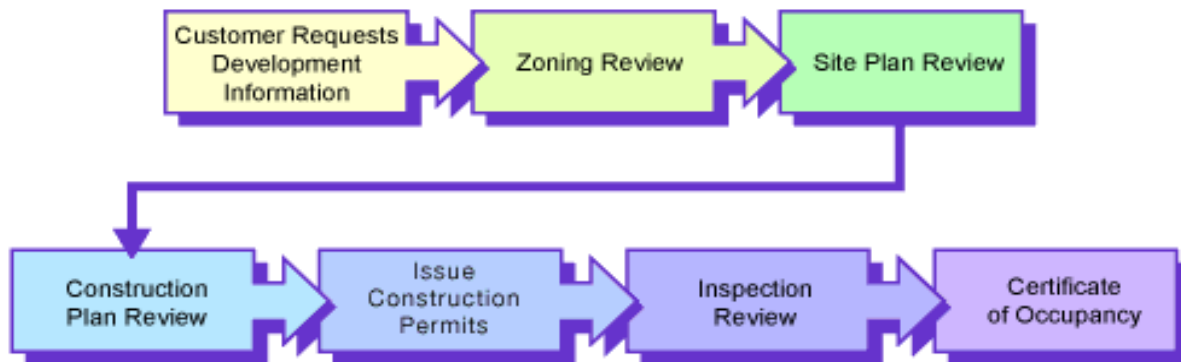
### Keep Phoenix Beautiful

The City partners with KPB, an affiliate of Keep America Beautiful, which organizes and implements programs in three areas: education/outreach, community gardens, and neighborhood beautification. KPB gives youth education presentations for Phoenix schools, Head Start programs, and community centers. The presentations reach both students and teachers. Topics emphasize solid waste management, including recycling, litter control, and waste prevention. Giveaway materials distributed at events include brochures, volunteer listings, pencils, recycling bags, and activity books ([Community Gardens | Keep Phoenix Beautiful | Phoenix](#)).

KPB hosts and participates in numerous neighborhood cleanups annually to reduce litter in neighborhoods and the environment. KPB also hosts annual 'I Recycle Phoenix' events, which divert electronics, clothing, household goods, shredded paper, and Christmas Trees from the landfill. These special projects involve residents and result in a healthier, cleaner, and more beautiful environment.

### Educational Program for Developers and Contractors

The PDD conducts periodic meetings for developers and contractors to provide information about the development process depicted in the flowchart shown in Figure 4-1. In addition to PDD activities, STORM conducts periodic outreach to developers and construction site operators.



*Figure 4-1: Development Process Overview*

## **Five Year Plan**

The City has developed a five-year Public Education and Outreach Plan (as referenced Table 4-1) to focus on specific target audiences and topics, as required under the MS4 permit. It aligns with STORM's five-year plan which is adopted by a majority of the member cities in Arizona.

Table 4-1 Five-Year Public Education and Outreach Plan

When	Theme	Status	Topics for Target Audiences	
Fiscal 2023 (July 2022 – June 2023)	Stormwater Runoff Issues:	Complete	HOA: Best Management practices	Development Community: grading /drainage standards
Fiscal 2024 (July 2023- June 2024)	Post Construction Ordinances & IDDE	Complete	Residential Community: Illicit discharges and illegal dumping, proper management of non-stormwater discharges, and to provide information on reporting spills, dumping, and illicit discharges	Commercial Business: Stormwater management practices, pollution prevention plans, and facility maintenance procedures
Fiscal 2025 (July 2024- June 2025)	Water Quality Impacts	Complete	General Public.: Potential impacts of animal waste on water quality and the need to clean up and properly dispose of pet waste to minimize runoff of pollutants in stormwater	Businesses: Illicit discharges and proper management of non-stormwater discharges
Fiscal 2026 (July 2025- June 2026)	Stormwater Runoff Issues and Illicit discharges	Future	Residential/HOA: Potential water quality impacts of application of pesticides, herbicides and fertilizer and control measures to minimize runoff of pollutants in stormwater	Construction: Municipal stormwater requirements and stormwater management practices for construction sites
Fiscal 2027 (July 2026- June 2027)	IDDE Reporting and Stormwater requirements and management for construction sites	Future	Schools: Stormwater runoff issues and residential stormwater management practices	Development: Water quality impacts associated with land development (including new construction and redevelopment).

Situations may arise that change the plan without prior modification of the SWMP. For example, the City may identify an industrial group or topic that requires special and timely attention. The intent will be to provide public education on the causes of stormwater pollution and control measures that minimize pollution to the MEP.

## 5. Public Involvement

The City conducts public involvement activities that provide the public with an opportunity to participate in the City's stormwater management program, including:

- Hosting an annual public workshop to inform and engage interested members of the public with the development and implementation of all parts of the SWMP,
- Creating opportunities for citizens to participate in the implementation of stormwater controls,
- Providing and publicizing a reporting system to facilitate and track public reporting of spills, discharges, and/or dumping to the MS4,
- Implementing a household hazardous waste (HHW) collection program to facilitate proper disposal of used oil, antifreeze, pesticides, herbicides, paints, and other hazardous materials, and
- Posting the SWMP and Annual Report on the City's website ([phoenix.gov/stormwater](http://phoenix.gov/stormwater)).

### 5.1 Public Reporting of Stormwater Issues

The City promotes myPHX311 (formerly known as Phoenix at Your Service (PAYS)) to simplify access to City departments [phoenix.gov/atyourservice](http://phoenix.gov/atyourservice). Members of the public can also notify the City of potential stormwater concerns by calling the Stormwater Hotline at (602) 256-3190 or 7-1-1 (TTY), through the website at [Water Services Stormwater Program \(phoenix.gov\)](http://Water Services Stormwater Program (phoenix.gov)), or via email ([ask.water@phoenix.gov](mailto:ask.water@phoenix.gov)). The WSD's Stormwater Management Section (SWM) tracks the number and types of complaints received and the number of investigations initiated by the section.

### 5.2 Municipal Programs

#### Parks and Recreational Areas Clean-up

The PRD holds clean-up events at various parks and recreational facilities and recreational sites including local rivers, washes, and habitat restoration areas to educate the public about stormwater and water quality impacts from pollution. Park Rangers also conduct trail and trailhead programs emphasizing the need for, residents to pick up after their pets and other safety related topics.

#### Household Hazardous Waste

PWD organizes the HHW collection program. This program assists residents in properly disposing of potentially hazardous or toxic materials, including household paint, batteries, used oil, antifreeze, pesticides, and a variety of other items. Information is available on the City website at [Public Works Household Hazardous Waste and Electronics \(phoenix.gov\)](http://Public Works Household Hazardous Waste and Electronics (phoenix.gov)) or by calling (602) 262-6251 or 7-1-1 (TTY).

- Examples of wastes that are accepted as part of the HHW collection program include the following items:

- Chemicals
- Paints
- Automotive
- Garden
- Miscellaneous
- Cylinders
- Batteries
- Electronics

Examples of wastes that are not accepted in the HHW collection program include the following items:

- Regular refuse and bulk trash
- Business/commercial waste
- Explosives/ammunition
- Compressed gases such as methyl-acetylene propadiene propane (MAPP) or Acetylene
- Radioactive materials
- Biomedical waste
- Medications and sharps
- Volatile materials

Residents can also drop off limited varieties of HHW at the 27<sup>th</sup> Avenue and North Gateway Transfer Stations. Acceptable wastes and conditions can be found at [Public Works Transfer Stations \(phoenix.gov\)](https://www.phoenix.gov/public-works-transfer-stations).



## 6. Illicit Discharge Detection and Elimination

### 6.1 Measures to Control Illicit Connections and Illegal Dumping to MS4

The City prohibits illicit discharges to the MS4, and controls discharges to the MS4 resulting from spills, dumping, or disposal of materials other than stormwater.

The WSD has an Illicit Discharge Detection and Elimination (IDDE) Program to investigate and eliminate illegal discharges to the MS4. The program includes field inspections, regulatory enforcement, and illicit discharge education.

#### P.C.C. Chapter 32C Stormwater Quality Protection

The City's Stormwater Quality Protection Ordinance (P.C.C. Chapter 32C) prohibits the release of significant quantities of materials, pollutants, or stormwater that "may reasonably be expected to cause or contribute to: damage to a public right-of-way or public storm drain system; a violation of an applicable water quality standard; or a violation of any condition of a stormwater AZPDES permit". A link to the Ordinance is here: ([Chapter 32C Stormwater Quality Protection | Phoenix City Code \(municipal.codes\)](#)).

#### Non-Stormwater Discharge Evaluation

Most non-stormwater discharges, not covered by a separate AZPDES permit, are prohibited under the MS4 Permit. However, the MS4 Permit and P.C.C. Chapter 32C authorize non-stormwater discharges, provided they are not significant sources of pollutants, including the following list:

1. Water line flushing
2. Landscape irrigation
3. Diverted stream flows
4. Rising ground waters
5. Uncontaminated groundwater infiltration (as defined at 40 CFR 35.2005(B)(20) to separate storm sewers
6. Uncontaminated pumped groundwater
7. Discharges from potable water sources
8. Foundation drains
9. Air conditioning condensation
10. Irrigation water
11. Springs
12. Water from crawl space pumps
13. Footing drains
14. Lawn watering
15. Individual residential car washing
16. Flows from riparian habitats and wetlands

17. Dechlorinated swimming pool discharges
18. Street wash water
19. Discharges or flows from emergency firefighting activities
20. Discharges authorized by another NPDES or AZPDES permit

P.C.C. Chapter 32C allows the issuance of temporary discharge permits for the release of uncontaminated non-stormwater if the release will not cause a violation of a surface water quality standard or a condition of a NPDES/AZPDES permit. Requests to discharge are reviewed to determine if applicable requirements are fulfilled. If a discharge permit is not granted, staff provides guidance to the applicant on the best method for disposal. Options may include discharging to the sanitary sewer cleanout, using the water for irrigation, or contacting a non-hazardous liquid waste hauler. The City may require commercial or industrial applicants to provide a water analysis report prior to issuing a permit. At a minimum, pH, chlorine levels, and color are required. Specific restrictions may be applied in the permit, including flow rate and time of discharge limitations.

Non-stormwater or unauthorized discharges identified by field personnel or through complaints received from the public are recorded in the SWM database. Trained staff members investigate these reports and enter their findings and any actions initiated in the appropriate database fields. Records of temporary discharge permits issued by WSD are also maintained.

## 6.2 Outfall Inventory, Inspections and Field Screening Procedures

The outfall inventory is maintained in the SWM database and currently includes 778 total active outfalls, and 258 major outfalls. The number of outfalls and major outfalls may change depending on the federal WOTUS definition and the state Protected Surface Water.

Seventeen outfalls are currently considered priority outfalls under the permit requirements, though this number may vary from year-to-year. Priority outfalls include major outfalls that discharge to impaired waters or not-attaining waters, major outfalls that have been a source of illicit discharge in the past five years, and major outfalls that have been identified as priority for illicit discharges and other non-stormwater flows. Outfalls with dry-weather flow, where the source has been identified as allowable under City code and the flow has been determined to not be significantly polluted, are removed from the priority outfall list.

The City's Stormwater Management Program maps showing outfalls, structural controls, rain gauge locations, drainage pipes and their associated outfalls, stormwater conveyances, catchment basins, zoning polygons, and other information are available to City employees on the City's Geographic Information System (GIS). Maps of the five monitored outfalls (wet-weather monitoring locations) are included in Appendix B of this plan. In addition, a list of major outfalls is included in Appendix C.

### Inspection Priorities and Schedule

Priority outfalls are inspected annually. Approximately 20 percent of the remaining major outfalls are inspected annually, so that every outfall is inspected at least once every five years. The inspection schedule is reviewed annually and updated as needed.

## Field Screening Procedures

Field screening activities are conducted on outfalls that have a dry weather flow. The screening includes a visual inspection of the outfall and surrounding area, as well as qualitative analyses of flows. City personnel perform field screening on dry weather discharges if the flow rate is found to be sufficient—typically greater than 0.03 gallons per minute. Colorimetric field kits are typically used for field screening. The results are used to determine if the flow is ‘significantly polluted’ (i.e., pollutants exceeding a trigger). The information obtained from the field screening is used to prioritize IDDE investigations. The SWM database is used to track and record findings from field screening procedures.

## 6.3 Investigating Potential Illicit Discharges

Potential illicit discharges are identified in several ways, including through outfall inspections, field screening, and storm drain maintenance. Illicit connections and illegal discharges may also be identified from complaints from the public.

SWM inspectors typically respond to illicit discharge reports within three business days but will immediately respond to illicit discharges that constitute a threat to human health or the environment. When applicable, educational information is given to the discharger and a field notice of violation (NOV) may be issued. If necessary, an industrial inspection may be conducted to bring the business into compliance with the appropriate P.C.C. All observations are recorded in the SWM database and enforcement action may be initiated.

The Street Maintenance Dispatch Office maintains a data retrieval system to record work requests and field observations. Some typical examples of service requests include cleaning streets, catch basins, washes, pipes and outfalls and responding to spills in the roadway. All requests for service received by the Streets Department Dispatch and are logged into a computer database called Citizen Serve. ([phxatyourservice.dynamics365portals.us](http://phxatyourservice.dynamics365portals.us)) The information is transmitted to the appropriate service center where it is assigned to staff. The location and responsible party are included in the system, as well as a description of the work completed. The Citizen Serve system provides a convenient mechanism for tracking cases, and also provides access to historical data, which may be used to note trends. For larger spills, the City’s emergency contractor may be dispatched for clean-up response.

## Dry Weather Discharges

Procedures are in place to investigate dry weather flows observed during outfall inspections. The SWM inspector uses field screening procedures to identify and characterize the discharge. Dry weather discharges that exceed a trigger or appear to be obvious wastewater discharges are prioritized. Outfalls that have a dry-weather flow observed during routine inspections are documented. The SWM database automatically triggers an IDDE investigation and staff begin to search for the source of flow using a variety of techniques. IDDE investigations typically involve tracing the flow up the storm drain system and may include performing a video inspection. Each investigation is cataloged thoroughly. Corrective action is initiated if the source(s) can be identified, and illegal flow can be verified. If the source of the flow can be identified and determined to be allowable under P.C.C., and the flow is not “significantly

polluted”, the outfall will be removed from the priority list. WSD procedures describe the IDDE dry weather flow investigations.

## **Illicit Discharge Investigation**

When notified by staff or a third party of a potential illicit discharge in the City’s jurisdiction, the occurrence is logged into the SWM database, assigned a priority level (low to high), and assigned to a SWM inspector. Response time is typically less than three business days. Discharges that threaten human health or the environment are investigated immediately. Triggers have been set up in the SWM database to assist the inspectors in prioritizing the illicit discharges. Staff evaluate the field screening and determine if the recent discharge warrants a higher priority than the illicit flow currently being investigated. The City may also utilize consultants or contractors to assist with complex or high priority IDDE investigations.

Once the source has been identified, the City evaluates if the discharge is:

- Allowable through an AZPDES Permit
- Allowable under P.C.C or the MS4 permit
- Illicit
- Illicit Discharge Elimination

When an illicit discharge source has been located, it is evaluated to determine if it is allowable under P.C.C. or permitted through the State. If the discharge is allowable or permitted, no additional action may be necessary. However, if the discharge is not allowable, or is determined to be significantly polluted, corrective action will be initiated as soon as practicable based on its determined priority level, but not more than 60 days after the source has been identified.

The discharger may be asked to remove or reduce the source. If this is not possible or practical, then the City may issue a Temporary Stormwater Discharge Permit allowing the discharger to continue to release non-stormwater flows to the storm drain system provided certain conditions are met per P.C.C Chapter 32C. If the discharger is required to remove or eliminate the source and does not comply with the order, the investigators initiate enforcement action. The WSD Enforcement Response Plan includes specific details on enforcement actions (Appendix D).

The City does coordinate with other municipalities to address pollutants that may enter one MS4 from another MS4. This coordination includes courtesy notifications or field investigations with staff from all MS4’s affected.

## **Industrial Facility Inspections**

If the potential source of an illicit discharge is an industrial facility, SWM inspectors may conduct a facility inspection. The SWM inspectors evaluate the facility’s potential to pollute stormwater, and look for signs of illicit discharges and direct connections to the MS4. If staff believe that an illicit connection exists between the facility and the storm drain, inspectors may use one or more techniques including smoke and dye testing, a video inspection, and reviewing facility schematics. Should an illegal connection exist, the inspector can require that the connection be severed immediately.

See Section 9.3 for more detail on industrial and commercial facility inspections.

## Tracking and Reporting

The SWM uses a computer database to track the inspections conducted, observations made by inspectors, and enforcement actions initiated (if any). The database provides security for the stormwater program data and includes functionality to retrieve data and generate reports. Reports are generated to provide information required for the annual report and as requested by City management.

## 6.4 Illicit Discharge Public Awareness and Reporting Program

As discussed in Section 5.1, members of the public are encouraged to notify the City of potential stormwater contamination issues. Inspections are also conducted in response to complaints of dumping or illicit discharges. The City advertises the Stormwater Hotline in both English and Spanish.



## 7. Municipal Facilities and Activities

### 7.1 City Hazardous Materials Management Program

Administrative Regulation (A.R.) 2.314, Hazardous Materials Owned by the City of Phoenix; Responsibilities for Compliance with Local, State, and Federal Rules Governing Hazardous Materials, adopts the Hazardous Material Management Program (HMMP) as the official City guidance for hazardous materials management.

The HMMP was developed to assist City operations comply with federal, state, and local environmental and safety regulations related to chemical management. It also provides a basic understanding of hazardous waste regulations, how to determine a facility's hazardous waste generator category and how to understand and properly apply City hazardous, universal and non-hazardous waste and materials procedures. The procedures apply to all City departments unless stated otherwise.

The HMMP protocols are designed to reduce potential for stormwater contamination by establishing procedures and standards for preventing spills, waste generation, and proper storage of hazardous materials. All protocols meet or exceed ADEQ and EPA Hazardous Waste and Universal Waste Regulations as mandated by the Resource Conservation and Recovery Act (RCRA). Protocols include:

- Used Batteries – Recycling and Disposal
- Management of Hazardous Building Materials at City of Phoenix Facilities
- Hazardous Materials Purchasing Program
- Disposal and Recycling of Hazardous Waste and Materials
- Pesticide Management Program
- Spill Preparedness
- Storage and Handling of Hazardous Materials
- Stormwater Management
- Universal Waste Lamps, Mercury Containing Equipment, Lamp Ballasts and Aerosols
- Used Oil and Petroleum Contaminated Absorbent Material

The Stormwater Management Policy of the HMMP applies to all City facilities that have the potential to impact stormwater quality. General City facility BMPs are detailed in Section VII of this HMMP, such as BMPs for parking lots, vehicle storage, vehicle washing, equipment storage, and product storage. The policy also includes reference to other environmental rules and permits that may be applicable to City departments, such as the Multi-Sector General Permit (MSGP) and De Minimis General Permit. Note that BMPs for hazardous materials and hazardous wastes are also included in “Storage and Handling of Hazardous Materials” and other HMMP procedures.

The HMMP is maintained by the OEP. Each HMMP procedure is targeted for OEP review at least once every two years. Revisions may be made more frequently if regulatory or operational requirements change. Updates to the HMMP are posted on-line upon finalization of any updates. The detailed procedures for HMMP updates are documented in the OEP Hazardous Materials Management Program (HMMP) and Spill Log SOP.

The HMMP Stormwater Management Policy was updated in June 2022 to include requirements from the updated 2021 MS4 permit, including general Good Housekeeping Measures. This policy continues to follow the biennial revision review timeline and was last updated August 2024.

Departments with specific job tasks (for example, utility installation and street maintenance) have developed specific written procedures for their tasks (to supplement the more general HMMP

procedures and policies).

## 7.2 Proper Management of Used Oils and Toxics

The City collects and recycles used oil from municipally-owned facilities. The City follows all EPA and ADEQ rules and regulations relating to the labeling, storing, recycling, and disposing of used oil, oil debris, and petroleum contaminated absorbent. These requirements are augmented by the City's HMMP procedures, specifically the "Used Oil and Petroleum Contaminated Absorbent Materials" procedure, and individual department procedures such as the PWD Fleet Services Division procedure "Facility Spill Response Plan." These procedures are revised as needed and in accordance with regulatory changes.

Any toxic and hazardous materials and wastes are stored, handled, and disposed of in accordance with the HMMP protocols previously described in Section 7.1 above.

## 7.3 Controls for Pesticides, Herbicides and Fertilizers

The City follows all EPA, Arizona Department of Agriculture Pest Management Division, and State of Arizona statutes, rules, and regulations relating to the use, disposal and storage of pesticides, herbicides, and fertilizers that are used on the perimeter of buildings, in landscaped areas, and other areas impacted by City-owned property. These requirements are augmented by the City's HMMP procedures, specifically "Pesticide Management Program," "Municipal Facility Stormwater Management Policy," and individual department procedures. The City's PRD and WSD both submitted Notices of Intent (NOI) to ADEQ under the AZPDES General Permit for Point Source Discharges from the Application of Pesticides to PSW, which required development of Pesticide Discharge Management Plans.

The City's Pesticide Management Program HMMP is focused on the principle of Integrated Pest Management (IPM). IPM seeks to reduce the amount and toxicity of pesticides and eliminate the need for pesticide use, where possible, by implementing measures that eliminate conditions that attract pests. The Pesticide Management Program HMMP is applicable to any City department that purchases, transports, stores, uses or controls pesticides or uses contractors to perform these activities.

Pesticides are routinely used in and around public buildings, grounds, and outdoor areas to manage weeds, spiders, insects, and on occasion, rodents. IPM can be equally effective and is more protective of human health and the environment. This program is also consistent with the City's sustainability efforts and is creditable in Leadership in Energy and Environmental Design (LEED) Certification for Existing Buildings: Operation and Maintenance Certification.

## 7.4 Spill Prevention and Response

As previously discussed, the City standard for managing hazardous waste and hazardous materials is the HMMP supported by A.R. 2.314. The HMMP directs personnel to protect chemical storage areas from weather, and to store in a manner that minimizes the potential for stormwater contamination. This is accomplished by locating the storage areas indoors or by using an appropriate canopy for outdoor storage. Guidance is also provided in the HMMP Manual on secondary containment, security, permitting requirements, spill response, proper signs, and labeling requirements. Container storage requirements

such as aisle spacing, limitations on drum stacking, segregation of incompatible materials, and types and condition of containers are also included.

Safety Data Sheets (SDSs) must be available for all materials located at City owned and operated sites. Material inventory information must be entered and maintained by departments in the on-line City Safety Data System. The SDS is available to all City employees on the City's SharePoint site. The HMMP includes a Material & Waste Storage Area Checklist that assists City employees in minimizing spills caused by improper storage practices. Additional regulatory requirements specific to managing hazardous wastes are included in the HMMP.

Environmental Facility Assessments (EFAs) are conducted at City-owned and operated facilities in accordance with the City's MS4 permit. The OEP Municipal Facility Inventory, Environmental Facility Assessments/EFA and Prioritization Process SOP contains the OEP EFA procedures. As part of the EFA, each facility's spill response procedures are verified. These inspections help assess the City's hazardous material management process and its impact to stormwater. Availability of spill kits and emergency number information is also verified during EFAs. Spill prevention and response standards are included in the HMMP Spill Preparedness Policy. Facilities subject to the policy are required to develop, implement, and update (as needed) a spill response program including posting emergency numbers and implementing BMPs to prevent hazardous material spills.

## 7.5 Other Municipal Facilities and Activities

The City implements other programs and activities that supplement the stormwater program. These activities include, but are not limited to:

- Purchasing
- Recycling
- CWA Section 404 Program
- Riparian Area Restoration and Preservation Projects
- Brownfields

### Purchasing

Purchasing is an important control point for managing the use and/or disposal of products which may have the potential to become hazardous waste after use or have the potential to pollute stormwater. The City Sustainable Purchasing Policy and Hazardous Materials Purchasing Policy under the HMMP are available to departments on the City's Intranet. These policies document the City's preference for products that have reduced toxicity, contain recycled or bio-based materials, are energy or water efficient, divert waste from landfill through recovery/reuse services, use alternative fuels, renewable energy, or contain sustainable forestry certified materials.

### Recycling

The City purchases products made from recycled materials and recycles wastes whenever possible. The City recycles the following items within municipal operations:

- Fluorescent, high intensity discharge, sodium vapor, high- and low-pressure mercury vapor, metal halide and metal arc lamps
- Mercury-containing thermostats
- Batteries – lead acid, nickel cadmium, nickel halide, lithium
- Printer and toner cartridges
- Used oil
- Cardboard and paper
- Aluminum
- Used Antifreeze
- Scrap metal
- Spent fuels
- Plastics

## **CWA Section 404 Program**

The City's 404 Program was established in OEP in 1998 to help departments review projects, address and minimize the impacts of construction or maintenance on water bodies/channels, and obtain Section 404 permits and associated Section 401 certifications for the discharge of dredged or fill material in WOTUS. In metro Phoenix, the 404 Program focuses on City projects with the potential to have impacts in WOTUS, but also includes considerations for connected desert washes (that may not be WOTUS under the current definition) that are key wildlife habitat and movement corridors. The program also helps project managers consider and minimize impacts to other natural and cultural resources. In October 2020, the City published A.R. 1.55, Surface Water Protection, to address the changing landscape of Clean Water Act regulation concerning the definition of WOTUS.

## **Riparian Area Restoration and Preservation Projects**

Riparian areas are among the most biologically rich habitats and once represented a much larger portion of the Phoenix area. Aided by community leaders, the City recognized the importance of these areas and works with various partners to restore them. Two key projects, the Rio Salado Habitat Restoration Area and the Tres Rios Ecosystem Restoration Area, encompass hundreds of acres of wetlands and riparian vegetation which are open to the public and provide numerous environmental education opportunities.

## **Brownfields**

The City also supports Brownfields redevelopment through a municipal grant program. Brownfields is a term used to describe real estate that is contaminated or perceived to be contaminated by hazardous substances or petroleum products. Examples include closed landfills, abandoned gas stations, and former manufacturing and dry-cleaning facilities. The City encourages and supports the cleanup and redevelopment of Brownfields, thereby reducing the health and environmental risk from the property, creating jobs, increasing property values, and revitalizing neighborhoods.

## 8. MS4 Maintenance

### 8.1 Drainage System (Structural Controls) Maintenance

The City has a comprehensive program that develops, implements, maintains, and monitors structural and treatment control BMPs. The maintenance program addresses upkeep needed for open channels, catch basins, retention/detention basins, and structures for stormwater runoff treatment. BMPs are deployed to minimize impacts to the receiving waters to the MEP. Drainage system maintenance is the responsibility of the Street Transportation Department (STR).

Drainage system and outfall maps are available for review by employees on the City's GIS, which are maintained and updated by STR.

#### Drainage System Monitoring Program

Staff assigned as STR Maintenance Foreman and other staff responsible for the Vector equipment are scheduled to perform monthly visual inspections of the drainage systems assigned to their area. There are four areas in the City that are:

- Northeast General Maintenance – Union Hills Service Center,
- Central General Maintenance – Glenrosa Service Center,
- Southwest General Maintenance – Salt River Service Center, and,
- Southeast General Maintenance – Okemah Service Center.

The schedules are maintained by STR and include the addresses of the priority area, map location, and date of service column.

Outfalls are monitored by the WSD SWM at the frequency required in the MS4 permit. High Priority outfalls are monitored annually, and all other non-priority major outfalls are observed at least once every five years (approximately 20 percent per year).

#### Maintenance Priorities and Schedule

STR Drainage Foremen prioritize and schedule maintenance using the following criteria:

- Full closure of the drain
- Plugged or partial closure of the drain
- Geographical location – assign cleanup of system based on proximity and location.

When new maintenance needs are identified following monsoon events, staff follow STR protocol to mitigate any observed issues.

## 8.2 Operation and Maintenance of Public Streets, Roads, and Highways

### Maintenance Priorities and Schedules

STR is responsible for design, construction, and maintenance of all City streets. Prioritizing street surface maintenance (including crack sealing, pothole repair, and more extensive pavement restoration) is managed using a computerized pavement management system that analyzes ride quality. The surface distress information generated by the program helps STR to determine the pavement's structural adequacy and is used to prioritize maintenance on a City-wide basis. Records of system maintenance are generated when the Citizen Serve system creates a work request for an activity. The work is performed by STR personnel and then recorded in the Citizen Serve system when completed.

### System Maintenance Practices

The BMP for drainage facility component cleaning and maintenance instructs STR employees to clear debris and trash from man-made easements, detention basins, and washes prior to mowing. Employees are reminded to be aware that items like oil, paint, and other pollutants may be illegally dumped in these areas and must be cleaned up and disposed of properly. Any chemicals encountered are removed and disposed of by the City hazardous materials contractor not by City employees. Non-hazardous debris collected is deposited directly into the dump truck bed for disposal, not stored on the street surface or shoulder. When catch basins and storm drain lines are cleaned out, non-hazardous debris is also placed in the dump truck bed. Employees must dump Vactor trucks at designated sludge drying bed the 91<sup>st</sup> Avenue WWTP during normal operations. Debris that contains or has the potential to contain hazardous or bio-hazardous materials is removed and disposed of by specialized contractors trained and equipped to handle these materials.

During significant storm events, the City allows rainwater pumped from sumps and standing water to be disposed of through existing storm drain inlets.

Records of system maintenance are generated when the Citizen Serve system creates a work request for an activity. The work is performed by STR personnel and then recorded in the Citizen Serve system when completed.

### Street/Parking Lot Sweeping Program

To reduce the amount of debris that may enter the storm drain system, the City has implemented a street sweeping program that encompasses all areas of the City. The City maintains a fleet of Particulate Matter thirty-four PM10 motor brooms. Most parking lots are swept on an as-needed or on-call basis. Some City facilities (e.g., Service Centers) may develop site-specific sweeping schedules. The sweeping schedule for streets varies according to the type:

- Major and collector streets are scheduled to be swept once every 14 days
- Local streets are scheduled to be swept once every three months
- Parking lots are swept as needed or on request
- High priority areas in the City are scheduled to be swept every seven days
- Non-attainment areas are swept on a seven-day cycle.

STR sweeps local roads quarterly, majors and collectors are swept biweekly. In addition, personnel pick up trash, weeds, and debris in empty lots and the right-of-way, as requested by employees or citizens.

For the Current Street Sweeping Schedule go to the link below:

**[phoenix.gov/administration/departments/streets/initiatives/pavement-maintenance/street-sweeping-schedule.html](https://phoenix.gov/administration/departments/streets/initiatives/pavement-maintenance/street-sweeping-schedule.html)**

Occasionally, adherence to the published schedule is delayed responding to events that are non-routine. Equipment and personnel resources are directed to priority tasks such as debris cleanup after storm events to ensure public safety. Storm events in a specific area of the City may preempt routine maintenance in an area that was unaffected by the storm. Unscheduled equipment maintenance is an additional non-routine task that can affect maintenance schedules.

## **Street Repair Practices**

The STR Street Maintenance Division has developed and implemented BMPs for routine activities that have the potential to impact the storm drain system. When performing asphalt maintenance and removal activities, employees are instructed to place debris and rubble directly into the bed of the dump truck as opposed to staging the material on the street or shoulder. Spraying activities are controlled such that overspray is minimal. Any material generated during equipment flushing or tool cleaning must be disposed of properly.

Materials generated during concrete removal and replacement are managed in a similar manner. When hand-mixing concrete, employees must employ practices to prevent water from flowing onto the pavement. The mobile mix truck and contractor ready mix trucks are required to utilize buckets to collect equipment cleaning water and excess concrete material for proper disposal.

Water utilized during concrete/asphalt sawing operations is contained in sand or absorbent material and placed in the dump truck bed for disposal. Excess soil removed when an auger is used to place posts for permanent barricades is collected for disposal at the designated landfill.



