GOVERNMENT OF THE DISTRICT OF COLUMBIA
Department of Energy and Environment

Stormwater Retention Credit Program
Fiscal Year 2018 Summary Report

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Contents

1. Summary

The 2013 Stormwater Rule provides major regulated sites with flexible options for meeting the District's stormwater management regulations. Under the rule, each major regulated project is required to achieve a stormwater retention volume (SWRv) based on either the 0.8 or 1.2 inch storm. Each major regulated site must meet at least 50 percent of the required SWRv on-site and has flexibility to meet the remaining portion of its SWRv off-site. This can be done through Stormwater Retention Credits (SRCs) that are purchased in an open market or through payment of an in-lieu fee (ILF) to DOEE.

When regulated construction projects purchase SRCs on the market from newly-constructed, voluntary green infrastructure projects in areas served by the Municipal Separate Storm Sewer System (MS4), this shifts investment in green infrastructure to areas that drain directly to the District's waterbodies without treatment, maximizing water quality benefits. DOEE expects that this will help to accelerate the restoration of the District's waterbodies while also providing compliance flexibility.

Information about SRC and Offv program activity in FY18 is summarized. Additional details are provided in the subsequent sections of this report in charts and tables. For full information about the SRC Program, SRC Price Lock Program, and to view the SRC Registry, visit http://doee.dc.gov/src.

Establishment of the SRC Price Lock Program, SRC Aggregator Startup Grant Program, and SRC Site Evaluation Program

In FY18, DOEE made a significant investment to accelerate green infrastructure retrofits in MS4 areas by establishing three new programs: the SRC Price Lock Program, the SRC Aggregator Startup Grant Program, and the SRC Site Evaluation Program. The SRC Aggregator Startup Grant Program provides funding to support SRC-generating businesses as they evaluate sites for the feasibility of green infrastructure retrofits. Through the SRC Site Evaluation Program, participants receive an assessment of potential green infrastructure opportunities on their properties. To maximize outcomes for the District's waterbodies, participation in each of these programs requires the intent to design and construct new, voluntary green infrastructure in the MS4.

Once enrolled in the SRC Price Lock Program, eligible SRC generators can build new, voluntary green infrastructure in the MS4 with the option to sell SRCs to DOEE at a fixed price, effectively creating a price floor in the SRC market. This program offers certainty about the revenue from selling SRCs, as participants are offered the ability to sell SRCs to DOEE for the first 12 years of SRC certification while still retaining the option to sell to another buyer on the SRC market for a higher price. SRC generators have told DOEE that this certainty allows them to obtain private financing at more favorable rates, making their development of green infrastructure cheaper and more profitable and increasing the amount of green infrastructure in DC. All SRCs purchased through this program will be retired and removed from the market, meaning they cannot be resold. DOEE has made $11.5 million available solely for SRC purchases. DOEE began accepting applications to participate in this program in early FY18.

SRC Price Lock Program Activity

Three projects enrolled in the SRC Price Lock Program in FY18. The first project to enroll in the SRC Price Lock Program in FY18 was constructed in FY17, after DOEE announced that it would launch the SRC Price Lock Program but before DOEE began accepting applications. All three SRC Price Lock Program projects were fully constructed by the end of FY18, achieving a combined retrofit of 7.5 acres.

All three SRC Price Lock Program projects were motivated primarily by the opportunity to generate and sell SRCs. One project was installed at a cemetery in Ward 5 and two projects were installed at religious institutions in Ward 7. All projects are located in the MS4 area and capture runoff that would otherwise drain to tributaries of the Anacostia River.

The table below shows the best management practices (BMPs) installed by projects that enrolled in the SRC Price Lock Program in FY18.

Table 1. BMPs Installed by SRC Price Lock Program Participants who enrolled in FY18

BMP Group	BMP installation date	Total Contributing Drainage Area (CDA) (square feet)	Impervious portion of CDA (square feet)	BMP surface area (square feet)	SRC-eligible Retention Volume (gal)[1]
Bioretention	5/4/2017[2]	14,600	9838	748	11,165
Bioretention	12/7/2017	53,492	6169	3542	21,374
Bioretention	12/7/2017	74,880	8582	4062	24,123
Bioretention	12/7/2017	70,785	4724	2912	16,709
Bioretention	12/7/2017	56,323	7323	3123	14,447
Bioretention	12/7/2017	42,253	2976	2830	15,500
Bioretention	6/27/2018	12,458	8258	1015	9,426
	TOTAL	324,791	47,870	18,232	112,744

Of the $11.5 million DOEE committed to the SRC Price Lock Program, the projects that enrolled in FY18 originally accounted for $1.59 million of funding to purchase 1,352,928 SRCs over 12 years of credit certification prior to selling any of their SRCs on the market. Of the 338,232 SRCs generated as part of the first 3-year SRC certification cycles for those projects, participants have sold a total number of 47,306 SRCs on the market through the end of FY18. If not sold on the market, these SRCs would have used $92,246.70 of DOEE's SRC Price Lock Program funds, which can now be used for other SRC Price Lock Program projects in the future. DOEE purchased SRCs from one SRC Price Lock Program project in FY18, spending a total of $55,142.10 to purchase 28,278 SRCs that the project generated from its first 3-year SRC certification cycle.

