Using DOEE's Stormwater Database for

Permit Review and Stormwater Incentives

Matthew Espie
Department of Energy and Environment





Training Objectives

- Become familiar with the Stormwater Database
- Understand how the Stormwater Database supports DOEE plan review
- Be able to enter, modify, and submit stormwater plan information to DOEE

Training Outline

- Overview of DC Stormwater Programs and Stormwater Database
- Using the Stormwater Database to submit plan information

About the Stormwater Database

- Allows web-based entry and review of project data
- Incorporates and enhances existing compliance calculations
- Allows project team to access data during design, review, construction, and inspection
- Streamlines review of stormwater plans
- Generates green infrastructure reports for DOEE

About the Stormwater Database

- Integrates with the SRC and RiverSmart Rewards programs to streamline applications
 - Certify SRCs
 - Transfer SRCs
 - Use SRCs
 - Retire SRCs
 - Notification of in-lieu fee payment
 - RiverSmart Rewards applications
- Enables online submission of compliance information for an Off-site retention volume (Offv)
- Provides Access to the SRC Registry

2013 Stormwater Rule

Major land-disturbing activity

- > 5,000 ft² or more of land-disturbing activity.
- Retain the first 1.2" of rainfall on site or through a combination of on-site and off-site retention.

Major substantial improvement activity

- > Renovation for which:
 - Cost exceeds 50% pre-project value of structure and
 - Combined footprint of structure and land disturb ≥ 5,000 ft².
- Retain the first 0.8" of rainfall on site or through a combination of on-site and off-site retention.

Allowable Use of Off-Site Retention

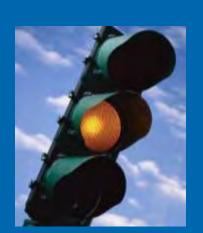
On-site retention ≥ 50% of Stormwater Retention Volume (SWRv).

Free to go off site.



On-site retention < 50% of SWRv.

- Must prove that on-site retention is technically infeasible or environmentally harmful.
- Minimum on-site retention requirement waived during
 - Transition Period 2A (1/15/14 to 1/15/15).
 - Transition Period 2B (1/15/14 to 7/14/15).



Off-Site Retention Volume (Offv)

On-Site SWRv Offv Retention = Volume 10,000 5,000 5,000 gallons gallons gallons

Two Options to Achieve Offv

In-lieu fee (ILF) payment = \$3.58

- Paid to DOEE.
- Corresponds to 1 gallon of retention for 1 year.
- Achieves 1 gallon of Offv for 1 year.

Stormwater Retention Credits (SRCs)

- Privately tradable.
- > 1 SRC corresponds to 1 gallon of retention for 1 year.
- > 1 SRC achieves 1 gallon of Offv for 1 year.
- Each SRC has a unique serial number.

RiverSmart Rewards

- DC Gov't (DOEE) Stormwater Fee (\$2.67/ERU for FY2015).
- DC Water Impervious Area Charge (\$20.30/ERU for FY2015).
- Two separate discount programs.
 - DOEE 55% max discount for 1.2" retention from 1 ERU.
 - DC Water 4% max discount for 1.2" retention from 1 ERU.
- RiverSmart Rewards Standard Application:
 - Available for all sites with Stormwater Management Practices
 - A Simple Application is available for all sites with practices managing 2,000 sf of impervious surface or less

Using the Database

Create a Stormwater Database Account

- Visit the database landing page at doee.dc.gov/swdb
- Request an account (DOEE will approve request)
- Create log in credentials
- DOEE communications may be sent from notify@quickbase.com







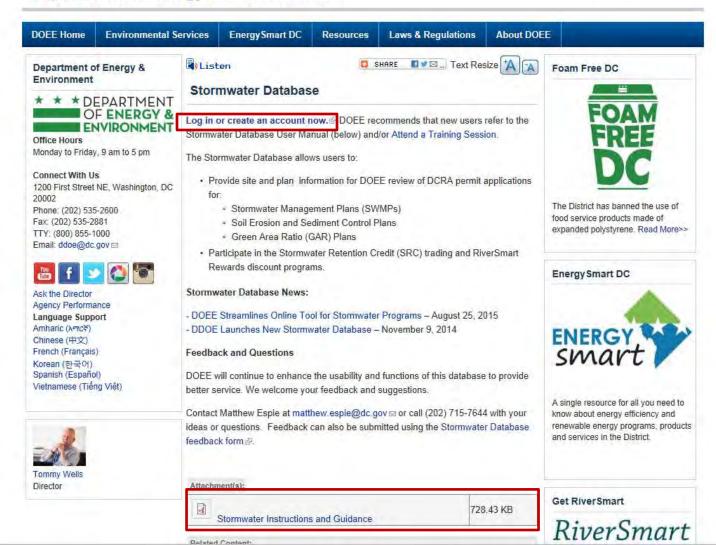


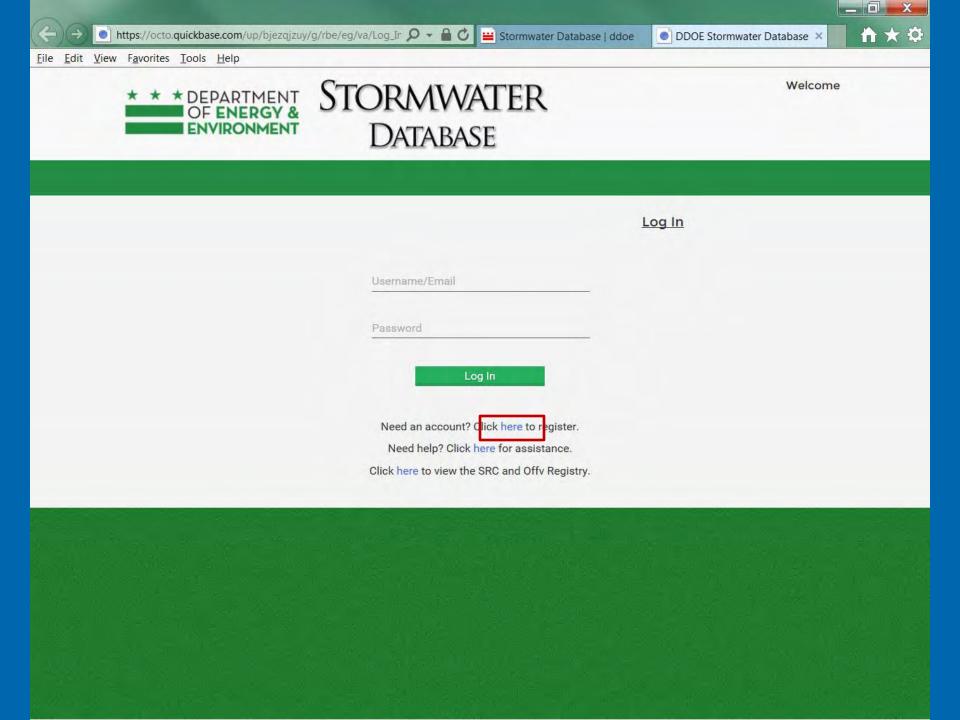




O DC.gov @ doee.dc.gov

Department of Energy & Environment









File Edit View Favorites Tools Help

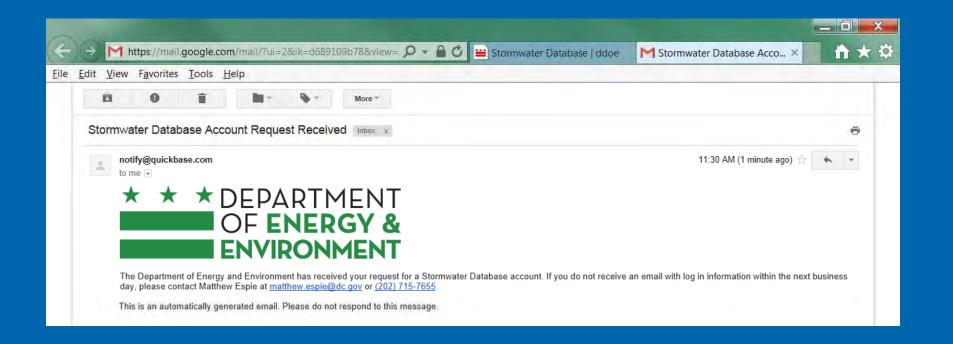
DITTUINE

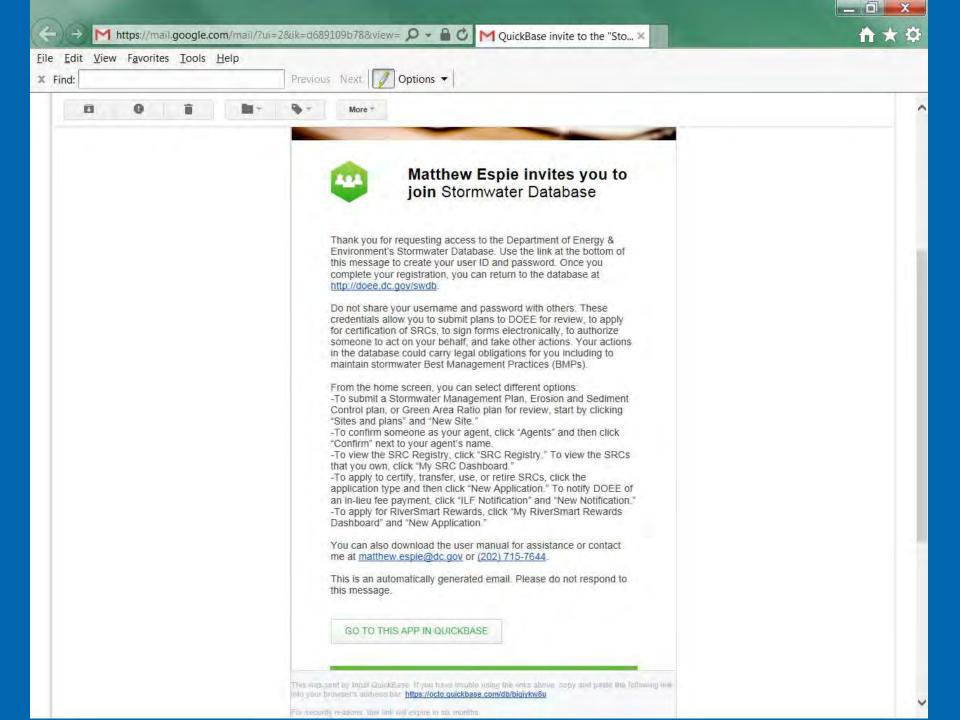
Register

To use DDOE's Stormwater Database, please fill out the form below. After you submit your information, DDOE will approve your account and notify you via email with login instructions. Please ensure that you enter the correct email address.

You will receive a confirmation email from notify@quickbase.com, If you do not receive login credentials within the next business day, please contact Matthew Espie at matthew.espie@dc.gov or (202)-715-7644.

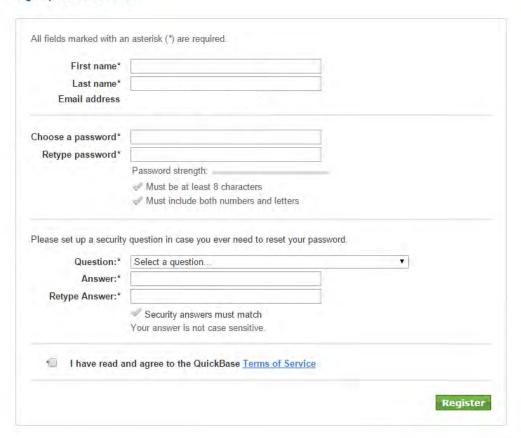
First Name *		Last Name *	
Email *		Phone *	ext
Title		Organization	
	\square Include organization name in address		
ress line 1 *			
ddress line 2			
City *	Washington		
State *	DC 💌		
Zip code *			



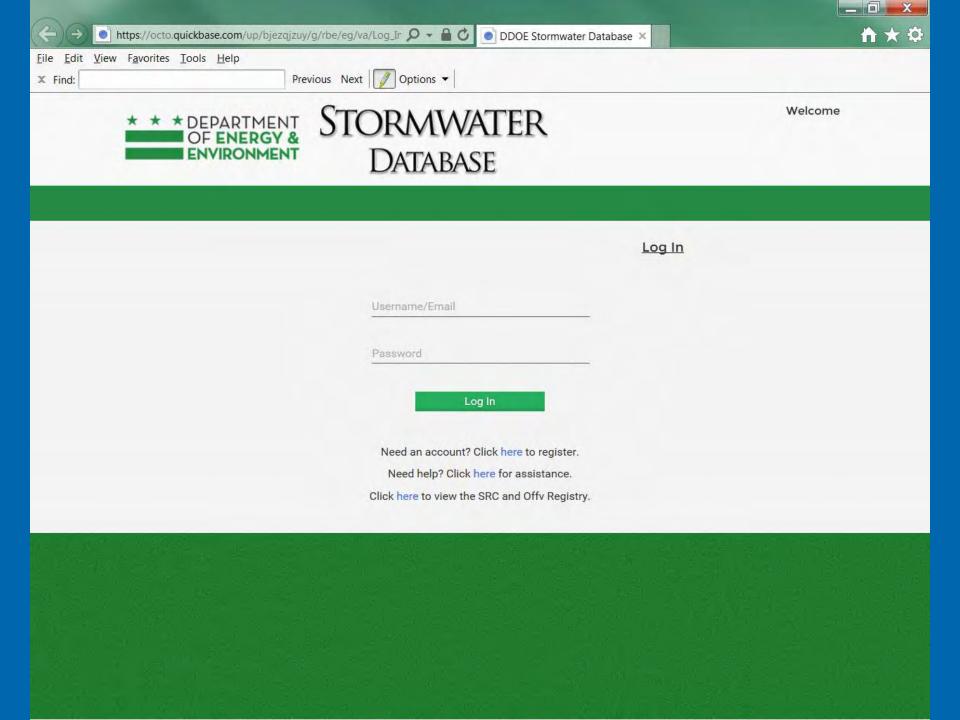




Sign Up for QuickBase



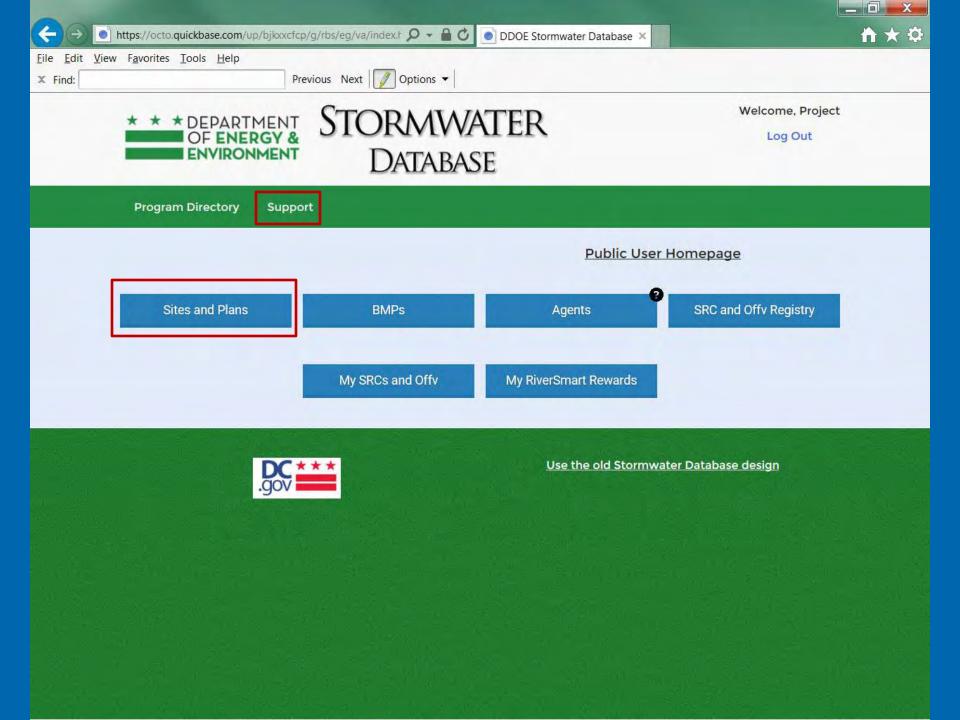
Copyright © 2000-2015 Intuit Inc. All rights reserved.

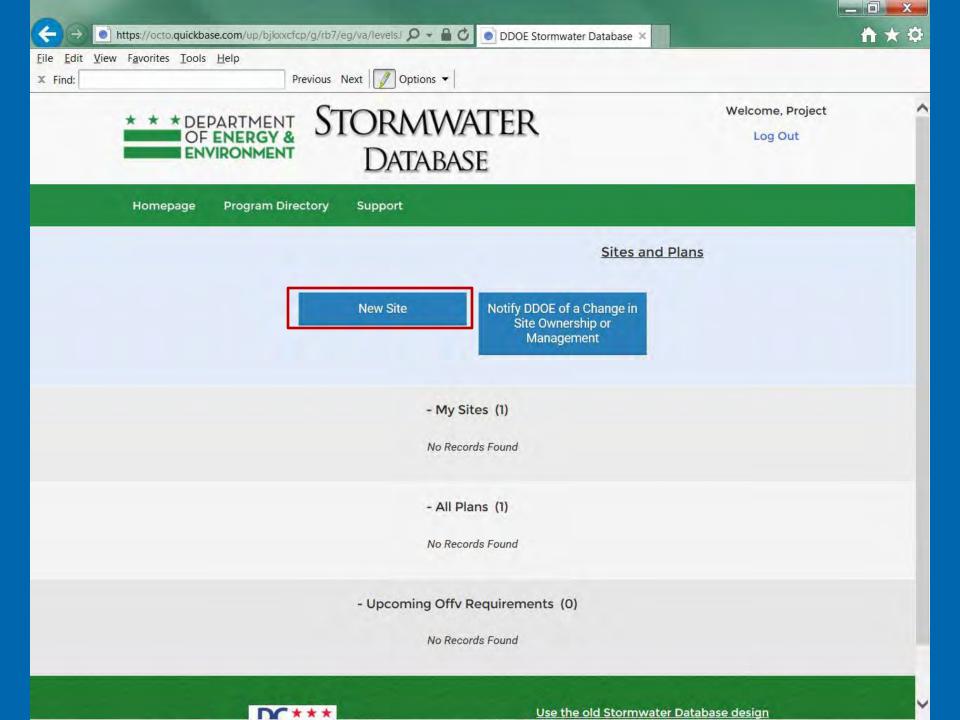


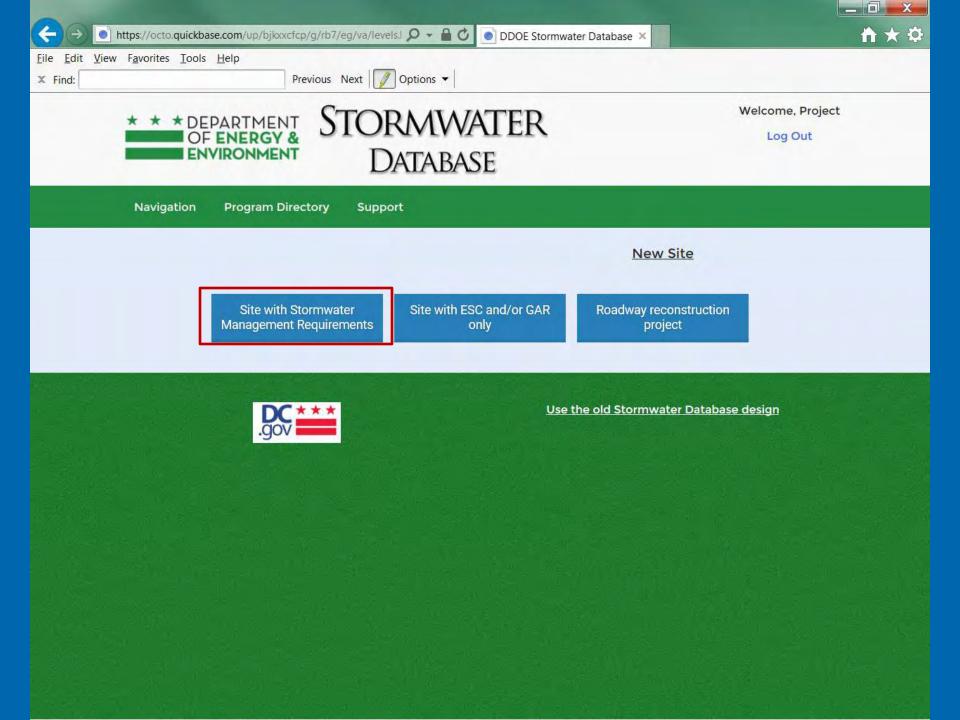
Stormwater Management Plans

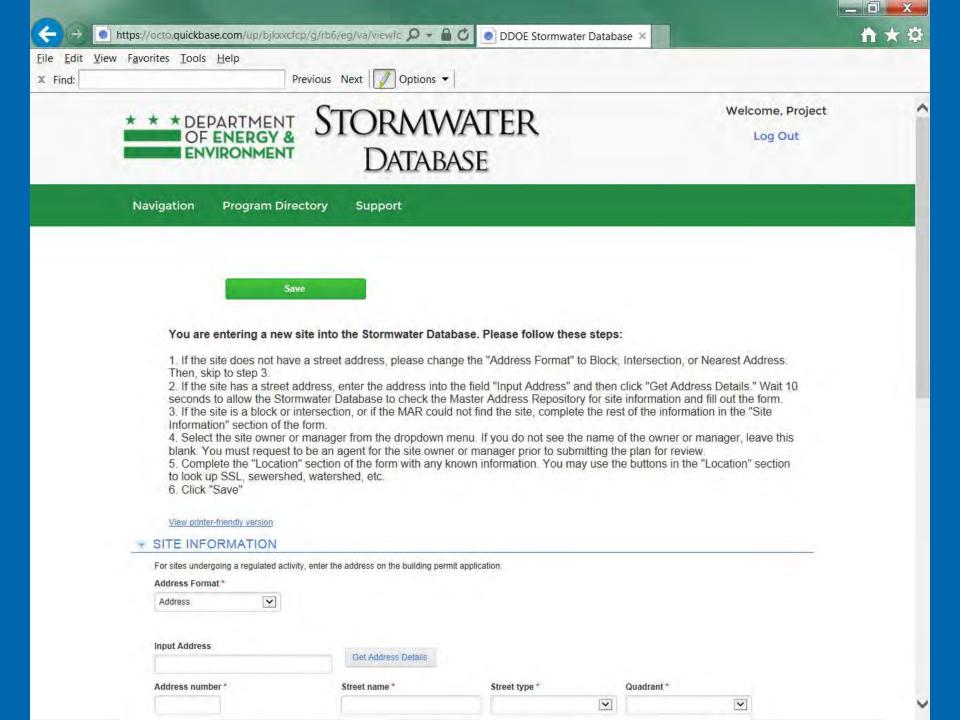
Enter Plan Information

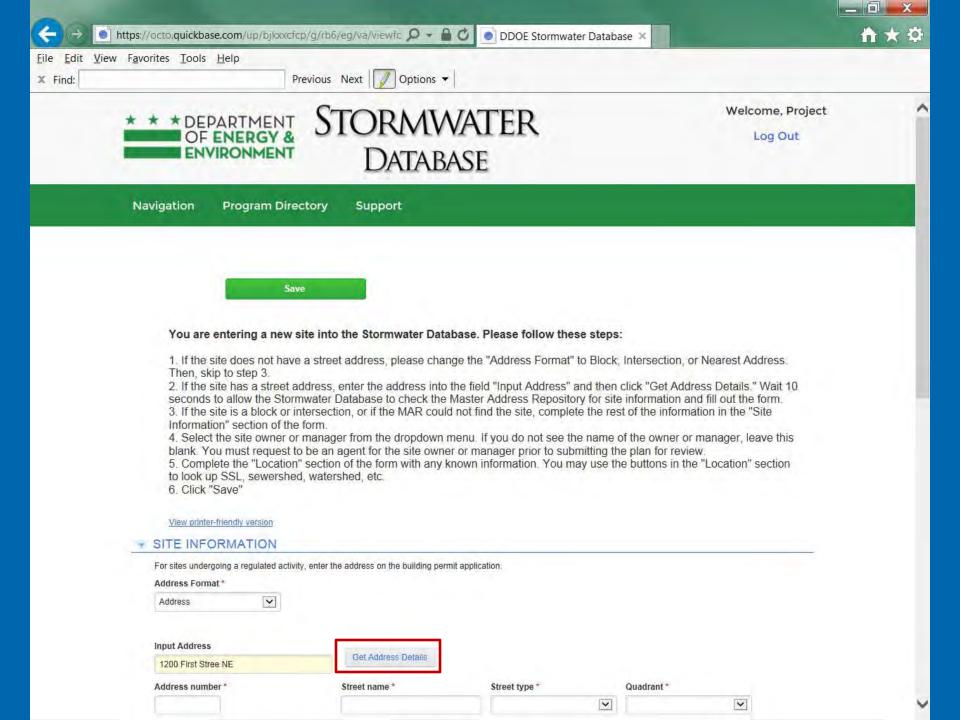
- > Site Information
- > Plan Information
- Site Drainage Area Information
- > BMP Information
- > Submit

