



United States Environmental Protection Agency

Stormwater Management Including Discharges from Developed Sites NPDES Permitting Authority Questionnaire

An Agency may not conduct or sponsor, and a person is not required to respond to, a collection of information, unless it displays a currently valid OMB control number.

The public reporting and recordkeeping burden for this collection of information is estimated to average 43 hours per response. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques to the Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed questionnaire to this address.

General Information

Purpose of the Questionnaire

Stormwater discharges from developed land can negatively impact water quality through increases in stormwater volume and increased pollutant loads to the receiving waters. To strengthen its stormwater regulations, EPA's Office of Water (OW) is considering revisions to the current National Pollutant Discharge Elimination System (NPDES) regulations including the establishment of standards for post construction stormwater discharges from developed sites.

To collect data to inform decisions regarding how the nation's stormwater regulations should be strengthened and to support the technical and financial feasibility associated with this rulemaking, EPA is sending the following questionnaire to NPDES Permit Authorities. This questionnaire will provide EPA with information related to the administration of the NPDES program to:

- Characterize the current scope, components, and implementation of existing state and regional NPDES stormwater programs; ordinances and laws that may constrain the utilization of stormwater retention practices; and retrofit requirements for discharges from existing development; and
- Estimate the burden and expenditures to comply with and enforce existing requirements on stormwater discharges.

The questionnaire is presented in five sections covering the following topic areas:

- Section A: General Information
- Section B: Municipal Stormwater Program
- Section C: Construction Stormwater Program
- Section D: Standards for Stormwater Discharges from New and
Redevelopment and Implementation of Stormwater
Retention Practices
- Section E: Industrial Stormwater Program

General Information

Authority

EPA has authority to administer this questionnaire under sections 304(i) and 402(c) of the CWA, 33 U.S.C. Sections 1314(i) and 1342(c). Specifically, 40 CFR 123.41(a) states that “[a]ny information obtained or used in the administration of a State [NPDES] program shall be available to EPA upon request without restriction.” **Participation in this questionnaire is mandatory, and you are required to respond. You must retain a copy of the completed questionnaire for your files.** EPA may contact you with follow-up questions to clarify your answers.

When to Complete the Questionnaire

You must complete this questionnaire, then print, sign and return the certification statement to EPA no later than 60 calendar days after receiving the survey link.

If you wish to request an extension, you must do so in writing no later than one week prior to the due date of this questionnaire. Written requests may be e-mailed to Ms. Jan Matuszko at matuszko.jan@epa.gov. **Submittal of an extension request does not alter the due date of your questionnaire unless and until EPA agrees to the extension and establishes a new date.**

Certification Statement

A responsible state official or authorized representative must verify the accuracy of the responses to the questionnaire by reading and signing the Certification Statement. After completing the survey, you must print the Certification statement, sign it, and return it with your completed questionnaire to EPA at the following address:

U.S. Environmental Protection Agency
Stormwater Management NPDES Permitting Authority Questionnaire
c/o Eastern Research Group, Inc.
14555 Avion Parkway, Suite 200
Chantilly, VA 20151

Where to Get Help

If you have any questions regarding completion of this questionnaire EPA prefers you request assistance using EPA’s e-mail helpline provided below.

E-mail address for help line:

Please include the name of the survey to which you are responding, the question number along with your questions. Respondents who desire assistance by telephone should send an e-mail with “Please Call Me” in the subject line. Please provide the call-back phone

number, contact name, and desired day and time to call. The return phone call will be free of charge to the respondent. For pressing questions that require a more immediate response, please call [REDACTED].

Confidential Business Information

Because the information requested in this questionnaire is not business confidential, EPA may make the information available to the public without further notice.

Detailed Instructions for Completing the Questionnaire

Complete the questionnaire considering the following instructions:

- This questionnaire is available at the following link: [_____](#).
- Personnel most knowledgeable about the subject areas covered by a specific section should complete that section of the questionnaire.
- For all questions and sections, read all instructions and definitions carefully.
- Do not leave any entry blank. If the answer is zero, write “0” or “zero”. If a question is not applicable, write “NA.”
- Answer all of the questions in sequence unless you are directed to SKIP forward in the questionnaire. This is important since some questions and/or sections are only applicable to some respondents.
- Use the units specified when responding to questions requesting measurement data (e.g., acres).
- The period of interest for the questionnaire is your fiscal year (FY) 2009 unless indicated otherwise.
- Provide the requested information based on data you currently have. EPA is not requesting or recommending that respondents collect new data to provide information for this questionnaire.

Certification Statement

The individual responsible for directing or supervising the preparation of the *Stormwater Management Including Discharges from Developed Sites NPDES Permitting Authority Questionnaire* must read and sign the Certification Statement below before returning both documents to the U.S. Environmental Protection Agency. The certifying official must be a state official or duly authorized representative. The Certification Statement must be completed and submitted in accordance with the requirements contained in the *Code of Federal Regulations* at 40. CFR 122.22.

I certify under penalty of law that the attached questionnaire was prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gathered and evaluated the information submitted. The information submitted is, to the best of my knowledge and belief, accurate and complete. In those cases where we did not possess the requested information, we have provided best engineering and/or financial estimates or judgments where possible. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Signature of Certifying Official

Date

Printed Name of Certifying Official

(_____)_____
Telephone Number

Title of Certifying Official

Definitions

Note that the following terms are defined for the purposes of this questionnaire only.

These definitions were written as broadly as possible, relying on our regulations, guidance, fact sheets, etc. We acknowledge that there are likely local or regional differences in the meanings of some of these terms. Where those differences will affect their answer to the questions, respondents should provide information on those differences in the survey blanks provided.

