

# Surface Water Requirements

Most point source discharges to a surface water require an AZPDES permit.

- any discernible, confined, and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel, or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural stormwater runoff. See 40 CFR 122.3.

- Discharges of dredge or fill material (404 permits)
- Discharges to POTWs (indirect discharges)
- Any introduction of pollutants from non point source agricultural and silvicultural activities
- Return flows from irrigated agriculture
- Discharges into a privately owned treatment works except as Director may require under 122.44(m)
- Discharges from a water transfer (surface water to surface water) (Phoenix area canals are surface waters)

## Types of Surface Water Permits

- AZPDES Process Wastewater Permits
  - Wastewater Treatment Plants
  - Groundwater Discharges
  - Water Treatment Plant Discharges
  - Industrial Discharges
- AZPDES Stormwater Permits
  - Multi Sector General Permits (MSGP mining/non-mining)
  - Municipal Separate Stormwater System Permits (MS4)
  - Construction General Permits (CGP)

- De Minimis General Permit
- Pesticide General Permit



# Permit Requirements

- Meet Standards
  - Technology Based (ELGs)= Control measures
  - Water Quality Based - A.A.C R 18-11 Articles 1
- WQ Standards relate to Designated Uses

## Uses for the Salt River

Salt River Verde River to 2 km below Granite Reef Dam	A&Ww, FBC, DWS, FC, AgI, AgL
Salt River 2 km below Granite Reef Dam to City of Mesa NW WRF	A&We, PBC
Salt River from City of Mesa NW WRF outfall to Tempe Town Lake	A&Wedw, PBC
Tempe Town Lake	A&Ww, FBC, FC
Salt River below Tempe Town Lake to I-10 bridge	A&We, PBC
Salt River from I-10 bridge to the 23rd Ave WWTP outfall	A&Ww, PBC, FC
Salt River from 23rd Ave WWTP to confluence with Gila River	A&Wedw, PBC, FC, AgI, AgL

- Most restrictive standard applies - in most cases A&W
- A&W uses have acute and chronic standards – acute would apply to stormwater but persistent non-stormwater could have chronic
- *E. Coli* is only for PBC or FBC

FBC=126 mean and 235 ss /PBC= 126 mean and 575 ss

- Non stormwater discharge concerns:  
Se, Cl, WET, Cu, B if AgI, NO<sub>3</sub> if DWS
- Stormwater quality concerns: Pb, Cu, Zn,  
*E. Coli*



# Existing Permits

## Process Permits:

NW Mesa WWTP (infrequent)

COP Rio Salado Habitat Restoration

COP 23<sup>rd</sup> Ave WWTP

91<sup>st</sup> Ave WWTP (NPDES)

Tolleson WWTP (infrequent)

SRP- Santan, Kyrene, and K-7



## Other Individual Non-Stormwater Permits

- SRP Groundwater wells to canals
- Groundwater from basement dewatering

## Municipal Separate Stormwater Sewer Systems in Basin

Phoenix  
Mesa  
Scottsdale  
Tempe  
ADOT  
Apache Junction  
Chandler  
Avondale  
Gilbert  
Glendale  
Goodyear  
Guadalupe  
Paradise Valley  
Surprise  
Tolleson

- All dry weather discharges must have associated AZPDES permits except emergency fire fighting discharges.
- MSGP and CGP have provisions for non-stormwater discharges
- De Minimis GP (short term)
- MS4 has “conditional” non-stormwater discharges



## “Conditional” Non Stormwater discharges 40 CFR 122.26(d)(2)(iv) (B)

- Water line flushing
- Landscape irrigation
- Diverted stream flows
- Rising groundwater
- Uncontaminated groundwater infiltration to separate stormwater sewers
- Uncontaminated pumped groundwater
- Discharges from potable water sources, Foundation drains, air conditioning condensation, irrigation water, springs, water from crawl space pumps, footing drains, lawn watering, individual residential car washing, flows from riparian habitats and wetlands, dechlorinated swimming pool discharges and street wash water
- Discharges from fire fighting activities



## Allowable Non Stormwater Discharges under MSGP provided appropriate controls are used

- Water used to control dust, provided effluent or other wastewaters are not used;
- Hydrostatic testing of new pipes, tanks or vessels using potable water, surface water, or uncontaminated groundwater;
- Discharges of water associated with drilling, rehabilitation and maintenance of potable or non-potable water wells and peizometers, or water supply or water quality evaluations including:
  - Discharges from any borehole not fully developed; Well purging; Well/aquifer pump tests not associated with groundwater remediation activities; Backflushing of injection wells provided the discharge meets applicable water quality standards;
- Non-stormwater discharges subject to an effluent limitation guideline listed in Table 1-2. (Mine dewatering discharges at crushed stone, construction sand and gravel, or industrial sand mining facilities.)

## Allowable Non stormwater under CGP

- Water used to control dust, provided reclaimed water or other wastewaters are not used;
- Water used to rinse vehicles and equipment, provided that reclaimed water or other wastewater is not used and no soaps, solvents, detergents, oils, grease or fuels are present in the rinsate
- Foundation or footing drains where flows are not contaminated with process materials such as solvents
- Hydrostatic testing of new pipes, tanks or vessels using potable water, surface water, or uncontaminated groundwater;
- Water used for compacting soil, provided reclaimed water or other wastewaters are not used;
- Water used for drilling and coring such as for evaluation of foundation materials, where flows are not contaminated with additives; and
- Uncontaminated waters obtained from dewatering operations/ foundations in preparation for and during excavation and construction.

De Minimis GP permits discharges typically less than 30 days

- Potable water systems
- Subterranean dewatering
- Well Development
- Hydrostatic testing
- Reclaimed water systems for post repair flushings and pressure releases to ephemeral, edw, or non-DWS waters.
- Other- residential non-contact cooling water, charitable noncommercial car washes (exterior only), building and street wash water (with conditions), dechlorinated freshwater swimming pool drainage (typically no notification required)
- Specific approvals



## MS4 dry weather discharge Requirements

All MS4 permits require MS4 to investigate sources of dry weather discharges and to eliminate them or require the discharge to be permitted.



Questions

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