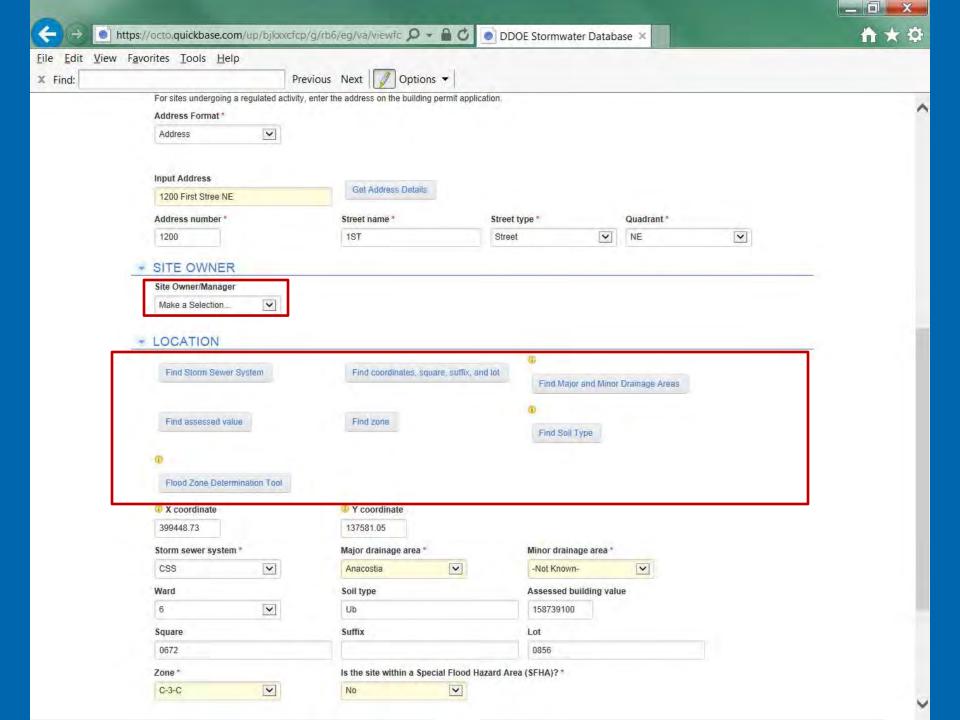


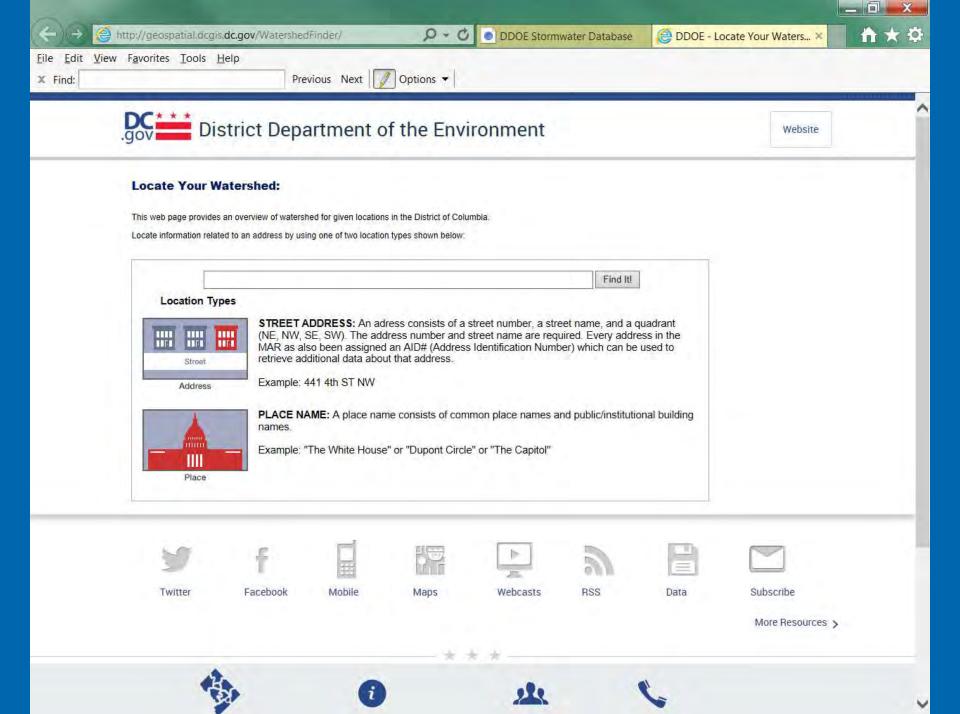


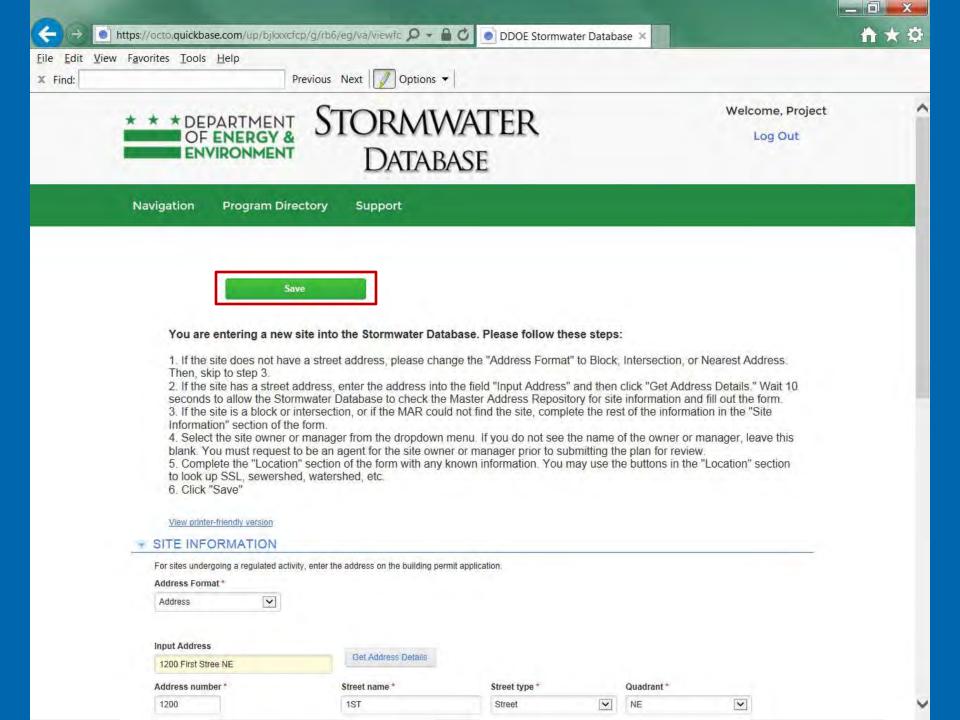


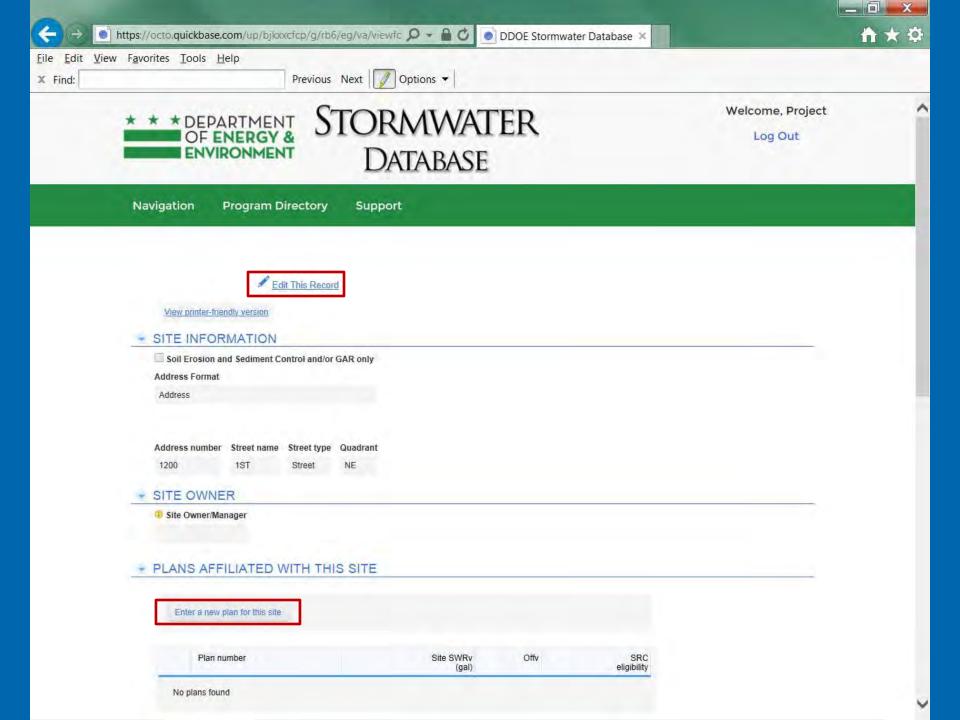


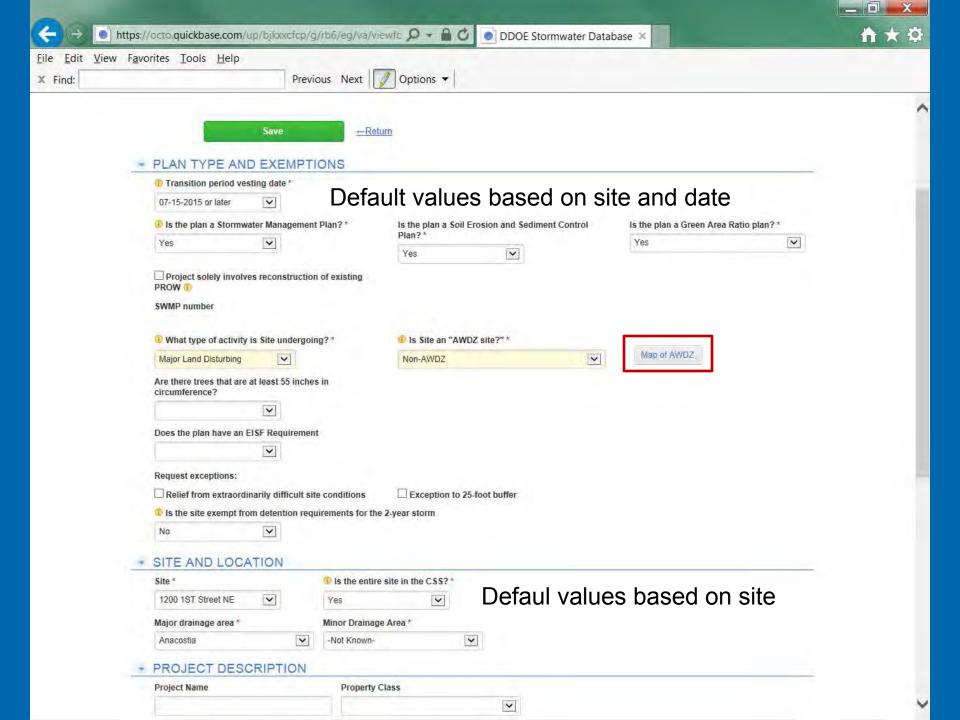


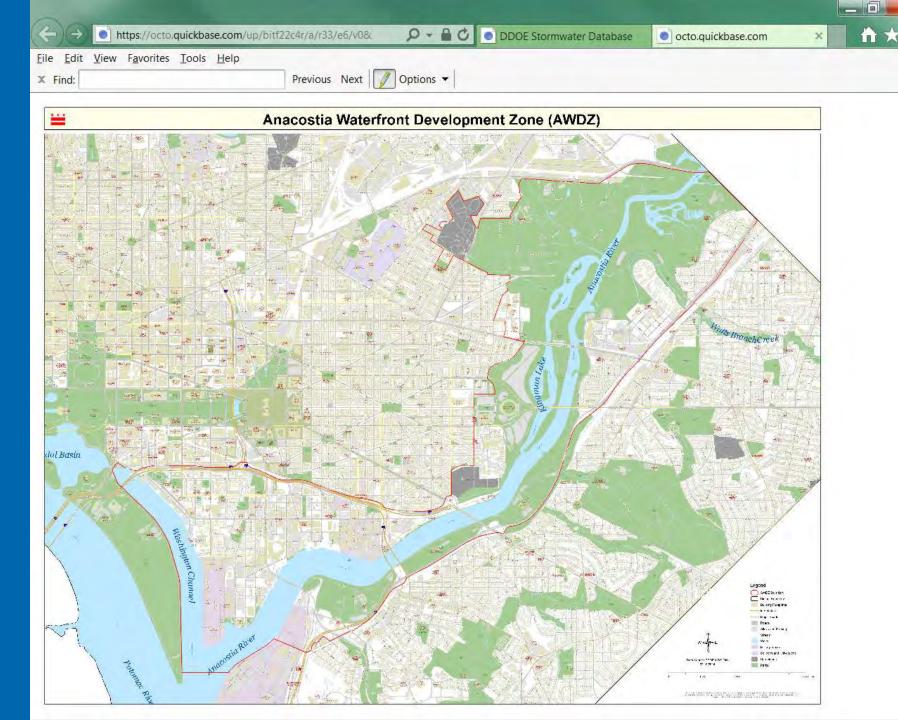


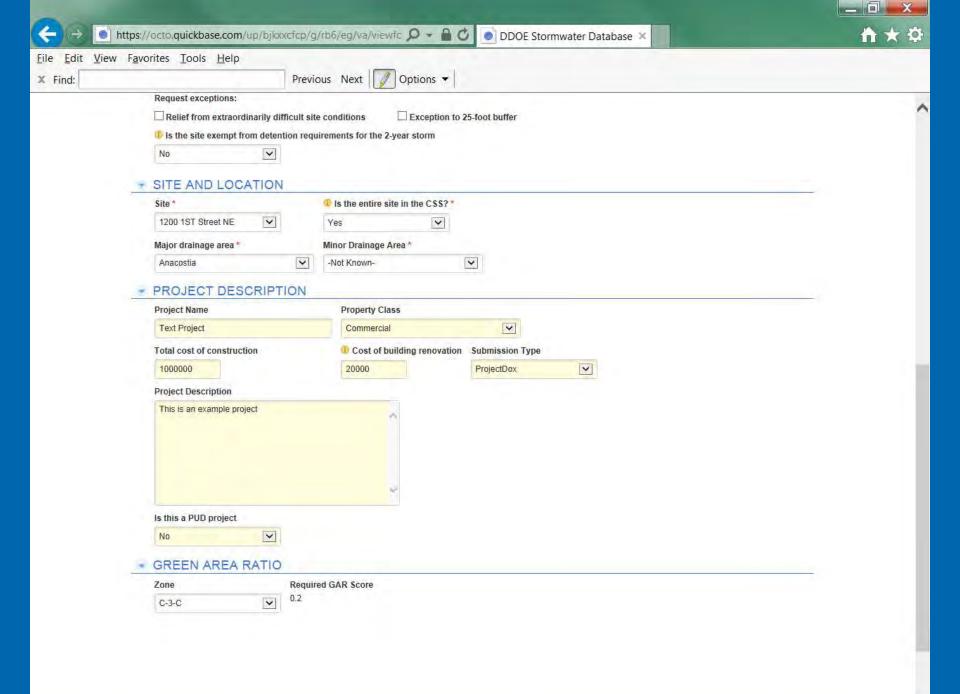


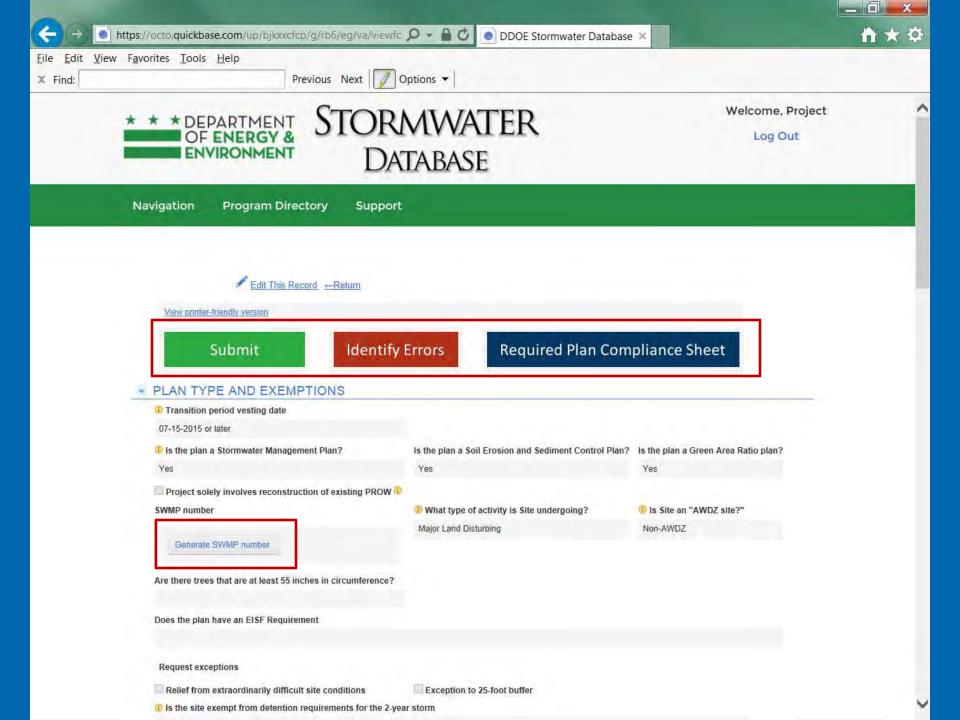


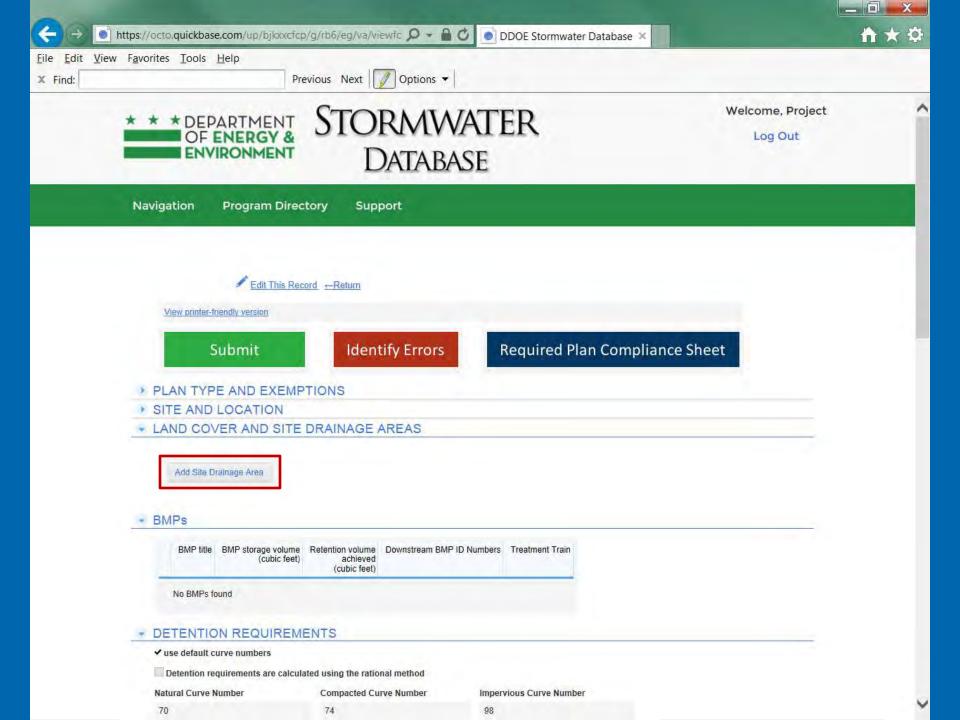




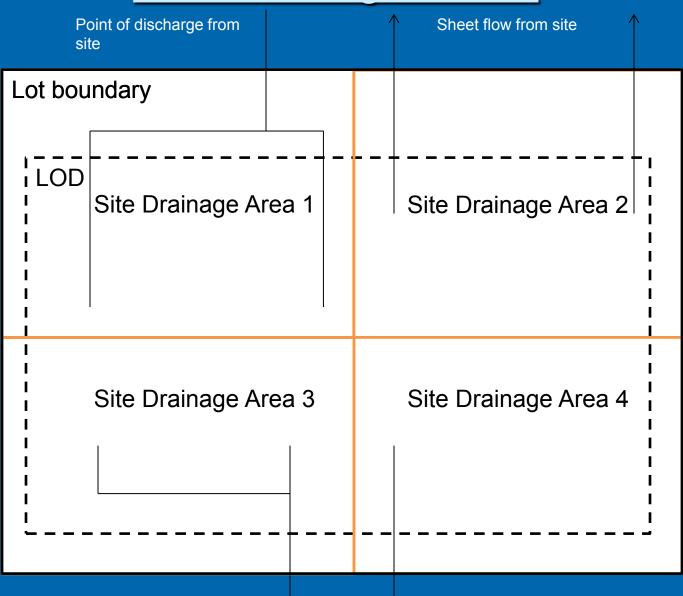






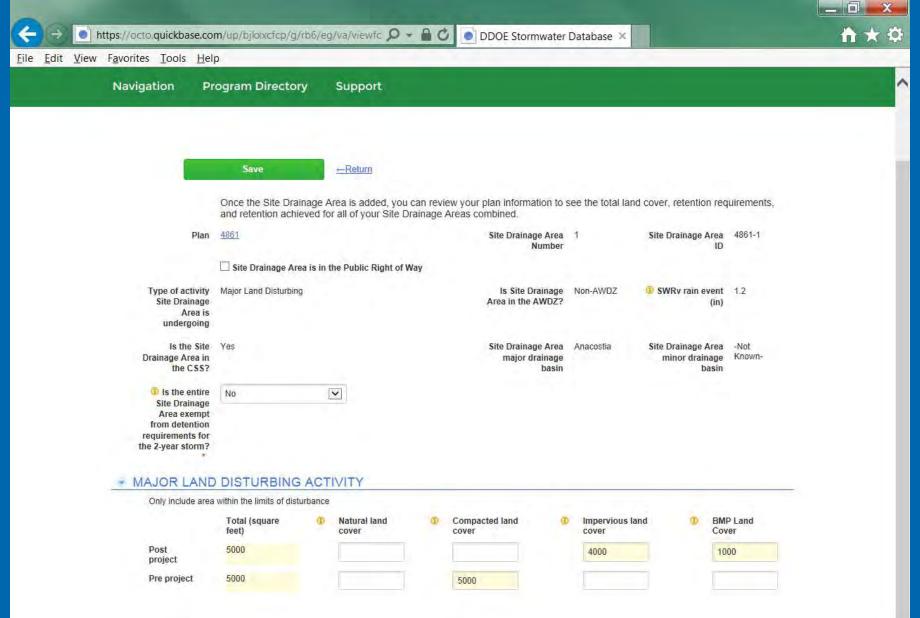


Site Drainage Areas

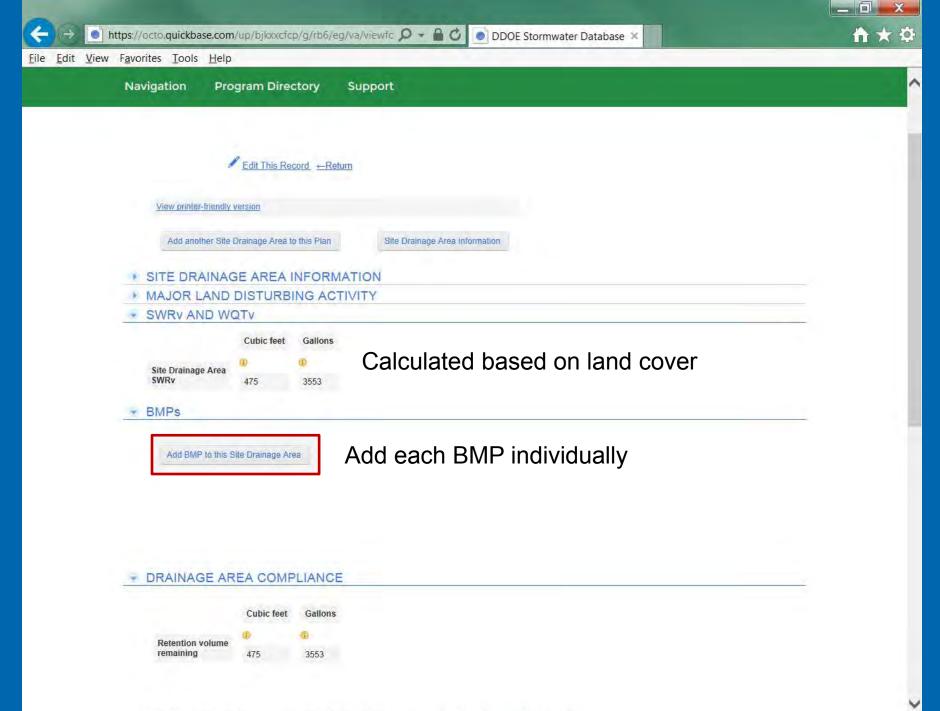


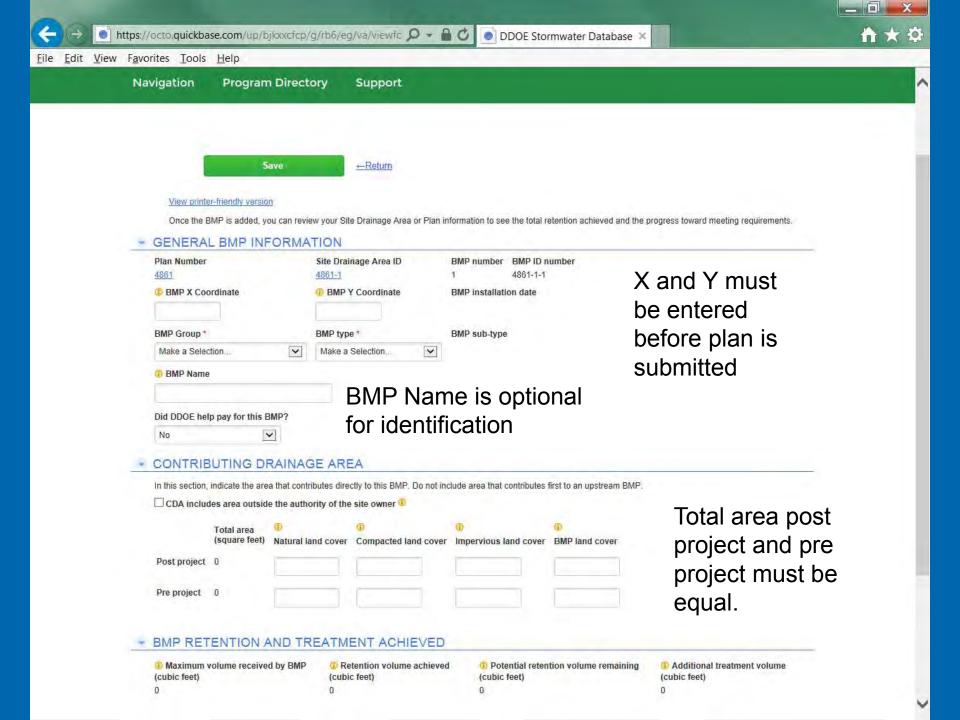
Point of discharge from site

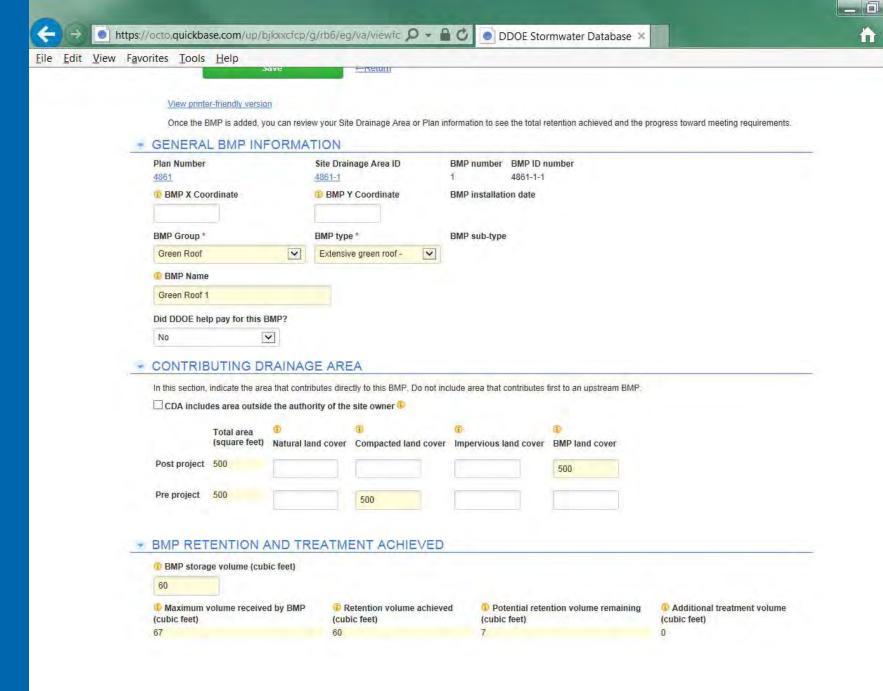
Point of discharge from site

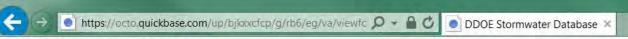


Total area must be equal post project and pre project













STORMWATER DATABASE

Welcome, Project

Log Out

Navigation

Program Directory

Support



View printer-friendly version

Create another BMP in the same Site Drainage Area

BMP Information

GENERAL BMP INFORMATION

Plan Number Site Drainage Area ID BMP number BMP ID number

4861 4861-1 1 4861-1-1

(BMP X Coordinate BMP Y Coordinate BMP installation date

BMP Group BMP type BMP sub-type

Green Roof Extensive green roof

(BMP Name

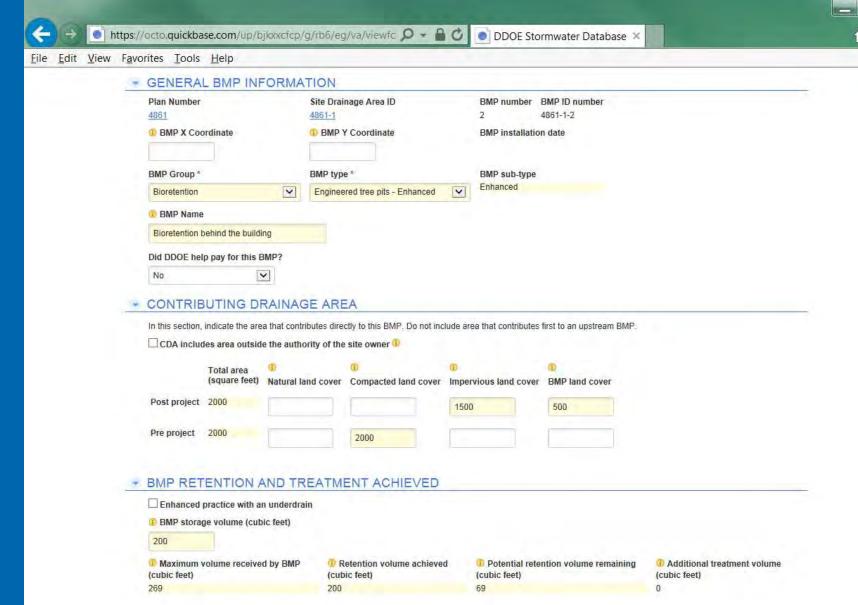
Green Roof 1

Did DDOE help pay for this BMP?

- CONTRIBUTING DRAINAGE AREA

In this section, indicate the area that contributes directly to this BMP. Do not include area that contributes first to an upstream BMP.

CDA includes area outside the authority of the site owner ⁽¹⁾









STORMWATER DATABASE

Welcome, Project

Log Out

Navigation

Program Directory

Support



View printer-friendly version

Create another BMP in the same Site Drainage Area