Term	Definition
Bioretention	Landscaping features adapted to provide on-site removal of pollutants from stormwater discharges. Surface discharges are directed into shallow, landscape depressions, which are designed to incorporate many of the pollutant removal mechanisms that operate in forested or other natural (prairies, wetlands, etc) ecosystems. Includes rain gardens, sidewalk planters, curb extensions and other plant or soil systems designed to infiltrate or evapotranspire stormwater.
Cistern	Large storage devices that are often built below ground, at ground level, or on rooftops, for storing captured stormwater and can be integrated with more sophisticated pumping devices. For example, some cisterns collect stormwater that is subsequently used for non-potable plumbing, such as flushing of toilets, or irrigation applications.
Detention/ Extended Detention Practices	Practices which hold stormwater temporarily and discharge the stormwater over an expended period of time (hours to days) generally by controlling the size of the discharge volume and flow rate. Also known as “wet/dry ponds”, “extended detention basins”, “detention ponds”, “extended detention ponds.”
Full Time Equivalent (FTE)	The number of full-time employees that could have been employed if the reported number of hours worked by part-time employees had been worked by full-time employees. This statistic is calculated separately for each function of a government by dividing the “part- time hours paid” by the standard number of hours for full-time employees in the particular government and then adding the resulting quotient to the number of full-time employees.
Green Roof	A vegetative system installed on top of and in addition to the traditional roof system. A green roof includes engineered soil layers (e.g., a waterproof membrane, drainage, high inorganic growing media), and appropriate plant species. Green roofs reduce surface discharges from the rooftop by absorbing stormwater and slowing stormwater flow rates, and provide ancillary benefits such as summer cooling, lowered urban heat island effect, and improved air quality.
Green Infrastructure	Wet weather management approaches and technologies that

	infiltrate, evapotranspire, capture and reuse stormwater to maintain or restore natural hydrology.
Impervious Area	The total area of a parcel or right-of-way that consists of buildings and associated constructed facilities; areas that are covered with a low-permeability material such as asphalt or concrete; or areas such as gravel roads and unpaved parking areas that are compacted through design or use to reduce their permeability. Common impervious areas include, but are not limited to, roads, rooftops, walkways, patios, driveways, parking lots or storage areas, concrete or asphalt paving, packed earthen materials, and macadam or other surfaces which similarly impede the natural infiltration of storm water.
Infill Development	Describes development activity that occurs on a generally undeveloped lot/parcel that is situated in an area in which most lots/parcels have already been developed.
Low Impact Development (LID)	Development that is designed to be hydrologically functional by mimicking pre-development hydrology conditions. This is achieved by using design techniques that infiltrate, filter, evaporate, and store discharges close to its source.
Mixed Use	Development that includes a combination of residential, commercial, industrial, office, institutional, or other land uses.
Municipal Separate Storm Sewer System (MS4)	A conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains) that is owned by a state, city, town, village, or other public entity having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under state law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the U.S., which is not a combined sewer, and which is not part of a Publicly Owned Treatment Works (sewage treatment plant).
New Development	Development that occurs on land where generally no or minimal structures and other impervious surfaces, such as buildings, parking lots, and roads, exist. This includes agricultural, forested and open/barren land. These sites are commonly referred to as greenfield sites.
NPDES	EPA's or a State's "National Pollutant Discharge Elimination System" program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits under the authority of the Clean Water Act.
Outfall	Outfall means a point source as defined by 40 CFR 122.2 at the point where a municipal separate storm sewer discharges to waters of the United States and does not include open

	conveyances connecting two municipal separate storm sewers, or pipes, tunnels or other conveyances which connect segments of the same stream or other waters of the United States and are used to convey waters of the United States.
Phase I MS4	A “large” (population of 250,000 or more) or “medium” (population of 100,000 or more) sized MS4, as defined in 40 CFR 122.26(b)(4) and (7)
Phase II MS4	A “small” MS4, defined by 40 CFR 122.26(b)(16), not defined as “large” or “medium”, that is located in an urbanized area as determined by the latest Decennial Census by the Bureau of the Census, or designated for regulation, and therefore required to obtain an EPA or State NPDES permit. Small MS4s include non-traditional systems, for example: universities and systems maintained by transportation authorities such as a state’s department of transportation.
Post Construction	Describes the phase of a site immediately following the termination of construction activities. “Post-construction discharges” are discharges of stormwater from developed sites after construction is complete. Post-construction controls are those stormwater controls that are installed and maintained to permanently manage stormwater discharged from the developed sites.
Redevelopment	Development of a site with existing structures or impervious surfaces. Redevelopment does not include projects that are solely remodeling or alterations to the interior of a structure.
Retention Practices	Stormwater techniques that manage stormwater through infiltration, evapotranspiration, or harvesting. Commonly referred to as Low Impact Development or Green Infrastructure practices.
Retrofit	The installation or modification of stormwater control measures on sites with existing development (including existing storm sewers) to enhance the reduction of stormwater pollutants or the discharge volume or flow rates.
Site plan review	A procedure used by MS4s and other entities for conducting a review of development site plans for conformance with stormwater control requirements, such as sediment and erosion controls, and post-construction controls.
Storm Sewer System	A conveyance or system of conveyances, including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, pipes, or storm drains designed or used for collecting or conveying stormwater.
Stormwater	Runoff, snow melt runoff, and surface runoff and drainage.
Stormwater Control	Practices that are installed and maintained to control stormwater discharges.
Stormwater Quality Control	Stormwater control used to reduce or eliminate pollutants carried in stormwater discharges.

