

# Arizona MS4 Permits

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## Changes and Challenges

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# Outline

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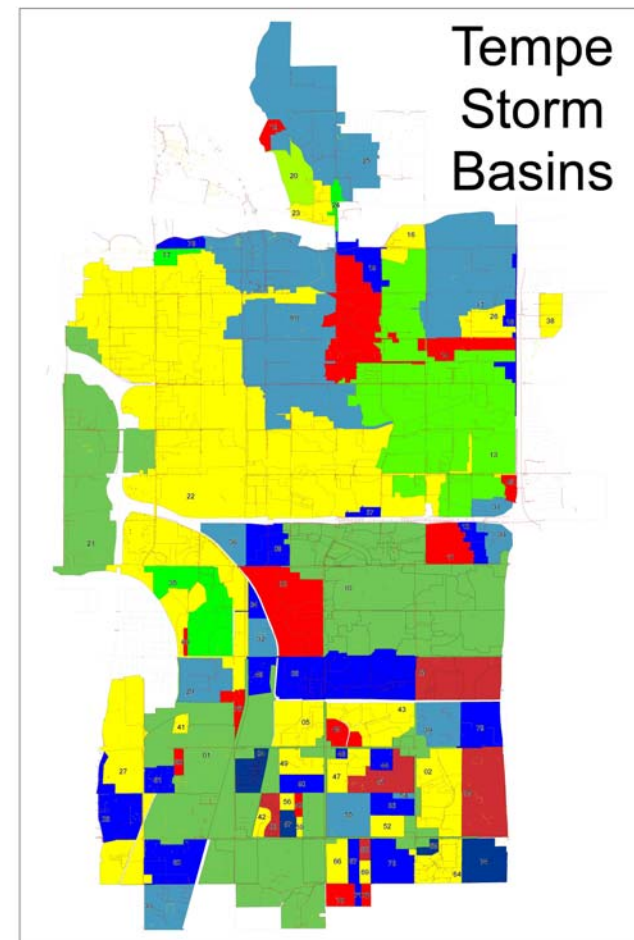
- One definition
- Arizona Phase I MS4 Timeline
- Original Phase I MS4 Permits
- ADEQ/MS4 Stakeholder Process
- New Permit
- New Permit – Concerns/Challenges
- New Permit – Wish List

# The One and Only Definition

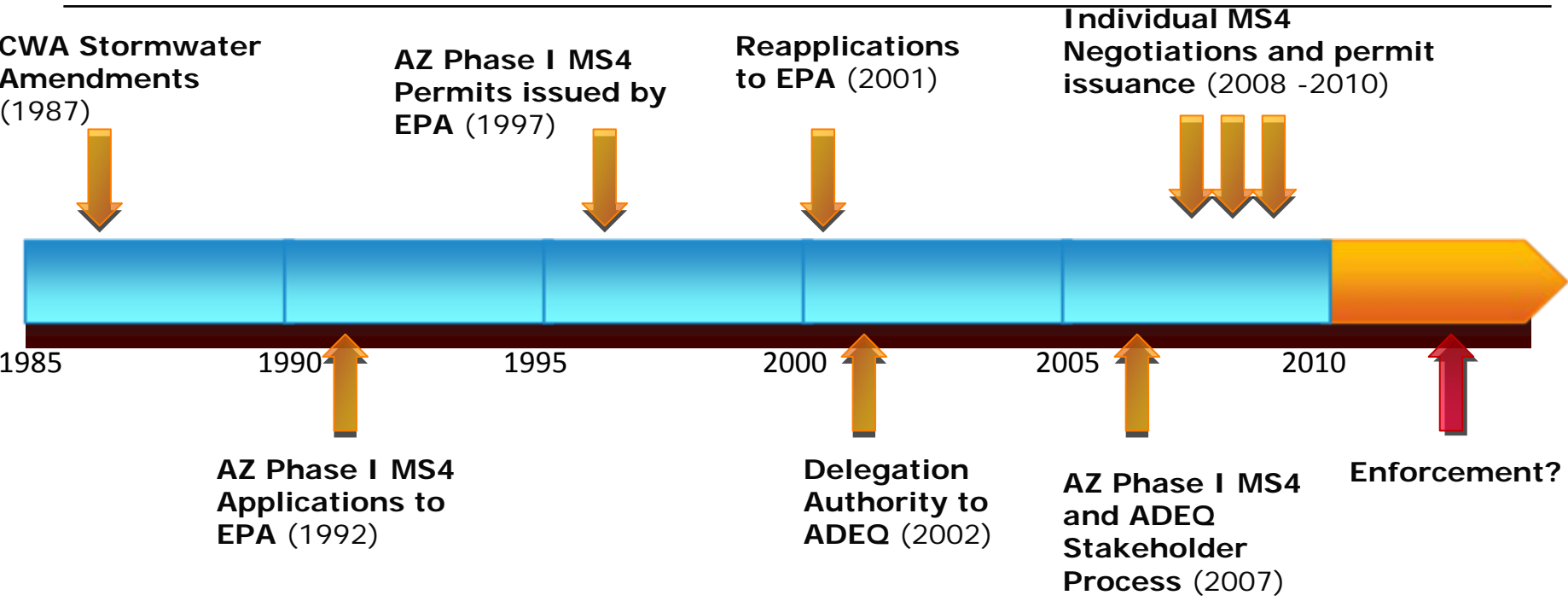
## Municipal Separate Storm Sewer System