When DOEE approves a 3-year certification cycle, the participant has one year to decide whether to sell SRCs to DOEE or sell SRCs on the market. For the three projects enrolled in the program, DOEE still had $1.44 million reserved in the escrow account as of the end of FY18. This is the maximum amount required if DOEE were to purchase all the participants' remaining SRCs from their first 3-year certification cycle and SRCs from subsequent certification cycles for years 4 through 12. SRC purchase prices are $0.40/SRC for years 7 through 12 of SRC certification, so less funding is required to purchase credits during those years.

[1] The SRC-eligible retention volume is the retention volume achieved by the green infrastructure practice in excess of pre-project retention. This includes an adjustment based on land cover changes. For more information about this calculation, refer to Chapter 7 of the Stormwater Management Guidebook (http://doee.dc.gov/swguidebook).
[2] DOEE began accepting applications for the SRC Price Lock Program in FY18 and allowed prior projects to enroll if they were built after September 2016.

Table 2. FY18 Escrow Account Status

Project Number	FY Enrolled	Original Amount Reserved	SRC Price Lock Program Funding Forfeited Due to Market Sale[3]	Total Amount Paid in FY18	Amount Still Reserved at the end of FY18
1	FY18	$157,426.50	$65,315.25	$0	$92,111.25
2	FY18	$1,299,357.30	$26,931.45	$0	$1,272,425.85
3	FY18	$132,906.60	$0	$55,142.10	$77,764.50
TOTAL		**$1,589,690.40**	**$92,246.70**	**$55,142.10**	**$1,442,301.60**

Table 3. SRCs Purchased and Retired by DOEE in FY18

Transfer Date	Watershed where SRCs are generated	Purchase price per SRC	Number of SRCs	Total value of transfer
9/5/2018	Anacostia	$1.95	28,278	$55,142.10

SRC Aggregator Startup Grant and SRC Site Evaluation Program Activity

DOEE approved the first 5 SRC Aggregator Startup Grants in FY18, accounting for a total of $374,425. Each SRC aggregator is focused on designing green infrastructure in the MS4 for participation in the SRC Price Lock Program. While each aggregator has proposed their own strategy for developing green infrastructure designs, general themes include focusing on religious institutions, partnering with properties that have large impervious surfaces, implementing vegetated green infrastructure like rain gardens, and searching for opportunities located in the non-tidal MS4.

DOEE provided one SRC Site Evaluation in FY18 for a condo building located in the MS4.

SRC Market Activity Summary

The SRC market and Offv programs grew substantially in FY18. Eighteen trades occurred for a total of 139,982 SRCs, with an average price of $2.04. The total number of SRCs sold in FY18 exceeded that of all prior fiscal years combined. DOEE received three in-lieu fee (ILF) payments in FY18, totaling $8,158.60. Projects may use SRCs or pay ILF to achieve Offv compliance in a later fiscal year, which means that some of these trades and payments will achieve Offv compliance in FY19.

In FY18, DOEE approved 10 applications to certify Stormwater Retention Credits, accounting for 1,571,627 SRCs, of which 1,491,865 represent new supply in the SRC market (including SRC Price Lock Program participants). The other 79,762 were generated by SRC owners who

[3] Based on the SRC Price Lock Program price that DOEE would have paid for these credits, as specified in the participant's SRC Purchase Agreement. For the credits these participants sold on the market, DOEE would have paid $1.95/SRC, based on these credits being for green infrastructure managing runoff from the non-tidal MS4 area and being for the first six years of credit certification.

have informed DOEE that there are no plans to sell the SRCs. The SRCs are being banked with the intention of meeting the SRC owners' Offv obligations on future projects if they arise.

Of the SRCs approved in FY18, 70 percent are from green infrastructure located in the Anacostia River watershed. Twenty-nine percent of the SRCs approved in FY18 are from green infrastructure located in the Potomac River watershed. One percent are from green infrastructure located in the Rock Creek watershed. 92 percent of SRCs of the SRCs approved in FY18 are from green infrastructure located in the MS4 and 8 percent are from green infrastructure located in the CSS.