BMP Information

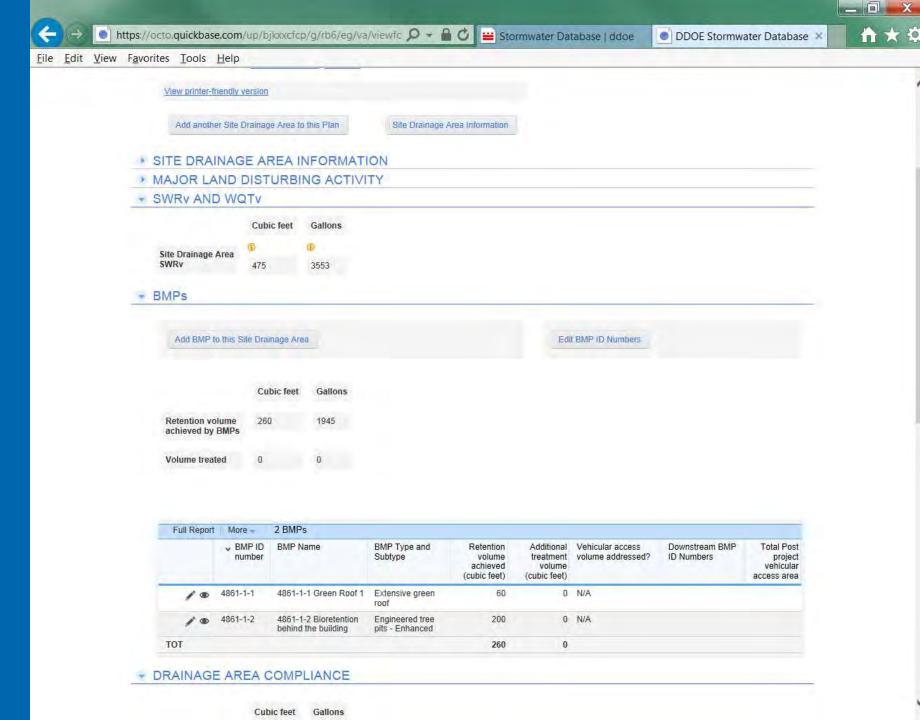
GENERAL BMP INFORMATION

Plan Number	Site Drainage Area ID	BMP number	BMP ID number
4861	4861-1	2	4861-1-2
6 BMP X Coordinate	BMP Y Coordinate	BMP installati	on date
BMP Group	BMP type	BMP sub-type	
Bioretention	Engineered tree pits	Enhanced	
3 BMP Name			
Bioretention behind the	e building		
Did DDOE help pay for	r this BMP?		

CONTRIBUTING DRAINAGE AREA

In this section, indicate the area that contributes directly to this BMP. Do not include area that contributes first to an upstream BMP.

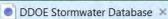
CDA includes area outside the authority of the site owner 6







Stormwater Database | ddoe





File Edit View Favorites Tools Help

DRAINAGE AREA COMPLIANCE

Cubic feet Gallons Retention volume remaining 215

50% of SWRv retained? Runoff from vehicular access areas sufficiently retained or treated? N/A Is treatment required? Minimum requirements for drainage area met? No Note about SWRv Off Site Retention may be needed. Can generate SRCs from PROW?

CHANNEL AND FLOOD PROTECTION

Natural curve number	70	Compacted curve number	74	Impervious curve number	98
Weighted Curve Number	98	S	0.20	Total BMP storage volume	260
	Adjusted Curve	Numbers			
	2-year storm		15-year storm		100-year storm
Storm size (in)	3.2		5.2		8.37
Runoff volume with no BMPs (in)	2.97		4.96		8.13
Runoff volume with BMPs (in)	2.34		4.34		7.51
Adjusted curve number	92		92		93





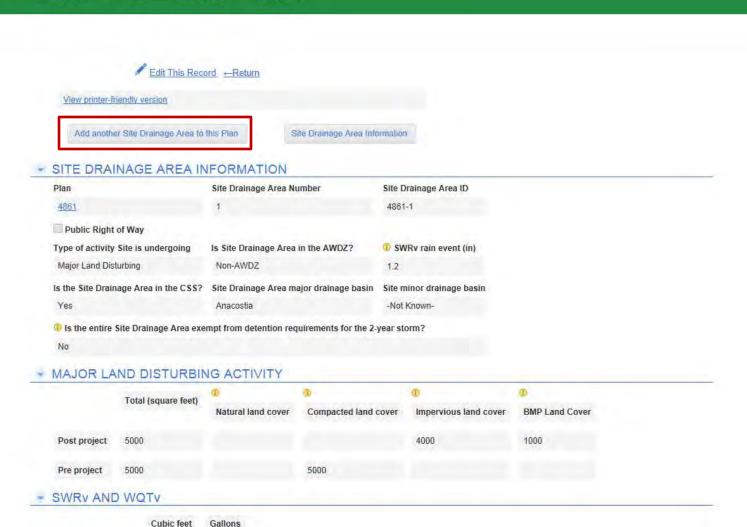
STORMWATER DATABASE

Log Out

Navigation

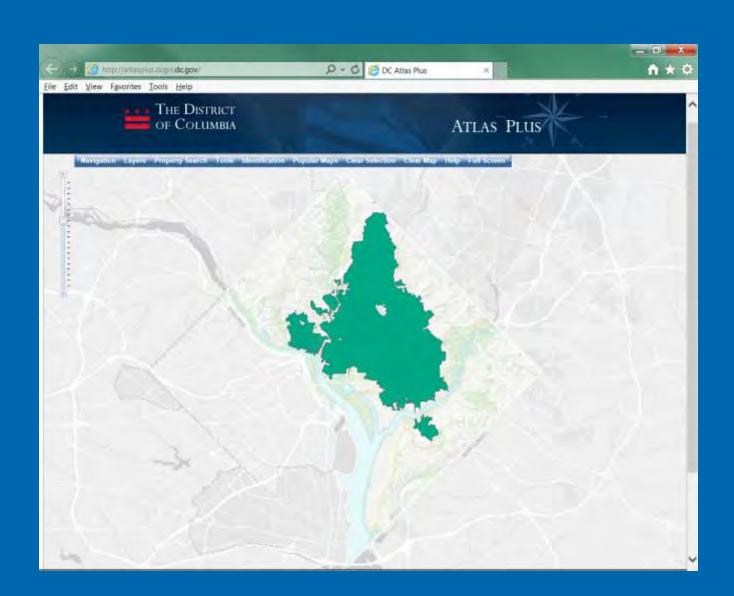
Program Directory

Support



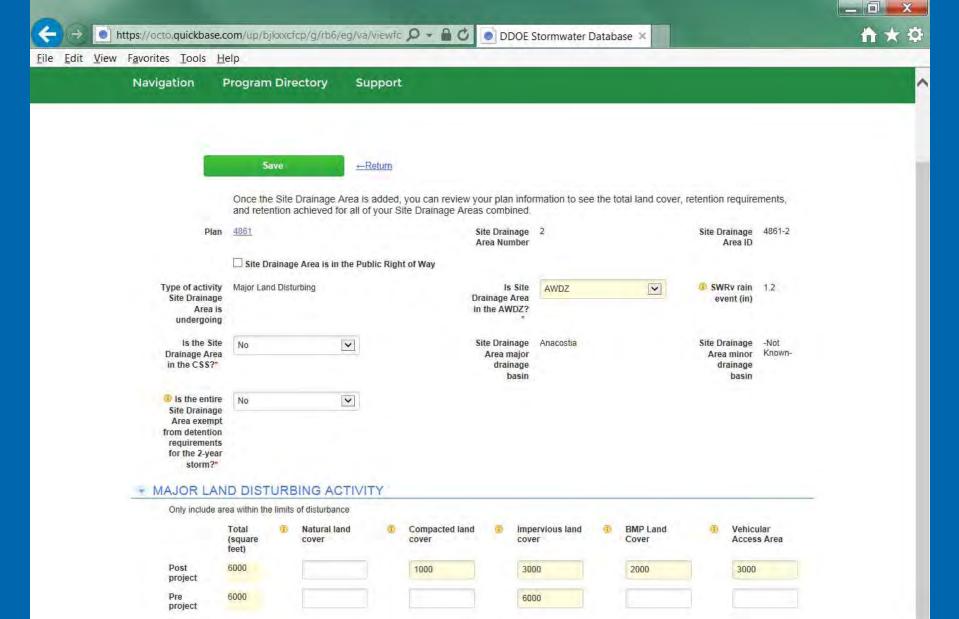
MS4

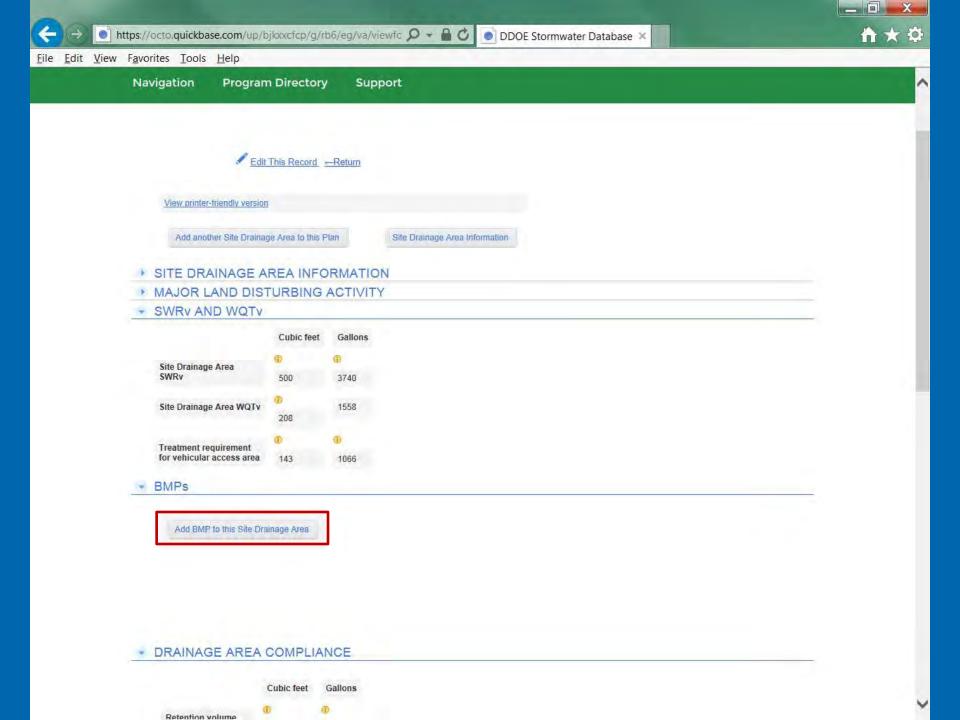
Map of Combined Sewer System (CSS)