Stormwater Quantity Control	Stormwater control used to control or convey the volume of water being discharged during storm conditions.
Undeveloped	Describes land that has not been subject to prior development. See “new development.”
Urbanized Area	A land area comprising one or more places — central place(s) — and the adjacent densely settled surrounding area — urban fringe — that together have a residential population of at least 50,000 and an overall population density of at least 1,000 people per square mile. Any MS4 located within a 2000 Census-defined “urbanized area” is required to obtain an NPDES permit for discharges from its storm sewer system.
Vegetated Buffer	Vegetated surfaces used to reduce stormwater velocity from nearby less pervious surfaces, and to filter out pollutants from stormwater and allow infiltration into the underlying soil. Also referred to as “riparian buffer” if established around streams, lakes, and/or wetlands.
Vegetated Swales	<p>A broad, shallow channel used for conveying stormwater discharges. Vegetation on the side slopes and bottom acts to slow discharge velocity, trap particulates, and promote infiltration. Vegetated swales are often referred to as bio-swales, enhanced swales, or water quality swales and can be classified as wet swales, dry swales, and grassed channels. A <i>dry swale</i> (bio-swale) incorporates additional elements with the vegetated swale design. Infiltration is aided by a soil bed (not necessarily natural soil) with an underdrain system composed of a perforated pipe surrounded by gravel. Check dams may be used to temporarily retain stormwater discharge.</p> <p>A <i>wet swale</i> is capable of temporarily retaining stormwater discharges, but, unlike the dry swale, lacks an underdrain system. The wet swale is marshlike and relies on and supports wetland vegetation</p>

Section A: General Information

A-1 Fill in the following identifying and contact information.

Your Name and Title

Agency/ Department:

Address

Phone Number

Email Address

Best Time to Contact

A-2 Name the stormwater program permitting authority’s department or agency.

A-3 What was your state’s annual operating budget for the NPDES program and specifically the stormwater program for the last five years? Include all parts of your stormwater program (MS4, construction and industrial).

Annual Budget (\$)					
	Fiscal Year				
	2005	2006	2007	2008	2009
NPDES Budget					
Stormwater Operating Budget					

A-4 Indicate what activities are included in your state’s stormwater budget for FY 2009 and indicate what percentage of total budget is allocated to those

- _____ MS4 inspections/enforcement/audits
- _____ Outreach
- _____ Installation/Maintenance of stormwater control measures
- _____ Funding local government stormwater projects
- _____ Other, Specify _____

A-7 Is any part of your state’s stormwater budget used to support MS4s to implement their program (for example through grants or other funding mechanisms)?

Yes, describe _____

No

A-8 Provide any additional budget information in the space provided below (e.g. funding decreases, furloughs)

Source Control

A-9 Does your state prohibit/ban or limit/restrict the use or sale of nitrogen or phosphorus fertilizers, phosphorus detergents or specific pesticides as a source control measure for stormwater discharge?

	Prohibit Sale	Prohibit Usage	Limit usage	No prohibition/ Not applicable
Nitrogen fertilizer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Phosphorus fertilizer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Phosphorus detergents	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Specific pesticides,	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

describe _____				
Other Describe _____				

A-10 If applicable, does your state have data indicating water quality improvements as a result of the ban or limits on usage of nitrogen or phosphorus fertilizers, detergents or specific pesticides as a source control measure for stormwater discharge?

- Yes, describe _____
- No
- Not applicable, the state has no such ban or usage restriction

Section B: Municipal Stormwater Program

B-1 What is the current number of MS4 permits that you have issued in your state?
_____ # Phase I MS4 permits
_____ # Phase II MS4 individual permits
_____ # Phase II MS4 general permits

B-2 What is the total number of Phase I permittees or copermitees in your state?
_____ # Phase I MS4 permittees or copermitees

B-3 What is the number of Phase I MS4s in the follow categories?
_____ # City/town/township/village MS4s
_____ # County/borough MS4s
_____ # School/university/hospital MS4s
_____ # Transportation (state/local) MS4s
_____ # Federal facility MS4s (military bases, prison, etc.)
_____ # Sewer, flood control, drainage district
_____ # Watershed district or other watershed body
_____ # Other, describe; _____

B-4 What is the total number of Phase II permittees or copermitees in your state?
_____ # Phase II MS4 permittees or copermitees

B-5 What is the number of Phase II MS4s in the follow categories?
_____ # City/town/township/village MS4s
_____ # County/borough MS4s
_____ # School/university/hospital MS4s
_____ # Transportation (state/local) MS4s
_____ # Federal facility MS4s (military bases, prison, etc.)
_____ # Sewer, flood control, drainage district
_____ # Watershed district or other watershed body
_____ # Other, describe; _____

B- 6 What is the number of MS4s in your state that are located within urbanized areas (as defined by the Census) but have not yet been permitted?

Extent of Coverage

B-7 Are there Phase II permits in your state in which coverage is extended beyond that required by the Phase II regulation (i.e., based on a boundary other than an urbanized area boundary (as defined by the U.S. Census and automatically designated under the Phase II regulations (CFR 122.32)))?
 Yes, describe _____
 No, all Phase II permits are based on urbanized area boundary

B-8 How much land area in your state is covered by stormwater MS4 permits (including any areas regulated beyond minimum federal criteria – Phase I and Phase II in urbanized area)?

_____ acres
_____ %

B-9 Do you have a GIS map of Phase I and II MS4 coverage for your state?