In FY18, DOEE approved 30 new permit applications for sites with Offv (16 percent of all projects approved in FY18). In addition to these 30 new sites with Offv and the 47 sites approved with Offv in prior fiscal years, the designs for some projects approved in prior fiscal years were revised. While some of these projects eliminated the Offv requirement, others opted to comply off-site, for a net increase of 3 projects with Offv. Including the 47 previously-approved sites with Offv, the net increase of 3 revised sites with Offv, and the 30 new sites with Offv, DOEE has approved 80 projects with Offv from the SRC program inception through the end of FY18 (12.7 percent of all projects approved since program inception through the end of FY18). Out of the total 80 projects with Offv, 16 projects with Offv finished construction in FY18.

In FY18, DOEE also updated the publicly-available information about the SRC program in the SRC and Offv Registry, which is available via the Stormwater Database. These updates are intended to increase program transparency and provide more information about program activity. DOEE also added new capabilities to the registry that allow SRC sellers to self-identify the additional environmental and community benefits achieved by their SRC-generation projects. DOEE expects these changes will help SRC sellers advertise their SRCs and help SRC buyers identify projects that achieve multiple benefits for the District.

2. SRCs Certified

A total of 1,571,627 SRCs were certified in FY18. DOEE certifies SRCs for up to 3 years at a time on one application, so each fiscal year shown in Figure 1 may include an SRC certification period that lasts up to 2 years beyond the FY in which the application was approved. The number of years of certification is based on the period covered by the maintenance contract, which is submitted with the SRC certification application. If the SRC generator can demonstrate that they have the appropriate expertise and staff necessary to maintain their BMPs, the SRC generator may submit their own maintenance plan rather than a maintenance contract with a third party.

Some SRC owners generate SRCs to bank for Offv compliance for potential future regulated projects. Table 4 and Figure 1 show how many of the SRCs certified each year represent supply in the SRC market versus SRCs that were not listed for sale on the market because they were privately banked for other reasons such as satisfying the SRC generator's Offv requirement at another site. This categorization is based on the applicant's decision whether to list SRCs for sale.

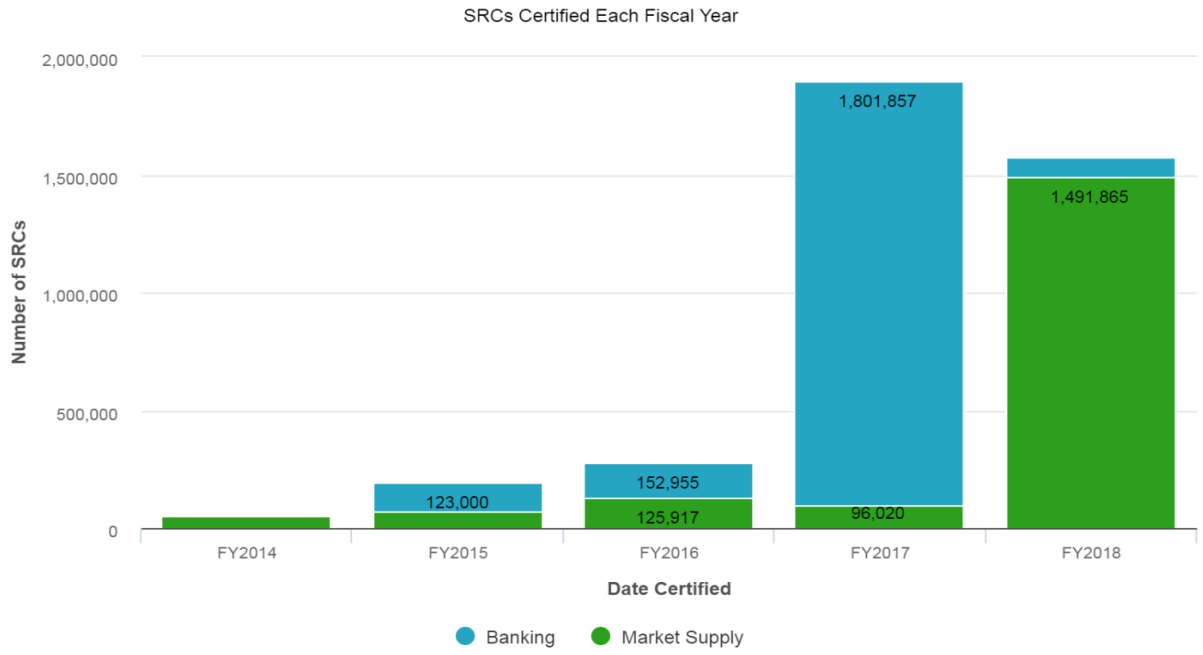

Figure 1. SRCs Certified Per Fiscal Year

Table 4. SRCs Certified Each Fiscal Year

Fiscal Year	SRCs approved – Market Supply	SRCs Approved - Banking	Total
FY14	51,249	0	51,249
FY15	71,588	123,000	194,588
FY16	125,917	152,955	278,872
FY17	96,020	1,801,857	1,897,877
FY18	1,491,865	79,762	1,571,627
Total	**1,836,639**	**2,157,574**	**3,994,213**

Figure 2 and Figure 3 show the number of SRCs certified by DOEE in FY18, grouped by watershed and sewershed, respectively.