## 9. Industrial Sites

### 9.1 Measures to Control Pollutants

The City's industrial and commercial facility inspection program includes measures to monitor, control and eliminate pollutant discharges from sources throughout the City's MS4 jurisdiction. It is a priority for the City to maintain good working relationships with the industrial community while ensuring that stormwater and the MS4 receiving waters are protected.

Industrial Pretreatment inspectors include stormwater compliance in their annual inspections of permitted facilities. A stormwater assessment has been incorporated into the WSD ESD Commercial Inspection Section's inspection program. The SWM section has provided WSD ESD commercial inspectors with the tools needed to conduct stormwater screening at restaurants, auto repair shops, and car washes.

### 9.2 Priorities and Implementing Controls

#### Industrial Facility Inventory

The City prioritizes the industrial facility inventory by considering factors such as potential pollutants, and potential for exposure. The City's industrial facility inventory is maintained in the WSD database and includes the following:

- Facilities subject to Section 313 of Title III of the Superfund Amendments and Reauthorization Act (SARA)
- Hazardous waste treatment, storage, or disposal facilities (TSDFs)
- Landfills
- Industrial facilities permitted for pretreatment discharges to the sanitary sewer
- Industrial facilities that the City considers to be a potential source of substantial pollutant loading to the MS4

A listing of the SARA Section 313 facilities, TSDFs, and active landfills can be generated from the City's database. In addition, the City has compared the list of facilities that have applied to ADEQ for coverage under the MSGP to their industrial facility list. Where doing so will enhance the program, the City has added those MSGP facilities to the industrial list.

ESD receives regular email notification of new facilities coming into Phoenix from PDD. The information is reviewed by the Industrial Pretreatment Program (IPP) and added to the inventory, when applicable. New facilities are also added when identified by staff during inspections of neighboring facilities.

The City's inventory is reviewed on an annual basis and updated as necessary. The update may include an updated MSGP list from ADEQ, and/or the most recent lists from EPA (e.g., SARA Title III, Tier II, or TSDF). The inventory is revised to address any significant gaps. The WSD procedure describes the industrial facility inventory prioritization and inspection.

## Municipal Facility Inventory

The municipal facility inventory (MFI) identifies those municipal facilities with chemical storage and the potential to discharge pollutants to the City's MS4. Facilities that consist of only administrative buildings and parking areas were not identified as sites of stormwater runoff pollution concerns.

The MFI, or facilities subject to the stormwater-required facility assessments, was compiled by OEP in December 2009. Data included in the MFI includes the facility name and address, standard industrial classification (SIC) code, contact name, latitude and longitude, and a brief description of activities of concern at the facility that may discharge pollutants in stormwater. The facility inventory is continually reviewed by OEP and facilities may be added as they come online or removed based upon closures, consolidations, or operational changes. The last inspection date for each facility is tracked in OEP's database. The Municipal Facility Inventory, Environmental Facility Assessments/EFA and Prioritization Process SOP contains the OEP MFI procedures.

The MFI at the time the SWMP was updated is included in Appendix E.

## Higher Risk Facilities

### Industrial Facilities (Private)

SARA Section 313, TSDF, and landfill facilities are required to be inspected under the terms of the MS4 permit and are considered as higher risk (high priority) facilities for purposes of industrial inspections. An additional consideration for determining high priority facilities includes the results of stormwater screening inspections conducted by other WSD ESD Sections. If Commercial or IPP Inspectors identify a stormwater concern, they forward the information to the SWM section for additional evaluation. In addition, facilities that have a high potential to pollute stormwater based on past stormwater inspection results are also considered high priority.

If conditions change (e.g., wet weather monitoring results, impaired waters, location, etc.), the high priority inspection list may be adjusted. Similarly, the high priority list may be adjusted based on the trends observed at specific industry sectors.

### Municipal Facilities

The City's MS4 Permit requires the development of a system to review and prioritize the MFI for more frequent inspections. This requirement under the 2009 MS4 permit was completed in June 2011. Under the 2021 MS4 Permit, the City's "higher risk" prioritization method has been further refined based on the criteria included in the permit.

The Municipal Facility Inventory, Environmental Facility Assessments/EFA and Prioritization Process SOP contains the OEP higher risk prioritization procedure, using the following as the criteria for determining higher risk facilities:

- RCRA Large Quantity Generator, OR
- Multi-departmental sites with Facility Stormwater Plans (excludes sites listed in Appendix F that have Stormwater AZPDES coverage, such as MSGP), AND
- Within 0.25 miles of a Surface Water that is one of the following:
  - a) Impaired\*
  - b) Not-Attaining\*
  - c) Outstanding Arizona Water
  - d) Perennial or Intermittent

\* Impaired & Not-Attaining criteria do not apply if the surface water is Impaired or Not-Attaining for *E. coli* or similar parameters for which the City operations would not contribute pollutants.

Facilities will continue to be reviewed against the higher-risk facility criteria during each annual assessment cycle and facilities are added or removed to the list, based upon those results. As per the MS4 permit, the City may continue to refine this “higher risk” facility prioritization system. Appendix E includes identification of “higher risk” facilities under this new prioritization method.

## Municipal Facility Inspections/Facility Assessments

The City conducts an EFA at City-owned and operated facilities in accordance with the City’s MS4 permit. OEP conducts EFAs on at least 20 percent of the facilities in the MFI each year, which may include follow-up inspections if needed. The higher risk criteria laid out in Section 9.2.3 (Municipal Facilities) is used to identify facilities for more frequent EFAs. EFA findings must be corrected within 90 days or an implementation schedule must be in place. Findings not corrected within 45 days are referred to the Environmental Programs Manager for elevation and follow-up. The Municipal Facility Inventory, Environmental Facility Assessments/EFA and Prioritization Process SOP contains the OEP EFA procedures.

Identification of the potential pollutants at each municipal facility was necessary to select appropriate candidate BMPs to reduce pollutants in stormwater runoff to the MEP. The use of appropriate BMPs is assessed during each EFA for activities addressed in the HMMP, such as spill response procedures, hazardous materials/waste container management, building and parking lot washing, solid waste/litter control, scrap metal storage, pesticides and fertilizer use, used oil and universal waste protocols, etc.

*Table 9-1 identifies activities of concern that may be associated with activities conducted or based at the City’s municipal facilities. Table 9-2 presents a matrix of pollutants of concern and the activities that may produce them.*

*Table 9-1: Municipal Facilities and Activities in the City of Phoenix Inventory*

Type of Municipal Facility	Activities of Concern Conducted
Maintenance Yards and Hazardous Materials Storage Facilities	Loading, unloading, handling, and storage of significant materials including anti-freeze, asphalt, batteries, chemicals, concrete, diesel wastes, emulsions, fertilizer, fuel, green wastes, hazardous materials, new and used oil, paint products, pesticides, scrap metal, solvents, trash and debris
	Filling of aboveground and underground storage tanks (ASTs and USTs) with fuels
	Dispensing of fuels to vehicles, equipment, and portable fuel containers
	Vehicle and equipment parking and storage
	Vehicle, equipment, and material washing and steam cleaning

Type of Municipal Facility	Activities of Concern Conducted
	Leak and spill cleanup
	Landscape, garden, and general maintenance and cleaning
Fueling Stations	Filling of aboveground and underground storage tanks (ASTs and USTs) with fuels
	Dispensing of fuels to vehicles, equipment, and portable fuel containers
Parks and Recreational Facilities, including Golf Courses and Landscape Areas	Landscape, garden, and general maintenance and cleaning
	Application of pesticides/herbicides
	Leak and spill cleanup
Warehouses	Loading, unloading, handling, and storage of materials
	Landscape, garden, and general maintenance and cleaning
Fire and Police Stations	Loading, unloading, handling, and storage of significant materials
	Vehicle and equipment maintenance
	Vehicle and equipment parking and storage
	Vehicle washing and steam cleaning
	Dispensing of fuels to vehicles, equipment, and portable fuel containers
	Leak and spill cleanup
	Landscape, garden and general maintenance and cleaning
Service Centers	Vehicle and equipment maintenance
	Vehicle and equipment parking and storage
	Vehicle and equipment washing and steam cleaning
	Loading, unloading, handling, and storage of significant materials.
	Filling of aboveground and underground storage tanks (ASTs and USTs) with fuels
	Dispensing of fuels to vehicles, equipment, and portable fuel containers
	Leak and spill cleanup
	Bulk material pile storage
Swimming Pools	Storage and use of chemicals, including chlorine

Type of Municipal Facility	Activities of Concern Conducted
	Filter maintenance and backwashing
	Landscape, garden, and general maintenance and cleaning
Water Treatment Facilities	Loading, unloading, handling, and storage of materials
	Vehicle washing and steam cleaning
	Storage and use of chemicals, including chlorine
	Leak and spill cleanup
	Landscape, garden, and general maintenance and cleaning
Roads, streets, highways and parking facilities	Leak and spill cleanup
	Striping, saw cutting, and sealing
Flood control projects and devices, drainage facilities and associated maintenance activities	Leak and spill cleanup
	Vegetation control
Active or closed municipal/ sanitary landfills	Vehicle and equipment parking and storage
	Vehicle and equipment maintenance
	Leak and spill cleanup
POTWs and sanitary sewage collection facilities	Loading, unloading, handling and storage of materials
	Filling of ASTs and USTs with fuels
	Storage and use of chemicals, including chlorine
	Vehicle washing and steam cleaning
	Landscape, garden and general maintenance and cleanup
Sites for disposing and treating sewage sludge	Sewage sludge application
Municipal airports	Leak and spill cleanup
	Filling of ASTs and USTs with fuels.
	Landscape, garden and general maintenance and cleaning
	Dispensing of fuels to vehicles, equipment, and portable fuel containers

Type of Municipal Facility	Activities of Concern Conducted
	Vehicle and equipment parking and storage
Other landscaped areas	Landscape, garden and general maintenance and cleaning

Table 9-2: Potential Pollutants of Concern

Potential Pollutants	Material Loading, Unloading, Handling, or Storage	Filling of ASTs & USTs	Dispensing Fuel	Vehicle & Equipment Maintenance	Vehicle & Equipment Parking and Storage	Vehicle & Equipment Material Washing & Steam Cleaning	Leak & Spill Cleanup	Landscape, Garden, and General Maintenance & Cleaning
Asphalt	✓							
Chemicals/Acids/Bases	✓			✓	✓		✓	
Diesel Wastes	✓			✓			✓	
Fertilizer	✓						✓	
Fuel and Fuel Spills		✓	✓	✓			✓	
Hazardous Materials	✓			✓	✓		✓	✓
Herbicides	✓						✓	✓
New/Used Oil	✓			✓			✓	
Oil and Grease Spills	✓			✓	✓	✓	✓	
Paint Products	✓			✓			✓	✓
Pesticides/Herbicides	✓						✓	✓
Soil stockpiles	✓							✓
Solvents	✓			✓			✓	
Trash and Illegal Dumping	✓			✓	✓			✓
Parts Washer Water				✓	✓	✓		

## 9.3 Inspections and Monitoring of Industrial Facilities

### Inspection Procedures

The City values its relationship with the industrial community and uses the inspection program as an opportunity to provide guidance and information on stormwater protection. Communicating and verifying the implementation of appropriate BMPs are an important part of the inspection process.

The City has developed an inspection program and procedures for industrial facilities to identify compliance with local stormwater ordinances. When conducting these inspections, at a minimum, the following items are reviewed, and the findings are documented in the SWM database:

- Investigate any sources of non-stormwater discharges to the storm drain system
- Determine the corrective actions or BMPs needed to contain or halt the discharge
- Initiate the corrective actions, if needed
- Determine if the property has an AZPDES Stormwater permit, NOI, No Discharge Certification, or No Exposure Certification
- Document any information needed for follow-up compliance or enforcement actions
- Verify that the facility is operating under its SWMP or Stormwater Pollution Prevention Plan (SWPPP) and recommended BMPs in accordance with P.C.C. Chapter 32C, the City's Stormwater Quality Ordinance

#### Re-inspection of Industrial Facilities

The SWM employees inspect approximately 20 percent of the stormwater industrial facility inventory every year, including follow-up inspections. The SWM Section has established a goal of re-inspecting industrial facilities every three to seven years. The SWM database automatically generates a new inspection task, depending on the priority; high-risk facilities are scheduled for inspection every three years, normal priority facilities are scheduled every five years, and low-risk facilities (e.g., low potential to pollute stormwater) are inspected every seven years. In addition, the Chief Water Quality Inspector may select a facility for an accelerated re-inspection based on compliance history or concerns.

#### Minimum BMPs for Industrial Facilities

Minimum BMPs for industrial and commercial facilities within the City's jurisdiction have been identified to reduce the discharge of pollutants to the MEP. City inspectors notify the industrial and commercial facilities of minimum BMPs for storing hazardous materials or waste, as applicable.

- Hazardous waste/materials storage areas are clean and protected from rainfall and runoff,
- Trash bin areas are clean, lids are closed, and there are no signs of leakage from the trash bins,
- Aboveground tanks have been properly maintained including no signs of leakage, and secondary containment is in good condition,
- Onsite storm drain inlets are protected from inappropriate non-stormwater discharges,
- Oil/water separators are covered or indoors and connected to a sanitary sewer,



- Wash water from wash pads and/or mop buckets is directed through a control device to the sanitary sewer and does not discharge to the MS4,
- Parking lot areas are free of trash, debris, and fluids other than water,
- Facility has coverage under the MSGP, if appropriate,

Restaurants are expected to implement the minimum BMPs below:

- Oil and grease wastes are not discharged onto a parking lot, street or adjacent catch basin,
- Trash bin areas are clean, lids are closed, and there are no signs of leakage,
- Floor mats, filters and garbage containers are not washed in adjacent parking lots, alleys, sidewalks, or streets and no wash water is discharged to MS4, and
- Parking lot areas are cleaned by sweeping, not by hosing down, and the facility operator uses dry methods for spill cleanup.

## **AZPDES Non-Filers**

SWM Inspectors make note of facilities that may be subject to the MSGP, but cannot provide documentation of coverage (e.g., lack an NOI and/or SWPPP). A report of these “non-filer” facilities is submitted to ADEQ monthly. The City does not determine compliance or non-compliance with AZPDES permits, but rather forwards information to ADEQ, as required under the MS4 permit.

## **Enforcement**

If during a routine inspection or an inspection in response to a complaint, an inspector observes that a business/facility is non-compliant with the City’s stormwater ordinance (including the prohibition of non-exempt non-stormwater discharges or minimum BMPs) the City will initiate enforcement procedures. As described in the Enforcement Response Plan (Appendix D), the severity of the violation is based on various factors. After considering the various factors, the City will determine the level of enforcement that is required. Enforcement is escalated as necessary to bring the facility into compliance.

Enforcement may include the following informal and formal actions:

- Verbal Warning
- Inspection Report with Requirements
- NOV
- Field NOV
- Show Cause Proceeding
- Civil Citation

## 9.4 Other Measures to Control Pollutants from Landfills, Transfer Stations, and Industrial Facilities

The City has obtained coverage under the MSGP (see Appendix F) for an operating landfill (SR85), two transfer stations (North Gateway and 27<sup>th</sup> Avenue), three airports (Deer Valley, Goodyear, Sky Harbor), and three wastewater treatment facilities (Cave Creek Water Reclamation Plant, 91<sup>st</sup> Avenue WWTP, and 23<sup>rd</sup> Avenue WWTP). A closed landfill (Skunk Creek) has a No Exposure Certificate (NEC). The landfill portion of the 27<sup>th</sup> Avenue transfer station also has Sector L closure under the MSGP. Those located in the jurisdiction of the City's MS4 are included in Appendix E.

Each of these locations (except for those with an NEC) are required to have a SWPPP that includes identification of the potential sources of pollution and the proper measures or BMPs that will reduce or eliminate pollutant loadings in stormwater discharges. Example BMPs in the SWPPPs include:

- Good Housekeeping
- Preventive Maintenance
- Visual Inspections
- Training
- Spill Prevention and Response
- Sediment and Erosion Control
- Management of Runoff

## 10. Construction Sites

### 10.1 Measures to Control Pollutants from Construction Sites

One of the purposes of the City's PDD construction plan review and permitting program is to reduce pollutant loads from development projects to the MEP. Plan reviewers establish project-specific requirements in the form of conditions of approval, design specifications, tracking, inspection, and enforcement actions. These features are planned, designed and evaluated in accordance with the City's mandate to protect stormwater runoff quality.

### 10.2 Construction Site Plans

PDD oversees plan review for private construction projects and some municipal construction projects that occur in the City's MS4 jurisdiction. Some municipal projects, such as those in the right-of-way, are not required to submit plans to PDD for approval. In these cases, the department managing the project, usually Aviation, WSD or STR, reviews the construction site plans. A municipal Stormwater Plan Review Checklist was created under the 2021 permit revision to document the review and provide consistency with department-managed projects.

#### **Maintaining a Construction Project Inventory**

PDD maintains a database of all construction projects for which they have issued a paving or G&D permit.

OEP maintains the Municipal MS4 Project Inventory of City projects that are not required to submit plans to PDD for approval. OEP adds Aviation, STR WSD, and other applicable City Department projects to this inventory via the completed Stormwater Plan Review Checklist. OEP has documented procedures for maintaining the Inventory in the Municipal MS4 Project Inventory, Prioritization Process and MS4 Construction Inspections SOP.

#### **MS4 Plan Review of Construction Sites**

Construction projects are required to incorporate site design, source control, and/or treatment control BMPs that comply with the City's G&D Ordinance (P.C.C. Chapter 32A), the current Stormwater Policies and Standards, and BMPs detailed in the construction SWMP.

The G&D plan must include design standards and provisions for retaining stormwater onsite, unless exempted per P.C.C. Chapter 32A-24 and the current Stormwater Policies and Standards manual. PDD reviews G&D plans submitted for a project and issues a grading permit once the submittal is determined to satisfy all requirements. (A permit can be denied if the Director of PDD determines that the proposed activities would cause a violation of the NPDES/AZPDES Program.)

The plan must demonstrate that it incorporates the on-site retention of stormwater for a 100-year, 2-hour storm event in all areas of Phoenix except those exempted by law or excluded under the technical appeals process.

For municipal projects that are not required to submit plans to PDD for approval, the department managing the project (for example, Aviation, WSD or STR) completes the municipal Stormwater Plan Review Checklist for projects that are equal to or greater than one acre, or less than one acre but part of a larger common plan of development. These checklists are also sent to OEP for inclusion in the Municipal MS4 Project Inventory.

## Plan Approval/Permits

PDD administers the plan review and permit process established for G&D, paving, and the construction SWMP. Permit requirements for stormwater facilities include but are not limited to:

- Drainage Facility Civil Permit
- G&D Permit
- Paving Permit
- Construction Stormwater Permit (CSW)

PDD has reviewed and revised standard conditions of approval to remain in line with provisions of the MS4 Permit, the SWMP, or the Construction General Permit (CGP). To minimize the short-term and long-term impacts of stormwater runoff on receiving water quality from development projects, PDD requires additional information/submittals before permits may be issued:

- Prior to the issuance of any G&D or building permits for projects that will result in soil disturbance of more than one acre of land (or smaller projects that are part of a larger plan of development), the applicant shall demonstrate that they are adhering to ADEQ's AZPDES General Permit for Stormwater Discharges Associated with Construction Activity (CGP) requirements. This may be accomplished by providing a copy of the NOI submitted to the ADEQ, the AZCON Authorization Number, an Erosivity Waiver, and/or No Discharge Certification.
- Projects that must comply with ADEQ's AZPDES requirements shall prepare and implement a SWPPP. A copy of the current SWPPP shall be kept at the project site and be available for review upon request. As required by both EPA and ADEQ the SWPPP is a free-standing document, not a page on the construction plans.
- Prior to G&D or building permit close-out and/or the issuance of a certificate of use or a certificate of occupancy, the applicant shall demonstrate that all BMPs have been constructed, installed, and implemented in conformance with approved plans and specifications.

## 10.3 Construction Best Management Practices

Sediment is the most common pollutant from construction activities. Soil can clog inlets and pipes, cause flooding, or increase turbidity or impede flow of streams. Construction site operators must design, install, and maintain effective erosion and sediment controls to minimize the discharge of pollutants to the MS4 in compliance with the municipal stormwater ordinance and the approved

Construction Stormwater Plan (CPSW). Operators must also implement BMPs to protect against other pollutants present at the job site, including chemicals and construction waste.

Common construction site BMPs include, but are not limited to:

- Protecting inlets to dry wells and storm drains from soil and chemicals,
- Stabilizing construction entrances and exits to reduce track out,
- Installing perimeter protection, such as silt fencing, straw wattles, or filter socks,
- Stabilizing inactive soil or sand piles with BMPs such as a tarp or perimeter controls,
- Conducting concrete wash-out in designated locations,
- Properly storing chemicals (e.g., secondary containment, covered, etc.),
- Minimizing the area disturbed and the time-period of disturbance, and
- Preserve vegetation when possible and stabilize disturbed areas.

These BMPs must be properly maintained so that they continue to operate effectively. Damaged or ineffective BMPs must be repaired or replaced.

## 10.4 Site Inspections and Enforcement

### Inspection Priorities

Construction projects greater than or equal to one acre are inspected every three to six months, depending on the priority. The following high priority projects will be inspected every three months:

- a) Projects that disturb more than five acres, and
- b) are within 0.25 mile of a PSW, and
- c) have a direct discharge path to a PSW.

Projects that do not meet these criteria will be inspected every six months. The city may opt to inspect any construction project more frequently.

### Inspection Procedures

PDD conducts construction inspections per the Civil Engineering Construction Inspection Checklist Technical Review Team (TRT) document. The following items are addressed during construction site inspections:

- For projects of one acre or more, verify that an approved construction SWMP and CSW are available, where applicable.
- Confirm compliance with the City's stormwater ordinance, and other local, state, and federal requirements.

After notification from the developer that work is to begin, a pre-construction meeting is scheduled. PDD inspection staff verify that the developer has obtained G&D, paving, and CSW permits prior to holding the pre-construction meeting.

At the meeting, the developer is reminded of all applicable stormwater requirements, and the site-specific construction SWMP is reviewed at the meeting. After construction entrance BMPs are installed, stormwater inspections can occur in part on any inspection of the site. Inspections generally include, but are not limited to:

- Track out measures
- Tire wash racks
- Silt fencing
- Straw bales
- Straw wattles
- Perimeter controls
- Chemical storage
- Portable toilets
- Concrete wash-out

BMPs must be installed per the construction SWMP and maintained in place during the construction period. During periods of rain, inspections include observing drainage at project sites.

For those municipal construction projects which do not undergo PDD review, the appropriate department staff schedules pre-construction meetings with the contractor. Construction site stormwater inspections for these projects are conducted by OEP staff or by properly trained departmental staff. For example, WSD conducts inspections for WSD projects that are not subject to PDD Plan Review. These inspections address the same requirements as discussed above.

OEP has documented procedures for OEP construction inspections in the Municipal MS4 Project Inventory, Prioritization Process and MS4 Construction Inspections SOP.

## **Inspection Records**

PDD documents construction site inspection information in the inspection database. Based on the inspection findings, PDD conducts follow-up inspections as necessary to verify compliance with the requirements of the City's MS4 Permit.

For projects which do not require a G&D and CSW permit from PDD, such as projects in the right-of-way, OEP documents and maintains construction site inspection information in its database. WSD tracks and schedules all construction inspections for WSD project and maintains WSD inspection reports and findings.

## Enforcement Processes and Actions

At any point during an inspection, the site/project is non-compliant with the applicable City stormwater requirements, PDD may initiate education and enforcement procedures. Upon observing a deficiency of any installed BMP, or noting a missing BMP, inspection staff will follow a procedure of progressive actions to return a site to compliance by the developer. The actions are detailed in the Progressive Steps for Stormwater Compliance at Construction Sites Civil Inspections Procedure.

The steps are as follows:

- Verbal Notification
- Inspectors Written Notice
- Second inspectors Notice and Civil Inspections Stop
- Third Inspector's Notice and All Inspections Stop
- Stop Work Order
- Notice of Violation and Civil Citation

For private projects, failure to develop specific BMPs or to implement the BMPs located in the SWMP may subject the PDD Permittee(s) to fines not less than \$500 nor more than \$2,500.

Corrections of findings for municipal projects are referred to the Project Manager. The City department supervisor, such as the OEP Environmental Programs Manager may escalate to the department management if findings are not resolved in a timely manner. The OEP process for escalation of unresolved findings is documented in the OEP Municipal MS4 Project Inventory, Prioritization Process and MS4 Construction Inspections SOP.

## Project Closeout

The end of the construction phase is accompanied by the close out of permits and issuance of certificates of use and/or occupancy. PDD uses this milestone to validate satisfactory completion of all conditions of approval for private projects.

BMPs for development projects cannot be considered effective unless a mechanism is in place to provide for long-term reliability, which is achieved through proper implementation, operation, and maintenance. Therefore, once construction of a project is complete, the owner is responsible for the long-term implementation, operation and maintenance of BMPs, and most particularly for treatment control BMPs.

The responsibility to provide for the long-term implementation, operation, and maintenance of BMPs associated with a development project may:

- Remain with a private entity (property owner, HOA, etc.); or



- Be transferred to a public entity (e.g., a city, county, special district, etc.) through dedication of the property; or
- Be transferred to a public entity, or another private party through a contract.

### **AZPDES Non-Filers**

While conducting an inspection, if it appears that the project may be required to have coverage under the CGP and the operator indicated that a SWPPP is not onsite, the PDD inspector provides the operator with information on the requirements of the AZPDES Permit with a Memo entitled “Failure to obtain Notice of Intent, Waiver, and/or No Discharge Certificate”. They also note the operator name and location for inclusion on a non-filer notification report to ADEQ. These reports are submitted monthly to WSD. Projects with an Erosivity Waiver or No Discharge Certification will not be considered non-filers.

## 11. Post-Construction Controls

The City has a Stormwater Post-Construction Program that includes an inventory, inspection, maintenance, and tracking program. Projects that meet all the following criteria fall under this program:

- A public or private development or redevelopment project that results in disturbance of one acre or greater in size.
- The permit application was submitted on or after July 1, 2022.
- The project contains at least one post-construction stormwater control (retention/detention basin, dry well, catch basin with filter insert, underground stormwater storage, etc.). It does not include infrastructure used strictly for conveyance such as gutters, storm drains, catch basins, etc.
- The post-construction stormwater control discharges or has the potential to discharge to the City's MS4 as determined by PDD staff.

Post-construction requirements are included in an amendment to the City of Phoenix Storm Water Policies and Standards. The G&D requirements are included in P.C.C. Chapter 32A and program compliance details are listed in P.C.C. Chapter 32C. Guidance and reference materials are located on the PDD website: [phoenix.gov/pdd/stormwater](https://phoenix.gov/pdd/stormwater).

### 11.1 Green Stormwater Infrastructure

The City encourages the use of GSI in construction projects. GSI, also known as low impact development (LID), includes a variety of design elements, including pervious paving materials, vegetated bioswales, and bioretention basins. See [phoenix.gov/pdd/gsi](https://phoenix.gov/pdd/gsi) for more information.

Effective July 1, 2011, the City adopted a voluntary construction code that incorporates sustainable design and construction standards. The Phoenix Green Construction Code is available on the City's web page ([Planning and Development Codes, Ordinances, Standards and Interpretations \(phoenix.gov\)](https://phoenix.gov/planning-and-development/codes-ordinances-standards-and-interpretations)). The 'whole project' approach encourages GSI through natural resource conservation and environmentally responsible land use and development.

The [City's Walkable Urban \(WU\) Code](#) was adopted in July 2015. The WU Code, which was developed as part of the light-rail corridor revitalization initiative, Reinvent Phoenix, encourages the use of GSI and green-infrastructure practices to meet the newly developed landscape standards within the Code. Overall, the new WU Code encourages walkability, use of mass transit, and supports additional livability principles through the incorporation of trees, shade, and other natural systems.

The City Manager's Infrastructure Strategic Plan ([City Manager Infrastructure Strategic Plan \(phoenix.gov\)](https://phoenix.gov/city-manager/infrastructure-strategic-plan)) includes strategies aimed at providing safe, clean, efficient, sustainable, multi-modal surface transportation systems to support the needs of present and future residents. A key strategy for this priority is the planning, designing, and constructing facilities with GSI to increase shade

canopy and promote pedestrian mobility, parks, preserves, tree and shade master plans, and habitat restoration.

The Phoenix City Council adopted the Complete Streets ([Street Transportation Complete Streets Program \(phoenix.gov\)](#)) policy on June 28, 2017. The Street Planning and Design Guidelines Manual was updated in July 2023 and includes guidance and information on the use of GSI and low-impact development principles in the right of way for stormwater management. The guidance was primarily adopted from, with permission, Watershed Management Group's Green Infrastructure for Southwestern Neighborhoods (2012). Other design principles in the guidelines include improvement of pedestrian and bicycle safety and access and incorporation of street amenities like street furniture and shade accommodation.

In 2020, the Planning and Development Department adopted the Greater Phoenix Metro Area GI/LID Handbook ([Greater Phoenix Green Infrastructure and LID Handbook - Sustainable Cities Network \(asu.edu\)](#)) for use outside of street rights-of-way and in 2021, eight of the ten standard details were initially included in the 2021 City Supplement to the 2019 Maricopa Association of Governments Details for Public Works Construction [Street Project Resources | City of Phoenix](#) for work within street rights-of-way. The original adoption has been retained, and continue to be added in updated supplements to the MAG standards (currently 2024 version). In alignment with the City's commitment to GSI, standard details for common GSI features were adopted in July 2023 and included in the Street Planning and Design Guidelines Manual ([Street Planning and Design Guidelines Manual.pdf \(phoenix.gov\)](#)).

Another component of the City's commitment to GSI is the 2021 Climate Action Plan, which established goals to reduce greenhouse gas emissions, and increase resilience, like reducing the urban heat-island effects, and increasing shade in communities. This City Council Ordinance is used as the basis to apply rezoning stipulations to private development and redevelopment projects, requiring at least one GSI feature.

The [Phoenix General Plan](#) (also known as PlanPHX) is the long-range guide for the City, and addresses issues such as energy, housing, neighborhoods, public facilities, natural resources, transportation and land use. On April 17, 2024, Phoenix City Council adopted an updated 2025 General Plan (planPHX) which includes policies, plans, and initiatives in alignment with the City's Build the Most Sustainable Desert City Core Value. The General Plan advocates for proper stormwater management through GSI to reduce flooding, protect surface waters, and reduce reliance on potable water for irrigation.

In the Fall of 2024, the City of Phoenix finalized a new resource for homeowners called the "Green Stormwater Infrastructure Handbook for Residents" ([phoenix.gov/pdd/gsi](#)). This handbook encourages private property implementation of GSI by helping residents visualize the use of GSI on their own property, and by providing helpful tips, city permitting implications, and native plant palette ideas. This handbook is available in both English and Spanish, online and hard copy in Phoenix library branches.

## 11.2 Plan Review

PDD plan review staff follow the applicable checklist to verify that the project meets all applicable requirements before permits are issued. When staff review G&D or paving plans, they verify that the site retention volume is adequate to prevent runoff for the required storm event. They also verify that the construction SWMPs adequately address the construction BMPs needed during construction. If inspectors find that the plans are not being followed, they may stop work on the project. If the problem continues, court-ordered injunctions may be sought or civil penalties assessed.

P.C.C. Chapter 32A, the City's G&D Ordinance, and the current Storm Water Policies and Standards establishes implementation and enforcement procedures. G&D Permits are issued to applicants who fulfill the application requirements, including the submittal of a stormwater management plan when applicable.

Staff from PDD hold pre-application, fact finding, preliminary approval, and pre-construction meetings with private developers to discuss many issues, including the need to minimize the total volume of runoff, the peak rate of runoff from roof drains, on-site retention of stormwater, controlling erosion, and post-construction controls.

