

ADOT's Stormwater Program

WESTCAS 2011 Fall Conference
Phoenix

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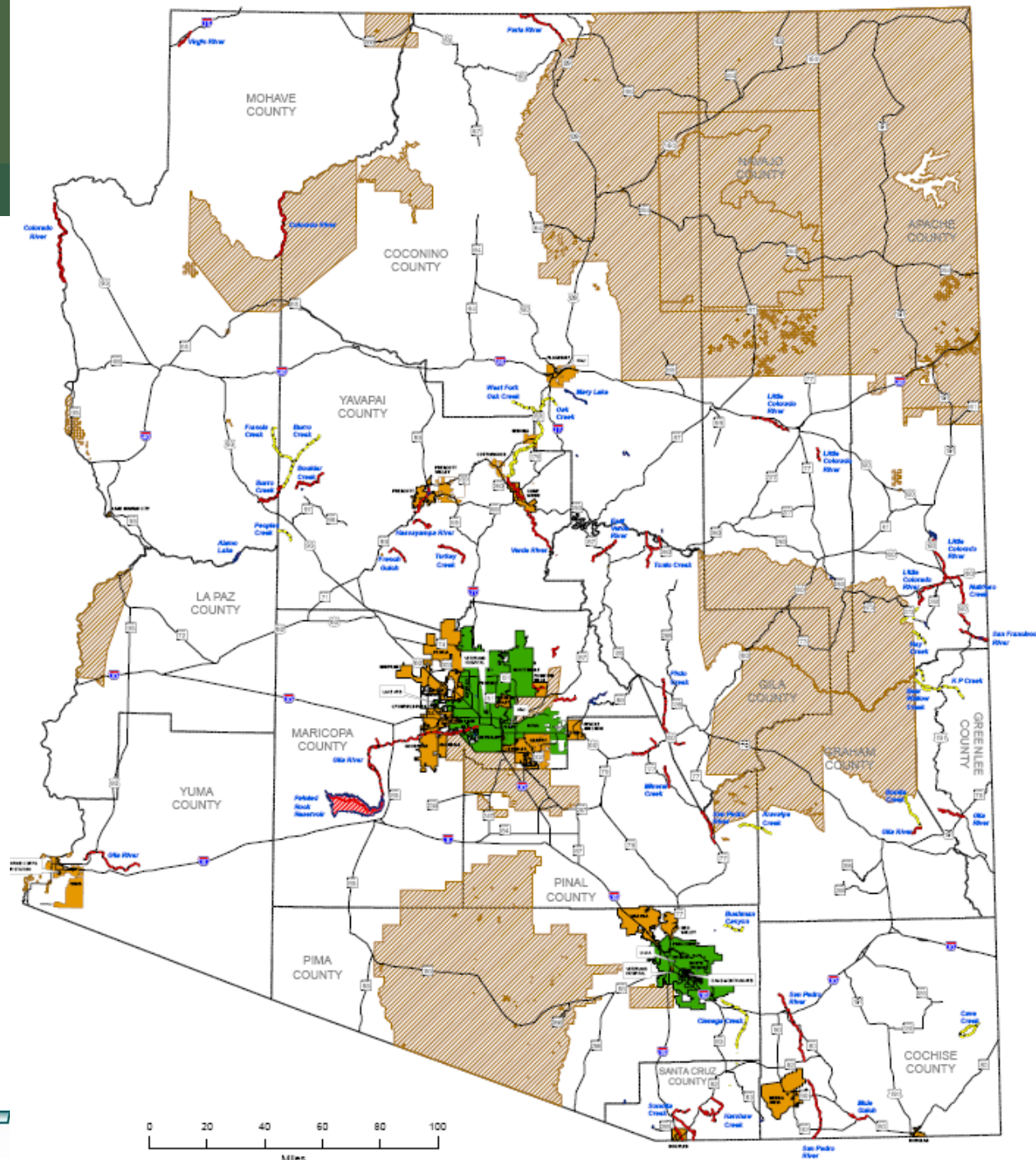
Overview

- Background
 - ADOT
 - Permit
- EPA Audit
- Where we are going

ADOT Background

- 9 Districts
- 18,000 travel lane miles (does not include the shoulders or off-ramps)
- Approximately 4,300 employees
 - 2 fte dedicated to water quality





Permit Background

- In 1999, EPA determined ADOT to be a Phase 1 MS4 and issued a permit for the Phoenix and Tucson metro areas
- Re-application for Phase I Permit was submitted in February 2002
- Permit expired in September 2002 and was administratively continued by ADEQ
- Revised application was submitted in 2003 and include Phase II requirements
- In 2004, ADOT received a consent order
 - As a condition of the consent order reapplied in 2005 for an individual permit

ADOT Individual Permit

- ADOT received 1st draft, March 2007
- Negotiations with ADEQ took place for 15 months
 - Focused on big ticket items
- Final Permit issued August 2008
 - Statewide (not limited to urbanized areas) but does not include Indian Country
 - Includes Phase I and II requirements
 - Includes MS4, construction, industrial requirements
- Expires September 2013

MS4



- All of ADOT's roadways, rights of way, channels/ditches, maintenance yards, etc.
- Requires mapping of the entire ADOT system (statewide)
- 5 monitoring locations throughout the state
 - 1 sample/site per wet season
- Maintenance yards within urbanized areas require SWPPPs, others yards need BMPs
 - 3 yards require monitoring due to their proximity to impaired waters

Construction

- Mirror image of the state construction general permit
- ADOT does not have to submit NOI/NOT for projects (contractor does)
- Contractor is responsible for conditions in both permits
- Requires inspections to be performed by an Erosion Control Coordinator (ECC)
- Analytical monitoring for concrete/asphalt batch plants within $\frac{1}{4}$ mile of outstanding or impaired waters