- Yes, GIS map includes Phase I & II MS4 coverage
- Yes, GIS map only includes Phase I MS4 coverage
- Yes, GIS map only includes Phase II MS4 coverage
- No

Provide the citation of the location of the GIS information. Provide the URL if the GIS information is posted on the web.

B-10 What is your state's criteria for designating small MS4s, other than those located in an urbanized area, as described in the Phase II regulations (CFR 123.35(b))?

Check all that apply.

- Discharge to sensitive waters
- Population or population density
- High growth or growth potential
- Contiguity to an urbanized area
- Significant contributor of pollutants to waters of the United States
- Ineffective protection of water quality concerns by other programs
- Other, describe _____
- None

Provide the citation of the regulation, statute, or guidance where your state's MS4 designation criterion (developed under 40 CFR 123.35) is located. Provide the URL if the criteria is posted on the web.

B-11 Has your state stormwater program used its designation authority to regulate small MS4s other than those located in an urbanized as described in the Phase II regulations (CFR 123.35(b))? Include designation of entire counties which contain urbanized area.

- Yes, describe _____
- No

B-12 Has your state stormwater program used its residual designation authority (CFR 122.26 (a)(9)(i)(C) or (D)) to regulate discharges or category of discharges within a geographic area because controls were needed based on wasteload allocations that are part of TMDLs or because the stormwater discharge

contributes to a violation of a water quality standard or is a significant contributor of pollutants to waters of the U.S.?

- Yes, describe _____
- No

B-13 Has your state identified any stormwater discharges or classes of stormwater discharges for regulation/permitting under **state law** that are not currently subject to regulation/permitting under the federal Clean Water Act stormwater program?

- Yes, Describe those discharges _____
- No, my state regulates only those discharges subject to the Phase I and Phase II stormwater regulations

B-14 In your state, how many stormwater permits have you issued which are based on watershed or watershed district boundaries?

- _____ # MS4 watershed permits, describe _____
- None of the MS4 permits are based on watershed-based boundaries

B-15 In your state, what is the percent of MS4s regulated as a permittee or copermitee under a stormwater permit which is based on watershed boundaries/ watershed districts boundaries?

- _____% MS4 permittees covered under a watershed permit
- No MS4s are covered under a watershed permit

B-16 In your state, what is the percent of MS4s whose stormwater permit requires or encourages implementation of components of a watershed management plan (not including TMDL implementation)?

- _____% MS4s, describe _____
- None

Specific Stormwater Program Components

B-17 Do you require Phase I MS4s in your state to implement any of the six minimum control measures as described in the Phase II stormwater regulations?

- Yes, this is true for all Phase I MS4s in my state
- This is true for some Phase I MS4s in my state
- No, Phase I requirements do not go beyond what is described in the Phase I regulations
- Not applicable, my state does not have any Phase I MS4s

If yes, check all of the minimum controls measures (as described in the Phase II regulations) that are required of Phase I permittees.

- Public Education and Outreach
- Public Participation/Involvement
- Illicit Discharge Detection and Elimination
- Construction Site discharge control
- Post Construction discharge control

- Pollution Prevention/Good Housekeeping
- B-18 Do you require Phase II MS4s to implement an industrial program similar to that required for Phase I MS4s?
- Yes
 - Some Phase II MS4s
 - No
- B-19 Do you require Phase II MS4s to conduct monitoring similar to that required for Phase I MS4s?
- Yes
 - Some Phase II MS4s
 - No
- B- 20 Does your state collect annual reports through electronic submission for Phase I and Phase II MS4s? Check all that apply.
- Phase I MS4s submit electronic annual reports
 - Phase II MS4s submit electronic annual reports
 - Some Phase I MS4s submit electronic annual reports
 - Some Phase II MS4s submit electronic annual reports
 - No
- B- 21 Does your state require Phase I and Phase II MS4s to report their stormwater operating budget in their annual report? Check all that apply.
- Phase I MS4s must report their budget in their annual report
 - Phase II MS4s must report their budget in their annual report
 - No
- B- 22 Does your state require Phase I and Phase II MS4s to report their monitoring results in their annual report? Check all that apply.
- Phase I MS4 must report their monitoring results in their annual report
 - Phase II MS4 must report their monitoring results in their annual report
 - No
- B- 23 Has your state done an analysis of the MS4 annual reports. Check all that apply.
- Yes, we have analyzed Phase I MS4 annual reports
 - Yes, we have analyzed Phase II MS4 annual reports
 - No
- B-24 Does the state's MS4 general permit require the review of ordinances?
- Yes
 - No
- B-25 Provide a description of any data (may include water quality/water quantity monitoring) that has shown the effectiveness of any component of your

stormwater program in protecting waterbodies from stormwater impacts. Include references to any data or other information you may have.

B-26 Provide a description of any data (may include water quality/water quantity monitoring) that has shown any component of your stormwater program has **NOT been effective** in protecting waterbodies from stormwater impacts. Include references to any data or other information you may have.

Retrofit of Stormwater Management Practices

B-27 Are there currently stormwater retrofit requirements in any MS4 permits (or other regulation) in your state to reduce the water quantity and quality impacts from *existing* developed areas?

- Yes, in the MS4 general permit, describe _____
- Yes, in MS4 individual permits, describe _____
- Yes, there are retrofit requirements in some MS4 permits which a TMDL implementation plan necessitates such practices
- There are no retrofit requirements in MS4 permits, but there are retrofit requirements in another regulation, describe _____
- No (skip to B-30)

B-28 What is the driver of the stormwater retrofit requirement? Check all that apply.