An overview of the PDD process for stormwater related submittals is provided below:

- The customer submits grading/drainage and stormwater plans for review,
- PDD provides red lines on plans,
- The customer addresses the red lines,
- Plans are approved for construction by PDD,
- The customer applies for required permits,
- Permits are created by PDD, including Civil G&D, Paving, and Civil Construction Stormwater Plan,
- PDD staff checks to verify that an NOI has been submitted and an AZPDES CGP number has been received before the customer can purchase permits (Note: An Erosivity Waiver or No Discharge Certification is also acceptable.),
- The customer schedules a Pre-Construction Meeting prior to beginning work,
- BMPs are implemented by the customer prior to the start of construction,
- The PDD Inspector verifies that track out and BMPs are in place per the SWMP and are properly maintained throughout the construction process,
- Final inspection is conducted to confirm the project was constructed as designed and all temporary BMPs are removed, and
- A warranty inspection is performed by PDD inspectors one-year after completion.

## 11.3 Inventory

PDD tracks municipal and private projects that have post-construction controls per the criteria outlined in Section 11.0. Additionally, PDD automatically receives a copy of the Stormwater Plan Review Checklist when it is submitted electronically by the department's program manager (if it does not go through the PDD process).

## 11.4 Inspection Program

A post-construction or one-year warranty inspection is conducted by PDD staff on each construction project for which permits were issued. This inspection provides an opportunity to identify corrective action to be implemented by the developer or responsible sub-contractor for a variety of items, including stormwater and G&D controls.

Property owners or their designees should conduct inspections at the frequency identified in their O&M Plan. Copies of these inspections should be retained for a period of five years and made available to the City upon request.

PDD staff may also conduct a physical or administrative inspections at projects with post-construction controls because of a complaint or routine inspection.

## 11.5 Enforcement Strategy/Actions

The current Storm Water Policies and Standards detail the requirements for and responsibility of permanent post-construction control maintenance. All drainage facilities owned and/or operated by private entities, including HOAs, shall be properly maintained to promote performance of the drainage facilities consistent with the original design intent. All drainage facilities that are to be maintained by the City of Phoenix shall be encompassed within a City owned property, public right-of-way, public right-of-way easement, or public drainage easement and clearly shown on the recorded plat.

PDD staff can enforce on these requirements through the authority granted in P.C.C. Chapters 32A and 32C. After considering the various factors, the City will determine the level of enforcement that is required. Enforcement may include the following informal and formal actions:

- Verbal Warning
- Inspection Report with Requirements
- NOV
- Field NOV
- Civil Citation

## 11.6 Design and maintenance Standards Applicable to Post-Construction

The analysis and design of stormwater retention facilities for new developments must include provisions to retain the stormwater runoff from a 100-year, 2-hour duration storm occurring within the property boundaries per P.C.C. Chapter 32A, current City Stormwater Policies and Standards, and the current version of Maricopa County Flood Control District's Drainage Design Manual for Maricopa County, Volumes 1-2 and Drainage Policies and Standards Manual for Maricopa

County, unless otherwise required. A person may not install or use a direct connection to the public storm drain system without written permission of the City Manager.

- Per the current City Stormwater Policies and Standards, a person shall maintain BMPs and post-construction stormwater controls to achieve and maintain the original design intent for detention, retention, and treatment.
- Effective March 1, 2024, maintenance and inspection recommendations for post-construction controls will be documented using the Stormwater Post-Construction Control Operations and Maintenance (O&M) Plan TRT. Private projects that meet the criteria in Section 11.0 will submit the O&M Plan with the Civil Plan Review Package for G&D and/or Paving Plans.
- A property owner or their designee should inspect the controls at least once per year and conduct proactive and corrective maintenance activities as recommended in the O&M Plan. Copies of the maintenance records should be retained for no less than five years and provided to the City upon request.

## 12. Stormwater Training Program

Knowledge of the applicable MS4 permit requirements and the overall Stormwater Management Program helps personnel with program responsibilities, recognize potential violations, respond appropriately, and effectively coordinate with other agencies. The City has a Citywide Stormwater Training Program for its staff to address the training requirements outlined in the MS4 Permit. It is accomplished through training offered by multiple departments and is coordinated by OEP. Training requirements, course number, course objectives, frequencies, and brief descriptions of the subject matter covered in the courses are presented in the Citywide Stormwater Training Plan Appendix G.

The Human Resources (HR) Department maintains electronic records of formal training attended by employees (tracked in the City's HR information system, called PHXYou) which is used to provide a summary of training activities in the MS4 Annual Report. Some departments may track training using their department procedures.

The Citywide Stormwater Training Program targets two categories of employees: 1) municipal employees without direct stormwater responsibilities and 2) municipal employees with direct stormwater program responsibilities. Examples of employees with direct responsibilities include municipal facility inspectors, industrial facility inspectors, plan reviewers, and construction project inspectors. Employees with no direct stormwater responsibilities include field staff, such as Neighborhood Services Department specialists and Housing Department building maintenance workers, who may observe illicit discharges or potential violations.

### 12.1 Field Staff Training

Select field staff with no direct stormwater responsibilities receive awareness training. Awareness training includes information on the City's MS4 Permit, harmful and prohibited practices like hazardous materials spills, and illegal dumping, and reporting procedures. Spill prevention and response training provides specific practices to minimize spills and discharges to the storm drain system. Hazardous materials handling training discusses proper handling, storage, and disposal of used oil and other toxic and hazardous materials and wastes to prevent spills, exposure to rainfall, and contamination of stormwater runoff.

### 12.2 Municipal Employees with Specific Job Responsibilities

City employees who perform any of the following tasks receive training to minimize stormwater pollution:

- Street repair and road improvement
- Material handling and spill management
- Handling, storage, and disposal of used oil and other toxic and hazardous materials
- Water and sanitary sewer system maintenance and repair
- Municipal and private stormwater inspections



## 12.3 Inspector and Stormwater Field Staff Training

### Illicit Discharge Detection and Elimination

Inspectors and other stormwater field staff are educated and updated on detecting, investigating, and identifying illicit discharges, de minimis discharges, and other sources of non-stormwater discharges. On-the-job training includes a requirement to complete a series of tasks and then demonstrate proficiency. This includes, but is not limited to, computer proficiency in a variety of programs, familiarity with 40 CFR 122 and P.C.C. Chapter 32C, policies and procedures, field training on outfall inspection/sampling, and field training on IDDE complaint investigations, field screening techniques, sampling methods, and field measurements.

### Municipal Stormwater Inspectors

The staff who inspect municipal construction projects or municipal facilities are trained in stormwater management practices and pollution prevention planning. This training is listed in Appendix G and includes information on P.C.C. Chapter 32C and other stormwater discharge regulations and permit requirements.

### Industrial Site Inspectors

Industrial site inspectors in WSD are educated and updated on stormwater management practices and BMPs for facilities subject to inspection. Information on requirements for stormwater discharges associated with industrial activity and common BMPs is provided and is listed in Appendix G. In addition, on-the-job training must be completed on industrial/commercial inspections, and each new SWM inspector must demonstrate proficiency requirements.

### Construction Project Plan Reviewers, Inspectors, and Post-Construction Program Staff

PDD plan reviewers, inspectors, and post-construction program staff complete sessions required per Appendix G and receive on-the-job training in the following areas:

- G&D plan standards
- Plan review procedures
- Municipal ordinances related to stormwater and construction
- Requirements for structural and non-structural management practices on construction sites such as erosion and sediment controls
- Post-construction stormwater controls
- Construction BMP maintenance requirements
- Inspection procedures
- Enforcement procedures

## **City Staff and Project Managers**

City staff may also attend outside training sponsored by industry associations (e.g., Building Industry Association, American Society of Civil Engineers, etc.), the ADEQ, or training sponsored by other entities when funding is available.

Other department's (Aviation, WSD, STR) City Project Managers receive training on the Stormwater Plan Review Checklist and MS4 permit plan review requirements.

## 13. Wet Weather Monitoring Program

### 13.1 Overview of the Program for Water Quality Monitoring

The City has five major outfall locations in the wet weather monitoring program. The monitoring sites and rain gauge locations are depicted on the Drainage System Maps and included in Appendix B. The first overview map shows five stars, those are the five major outfall locations and each of the following drainage maps shows each of these sites with the correlating drainage area. These outfall locations were selected to best characterize stormwater discharges from the citywide system.

The SWM inspectors collect the wet weather samples and maintain the sampling equipment. Samples are analyzed by the WSD Compliance Laboratory.

### 13.2 Qualifying Storm Event

A qualifying storm event is rainfall in the amount of 0.1 inches or more with a resulting discharge. Samples must be collected from qualifying storm events that are at least 72 hours (three calendar days) after a previous qualifying storm event. For each qualifying storm event, a record is kept that includes:

- The date of the event,
- The amount of rainfall in the drainage area for each stormwater monitoring location, and
- A notation of whether samples were collected or not, and a reason if samples were not collected, when applicable.

The summer wet season is defined as the period between June 1 and October 31, and the winter wet season is the period between November 1 and May 31.

Samples must be collected during the first representative storm event that occurs in each wet season, and for subsequent representative storm events so that samples are collected once for each of the five outfalls during each wet season.

The parameters for which stormwater samples must be analyzed are listed in Tables 1 (one time per wet season) and 2 (one time per wet season during year 4) of the MS4 Permit.

### 13.3 Water Quality Assessment

Precipitation and water quality data are maintained by SWM staff. Quality control procedures, including data analysis and reporting procedures, are implemented to verify the integrity of the data. Other software may be used as needed to analyze the data and create reports. The Stormwater Working Group meets at least annually to review and assess available water quality data, assess overall program effectiveness, and review and update the SWMP as necessary.

The City's MS4 does not discharge to any impaired waters listed on Arizona's 303(d) List, not-attaining waters listed in the 305(b) Water Quality Assessment Report, or to an OAW. The MS4 Permit may be reopened if these conditions change.

#### Persistent Exceedances of Water Quality Standards

If an exceedance of water quality standards occurs at a wet weather monitoring station due to stormwater runoff discharges, notwithstanding the implementation of the SWMP and other conditions of the MS4 Permit, the City will try to identify potential sources of the pollutant(s), evaluate the effectiveness of existing BMPs, and implement additional BMPs to improve stormwater quality.

WSD will attempt to identify potential sources of the pollutant(s) of concern through research and inspections. Research includes the identification of industry types that are known to use the pollutant(s), potential non-industrial sources of the pollutant(s), review of industries in the targeted catchment area(s), and visual reconnaissance of the targeted catchment area(s).

WSD will evaluate existing BMPs that may affect the pollutant(s) of concern and determine if revisions are warranted or if new BMPs are recommended. Input may be needed from other departments, including STR, PWD, or PDD, depending on the nature of the pollutant(s), the identified source(s), and the applicable BMPs.

The City reports information on exceedances to ADEQ in the wet weather sampling submittals. If a recurring, consecutive exceedance of a SWQS exists at an outfall, and the exceedances are not a routine or ubiquitous stormwater pollutant (e.g., *E. coli*, dissolved copper, lead), the City will submit an Action Plan to ADEQ within 60 calendar days of becoming aware of the repeated exceedance.

### 13.4 Discharge Monitoring Reports

When available, wet weather data is submitted to ADEQ electronically in a Discharge Monitoring Report (DMR) via the myDEQ portal. The DMRs are submitted within 30 business days of receipt of lab reports for each outfall. The reports must include:

- Discharge Monitoring Reports
- Storm event data attachment (as appropriate)
- Copies of laboratory reports
- Bench sheets or similar documentation for field testing parameters

Until the myDEQ portal is functioning, wet-weather data is submitted to ADEQ via email using Excel spreadsheet templates provided by the agency.

## 14. Program Evaluation, Reporting and Revision

### 14.1 Annual Reporting

Each year the City prepares an MS4 Annual Report summarizing the implementation of the programs described in the SWMP for submittal to the ADEQ via myDEQ by September 30. The form is provided by ADEQ and includes the information provided in Appendix A of the MS4 Permit. To support preparation of the Annual Report, the City departments with program responsibilities submit data to WSD for compilation and submission. A link to this plan (current SWMP) is provided to ADEQ with the Annual Report.

### 14.2 Program Evaluation

The City will regularly assess the components of this SWMP Plan to identify methods to reduce pollutants in stormwater runoff to the MEP and support the responsible management and allocation of public resources.

#### Short Term Strategies

The short-term strategy for assessing the effectiveness of this SWMP focuses on quantitative, indirect methods (not directly based on the quality of stormwater runoff or receiving water quality.) The City may track the following data that are believed to have an influence on stormwater runoff and receiving water quality:

- Estimated quantity of material collected under litter removal and street sweeping programs,
- Total number of construction site inspections for stormwater compliance,
- Total number of industrial and commercial facility inspections for stormwater compliance,
- Number of City staff receiving training for activities related to SWMP implementation,
- Number of stormwater complaints and illicit discharges investigated,
- Public involvement opportunities, and
- Public education and outreach events.

#### Long Term Strategies

The long-term strategy for assessing the effectiveness of this SWMP focuses on water quality data obtained as part of the Stormwater Monitoring Program. There is inherent variability in stormwater runoff. Reviewing several years of monitoring data is necessary to identify statistically significant trends and formulate conclusions. Additionally, because there are numerous program elements being implemented concurrently and other environmental regulations indirectly impact stormwater runoff, the ability to identify cause-and-effect relationships between a specific program element and/or BMP and improvement in the quality of stormwater runoff is complicated, and may not be feasible.

### Program Effectiveness

In addition to assessing the effectiveness of the various program elements, the City also evaluates the effectiveness of the overall Stormwater Management Program. The legal authority and program management elements are reviewed to determine if changes are needed to comply with permit requirements or other regulatory updates. Major accomplishments and recommended improvements are discussed in the program evaluations.

- The effectiveness of the Public Education and Outreach Program is measured using the following tools:
- Public surveys to help assess the effectiveness of public education and outreach activities.
- Modify the public education program based on employee feedback or knowledge of stormwater quality issues affecting a specific drainage area
- External consultant evaluation as required by the MS4 permit

## 14.3 SWMP Revisions

As part of the annual review process, the Stormwater Working Group reviews the SWMP to identify the need, if any, for revisions. Additionally, the SWMP will be revised under the following conditions:

- New BMPs or modifications to existing BMPs are determined to be necessary,
- To address impacts on water quality caused, or contributed to by discharges from the MS4,
- New requirements are necessary to comply with new State or Federal statutory or regulatory requirements,
- Specific BMPs are needed to address a recurring, consecutive exceedance of a non-routine stormwater pollutant,
- Specific TMDL requirements are established during the permit term, and
- A receiving water in the MS4 is classified as an OAW.

## **APPENDIX A**

### **CERTIFICATION STATEMENT**



**SWMP – APPENDIX A  
CERTIFICATION**

The SWMP must be signed and certified by either a principal executive officer or ranking elected official; or by a “duly authorized representative” of that person in accordance with Section 7.2 of the permit.

*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 ensure 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 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.*

  
James Swanson (Sep 20, 2025 15:56:57 PDT)

James Swanson  
Assistant Water Services Director

Sep 20, 2025

Date

**Concurrences**



Jason Blakley  
Assistant Planning & Development Director

Sep 19, 2025

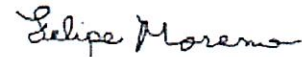
Date



Eric Froberg  
City Engineer (Street Department)

Sep 19, 2025

Date



Felipe Moreno  
Public Works Director

Sep 22, 2025

Date

Nancy Allen  
Environmental Programs Administrator

Date



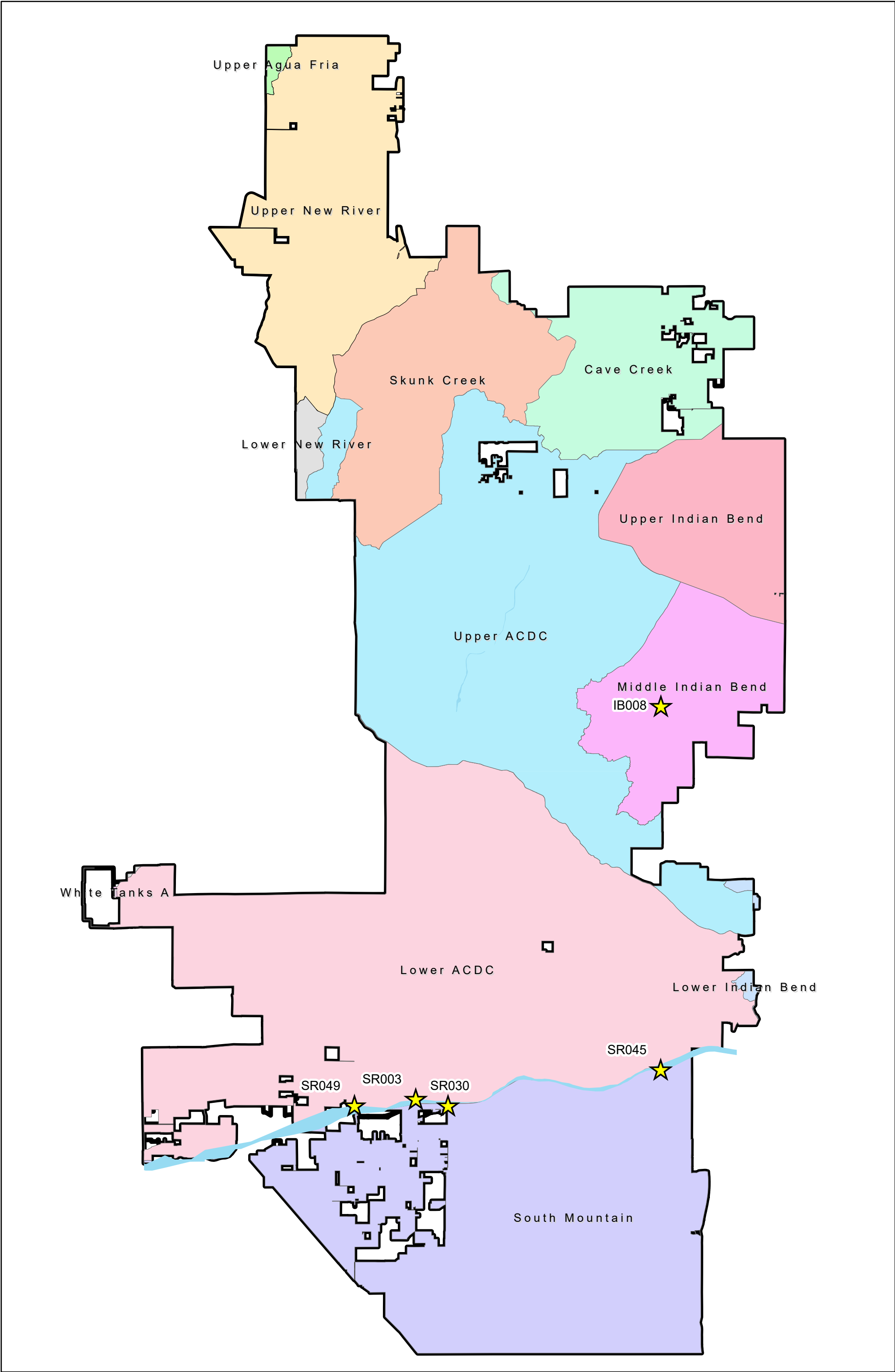
Dezarai B. Fisher  
Assistant City Attorney IV

Sep 22, 2025

Date

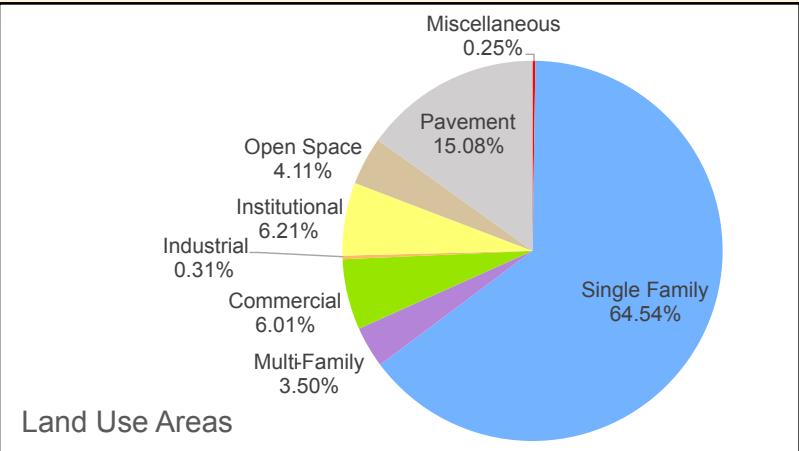
## **APPENDIX B**

### **DRAINAGE SYSTEM MAPS**



City of Phoenix Watersheds

Drainage Area IB008

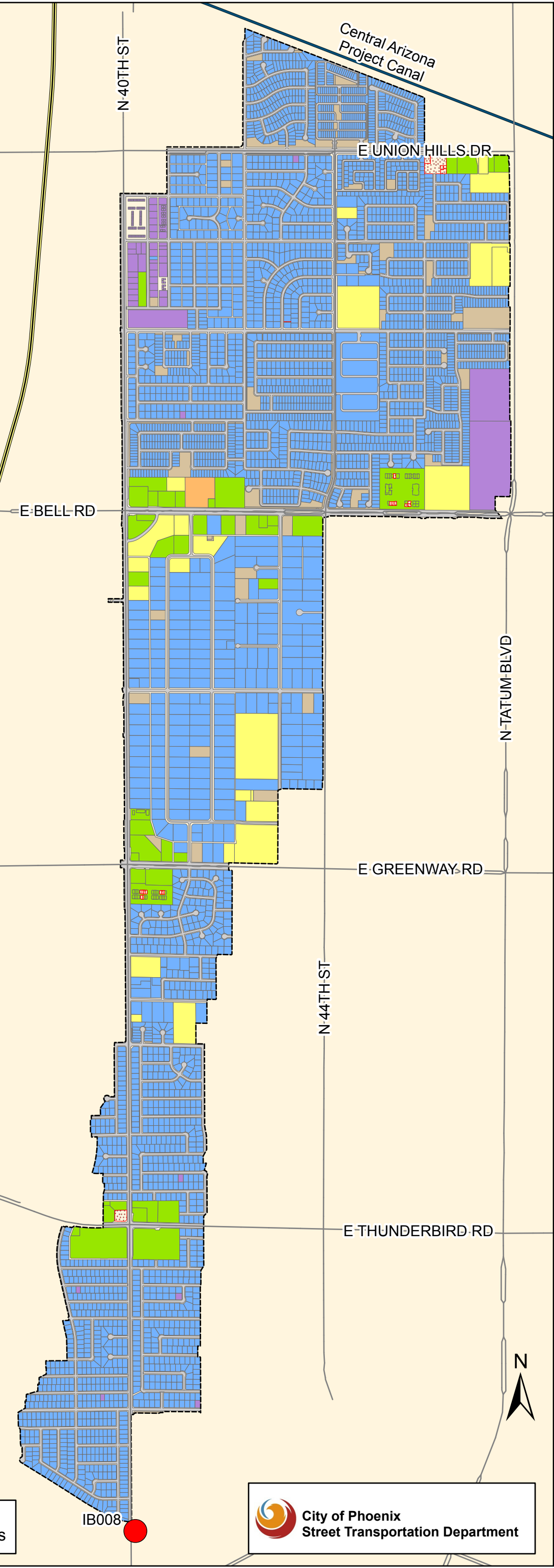
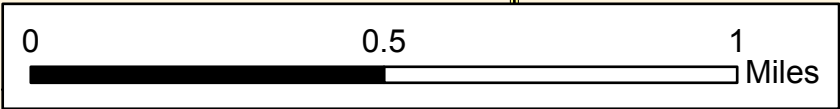
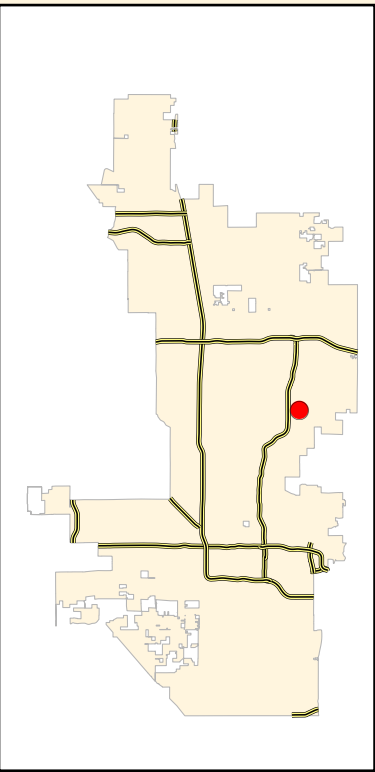


**Legend**

- Outfalls
- == Freeways
- Streets
- Canals
- ▨ Rivers
- ▨ Pavement
- ▨ City Limit
- ▨ Drainage Areas

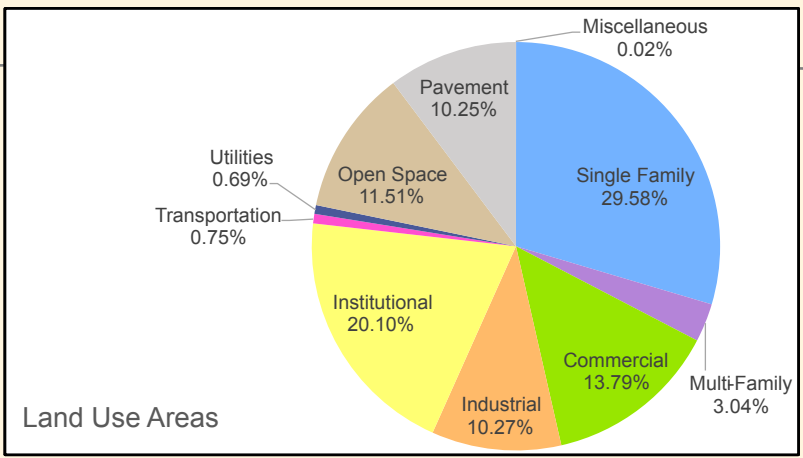
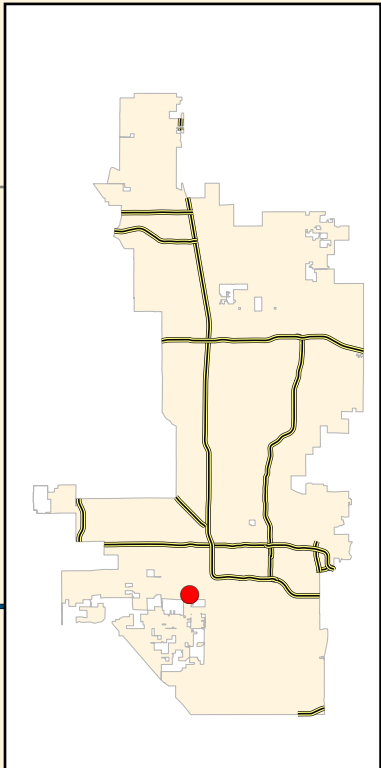
**Land Use**

- Commercial
- Industrial
- Institutional
- Miscellaneous
- Multi Family Residential
- Open Space
- Single Family Residential
- Transportation
- Utilities

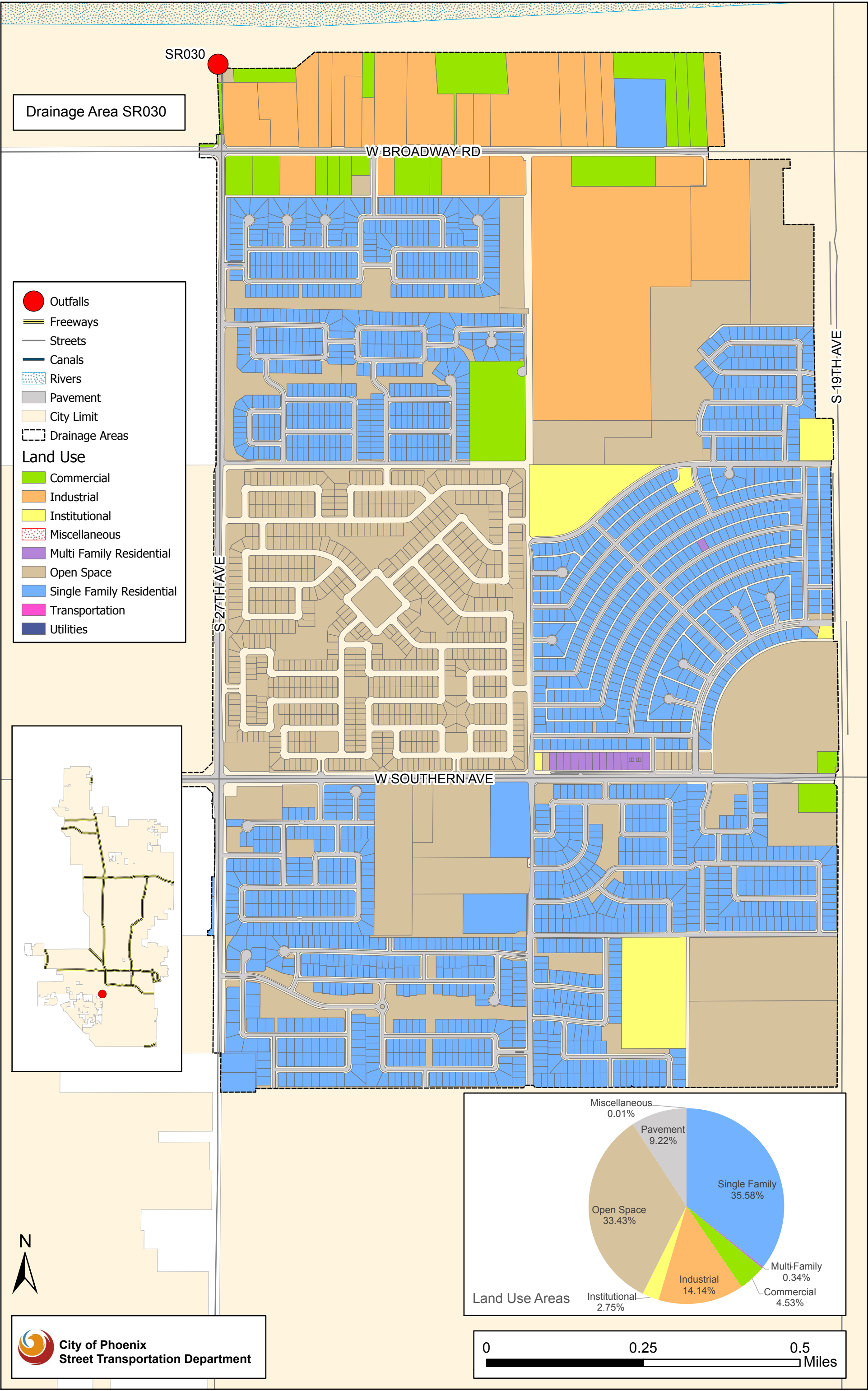


Drainage Area SR003

- Outfalls
  - Freeways
  - Streets
  - Canals
  - ▨ Rivers
  - ▨ Pavement
  - ▨ City Limit
  - ▨ Drainage Areas
- Land Use**
- Commercial
  - Industrial
  - Institutional
  - Miscellaneous
  - Multi Family Residential
  - Open Space
  - Single Family Residential
  - Transportation
  - Utilities