Industrial

- ADOT owns/operates 4 types of industrial facilities:
 - Sign shop
 - Grand Canyon National Park Airport
 - Conditions applies to both ADOT and the tenants
 - Print shop (closed 2010)
 - Various material source sites (mining)
 - exclusive use of a material source site



Benefits of Individual Permit

- One permit consolidates information and makes finding information easier
- More tailored to DOT practices
- Standardization of regulations for different activities
- Streamlines the reporting process

Challenges of Implementation

- Scope of permit: Phoenix and Tucson MS4s to statewide
- Establishing a comprehensive stormwater program
- Integration of that program into other established areas (construction and operations)
- Lack of phasing considered in some of the permit conditions

Challenges of Implementation

- Mapping of entire state
 - Inspections: hard to inspect if you do not know culverts/detention basins locations
 - Eliminating illicit discharges/connections
 - Lack authority (rely upon state code/statute)
- Economic downturn, budget crisis in AZ
 - Hiring freeze
 - Reliance on federal funding, need to tie back to a construction project

Audit Timeline

- **February 2010** EPA states their intent to audit
- **May 2010** ADOT notified of the probability of an audit
- **June – August 2010** presented to various groups (internal and external)
- **June - July 2010** consultant conducted a mini audit of ADOT's stormwater program
 - Desktop review and a facility review
 - Provided recommendations
- **October 2010** EPA audit

The Audit

October 25-29, 2010

- Visited 4 Districts
 - 57 sites (construction, maintenance, industrial)
- Included document review, interviews, and field verification inspections



Audit Topics

Topic	Description of Material Covered
Stormwater Management Plan (SSWMP)	Items in the permit and measurable goals
Maintenance Facilities	Stormwater Pollution Prevention Plan (SWPPP) content, implementation, inspections
Construction Facilities	SWPPP content, implementation, inspections
Industrial Facilities	SWPPP content, implementation, inspections
Monitoring	Compliance with permit requirements
Program Evaluation and Reporting	Compliance with permit requirements
Post-construction BMP Design and Maintenance	Sufficient implementation and design guidance, tracking and field maintenance

AUDIT OBSERVATIONS

Encroachment Permits

- Permittees are supposed to comply with all applicable environmental regulations
 - As an owner, we have a responsibility to make sure the permittee is not violating conditions of our permit
- Limited authority to enforce stormwater program
- Improperly installed/maintained BMPs are nuisances for encroachment permits



Construction Concerns

- Good housekeeping at yards
- Inconsistent use of liners in concrete washouts
- Improper selection, installation and maintenance of BMPs
- Lack of documentation of inspections and corrective action follow-up
- Incomplete delegation of authority



Contractor Oversight

- SWPPP template was created to assist the contractor
- Ensures that all information ADOT requires is captured
 - Section 9 provides a certification as well as a place for delegation of authority

9. SWPPP CERTIFICATION

9.1 SWPPP CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering 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.

Project Name: _____
Federal Aid No.: _____
Project No.: _____
Contractor Co. Name: _____
Address: _____
Phone Number: _____

Printed Name

Date

9.2 AUTHORIZATION OF A DULY AUTHORIZED REPRESENTATIVE

I authorize the person holding the position of the _____ (insert name of person or position here) at _____ (insert company/agency name here) to sign the _____ (insert documents that representative is authorized to sign) as my duly authorized representative.

Printed Name

Date

Secondary Containment



Gap in liner



Tear in liner

Concrete Washout



Not lined and unconsolidated material



Maintenance Yard Concerns

- Good Housekeeping
- Lack of signatures on SWPPPs
- Inconsistent application of SWPPPs
- Inconsistent documentation of inspections and corrective action follow-up



Oily Residue



Leaking truck over
marked storm drain



Sweeper Waste



Stockpile Management



spillage

Audit Outcome

- Report received May 2011
- Requested a 3-month extension for formal response
 - Response is due November 1, 2011
- A Compliance Order or similar action will be issued by EPA outlining an implementation plan and timeline
 - Possible directives on things they want us to do immediately
- More stringent permit conditions in the future
- Similar order as that received by Caltrans
 - <http://www.epa.gov/region9/water/npdes/pdf/ms4/Caltrans-order.pdf>
 - No fines, but remedial action required

Information on the ADOT Audit

More information on the ADOT audit can be found at:

<http://www.epa.gov/region9/water/npdes/ms4audits.html>



U.S. Environmental Protection Agency, Region 9
75 Hawthorne Street
San Francisco, CA 94105-3901

**MUNICIPAL SEPARATE STORM
SEWER SYSTEM (MS4)
COMPLIANCE AUDIT**

**STATE OF ARIZONA
DEPARTMENT OF TRANSPORTATION**

**ADOT MS4
AUDIT REPORT**

Audit Date:
October 25–29, 2010

Report Date:
May 10, 2011

United States Environmental Protection Agency
Region 9
75 Hawthorne Street
San Francisco, CA 94105

Solutions to Audit Observations

- Establish the governance – policy, standards, directives
- Training – focus on key emphasis areas
- Evaluation – review and evaluate the effectiveness of the governance, and the reality of what is going on in the field
- Repeat – Plan, Do, Check, Act philosophy
- More enforcement capabilities, either by the Districts or HQ
 - Coordination with other municipalities
 - Leverage with contractors: Incentive/disincentive specs

Where are we going?

- In the past few years, EPA has focused attention on DOTs nationwide.
- Biennial meetings with all DOTs to discuss strategies and solutions.
- Collaboration between the American Association of State Highway and Transportation Officials (AASHTO) and EPA at a national level has helped EPA recognize differences between the DOTs and municipalities.





For More Information...

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