- To strengthen MS4 stormwater permit requirements
- To address wetlands mitigation
- To address flooding
- Total Maximum Daily Load (TMDL) or other Clean Water Act water quality requirement(s)
- Safe Drinking Water Act (SDWA) wellhead protection or UIC regulations
- To comply with other federal regulations (ESA, CERCLA, WRDA, etc)
- To strengthen local watershed plan or local water quality, habitat or stream stability or geomorphology concerns

- Other: _____
- Not applicable

B-29 Provide any additional details of a retrofit program in your state.

MONITORING

B-30 Do you require any of the following types of monitoring in your Phase I and Phase II MS4 permits? Do not include visual inspections as part of the Illicit Discharge and Detection Elimination (IDDE) program. Check all that apply.

Phase I MS4 permits

- Stormwater outfall monitoring - dry weather
- Stormwater outfall monitoring – wet weather
- Stormwater monitoring of specific stormwater controls
- In-stream monitoring for water quality parameters
- In-stream monitoring for biological parameters
- In-stream monitoring for geomorphology or physical habitat

Phase II MS4 permits

- Stormwater outfall monitoring - dry weather
- Stormwater outfall monitoring – wet weather

- Stormwater monitoring of specific stormwater controls
- In-stream monitoring for water quality parameters
- In-stream monitoring for biological parameters
- In-stream monitoring for geomorphology or physical habitat

B-31 Does your state collect data on the performance effectiveness of stormwater control practices for water quality or volume control or sustainability? If yes, can you share such data?

- Yes, my state has measured effectiveness data and we have data to share
- Yes, my state has measured effectiveness data but we don't have data to share
- No, my state has not collected effectiveness data

B-32 Has your state documented any chemical, biological, and/or physical improvements in waters of the U.S. and/or waters of the state that can be attributed to your stormwater program?

- Yes
- No
- Unknown

- B-33 Has your state measured improvements in water quality resulting specifically from the implementation of stormwater post construction performance standards and/or design criteria? If yes, can you share such data?
 - Yes, my state has measured such water quality improvement and we have data to share
 - Yes, my state has measured such water quality improvement but we don't have data to share
 - My state has implemented such standards but we have not measured water quality improvements
 - My state has not implemented such standards

B-34 Provide any additional information for this Section B in the space provided below.

Section C: Construction Stormwater Program

- C-1 What is the size criterion for obtaining a construction general permit in your state?
 _____ indicate units: acre(s), sq feet, volume (cubic feet) of disturbed land
 Other, describe _____

- C-2 What is the number of permittees in the state Construction Permit for FY2005 – FY2009 for each of the following size categories? Fill in the entire table; if unknown, write “UK”, if not applicable write “NA”, if there are no permittees in that size category write “Zero.”

Construction Permittees, FY 2005-2009					
	Fiscal year				
	2005	2006	2007	2008	2009
< 1 acre					
1 – 5 acres					
6 - 10 acres					
11 - 30 acres					
31- 50 acres					
> 50 acres					

My state has a “no application” permit for disturbances less than 5 acres

- C-3 Has your state included numeric limits in construction general permits?
 Yes, please describe _____
 No

- C-4 Has your state included benchmarks in construction general permits?
 Yes, please describe _____
 No

- C-5 Does your state require specific stormwater controls in its construction general permit?
 Yes, please describe _____
 No

C-6 Provide any additional information for this Section in the space provided below.

D: STANDARDS FOR STORMWATER DISCHARGES FROM NEW DEVELOPMENT AND REDEVELOPMENT & SPECIFIC STORMWATER PRACTICES

D-1 Does your state define the following as new development or redevelopment?

Infill projects on existing undeveloped parcels New Redevelopment Neither

Projects involving the conversion from one land use type to another with no change in impervious area (e.g. a commercial property is converted into townhouses) New Redevelopment Neither

Development extensions that add imperviousness onto previously undeveloped land, but are part of the same plot/parcel (e.g. a commercial parking lot is extended into an adjoining forested area) New Redevelopment Neither

Replacement of impervious surfaces (road resurfacing, sidewalk replacement, etc) New Redevelopment Neither

If your state has defined new development and redevelopment, provide the citation of the regulation, statute, or guidance where the definition is located. Provide the URL if the criteria is posted on the web.

D-2 Does your state define the following roadway activities as new development, redevelopment or maintenance?

Bridges
Bridge deck replacement New Redevelopment Maintenance

Repairing bridge girders and substructures New Redevelopment Maintenance

Other, specify _____

Additional Surfaces
Extensions/expansions that add imperviousness onto previously undeveloped land, but are part of the same plot/parcel (e.g. a rest stop parking lot is extended into an adjoining forested area) New Redevelopment Maintenance

Road and/or shoulder widening New Redevelopment Maintenance
Projects (e.g. adding a lane or widening an older
roadway to improve safety)

Reconstruction projects New Redevelopment Maintenance

Pavement structural and joint repair New Redevelopment Maintenance
(e.g. pothole and square cut patching, crack
Sealing, etc.)

Realignment (moving the location of an Existing highway, curve corrections,
intersection realignment, etc.) New Redevelopment Maintenance

Addition of new sidewalks or bike paths New Redevelopment Maintenance

Other, specify _____

Other

Road resurfacing New Redevelopment Maintenance

Road repaving New Redevelopment Maintenance

Sidewalk replacement New Redevelopment Maintenance

Culvert replacement and repair New Redevelopment Maintenance

Removal or protection of roadside objects which pose a safety hazard
to the traveling public New Redevelopment Maintenance

Other, specify _____

D-3 Does your state have a planning process, program or other mechanism that
projects how much or where new development may occur over a certain time
period?
 Yes, describe _____
 No

D-4 Has your state determined impervious coverage statewide or for any certain
regions of your state?
 Yes
 No
Describe the method used to determine impervious cover.