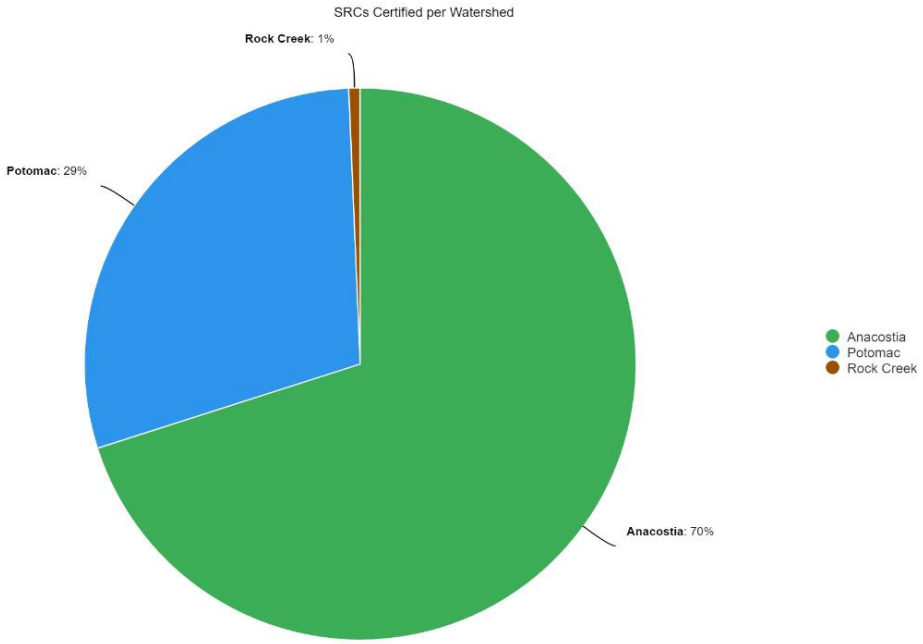

Figure 2. SRCs Certified per Watershed in FY18

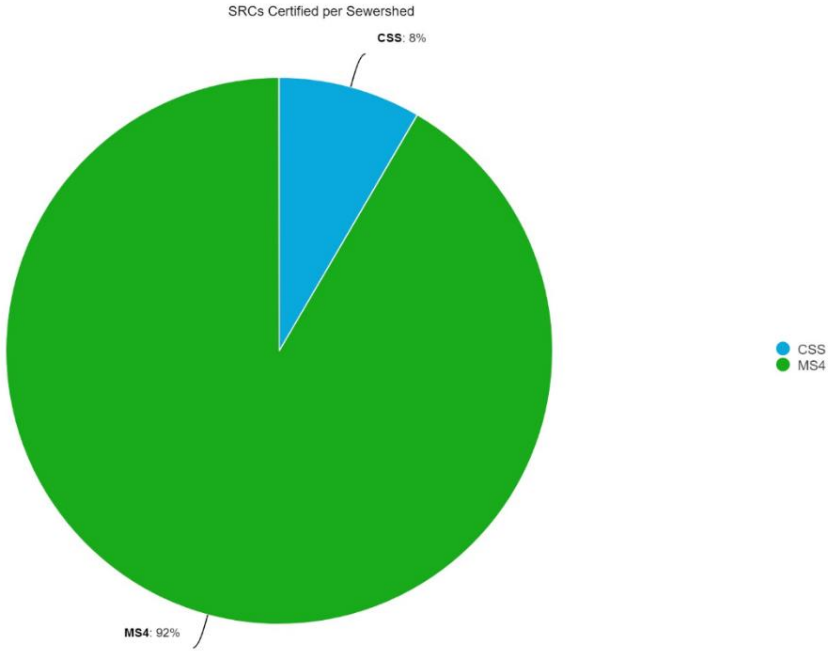

Figure 3. SRCs Certified per Sewershed in FY18

Since the SRC certification period may last for up to 3 years, each SRC also has a retention year, which corresponds to the year during which the green infrastructure that generated the SRC is actually retaining stormwater.[4] For example, if a GI project with 100 gallons of SRC eligibility is

[4] In prior reports, DOEE has referred to this concept as the "vintage year." DOEE is switching to the term "retention year" to clarify the meaning. DOEE welcomes feedback on other terms that may provide further clarification.

certified for 3 years in FY18, all 300 credits would be approved in FY18. However, 100 credits are from the retention of stormwater in FY18, 100 are from the retention of stormwater in FY19, and 100 are from the retention of stormwater in FY20. For clarity, DOEE refers to this concept as the retention year to distinguish it from the SRC certification date that is based on DOEE approval of the application to certify SRCs. A project's first SRC retention year is based on the date DOEE receives a complete application to certify the SRCs. The second and third retention years covered by the application begin on the anniversaries of the date DOEE received the complete application.