Site Drainage Area Requirements (MS4 Only)

- Retain or treat 50% of the SWRv
- 100% of Vehicular Access Area (VAA) must drain to BMPs
- Retain or treat 50% of the SWRv from the entire Vehicular Access Area

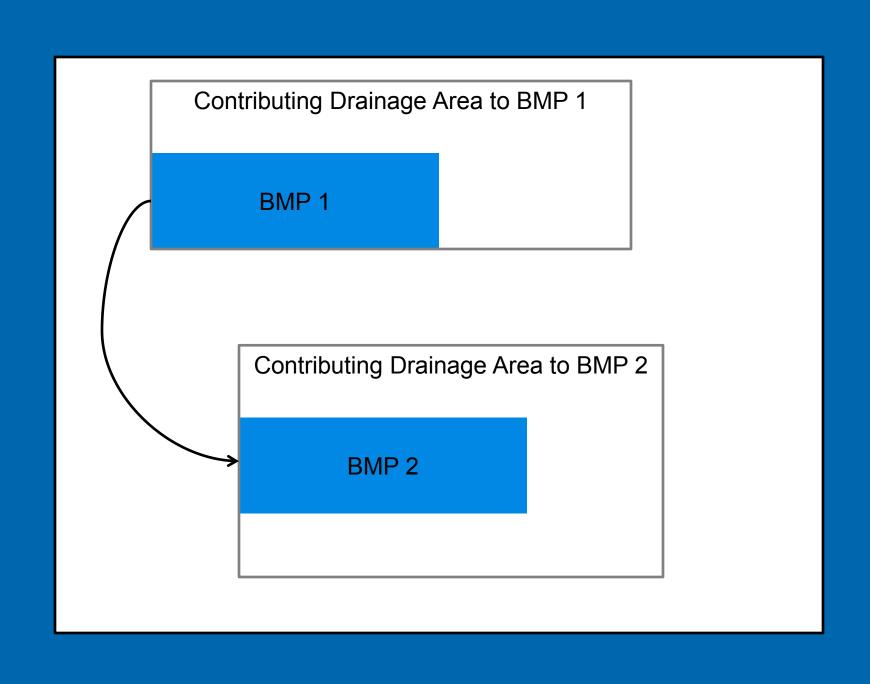


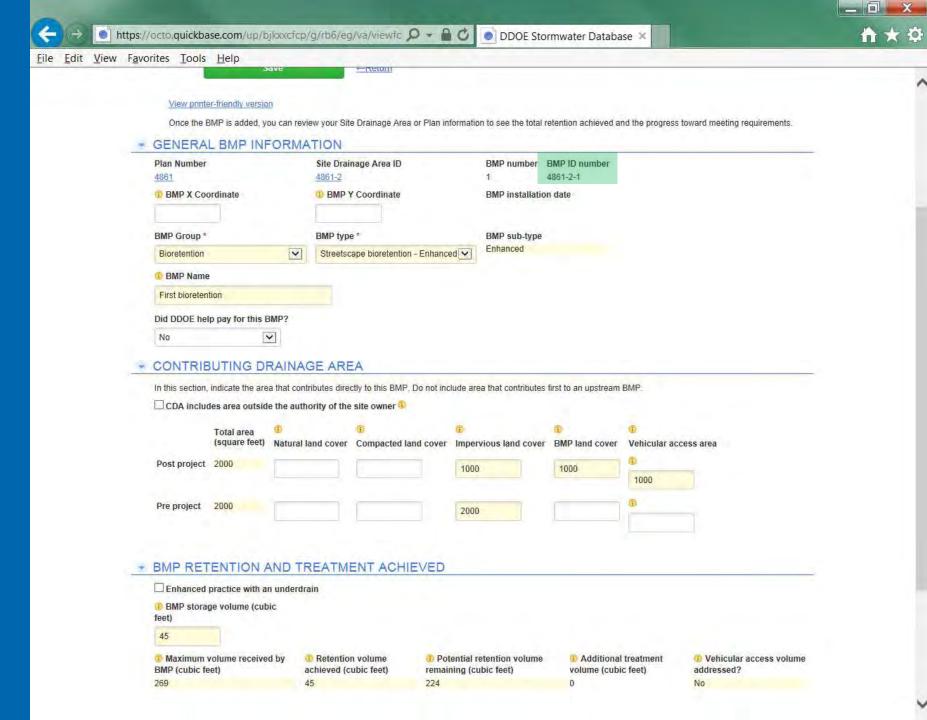


Treatment Trains

Treatment Trains

- > Enter information for the first BMP
- > Enter information for the downstream BMP
- Create a connection between these two BMPs
- Update this connection as necessary



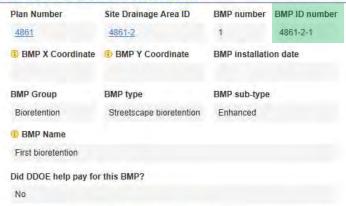




Create another BMP in the same Site Drainage Area

BMP Information

GENERAL BMP INFORMATION



CONTRIBUTING DRAINAGE AREA

BMP RETENTION AND TREATMENT ACHIEVED

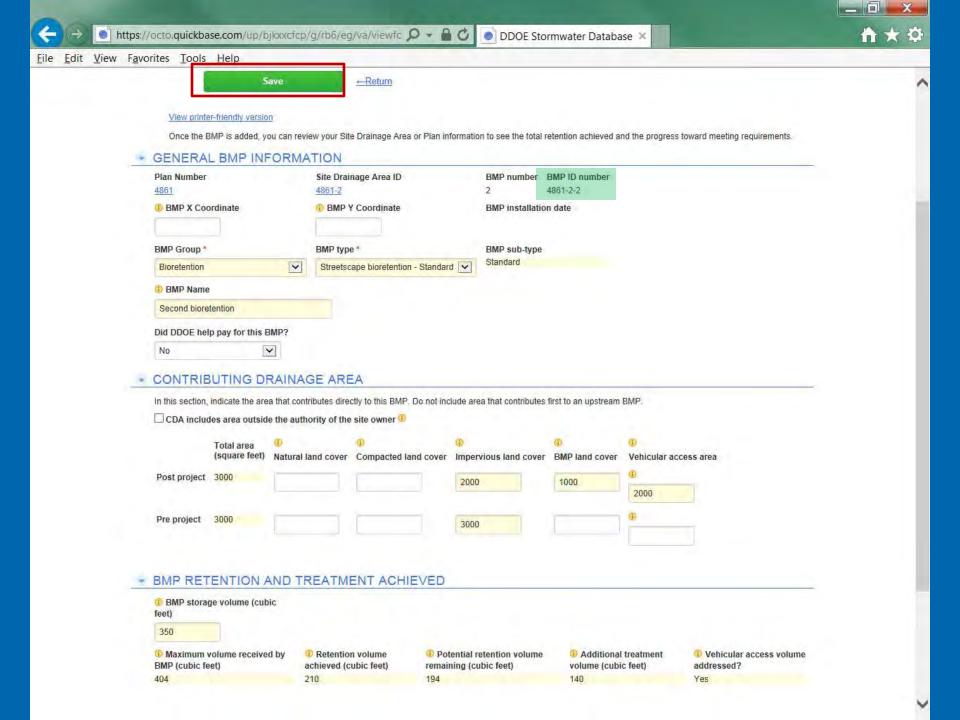
DOWNSTREAM BMP

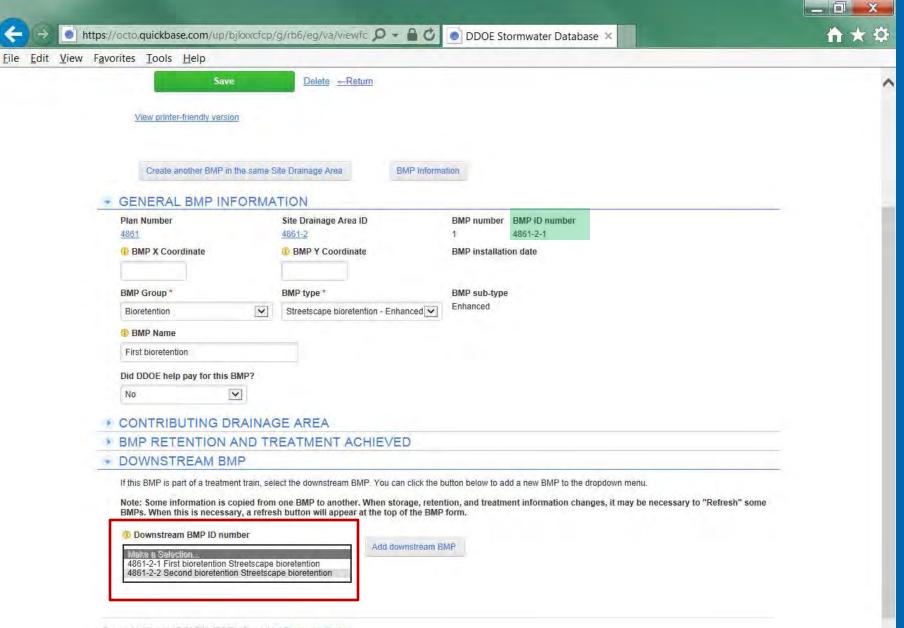
If this BMP is part of a treatment train, select the downstream BMP. You can click the button below to add a new BMP to the dropdown menu.

Note: Some information is copied from one BMP to another. When storage, retention, and treatment information changes, it may be necessary to "Refresh" some BMPs. When this is necessary, a refresh button will appear at the top of the BMP form.

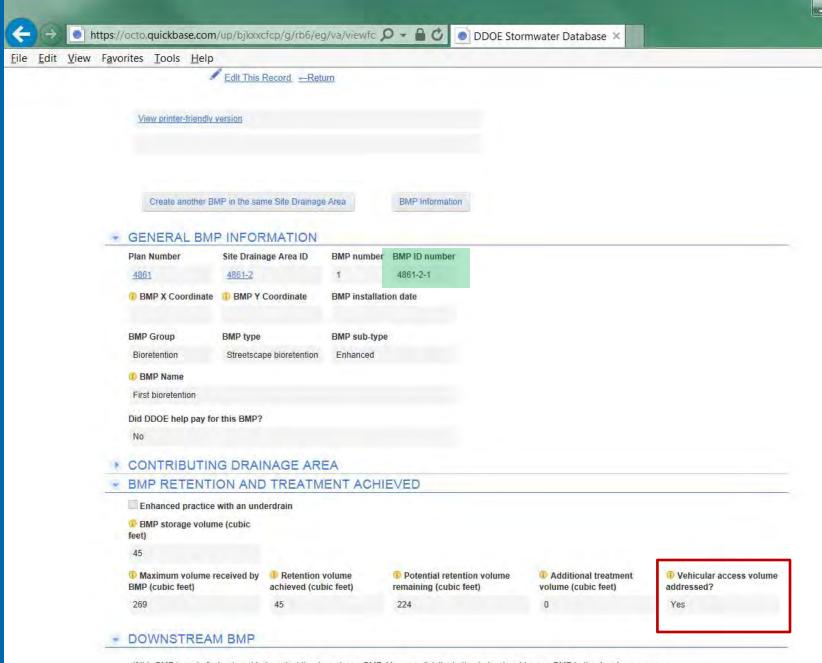
Downstream BMP ID number

Add downstream BMP



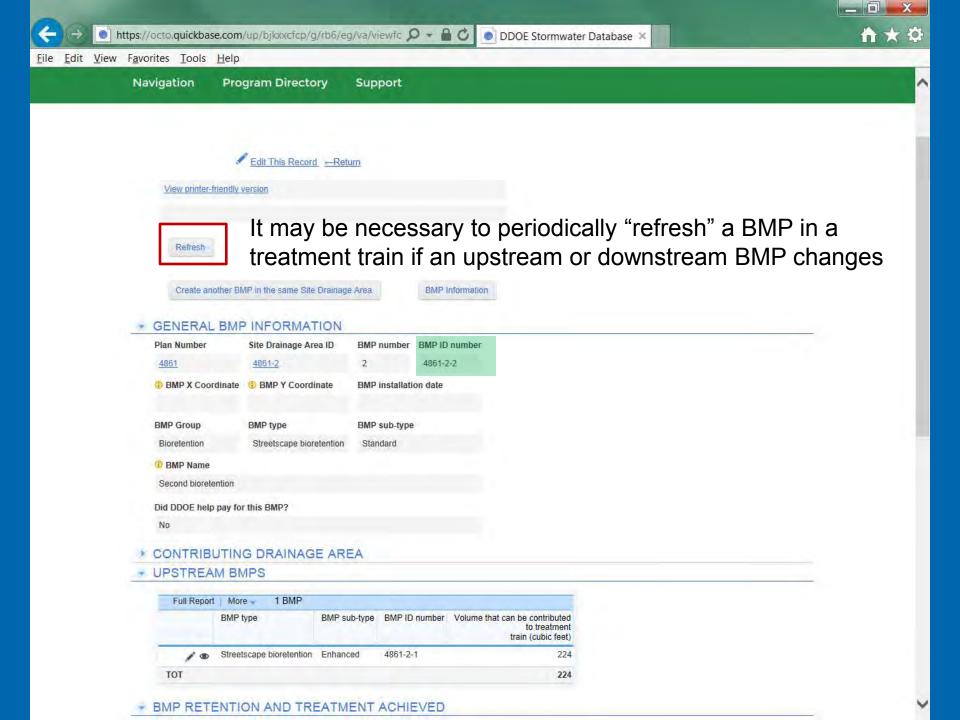


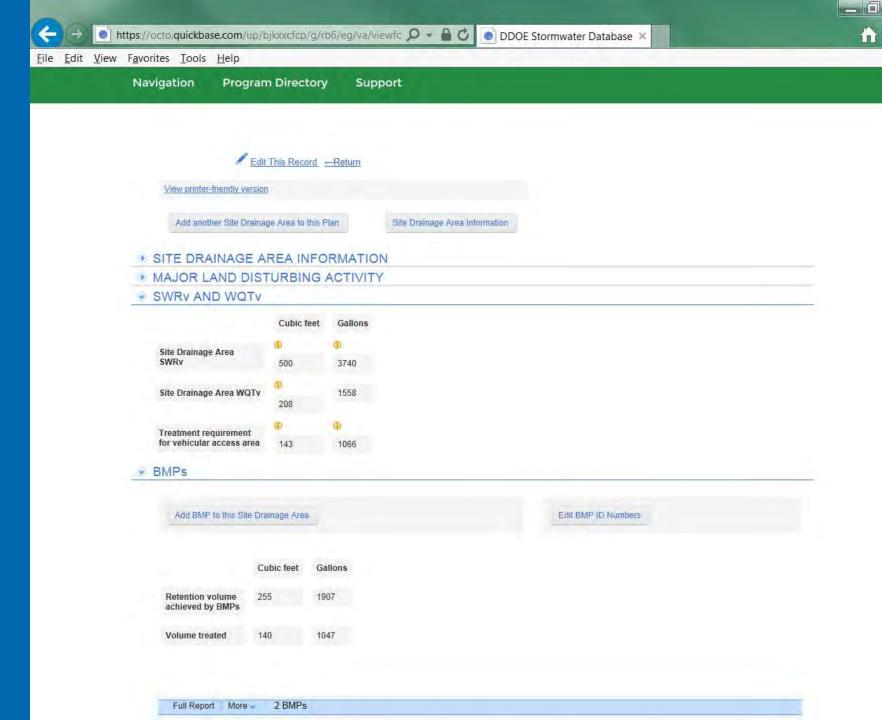
Created today at 12:50 PM (EDT). Owned by Engineer, Project.



If this BMP is part of a treatment train, select the downstream BMP. You can click the button below to add a new BMP to the dropdown menu.

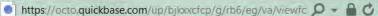
Note: Some information is copied from one BMP to another. When storage, retention, and treatment information changes, it may be necessary to "Refresh" some BMPs. When this is necessary, a refresh button will appear at the top of the BMP form.















Volume treated

140

1047

	→ BMP ID number	BMP Name	BMP Type and Subtype	Retention volume achieved (cubic feet)	Additional treatment volume (cubic feet)	Vehicular access volume addressed?	Downstream BMP ID Numbers	Total Pos projec vehicula access area
10	4861-2-1	4861-2-1 First bioretention	Streetscape bioretention - Enhanced	45	0	Yes	4861-2-2	1000
10	4861-2-2	4861-2-2 Second bioretention	Streetscape bioretention - Standard	210	140	Yes		2000
ОТ				255	140			

- DRAINAGE AREA COMPLIANCE

	Cubic feet	Gallons
Retention volume	(i)	(E)
remaining	245	1833
Volume remaining to treat WQTv	68	511

50% of SWRv retained?	Runoff from vehicular access areas sufficiently retained or treated?
Yes	Yes
Is treatment required?	Minimum requirements for drainage area met?
No	Yes
Note about SWRv	Note about WQTv
Off Site Retention may be needed.	Off Site Retention may be needed.
Can generate SRCs from PROW	?

CHANNEL AND FLOOD PROTECTION

Compacted curve number 74 Impervious curve number 98 Natural curve number 70 Weighted Curve Number 94 \$ 0.64 Total BMP storage 395 volume





STORMWATER DATABASE

Welcome, Project

Log Out

Navigation

Program Directory

Support



View printer-friendly version

Submit

Identify Errors

Required Plan Compliance Sheet

- PLAN TYPE AND EXEMPTIONS
- SITE AND LOCATION
- LAND COVER AND SITE DRAINAGE AREAS

Add Site Drainage Area

Total area

11,000

0

Post-project natural land cover Post-project compacted land cover Post-project impervious land cover Post-project BMP land cover

0 1000 7000 3000

Pre-project natural land cover Pre-project compacted land cover Pre-project impervious land cover Pre-project BMP land cover

5000

6000

0

Site Drainage Areas

Full Report	More = 2 Site D	rainage	Areas		
	Site Drainage Area ID	CSS?	AWDZ	Type of Activity	Minimum requirements for drainage area met?
10	4861-1	Yes	Non-AWDZ	Major Land Disturbing	N/A
10	4861-2	No	AWDZ	Major Land Disturbing	Yes

10	4861-1	Yes	Non-AWDZ	Major Land Disturbing	N/A
10	4861-2	No	AWDZ	Major Land Disturbing	Yes

- BMPs

	BMP title	BMP storage volume (cubic feet)	Retention volume achieved (cubic feet)	Downstream BMP ID Numbers	Treatment Train
10	4861-1-1 Green Roof 1 Extensive green roof	60	60		
10	4861-1-2 Bioretention behind the building Engineered tree pits	200	200		
10	4861-2-1 First bioretention Streetscape bioretention	45	45	4861-2-2	TT - 4861-2-2
10	4861-2-2 Second bioretention Streetscape bioretention	350	210		TT - 4861-2-2
ОТ		655	515		

RETENTION AND TREATMENT REQUIREMENTS

Site SWRv (cubic feet) Site SWRv (gal)

975 7293

Plan WQTv (cubic feet) Plan WQTv (gal)

208 1558

RETENTION AND TREATMENT ACHIEVED

Total on-site retention volume achieved by BMPs (cubic feet) Total on-site retention volume achieved by BMPs (gal)

515

Site retention volume remaining (cubic feet)

Site retention volume remaining (gal)

(cubic feet)

Total volume treated (gal)

140

1047

Total volume remaining to treat WQTv (cubic feet)

Total treatment volume remaining to treat WQTv (gal)

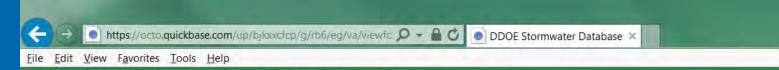
68

511

SUMMARY, OFFV, AND SRCs

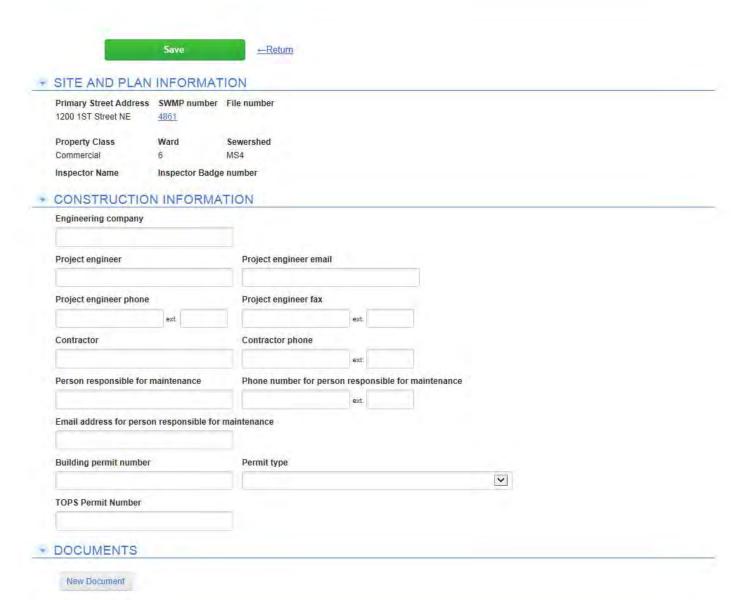
At least 50% of SWRv for the Site Retained? 6 Offv