Performance Standard or Design Criteria for Stormwater Discharges from New Development or Redevelopment

- D-5 In your state, is there a post construction standard that includes either numeric or specific stormwater performance standards or design criteria for stormwater control that applies to discharges from new development or redevelopment?
 - Yes, there is a standard for post-construction discharges from new development or redevelopment in the MS4 general permit
 - Yes, there is a standard for post-construction discharges from new development or redevelopment in the state construction general permit and/or individual state construction permits
 - Yes, some MS4 or construction permits have such standard, but it's not in a state general stormwater permit
 - Yes, there is a standard for post-construction discharges from new development or redevelopment in state regulations, but not in a federal NPDES permit
 - Yes, other, describe _____
 - No, there are no standards for post-construction discharges from new development or redevelopment in my state (skip to D-18)

- D-6 Is your post construction standard for redevelopment projects different than that for new development projects?
 - Yes (Answer questions D-7 – D-9 regarding your standard for new development, answer questions D-10 – D-12 regarding your standard for redevelopment)
 - No (Answer question D-7 – D-9 regarding your standard for development, skip D-10 – D-12)

Stormwater Performance Standard or Design Criteria for (New) Development Projects

- D-7 For **new development** projects, what is the threshold to which the post construction stormwater performance standards or design criteria apply?
 - _____ sq ft of disturbed land
 - _____ acre(s) of disturbed land
 - _____ cubic feet of disturbed land
 - _____ area of impervious surface (indicate units)
 - Type of facility usage, *specify* _____
 - Specific location / watershed priority, *specify* _____
 - Type of activity (i.e. fueling, storage of materials), *specify* _____
 - New MS4 system connections, *specify* _____
 - Other: _____
 - Unknown
 - Not Applicable

D-8 Indicate which specific or numeric stormwater performance standards or design criteria requirements apply to **new development** projects. Please provide your standard in the “specify” blank. Check all that apply.

Attach copies and/or citations for the relevant standards and criteria (such as a copy of your municipal stormwater design requirements or a citation to the state law or a web page link to the design manual that contains the information).

Note: Standards that require detention or extended detention are those which hold stormwater temporarily and discharge the stormwater over an extended period of time (hours to days) generally by controlling the size of the discharge volume and flow rate. The options for standards that require retention are those in which the stormwater is infiltrated, evapotranspired, or harvested.

In the electronic version of the survey, EPA will create a table for options to indicate if each standard applies to all areas within the jurisdiction, or only to certain sites or waterbodies.

Post-development peak runoff/discharge rate must match pre-development peak runoff/discharge rate for a specified storm return interval or intervals

- 1 year storm
- 2 year storm
- 5 year storm
- 10 year storm
- 25 year storm
- 100 year storm
- Other (*Specify*) _____

Detention of a specified storm depth or volume (such as 0.5 inch per acre or 1 inch per impervious acre)
(*Specify*) _____

Detention of a specified storm volume (such as 1,800 cubic feet per acre or 3,600 cubic feet per impervious acre)
(*Specify*) _____

Detention of a specified percentile storm event (such as the 80th percentile storm)
(*Specify*) _____

Retention of a specified storm depth or volume (such as 0.5 inch per acre or 1 inch per impervious acre)
(*Specify*) _____

Retention of a specified storm volume (such as 1,800 cubic feet per acre or 3,600 cubic feet per impervious acre)
(*Specify*) _____

- Retention of a specified percentile storm event (such as the 80th percentile storm)
Specify: _____

- Pollutant reduction requirement (for example, stormwater control practices must be installed to remove 80% of the post-construction TSS loading and 40% of the post-construction nitrogen loading)
Specify: _____

- Channel protection measures/ hydromodification controls (such as a maximum allowable discharge velocity or other metric)
Specify: _____

- Infiltration/groundwater recharge requirement (for example, maintain predevelopment groundwater recharge levels or infiltrate the first 0.5 inch of runoff)
Specify: _____

- Limits for effluent concentrations of specific pollutants measured at the stormwater control
Specify: _____

- Limits for effluent concentrations of specific pollutants in receiving waters
Specify: _____

- Requirements for control of temperature
Specify: _____
Does this standard apply to all areas within your jurisdiction, or only to certain sites or waterbodies?
 - All areas
 - Only certain areas (*Specify:* _____)

- Flood control requirements other than the peak discharge rate control and on-site detention/retention requirements specified above.
Specify: _____

- Stream buffer requirements (for example, a 50 foot vegetated buffer must be maintained/implemented adjacent to waters of the state)
Specify: _____

- Limits on the maximum percent imperviousness for the site, or maximum effective (commonly called directly connected) impervious surface or other limits on impervious surfaces.
Specify: _____

- Other Standards Not Identified Above, *Specify:* _____

- D-9 Which land use types do the stormwater performance or design standards for **new development projects** (described in Question D-8) apply? Check all that apply.
- Requirements are the same for all land use types
 - Residential
 - Commercial
 - Industrial
 - Institutional
 - Mixed use
 - Other, Specify: _____

Stormwater Performance Standards or Design Criteria for Redevelopment Projects (if different from new development standards, otherwise skip to D-13)

- D-10 For **redevelopment** projects, what is the threshold to which the post construction stormwater performance standards or design criteria apply?
- _____ sq ft of disturbed land
 - _____ acre(s) of disturbed land
 - _____ cubic feet of disturbed land
 - _____ area of impervious surface (indicate units)
 - Type of facility usage, *specify* _____
 - Specific location / watershed priority, *specify* _____
 - Type of activity (i.e. fueling, storage of materials), *specify* _____
 - New MS4 system connections, *specify* _____
 - Other: _____
 - Unknown
 - Not Applicable

- D-11 Indicate which specific or numeric stormwater performance standards or design criteria requirements apply to **redevelopment** projects. Please provide your standard in the “specify” blank. Check all that apply.