More information about SRC certification is available in Table 5, including the certification and retention year for each SRC. Each application may result in SRC certification for up to 3 years, which is shown in the Retention Year columns. In most instances, the retention year occurs partially in two fiscal years. For simplicity, this table reports the fiscal year during which the SRC begins to achieve retention. For example, an SRC with a retention year from 8/22/2018 through 8/23/2019 would achieve retention during both FY18 and FY19, but would be reported only in the FY18 column.

Due to space limitations, Table 5 includes information about all SRCs certified with an application submitted in FY18. Prior annual reports[5] include information about the retention year of SRCs approved by DOEE on applications submitted prior to FY18.

Table 5. Retention Year of SRCs Certified in FY18[6]

SRC Certification Date	Watershed	Sewershed	Total SRCs (certified in FY18)	Retention Year		
				FY18	FY19	FY20
8/22/2018	Anacostia	MS4	28,278	9,426	9,426	9,426
4/27/2018	Anacostia	CSS	19,338	9,669	9,669	-
4/20/2018	Anacostia	CSS	45,990	15,330	15,330	15,330
4/17/2018	Anacostia	CSS	157,053	52,351	52,351	52,351
3/26/2018	Anacostia	MS4	9,142	9,142	-	-
2/27/2018	Potomac	MS4	1,007,985	335,995	335,995	335,995
2/22/2018	Anacostia	MS4	11,294	5,647	5,647	-
2/9/2018	Rock Creek	CSS	3,140	1,570	1,570	-
1/23/2018	Anacostia	MS4	276,459	92,153	92,153	92,153
12/15/2017	Rock Creek	CSS	12,948	4,316	4,316	4,316
Total			**1,571,627**	**535,599**	**526,457**	**509,571**

3. Off-Site Retention Volume

In FY18, DOEE approved permit applications for 30 projects with Offv. Figure 4 shows the number of plans approved with Offv for each fiscal year. If applicable, values for prior fiscal years have been updated to reflect design changes that occurred in FY18 to projects that were

[5] Prior annual reports can be found in the MS4 annual reports at http://doee.dc.gov/node/139492 or on the SRC website at http://doee.dc.gov/src.
[6] Information about SRCs approved by DOEE in prior fiscal years can be found in prior annual reports.

initially approved in prior fiscal years. For example, a net of 3 projects originally approved in prior fiscal years were redesigned and approved in FY18, which resulted in a changed amount of projects with Offv for prior fiscal years. This may cause deviations in the number of sites with Offv or amount of Offv compared to what was reported in prior fiscal years.

The number of projects approved with Offv increased by 61 percent in FY18 relative to the number of projects approved with Offv in FY17. The number of gallons of Offv on plans approved in FY18 increased 79 percent relative to FY17, and has been steadily increasing since FY15. As more projects are approved with Offv, the demand in the SRC market increases, unless the regulated sites plan to comply with self-generated SRCs or ILF payment. This creates additional incentive for more voluntary green infrastructure projects to meet that demand. Figure 5 shows the number of gallons of Offv approved per fiscal year.