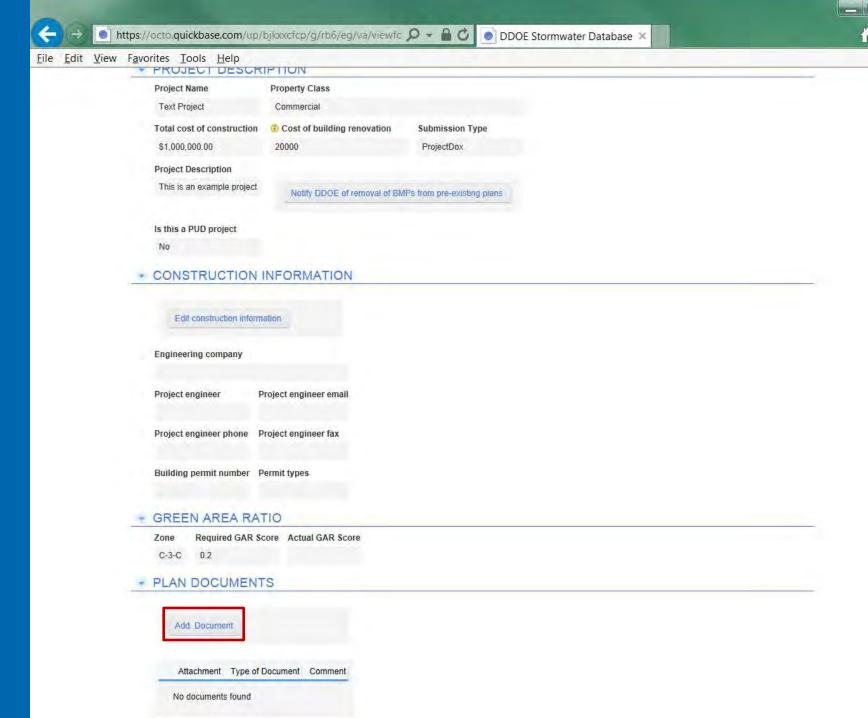
Building permit number Permit types





Navigation Program Directory Support







Support



File Edit View Favorites Tools Help

Navigation



Comment

STORMWATER Database

Welcome, Project

Log Out

	Save	<u>←Return</u>	
Plan number	4861		
Attachment			Brow

Program Directory



Use the old Stormwater Database design

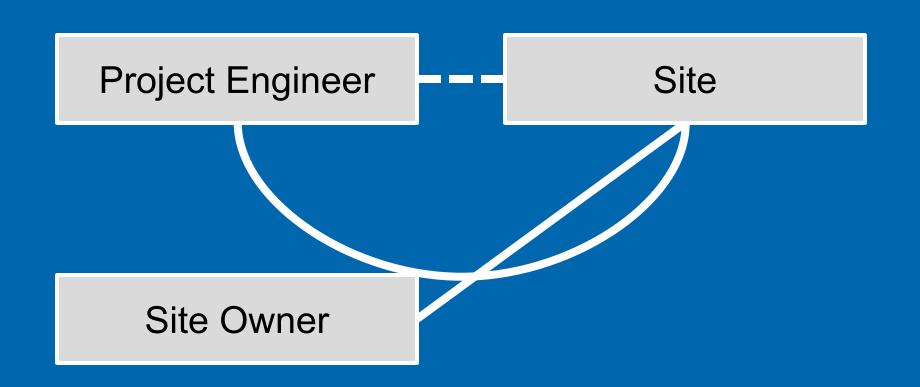
Submit the Plan

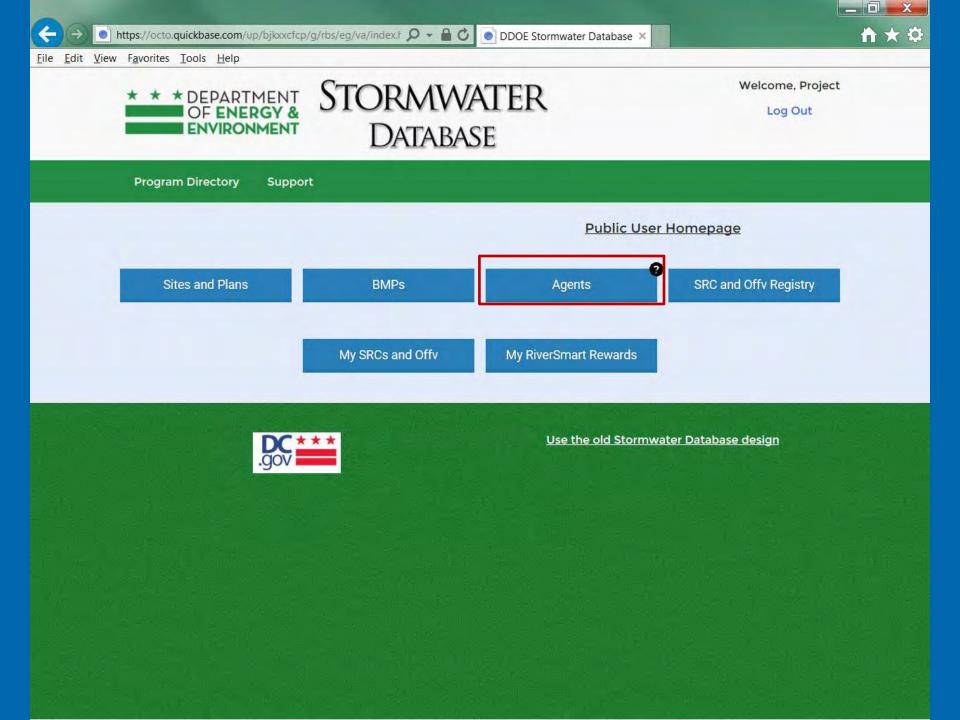
Necessary Steps Prior to Submittal

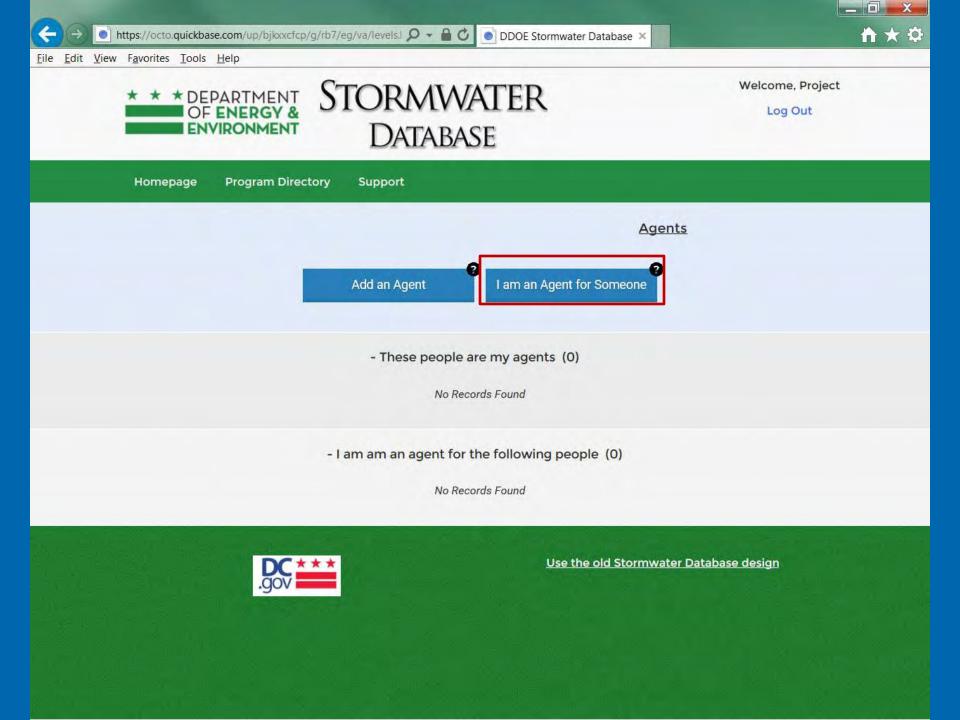
- Request to be an Agent for the Site Owner
- Correct all Plan Errors
- Generate the Required Plan Compliance Sheet
- Submit the Plan

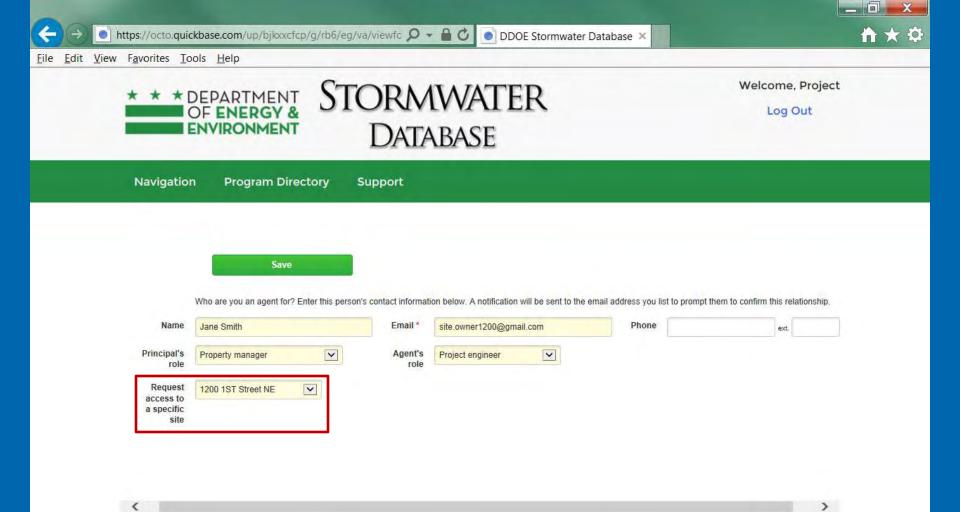
<u>Agents</u>

- You can modify information in the database for Sites that you manage
- You can modify information in the database for Sites that are managed by someone who has delegated authority to you





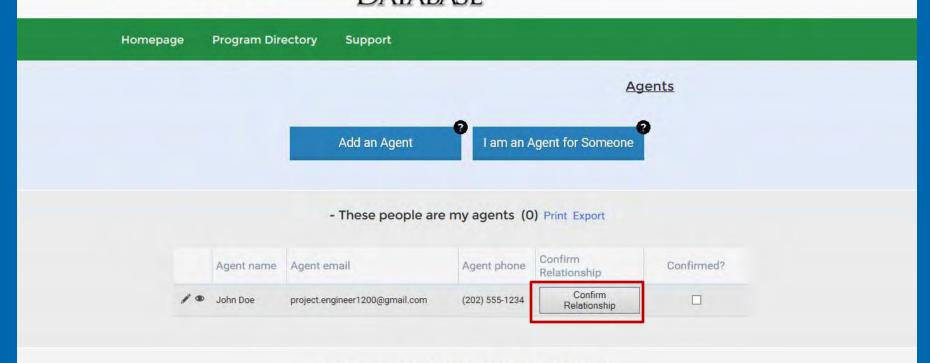






Use the old Stormwater Database design



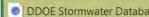


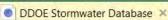
No Records Found

- I am am an agent for the following people (0)













STORMWATER **DATABASE**

Welcome, Jane

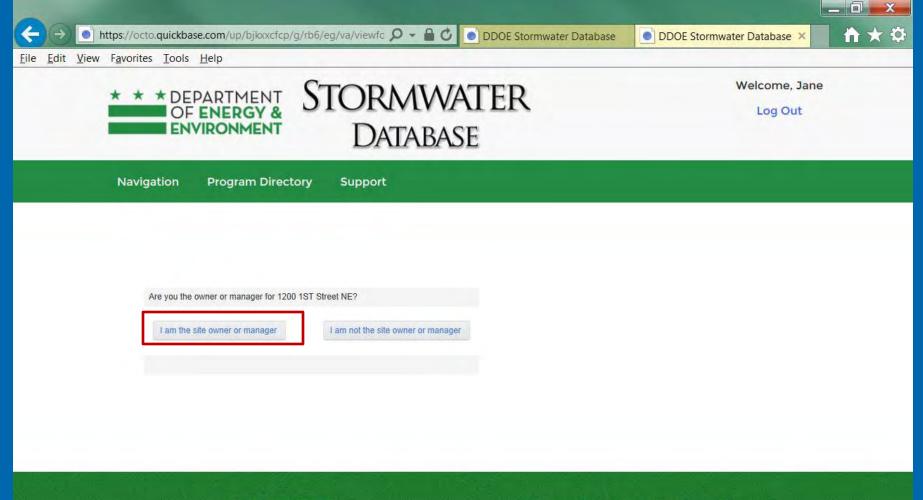
Log Out

Navigation

Program Directory

Support

Agent name	Agent email *	Agent phone		
John Doe	project.engineer1200@gmail.com	2025551234	ext.	
Principal's role	Agent's role			
Property manager	Project engineer			
Agent has permission to view and my Sites. (1)	modify Site, Plan, Site Drainage Area, and BMP i			
my Sites. 🕦	modify Site, Plan, Site Drainage Area, and BMP i			
Agent has permission to view and my Sites.	modify Site, Plan, Site Drainage Area, and BMP i			
Agent has permission to view and my Sites. Agent has permission to view and man off-site retention obligation for the 1200 1ST Street NE	modify Site, Plan, Site Drainage Area, and BMP i	rmation for this Site, to sub		





Use the old Stormwater Database design





STORMWATER DATABASE

Welcome, Jane

Log Out

Navigation

Program Directory

Support



View printer-friendly version

SITE INFORMATION

Soil Erosion and Sediment Control and/or GAR only

Address Format

Address

Address number Street name Street type Quadrant

1200 1ST Street NE

SITE OWNER

Site Owner/Manager

Test Company

PLANS AFFILIATED WITH THIS SITE

Enter a new plan for this site

Full Report	More 4 Plans			
	Plan number	Site SWRv (gal)	Offv	SRC eligibility
10	4869	0	0	2250
10	4861	7293	3952	3
10	s5590	1066	0	1





STORMWATER DATABASE

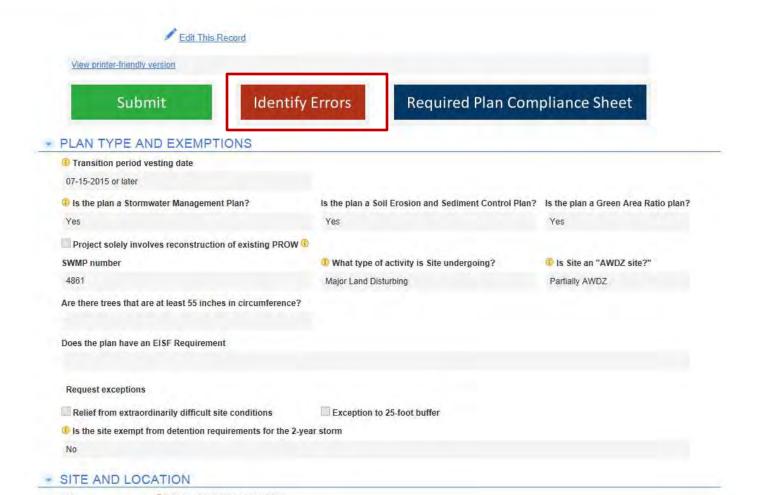
Welcome, Project

Log Out

Navigation

Program Directory

Support







STORMWATER DATABASE

Welcome, Project

Log Out

Navigation

Program Directory

Support

Return to Plan

Submittal Errors

This report displays system errors or missing information that must be updated by the applicant.

Full Report Grid Edit Email More 2 Errors											
Error	Error Instructions								Instructions When should error b addressed		Fix the error
One or more BMPs are missing X and Y coordinates	All BMPs must have X and Y coordinates (MD State Plane, North American Datum (NAD) 1983 in meters). Click "Fix the error" to enter BMP X and Y coordinates.	SWMP Submittal	Fix the error								
You must enter landscape expert information for GAR	Click "Fix the Error" to return to the form for the plan. In the Green Area Ratio (GAR) section, please enter then name and email address for the landscape expert.	SWMP Submittal	Fix the error								

Approval Errors

You must address the below errors before the plan may be APPROVED. These are not required for plan submittal.

Full Report Grid Edit Email More 🕶	2 Errors		
Error	Instructions	When should error be addressed	Fix the error
	While you do not need to enter the building permit number into the Stormwater Database in order to submit the plan for initial review, you must still file the building permit application in order for DOEE to being review. Then, you may enter the building permit number into the Stormwater Database prior to plan approval. Click "Fix the error" to enter the building permit number.	SWMP Approval	Fix the error
The person responsible for maintenance must sign the maintenance responsibility	Prior to plan approval, the person responsible for maintenance must log in to the Stormwater Database and sign the maintenance responsibility stamp. This stamp must be incorporated on the plan set via the Required Plan Compliance Sheet.	SWMP Approval	Fix the error
stamp	If the compliance data changes, this will require a new maintenance responsibility stamp.		



Maintenance Responsibility and Offv

- All Major Regulated Projects must have the person responsible for maintenance sign the Maintenance Responsibility Stamp online
- All sites with Offv must have the person responsible for achieving Offv sign the Offv Stamp online
- These stamps should be signed by the site owner or someone with responsibility for long-term management of the site.
- These stamps are not typically completed by the project engineer



https://octo.quickbase.com/up/bjkxxcfcp/g/rb6/eg/va/viewfc D - A C





File Edit View Favorites Tools Help

Navigation

Program Directory

Support

Plan number

5031

STATEMENT BY PERSON RESPONSIBLE FOR MAINTENANCE

The undersigned agrees to maintain and operate the stormwater best management practices (BMPs), stormwater infrastructure, and land covers in such a manner as to comply with the provisions of Chapter 5 of Title 21 of the District of Columbia Municipal Regulations (DCMR).

Responsibility for maintenance and operation may be transferred to another entity upon written notice to the Watershed Protection Division of the Department of Energy and Énvironment from the undersigned and the entity assuming responsibility. This notice must certify that the transfer of responsibility for maintenance and operation is in compliance with 21 DCMR Chapter 5.

Enter your name and click "submit" to sign this statement:

Please note that the signature must match the name associated with this account.

If your name and contact information does not appear below, please contact Matthew Espie at matthew.espie@dc.gov or (202) 715-7644.

Name

Jane Smith

Title

Manager

Organization

Test Company, LLC

Address

Jane Smith Test Company, LLC 123 Test Street NW Washington, DC 20000

Email

site.owner1200@gmail.com

Phone

(202) 555-5555

Submit Signature





STORMWATER DATABASE

Welcome, Project

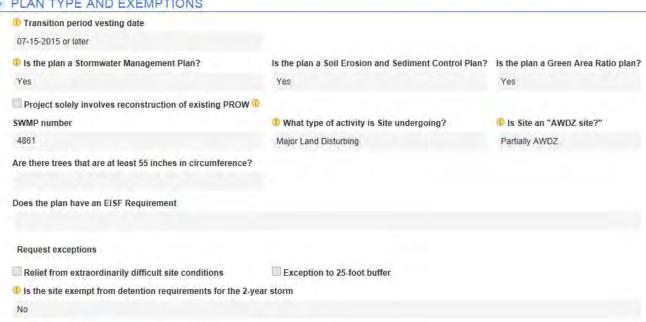
Log Out

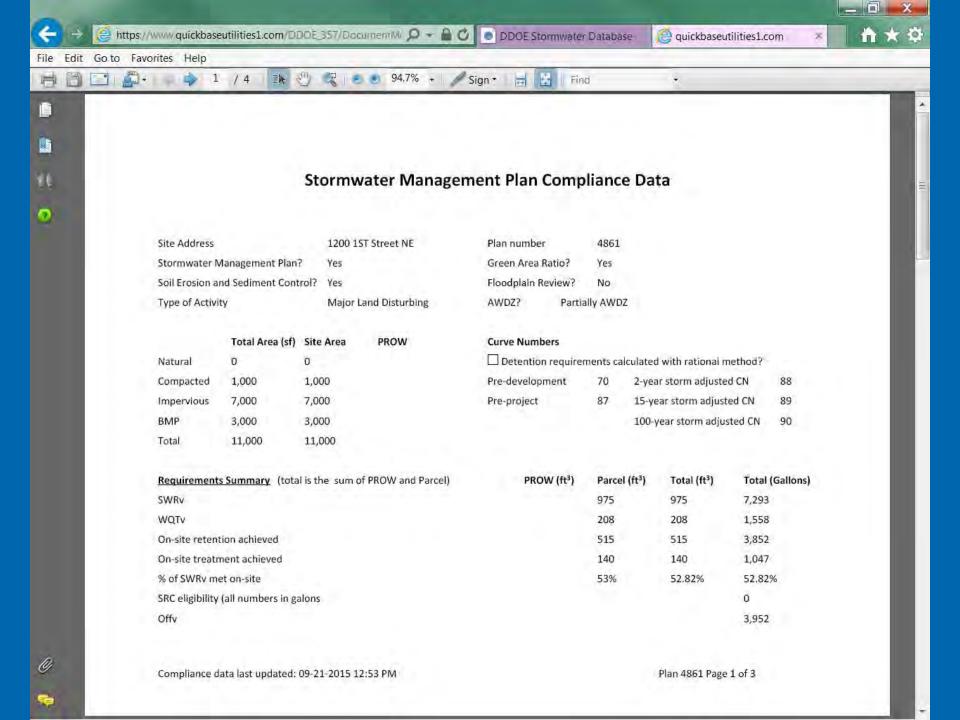
Navigation

Program Directory

Support









Site Drainage Area Compliance Data

Site Drainage Area ID	Public Right of Way	Total area (square feet)	Natural (square feet)	Compacted (square feet)	Impervious (square feet)	BMP (square feet)	Vehicular access area	10520999511	DKS065202.91	Volume retained (cubic feet)	Volume treated (cubic feet)	2-year storm adjusted Curve Number	15-year storm adjusted Curve Number	100-year storm adjusted Curve Number	Compliant
4861-2		6,000		1,000	3,000	2,000	3,000	500	208	255	140	85	87	87	Yes
4861-1		5,000			4,000	1,000	.=	475		260		92	92	93	N/A