Attach copies and/or citations for the relevant standards and criteria (such as a copy of your municipal stormwater design requirements or a citation to the state law or a web page link to the design manual that contains the information).

Post-development peak runoff/discharge rate must match pre-development peak runoff/discharge rate for a specified storm return interval or intervals

- 1 year storm
- 2 year storm
- 5 year storm
- 10 year storm
- 25 year storm
- 100 year storm
- Other (*Specify*) _____

- Detention of a specified storm depth or volume (such as 0.5 inch per acre or 1 inch per impervious acre)
(Specify) _____
- Detention of a specified storm volume (such as 1,800 cubic feet per acre or 3,600 cubic feet per impervious acre)
(Specify) _____
- Detention of a specified percentile storm event (such as the 80th percentile storm)
(Specify) _____
- Retention of a specified storm depth or volume (such as 0.5 inch per acre or 1 inch per impervious acre)
(Specify) _____
- Retention of a specified storm volume (such as 1,800 cubic feet per acre or 3,600 cubic feet per impervious acre)
(Specify) _____
- Retention of a specified percentile storm event (such as the 80th percentile storm)
(Specify) _____
- Pollutant reduction requirement (for example, stormwater control practices must be installed to remove 80% of the post-construction TSS loading and 40% of the post-construction nitrogen loading)
Specify: _____
- Channel protection measures (such as a maximum allowable discharge velocity or other metric)
Specify: _____
- Infiltration/groundwater recharge requirement (for example, maintain predevelopment groundwater recharge levels or infiltrate the first 0.5 inch of runoff)
Specify: _____
- Limits for effluent concentrations of specific pollutants measured at the stormwater control
Specify: _____
- Limits for effluent concentrations of specific pollutants in receiving waters
Specify: _____

Requirements for control of temperature

Specify: _____

Does this standard apply to all areas within your jurisdiction, or only to certain sites or waterbodies?

All areas

Only certain areas (*Specify:* _____)

Flood control requirements other than the peak discharge rate control and on-site detention/retention requirements specified above.

Specify: _____

Stream buffer requirements (for example, a 50 foot vegetated buffer must be maintained/implemented adjacent to waters of the state)

Specify: _____

Limits on the maximum percent imperviousness for the site, or maximum effective (commonly called directly connected) impervious surface or other limits on impervious surfaces.

Specify: _____

Other Standards Not Identified Above, *Specify:* _____

D-12 Which land use types do the stormwater performance or design standards for **redevelopment projects** (described in Question D-11) apply? Check all that apply.

Requirements are the same for all land use types

Residential

Commercial

Industrial

Institutional

Mixed use

Other, describe _____

Follow-up questions for post construction standard for new or redevelopment

D-13 To comply with the performance standard or design criteria specified in Question D-8 and/or D-11, is the use of specific stormwater controls measures, or choosing from a menu of such controls, a requirement?

Yes, specific controls are specified to meet the standard, describe _____

Yes, choosing specific controls from a menu is specified to meet the standard

No, specific controls are not required to meet the standard

D-14 What is your state's role in ensuring that post construction standards are implemented?

Site inspection

Site plan review/approval acceptance

- Review self-reporting/ self-certification database
 - MS4 audit/inspection
 - Other, describe _____
 - None
 - There are no post construction standards in my state.
- D-15 Does your state offer an alternative to compliance with your performance standard or design standard for **New Development**?
- Yes, it is a stormwater mitigation program, please describe _____
 - Yes, it is a payment in lieu program
 - Yes, there is another type of alternative compliance program, please describe _____
 - No, but there is an alternative compliance program offered by another level of government (MS4, county, etc), Specify: _____
 - No, an alternative compliance program does not exist for new development
 - There are no post construction standards in my state
- D-16 Does your state offer an alternative to compliance with your performance standard or design standard for **Redevelopment**?
- Alternatives to compliance are the same for new development and redevelopment.
 - Yes, it is a stormwater mitigation program, please describe _____
 - Yes, it is a payment in lieu program
 - Yes, there is another type of alternative compliance program, please describe _____
 - No, but there is an alternative compliance program offered by another level of government (MS4, county, etc), Specify: _____
 - No, an alternative compliance program does not exist for redevelopment
 - There are no post construction standards in my state
- D-17 If options for alternative to compliance with your performance standard or design standard are offered, what are the criteria for use of the compliance alternative?
- Infiltration cannot be achieved: lot size too small outside of the footprint to create the necessary infiltration capacity (even with amended soils), shallow groundwater
 - Soil instability as documented by geotechnical analysis
 - Capture or reuse of stormwater cannot be achieved on the property
 - Cost constraints
 - Other, describe _____
- D-18 Indicate who is responsible for determining whether compliance with the standard can be achieved?
- MS4 permittee staff
 - Owner or operator of the developed site
 - Other, describe _____