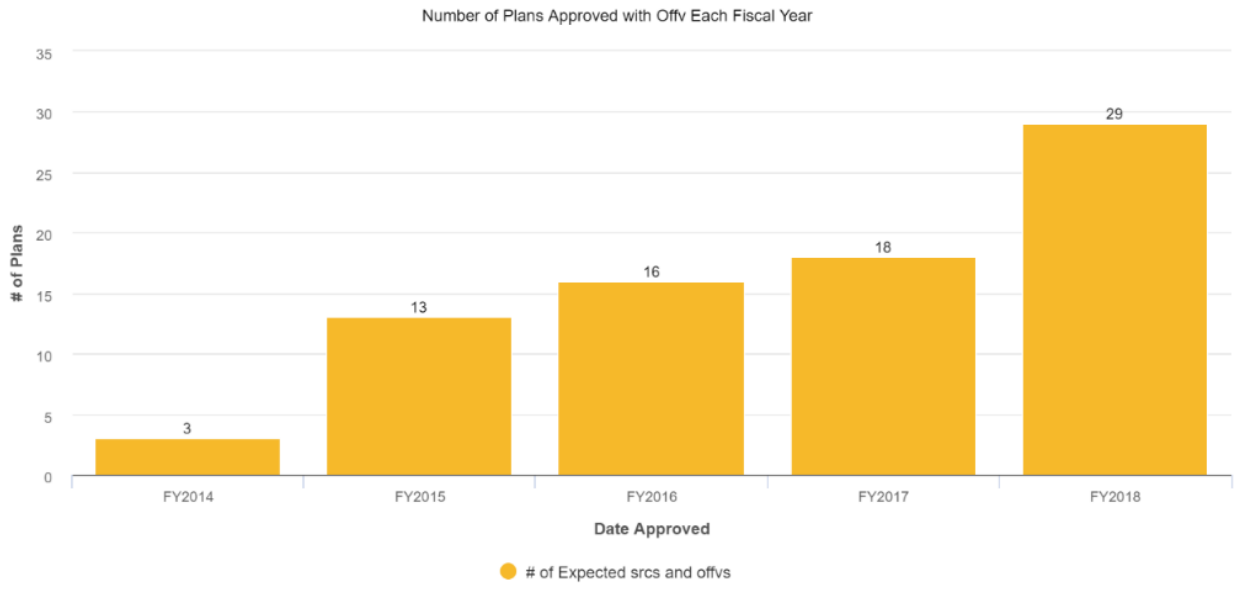

Figure 4. Number of Plans Approved with Offv per Fiscal Year

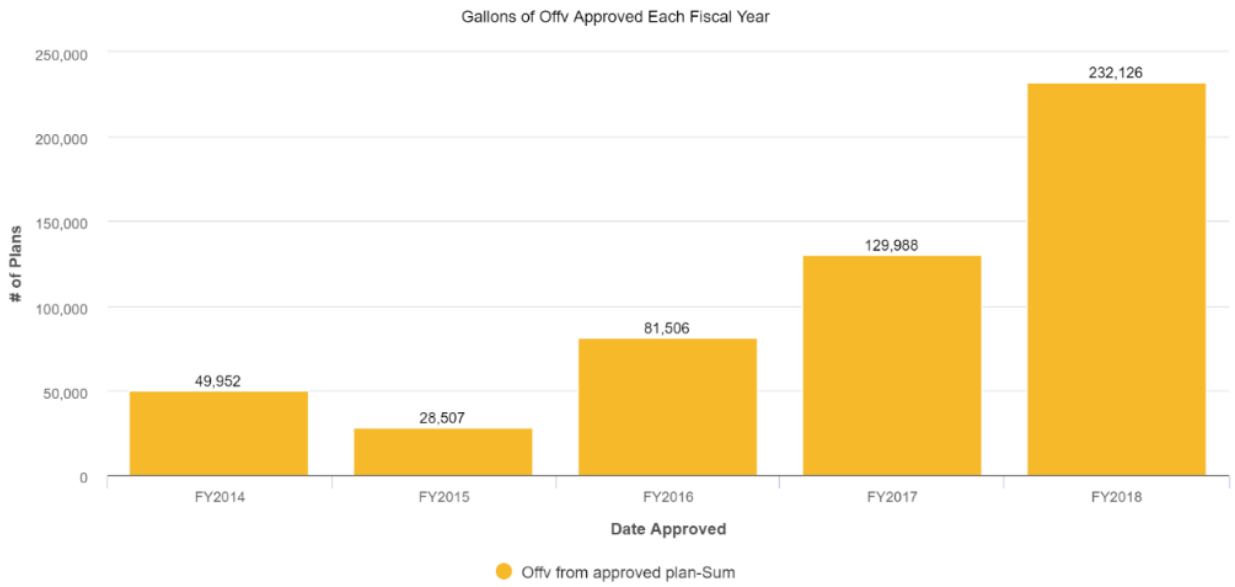

Figure 5. Gallons of Offv Approved per Fiscal Year

Figure 6 shows the number of plans built (Figure 4 shows plans approved) with Offv each fiscal year. Figure 7 shows the number of gallons of Offv on plans built (Figure 5 shows gallons on plans approved) in each fiscal year. While the number of individual projects with Offv built decreased by 1 in FY18 relative to FY17, the number of gallons of Offv on projects built in FY18 increased by 65 percent relative to FY17. Additionally, the cumulative Offv built since program inception increased by 88 percent in FY18, as shown in Figure 8. The increase in the number of plans approved with Offv each fiscal year indicates the future demand on the SRC market.