Drainage Area SR045

SR045

S 40TH ST

S 44TH ST

S 44TH ST

W UNIVERSITY DR

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Outfalls

Freeways

Streets

Canals

Rivers

Pavement

City Limit

Drainage Areas

Land Use

Commercial

Industrial

Institutional

Miscellaneous

Multi Family Residential

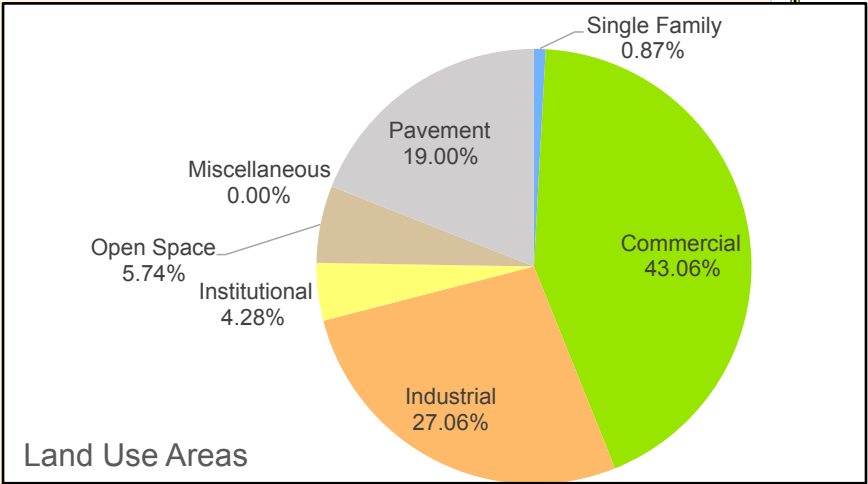
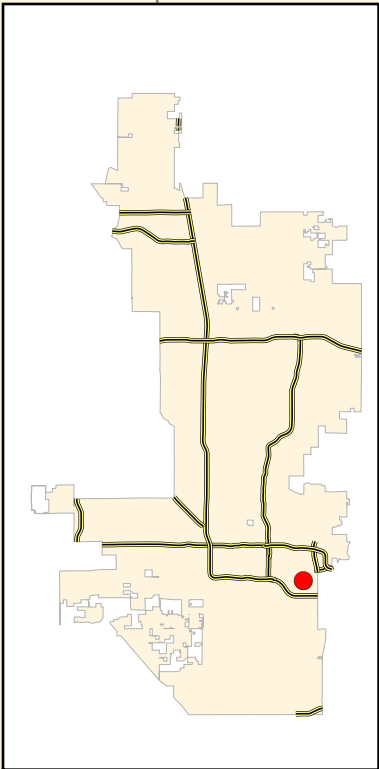
Open Space

Single Family Residential

Transportation

Utilities

Land Use Areas



City of Phoenix  
Street Transportation Department

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0.25

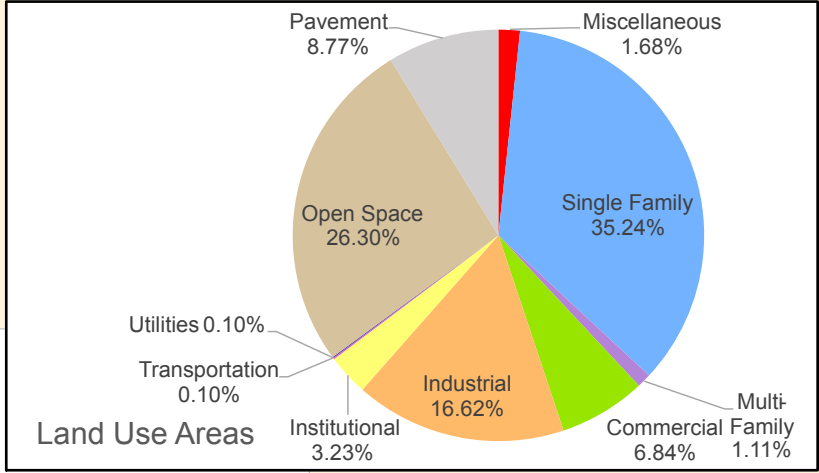
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Miles





Drainage Area SR049



Outfalls

Freeways

Streets

Canals

Rivers

Pavement

City Limit

Drainage Areas

**Land Use**

Commercial

Industrial

Institutional

Miscellaneous

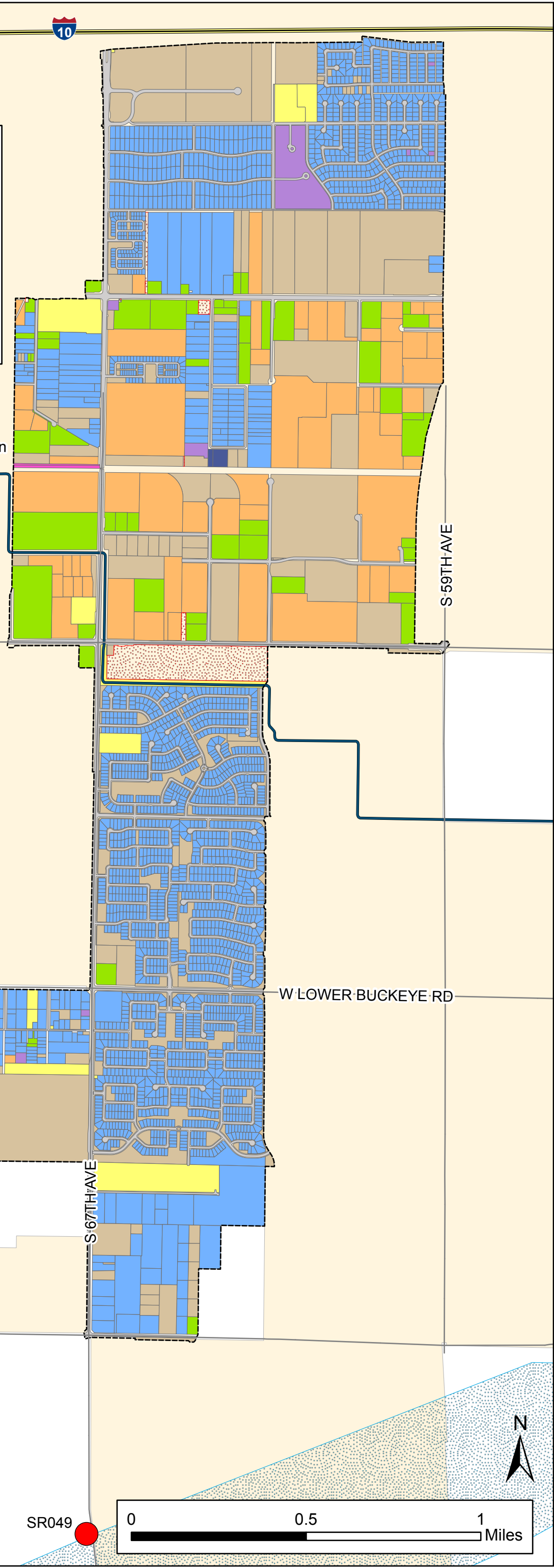
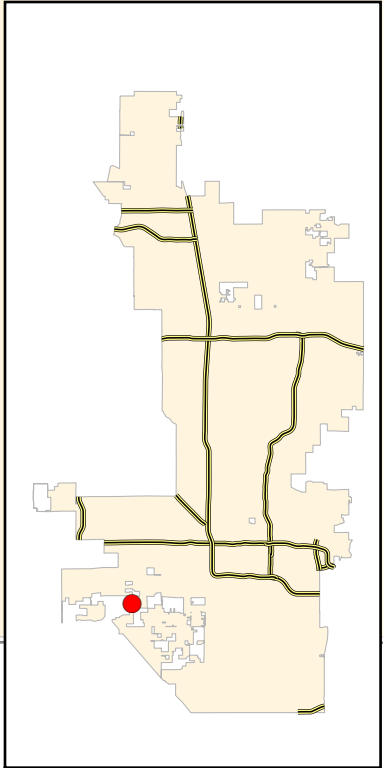
Multi Family Residential

Open Space

Single Family Residential

Transportation

Utilities



## **APPENDIX C**

### **INVENTORY OF MAJOR OUTFALLS**

Outfall Id	Site Address	Latitude	Longitude	Drain Size	Last Inspection	Next Inspection
<b><u>AC/DC-Arizona Canal Diversion Channel</u></b>		<b><u>Count: 34</u></b>				
AC001	51st Ave And Cactus Road, Phoenix, AZ	33.5965	-112.1695	78 Inches	07/14/2025	
AC002	43rd Ave And Peoria Ave, Phoenix, AZ	33.5829	-112.1519	90 Inches	01/12/2021	
AC003	43rd Ave And Peoria Ave, Phoenix, AZ	33.5817	-111.8500	42 Inches	07/14/2025	
AC004	35th Ave And Acdc Channel, Phoenix, AZ	33.5725	-111.8656	96 Inches	09/03/2024	
AC005	30th Ave And Metrocenter, Phoenix, AZ	33.5697	-111.8744	53 Inches	01/11/2021	
AC006	29th Ave And Metrocenter, Phoenix, AZ	33.5708	-111.8789	48 Inches	07/09/2025	
AC007	29th Ave And Metrocenter, Phoenix, AZ	33.5708	-111.8789	43 Inches	07/09/2025	
AC008	I-17 (Black Canyon Fwy) And Acdc Channel, Phoenix, AZ	33.5714	-111.8825	27 Inches	07/09/2025	
AC010	19th Ave And Acdc Channel, Phoenix, AZ	33.5721	-112.0997	36 Inches	07/09/2025	
AC011	7th St And Acdc Channel, Phoenix, AZ	33.5964	-111.1694	42 Inches	07/09/2025	
AC012	18th Pl And Acdc Channel, Phoenix, AZ	33.5357	-112.0422	48 Inches	07/10/2025	
AC013	24th St. Water Treatment Plant And Acdc Channel, Phoenix, AZ	33.5264	-112.9692	36 Inches	07/10/2025	
AC014	2 Mile Tunnel And Acdc Channel, Phoenix, AZ	33.5964	-111.8308	36 Inches	08/20/2025	
AC015	33rd Dr And Acdc Channel, Phoenix, AZ	33.5714	-111.8692	12 Inches	07/14/2025	
AC018	18th Ave And Hatcher, Phoenix, AZ	33.5715	-112.0974	36 Inches	08/21/2025	
AC033	7th Ave And Acdc Channel, Phoenix, AZ	33.5690	-112.0829	42 Inches	08/21/2025	
AC034	12th Ave And Acdc Channel, Phoenix, AZ	33.5700	-111.9086	36 Inches	08/21/2025	
AC039	14th St And Acdc Channel, Phoenix, AZ	33.5817	-111.8503	36 Inches	08/20/2025	
AC044	6th St And Acdc Channel, Phoenix, AZ	33.5581	-111.9339	36 Inches	02/04/2021	2026
AC048	10th St And Acdc Channel, Phoenix, AZ	33.5564	-111.9375	96 Inches	02/04/2021	2026
AC070	Dunlap Ave And Short Tunnel, Phoenix, AZ	33.5708	-111.8794	60 Inches	02/04/2021	2026
AC081	Hwy 51 And Acdc Channel, Phoenix, AZ	33.5353	-112.0415	6 x 6 Feet	02/09/2021	2026
AC083	24th St. Water Treatment Plant And Acdc Channel, Phoenix, AZ	33.5714	-111.8822	36 Inches	02/10/2021	2026
AC085	2 Mile Tunnel And Acdc Channel, Phoenix, AZ	33.5714	-111.8822	30 Inches	02/10/2021	2026
AC106	2 Mile Tunnel And Acdc Channel, Phoenix, AZ	33.5189	-111.9872	36 Inches	02/10/2021	2026
AC124	2 Mile Tunnel And Acdc Channel, Phoenix, AZ	33.5347	-112.0414	36 Inches	07/15/2003	
AC128	7th Ave And Dunlap Ave, Phoenix, AZ	33.5681	-111.9200	12 Inches	02/03/2021	2027
AC147	23rd Ave And Acdc, Phoenix, AZ	33.5733	-111.8928	40 Feet	02/08/2021	2026
AC148	21st Dr And Acdc, Phoenix, AZ	33.5728	-111.8956	40 Feet	02/08/2021	2026
AC150	20th Dr And Acdc, Phoenix, AZ	33.5725	-111.8969	50 Feet	02/08/2021	2026
AC151	20th Ave And Acdc, Phoenix, AZ	33.5722	-111.8983	40 Feet	02/08/2021	2026
AC152	20th Dr And Acdc, Phoenix, AZ	33.5719	-111.8994	24 Feet	02/08/2021	2026

Outfall Id	Site Address	Latitude	Longitude	Drain Size	Last Inspection	Next Inspection
<b><u>AC/DC-Arizona Canal Diversion Channel</u></b>		<b><u>Count: 34</u></b>				
AC169	Morten Ave And Acdc, Phoenix, AZ	33.5472	-111.9422	40 Feet	02/09/2021	2026
AC195	9th Avenue And Acdc Channel, Phoenix, AZ	33.5689	112.0844	72 Inches	10/20/2021	2027
<b><u>AF-Agua Fria</u></b>		<b><u>Count: 4</u></b>				
AF002	Encanto Blvd And Sr101 West (9500 W), Phoenix, AZ	33.4722	-111.7342	42 Inches	07/22/2020	2026
AF003	Mcdowell Rd And Sr101 West (9700 W), Phoenix, AZ	33.4653	-111.7325	4 x 11 Feet	07/22/2020	2026
AF005	Camelback Rd And Sr Loop 101, Phoenix, AZ	33.5081	-112.2680	35 Inches	07/22/2020	2026
AF006	Camelback Road And 114th Aveune, Phoenix, AZ	33.5067	-111.6958	60 Inches	07/22/2020	2026
<b><u>AZ-Arizona Canal</u></b>		<b><u>Count: 6</u></b>				
AZ001	Arizona Canal And 42nd St, Phoenix, AZ	33.5073	-111.9913	36 Inches	08/28/2024	
AZ002	Arizona Canal And 56th St, Phoenix, AZ	33.4894	-111.9606	48 Inches	09/03/2024	
AZ003	Arizona Canal And 57th St, Phoenix, AZ	33.4896	-111.9595	48 Inches	09/03/2024	
AZ025	Arizona Canal And 21st St, Phoenix, AZ	33.5275	-112.0346	36 Inches	09/16/2024	
AZ028	Arizona Canal And 56th St, Phoenix, AZ	33.4891	-111.9610	6 Feet	08/29/2024	
AZ030	Arizona Canal And 44th St, Phoenix, AZ	33.5043	-111.9869	8 Inches	04/02/2025	
<b><u>CAP-Central Arizona Project</u></b>		<b><u>Count: 2</u></b>				
CAP002	19224 N North TatumBlvd Phoenix, AZ	33.6592	11.9828	20 Feet	08/17/2020	2027
CAP003	56th Street And Cap (Central Arizona Project), Phoenix, AZ	33.6453	11.9469	20 Feet	08/17/2020	2027

Outfall Id	Site Address	Latitude	Longitude	Drain Size	Last Inspection	Next Inspection
<b><u>CC-Cave Creek Wash</u></b>		<b><u>Count: 26</u></b>				
CC002	23rd Ave And Mountain View Rd, Phoenix, AZ	33.5746	-112.1088	48 Inches	09/30/2024	
CC003	Peoria Ave And Cave Creek Wash, Phoenix, AZ	33.5816	-112.1119	84 Inches	06/24/2024	
CC004	Cave Creek Canal And Cholla Rd, Phoenix, AZ	33.5892	-112.1145	62 Feet	09/17/2024	
CC005	25th Ave And Cactus Rd, Phoenix, AZ	33.5963	-112.1119	48 Inches	09/16/2024	
CC006	25th Ave And Larkspur Dr, Phoenix, AZ	33.5999	-112.1111	30 Inches	01/30/2025	
CC008	23rd Ave And Thunderbird Rd, Phoenix, AZ	33.6108	-112.1076	72 Inches	01/23/2025	
CC010	19th Ave And Greenway Rd, Phoenix, AZ	33.6243	-112.0999	90 Inches	01/23/2025	
CC024	Shangri-La Rd And Cave Creek Wash, Phoenix, AZ	33.5881	-112.1147	36 Inches	09/30/2024	
CC041	901 W DanburyRd Phoenix, AZ	33.6421	-112.0849	10 Feet	02/26/2025	
CC043	7th Ave And Cave Creek Wash, Phoenix, AZ	33.6444	-112.0830	60 Inches	02/26/2025	
CC044	3rd Ave And Grovers Ave, Phoenix, AZ	33.6476	-112.0790	16 Feet	03/05/2025	
CC047	232 W MichiganAve Phoenix, AZ	33.6508	-112.0782	14 Feet	03/05/2025	
CC049	237 W WagonerRd Phoenix, AZ	33.6524	-112.0785	8 Feet	03/05/2025	
CC050	Union Hills Dr And Cave Creek Wash, Phoenix, AZ	33.6544	-112.0788	72 Inches	03/06/2025	
CC057	Cave Creek Golf Course At Acoma Dr, Phoenix, AZ	33.6183	-112.1067	42 Inches	02/06/2025	
CC060	18019 N Villa RitaDr Phoenix, AZ	33.6498	-112.0786	18 Feet	02/06/2025	
CC063	19819 N 3rdSt Phoenix, AZ	33.6663	-112.0701	20 Feet	02/06/2025	
CC064	19801 N 3rdSt Phoenix, AZ	33.6658	-112.0699	7 Feet	02/06/2025	
CC077	519 W HelenaDr Phoenix, AZ	33.6448	-112.0814	15 Feet	03/19/2025	
CC078	4th Ave And Muriel Dr, Phoenix, AZ	33.6463	-112.0792	24 Feet	03/19/2025	
CC079	4th Ave And Angela Dr, Phoenix, AZ	33.6457	-112.0798	16 Feet	03/19/2025	
CC080	4th Ave And Angela Dr, Phoenix, AZ	33.6458	-112.0797	16 Feet	03/19/2025	
CC081	17415 N 6thAve Phoenix, AZ	33.6444	-112.0823	19 Feet	03/19/2025	
CC082	Cave Creek Gc And Cave Creek Wash, Phoenix, AZ	33.6237	-112.1054	42 Inches	03/19/2025	
CC087	Deer Valley Road And 11th Pl, Phoenix, AZ	33.6843	-112.0575	66 Inches	03/19/2025	
CC094	7th St And Lone Cactus, Phoenix, AZ	33.6809	-112.0659	54 Inches	03/27/2025	
<b><u>CO-Charter Oak</u></b>		<b><u>Count: 2</u></b>				
CO001	Nisbet Rd And 42nd St, Phoenix, AZ	33.6226	-111.9905	5 Feet	06/24/2024	
CO015	Thunderbird Rd And 41st Place, Phoenix, AZ	33.6114	-111.9917	5 Feet	06/24/2024	

Outfall Id	Site Address	Latitude	Longitude	Drain Size	Last Inspection	Next Inspection
<b><u>EF-East Fork of Cave Creek</u></b>		<b><u>Count: 27</u></b>				
EF001	Cave Creek Rd And Greenway Pkwy, Phoenix, AZ	33.6317	-111.9689	72 Inches	09/15/2022	
EF002	16th St And Greenway Pkwy, Phoenix, AZ	33.6342	-111.9561	84 Inches	09/15/2022	
EF003	18th St And Greenway Pkwy, Phoenix, AZ	33.6342	-111.9558	84 Inches	09/15/2022	
EF004	20th St And Greenway Pkwy, Phoenix, AZ	33.6327	-112.0397	96 Inches	11/16/2022	
EF006	9th St And Greenway Pkwy, Phoenix, AZ	33.6369	-111.9386	96 Inches	09/20/2022	
EF007	9th St And Greenway Pkwy, Phoenix, AZ	33.6374	-112.0616	36 Inches	09/20/2022	
EF008	Cave Creek Rd And Greenway Pkwy, Phoenix, AZ	33.6317	-111.9686	72 Inches	09/19/2022	
EF009	16th St And Greenway Pkwy, Phoenix, AZ	33.6361	-111.9522	48 Inches	09/15/2022	
EF010	7th St And Greenway Pkwy, Phoenix, AZ	33.6374	-112.0660	84 Inches	11/16/2022	
EF011	7th St And Greenway Pkwy, Phoenix, AZ	33.6370	-112.0657	36 Inches	11/16/2022	
EF012	7th St And Greenway Pkwy, Phoenix, AZ	33.6373	-112.0657	36 Inches	11/16/2022	
EF015	22nd St And East Fork, Phoenix, AZ	33.6322	-111.9650	36 Inches	09/19/2022	
EF016	22nd St And East Fork, Phoenix, AZ	33.6322	-111.9650	36 Inches	09/19/2022	
EF018	21st St And East Fork, Phoenix, AZ	33.6322	-111.9628	36 Inches	09/19/2022	
EF019	21st St And East Fork, Phoenix, AZ	33.6322	-111.9628	42 Inches	09/19/2022	
EF027	12th St And East Fork, Phoenix, AZ	33.6369	-111.9428	36 Feet	09/20/2022	
EF034	301 W Monte Cristo Ave Phoenix, AZ	33.6313	-112.0771	6 Feet	11/28/2022	
EF037	Moon Valley Park, Phoenix, AZ	33.6272	-111.9183	5 Feet	11/28/2022	
EF039	16042 N 1st St Phoenix, AZ	33.6325	-111.9267	8 Feet	11/28/2022	
EF051	19th Pl And Greenway Pkwy, Phoenix, AZ	33.6331	-111.9581	36 Inches	09/19/2022	
EF058	15406 N 7th Dr Phoenix, AZ	33.6256	-111.9167	90 Inches	11/30/2022	
EF065	Union Hills And 25th Way, Phoenix, AZ	33.6547	112.0264	48 Inches	12/20/2022	
EF066	Union Hills And 25th Way, Phoenix, AZ	33.6547	112.0261	63 Inches	12/20/2022	
EF069	Utopia Rd Between 27th And 28th Street, Phoenix, AZ	33.6622	112.0239	48 Inches	12/08/2022	
EF070	Utopia Road Between 27th And 28th St., Phoenix, AZ	33.6622	112.0239	96 Inches	12/08/2022	
EF088	Cave Creek And 101, Phoenix, AZ	33.6731	-112.0306	58 Inches	01/12/2023	
EF091	2302 E Grovers Ave Phoenix, AZ	33.6482	-112.0320	96 Inches	01/11/2023	
<b><u>GC-Grand Canal</u></b>		<b><u>Count: 2</u></b>				
GC001	Grand Ave And Grand Canal, Phoenix, AZ	33.4892	-112.1273	24 Inches	04/02/2025	
GC002	Grand Ave And Grand Canal, Phoenix, AZ	33.4891	-112.1276	36 Inches	04/02/2025	

Outfall Id	Site Address	Latitude	Longitude	Drain Size	Last Inspection	Next Inspection
<b><u>IB-Indian Bend Wash</u></b>		<b><u>Count: 18</u></b>				
IB001	52nd St And Shea Blvd, Phoenix, AZ	33.5825	-111.9679	36 Inches	11/15/2023	
IB002	52nd St And Shea Blvd, Phoenix, AZ	33.5825	-111.9688	84 Inches	11/15/2023	
IB003	Tatum Blvd And Cholla St, Phoenix, AZ	33.5906	-111.9774	66 Inches	11/28/2023	
IB004	Tatum Blvd And Cholla St, Phoenix, AZ	33.5901	-111.9770	66 Inches	11/28/2023	
IB005	52nd St And Indian Bend Wash, Phoenix, AZ	33.5837	-111.9688	14 x 3 Feet	11/15/2023	
IB007	36th St And Sweetwater Ave, Phoenix, AZ	33.6036	-112.0042	78 Inches	11/07/2023	
IB008	40th St And Indian Bend Wash, Phoenix, AZ	33.5989	-111.9953	66 Inches	06/24/2024	
IB010	40th Street And Indian Bend Wash. North Side Of Wash., Phoenix, AZ	33.5989	-111.9954	36 Inches	06/24/2024	
IB011	56th St And Indian Bend Wash, Phoenix, AZ	33.5739	-111.9609	66 Inches	11/28/2023	
IB013	Cactus Rd And Indian Bend Wash, Phoenix, AZ	33.5974	-111.9929	72 Inches	11/07/2023	
IB016	Tatum Blvd And Cholla St, Phoenix, AZ	33.5914	-111.9779	36 Inches	11/28/2023	
IB018	Cactus Rd And Indian Bend Wash, Phoenix, AZ	33.5975	-111.9929	72 Inches	11/07/2023	
IB021	10202 N 54thPl Phoenix, AZ	33.5791	-111.9643	36 Inches	01/04/2024	
IB035	Thunderbird Rd And Indian Bend Wash, Phoenix, AZ	33.6118	-112.0090	60 Inches	11/29/2023	
IB036	Thunderbird Rd And Indian Bend Wash, Phoenix, AZ	33.6119	-112.0091	60 Inches	11/29/2023	
IB037	Thunderbird Rd And Indian Bend Wash, Phoenix, AZ	33.6130	-112.0090	6 x 10 Feet	11/28/2023	
IB038	Thunderbird Rd And Indian Bend Wash, Phoenix, AZ	33.6130	-112.0090	84 Inches	11/29/2023	
IB050	40th St And Indian Bend Wash. North Side Of Wash., Phoenix, AZ	33.5989	-111.9953	48 Inches	06/24/2024	
<b><u>LC-Laveen Channel</u></b>		<b><u>Count: 9</u></b>				
LC001	4532 W Alta VistaRd Phoenix, AZ	33.3875	-111.8433	9 Feet	09/15/2021	2027
LC008	53rd Ln And Baseline Rd, Phoenix, AZ	33.3781	-112.1750	66 Inches	07/22/2021	2027
LC015	63rd Land And Beverly Rd, Phoenix, AZ	33.3730	-112.1970	26 Inches	09/15/2021	2027
LC017	7377 W Magdalena Ln, Phoenix, AZ	33.3703	112.2136	34 Inches	09/15/2021	
LC018	7810 S 74thAve Phoenix, AZ	33.3742	-111.7808	36 Inches	09/15/2021	2027
LC020	S 63rd Ave And Lacc, Phoenix, AZ	33.3731	112.1947	60 Inches	09/16/2021	2027
LC022	4724 W CarsonRd Phoenix, AZ	33.3830	-112.1616	8 Feet	09/16/2021	2027
LC023	North Side Of Channel. About 50 Ft. West Of 51st Street Culvert., Phoenix, AZ	33.3824	-112.1687	62 Inches	07/22/2021	2027
LC026	Inside West Tunnel Culvert @ Baseline And Lacc, Phoenix, AZ	33.3771	-112.1808	48 Inches	07/22/2021	2027
<b><u>MV-Moon Valley</u></b>		<b><u>Count: 6</u></b>				
MV001	19th Ave And Sweetwater Ave, Phoenix, AZ	33.6040	112.0990	48 Inches	08/08/2022	
MV005	12th Ave And Thunderbird Rd, Phoenix, AZ	33.6070	112.0870	54 Inches	03/27/2023	
MV007	7th St And Hearn Rd, Phoenix, AZ	33.6153	-111.9344	48 Inches	03/27/2023	
MV019	7th St. And E. Roberts Rd. West Side Of Street, Phoenix, AZ	33.6120	112.0600	50 Inches	06/24/2024	
MV020	7th St. And E. Roberts Rd. West Side Of Street., Phoenix, AZ	33.6110	112.0600	50 Inches	06/24/2024	
MV023	23rd Avenue And Wood DriveAve Phoenix, AZ	33.6030	-112.1080	46 Feet	06/24/2024	



Outfall Id	Site Address	Latitude	Longitude	Drain Size	Last Inspection	Next Inspection
<b><u>NR-New River</u></b>		<b><u>Count: 5</u></b>				
NR001	44th Lane And Kastler Ln, Phoenix, AZ	33.8100	112.1228	40 Inches	09/13/2021	2027
NR002	44th Lane And Lapenna Drive, Phoenix, AZ	33.8814	112.1561	40 Inches	09/13/2021	2027
NR004	4640 W Heyerdahl Ct Phoenix, AZ	33.8725	112.1611	40 Inches	09/13/2021	2027
NR005	N 45th Ave And W Emily Dr, Phoenix, AZ	33.8786	112.1575	40 Inches	09/13/2021	2027
NR006	45th Ave And Judson Drive, Phoenix, AZ	33.8764	112.1581	36 Inches	09/13/2021	2027
<b><u>OC-Old Cross-Cut Canal</u></b>		<b><u>Count: 16</u></b>				
OC001	Old Cross Cut And Washington St, South Tunnel, Phoenix, AZ	33.4478	-111.9810	36 Inches	05/20/2024	
OC002	Old Cross Cut And Van Buren St, South Tunnel, Phoenix, AZ	33.4511	-111.9810	42 Inches	05/20/2024	
OC004	46th St And Mcdowell Rd, Phoenix, AZ	33.4660	-111.9801	42 Inches	04/17/2024	
OC005	48th St And Thomas Rd, Phoenix, AZ	33.4800	-111.9780	36 Inches	05/14/2024	
OC006	48th St And Earll Dr, Phoenix, AZ	33.4840	-111.9780	52 Inches	05/13/2024	
OC007	48th St And Indian School Rd, Phoenix, AZ	33.4940	-111.9780	36 Inches	05/14/2024	
OC008	46th St And Mcdowell Rd, Phoenix, AZ	33.4660	-111.9810	54 Inches	04/17/2024	
OC022	48th St And Oak St, Phoenix, AZ	33.4730	-111.9780	48 Inches	04/25/2024	
OC039	46th Street And Roosevelt Street - Old Cross Cut, Phoenix, AZ	33.4580	-111.9820	6 x 5 Feet	03/25/2024	
OC053	48th St And Osborn Rd, Phoenix, AZ	33.4880	-111.9780	52 Inches	03/14/2024	
OC054	48th St And Osborn Rd, Phoenix, AZ	33.4870	-111.9780	8 x 6 Feet	03/13/2024	
OC055	48th St And Weldon Ave, Phoenix, AZ	33.4900	-111.9780	48 Inches	03/18/2024	
OC062	48th St And Thomas Rd, Phoenix, AZ	33.4800	-111.9780	36 Inches	03/12/2024	
OC072	Old Cross Cut And Granada, Phoenix, AZ	33.4680	-111.9790	42 Inches	03/11/2024	
OC090	48th St. And Indian School, Phoenix, AZ			102 Inches	05/14/2024	
OC091	48th st And Osborn Rd Phoenix, AZ			48 Inches	05/14/2024	
<b><u>PD-Papago Diversion Channel</u></b>		<b><u>Count: 1</u></b>				
PD010	35th Ave And Papago Diversion Channel, Phoenix, AZ	33.4636	-112.1347	54 Inches	03/05/2024	
<b><u>PV-Paradise Valley</u></b>		<b><u>Count: 2</u></b>				
PV002	34th St And Lincoln Dr, Phoenix, AZ	33.5300	112.0000	48 Inches	07/12/2022	
PV004	35th St And Lincoln Dr, Phoenix, AZ	33.5300	112.0000	48 Inches	07/12/2022	