Site BMP Compliance Data





BMP ID number	Туре	Total CDA (square feet)	Natural (square feet)	Compacted (square feet)	Impervious (square feet)	BMP (square feet)	Total Post project vehicular access area	Volume received from upstream BMPs (cubic feet)	Max volume received by BMP (cubic feet)	Storage volume (cubic feet)	Retention calculation	The second second	Volume treated (cubic feet)	Downstream BMP ID Numbers
4861-1-1	Extensive green roof	500				500			67	100	100% of storage volume	60		
4861-1-2	Engineered tree pits - Enhanced	2,000			1,500	500			269	10.000	100% of storage volume	200	+	
4861-2-1	Streetscape bioretention - Enhanced	2,000			1,000	1,000	1,000		269	100	100% of storage volume	45		4861-2-2
4861-2-2	Streetscape bioretention - Standard	3,000			2,000	1,000	2,000	224	628	7.2.2	60% of storage volume	210	140	

PROW Drainage Area Compliance Data

PROW BMP Compliance Data







STORMWATER DATABASE

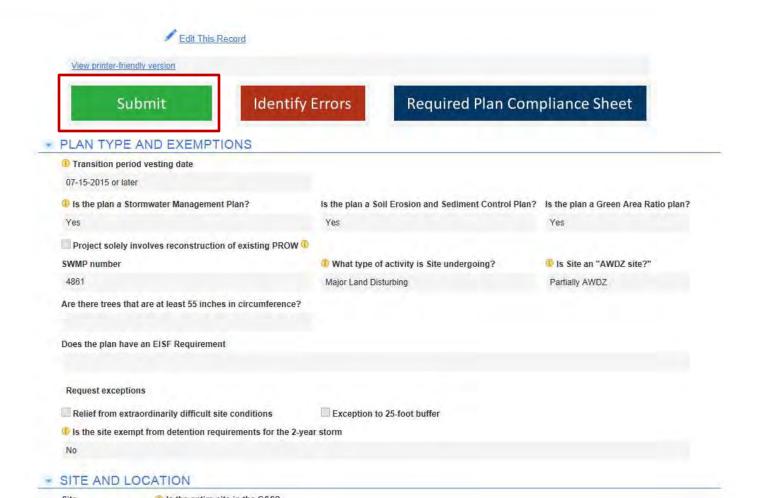
Welcome, Project

Log Out

Navigation

Program Directory

Support







STORMWATER Database

Welcome, Project

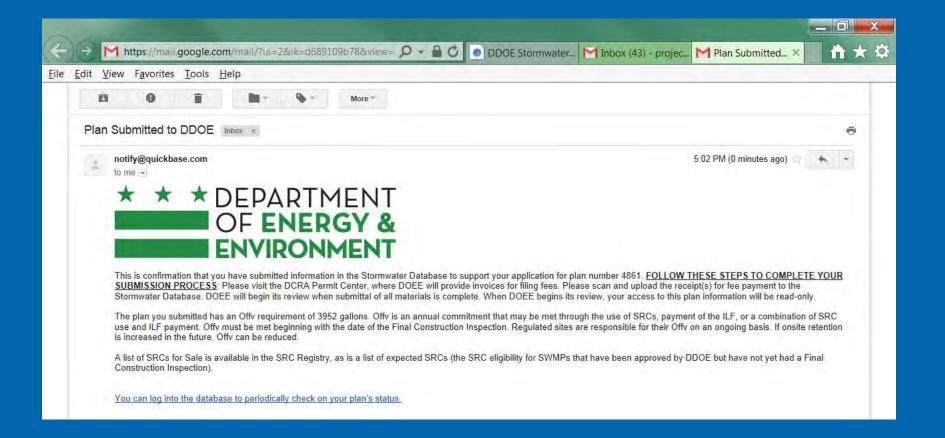
Log Out

Navigation **Program Directory** Support Save -Return Date 09-21-2015 Plan number 4861 Who should receive email project.engineer1200@gmail.com communication from DDOE regarding this plan? Click Save to submit this information to DDOE. DDOE will begin its review when submittal of all materials is complete. This includes submission of the plan at DCRA. When DDOE begins its review, your access to this plan information will be read-only.



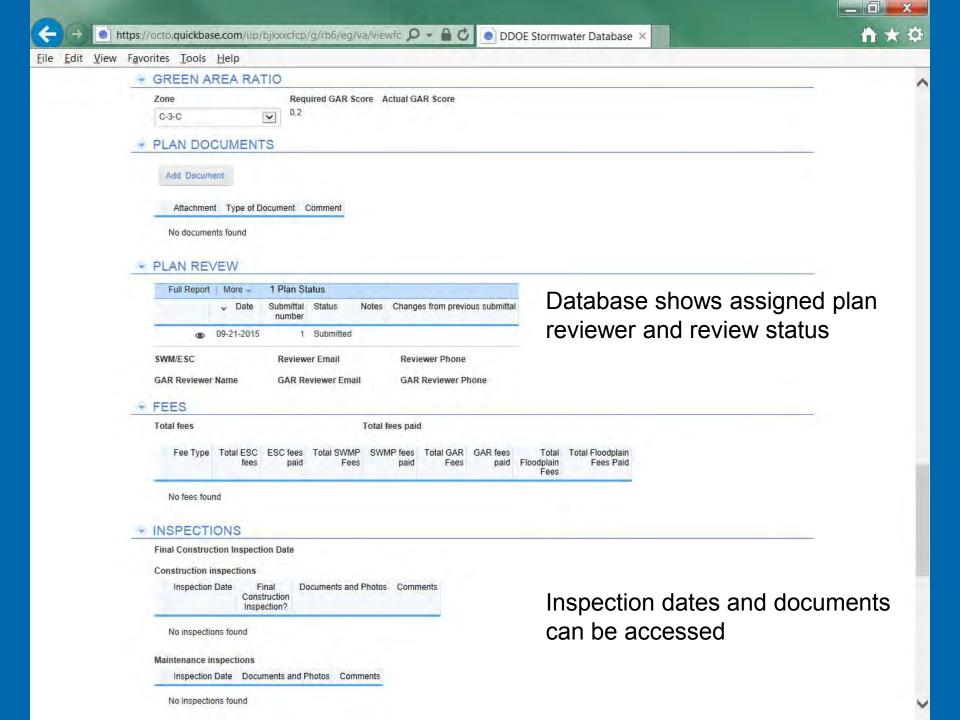
Submit Plan Information

Use the old Stormwater Database design



Next Steps

- File the building permit application and go to the Permit Center at DCRA (1100 4th Street SW) to pick up an invoice for filing fees
- Pay filing fees and upload a receipt to the Stormwater Database
- Failure to complete this process will put review of your plan on hold
- DOEE will provide review comments
- Revise the plan information, updating the record in the Stormwater Database, and resubmit



Exemptions from GAR or Erosion and Sediment Control



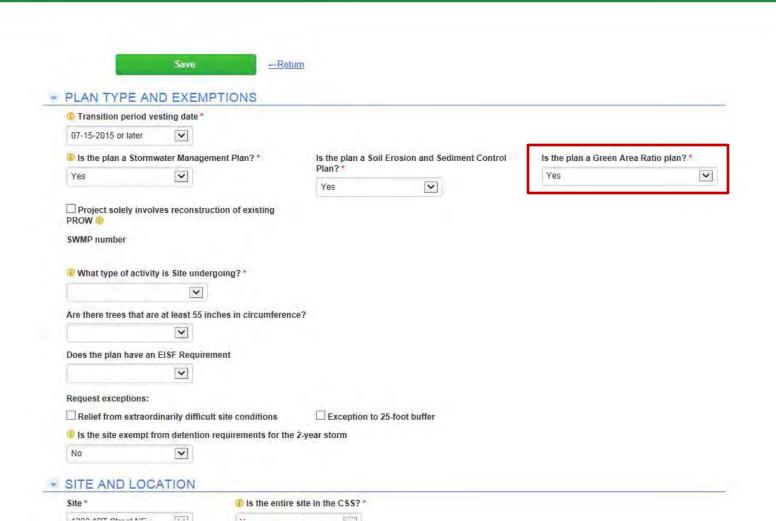
Log Out

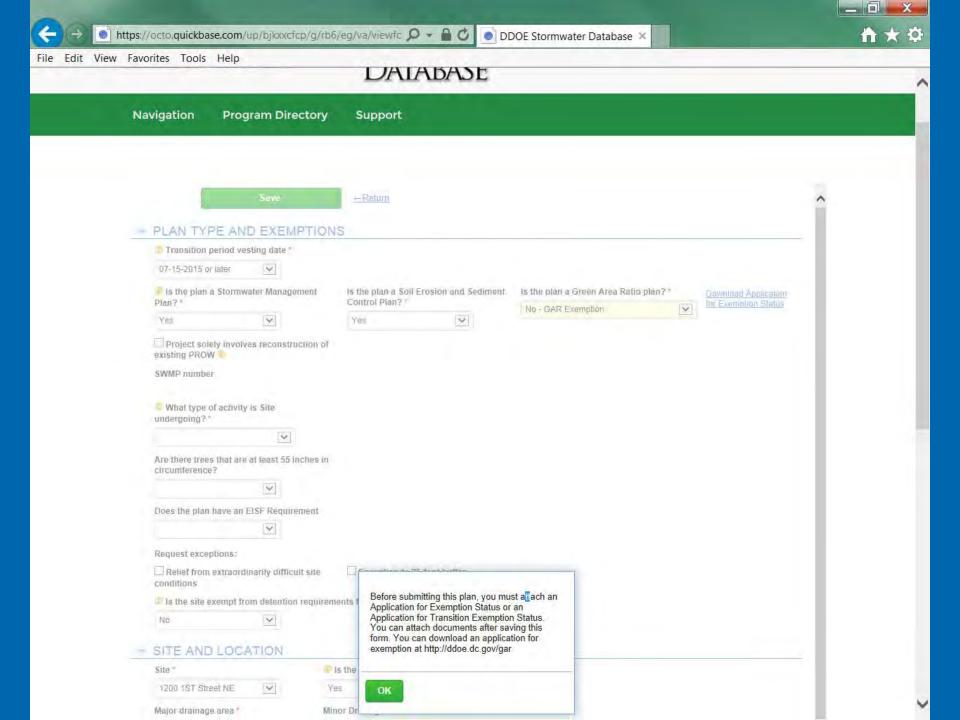
Navigation

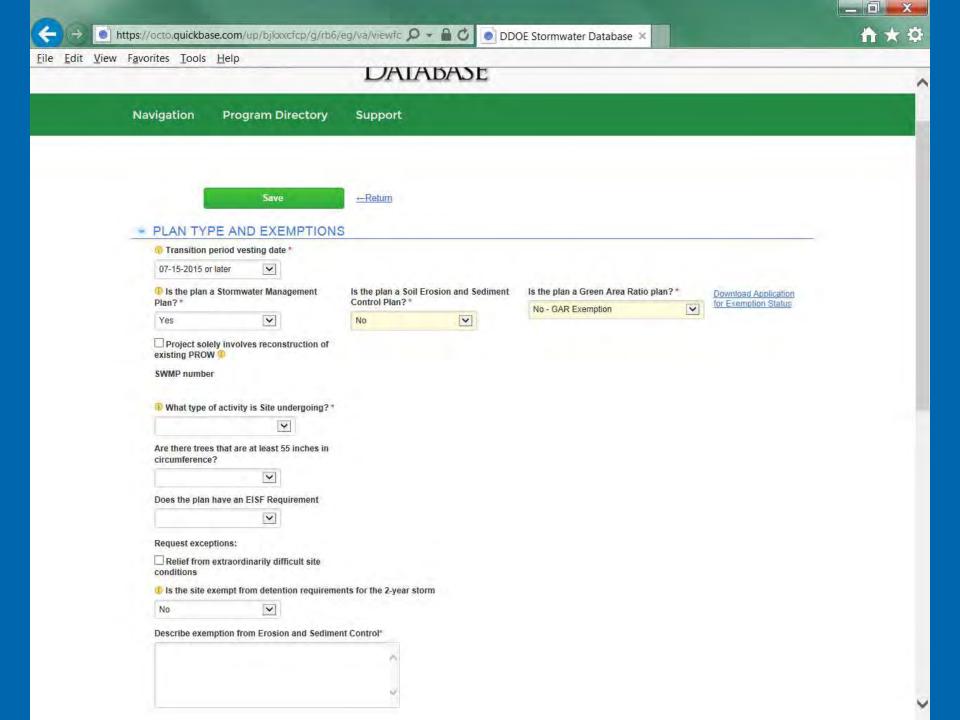
Program Directory

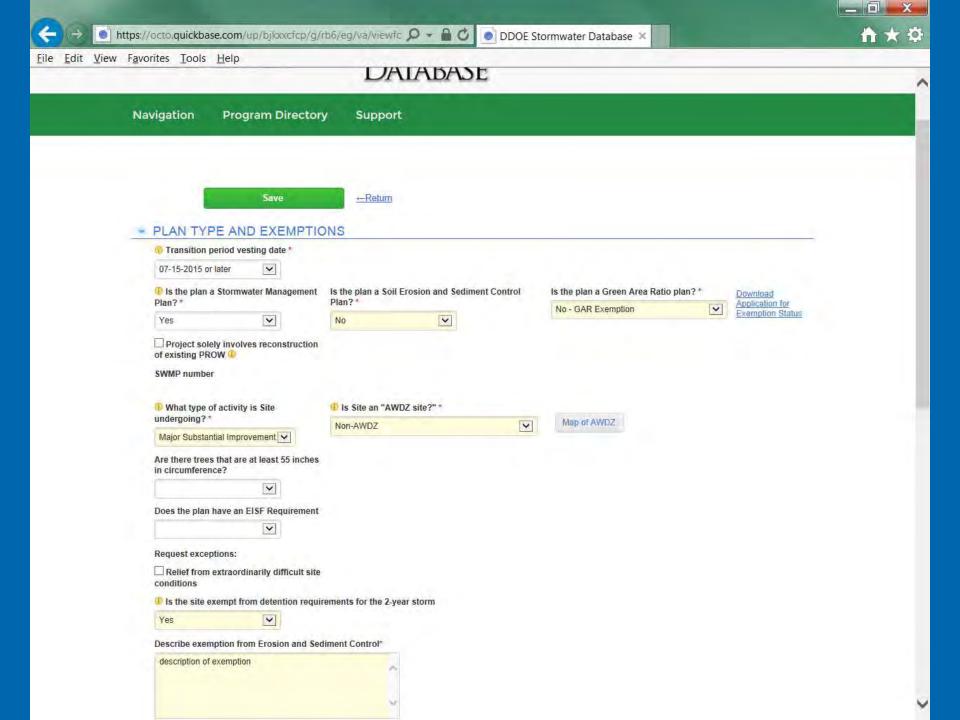
Support

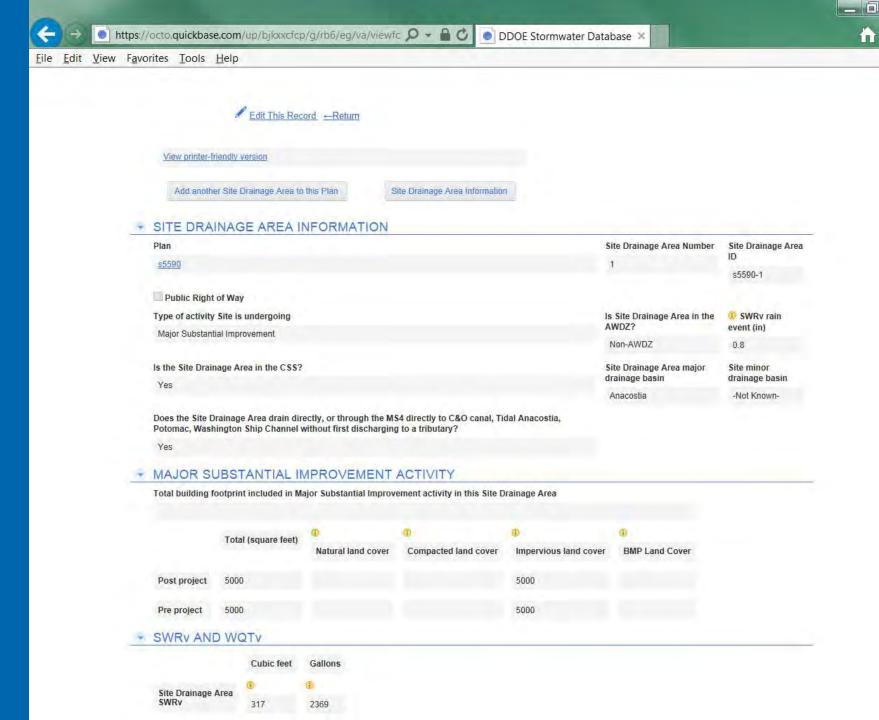
DATABASE

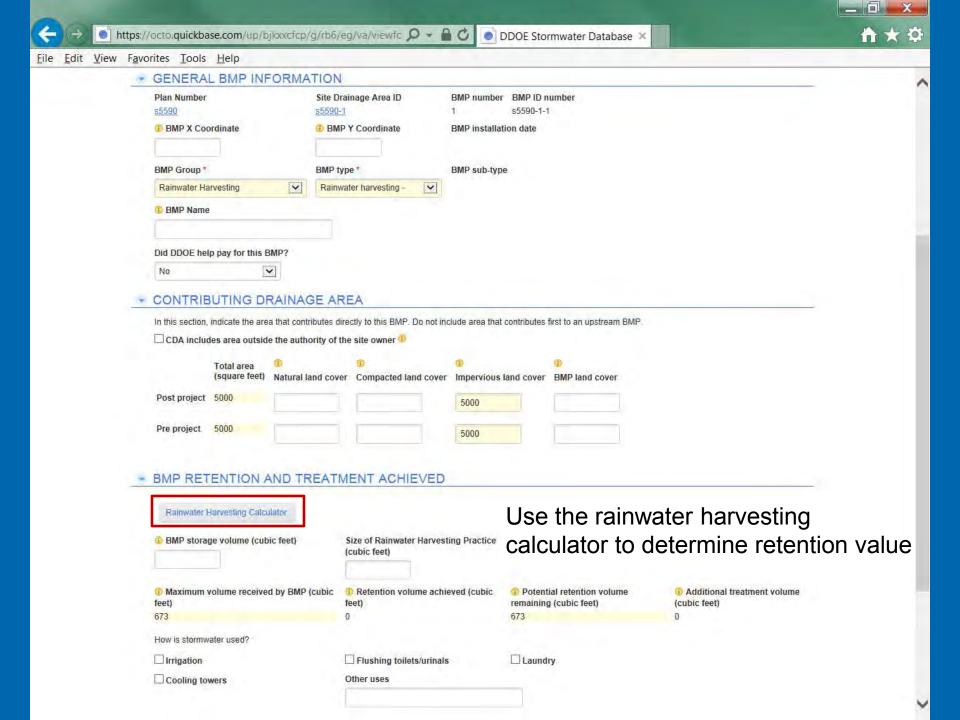


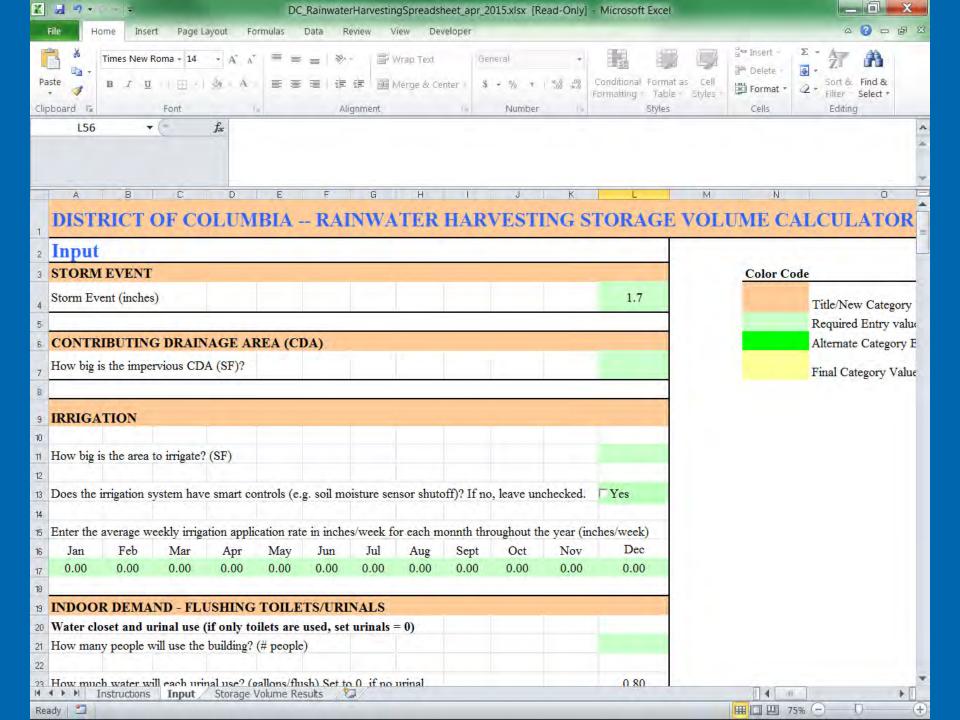


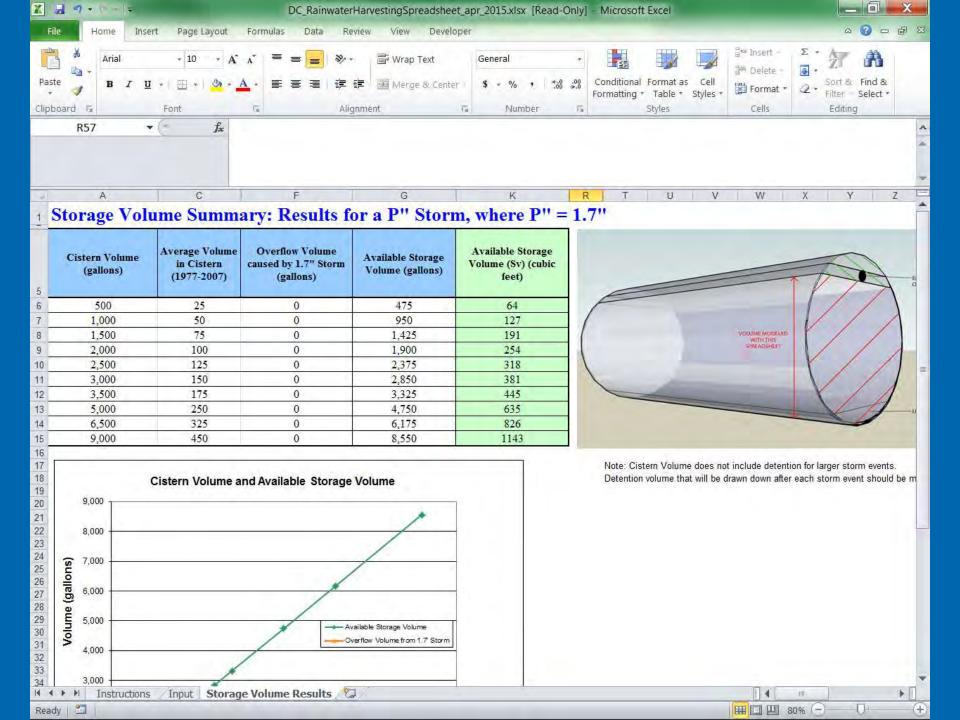












Public Right of Way

Public Right of Way

- Meet requirements to the Maximum Extent Practicable (MEP)
- "Type 1" roadway reconstruction projects
 - Submit at 30%, 65%, 90%, and final design phases
- "Type 2" parcel-based projects