- D-19 Are there any prohibitions in your state, through permit, policy or guidance that would preclude the use of offsite stormwater mitigation?
- Yes: _____
 - No
 - Not Applicable, my state does not have a policy on offsite stormwater mitigation
- D-20 Are there any provisions in your state, through permit, policy or guidance that would preclude the use of payment-in-lieu programs, in which in select circumstances, a fee is furnished in place of meeting stormwater management requirements?
- Yes: describe, including fees _____
 - No
- D-21 Has your state developed a state-wide stormwater manual that addresses stormwater requirements for new development and redevelopment?
- Yes, provide internet URL where manual can be found _____
 - Development in progress
 - No, skip Question D-22
- D-22 Does the stormwater manual include specification for retention practices that infiltrate, evapotranspire or harvest stormwater for reuse?
- Yes
 - Development in progress
 - No

IMPLEMENTATION OF STORMWATER RETENTION PRACTICES

In this section EPA is obtaining information about drivers, incentives and obstacles to the implementation of stormwater retention practices in the state. These practices are those in which stormwater is infiltrated, evapotranspired, or harvested. Examples include bioretention (includes rain gardens, sidewalk planters, curb extensions and other plant or soil systems designed to infiltrate or evapotranspire stormwater), porous pavement, green roofs, vegetated swales, cisterns and other practices. These practices are commonly referred to as Low Impact Development (LID) or Green Infrastructure (GI) practices.

- D-23 Indicate the driver for implementation of stormwater retention practices in your state. Check all that apply.
- Meet post construction performance standards or other requirements in the state's stormwater program
 - Local watershed plan or considerations involving storm drainage issues
 - NPDES WQ protection objectives (i.e. TMDL, impaired water, etc.)
 - CSO Long Term Control Plan requirement
 - To address flooding
 - Other: _____

- Unknown
- Not Applicable

D-24 What, if any, incentives are provided to implement stormwater retention practices in your state? Check all that apply.

- Clean Water State Revolving Fund (SRF) for green projects
- Supplement Environmental Project (SEP) funding
- Grants: Provide direct funding to municipalities or others for implementing a range of green infrastructure projects and practices.
- Rebates & Installation Financing: (e.g. provide funding, tax credits or reimbursements to property owners who install specific practices)

Please Specify: _____

- Awards & Recognition Programs (e.g. provide marketing opportunities and public outreach for exemplary projects)

Please Specify: _____

- Development Incentives

Please Specify: _____

- Local jurisdiction incentives

Please Specify: _____

- Other:

Please Specify: _____

- None
- Unknown
- Not Applicable

D-25 In your state, are there any water rights issues that may prevent stormwater retention practices (as described at the beginning of this section) from being implemented? This could include restrictions of state authority in that only local governments can decide how discharges are controlled.

- Yes, describe the state constitutional, statutory and/or regulatory basis for any restriction on the use of stormwater retention practices_____
- No

D-26 In your state, which of the following types of regulations may **prevent** stormwater retention practices (as described at the beginning of this section) from being implemented?

Check all that apply. This question should be answered regardless of the level of government that imposes the regulation.

Specific Water Requirements

- Standing water restrictions which may prevent the use of extended detention, water reuse or other practices.
- Water rights issues which may prevent water harvesting or reuse (rain barrels, cisterns)
- Water rights issues which may prevent stormwater infiltration

- Restrictions related to groundwater contamination potential
- Restrictions related to sole source aquifer limitations
- Restrictions related to tree/wetland protection requirements

Site design/infrastructure practices

- Curb and Gutter requirements which may restrict roadside infiltrations practices
- Maximum/Minimum parking lot size requirements
- Maximum/Minimum roadway widths
- Requirements setting minimum/maximum cul-de-sac radius
- Restrictions on the width of rights of way
- Conflicts in obtaining private land (e.g., for use as a public right of way)

Building/Structure Requirements

- Restrictions on setbacks/frontages
- Restrictions related to plumbing codes (e.g., prohibitions on stormwater reuse for toilet flushing)

Vegetation Requirements

- Restriction on height of vegetation (e.g. wetland vegetation or grasses)
- Restriction related to tree placement (e.g., restricting the places where trees may be planted, such as near sidewalks, utility poles, along certain stretches of roads)
- Aesthetic requirements for plantings

Other Requirements

- Requirements that may restrict the use of pervious concrete, porous asphalt, modular block pavers, or other alternatives to conventional/impermeable paving materials
- Limited mixed use/compact development
- Restrictions related to deeds
- Restrictions on stormwater reuse for irrigation (e.g., health code restrictions)
- Flooding requirements
- Other: _____

D-27 Does your state require post construction stormwater management practices on private property?
 Yes
 No

D-28 Does your state allow third parties to be responsible for operation and maintenance of required post construction stormwater management practices?
 Yes
 No

D-29 In your state, are there categories or areas excluded from stormwater infiltration due to concerns for groundwater contamination?
 Yes, describe _____

- No
- Not applicable, specify: _____

Section E: Industrial Stormwater Program

E-1 What is the number of permittees currently covered under the industrial stormwater general permit(s) in your state as of FY2009?

_____ # Industrial stormwater permittees

E-2 How many industrial permittees subject to the industrial stormwater general permit(s) are within regulated Phase I or Phase II MS4 permit boundaries as of FY2009? Provide best estimate.

_____ # Industrial Stormwater permittees within Phase I MS4s

_____ # Industrial Stormwater permittees within Phase II MS4s

Cannot answer this question based on state’s current data system.

E-3 Do(es) the industrial stormwater permit(s) in your state have numeric limits?

Yes, describe _____

- No
- Unknown
- Not Applicable

E-4 Do the industrial stormwater permits in your state have benchmarks?

Yes, describe _____

- No
- Unknown
- Not Applicable

E-5 Provide any additional information for this Section E in the space provided below.

You have completed the questionnaire. Refer to the instructions for mailing the questionnaire back to the United States Environmental Protection Agency. Thank you.