Outfall Id	Site Address	Latitude	Longitude	Drain Size	Last Inspection	Next Inspection
<b>SC-Skunk Creek</b>		<b>Count: 23</b>				
SC001	56th Ave And Union Hills Dr, Phoenix, AZ	33.6553	-111.8208	10x11 Feet	11/03/2021	2027
SC002	51st Ave And Skunk Creek, Near Norhtwest Bike Lane Off Bridge., Phoenix, AZ	33.6622	-111.8308	36 Inches	11/03/2021	2027
SC014	19640 N 47thAve Phoenix, AZ	33.6641	-112.1604	6 Feet	11/09/2021	2027
SC015	46th Dr And Behrend Dr, Phoenix, AZ	33.6650	-111.8397	6 Feet	11/09/2021	2027
SC016	19810 N 46thAve Phoenix, AZ	33.6659	-112.1596	6 Feet	11/09/2021	2027
SC025	27th Ln And Via Aquila, West Side, Phoenix, AZ	33.8072	-111.8800	4 x 2 Feet	11/15/2021	2027
SC027	Carefree Hwy And 27th Dr, Phoenix, AZ	33.7986	-111.8817	36 Inches	11/22/2021	2027
SC031	35th Dr And Soft Wind Dr, Phoenix, AZ	33.7017	-111.8644	30 Inches	11/16/2021	2027
SC037	Sc Wash And Sr101 Frontage Rd, Phoenix, AZ	33.6700	-111.8489	36 Inches	11/16/2021	2027
SC040	Via Puzzola And Via Del Deserto, Phoenix, AZ	33.8089	-111.8783	36 Inches	11/22/2021	2027
SC044	35th Ave And Parkside Ln, Phoenix, AZ	33.6939	112.1344	35 Inches	11/30/2021	2027
SC046	35206 N 27thDr Phoenix, AZ	33.8031	-112.1187	36 Inches	11/30/2021	2027
SC049	Pinnacle Peack Road And 40th Lane, Phoenix, AZ	33.6981	112.1472	62 Inches	12/02/2021	2027
SC050	South Side Of Pinnacle Peak Road At 40th Lane., Phoenix, AZ	33.6981	112.1475	60 Inches	12/02/2021	2027
SC052	Southside Of Pinnacle Peak Road Just Before 47th Avenue., Phoenix, AZ	33.6978	112.1592	54 Inches	12/02/2021	2027
SC053	Southside Of Pinnacle Peak Road Just Before 47th Avenue., Phoenix, AZ	33.6978	112.1594	48 Inches	11/29/2021	2027
SC054	Southside Of Pinnacle Peak Road Just Before 47th Avenue., Phoenix, AZ	33.6978	112.1594	42 Inches	11/29/2021	2027
SC055	Southside Of Pinnacle Peak Road And 51st Avenue., Phoenix, AZ	33.6978	112.1697	42 Inches	11/29/2021	2027
SC059	23620 N 45thAve Phoenix, AZ	33.7050	112.1567	24 Inches	11/29/2021	2027
SC061	Mariposa Grande And 45th Dr, Phoenix, AZ	33.7031	112.1569	10 Feet	12/20/2021	2027
SC064	Alamedia Road Between 43rd Ave And 45th Dr, Phoenix, AZ	33.7053	112.1553	24 Inches	12/01/2021	2027
SC065	44th Ln And W Misty Willow Ln, Phoenix, AZ	33.7039	112.1556	9 Feet	12/01/2021	2027
SC067	35th Avenue And Williams Drive, Phoenix, AZ	33.6909	-112.1360	56 Inches	12/20/2021	2027

Outfall Id	Site Address	Latitude	Longitude	Drain Size	Last Inspection	Next Inspection	
<b>SR-Salt River</b>		<b>Count: 58</b>					
SR001	51st Ave And Salt River, Phoenix, AZ	33.4087	-112.1695	96 Inches	04/10/2025	2026	(2)
SR002	43rd Ave And Salt River, Phoenix, AZ	33.4124	-112.1515	90 Inches	04/10/2025	2026	(2)
SR003	35th Ave And Salt River, Phoenix, AZ	33.4119	-112.1347	75 Inches	08/14/2024	2026	(2)
SR004	27th Ave And Salt River, Phoenix, AZ	33.4178	-112.1169	72 Inches	04/28/2025	2026	(3)
SR005	25th Ave And Salt River, Phoenix, AZ	33.4169	-112.1131	102 Inches	09/09/2021		
SR006	22nd Ave And Salt River, Phoenix, AZ	33.4187	-112.1066	72 Inches	08/26/2021		
SR007	19th Ave And Salt River, Phoenix, AZ	33.4114	-112.0997	54 Inches	09/07/2021		
SR008	15th Ave And Salt River, Phoenix, AZ	33.4149	-112.0908	96 Inches	09/08/2021	2026	
SR009	11th Ave And Salt River, Phoenix, AZ	33.4213	-112.0873	81 Inches	04/10/2025		
SR010	7th Ave And Salt River, Phoenix, AZ	33.4194	-112.0824	54 Inches	08/14/2024	2026	
SR012	Central Ave And Salt River, Phoenix, AZ	33.4234	-112.0741	42 Inches	04/16/2025		
SR013	Central Ave And Salt River, Phoenix, AZ	33.4238	-112.0740	10 x 21 Feet	04/16/2025		
SR014	3rd St And Salt River, Phoenix, AZ	33.4224	-112.0695	36 Inches	08/31/2021	2026	
SR015	3rd St And Salt River, Phoenix, AZ	33.4224	-112.0695	84 Inches	04/15/2025	2026	(3)
SR016	10th St And Salt River, Phoenix, AZ	33.4217	-112.0605	54 Inches	04/15/2025		
SR017	12th St And Salt River, Phoenix, AZ	33.4212	-112.0561	96 Inches	01/16/2024		
SR018	16th St And Salt River, Phoenix, AZ	33.4196	-112.0485	66 Inches	05/28/2024		
SR019	20th St And Salt River, Phoenix, AZ	33.4204	-112.0394	10 x 21 Feet	03/17/2020		
SR020	24th St And Salt River, Phoenix, AZ	33.4184	-112.0304	84 Inches	08/14/2024	2026	(3)
SR024	28th St And Salt River, Phoenix, AZ	33.4204	-112.0186	90 Inches	04/14/2020		
SR026	37th St And Salt River, Phoenix, AZ	33.4270	-112.0056	42 Inches	04/15/2020		
SR027	36th St And Salt River, Under Sky Harbor, Phoenix, AZ	33.4276	-112.0011	82 Inches	04/15/2020		
SR029	47th St And Salt River, Phoenix, AZ	33.4334	-111.9813	78 Inches	04/03/2025		
SR030	27th Ave And Salt River, Phoenix, AZ	33.4088	-112.1164	108 Inches	01/30/2025		
SR031	19th Ave And Salt River, Phoenix, AZ	33.4101	-112.1000	60 Inches	04/01/2020		
SR032	7th Ave And Salt River, Phoenix, AZ	33.4164	-112.0824	72 Inches	04/07/2020		
SR033	Central Ave And Salt River, Phoenix, AZ	33.4209	-112.0738	66 Inches	06/04/2024		
SR035	7th St And Salt River, Phoenix, AZ	33.4203	-112.0650	72 Inches	02/19/2020		
SR036	15th St And Salt River, Phoenix, AZ	33.4178	-111.9503	72 Inches	06/04/2024		
SR037	16th St And Salt River, Phoenix, AZ	33.4172	-112.0481	36 Inches	06/04/2024		
SR038	24th St And Salt River, Phoenix, AZ	33.4155	-112.0303	72 Inches	06/05/2024		
SR039	28th St And Salt River, Phoenix, AZ	33.4164	-112.0209	96 Inches	04/10/2025	2026	(3)
SR045	40th St And Salt River, Phoenix, AZ	33.4261	-111.9956	54 Inches	06/05/2024		
SR046	7th St And Salt River, Phoenix, AZ	33.4216	-112.0651	24 Inches	06/04/2024		
SR048	45th St And Salt River, Phoenix, AZ	33.4265	-111.9927	48 Inches	06/05/2024		

Outfall Id	Site Address	Latitude	Longitude	Drain Size	Last Inspection	Next Inspection
<b><u>SR-Salt River</u></b>		<b><u>Count: 58</u></b>				
SR049	67th Ave And Salt River, Phoenix, AZ	33.4001	-112.2042	96 Inches	04/10/2025	2026
SR052	52nd St And Hohokam Frwy, Phoenix, AZ	33.4370	-111.9729	8 x 5 Feet	06/05/2024	
SR056	28th St And Salt River, Phoenix, AZ	33.4199	-112.0199	36 Inches	04/03/2025	
SR059	25th Ave And Salt River, Phoenix, AZ	33.4167	-112.1131	60 Inches	03/27/2020	
SR061	32nd St And Salt River, Phoenix, AZ	33.4230	-112.0133	7 x 5 Feet	04/29/2025	2026 (2)
SR062	38th St And Salt River, Phoenix, AZ	33.4277	-112.0012	60 Inches	04/03/2025	
SR063	15th Ave And Salt River, Phoenix, AZ	33.4149	-112.0908	60 Inches	04/30/2025	
SR064	19th Ave And Salt River, Phoenix, AZ	33.4115	-112.0990	36 Inches	04/29/2025	
SR068	28th St And Salt River, Phoenix, AZ	33.4205	-112.0182	8 x 8 Feet	04/03/2025	2026
SR069	31st St And Salt River, Phoenix, AZ	33.4228	-111.9858	60 Inches	04/03/2025	
SR070	33rd St And Salt River, Phoenix, AZ	33.4236	-112.0125	36 Inches	04/03/2025	
SR071	33rd St And Salt River, Phoenix, AZ	33.4247	-112.0105	60 Inches	04/03/2025	
SR072	45th St And Salt River, Phoenix, AZ	33.4313	-111.9867	48 Inches	04/03/2025	
SR073	45th St And Salt River, Phoenix, AZ	33.4313	-111.9867	60 Inches	04/03/2025	
SR075	43rd Ave And Broadway Rd, Phoenix, AZ	33.4038	-112.1514	10 Feet	03/24/2020	
SR076	43rd Ave And Broadway Rd, Phoenix, AZ	33.4041	-112.1509	48 Inches	03/24/2020	
SR079	35th Ave And Salt River, Phoenix, AZ	33.4096	-112.1343	42 Inches	03/25/2020	
SR080	51st Ave And Salt River, Phoenix, AZ	33.4043	-112.1691	42 Inches	03/23/2020	
SR082	75th Ave S/O Broadway Rd, Phoenix, AZ	33.3961	-112.2205	84 Inches	02/27/2020	
SR083	83rd Ave And Salt River, Phoenix, AZ	33.3861	-112.2315	16 Inches	04/28/2025	2026 (3)
SR084	Sw Corner Of The 153 Expressway And The Salt River, Phoenix, AZ	33.4309	-111.9801	72 Inches	04/03/2025	
SR088	31st Ave. And Salt River, Phoenix, AZ	33.4080	-112.1248	30 Inches	04/08/2025	2026 (3)
SR089	31st And Salt River, Phoenix, AZ	33.4080	-112.1248	11 Feet	04/08/2025	2026 (3)
<b><u>ST-Sweetwater Tributary of Indian Bend Wash</u></b>		<b><u>Count: 1</u></b>				
ST004	Sweetwater Ave And 35th St, Phoenix, AZ	33.6042	112.0060	36 Inches	07/06/2022	

Outfall Id	Site Address	Latitude	Longitude	Drain Size	Last Inspection	Next Inspection
<b><u>SW-Scatter Wash</u></b>		<b><u>Count: 10</u></b>				
SW001	33rd Ave And Deer Valley Rd, Phoenix, AZ	33.4000	-112.0700	54 Inches	01/03/2022	
SW006	43rd Ave And Behrend Dr, Phoenix, AZ	33.6650	-111.8481	36 Inches	01/19/2022	
SW009	21041 N 33rdAve Phoenix, AZ	33.6775	-112.1300	8 Feet	01/24/2022	
SW011	33rd Ave And Deer Valley Rd, Phoenix, AZ	33.4100	-112.0700	36 Inches	01/24/2022	
SW015	38th Ave And Beardsley Rd, Phoenix, AZ	33.6689	-111.8592	96 Inches	02/03/2022	
SW019	31st Dr And Deer Valley Rd, Phoenix, AZ	33.4100	-112.0700	36 Inches	01/03/2022	
SW026	31st Ave And Deer Valley Rd, Phoenix, AZ	33.4100	-112.0700	36 Inches	02/14/2022	
SW032	22125 SandsDr Phoenix, AZ	33.6867	-112.1190	53 Inches	02/08/2022	
SW037	35th Avenue And Mohawk Lane, Phoenix, AZ	33.6722	-112.1353	48 Inches	02/03/2022	
SW040	35th Avenue And Mohawk Lane, Phoenix, AZ	33.6720	-112.1348	42 Inches	08/31/2023	
<b><u>TD-Tempe Drainage Channel</u></b>		<b><u>Count: 3</u></b>				
TD008	3402 S 40thSt Phoenix, AZ	33.4160	-111.9961	36 Inches	08/28/2023	
TD010	3425 S 40thSt Phoenix, AZ	33.4158	-111.9944	18 Inches	06/25/2024	
TD013	3402 E IlliniSt Phoenix, AZ	33.4127	-112.0083	24 Inches	06/25/2024	
<b><u>TS-Tenth Street Wash</u></b>		<b><u>Count: 2</u></b>				
TS002	11421 N Cave CreekRd Phoenix, AZ	33.5885	-112.0455	48 Inches	09/21/2021	2027
TS007	1425 E Desert CoveRd Phoenix, AZ	33.5847	-111.9489	36 Inches	09/22/2021	2027
<b><u>ZT-Emile Zola Tributary of Indian Bend Wash</u></b>		<b><u>Count: 1</u></b>				
ZT002	33rd Pl And Emile Zola Ave, Phoenix, AZ	33.6078	-111.9897	46 Feet	09/20/2021	2027

## **APPENDIX D**

### **ENFORCEMENT RESPONSE PLAN**

## Document Notification: "Reviewed and Still in Effect"

This is to notify the Quality Assurance Section and the Environmental Services Division management that the following document has been evaluated based on the Divisions Document Control and SOP Review Policies, and is still in effect.

**Document Title:** Stormwater Enforcement Response Plan

**Analyte/Method:** N/A

**Document Number/Revision Number:** 6021R9I

**Original Effective Date:** 7/8/2024

**Updated Effective Date:** 7/8/2025

**Marcos Cordova**  
Supervisor

Digitally signed by Marcos  
Cordova  
Date: 2025.05.19 12:03:25 -07'00'

Date: 5/19/2025

**Tony Genco**  
QA Manager

Digitally signed by Tony Genco  
Date: 2025.05.19 12:42:40 -07'00'

Date: 05/19/2025

**Luis Weisel**  
Section Head

Digitally signed by Luis Weisel  
Date: 2025.05.19 13:00:25 -07'00'

Date: 05/19/2025

For Administration: Scan and link to document; provide controlled copies, update <matrix.xls> file, send email to staff that document "Reviewed and Still in Effect" is ready for use, and file original in Archives.





Water Services Department  
Environmental Services Division  
Stormwater Management Section  
2474 South 22<sup>nd</sup> Avenue  
Phoenix, Arizona 85009

Effective Date: JUL 08 2024

## STANDARD OPERATING PROCEDURE

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### Stormwater Enforcement Response Plan

Document Number: 6021R9I

Prepared/Revised by:	<u>James Mendez</u> Senior Water Quality Inspector	<small>Digitally signed by James Mendez Date: 2024.06.26 16:04:39 -07'00'</small>	Date: <u>Jun 26, 2024</u>
Reviewed by:	<u>Marcos Cordova</u> Chief Water Quality Inspector	<small>Digitally signed by Marcos Cordova Date: 2024.07.05 17:52:38 -07'00'</small>	Date: <u>Jul 5, 2024</u>
Reviewed by:	<u>Joshua Blakey</u> Environmental Quality Specialist	<small>Digitally signed by Joshua Blakey Date: 2024.07.08 06:29:22 -07'00'</small>	Date: <u>Jul 8, 2024</u>
Reviewed by:	<u>Kerri Keller</u> Quality Assurance Manager	<small>Digitally signed by Kerri Keller Date: 2024.07.08 08:22:40 -07'00'</small>	Date: <u>Jul 8, 2024</u>
Approved by:	<u>Luis Weisel</u> Stormwater Compliance Coordinator	<small>Digitally signed by Luis Weisel Date: 2024.07.08 08:23:47 -07'00'</small>	Date: <u>Jul 8, 2024</u>

## Stormwater Enforcement Response Plan

### Table of Contents

<b>Sections</b>	<b>Page No.</b>
1.0 Purpose .....	3
2.0 Responsibilities .....	3
3.0 Safety and Precautions .....	3
4.0 Job Planning.....	3
5.0 Procedures .....	3
6.0 Calculations .....	8
7.0 Documentation and Reporting .....	8
8.0 References .....	9
<b>TABLES</b>	
Table 1 Referenced Forms and Spreadsheets .....	10
Table 2 Violation Entry Sheet.....	11
<b>Exhibits</b>	
Exhibit 1 Checklist for Stormwater Show Cause Hearing Preparation.....	13
Exhibit 2 Stormwater Enforcement Flow Chart Inspection Requirement.....	14
<b>APPENDICES</b>	
Appendix A Procedural Changes Narrative .....	15

## **Stormwater Enforcement Response Plan**

### **1.0 Purpose**

- 1.1 The purpose of the Stormwater Enforcement Response Plan (ERP) SOP is to provide procedures for initial compliance actions and escalation of enforcement of the Stormwater Quality Protection ordinance under Chapter 32C of the Phoenix City Code.
- 1.2 This document provides guidance to staff for enforcement response procedures following complaints and facility inspections. Illicit discharge investigations may also utilize this SOP, as appropriate.
- 1.3 This SOP describes staff actions and time frames for escalating enforcement to achieve compliance with Chapter 32C of the Phoenix City Code. Staff must use professional judgment when evaluating unique situations and determining appropriate response options.
- 1.4 Changes to this document are outlined in Appendix A.

### **2.0 Responsibilities**

- 2.1 Water Quality Inspectors/Senior Water Quality Inspector (WQI/SWQI) are responsible to follow the procedures outlined in this document in consultation with the Chief Water Quality Inspector (CWQI), Stormwater Compliance Coordinator (SCC) and Environmental Programs Manager (EPM). The CWQI and SWQIs will train and guide WQIs in appropriate enforcement responses. WQI/SWQI are required to thoroughly document observed conditions at the facility and/or complaint site and provide a monthly update of the status of the inspection as required by A.R.S §9-833.H. WQI/SWQI are also required to keep updated records of all communications with facility or property representatives and make appropriate entries into the database.
- 2.2 The CWQI is responsible for monitoring adherence to the procedures described in this , providing guidance or direction for complaints and enforcement actions as necessary to the WQI/SWQI, and for interacting with the SCC, EPM and legal counsel on enforcement escalation.
- 2.3 The SCC or EPM is responsible for arranging consultations with legal counsel concerning escalated enforcement actions and for providing guidance or direction for complaints and enforcement actions to all stormwater staff as necessary.
- 2.4 The Environmental Quality Specialist (EQS) is responsible for providing relevant details to enforcement in the Stormwater Annual Report.

### **3.0 Safety and Precautions**

There are no hazards associated with this procedure.

### **4.0 Job Planning**

- 4.1 All staff will review this SOP and complete the "Read and Understood" form.
- 4.2 It is critical that all staff maintain complete and accurate records of inspections, correspondence, and communications with the facility or property representative to support future enforcement.

### **5.0 Procedures**

5.1 To ensure the facility or property is brought to compliance progressive enforcement steps are presented in this section. The severity of the compliance or extent of failure to implement best management practices, recalcitrance, history of repeat violations, and/or other evidence of bad faith will be considered in determining the level of enforcement response. WQI/SWQI, in consultation with the CWQI, will evaluate the individual facility information to determine the appropriate enforcement option. With the approval of the SCC/EPM, specific progressive enforcement steps may not be applicable. All compliance letters are transmitted via Certified Mail or hand-delivered when necessary, except for the Closure Letter and Status Letter, which are sent regular mail. For stormwater complaint inspections, the WQI/SWQI will search the database for previous complaints associated with the property address or responsible party.

## 5.2 Industrial/Commercial Facility Enforcement

5.2.1 Informal and formal enforcement actions may be initiated for an industrial or commercial facility following routine Illicit Discharge Detection and Elimination (IDDE) and complaint compliance inspections. See Facility Inspections SOP 6003 for routine facility inspection procedures and the Complaint Investigation SOP 6013 for complaint inspection procedures. Documentation requirements for all enforcement actions are provided in Section 7 of this SOP. Informal actions and requirements maybe documented on the inspection form. If the requirements are not addressed during the inspection, a formal inspection letter must be mailed no later than 30 days from the date of the inspection.

5.2.2 A verbal warning is a verbal exchange between the WQI/SWQI and the facility representative and is used ONLY during a complaint investigation or a less-serious IDDE investigation where no requirements are issued. Results of complaint investigations are documented per the procedures in the Stormwater Complaint Investigation SOP 6013.

During a complaint investigation, no letter is written if the facility has corrected the problem immediately and the WQI/SWQI has observed the corrective action and deems it appropriate. However, a complaint inspection report may be warranted to document the findings of the inspection, especially if the inspection results in requirements. WQI/SWQI should check with the CWQI if a complaint inspection report is required.

5.2.3 The Compliance Inspection Letter details concerns noted during the industrial/commercial facility inspection process. The facility inspection process, including the issuance of the Compliance Inspection Letter, is described in the Facility Inspections SOP 6003. Facility inspections typically have a 30-day compliance timeframe. Issuing a Compliance Inspection Letter with requirements is considered an informal enforcement action.

5.2.4 A Notice of Violation (NOV) typically requires compliance within fourteen (14) calendar days. An NOV is issued to a facility:

- If the facility fails to correct compliance issues identified in the Compliance Inspection Letter.
- When compliance issues are critical, or human health or the environment is threatened.
- If the inspection reveals issues that are considered a violation of the City's Municipal Separate Storm System (MS4) permit.

The NOV is prepared by the WQI/SWQI and reviewed and signed by the CWQI or designee.

5.2.5 A Field NOV requires the facility to immediately cease and desist further discharge and provides a date that corrective actions such as cleanup or repairs must be conducted.

The WQI/SWQI may issue a Field NOV to a facility observed actively discharging a pollutant to the MS4 or if there is clear evidence of a recent discharge of a pollutant to the storm drain system. Field NOVs are not issued for administrative violations (e.g., failure to have a Stormwater Management Plan). In this situation, a compliant inspection report may be appropriate.

- 5.2.6 Show Cause Proceeding: For situations where prior enforcement actions have failed to produce compliance or a reasonable commitment to attain compliance by an established deadline, or at the discretion of the SSC / EPM, a meeting will be scheduled. A Show Cause letter will be sent to the facility, establishing a date, time, and location for a meeting between the facility representative(s) and representatives of the City of Phoenix (City). The City's representatives will include the CWQI, SSC, EPM, and representative of the Law Department, and in most instances the WQI/SWQI.
- 5.2.6.1 During the Show Cause Proceeding, the City will present evidence establishing the facility's non-compliance. The City will give an overview of the stormwater program, review the compliance issues, prior activities, explain the City enforcement policy, and identify the assessed penalties for non-compliance. The SSC, EPM, Law, or Deputy Director will negotiate to reach an agreement on the required compliance activities and the amount of civil sanctions/fines will be assessed. The CWQI will take meeting notes and prepare the meeting minutes. The terms of this agreement will be documented in a Show Cause Proceeding Meeting Minutes memorandum to the file.
- 5.2.6.2 Guidelines for creating a packet for use by City Personnel and the Law Department are found in Exhibit 1. These packets are for City use only and are not intended to be provided to the Facility Representative(s).
- 5.2.6.3 After the Show Cause Proceeding, the Law Department will prepare a draft of the Stormwater Settlement Agreement that details the terms of the agreement reached. The Stormwater Settlement Agreement is signed by the Water Services Director and the facility representative authorized to enter into the agreement. A copy of the Stormwater Settlement Agreement is filed in the facility file and associated compliance dates are entered into the database. A pdf copy of the final settlement agreement should be entered into the database as an attachment.
- 5.2.7 If the violation is intentional or threatens human health or the environment, and the facility does not achieve substantial compliance with the stormwater requirements, a Civil Citation with the Phoenix Municipal Court may be filed. Depending on the situation, a Civil Citation may be issued in lieu of a Show Cause Proceeding. The CWQI will consult with the SCC/EPM and Law to determine if a Civil Citation is appropriate.
- 5.2.8 When all elements of enforcement action are met, a Closure Letter will be issued. This letter will inform the individual or facility that they have addressed the issues identified during the inspection and that no additional action is required.
- 5.2.8.1 A facility inspection with no requirements can be closed when the Facility Inspection Report is issued, noting that no additional actions are required.
- 5.2.8.2 A facility investigation can be closed if the facility has resolved all stormwater requirements. The WQI/SWQI prepares the closure memo. No letter is generated for non-operational facilities.
- 5.2.9 WQI/SWQI will conduct a full inspection at industrial/commercial facilities that have repeat complaints in one year or a complaint with conditions that warrant a full inspection. Enforcement actions follow the same procedures as a routine inspection.

5.2.10 The Stormwater Management Section's goal is to close 90% of compliance cases within one year of inspection. The MS4 Permit requires 80% of all inspections to be fully resolved within one year, facilities required to construct or install extensive structural best management practices or facilities required to pay substantial fines may be offered a compliance schedule by the City. A compliance schedule breaks down the work to be conducted into an enforceable sequence of actions (or payments), with the ultimate result of compliance with the Phoenix City Code Chapter 32C. The Stormwater Management Section may consider a compliance schedule when dealing with companies that conduct a large number of operations outdoors and/or store a large amount of material outdoors (such as scrap yards). WQI/SWQI must discuss with the CWQI any inspections that have not been resolved within six months of the inspection date.

5.2.11 If a facility's compliance exceeds 30 days, a written or electronic "update of action resulting from on-site inspection" letter must be sent per A.R.S. 9-833(H). This is referred to as a status letter. The status letter is intended to inform the facility of the current status of compliance process, and to remind them of any impending due dates. A new status letter must be generated and sent to the business monthly until all compliance issues are resolved. For businesses without reliable physical or electronic mail service, these letters may be hand delivered.

The WQI/SWQI may request the facility to provide a proposed list of actions and timeframe for completion in the facility's response to the Compliance Inspection Letter. The WQI/SWQI reviews the proposed list of actions and timeframes for completion and determines if they are acceptable. If they are not acceptable, the WQI/SWQI can request the facility to meet to negotiate a more agreeable list of actions and time frames. If they are acceptable, the WQI/SWQI incorporates the list of actions and time frames into a compliance schedule issued to the facility. Missing a timeframe is cause for initiating escalated enforcement to the facility. However, any compliance schedule exceeding nine months should proceed to a Show Cause Proceeding.

5.2.12 A Flowchart showing typical enforcement process and timeline is included in Exhibit 2.

### 5.3 Residential Complaint Enforcement

5.3.1 A Verbal Warning is a verbal exchange between a WQI/SWQI and the resident and is ONLY used during a complaint investigation where no requirements are necessary. Results of complaint investigations are documented according to the procedures in the Stormwater Inquiry and Complaint Investigation SOP 6013.

During an complaint investigation, a letter is not typically written if the resident has corrected the problem immediately, the WQI/SWQI observed the corrective action, and deems it appropriate. The WQI/SWQI may also direct the resident to correct the compliance issue within a given timeframe (generally fourteen calendar days or less) using an informal enforcement action. If the WQI/SWQI requires an action by a specific date, then a follow-up complaint inspection is required, and a complaint inspection report may be warranted. If the resident fails to correct the compliance issue after the first follow-up visit, an inspection letter should be written by the WQI/SWQI .

5.3.2 An WQI/SWQI may issue a Field NOV for discharges that could adversely affect human health or the environment or are a violation of Chapter 32C. Examples of such discharges include, oils, paint, hazardous chemicals, or green (algal bloom) pool water.

5.3.3 An informational letter is written to advise residents of stormwater requirements. An example of this type of letter is a Neighborhood Letter, used when multiple residents are discharging pool water to a wash behind their properties. An informational letter is considered outreach

and generally does not have actions associated with a timeframe. Informational flyers may also be used to educate residents about pollution prevention best management practices.

5.3.4 A Residential Complaint Investigation Letter may be sent to the resident if they fail to comply with the standard guidance information provided during the complaint investigation. A 30-day compliance timeframe is typically specified.

5.3.5 If the resident fails to comply with the Residential Complaint Investigation Letter or the non-compliance is substantial, a Notice of Violation (NOV) or field NOV may be issued (See Section 5.2.5). The CWQI, SCC, EPM, and Deputy Director should be consulted along with the Law Department.

#### 5.4 Monetary Assessments

5.4.1 Potential monetary assessments include the sum of civil penalties and reimbursement of City costs (see Section 6.0).

5.4.2 Under Phoenix City Code Chapter 32C, the City is authorized to collect monetary sanctions of not less than \$50 or more than \$2,500 per violation per day. The purpose of assessing penalties is to deter potential violators of Chapter 32C, provide fair and equitable treatment to all MS4 users, and facilitate swift resolution of environmental problems.

Any civil sanction associated with stormwater violations should reflect the seriousness, frequency, and persistence of each violation.

5.4.2.1 This section of the SOP is intended for use by City personnel for settlement purposes and does not create any rights or obligations nor should it be used or relied upon by non-city personnel for any purpose. The City reserves the right to act at variance with this SOP and to change it at any time. Civil penalties may be considered under the following circumstances:

- As the result of a field NOV (in rare situations)
- When an active discharge is observed by an WQI/SWQI or clearly documented by others
- Failure to discontinue a prohibited action(s) after being made aware of non-compliance
- Failure to comply with the written requirements or timeframes specified in a NOV or other Administrative Order (such as a Stormwater Settlement Agreement)
- Damage to City property (including streets, gutters, right-of-way property, municipal storm drains, washes, rivers, etc.) from a prohibited activity
- Injury to City personnel caused by a prohibited activity
- Any other situation in which the City believes civil sanctions are necessary or legal action is contemplated relating to the Stormwater Program.

5.4.2.2 The base amount of the civil penalty can be increased (not to exceed \$2,500 per violation per day), decreased (but not less than \$50 per violation per day), or remain the same after consideration of the seriousness of the violation, any history of such violation, any good faith efforts to comply with the applicable requirements, the economic impact of the penalty on the violator, and such other factors as justice may require.

## 6.0 Calculations

- 6.1 Violations Entry Sheet Table 2 is a spreadsheet that contains the formulas for calculating penalties. Fines cannot exceed \$2,500 per day per violation. Outstanding compliance issues that are listed in the section of the table titled “Miscellaneous Sanctions” have penalties that are multiplied by the number of days of violation. For most facilities, the first day of violation is the submittal due date included in the Compliance Inspection Letter. This blank Excel spreadsheet is included in the S drive. Stormwater/inspections-Enforcements/Show cause.
- 6.2 Outstanding compliance issues that are listed under the “Discharge to Storm Drain System: Dominant Pollutant” and the “Discharge to Storm Drain System: Material with Potential to Cause Blockage” sections on Table 2. Each occurrence of a discharge is considered a separate offense. The penalty is multiplied by the number of offenses. A copy of penalty calculations is included in the facility file.
- 6.3 Any costs associated with the violation(s), such as sampling, analysis, investigation, surveillance, harm done to the environment, or damage to City infrastructure are not included in the amount of the calculated penalty. Rather, these costs are separate and distinct from civil penalties and can be recovered under the authorities identified in various sections of the Phoenix City Code, including Chapter 32C, and other laws.
- 6.4 Facility instructions for submittal of monetary assessments are included in the Stormwater Settlement Agreement. Monetary assessments are submitted to the Law Department for processing.
- 6.5 The WQI/SWQI will consult with the Law Department before including any material in the facility file that relates to a pending court action. All staff shall document all conversations or correspondence with the facility, providing appropriate information to the Law Department.

## 7.0 Documentation and Reporting

- 7.1 Documentation concerning the facility is attached to facility file, including information collected during the complaint or routine inspection (see Complaint Investigation SOP 6014 and Facility Inspections SOP 6003). The Closure Letter, Compliance Inspection Letter, NOV, field NOV, Show Cause Meeting letter, Closure letter, and/or Residential Complaint Investigation letter should all be included when applicable. If the letter is sent via Certified Mail, the Certified Mail receipts are stapled to the back of the first page of the letter as they are received. Copies of the signed correspondence (e.g., inspection letter, NOV, etc.) should also be included as an attachment to the database.
- 7.2 Copies of correspondence sent to the facility are saved in the S drive under S:/Stormwater/Documents current FY/ according to the type of letter issued. All violations and enforcement actions, including the correspondence date and required response date are entered into the database. If a Compliance Schedule has been developed, the submittal due dates (and date resolved) are entered into the database.
- 7.3 The correspondence log (for telephone calls) and any correspondence received from the facility (including copies of email) are included in the facility file. Telephone calls and correspondence received from the facility are also entered into the database.
- 7.4 Once a facility investigation is closed, the WQI/SWQI files the facility folder in the Stormwater file area. If the facility is no longer in operation, file the facility folder in the “inactive files” area of the Stormwater files. If the facility is still in operation, the WQI/SWQI files the facility folder in Stormwater Management Section’s main facility file area.