Type 1



Welcome, Project

_ 0 X

Log Out

Navigation

Program Directory

I ENVIRONMENT

Support

DATABASE

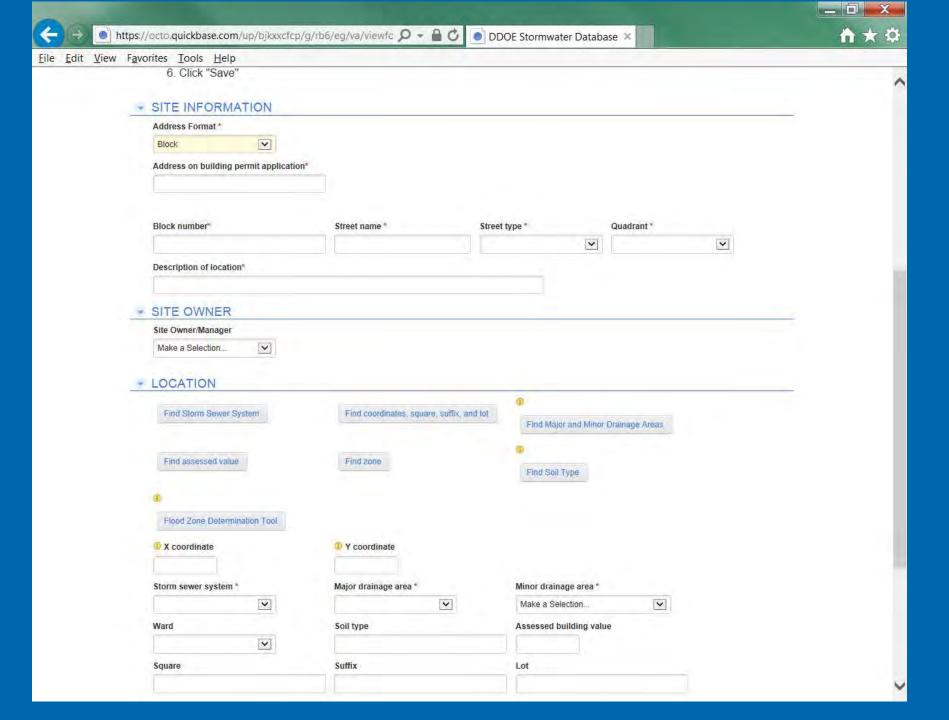
New Site

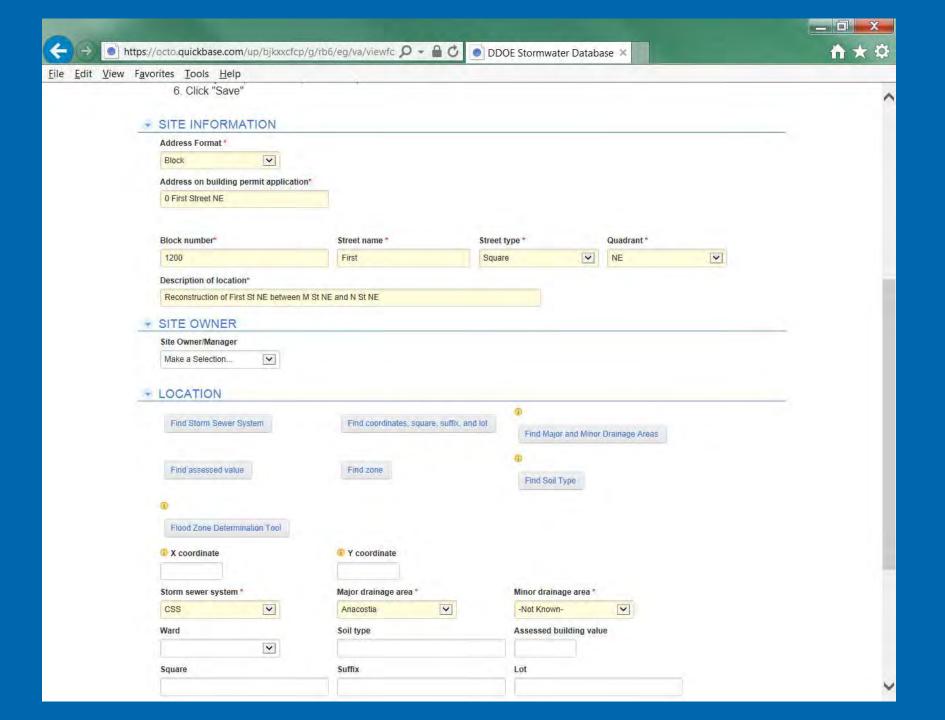
Site with Stormwater Management Requirements Site with ESC and/or GAR only

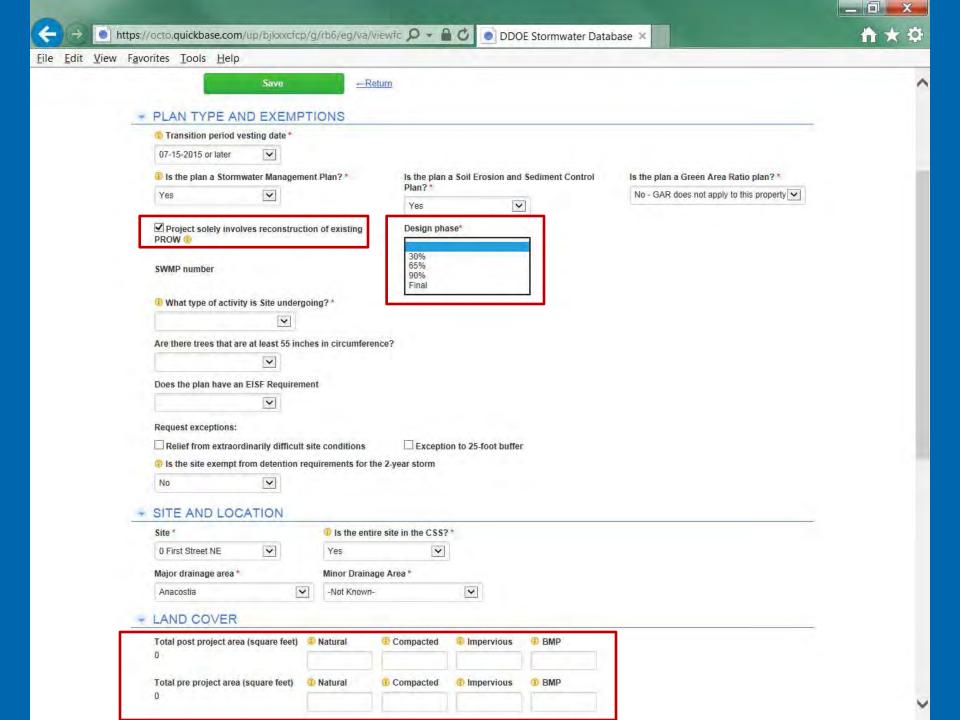
Roadway reconstruction project



Use the old Stormwater Database design







Type 2







STORMWATER Database

Welcome, Project

Log Out

Navigation

Program Directory

Support

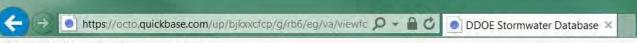
New Site

Site with Stormwater Management Requirements Site with ESC and/or GAR only

Roadway reconstruction project



Use the old Stormwater Database design









STORMWATER DATABASE

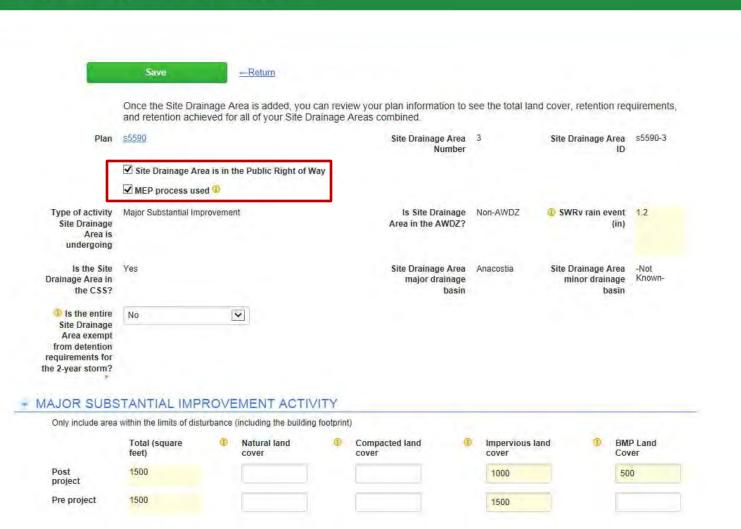
Welcome, Project

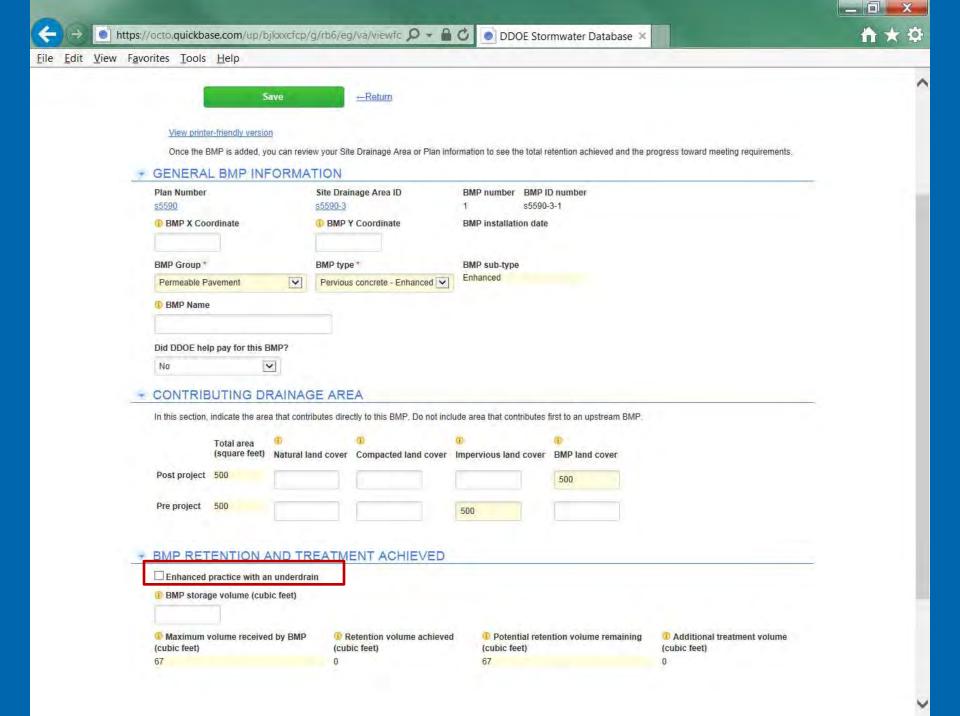
Log Out

Navigation

Program Directory

Support





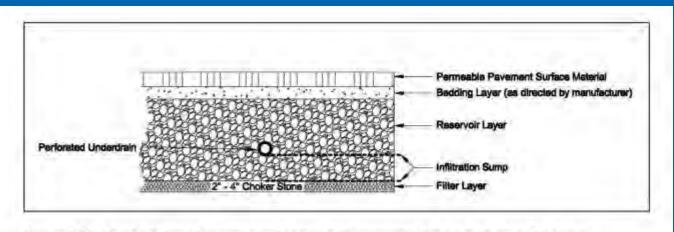
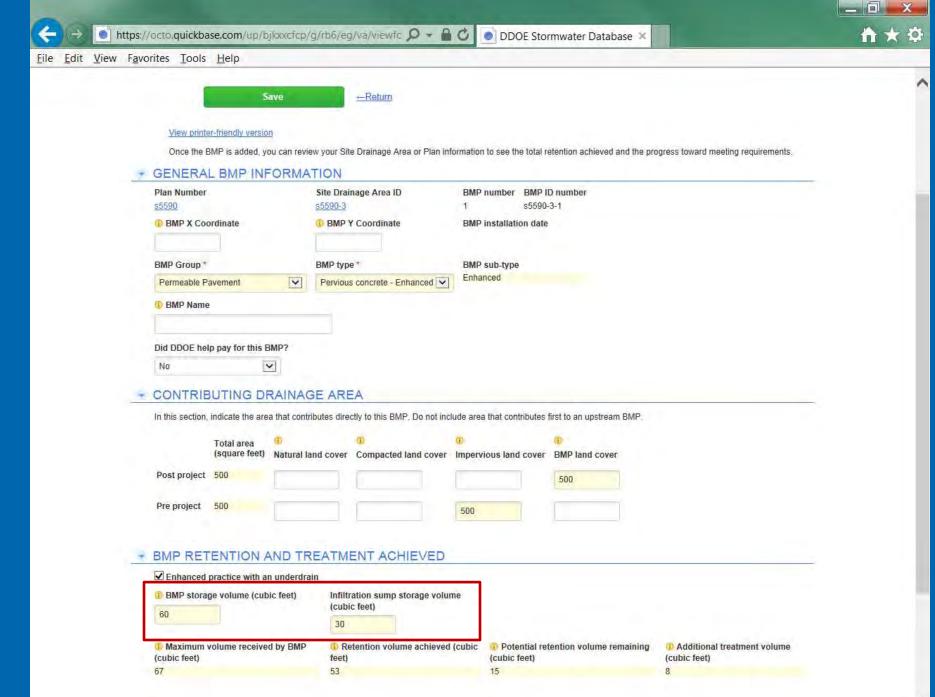


Figure 3.14 Cross section of an enhanced permeable pavement design with an underdrain.

Page 80 of the Stormwater Management Guidebook (doee.dc.gov/swguidebook)







Retention volume 53 393 achieved by BMPs

Volume treated 8 56

	→ BMP ID number	BMP Name	BMP Type and Subtype	Retention volume achieved (cubic feet)	Additional treatment volume (cubic feet)	Vehicular access volume addressed?	Downstream BMP ID Numbers	Total Pos projec vehicula access are
10	s5590-3-1	s5590- 3-1	Pervious concrete - Enhanced with underdrain	53	8	N/A		
OT				53	8			

DRAINAGE AREA COMPLIANCE

Retention volume remaining 90 673

 50% of SWRv retained?
 Runoff from vehicular access areas sufficiently retained or treated?

 No
 N/A

 Is treatment required?
 Minimum requirements for drainage area met?

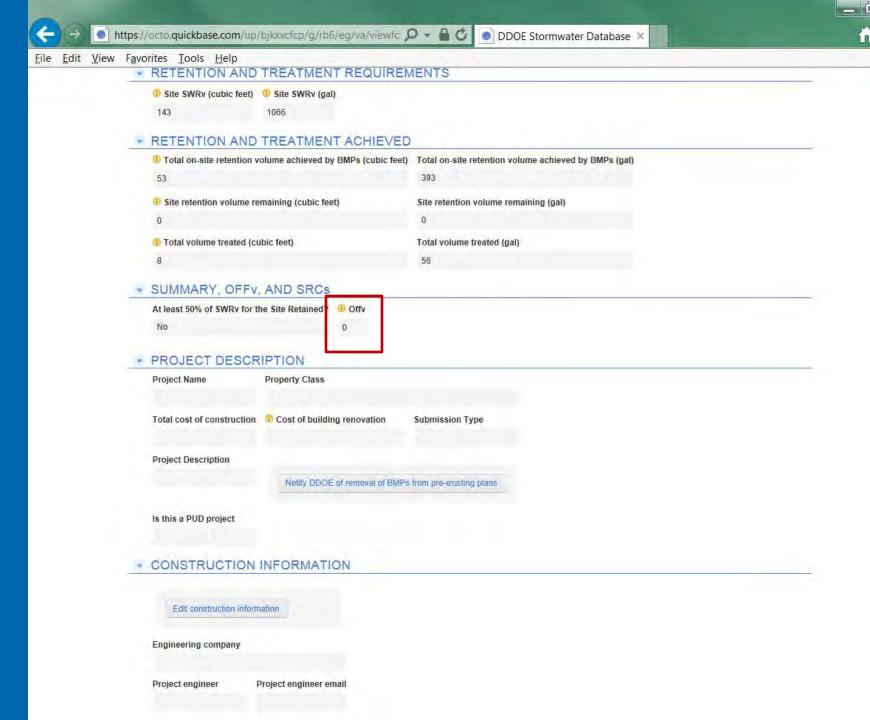
 No
 N/A

✓ MEP process used

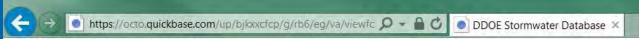
Can generate SRCs from PROW?

DDOE approval of MEP process

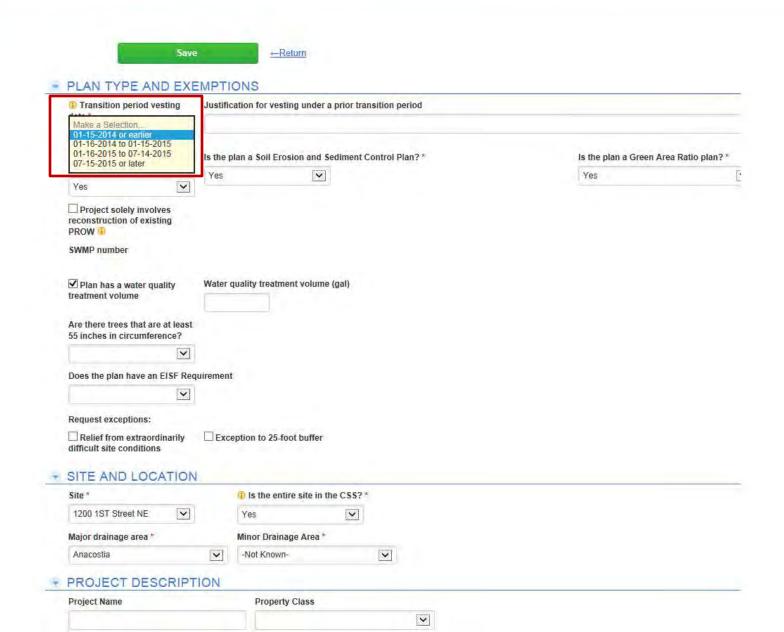
Note about SWRv



Plans Vested Under Transition Period 1



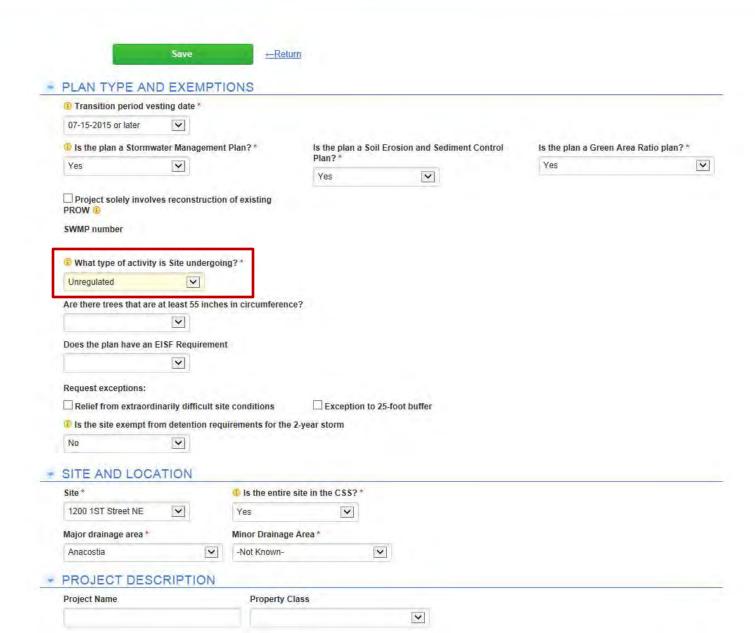




Unregulated Plans



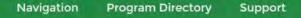














View printer-friendly version

Add another Site Drainage Area to this Plan

Site Drainage Area Information

Site Drainage Area ID

SITE DRAINAGE AREA INFORMATION

	CATTLE DAMAGE TO THE CALL TRANSPE	AND THE STATE OF STAT
4869	1	4869-1
Public Right of Way		
Type of activity Site is undergoing	Is Site Drainage Area in the AWDZ?	(in) SWRv rain event (in)
Unregulated		0
Is the Site Drainage Area in the CSS?	Site Drainage Area major drainage basin	Site minor drainage basin
Yes	Anacostia	-Not Known-
(1) Is the entire Site Drainage Area exe	mpt from detention requirements for the 2-	year storm?
No		