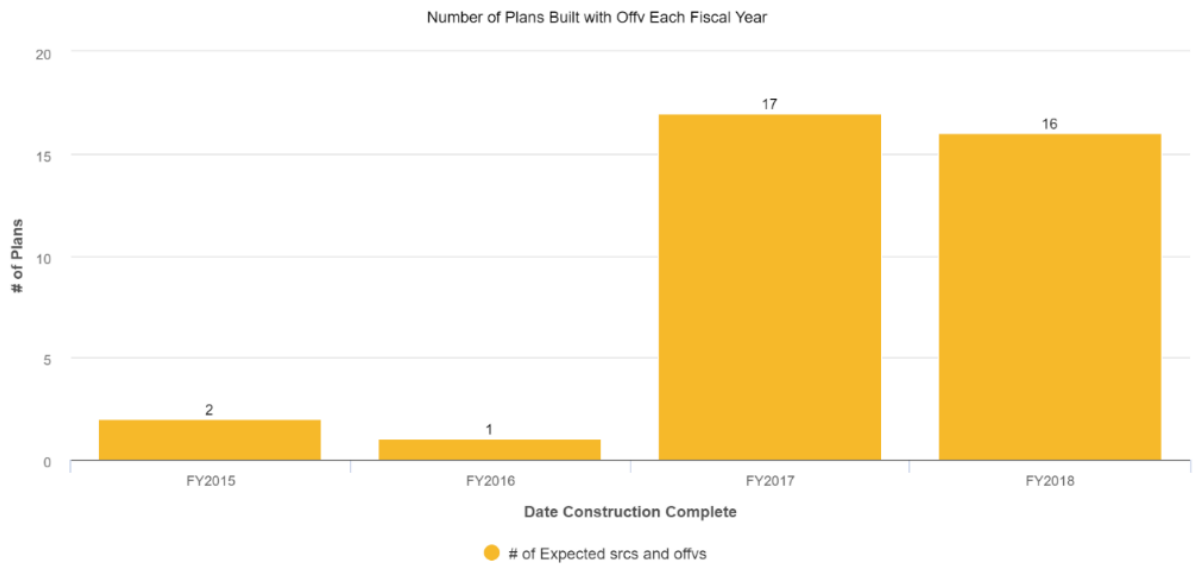

Figure 6. Number of Plans Built with Offv Per Year

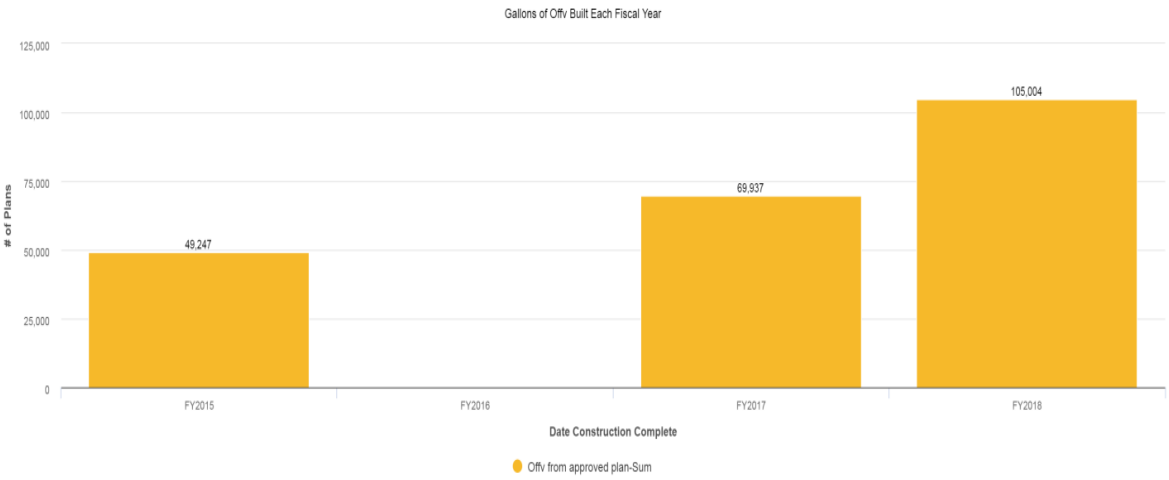

Figure 7. Gallons of Offv on Built Projects Per Year

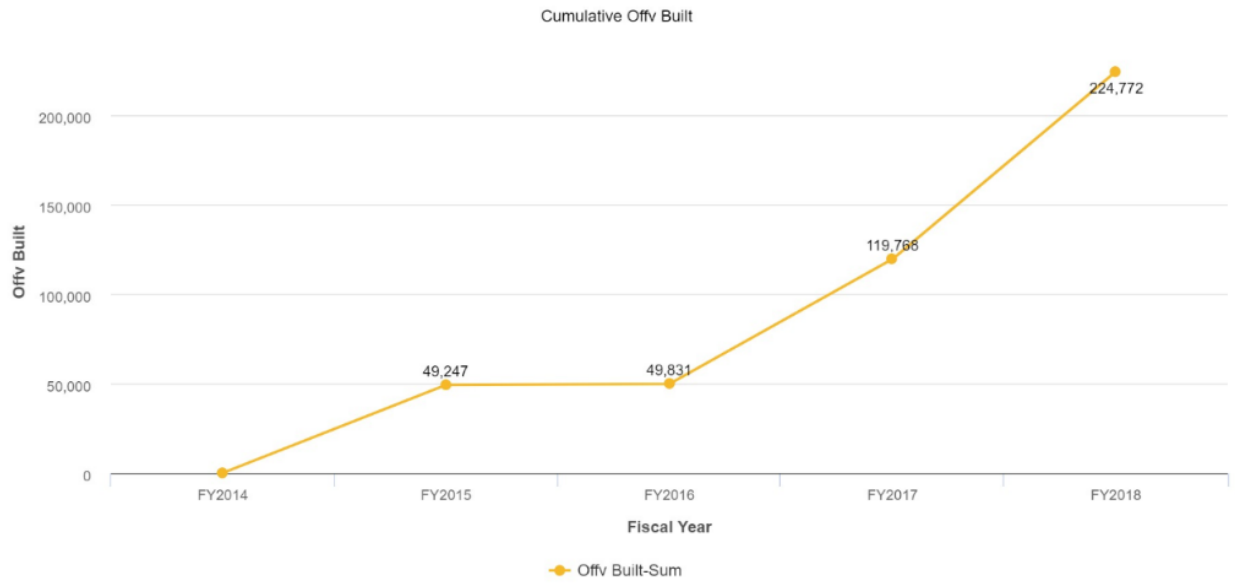

Figure 8. Gallons of Offv on Built Projects (Cumulative)

4. SRC Trades

The overall number of SRC trades has increased in FY18. 18 SRC Trades occurred in FY18, an increase from 12 SRC trades in FY17. In contrast to FY17, the SRC trades in FY18 were also more evenly spaced throughout the year.

All trades were driven by projects that were nearing the end of construction or their next Offv compliance date. This does not include SRCs purchased by DOEE through the SRC Price Lock Program. Table 6 lists the prices for each trade and a weighted average price for all trades.

Table 6. FY18 SRC Trades

Date	Number of SRCs	SRC Sale Price	Value of SRCs Sold
8/23/18	36	$2.00	$72
8/22/18	548	$2.00	$1,096
8/8/18	18,025	$1.99	$35,869
6/19/18	1052	$1.99	$2,093.48
6/12/18	5905	$2.00	$11,810
6/8/18	9296	$1.74	$16,151.80
5/24/18	12,806	$2.00	$25,612
5/22/18	2142	$2.00	$4,284
5/15/18	12,671	$2.00	$25,342
3/29/18	27,092	$2.50	$67,730
3/29/18	1242	$1.70	$2,111.40
3/6/18	1859	$1.75	$3,253.25
2/26/18	438	$2.35	$1,029.30
1/16/18	1825	$1.90	$3,467.50
12/26/17	19,349	$1.90	$36,763.10
12/20/17	13,543	$1.90	$25,731.70
11/13/17	1,140	$1.90	$2,166
10/10/17	11,013	$1.90	$20,924.70
TOTAL/AVERAGE	**139,982**	**$1.97**	**$285,507.98**