- 7.5 Enforcement information is reported to ADEQ in the Annual Report.
- 7.6 Forms used to document the activity performed according to this SOP are shown in Table 1.
- 8.0 References
- 8.1 Phoenix City Code Section 32C
- 8.2 Stormwater Section, Quality Assurance Plan, Document Number 12153, current version.
- 8.3 Stormwater Section, Inquiry and Complaint Investigation SOP, Document 6013, current revision.
- 8.4 Facility Inspections SOP, Document 6003, current revision.
- 8.5 Municipal Separate Storm Sewer System (MS4) Permit, AZS000003, current version.

**Table 1**

**Referenced Forms and Spreadsheets**

Form Number	Title
148-17D	Field NOV Form
6000R0wks	Penalty Calculation Worksheet spreadsheet

# Table 2

## Instructions for Violation Entry Sheet

1. Place an "x" in the yellow box next to the violation type and quantity being assessed. Leave the other yellow boxes blank.
2. If any of the violation categories was "Discharge to Storm Drain System", enter the number of discharge occurrences for each type of discharge in the blue boxes.
3. If there were costs to the city to recover, enter the amount in the orange box.
4. Click on the "Penalty Calculation Sheet" tab at the bottom of the spreadsheet to enter additional information

### VIOLATION ENTRY SHEET

DISCHARGE TO STORM DRAIN SYSTEM: DOMINANT POLLUTANT	DISCHARGE OCCURRENCES		Discharge <55 gal		Discharge >55 gal		Any Quantity
Any "unauthorized" discharge <sup>(1)</sup>	1	x	\$100.00		\$1,500.00		
Organic matter <sup>(2)</sup>	1					x	\$200.00
Septic/sanitary waste <sup>(3)</sup>	1	x	\$250.00		\$2,500.00		
Construction debris <sup>(4)</sup>	1				x		\$500.00
Any substance that may cause a blockage <sup>(5)</sup>	1				x		\$1,000.00
Acids and bases <sup>(6)</sup>	1	x	\$1,000.00		\$2,500.00		
Petroleum products <sup>(7)</sup>	1	x	\$1,500.00		\$2,500.00		
Other pollutant not covered above <sup>(8)</sup>	1					x	\$2,500.00

MISCELLANEOUS SANCTIONS		BASE PENALTY PER DAY
Failure to develop and/or submit a SWMP or SWPPP or other required documentation by deadline.	x	\$100.00
Failure to implement Best Management Practice(s)	x	\$100.00
Failure to submit sampling reports, inspection reports or other requested information	xx	\$100.00

CITY COSTS			
Other costs to city <sup>(9)</sup>	x	Enter total costs:	\$300.00

- <sup>1</sup>Any discharge into the public storm drain system not consisting entirely of stormwater which is not listed elsewhere.
- <sup>2</sup>Substances partially or entirely consisting of material derived from an organism.
- <sup>3</sup>Substances typically treated at a waste water treatment plant.
- <sup>4</sup>Debris or material originating from a site of construction activity.
- <sup>5</sup>Blockages occur when a substance or material may inhibit the flow of stormwater through any part of the Public Storm Drain System, as defined in Sec. 32C-101.
- <sup>6</sup>Substances labeled as 'Acids' and 'Bases' or any substances with pH of 6.0 or less and a pH of 9.5 or greater
- <sup>7</sup>Petroleum products include gasoline, diesel gasoline, kerosene, jet fuels, and other petroleum based products used to run equipment.
- <sup>8</sup>Pollutants including chemicals, pesticides, herbicides, dissolved metals, other hazardous materials as defined in 29 CFR 1910.1200, 40 CFR 355, and 49 CFR 171.8, and hazardous wastes as defined in 40 CFR 261.3.
- <sup>9</sup>Costs incurred to the City associated with Chapter 32C violations required to be recouped from responsible party.

1. Enter information on the "Violation Entry Sheet"
2. Enter Company Name and enforcement dates in the yellow boxes.
3. If there are any violations for Failure to Implement BMPs, write brief description of each in separate orange boxes.
4. If there are other penalties not listed in the "Violation Entry Sheet", fill in the appropriate green boxes.
5. The total base penalties are listed on the last line of the worksheet.
6. Save spreadsheet on the S: drive with a unique name.

## PENALTY CALCULATION

**Company Name:**

**Penalty Calculations through (mm/dd/yyyy):**

1/2/2019

**Due Date on the NOV (mm/dd/yyyy):**

1/1/2019

**Days in non-compliance:**

1

## INFRACTION

## Miscellaneous Sanctions

other requested information

N/A

### Failure to implement Best Management Practice(s)

### Dominant Pollutant

Any "unauthorized" discharge (1)

Organic matter (2)

Septic/sanitary waste (3)

N/A

N/A

## Acids and bases (6)

### Petroleum products (7)

Other pollutant not covered above (8)

## City Costs

Other costs to city (9)

**Other Penalties (list here)**

## PENALTY

\$100.00

\$100.00

\$100.00

\$100.00

\$200.00

\$250.00

\$1,000.00

\$1,500.00

\$2,500.00

\$300.00

Amount

=====

**TOTAL BASE PENALTIES:**

\$6,150.00

## Exhibit 1

### Checklist for Stormwater Show Cause Hearing Preparation

**Inspector:** Click here to enter text.

**Facility:** Click here to enter text.

**Include the following with the Notice to Show Cause Letter for the Facility:**

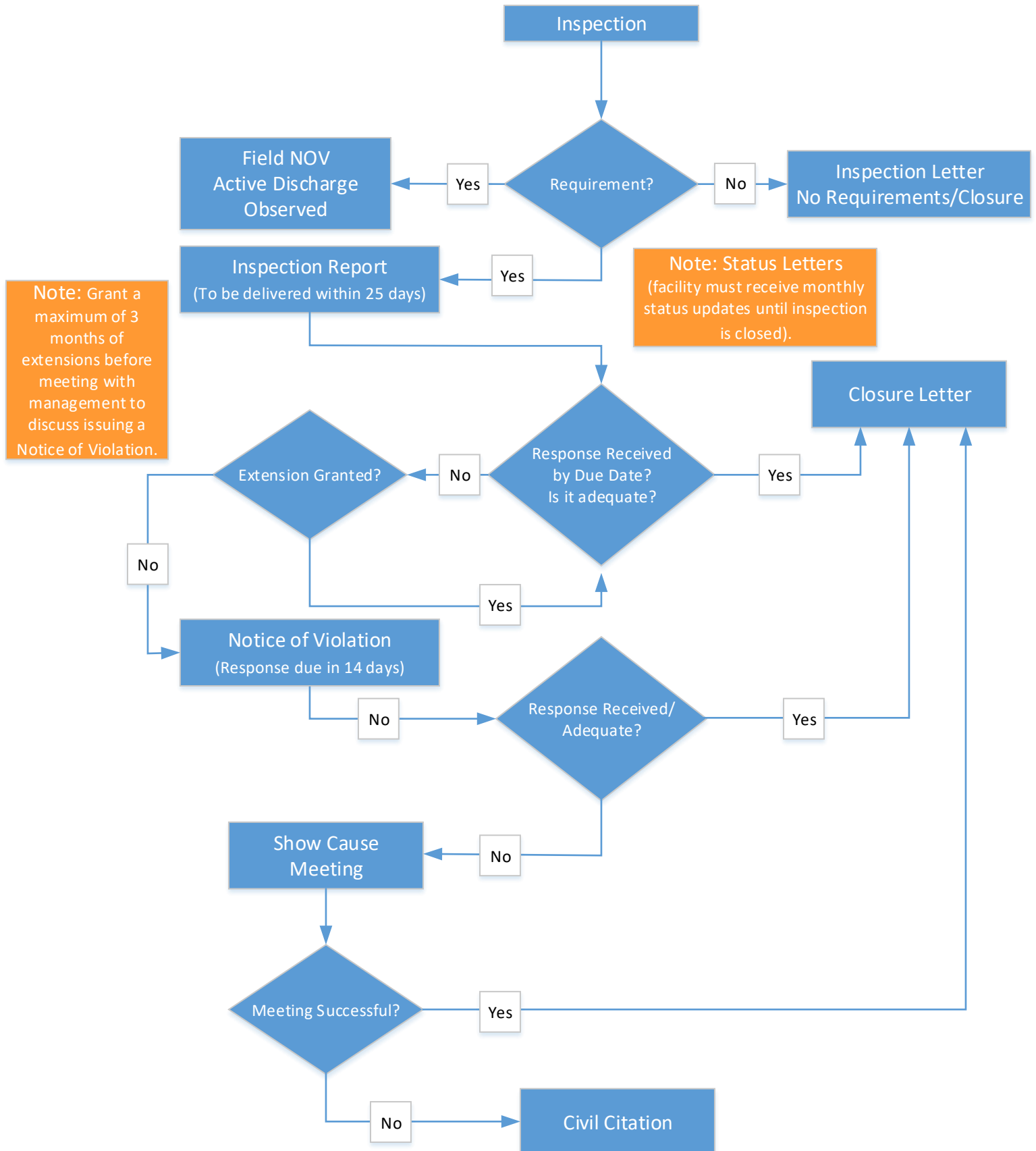
- ☐ 1. Civil Penalty Calculations
- ☐ 2. Copies of all NOV's to be discussed during the Show Cause Hearing
- ☐ 3. Copy of the current Civil Penalty Policy or Civil Penalty in Phoenix City Code

**Include the following documents in EACH Show Cause Packet:**

	Section No
<input type="checkbox"/> 1. Cover page: Facility Name, "Show Cause Hearing", Date	Front Cover
<input type="checkbox"/> 2. Table of Contents Page	1
<input type="checkbox"/> 3. Civil Penalty Policy (Inspector Packet Only)	1
<input type="checkbox"/> 4. Notice to Show Cause	2
<input type="checkbox"/> 5. Civil Penalty Calculations	2
<input type="checkbox"/> 6. NOV's & Responses paired together in chronological order (do not reverse)	2
<input type="checkbox"/> 7. Compliance History	3
<input type="checkbox"/> 8. One Page Sample Data Table (if applicable)	3
<input type="checkbox"/> 9. BRIEF Facility Description	4
<input type="checkbox"/> 10. Inspection Report and Relevant Photographs	4
<input type="checkbox"/> 11. Previous Stormwater Settlement Agreement (if applicable)	5
<input type="checkbox"/> 12. New Stormwater Settlement Agreement (once it is finalized)	5
<input type="checkbox"/> 13. BLANK Note Paper – Do Not Add Lines or Tables	6
<input type="checkbox"/> 14. Section & Document Tabs Corresponding to Table of Content Page	ALL
<input type="checkbox"/> 15. Attendee Sign-in Sheet (Inspector Packet Only)	
<input type="checkbox"/> 16. Chief WQI Reviews Show Cause Packets Prior to Distribution 10-Days Prior to Hearing	
<input type="checkbox"/> 17. <b>Distribute Show Cause Packets to City Attendees ONE WEEK PRIOR to Hearing</b>	

- |  |  |
|--|--|
| <input type="checkbox"/> 18. One (1) Additional copy of each of the following: | 1. Notice to Show Cause<br>2. Civil Penalty Calculations<br>3. All Relevant NOV's<br>4. Other Documents as Advised |
|--|--|
- NOTE: PROVIDE THIS EXTRA COPY TO THE ASSISTANT CITY ATTORNEY; DO NOT STAPLE**

## Exhibit 2: Stormwater Enforcement Flow Chart



## Appendix A

### Procedural Changes Narrative

The following changes have been incorporated into this revision:

Location	Description
Cover page/ Throughout	Added: Stormwater Compliance Coordinator and changed EPC to EPM
Cover page	Added: EQS for reviewer
<b>Table of Contents</b>	Added the Exhibits 1 and 2



**City of Phoenix**  
WATER SERVICES DEPARTMENT  
ENVIRONMENTAL SERVICES DIVISION

**"Read and Understand Form"**

Document Title: Stormwater Enforcement Response Plan

Document/Revision Number: 6021R9I

Quick Fix Number: n/a Quick Fix Effective Date: n/a

I have received, agree to read, and will ask any questions I may have. I will adhere to the policies and procedures for the document identified above.

Staff Name (Print)	Staff Signature	Date
Luis Weisel	Luis Weisel <small>Digitally signed by Luis Weisel Date: 2024.07.11 06:30:32 -07'00'</small>	7/11/2024
Tobias Estrada	Tobias Estrada <small>Digitally signed by Tobias Estrada Date: 2024.07.11 06:38:43 -07'00'</small>	7/11/2024
Jeffrey Dooley	Jeffrey Dooley <small>Digitally signed by Jeffrey Dooley Date: 2024.07.11 06:46:49 -07'00'</small>	7/11/2024
Patrick Anderson	Patrick Anderson <small>Digitally signed by Patrick Anderson Date: 2024.07.11 06:59:46 -07'00'</small>	7/11/2024
Joshua Blakey	Joshua Blakey <small>Digitally signed by Joshua Blakey Date: 2024.07.11 07:04:06 -07'00'</small>	7/11/2024
James Mendez	James Mendez <small>Digitally signed by James Mendez Date: 2024.07.11 14:14:05 -07'00'</small>	7/11/2024
Jorge Estrada	Jorge Estrada <small>Digitally signed by Jorge Estrada Date: 2024.07.16 10:53:58 -07'00'</small>	7/16/2024
Robert Rivera	Robert Rivera <small>Digitally signed by Robert Rivera Date: 2024.07.18 06:25:02 -07'00'</small>	7/18/24
Henry Saenz	Henry Saenz <small>Digitally signed by Henry Saenz Date: 2024.07.18 06:48:17 -07'00'</small>	7/18/2024
Edwin Villalobos	Edwin Villalobos <small>Digitally signed by Edwin Villalobos Date: 2024.07.18 09:45:27 -07'00'</small>	7/18/24
Rocky Orosco	Rocky Orosco <small>Digitally signed by Rocky Orosco Date: 2024.07.18 13:13:06 -07'00'</small>	7/18/2024
Jessica Pendle	Jessica Pendle <small>Digitally signed by Jessica Pendle Date: 2024.07.18 14:17:15 -07'00'</small>	7/18/2024

Supervisor's Initials: Marcos Cordova  
Digitally signed by Marcos Cordova  
Date: 2024.07.18 06:07:44 -07'00'

Date: 7/18/2024

Supervisor's Initials: \_\_\_\_\_

Date: \_\_\_\_\_

Supervisor's Initials: \_\_\_\_\_

Date: \_\_\_\_\_

\*Original RAU filed in archive with document.

Scanned/Attached to document: Initials: SP Date: 08/26/24



## **APPENDIX E**

### **INVENTORY OF MUNICIPAL FACILITIES AND OPERATIONS**

**Appendix E**  
**City of Phoenix Municipal Inventory of Facilities with a Potential to Relase Pollutants to Stormwater**

City facility	Address	SIC Code (best fit for services at facility)	Operating Status	Latitude - Degrees	Latitude - Minutes	Latitude - Seconds	Longitude - Degrees	Longitude - Minutes	Longitude - Seconds	Facility Contact	Brief Description of Activities of Concern (use letter codes A-N on second worksheet tab. If O (other), please specify.)
Arts and Culture Phoenix Art Museum & PW	1625 N Central Ave.	7999	Operational	33	46	72.70	112	7	2.78	Benjamin Chavarria/Mikaela Castle	D,O,G
Arts and Culture S'edav Va'aki Museum	4619 E. Washington St.	7999	Operational	33	26	48.30	111	59	5.24	Benjamin Chavarria	A,C,D,F,G,H
Aviation Deer Valley Airport Maintenance Center	702 W. Deer Valley Road	4581	Operational	33	41	3.27	112	4	58.62	Lisa Farinas	A,B,C,D,E,G,H,J,F,L,N
Aviation Sky Harbor Terminal 2, 3, and 4, all applicable buildngs	3400 E. Sky Harbor Blvd.	4581	Operational	33	26	7.62	112	0	31.42	Lisa Farinas	A,B,C,D,E,G,H,J,F,L,N
Sky Harbor Airport Independent Operator Parcels and Rental Car Center	1805 E. Sky Harbor Circle	4581	Operational	33	43	7.7	112	4	4.94	Lisa Farinas	B,C,D,F
Convention Center CCEG HVAC	601 E. Washington	7521	Operational	33	26	51.17	112	3	58.96	David Whetton	A,D,F,G
Convention Center Herberger Theater (ES)	222 E. Monroe	6512	Operational	33	27	3.49	112	4	14.58	David Whetton	B,F,G
Convention Center North building	150 N. 5th St.	6512	Operational	33	26	57.75	112	4	7.37	David Whetton	A,B,D,E,F,G
Convention Center Orpheum Basement (BT) and Production Services (PS)	203 W. Adams Street	6512	Operational	33	26	56.33	112	4	36.57	David Whetton	F,G
Convention Center South Building	20 S. 5th Street	6512	Operational	33	26	50.64	112	4	6.45	David Whetton	A,B,D,E,F,G
Convention Center Symphony Hall	225 E. Adams Street	6512	Operational	33	26	56.17	112	4	14.07	David Whetton	A,F,G
Convention Center West Building	100 N. 3rd Street	6512	Operational	33	26	58.02	112	4	14.01	David Whetton	A,B,D,F,G
Fire Operations Center	150 S. 12th Street	9224	Operational	33	26	44.63	112	3	25.23	Jeff Schripsema	B,C
Fire Special Operations	2450 S. 22nd Ave	9224	Operational	33	25	28.57	112	6	25.56	Jeff Schripsema	A,D,E,F,G
Fire Station 01	323 N. 4th Avenue	9224	Operational	33	27	8.44	112	4	43.20	Jeff Schripsema	B,C,D,E,F,G
Fire Station 03	1257 W. Pierce	9224	Operational	33	25	28.57	112	5	26.86	Jeff Schripsema	B,C,D,E,F,G
Fire Station 04	1601 N. 3rd Avenue	9224	Operational	33	27	58.01	112	4	40.64	Jeff Schripsema	B,C,D,E,F,G
Fire Station 05	1840 E. Cambridge Ave.	9224	Operational	33	28	39.93	112	2	30.16	Jeff Schripsema	B,C,D,E,F,G
Fire Station 06	368 W. Apache Street	9224	Operational	33	25	49.30	112	4	48.55	Jeff Schripsema	B,C,D,E,F,G
Fire Station 07	403 E. Hatcher	9224	Operational	33	34	16.04	112	4	4.90	Jeff Schripsema	B,C,D,E,F,G
Fire Station 08	1025 E. Polk	9224	Operational	33	27	9.16	112	3	33.58	Jeff Schripsema	B,C,D,E,F,G
Fire Station 09 & WSD Odor Control Station 84	330 E. Fairmount Street	9224/4952	Operational	33	29	35.82	112	4	6.05	Jeff Schripsema/Lynn Ogata	B,C,D,E,F,G,L
Fire Station 10	2731 N. 24th Drive	9224	Operational	33	28	46.23	112	6	39.66	Jeff Schripsema	B,C,D,E,F,G
Fire Station 11	2727 E. Roosevelt	9224	Operational	33	27	29.43	112	1	22.16	Jeff Schripsema	B,C,D,E,F,G
Fire Station 12	4243 N. 32nd Street	9224	Operational	33	29	34.88	112	0	44.45	Jeff Schripsema	B,C,D,E,F,G
Fire Station 13	2828 N. 47th Place	9224	Operational	33	28	46.22	111	58	43.44	Jeff Schripsema	B,C,D,E,F,G
Fire Station 14	1330 N. 32nd Avenue	9224	Operational	33	27	50.29	112	7	39.10	Jeff Schripsema	B,C,D,E,F,G
Fire Station 15	4730 N. 43rd Avenue	9224	Operational	33	30	22.89	112	9	6.93	Jeff Schripsema	B,C,D,E,F,G

**Appendix E**  
**City of Phoenix Municipal Inventory of Facilities with a Potential to Release Pollutants to Stormwater**

City facility	Address	SIC Code (best fit for services at facility)	Operating Status	Latitude - Degrees	Latitude - Minutes	Latitude - Seconds	Longitude - Degrees	Longitude - Minutes	Longitude - Seconds	Facility Contact	Brief Description of Activities of Concern (use letter codes A-N on second worksheet tab. If O (other), please specify.)
Fire Station 16	1414 E. Mohave	9224	Operational	33	25	54.49	112	3	6.02	Jeff Schripsema	B,C,D,E,F,G
Fire Station 17	1531 E. Missouri	9224	Operational	33	30	58.40	112	2	53.96	Jeff Schripsema	B,C,D,E,F,G
Fire Station 18	5019 N. 23rd Avenue	9224	Operational	33	30	37.21	112	6	28.19	Jeff Schripsema	B,C,D,E,F,G
Fire Station 19	3547 E. Sky Harbor Blvd.	9224	Operational	33	26	3.25	112	0	20.50	Jeff Schripsema	B,C,D,E,F,G
Fire Station 20	726 W. Glendale Avenue	9224	Operational	33	32	19.79	112	5	0.67	Jeff Schripsema	B,C,D,E,F,G
Fire Station 21	1212 S. 27th Avenue	9224	Operational	33	26	10.48	112	7	3.52	Jeff Schripsema	B,C,D,E,F,G
Fire Station 22	230 E. Roeser Road	9224	Operational	33	23	59.88	112	4	12.67	Jeff Schripsema	B,C,D,E,F,G
Fire Station 23	4416 S. 32nd Street	9224	Operational	33	24	21.37	112	0	47.21	Jeff Schripsema	B,C,D,E,F,G
Fire Station 24	2602 N. 43rd Avenue	9224	Operational	33	28	37.57	112	9	7.47	Jeff Schripsema	B,C,D,E,F,G
Fire Station 25	4010 N. 63rd Avenue	9224	Operational	33	29	36.77	112	11	44.07	Jeff Schripsema	B,C,D,E,F,G
Fire Station 26	3301 W. Rose Lane	9224	Operational	33	31	37.81	112	7	49.06	Jeff Schripsema	B,C,D,E,F,G
Fire Station 27	12449 N. 32nd Street	9224	Operational	33	36	1.58	112	0	45.96	Jeff Schripsema	B,C,D,E,F,G
Fire Station 28	7409 S. 16th Street	9224	Operational	33	22	45.40	112	2	48.56	Jeff Schripsema	B,C,D,E,F,G
Fire Station 29	3949 E. Air Lane	9224	Operational	33	26	33.77	112	59	48.53	Jeff Schripsema	B,C,D,E,F,G
Fire Station 30	2701 W. Belmont Ave	9224	Operational	33	32	56.22	112	7	3.31	Jeff Schripsema	B,C,D,E,F,G
Fire Station 31	5730 E. Thunderbird Road	9224	Operational	33	36	42.80	111	57	26.96	Jeff Schripsema	B,C,D,E,F,G
Fire Station 32	7620 S. 42nd Place	9224	Operational	33	22	36.87	111	59	33.80	Jeff Schripsema	B,C,D,E,F,G
Fire Station 33	2409 W. Cactus Road	9224	Operational	33	35	46.13	112	6	38.42	Jeff Schripsema	B,C,D,E,F,G
Fire Station 35	646 E. Paradise Lane	9224	Operational	33	37	59.91	112	3	57.33	Jeff Schripsema	B,C,D,E,F,G
Fire Station 36	21602 N. 9th Avenue	9224	Operational	33	40	55.09	112	5	8.33	Jeff Schripsema	B,C,D,E,F,G
Fire Station 37	16602 N. 40th Street	9224	Operational	33	38	14.56	111	59	47.53	Jeff Schripsema	B,C,D,E,F,G
Fire Station 38	5002 E. Warner Road	9224	Operational	33	19	58.48	111	58	42.76	Jeff Schripsema	B,C,D,E,F,G
Fire Station 39	2276 W. Southern Avenue	9224	Operational	33	23	33.32	112	6	26.71	Jeff Schripsema	B,C,D,E,F,G
Fire Station 40	3838 N. 83rd Avenue	9224	Operational	33	29	26.15	112	14	17.46	Jeff Schripsema	B,C,D,E,F,G
Fire Station 41	2501 W. Morningside Drive	9224	Operational	33	38	54.26	112	6	47.30	Jeff Schripsema	B,C,D,E,F,G
Fire Station 42	3246 W. Greenway	9224	Operational	33	37	32.31	112	7	45.27	Jeff Schripsema	B,C,D,E,F,G
Fire Station 43	4110 E. Chandler Boulevard	9224	Operational	33	18	20.29	111	59	40.55	Jeff Schripsema	B,C,D,E,F,G
Fire Station 44	7117 W. McDowell Road	9224	Operational	33	27	55.25	112	12	44.76	Jeff Schripsema	B,C,D,E,F,G
Fire Station 45	2545 E. Beardsley Road	9224	Operational	33	40	6.95	112	1	37.29	Jeff Schripsema	B,C,D,E,F,G
Fire Station 46	15402 S. Marketplace Way	9224	Operational	33	18	24.45	112	3	7.78	Jeff Schripsema	B,C,D,E,F,G
Fire Station 48	5230 W. Happy Valley Road	9224	Operational	33	42	46.70	112	10	23.45	Jeff Schripsema	B,C,D,E,F,G
Fire Station 49	3750 E. Dynamite Road	9224	Operational	33	44	29.27	111	59	45.37	Jeff Schripsema	B,C,D,E,F,G
Fire Station 50	20225 N. 35th Ave	9224	Operational	33	40	14.71	112	8	2.60	Jeff Schripsema	B,C,D,E,F,G
Fire Station 52	21650 N Tatum Blvd	9224	Operational	33	40	58.79	111	58	36.65	Jeff Schripsema	B,C,D,E,F,G
Fire Station 54 & WSD Odor Control Station 85	9820 W. Campbell Ave.	9224/4952	Operational	33	30	6.12	112	16	13.98	Jeff Schripsema/Lynn Ogata	B,C,D,E,F,G,L
Fire Station 55	26700 N 27th Ave	9224	Operational	33	72	56.67	112	11	70.26	Jeff Schripsema	B,C,D,E,F,G
Fire Station 56	3210 W. Canotia Place	9224	Operational	33	48	3.90	112	7	44.12	Jeff Schripsema	B,C,D,E,F,G
Fire Station 57	1660 W. Dobbins	9224	Operational	33	21	49.10	112	5	43.02	Jeff Schripsema	B,C,D,E,F,G
Fire Station 58	4718 W. Dobbins Road	9224	Operational	33	21	48.20	112	9	40.40	Jeff Schripsema	B,C,D,E,F,G

**Appendix E**  
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City facility	Address	SIC Code (best fit for services at facility)	Operating Status	Latitude - Degrees	Latitude - Minutes	Latitude - Seconds	Longitude - Degrees	Longitude - Minutes	Longitude - Seconds	Facility Contact	Brief Description of Activities of Concern (use letter codes A-N on second worksheet tab. If O (other), please specify.)
Fire Station 59	1165 S. 65th Ave	9224	Operational	33	26	16.00	112	11	51.00	Jeff Schripsema	B,C,D,E,F,G
Fire Station 60	2405 W. Townley	9224	Operational	33	33	53.85	112	6	39.59	Jeff Schripsema	B,C,D,E,F,G
Fire Station 61	1925 E. Indian School	9224	Operational	33	29	39.22	112	2	24.20	Jeff Schripsema	B,C,D,E,F,G
Fire Station 72	33027 N. Cave Creek Rd.	9224	Operational	33	47	5.88	111	58	17.47	Jeff Schripsema	B,C,D,E,F,G
Fire Training Academy	2425 W Lower Buckeye	9224	Operational	33	25	17.29	112	6	34.07	Jeff Schripsema	A,B,D,E,F,G
Old Fire Station 8	541 W. Encanto Blvd	9224	Operational	33	47	27.59	112	8	25.12	Jeff Schripsema	B,C,D,E,F,G
Old Fire Station 25	4032 N. 59th Ave	9224	Operational	33	49	39.05	112	18	68.40	Jeff Schripsema	B,C,D,E,F,G
Old Fire Station 30	7717 N 27th Ave	9224	Operational	33	54	99.5	112	11	65.84	Jeff Schripsema	B,C,D,E,F,G
Old Fire Station 34 (property managed by Police)	50 N 51st Ave	9224	Operational	33	44	89.54	112	16	94.45	Jeff Schripsema	B,C,D,E,F,G
Housing Buchanan Warehouse	701 W. Buchanan	6513	Operational	33	26	33.54	112	4	58.09	Marla Tannenbaum	C,D,F,G,L
Housing Fillmore Gardens	802 N. 22nd Place	6513	Operational	33	27	20.45	112	1	59.30	Marla Tannenbaum	C,D,F,G,H,L
Housing Maryvale Parkway Terrace	4545 N. Maryvale Parkway	6513	Operational	33	30	13.95	112	10	14.05	Marla Tannenbaum	C,D,F,G,H,L
Housing Sunnyslope Manor	205 E. Ruth	6513	Operational	33	33	45.70	112	4	16.91	Marla Tannenbaum	C,D,F,G,H,L
Library Department Burton Barr Library (Public Works)	1221 N. Central Ave.	8231	Operational	33	27	45.00	112	4	23.43	Mikaela Castle	D,O,G
NSD Graffiti Warehouse	3325 W. Flower	1721	Operational	33	29	9.40	112	7	43.90	Christy Blake	O,A,D,F
Police Academy Firearms Shooting Range & Special Assignment Unit Bldg	10001 S. 15th Ave.	9221	Operational	33	21	12.64	112	5	18.39	David Jordan/Chevyn Bryant	D,G,N
Police Academy Defensive Driving Track	8645 W. Broadway Rd.	9221	Operational	33	24	3.55	112	14	38.89	David Jordan/Chevyn Bryant	D,F,G,J
Police MDC and Dive Facility	425 E. Buckeye Rd.	9221	Operational	33	26	11.17	112	4	5.82	David Jordan/Chevyn Bryant	D
Black Mountain Police Precinct (200) & PW Maint	33355 N. Cave Creek Rd.	9221/7538	Operational	33	47	15.85	111	58	8.70	David Jordan/Chevyn Bryant/Mikaela Castle	A,B,C,D,F,J,L
Police Cactus Park Precinct (Briefing Station) & PW Maint	12220 N. 39th Avenue	9221/7538	Operational	33	35	49.51	112	8	36.26	David Jordan/Chevyn Bryant/Mikaela Castle	B,C,D,E
Police Central City Precinct & PW Central City EMD	1902 S. 16th Street	9221/7538	Operational	33	25	45.16	112	2	56.75	David Jordan/Chevyn Bryant/Mikaela Castle	L
Police Deer Valley Tactical Operations, Air Support	102 E. Deer Valley Road	9221	Operational	33	41	11.66	112	4	24.15	David Jordan/Chevyn Bryant	A,D,E,F,J,L
Police Desert Horizon Precinct (Briefing Station) & PW Maint	16030 N. 56th Street	9221/7538	Operational	33	37	57.50	111	57	40.66	David Jordan/Chevyn Bryant/Mikaela Castle	B,C,D,E
Police Estrella Precinct & PW Maint	2111 S. 99th Ave.	9221/7538	Operational	33	25	38.30	112	16	16.11	David Jordan/Chevyn Bryant/Mikaela Castle	B,C,D,E
Police Laboratory Services and Police Crime Lab (PW Facilities)	621 W. Washington	8734/6512	Operational	33	26	50.84	112	4	55.03	David Jordan/Chevyn Bryant/Mikaela Castle	A,B,D,F,G,L
Police & Public Safety Bldg (PW Facilities)	620 W Washington St	9221/6512	Operational	33	26	55.20	112	4	55.15	David Jordan/Chevyn Bryant/Mikaela Castle	A,B,D,G,L