Site Drainage Area Number

* LAND COVER

Plan

	Total (square feet)	(1)	(i)	•	①	
	Total (Square rect)	Natural land cover	Compacted land cover	Impervious land cover	BMP Land Cover	
Post project	4000		1000	1000	2000	
Pre project	4000		2000	2000		
BMPs						

Add BMP to this Site Drainage Area

- BMPs

Add BMP to this Site Drainage Area

Edit BMP ID Numbers

	Cubic feet	Gallons
Retention volume achieved by BMPs	400	2992
Volume treated	0	0

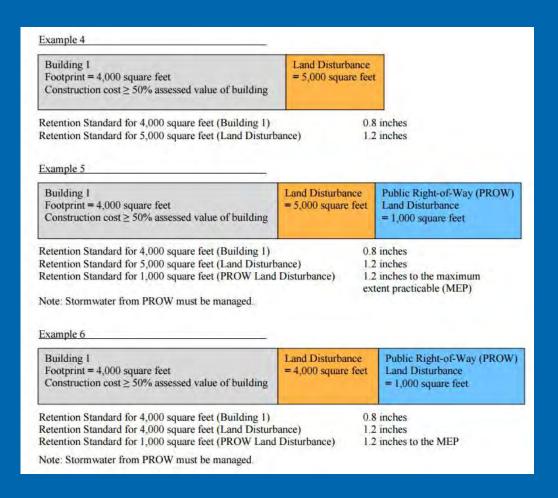
	→ BMP ID number	BMP Name	BMP Type and Subtype	Retention volume achieved (cubic feet)	Additional treatment volume (cubic feet)	Vehicular access volume addressed?	Downstream BMP ID Numbers	Total Pos projec vehicula access are
10	4869-1-1	4869-1-1	Stormwater planters - Enhanced	250	0	N/A		
10	4869-1-2	4869-1-2	Infiltration basin	150	0	N/A		
тот				400	0			

NET SRCs FOR UNREGULATED SITES

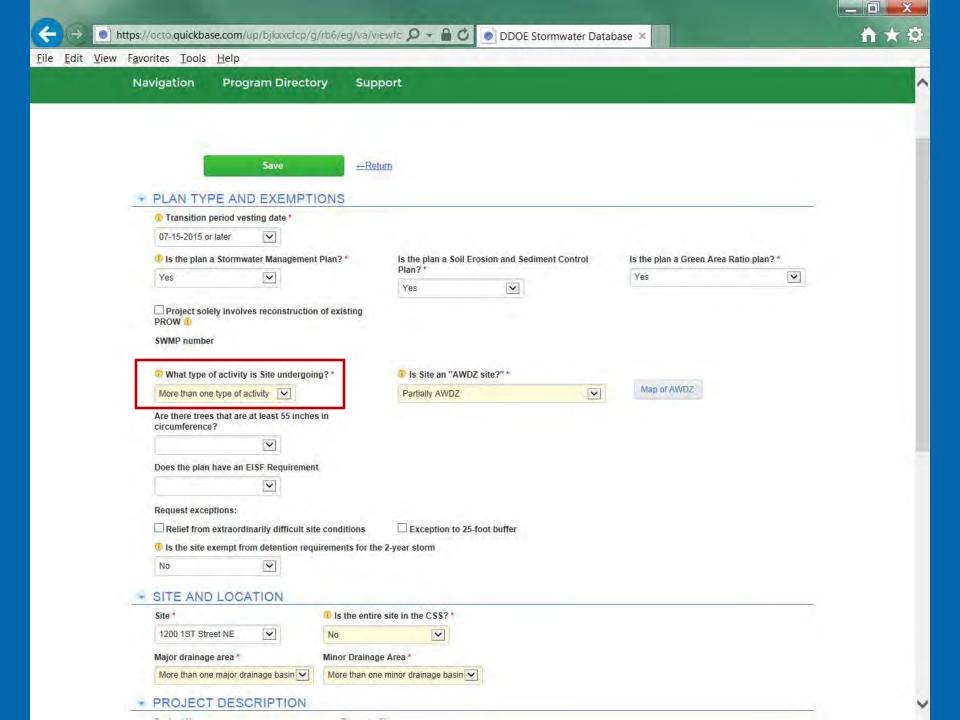
Pre-project land cover retention (cubic feet)	Pre-project BMP retention (cubic feet)	Total pre-project rete	ention (cubic feet)
227		227	
Post-project land cover retention (cubic feet)	Retention volume achieved by BMPs (cubic feet)	Total post-project re	tention (cubic feet)
128	400	528	
Total additional retention proposed (cubic feet)	Total additional retention proposed (gal)	() SRC Ceiling (gal)	(6 Maximum SRCs (gal)
301	2250	2543	2543
Net SRC Eligibility (gal)			
2250			

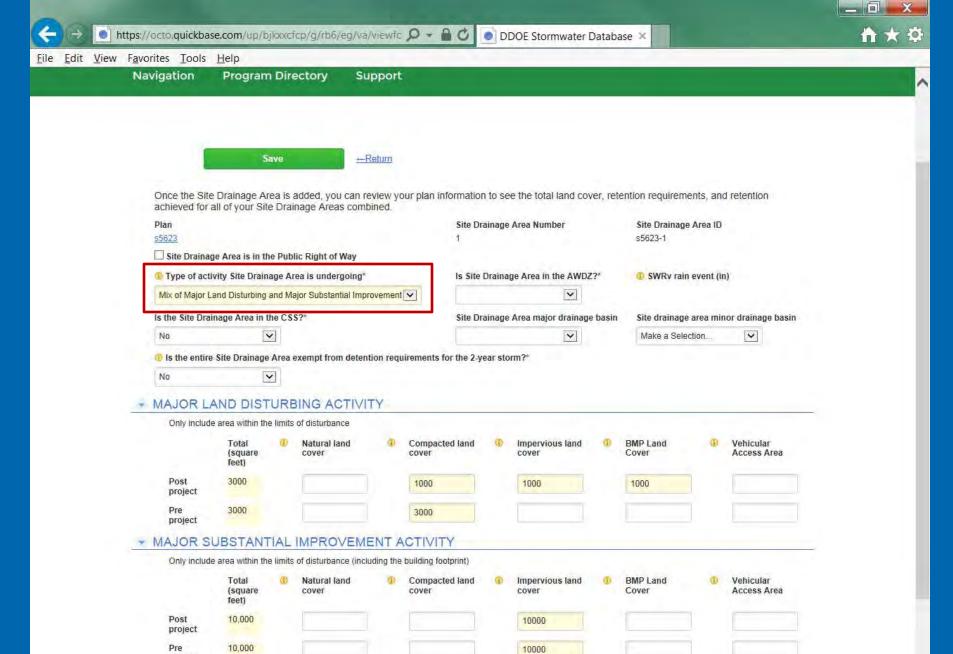
More than one type of activity

More Than One Type of Activity



Examples from *Clarifications to the 2013 Rule and Guidebook* available at doee.dc.gov/swregs and doee.dc.gov/swguidebook





project



Post project 10,000 Compacted land cover 10,000 BMP Land Cover Vehicular Access Area

10,000 10,000

- SWRV AND WQTV

		Cubic feet	Gallons	
	Site Drainage Area	(1)	6	
	SWRv	1007	7530	
	Site Drainage Area WQTv	(1)	4815	
Site L	Site Drainage Area WQTV	644	4015	
	Treatment requirement	3	1	
	for vehicular access area	.0	0	

- BMPs

Add BMP to this Site Drainage Area

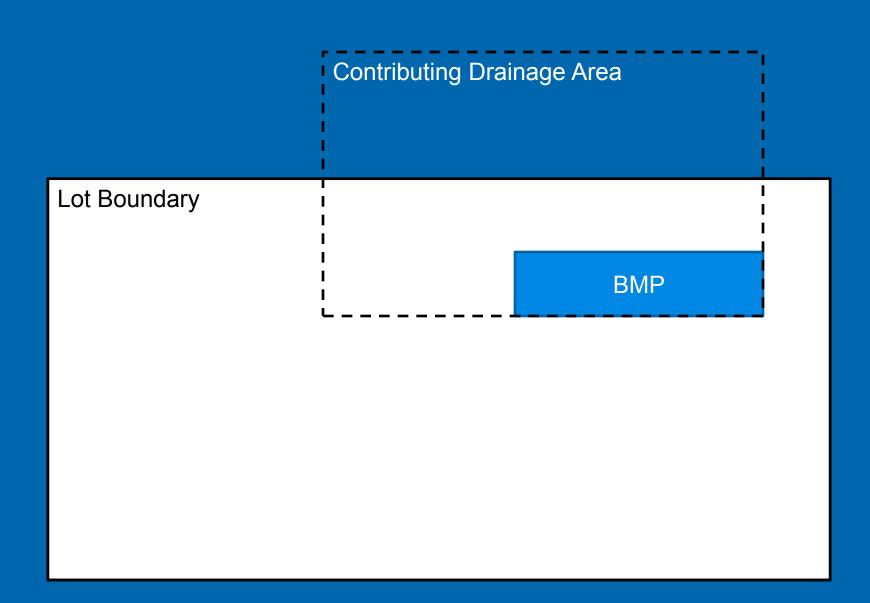
- DRAINAGE AREA COMPLIANCE

	Cubic feet	Gallons
Retention volume	(1)	(i)
remaining	1007	7530
Volume remaining to treat 50% of the SWRv	503	3765
Volume remaining to treat WQTv	644	4815

BMP Contributing Drainage Area from an Off-Site Area

Off-Site BMP Contributing Drainage Area

- For parcels, retaining volume from an off-site area does not contribute to meeting the SWRv.
- Retaining volume from an off-site area may be eligible for Stormwater Retention Credit (SRC) certification





View printer-friendly version

BMP (cubic feet)

808

achieved (cubic feet)

150

Once the BMP is added, you can review your Site Drainage Area or Plan information to see the total retention achieved and the progress toward meeting requirements. GENERAL BMP INFORMATION Plan Number Site Drainage Area ID BMP number BMP ID number s5623-1 s5623 s5623-1-1 (1) BMP X Coordinate BMP Y Coordinate BMP installation date BMP Group * BMP type * BMP sub-type Amended soils ~ Grass channel - Amended soils V Open Channel **® BMP Name** Did DDOE help pay for this BMP? ~ No CONTRIBUTING DRAINAGE AREA In this section, indicate the area that contributes directly to this BMP. Do not include area that contributes first to an upstream BMP. CDA includes area outside the authority of the site owner 🗓 Total area (square feet) Natural land cover Compacted land cover Impervious land cover BMP land cover Vehicular access area Post project 6000 3000 3000 Pre project 6000 6000 BMP RETENTION AND TREATMENT ACHIEVED BMP storage volume (cubic) feet) 500 Maximum volume received by Retention volume Potential retention volume Additional treatment Vehicular access volume

remaining (cubic feet)

658

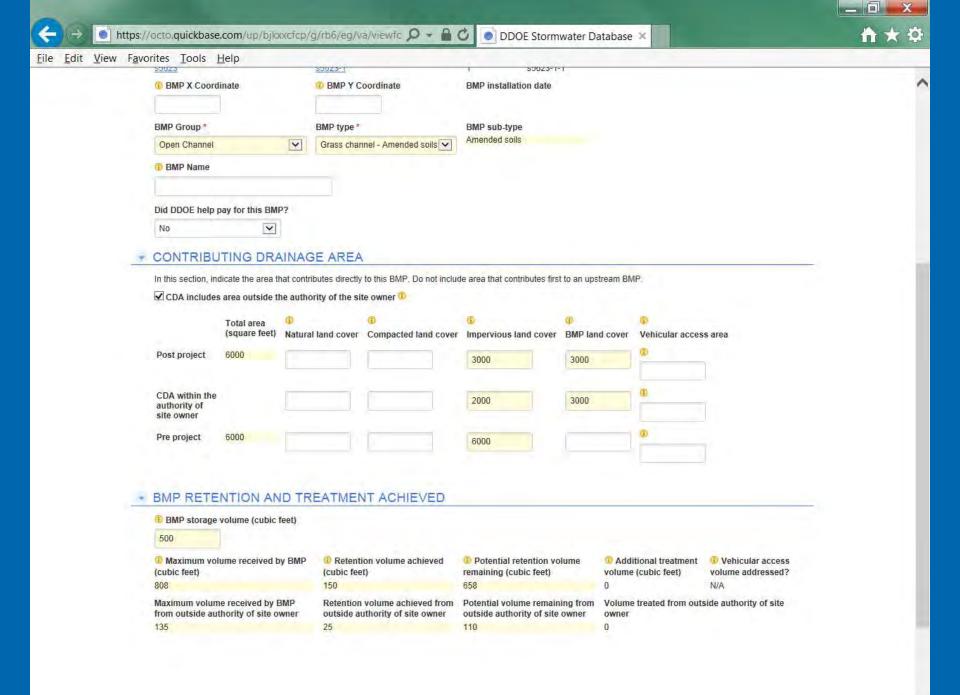
volume (cubic feet)

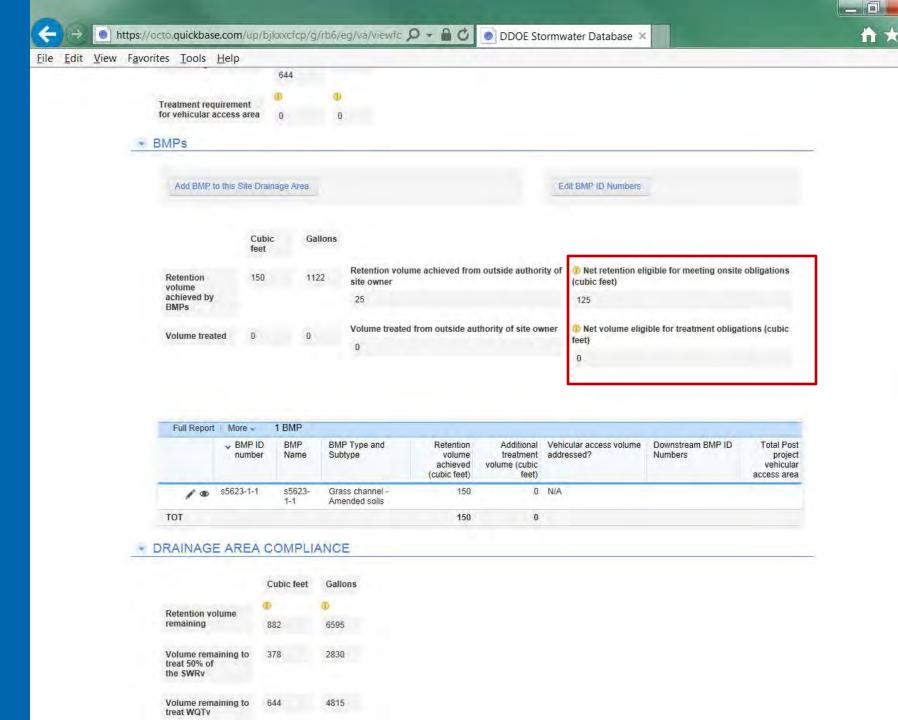
addressed?

N/A

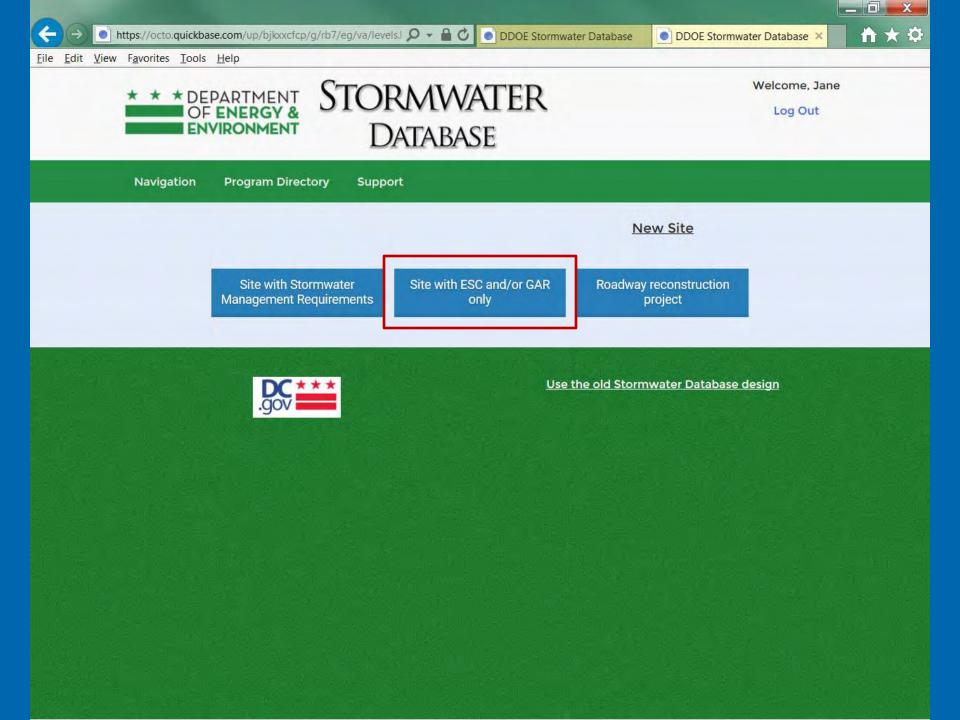
DDOE Stormwater Database ×

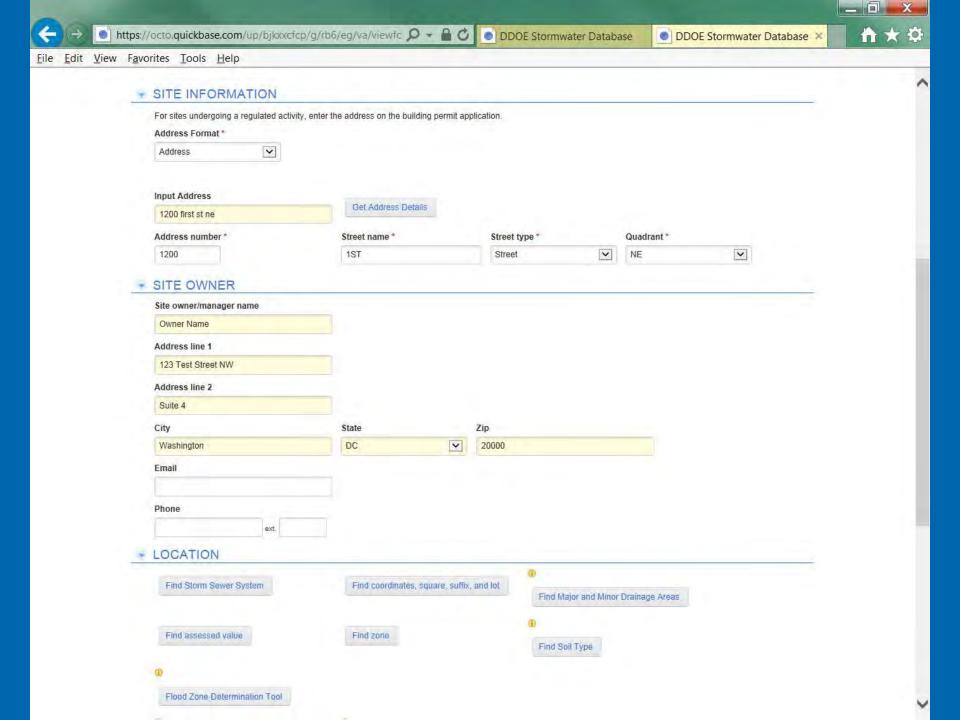


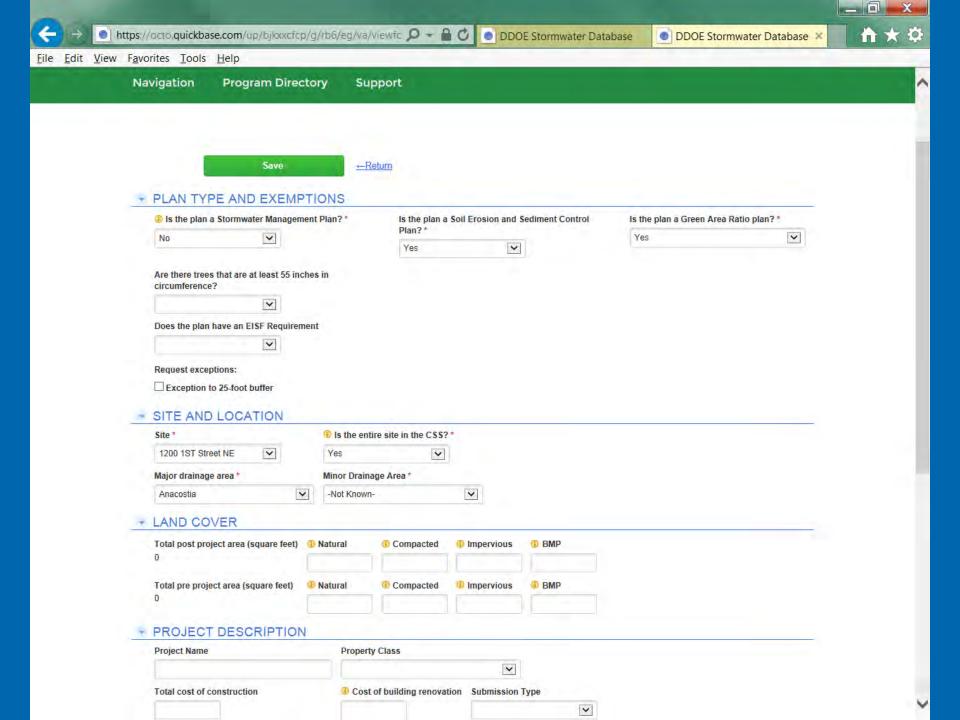




Erosion and Sediment Control and GAR plans







Additional Information

Matthew Espie
Matthew.Espie@dc.gov
202-715-7644

To access DOEE's Stormwater Database, visit doee.dc.gov/swdb.

For DOEE's stormwater management regulations and related information, visit doee.dc.gov/swregs.