*"An MS4 is a conveyance or system of conveyances that is:*

- *Owned by a state, city, town, village, or other public entity that discharges to waters of the U.S.;*
- *Designed or used to collect or convey stormwater (including storm drains, pipes, ditches, etc.);*
- *Not a combined sewer; and*
- *Not part of a Publicly Owned Treatment Works (sewage treatment plant)."*



# Arizona MS4 Timeline



**Timeline of stormwater regulations for Arizona Phase I MS4s. There are currently eight permitted Phase I MS4s.**

# Original Phase I MS4 Permits

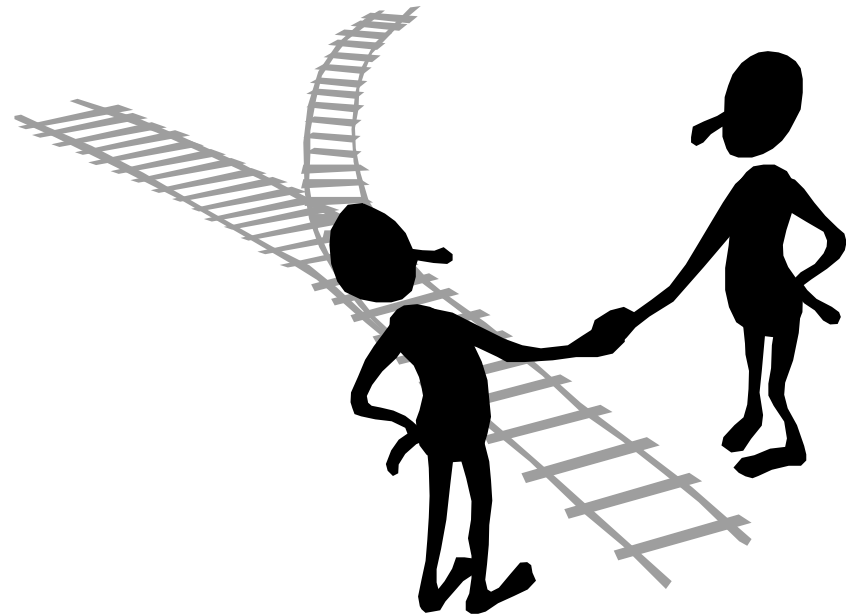
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- EPA issued Phase I MS4 Permits (1997)
  - 19 pages
  - Flexible (not prescriptive)
  - Focused on SWMP development and implementation
  - BMP to the MEP focus
  - Not enforceable or measurable



# ADEQ/MS4 Stakeholder Process

- 2007 ADEQ/MS4 Stakeholder Process
  - Negotiations with all Az. Phase I MS4s
  - Approximately one year
  - Results
    - Understanding of differences
    - Surface Water Quality Standards (SWQS) numeric limits removed, Low Impact Development (LID) mandate removed



# New Permit

- 91 Pages vs. 19 Pages
- Fact Sheet
  - Background/changes
- Permit
  - General conditions, legal authority, SWQS, monitoring, etc.
- Appendix A (SWMP – Measurable Goals)
- Appendix B (Annual Report Form)
- Appendix C (SWMP – Requirements)



# New Permit

- ❑ Public Education and Outreach
- ❑ Public Involvement
- ❑ IDDE
- ❑ Municipal Pollution Prevention and Good House Keeping
- ❑ Industrial and Commercial Facilities
- ❑ Construction Sites
- ❑ Post-Construction Sites
- ❑ Wet Weather Monitoring
- ❑ Reporting





# New Permit – Concerns/Challenges

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- General Concerns and Challenges
  - Prescriptive and duplicative (Fact Sheet, Permit, Three Appendices)
  - SWMP Modifications
    - Requires approval from ADEQ for replacement of existing control measures.
    - No allowance for routine update of SWMP.
    - Can't remove a BMP even if it achieved its original purpose.
  - Regulatory duplication and tracking (SPCC, APP, RCRA, MSGP, SARA Title II, OPM/FIFRA, HWMP)
  - MSGP/CGP
    - Must determine facility/activity applicability and report to ADEQ if not covered.



# New Permit – Concerns/Challenges

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- Activities with no benefit to receiving waters
  - Monitoring
    - characterization
    - lack of RP
    - pollutant loads based “first flush” (30 mins) and sampling criteria (.01 in resulting in flow for no more than three hours)
  - SWQS comparison and resulting investigations.
    - which standards are to be used
    - not based on wet weather flows
    - endpoints do not reflect effects of brief or variable exposures
  - Mapping other jurisdiction’s MS4
    - Infrastructure mapping for agencies one mile beyond jurisdictional boundary.
      - four cities, one reservation, one County, one State agency.

# New Permit – Concerns/Challenges

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- LID
  - Evaluate how to implement LID.
  - Rain water utilization and control of storm-water quantity.
  - Retention not fully recognized as LID
- Lack of Arid West and Nationwide Stormwater considerations
  - USGS studies – most organic compounds in permit do not impact Phx. Metro stormwater.
  - National Research Council (2008) report on Urban Stormwater Management in the United States – SWQS are inadequate indicators of stormwater pollution.
  - Arid West Water Quality Research Project administered by Pima County – duration and frequency of aquatic organism exposure distinctly different in the west.
- Training
  - Staff with no direct stormwater responsibilities.
- Time, resources, people



# New Permit – Wish List

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- Simplified
  - 91 pages of duplicative/redundant requirements not necessary
- Scientifically based
  - Monitoring program
- Arid West considerations
  - Monitoring
  - BMP
  - LID
- Flexibility
  - SWMP
- Municipal Specific
  - Construction/post-construction vs. industrial
- Focused on minimizing negative impacts to receiving streams

# Questions?

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