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City facility	Address	SIC Code (best fit for services at facility)	Operating Status	Latitude - Degrees	Latitude - Minutes	Latitude - Seconds	Longitude - Degrees	Longitude - Minutes	Longitude - Seconds	Facility Contact	Brief Description of Activities of Concern (use letter codes A-N on second worksheet tab. If O (other), please specify.)
Police Maryvale Precinct & PW Maryvale Police Substation Maint	6180 W. Encanto Blvd.	9221/7538	Operational	33	28	26.44	112	11	33.33	David Jordan/Chevyn Bryant/Mikaela Castle	A,B,C,D,E,F,J,L
Mountainview Police Substation Equipment Management Division & PW Maint	2075 E. Maryland	9221/7538	Operational	33	31	50.45	112	2	12.56	David Jordan/Chevyn Bryant/Mikaela Castle	A,B,C,D,F,J,L
Police Property Management Bureau (PMB) & PW Building Maintenance Site	100 E. Elwood	9221/6512	Operational	33	24	53.66	112	4	12.58	David Jordan/Chevyn Bryant/Mikaela Castle	B,C,D,E,L
Police Department Vehicle Storage Yard	2820 S. 22nd Avenue	9221	Operational	33	25	12.81	112	6	27.89	David Jordan/Chevyn Bryant	D,F,J
Police South Mountain Precinct (Briefing Station) & PW Maint	400 W. Southern Ave.	9221/7538	Operational	33	23	35.12	112	4	44.58	David Jordan/Chevyn Bryant/Mikaela Castle	B,C,D,E
Police South Resource Bureau Equipment Management Division & PW Maint	3443 S. Central Ave.	9221/7538	Operational	33	24	55.35	112	4	21.81	David Jordan/Chevyn Bryant/Mikaela Castle	A
Police Sunnyslope Precinct (Interim)	750 W. Peoria	9221	Operational	33	34	57.50	112	4	59.12	David Jordan/Chevyn Bryant	B,C,D,E
PRD Downtown Division Civic Space Park and Historic AE England Bldg	424 N. Central	7999	Operational	33	27	6.86	112	4	27.32	Scott Coughlin	A,C,D,F,G,H
PRD Downtown Division Encanto Park	2605 N. 15th Ave.	7999	Operational	33	28	34.64	112	5	23.19	Scott Coughlin	A,C,D,E,F,G,H
PRD Downtown Division Margaret T. Hance Park (includes JFG)	67 W. Culver Street	7999	Operational	33	27	44.06	112	4	35.41	Scott Coughlin	A,C,D,E,F,G,H
PRD Downtown Division Monterey Maintenance	322 E. Oak Street	7999	Operational	33	28	24.10	112	4	7.08	Scott Coughlin	A,C,D,E,F,G,H
PRD Downtown Division Steele Indian School Park Maintenance	300 E. Indian School Rd.	7999	Operational	33	29	55.07	112	4	2.19	Scott Coughlin	A,C,D,E,F,G,H
PRD Natural Resources Division Papago Park Maintenance Yard	1001 N 52nd St	7999	Operational	33	27	9.20	111	57	29.81	Scott Coughlin	A,C,D,F,G,H
PRD Natural Resources Division Ranger Station - Phoenix Mountains Preserve	2245 W. Greenway	7999	Operational	33	37	29.50	112	6	23.50	Scott Coughlin	A,C,D,F,G,H
PRD Natural Resources Division Rio Salado Maintenance Facility	641 W. Lower Buckeye	7999	Operational	33	25	18.59	112	4	48.95	Scott Coughlin	A,C,D,E,F,G,H
PRD Natural Resources Division South Mountain Park Maintenance	10919 S. Central Avenue	7999	Operational	33	20	52.23	112	4	57.56	Scott Coughlin	A,C,D,F,G,H
PRD Northeast Division 52nd Street Maintenance	1001 N. 52nd St.	7999	Operational	33	27	33.04	111	58	8.43	Scott Coughlin	A,B,C,D,E,F,G,H

**Appendix E**  
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City facility	Address	SIC Code (best fit for services at facility)	Operating Status	Latitude - Degrees	Latitude - Minutes	Latitude - Seconds	Longitude - Degrees	Longitude - Minutes	Longitude - Seconds	Facility Contact	Brief Description of Activities of Concern (use letter codes A-N on second worksheet tab. If O (other), please specify.)
PRD Northeast Division Bloomfield Warehouse	3201 E Bloomfield Road	7999	Operational	33	35	58.63	112	0	46.21	Scott Coughlin	A,D,F,G
PRD Northeast Division Paradise Valley Park Maintenance	17642 N. 40th Street	7999	Operational	33	39	6.04	111	59	53.12	Scott Coughlin	A,C,D,F,G,H
PRD Northeast Division Sahuaro Maintenance Yard	1602 E. Sahuaro	7999	Operational	33	35	6.53	112	2	50.19	Scott Coughlin	A,C,D,F,G,H
PRD Northwest Division La Pradera Maintenance Yard	3901 W. Glendale Ave.	7999	Operational	33	32	17.61	112	8	34.94	Scott Coughlin	A,C,D,F,G,H
PRD Northwest Division Peoria Maintenance Shop	9850 N. 23rd Ave.	7999	Operational	33	34	35.03	112	6	31.27	Scott Coughlin	A,C,D,E,F,G,H
PRD Northwest El Oso Park Splash Pad	3451 N. 75 <sup>th</sup> Ave	7999	Operational	33	29	18.00	112	13	7.00	Scott Coughlin	A,F,L,M,G
PRD Northwest Mariposa Park Splash Pad	3150 W. Morten Ave	7999	Operational	33	32	53.00	112	7	38.00	Scott Coughlin	A,F,L,M,G
PRD Northwest Paseo Highlands Park (Beuf)	3435 W Pinnacle Peak Rd	7999	Operational	33	41	46.00	112	7	55.00	Scott Coughlin	C,F,G,H
PRD Northwest Washington Activity Center	2240 W Citrus Way	7999	Operational	33	31	48.00	112	6	26.00	Scott Coughlin	C,F,G,H
PRD South Division Cesar Chavez Maintenance Yard	7858 S. 35th Ave.	7999	Operational	33	22	8.58	112	8	31.71	Scott Coughlin	A,C,D,E,F,G,H
PRD South Division Pecos Park Maintenance yard	17010 S. 48th St.	7999	Operational	33	17	29.07	111	59	10.68	Scott Coughlin	A,C,D,E,F,G,H
PRD South Trailside Point Park	7215 W. Vineyard Rd.	7999	Operational	33	23	10.00	112	12	41.00	Scott Coughlin	A,F,G
PRD Special Operations Division Alkire Pool	1617 W. Papago	7999	Operational	33	26	1.17	112	5	41.49	Scott Coughlin	A,F,L,M,G
PRD Special Operations Division Cielito Pool	4551 N. 35th Avenue	7999	Operational	33	30	14.21	112	7	57.42	Scott Coughlin	A,F,L,M,G
PRD Special Operations Division Coronado Pool	1717 N. 12th Street	7999	Operational	33	28	3.25	112	3	21.31	Scott Coughlin	A,F,L,M,G
PRD Special Operations Division Cortez Pool	3434 W. Dunlap	7999	Operational	33	34	4.96	112	7	57.34	Scott Coughlin	A,F,L,M,G
PRD Special Operations Division David Uribe Pool (Cactus Pool)	3801 W. Cactus Road	7999	Operational	33	35	39.06	112	8	27.80	Scott Coughlin	A,F,L,M,G
PRD Special Operations Division Deer Valley Pool	19400 N. 19th Avenue	7999	Operational	33	39	46.02	112	6	1.82	Scott Coughlin	A,F,L,M,G
PRD Special Operations Division Desert West Softball and PRD Northwest Divison Desert West Soccer	6602 W. Encanto Blvd	7999	Operational	33	28	29.03	112	11	46.09	Scott Coughlin	A,C,D,E,F,G,H
PRD Special Operations Division Eastlake Pool	1548 E. Jefferson Street	7999	Operational	33	26	47.17	112	2	53.60	Scott Coughlin	A,F,L,M,G
PRD Special Operations Division El Prado Pool	6428 S. 19th Avenue	7999	Operational	33	23	16.79	112	6	0.54	Scott Coughlin	A,F,L,M,G

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PRD Special Operations Division Encanto Maintenance Yard and Stores	1802 W. Encanto Blvd.	7999	Operational	33	28	25.12	112	5	51.64	Scott Coughlin	A,B,C,D,E,F,G,H
PRD Special Operations Division Encanto Pool	2121 N. 15th Ave.	7999	Operational	33	28	20.26	112	5	23.39	Scott Coughlin	A,F,L,M,G
PRD Special Operations Division Falcon Pool	3420 W. Roosevelt St.	7999	Operational	33	27	33.23	112	7	56.05	Scott Coughlin	A,F,L,M,G
PRD Special Operations Division Grant Pool	714 S. 2nd Avenue	7999	Operational	33	26	25.57	112	4	36.25	Scott Coughlin	A,F,L,M,G
PRD Special Operations Division Harmon Pool	1239 S. 5th Avenue	7999	Operational	33	26	5.10	112	4	47.24	Scott Coughlin	A,F,L,M,G
PRD Special Operations Division Hermoso Pool	5749 S. 20th Street	7999	Operational	33	23	39.50	112	2	17.64	Scott Coughlin	A,F,L,M,G
PRD Special Operations Division Holiday Pool	4530 N. 67th Ave.	7999	Operational	33	30	12.68	112	12	16.02	Scott Coughlin	A,F,L,M,G
PRD Special Operations Division Madison Pool	1440 E. Glenrosa Ave.	7999	Operational	33	29	55.77	112	3	1.12	Scott Coughlin	A,F,L,M,G
PRD Special Operations Division Marivue Pool	5625 W. Osborn Rd.	7999	Operational	33	29	13.21	112	10	51.04	Scott Coughlin	A,F,L,M,G
PRD Special Operations Division Maryvale Pool	4444 N. 51st Ave.	7999	Operational	33	30	6.17	112	10	10.57	Scott Coughlin	A,F,L,M,G
PRD Special Operations Division Mountain View Pool	1104 E. Grovers Ave.	7999	Operational	33	38	52.98	112	3	35.26	Scott Coughlin	A,F,L,M,G
PRD Special Operations Division Papago Softball Complex	6201 E. Oak Street	7999	Operational	33	28	13.84	111	56	43.95	Scott Coughlin	A,C,D,F,G,H
PRD Special Operations Division Paradise Valley Pool	17648 N. 40th St.	7999	Operational	33	38	50.46	111	59	51.09	Scott Coughlin	A,F,L,M,G
PRD Special Operations Division Pecos Park Pool	17010 S. 48th St.	7999	Operational	33	17	29.07	111	59	10.68	Scott Coughlin	A,F,L,M,G
PRD Special Operations Division Perry Pool	3131 E. Windsor	7999	Operational	33	28	41.56	112	0	48.83	Scott Coughlin	A,F,L,M,G
PRD Special Operations Division Pierce Pool	2150 N. 46th St.	7999	Operational	33	28	13.56	111	59	0.58	Scott Coughlin	A,F,L,M,G
PRD Special Operations Division Reach 11 Maintenance Yard/Sports Complex	2425 and 2405 E. Deer Valley Rd.	7999	Operational	33	41	11.66	112	1	29.73	Scott Coughlin	A,C,D,E,F,G,H
PRD Special Operations Division Roadrunner Pool	3502 E. Cactus Rd.	7999	Operational	33	35	52.86	112	0	25.26	Scott Coughlin	A,F,L,M,G
PRD Special Operations Division Roosevelt Pool	6246 S. 7th Street	7999	Operational	33	23	20.25	112	3	57.61	Scott Coughlin	A,F,L,M,G
PRD Special Operations Division Rose Mofford Soccer - Maintenance	9833 N. 25th Ave.	7999	Operational	33	34	49.59	112	6	46.10	Scott Coughlin	A,C,D,E,F,G,H

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PRD Special Operations Division Starlight Pool	7810 W. Osborn Rd.	7999	Operational	33	29	16.48	112	13	39.36	Scott Coughlin	A,F,L,M,G
PRD Special Operations Division Sunnyslope Pool	301 W. Dunlap	7999	Operational	33	34	1.76	112	4	42.40	Scott Coughlin	A,F,L,M,G
PRD Special Operations Division Telephone Pioneers of America Pool	1946 W. Morningside	7999	Operational	33	38	57.25	112	6	6.35	Scott Coughlin	A,F,L,M,G
PRD Special Operations Division University Pool	1102 W. Van Buren	7999	Operational	33	27	9.70	112	5	12.91	Scott Coughlin	A,F,L,M,G
PRD Special Operations Division Washington Pool	6655 N. 23rd Ave.	7999	Operational	33	32	3.81	112	6	26.64	Scott Coughlin	A,F,L,M,G
PW 22nd Avenue Equipment Management Division South Truck and Tire Shops & Metro Facilities Division HVAC	2441 S. 22nd Ave.	7538/6512/ 7379	Operational	33	25	29.34	112	6	18.54	Mikaela Castle	A,B,C,D,E,F,G,J,L
PW Madison Street Fueling Facility	1201 E Madison St.	5541	Operational	33	26	44.63	112	3	25.23	Mikaela Castle	B,C
PW 27th Avenue Transfer Station Solid Waste Disposal Division	3060 S. 27th Avenue	4212/5093	Operational	33	25	1.34	112	7	6.73	Mikaela Castle	A,B,C,D,F,H,L,N
PW 310 Parking Garage Downtown Facilities Division	310 W. Adams St	7521	Operational	33	26	58.86	112	4	42.79	Mikaela Castle	D
PW Calvin C. Goode Downtown Facilities Division - 10th Floor	251 W. Washington	9199	Operational	33	26	52.26	112	4	37.45	Mikaela Castle	L
PW City Hall Facilities Management Division	200 W. Washington	9199	Operational	33	26	54.73	112	4	38.57	Mikaela Castle	L
PW (Maint) Fire Operation Equipment Management Division & Fire Resources Sterling	2625 S. 19th Avenue	7538/9224	Operational	33	25	25.00	112	5	55.44	Mikaela Castle/Jeff Schripsema	A,B,C,D,E,F,G,J,L
PW Municipal Court Building	300 W. Washington	9199	Operational	33	26	55.22	112	4	41.68	Mikaela Castle	L
PW North Gateway Transfer Station Solid Waste Disposal Division	30205 N. Black Canyon Hwy	4212/5093	Operational	33	45	38.69	112	6	58.98	Mikaela Castle	A,B,C,F,N,L
PW Petroleum Stores	2239 W. Lower Buckeye Road	4214	Operational	33	25	18.90	112	6	26.36	Mikaela Castle	B,C,D
Glenrosa (Northwest) Service Center PW Equipment Management Division, Water Services Yard, PRD Warehouse & Maintenance Yard, Street Transportation General and Preventive Maintenance	4020, 4021, 4155 W. Glenrosa	7538/4953/ 4941/4952/ 1611/7999	Operational	33	24	53.60	112	8	43.55	Mikaela Castle/Lynn Ogata/Scott Coughlin/Miguel Vasquez/James Marshall	A,B,C,D,E,F,G,H,J,L,N



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Okemah Service Center PW Equipment Management Division & Street Transportation Southeast General Maintenance	3828 E. Anne St.	7538/4953/ 1611	Operational	33	24	52.47	111	59	49.37	Mikaela Castle/Miguel Vasquez/ <u>James Marshall</u>	A,B,C,D,E,F,G,H,J,L,N
Salt River (Southwest) Service Center PW Equipment Management Division, Water Services Yard & Street Transportation PSW General Maintenance	3045 S. 22nd Avenue	7538/4953/ 4941/1611	Operational	33	25	7.35	112	6	18.54	Mikaela Castle/Lynn Ogata/Miguel Vasquez/ <u>James Marshall</u>	A,B,C,D,E,F,G,H,J,L,N
PW Union Hills (North) Service Center Equipment Management Division, Water Services Yard & Street Transportation (North) Service Center Maintenance	202 E. Union Hills Drive	7538/4953/ 4941/4952/ 1611	Operational	33	39	19.81	112	4	17.37	Mikaela Castle/Lynn Ogata/Miguel Vasquez/ <u>James Marshall</u>	A,B,C,D,E,F,G,H,J,L,N
Street Transportation DCM Shop (Materials Lab)	1034 E. Madison	1611	Operational	33	26	46.58	112	3	35.36	Miguel Vasquez/ <u>James Marshall</u>	A,D,F
Street Transportation Signing and Striping	4035 W. Glenrosa	1721	Operational	33	29	53.30	112	8	49.08	Miguel Vasquez/ <u>James Marshall</u>	A,D,E,F
Street Transportation Traffic Signal Shop	2141 E. Jefferson Street	1611	Operational	33	26	46.92	112	2	7.37	Miguel Vasquez/ <u>James Marshall</u>	A,D,F,E
WSD 23rd Avenue W.W.T.P. (includes Wastewater Collections)	2470 S. 22nd Ave.	4952	Operational	33	25	23.10	112	6	29.40	Lynn Ogata	A,B,C,D,E,F,G,H,J,L
WSD 24th St. WTP	6202 N. 24th St.	4941	Operational	33	26	46.92	112	2	7.37	Lynn Ogata	A,B,C,D,E,F,G,H,J,L
WSD 5E W264 ATF	6630 E. Bell Road	4941	Operational	33	38	26.63	111	56	16.09	Lynn Ogata	L,B
WSD 91st Avenue W.W.T.P. (includes PW 91st Ave EMD)	5615 S. 91st. Ave.	4952/7538	Operational	33	23	37.10	112	15	11.50	Lynn Ogata	A,B,C,D,E,F,G,H,J,L
WSD Booster 2A-B11	4114 N 20th St	4941	Operational	33	29	43.62	112	2	23.05	Lynn Ogata	A,B,D,G,L
WSD Booster 4A-B11	16811 N 31st St.	4941	Operational	33	63	93.33	112	1	52.38	Lynn Ogata	L,B
WSD Booster 4B-B2	3192 E Sierra Vista Dr	4941	Operational	33	<u>31</u>	57.36	112	0	46.86	Lynn Ogata	L,B,G
WSD Booster 4F-B1, Lower Coral Gables	14627 N. 15th Avenue	4941	Operational	33	37	11.18	112	5	27.67	Lynn Ogata	L,B
WSD Booster 4J-B2 (Short Tank)	7500 N Invergordon Rd	4941	Operational	33	32	45.30	111	56	36.35	Lynn Ogata	L,B,G
WSD Booster 4M-B2, Phoenician	5943 E. Elsie Avenue	4941	Operational	33	30	9.60	111	57	8.60	Lynn Ogata	L,B
WSD Booster 4SC-B1 (Foothills)	15234 Desert Foothills Parkway	4941	Operational	33	18	26.29	112	3	19.53	Lynn Ogata	L,B
WSD Booster 4SC-B2, Privada (Foothills Zone 4)	437 W. Desert Foothills Parkway	4941	Operational	33	18	32.79	112	4	53.94	Lynn Ogata	L,B
WSD Booster 4SE-B1 (Sanctuary)	15651 S. 19th Street	4941	Operational	33	18	14.52	112	2	34.81	Lynn Ogata	L,B

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WSD Booster 5EA-B1 (Deem Hills, 4AW-R1)	3301 W. Pinnacle Vista Drive	4941	Operational	33	43	56.76	112	7	48.51	Lynn Ogata	L,B
WSD Booster 5EA-B3, 63rd Avenue and Jomax	27420 N. 63rd Avenue	4941	Operational	33	43	59.53	112	11	41.99	Lynn Ogata	L,B
WSD Booster 5EB-B2	5220 W. Inspiration Mtn. Parkway	4941	Operational	33	43	50.02	112	10	25.21	Lynn Ogata	L,B
WSD Booster 5ED-B1 (I-17 Corridor, Tramonto, 4A-R2)	26701 N. 19th Avenue	4941	Operational	33	43	37.72	112	5	56.65	Lynn Ogata	L,B
WSD Booster 5J-B3	6045 E Cheney	4941	Operational	33	32	44.55	111	57	3.41	Lynn Ogata	L,B,G
WSD Booster 5SB-B1 (Vista Estates)	201 W. Desert Foothills Parkway	4941	Operational	33	18	43.28	112	4	31.40	Lynn Ogata	L,B
WSD Booster 6B-B1 (I-17 Corridor, Tramonto, 5ED-R1)	31601 N. 26th Ave.	4941	Operational	33	46	34.66	112	6	45.60	Lynn Ogata	L,B
WSD Booster 7A-B1 (Cave Creek No. 7, 6A-R1, W299)	26829 N. Cave Creek Road	4941	Operational	33	43	47.54	112	0	18.96	Lynn Ogata	L,B
WSD Booster 7B-B1/8B-B1 (Tramonto, 6B-R1)	34650 N. 27th Avenue	4941	Operational	33	47	55.79	112	7	6.95	Lynn Ogata	L,B
WSD Booster 8A-B1 (Cave Creek No. 8, 7A-R3)	29221 N. Cave Creek Road	4941	Operational	33	45	1.52	111	59	32.74	Lynn Ogata	L,B
WSD Booster 8CP-B1, Anthem	4505 W. Opportunity Way	4941	Operational	33	51	51.04	112	9	13.28	Lynn Ogata	L,B
WSD Booster 9D-B1	4114 W. Circle Mountain Rd.	4941	Operational	33	88	60.29	112	14	84.78	Lynn Ogata	L,B
WSD Cave Creek Water Reclamation Plant	22841 N. Cave Creek Rd.	4952	Operational	33	41	27.90	112	1	30.60	Lynn Ogata	A,B,C,D,E,F,G,H,J,L
WSD Deer Valley W.T.P., Administration bldg., 2nd Floor Janitorial Room	3030 W. Dunlap Avenue	4941	Operational	33	34	14.80	112	7	31.70	Lynn Ogata	L,B
WSD Lift Station 40, Ray Road	5102 E. Ray Road	4952	Operational	33	19	14.73	111	58	22.95	Lynn Ogata	L,B
WSD Lift Station 41, E. Pecos Road	17017 S. 48th Street	4952	Operational	33	17	29.06	111	58	46.98	Lynn Ogata	L,B
WSD Lift Station 42, W. Pecos Road	3302 W. Pecos Road	4952	Operational	33	17	27.36	112	7	49.64	Lynn Ogata	L,B
WSD Lift Station 43, 75th Avenue	6834 S. 75th Avenue	4952	Operational	33	23	9.73	112	13	13.35	Lynn Ogata	L,B
WSD Lift Station 44, W. Softwind Drive	6570 W. Softwind Drive	4952	Operational	33	42	6.17	112	12	9.16	Lynn Ogata	L,B
WSD Lift Station 46, W. Indian School Road	10652 W. Indian School Road	4952	Operational	33	29	38.01	112	17	23.22	Lynn Ogata	L,B
WSD Lift Station 47, 113th Drive	4102 N. 113th Drive	4952	Operational	33	29	38.57	112	8	9.50	Lynn Ogata	L,B
WSD Lift Station 50, North 49th Dr.	12050 N. 49th Drive	4952	Operational	33	45	46.04	112	9	54.92	Lynn Ogata	L,B
WSD Lift Station 51 and Well 294, North Tatum Rd.	18635 N. Tatum Boulevard	4952/4941	Operational	33	39	42.27	111	58	33.11	Lynn Ogata	L,B
WSD Lift Station 55, South Foothills Drive	16800 S. Foothills Drive	4952	Operational	33	17	33.27	112	4	49.04	Lynn Ogata	L,B

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WSD Lift Station 56, South 7th Avenue	11 W. Liberty Lane	4952	Operational	33	17	33.16	112	4	59.62	Lynn Ogata	L,B
WSD Lift Station 61, S. 107th Avenue	4325 S. 107th Avenue	4952	Operational	33	24	26.21	112	17	19.98	Lynn Ogata	L,B
WSD Lift Station 62, 91st Avenue and Broadway Rd	9059 W. Broadway Rd.	4952	Operational	33	24	22.83	112	15	14.62	Lynn Ogata	L,B
WSD Lift Station 64, North 64th Street	18018 North 64th Street	4952	Operational	33	38	59.02	111	56	32.41	Lynn Ogata	L,B
WSD Lift Station 65	27001 N. Valley Parkway	4952	Operational	33	43	49.67	112	5	56.40	Lynn Ogata	L,B
WSD Lift Station 66	30101 N. Black Canyon Freeway	4952	Operational	33	45	18.81	112	6	54.94	Lynn Ogata	L,B
WSD Lift Station 68, Magellan Drive/Anthem West	4925 W. Magellan Drive	4952	Operational	33	52	35.96	112	9	59.06	Lynn Ogata	L,B
WSD Lift Station 72	4555 E Mayo Blvd	4952	Operational	33	39	56.60	111	59	16.53	Lynn Ogata	A,B,D,G,L
WSD Lift Station 73	11284 W. Camelback Road	4952	Operational	33	30	32.42	112	18	7.51	Lynn Ogata	L,B
WSD Lift Station 76	38107 N. Pioneer Road	4952	Operational	33	82	99.75	112	14	55.38	Lynn Ogata	L,B
WSD Lift Station 77	31700 N 51st Ave	4952	Operational	33	77	35.3	112	17	44.44	Lynn Ogata	L,B
WSD Odor Control Station 70 (Well 230, 4A-W230)	5712 E. Thunderbird Road	4952	Operational	33	36	42.36	111	57	29.77	Lynn Ogata	L
WSD Odor Control Station 71 (Well 255, 3D-W255)	4002 W. Grovers Avenue	4952	Operational	33	38	50.91	112	8	43.78	Lynn Ogata	L
WSD Odor Control Station 72, 47th Ave. and Pinnacle Peak Road	4653 West Pinnacle Peak Road	4952	Operational	33	41	52.21	112	9	37.70	Lynn Ogata	L
WSD Odor Control Station 76, Airport East Scrubber	4465 East Sky Harbor Blvd.	4952	Operational	33	26	6.33	111	59	20.41	Lynn Ogata	L
WSD Odor Control Station 78 (Well 272, 2A-W272, 55-608405, Payback Well)	10445 North 43rd Avenue	4952	Operational	33	34	53.52	112	9	4.41	Lynn Ogata	L
WSD Odor Control Station 79, 15th Ave. and Bethany Home Rd. (Yucca Library)	5648 North 15th Avenue	4952	Operational	33	31	10.62	112	5	29.88	Lynn Ogata	L
WSD Odor Control Station 82, 15th Street and Jefferson	1548 East Jefferson Street	4952	Operational	33	26	46.71	112	2	55.72	Lynn Ogata	L
WSD Odor Control Station 86 (McDowell)	1838 East Brill Street	4952	Operational	33	27	54.13	112	2	30.04	Lynn Ogata	L
WSD Odor Control Station 88 (Coronado Park)	1717 North 12th Street	4952	Operational	33	25	50.33	112	3	22.04	Lynn Ogata	L
WSD Odor Control Station 90 (Fire Station 39)	2276 West Southern Avenue	4952	Operational	33	23	33.43	112	6	26.88	Lynn Ogata	L
WSD Odor Control Station - Corona	30 West Corona Avenue	4952	Operational	33	24	23.33	112	4	29.57	Lynn Ogata	L
WSD PRV 0S-R4	6625 West Buckeye Road	4941	Operational	33	26	12.90	112	12	11.36	Lynn Ogata	A,B,D,G,L
WSD PRV 0S-R5	4230 South 35th Ave	4941	Operational	33	24	28.31	112	8	2.90	Lynn Ogata	A,B,D,G,L
WSD 0-R3 PRV 11	9402 West Indian School Road	4941	Operational	33	29	41.10	112	15	45.53	Lynn Ogata	L,B

**Appendix E**  
**City of Phoenix Municipal Inventory of Facilities with a Potential to Relase Pollutants to Stormwater**

City facility	Address	SIC Code (best fit for services at facility)	Operating Status	Latitude - Degrees	Latitude - Minutes	Latitude - Seconds	Longitude - Degrees	Longitude - Minutes	Longitude - Seconds	Facility Contact	Brief Description of Activities of Concern (use letter codes A-N on second worksheet tab. If O (other), please specify.)
WSD Service Yard - Campbell Support Services (Well 69)	4436 N. 35th Ave.	4941	Operational	33	30	5.56	112	8	6.67	Lynn Ogata	A,B,C,D,E,F,G,H,J,L
WSD Service Yard - Cave Creek Water Yard	21642 N. 20th Street	4941	Operational	33	40	59.64	112	2	29.82	Lynn Ogata	A,B,C,D,E,F,G,H,J,L
WSD Service Yard - Corona Water Distribution Yard	936 E Broadway	4941	Operational	33	24	21.92	112	4	28.39	Lynn Ogata	A,B,C,D,E,F,G,H,J,L
WSD Service Yard - East Wastewater Collection Service Yard (OCS 75)	3015 N. 52nd Street	4952	Operational	33	28	57.79	111	58	9.08	Lynn Ogata	A,B,C,D,E,F,G,H,J,L
WSD Service Yard - East Distribution, Reservoir Yard	3015 N. 52nd Street	4941	Operational	33	28	57.79	111	58	9.08	Lynn Ogata	A,B,C,D,E,F,G,H,J,L
WSD Service Yard - Morten Water Distribution Yard	7617 N. 21st Avenue	4941	Operational	33	32	56.04	112	6	12.53	Lynn Ogata	A,B,C,D,E,F,G,H,J,L
WSD Service Yard - Remote Facilities Service Yard (WSSS, 2A-B9, 2C-B3)	5204 E. Thomas Road	4941	Operational	33	24	50.44	111	58	9.56	Lynn Ogata	A,B,C,D,E,F,G,H,J,L
WSD Union Hills W.T.P., bldg. 04, Paint/Oil	2001 E. Deer Valley Rd.	4941	Operational	33	4	9.30	112	2	4.80	Lynn Ogata	A,B,C,D,E,F,G,H,J,L
Water Storage 1-ES1 (64th Street Reservoir, 2C-B1, 3B-B1)	2650 N 64th St	4941	Operational	33	28	42.99	111	56	43.38	Lynn Ogata	A,B,D,G,L
WSD Water Storage 1-ES3 ( South Mountain Reservoir, 2S-B4, 3SE-B4, 3S-R1, 4SN-B1)	10830 S. 27th Avenue	4941	Operational	33	20	52.78	112	7	9.85	Lynn Ogata	L,B
WSD Water Storage 1-ES4 (42nd Place Reservoir, Old Highline Reservoir)	8002 S. 42nd Place	4941	Operational	33	22	25.88	111	59	32.75	Lynn Ogata	L,B
WSD Water Storage 2A-ES1 (Shaw Butte Reservoir)	1638 W. Sunnyside Drive	4941	Operational	33	35	35.20	112	5	40.52	Lynn Ogata	L,B
WSD Water Storage 2C-ES1 (Papago Reservoir)	1820 N. 60th Street	4941	Operational	33	28	5.44	111	57	17.27	Lynn Ogata	L,B
WSD Water Storage 2S-ES1 (Lower Mineral Road Reservoir, 3S-B1)	745 E. Mineral Road	4941	Operational	33	21	21.26	112	3	49.98	Lynn Ogata	L,B
WSD Water Storage 2S-ES2 (Police Tank)	1201 W. Olney	4941	Operational	33	21	1.72	112	5	22.99	Lynn Ogata	L,B
WSD Water Storage 3A-ES1 (Sunnyslope Storage Tank, Old Hatcher)	1835 E. Hatcher Road	4941	Operational	33	34	15.80	112	2	32.08	Lynn Ogata	L,B
WSD Water Storage 3A-ES2 (North Mountain Reservoir(at	10234 N. 7th Street	4941	Operational	33	34	48.47	112	3	58.54	Lynn Ogata	L,B
WSD Water Storage 3D-ES1 (Hedgepeth Hills Reservoir)	21020 N. 47th Avenue	4941	Operational	33	40	38.94	112	9	43.71	Lynn Ogata	L,B
WSD Water Storage 3SE-ES1 (Horse Tank Reservoir, 4SA-B1)	3201 E. Equestrian Trail	4941	Operational	33	20	25.57	112	0	50.39	Lynn Ogata	L,B

**Appendix E**  
**City of Phoenix Municipal Inventory of Facilities with a Potential to Release Pollutants to Stormwater**

City facility	Address	SIC Code (best fit for services at facility)	Operating Status	Latitude - Degrees	Latitude - Minutes	Latitude - Seconds	Longitude - Degrees	Longitude - Minutes	Longitude - Seconds	Facility Contact	Brief Description of Activities of Concern (use letter codes A-N on second worksheet tab. If O (other), please specify.)
WSD Water Storage 3SE-ES2 (Mountain Park Ranch Storage(dif lat/long), 4SA-B3, Diamond Ridge Booster)	14100 S. 24th Way	4941	Operational	33	19	8.06	112	1	49.29	Lynn Ogata	L,B
WSD Water Storage 3SE-ES3 (Foothills Storage Tank)	15805 S. 3rd Street	4941	Operational	33	18	10.37	112	4	9.60	Lynn Ogata	L,B
WSD Water Storage 3S-ES1 (Upper Mineral Road Storage Tank)	901 E. Mineral Road	4941	Operational	33	21	16.87	112	3	41.29	Lynn Ogata	L,B
WSD Water Storage 4A-ES5 (Deems Hills Reservoir)	27442 N. 39th Avenue	4941	Operational	33	44	4.48	112	8	56.72	Lynn Ogata	L,B
WSD Water Storage 4F-ES1 (Upper Coral Gables Storage Tank, 5F-B2, 4FX-R1)	14214 N. 15th Ave.	4941	Operational	33	36	53.83	112	5	20.17	Lynn Ogata	L,B
WSD Water Storage 4M-ES1 (Cholla Invergordon Storage Tank, 5P-B1, Lower Cloudcroft)	5156 N. 61st Street	4941	Operational	33	30	47.47	111	56	59.12	Lynn Ogata	L,B
WSD Water Storage 4SC-ES1 (Tapestry Canyon Storage Tank, 6SA-B1)	1444 E. Desert Willow Drive	4941	Operational	33	19	1.53	112	3	2.98	Lynn Ogata	L,B
WSD Water Storage 5C-ES1 (Red Rock Storage Tank)	4948 E. Red Rock Road	4941	Operational	33	30	59.06	111	58	23.51	Lynn Ogata	L,B
WSD Water Storage 6A-B1	24201 N. Cave Creek Road	4941	Operational	33	42	24.06	112	1	10.93	Lynn Ogata	L,B
WSD Water Storage 6A-ES1 (Happy Valley Storage Tank)	24425 N. 64th Street	4941	Operational	33	30	45.78	111	56	23.42	Lynn Ogata	L,B
Water Storage 7A-GS2 (Pinnacle Peak)	23425 N 56th St	4941	Operational	33	41	58.00	111	57	32.64	Lynn Ogata	A,B,D,G,L
WSD Water Storage 7B-ES1 (Tramonto Storage Tank)	34701 N. 19th Avenue	4941	Operational	33	48	3.42	112	5	57.01	Lynn Ogata	L,B
WSD Storage 8A-ES1; Booster 11A-B1 & 9A-B3	32625 N 56th St	4941	Operational	33	46	28.01	111	57	33.77	Lynn Ogata	A,B,D,G,L
WSD Well 1-W72	5126 N 37th Avenue	4941	Operational	33	30	46.05	112	8	22.35	Lynn Ogata	L,B
WSD Well 166 (4A-W166, 55- 626582)	4138 E. Greenway Rd	4941	Operational	33	37	37.46	111	59	27.70	Lynn Ogata	L,B
WSD Well 180 (3C-W180, 3C- R3), 55-626589	13009 N. 56th Street	4941	Operational	33	36	17.63	111	57	36.40	Lynn Ogata	L,B
WSD Well 205 - (1S-W205, 1S- R1), 55-626598	4702 W. Estrella Drive	4941	Operational	33	20	2.91	112	9	39.86	Lynn Ogata	L,B
WSD Well 211 (2A-W211, 55- 626603)	3848 W. Cholla Street	4941	Operational	33	35	20.64	112	8	32.92	Lynn Ogata	L,B
WSD Well 218 - (2A-W218), 55- 626610	4375 W. Acoma Drive	4941	Operational	33	37	1.54	112	9	11.07	Lynn Ogata	L,B
WSD Well 232 - (3C-W232), 55- 626624	10831 N. 56th Street	4941	Operational	33	35	7.90	111	57	37.08	Lynn Ogata	L,B

**Appendix E**  
**City of Phoenix Municipal Inventory of Facilities with a Potential to Release Pollutants to Stormwater**

City facility	Address	SIC Code (best fit for services at facility)	Operating Status	Latitude - Degrees	Latitude - Minutes	Latitude - Seconds	Longitude - Degrees	Longitude - Minutes	Longitude - Seconds	Facility Contact	Brief Description of Activities of Concern (use letter codes A-N on second worksheet tab. If O (other), please specify.)
WSD Well 233 - (3C-W233), 55-626625	10801 N. 56th Street	4941	Operational	33	35	4.44	111	57	36.39	Lynn Ogata	L,B
WSD Well 235 (3C-W235, 3C-B1, 3C-GS1), 55-626627	6026 E. Caballo Street	4941	Operational	33	33	45.17	111	57	4.23	Lynn Ogata	L,B
WSD Well 244 (4A-W244, 5E-B2, CAP, 55-087614)	5602 E. Bell Road	4941	Operational	33	38	26.90	111	57	34.98	Lynn Ogata	L,B
WSD Well 250 (3D-W250, Odor Control Station 77, 55-626637)	4715 West Bell Road	4941	Operational	33	38	19.45	112	9	38.22	Lynn Ogata	L,B
WSD Well 261 (4A-W261, 4A-ES4, 4A-R1, 4A-R4, 6A-B2, 55-508818, Rose Garden, Desert Ridge)	20805 N. 56th Street	4941	Operational	33	40	29.95	111	57	31.48	Lynn Ogata	L,B
WSD Well 264 - (5E-W264 - Active), 55-501643	6714 E. Juniper Avenue	4941	Operational	33	38	23.80	111	56	8.08	Lynn Ogata	L,B
WSD Well 275 - (4A-W275 - Active), 55-504791	5746 E. Saint John Road	4941	Operational	33	38	51.58	111	57	21.02	Lynn Ogata	L,B
WSD Well 276 Active (Tatum Ranch, 8A-W276, 8A-GS1, 8A-B2), 55-603807	29402 N. 44th Street	4941	Operational	33	45	7.88	111	59	16.38	Lynn Ogata	L,B
WSD Well 280 (9A-W280, 9A-GS1, 9A-B1), 55-527549	4390 E. Rancho Tierra Drive	4941	Operational	33	45	55.50	111	59	9.52	Lynn Ogata	L,B
WSD Well 281 (9A-W281, 9A-GS2, 9A-B2, 10A-B1, Casa de Cielo Storage Tank), 55-524559	33005 N. 52nd Street	4941	Operational	33	47	11.13	111	58	7.83	Lynn Ogata	L,B
WSD Well 288 (8A-W288, Active), 55-540078	28401 N. Tatum Blvd	4941	Operational	33	44	34.82	111	58	34.59	Lynn Ogata	L,B
WSD Well 289 (8A-W289, Active), 55-540079	28606 N. 56th Street	4941	Operational	33	44	41.65	111	57	39.48	Lynn Ogata	L,B
WSD Well 290 (7A-W290, 7A-B2, 7A-GS1), 55-623687	26425 N. 40th Street	4941	Operational	33	43	33.54	111	59	44.51	Lynn Ogata	L,B
WSD Well 295 - (6A-W295 - Active), 55-560509	22204 N. 40th Way	4941	Operational	33	41	22.39	111	59	6.06	Lynn Ogata	L,B
WSD Well 296 (4A-W296 A163-Active), 55-583886	18604 N. 56th Street	4941	Operational	33	39	19.02	111	57	28.77	Lynn Ogata	A,B,D,G,L
WSD Well 303, (9A-W303 - Active), 55-227006	22204 N. 40th Way	4941	Operational	33	77	74.15	111	97	57.41	Lynn Ogata	L,B
Yellow shading indicates facilities prioritized as higher-risk using the criteria specified in the SWMP.											
Inventory only includes City owned and operated property within the jurisdiction of the MS4. Pink shading indicates facilities with MSGP coverage.											

Activities of Concern codes

Type of Municipal Facility	Activities of Concern Conducted	Activity Code
Maintenance Yards and Hazardous Materials Storage Facilities	Loading, unloading, handling, and storage of significant materials including anti-freeze, asphalt, batteries, chemicals, concrete, diesel wastes, emulsions, fertilizer, fuel, green wastes, hazardous materials, new and used oil, paint products, pesticides, scrap metal, solvents, trash and debris, and wash water	A
	Filling of aboveground and underground storage tanks (ASTs and USTs) with fuels	B
	Dispensing of fuels to vehicles, equipment, and portable fuel containers	C
	Vehicle and equipment parking and storage	D
	Vehicle, equipment, and material washing and steam cleaning	E
	Leak and spill cleanup	F
	Landscape, garden, and general maintenance and cleaning	G
Fueling Stations	Filling of aboveground and underground storage tanks (ASTs and USTs) with fuels	B
	Dispensing of fuels to vehicles, equipment, and portable fuel containers	C
Parks and Recreational Facilities, including Golf Courses	Landscape, garden, and general maintenance and cleaning	G
	Application of pesticides/herbicides	H
	Leak and spill cleanup	F
Warehouses	Loading, unloading, handling, and storage of significant materials including anti-freeze, asphalt, batteries, chemicals, concrete, diesel wastes, emulsions, fertilizer, fuel, green wastes, hazardous materials, new and used oil, paint products, pesticides, scrap metal	A
	Landscape, garden, and general maintenance and cleaning	G
Fire and Police Stations	Loading, unloading, handling, and storage of significant materials including antifreeze, chemicals, new and used oil, scrap metal, and trash and debris.	A
	Vehicle and equipment maintenance	J
	Vehicle and equipment parking and storage	D
	Vehicle and equipment washing and steam cleaning	E
	Leak and spill cleanup	F
	Dispensing of fuels to vehicles, equipment, and portable fuel containers	C
	Landscape, garden and general maintenance and cleaning	G
Service Centers / Street Transportation Sites	Vehicle and equipment maintenance	J
	Vehicle and equipment parking and storage	D
	Loading, unloading, handling, and storage of significant materials including antifreeze, batteries, chemicals, new and used oil, scrap metal, and trash and debris.	A
	Filling of aboveground and underground storage tanks (ASTs and USTs) with fuels	B
	Leak and spill cleanup	F
	Bulk Material Pile Storage	N
	Dispensing of fuels to vehicles, equipment, and portable fuel containers	C
	Vehicle and equipment washing and steam cleaning	E
Swimming Pools	Storage and use of chemicals, including chlorine	L
	Filter maintenance and backwashing	M
	Landscape, garden, and general maintenance and cleaning	G
Water Treatment Facilities and POTWs	Loading, unloading, handling, and storage of materials and chemicals	A
	Vehicle and equipment washing and steam cleaning	E
	Storage and use of chemicals, including chlorine	L
	Leak and spill cleanup	F
	Landscape, garden, and general maintenance and cleaning	G
Municipal Airports	Leak and spill cleanup	F

Activities of Concern codes

Type of Municipal Facility	Activities of Concern Conducted	Activity Code
	Filling of aboveground and underground storage tanks (ASTs and USTs) with fuels	B
	Landscape, garden, and general maintenance and cleaning	G
	Dispensing of fuels to vehicles, equipment, and portable fuel containers	C
	Vehicle and equipment parking and storage	D
	Vehicle and equipment maintenance	J
Landfills - Closed or active	Vehicle and equipment parking and storage	D
	Vehicle and equipment maintenance	J
	Leak and spill cleanup	F
OTHER	Other	O (specify)



## **APPENDIX F**

### **MUNICIPAL MSGP FACILITIES**

## Appendix F Municipal MSGP Facilities

Department	Facility	Address	POC	Authorization #	Comments
<b>Public Works</b>	Skunk Creek Landfill	3165 W Happy Valley Rd Phoenix, AZ 85027	Engineering Supervisor Doug Sawyer 602-534-1157	AZNC-107678	No Exposure Certification February 2025
	27 <sup>th</sup> Avenue Solid Waste Management Facility	3060 S 27 <sup>th</sup> Ave Phoenix, AZ 85009		AZMS-108475	
	SR 85 Landfill	28361 W Patterson Rd Buckeye, AZ 85326		AZMS-108476	
	North Gateway Transfer Station	30205 N Black Canyon Highway, Phoenix, AZ 85085		AZMS-108473	
<b>Aviation</b>	Sky Harbor International Airport	3400 E Sky Harbor Blvd, Ste 3300 Phoenix, AZ 85034	Project Manager Lisa Farinas 602-273-2787	AZMS-108248	
	Deer Valley Airport	702 W Deer Valley Rd Phoenix, AZ 85027		AZMS-108247	
	Phoenix/Goodyear Airport	1658 S Litchfield Rd Goodyear, AZ 85338		AZMS-108245	
<b>Water Services</b>	91 <sup>st</sup> Avenue Wastewater Treatment Plant	5616 S 91 <sup>st</sup> Ave Tolleson, AZ 85353	Environmental Quality Specialist Doug Taylor 602-534-5081	AZMS-80181	
	23 <sup>rd</sup> Avenue Wastewater Treatment Plant	2470 S 22 <sup>nd</sup> Ave Phoenix, AZ 85009		AZMS-80180	
	Cave Creek Water Reclamation Plant	22841 N Cave Creek Rd Phoenix, AZ 85024		AZMS-80179	
<b>City Clerk</b>	Customer Service Center (Print Shop)	2640 S 22 <sup>nd</sup> Ave Phoenix, AZ	Environmental Coordinator Hilary Hartline 602-534-1778	AZNC-85446	No Exposure Certification September 2020

## **APPENDIX G**

### **CITYWIDE STORMWATER TRAINING PLAN**

**SWMP – APPENDIX G**

City of Phoenix Stormwater Training Plan for AZPDES MS4 Permit (permit effective date 7/1/21)

Training will be provided for new employees with direct stormwater responsibilities at least one time per year.  
Refresher training for existing employees with direct stormwater responsibility will be provided at least once every two years.  
In the event there are no new employees in a given period, this will be documented in the Annual Report.  
Note: Municipal Employee General Awareness Training has different training frequency requirements which are listed below.

**Permit Section 4.4.D Illicit Discharge Detection and Elimination (IDDE)**

Course Objective	Course Topics	Employees Trained/Course Code
<b>Municipal Employee Training - Stormwater Inspectors</b> Educate and update inspectors on detecting, investigating, and identifying illicit discharges and recognizing allowable sources of non-stormwater discharges.	<b>IDDE</b> <ul style="list-style-type: none"><li>• Federal &amp; local regulatory requirements (including MS4 permit, SWMP, Phoenix PCC 32C, allowable AZPDES discharges such as DeMinimis discharges).</li><li>• Detecting, investigating and identifying illicit discharges.</li><li>• Field screening procedures, sampling methods, field measurements, and outfall inspections.</li><li>• Sources of non-stormwater discharges.</li></ul>	<b>Department/Employees</b> <u>WSD</u> <ul style="list-style-type: none"><li>• Water Quality Inspectors</li><li>• Senior Water Quality Inspectors</li><li>• Chief Water Quality Inspectors</li><li>• Stormwater Compliance Coordinator</li></ul> <b>New Employee &amp; Refresher Training:</b> WSSWPB (WSD737-ILT-Stormwater Permits Part B, WSSWRB-Video), <u>OR</u> equivalent documented OJT
<b>Municipal Employee Training – General Awareness</b> Educate and update field staff with no direct stormwater responsibilities on illicit discharges and best management practices (BMPs) .  <b>Provide Initial Training:</b> By July 1, 2022 <b>Provide Additional Training:</b> Select groups of staff every two years (FY 23/24, FY 25/26).	<b>Stormwater Pollution Awareness</b> <ul style="list-style-type: none"><li>• MS4 permit and requirements.</li><li>• Identifying harmful/prohibited practices (illegal dumping or spills) into the City’s stormwater system.</li><li>• Management procedure (reporting to the WSD Stormwater Management Section).</li></ul>	<b>Department/Employees</b> <u>PWD</u> <ul style="list-style-type: none"><li>• SWFS Drivers</li><li>• SWFS Environmental Specialist</li><li>• Zero Waste Team</li></ul> <b>New &amp; Refresher Employee Training:</b> EPTBSW (FY 21/22) - all EP8026 (OEP catalog course) and EP8093 also satisfies this training requirement.  <u>PWD</u> <ul style="list-style-type: none"><li>• SWFS Drivers</li></ul> <b>New &amp; Refresher Employee Training:</b> EPTBSW (FY 23/24, FY 25/26) EP8026 (OEP catalog course) and EP8093 also satisfies this training requirement. <ul style="list-style-type: none"><li>• SWFS Environmental Specialist and Zero Waste Team</li></ul> <b>New &amp; Refresher Employee Training:</b> EP8093 (FY 23/24, FY 25/26) EP8026 (OEP catalog course) and EPTBSW also satisfies this training requirement. <ul style="list-style-type: none"><li>• SWFS Foreman, Supervisors, Superintendents</li></ul> <b>New Employee Training and Refresher Training OPTIONAL (FY 23/24, FY 25/26):</b> EP8093  <u>WSD</u> <ul style="list-style-type: none"><li>• Water Distribution</li><li>• Wastewater Collection</li><li>• Meter Division</li></ul>

SWMP – APPENDIX G (continued)  
Citywide Stormwater Training Plan for City of Phoenix AZPDES MS4 Permit effective date 7/1/21

		<p><b>New &amp; Refresher Employee Training:</b> ESSW1*, ESSW4*, ESDM1Z <u>OR</u> ESST1Z (starting FY 21/22)</p> <ul style="list-style-type: none"><li>• Water Distribution</li><li>• Water Production</li><li>• Meter Division</li></ul> <p><b>New &amp; Refresher Employee Training:</b> WSD750-ONL-ESSW1B (starting FY 23/24) OR WSD719-ONL-TB-ESSW1T (starting FY 24/25) OR WSD751-ONL-ESSW1B (starting FY 24/25)</p> <ul style="list-style-type: none"><li>• Safety</li><li>• Water and Wastewater Engineering</li></ul> <p><b>New &amp; Refresher Employee Training:</b> WSD754-ONL-ESSW4A (starting FY 23/24) OR WSD-722-ONL-TB-ESWW4T (starting FY 24/25)</p> <ul style="list-style-type: none"><li>• Wastewater Collections</li></ul> <p><b>New &amp; Refresher Employee Training:</b> WSD719-ONL-TB-ESSW1T (starting FY 23/24)</p> <p><u>HOU</u> <u>Select employees in the Property Management Division:</u></p> <ul style="list-style-type: none"><li>• Building Maintenance Foreman</li><li>• Building Maintenance Worker</li><li>• Trades Helper</li></ul> <p><u>NSD</u> <u>Select employees in the Administrative Services, Neighborhood Engagement, Neighborhood Revitalization and Neighborhood Preservation divisions:</u></p> <ul style="list-style-type: none"><li>• Building Maintenance Foreman</li><li>• Community Worker II</li><li>• Community Worker III</li><li>• Economic Development Program Manager</li><li>• Housing Rehabilitation Supervisor</li><li>• Housing Rehabilitation Specialist</li><li>• Management Assistant II</li><li>• Neighborhood Inspector I</li><li>• Neighborhood Inspector II</li><li>• Neighborhood Specialist</li><li>• Project Management Assistant</li><li>• Project Manager</li><li>• Trades Helper* U2</li><li>• Volunteer Coordinator</li></ul> <p><u>PDD</u></p> <ul style="list-style-type: none"><li>• Field Supervisors and Inspectors (categories - general [residential], plumbing/mechanical, elevator, fire, structural, electrical)</li><li>• Building Code Examiners (residential and commercial)</li><li>• Principle Engineering Tech (residential only)</li></ul>
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**SWMP – APPENDIX G (continued)**  
Citywide Stormwater Training Plan for City of Phoenix AZPDES MS4 Permit effective date 7/1/21

		<u>PFD</u> <ul style="list-style-type: none"><li>• Fire Prevention Specialist/Inspectors</li></ul> <b>New &amp; Refresher Employee Training:</b> CMO101-ONL-EP8094, <u>OR</u> EPTBGA EP8026 (OEP catalog course) also satisfies this training requirement.
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**Permit Section 4.5.A.1. Municipal Facilities Pollution Prevention & Good Housekeeping Practices**

Course Objective	Course Topics	Employees Trained/Course Code
<b>Municipal Employee Training</b> <b>Stormwater Pollution Prevention</b>  Covers the importance of protecting water quality, pollutants/pollutant sources which may be present at municipal facilities, City operating procedures (e.g., HMMP), inspections, selecting appropriate BMPs, performing job activities to prevent or minimize impacts to water quality, spill prevention/response, and procedures for reporting illegal stormwater discharges.	<b>Stormwater Pollution Prevention &amp; Good Housekeeping Practices</b> <ul style="list-style-type: none"><li>• MS4 permit and requirements.</li><li>• Identifying harmful/prohibited practices (illegal dumping or spills) into the City’s stormwater system.</li><li>• Management procedure (reporting water quality concerns to the WSD Stormwater Management Section).</li><li>• Importance of water quality protection and performing job activities (e.g., street repair/improvement, vehicle/equipment maintenance) to prevent or minimize impacts to water quality.</li><li>• Spill prevention, response procedures, responsibilities, clean-up and reporting.</li><li>• Municipal facility/job activities pollutant sources.</li><li>• Proper handling, storage, transportation and disposal of used oil and other hazardous materials/wastes to prevent spills, exposure to rainfall and stormwater runoff.</li><li>• The City Hazardous Material Management Program (HMMP).</li><li>• Municipal facility inspections form for site staff.</li><li>• Selecting appropriate BMPs, including operation and maintenance.</li><li>• Water and sanitary sewer system maintenance and repair practices to minimize discharges (where applicable).</li></ul>	<b>Department/Employees</b> <u>PRD*</u> (includes Arts & Culture Department employees as applicable) <ul style="list-style-type: none"><li>• Field Staff</li><li>• Maintenance Yard Staff</li><li>• Warehouse Staff</li><li>• Foreman</li><li>• Park Manager</li><li>• Associated Supervisors</li></ul> <b>New Employee Training:</b> CMO100-ONL-EP8093, EP8062 (four training briefs), EP8092, <u>OR</u> equivalent documented OJT <b>Refresher Training:</b> CMO100-ONL-EP8093, EP8062 (four training briefs), <u>OR</u> EP8092  <u>PWD</u> <ul style="list-style-type: none"><li>• Fleet Services Division Staff</li></ul> <b>New Employee Training:</b> CMO100-ONL-EP8093, PW8026, <u>OR</u> equivalent documented OJT Refresher Training: CMO100-ONL-EP8093, <u>OR</u> PW8026  <u>STR</u> <ul style="list-style-type: none"><li>• Maintenance field employees</li><li>• Service center staff</li></ul> <b>New Employee Training:</b> CMO100-ONL-EP8093, EP8065, <u>OR</u> equivalent documented OJT Refresher Training: CMO100-ONL-EP8093, <u>OR</u> EP8065 <u>OR</u> OEP101-ONL-EP8097 (starting FY 25/26 for STR inspectors)

**SWMP – APPENDIX G (continued)**  
Citywide Stormwater Training Plan for City of Phoenix AZPDES MS4 Permit effective date 7/1/21

		<u>WSD (Facility Staff)</u> <ul style="list-style-type: none"><li>• Water Treatment Staff (Water Production)</li><li>• Wastewater Treatment Staff (Wastewater Treatment)</li></ul> <b>New Employee Training and Refresher Training:</b> WSSTMB, <u>OR</u> equivalent documented OJT <u>OR</u> WSD702-ONL-Stormwater Pollution Prevention Plant & Field Staff (starting February 2025)  <u>WSD (Field Staff)</u> <ul style="list-style-type: none"><li>• Wastewater Collection staff</li><li>• Wastewater Distribution staff</li></ul> <b>New Employee Training and Refresher Training:</b> WSSTMD, <u>OR</u> equivalent documented OJT <u>OR</u> WSD702-ONL-Stormwater Pollution Prevention Plant & Field Staff (starting February 2025)
<b>Municipal Employee Training</b> <b>Spill Management</b> Procedures and spill management practices to prevent or minimize spills or discharges to the storm sewer system, particularly during spill response.	<b>Spill Prevention and Reporting</b> <ul style="list-style-type: none"><li>• Spill prevention &amp; response procedures/responsibilities.</li><li>• Spill management practices to prevent or minimize discharges to the storm sewer system and drywells.</li></ul>	<b>Department/Employees</b> <u>PFD</u> <ul style="list-style-type: none"><li>• Company Officers (Fire Captains)</li><li>• Command Officers</li></ul> <b>New Employee Training:</b> EP8051, EPTBSW, <u>OR</u> equivalent documented OJT. <b>Refresher Training:</b> EP8051, <u>OR</u> EPTBSW
<b>Municipal Employee Training</b> <b>Municipal Stormwater Assessors</b> Procedures on how to conduct stormwater Environmental Facility Assessments (EFAs) at municipal facilities.	<b>Municipal Stormwater Inspector Training</b> <ul style="list-style-type: none"><li>• Federal &amp; local regulatory requirements (including MS4 permit requirements, SWMP and PCC 32C).</li><li>• Stormwater BMPs and pollution prevention for municipal facilities.</li><li>• Stormwater management plans (City Hazardous Materials Management Program), Facility Stormwater Plans and Stormwater Pollution Prevention Plans (SWPPPs) if applicable.</li></ul>	<b>Department/Employees</b> <u>OEP</u> <ul style="list-style-type: none"><li>• Environmental Quality Specialists</li><li>• Environmental Coordinators</li></ul> <b>New Employee Training:</b> EP8064, <u>OR</u> equivalent documented OJT <b>Refresher Training:</b> EP8064

**Permit Section 4.6.A.1 Industrial and Commercial Facilities**

Course Objective	Course Topics	Employees Trained/Course Code
<b>Municipal Employee Training – Industrial and Commercial Facilities</b> Educate and update inspectors on stormwater management practices and BMPs for industrial and commercial facilities subject to inspection.	<b>Industrial and Commercial Facility Inspections</b> <ul style="list-style-type: none"><li>• Information on requirements for stormwater discharges associated with industrial and commercial activity.</li><li>• Federal &amp; local regulatory requirements (including MS4 permit requirements and city SWMP)</li><li>• BMPs, industrial facility inspections, PCC 32C, and AZPDES MSGP.</li></ul>	<b>Department/Employees</b> <u>WSD</u> <ul style="list-style-type: none"><li>• Water Quality Inspectors</li><li>• Senior Water Quality Inspectors</li><li>• Chief Water Quality Inspectors</li><li>• Stormwater Compliance Coordinator</li></ul> <b>New Employee &amp; Refresher Training:</b> WSSWPA (WSD735-ILT-Stormwater Permits A, WSSWRA-Video), <u>OR</u> equivalent documented OJT

**SWMP – APPENDIX G (continued)**  
Citywide Stormwater Training Plan for City of Phoenix AZPDES MS4 Permit effective date 7/1/21

**Permit Section 4.7 Construction and Section 4.8 Post Construction**

Course Objective	Course Topics	Employees Trained/Course Code
<b>Plan Review Staff with Stormwater Responsibilities</b> Procedures on how to conduct plan review to verify compliance with local, state and federal stormwater regulations.	<b>Plan Review Procedures and Requirements</b> <ul style="list-style-type: none"><li>• Grading and drainage design standards</li><li>• Review procedures</li><li>• Municipal ordinances related to stormwater, construction and post-construction.</li><li>• Requirements for structural and non-structural management practices on construction sites in new development and redevelopment, such as erosion and sediment controls</li><li>• Post construction stormwater controls</li><li>• Includes PCC and Stormwater Policies and Standards Manual</li></ul>	<b>Department/Employees</b> <u>Private &amp; Municipal Project Review</u> <u>PDD</u> <ul style="list-style-type: none"><li>• Civil Plan Reviewers &amp; Post-Construction Program Staff (latter FY 23/24)</li></ul> <b>New Employee Training and Refresher Training:</b> WSGDPR (WSD700-ONL Grading & Drainage Plan Review), <u>OR</u> Equivalent documented OJT <b>New Employee Training and Refresher Training OPTIONAL (FY 23/24):</b> PDD107-MAT-Stormwater Post Construction  <u>Municipal Project Review</u> <u>AVN</u> <ul style="list-style-type: none"><li>• Project Managers</li></ul> <u>STR (Vertical Project Management, Horizontal Project Management)</u> <ul style="list-style-type: none"><li>• Project Managers</li></ul> <u>WSD</u> <ul style="list-style-type: none"><li>• Project Managers</li></ul> <u>Other City Departments as Applicable</u> <ul style="list-style-type: none"><li>• Project Managers</li></ul> <b>New Employee Training and Refresher Training:</b> WSGDPR (WSD700-ONL Grading & Drainage Plan Review), <u>OR</u> Equivalent documented OJT
<b>Construction Inspection Staff with Stormwater Responsibilities</b> Procedures on how to conduct construction inspections to verify compliance with local stormwater regulations and to protect the City’s MS4.	<b>Construction Inspection Procedures and Requirements</b> <ul style="list-style-type: none"><li>• Municipal ordinances related to stormwater and construction</li><li>• Requirements for structural and non-structural control measures</li><li>• Practices on construction sites, such as erosion and sediment controls</li><li>• Construction BMPs to reduce pollution from construction activities</li><li>• Inspection procedures</li><li>• Enforcement procedures</li></ul>	<b>Department/Employees</b> <u>Private &amp; Municipal Project Construction Inspectors</u> <u>PDD</u> <ul style="list-style-type: none"><li>• Civil Inspectors</li></ul> <b>New Employee Training and Refresher Training:</b> PDD Construction Inspection procedures, <u>OR</u> Equivalent documented OJT/Field inspections  <u>Municipal Project Construction Inspectors</u> <u>OEP, WSD</u> <ul style="list-style-type: none"><li>• Environmental Quality Specialists</li><li>• Environmental Coordinators</li></ul> <b>New Employee Training</b> EP8074, <u>OR</u> equivalent documented OJT. <b>Refresher Training:</b> EP8074
<b>Post-Construction Inspection Staff w/Stormwater Responsibilities</b> <b>Note: Implementation was required one (1) year from Permit effective date (July 1, 2022).</b>  Procedures on how to conduct post construction inspections to meet requirements of the City MS4 permit.	<b>Inspection Procedures and Requirements</b> <ul style="list-style-type: none"><li>• Municipal ordinances related to stormwater and post-construction</li><li>• Requirements for structural stormwater control practices in new development and redevelopment</li><li>• Maintenance responsibilities through agreements and policies</li><li>• Inspection procedures</li><li>• Enforcement procedures</li></ul>	<b>Department/Employees</b> <u>Private &amp; Municipal Project Construction Inspectors</u> <u>PDD (FY 22/23)</u> <ul style="list-style-type: none"><li>• Civil Inspectors</li></ul> <b>New Employee Training and Refresher Training:</b> PDD107-MAT-Stormwater Post Construction



**SWMP – APPENDIX G (continued)**  
Citywide Stormwater Training Plan for City of Phoenix AZPDES MS4 Permit effective date 7/1/21

**Acronyms**

AZPDES = Arizona Pollutant Discharge Elimination System	PCC = Phoenix City Code
BMP = Best Management Practices	PDD – Planning and Development Department
HOU = Housing Department	PFD = Phoenix Fire Department
IDDE = Illicit Discharge and Elimination (IDDE)	PWD = Public Works Department
MS4 = Municipal Separate Storm Sewer System	PRD = Parks & Recreation Department
MSGP = Multi-Sector General Permit	SWMP = Stormwater Management Plan
NSD = Neighborhood Services Department	STR = Street Transportation Department
OJT = On-the-Job Training	SWFS = Solid Waste Field Services Division
OEP = Office of Environmental Programs	WSD = Water Services Department

**Notes**

Training not provided to contractors/subcontractors.  
Facilities with specific AZPDES permits (for example, MSGP) are not covered in this training plan, but are governed by that permit.