Further analysis can be provided when grouping SRC trades into tiers based on the number of SRCs included in the trade. Table 7 shows this in more detail, including the average amount of SRCs traded, the average price per trade, and the average price per SRC per tier in FY18. This information has not been included in prior annual reports, so DOEE has also included Table 8 and Table 9, which include information since program inception.

Table 7. Average Price of SRCs Traded in FY18, grouped by size of trade

Number of SRCs Traded	Number of Trades	Average SRCs per Trade	Average Price of Trade	Average Price per SRC
Under 1,000	3	341	$732	$2.15
1,000 – 9,999	8	3,058	$5,667.18	$1.85
10,000 – 19,999	6	14,568	$28,373.88	$1.95
20,000 +	1	27,092	$67,730	$2.50

Table 8. Average Price of SRCs Traded since program inception, excluding FY18, grouped by size of trade

Number of SRCs	Number of Trades	Average SRCs per Trade	Average Price of Trade	Average Price per SRC
Under 1,000	6	578	$1,105.58	$1.89
1,000 – 9,999	10	3,681	$7,326.66	$1.95
10,000 – 19,999	4	11,428	$24,156.56	$2.11
20,000 +	1	24,505	$49,010	$2.00

Table 9. Average Price of SRCs Traded since program inception, including FY18 grouped by size of trade

Number of SRCs Traded	Number of Trades	Average SRCs per Trade	Average Price per Trade	Average Price per SRC
Under 1,000	10	527	$1,032	$1.96
1,000 – 9,999	23	3,331	$6,429.80	$1.93
10,000 – 19,999	11	13,103	$26,263.23	$2.00
20,000 +	2	25,799	$58,370	$2.26

5. Offv Compliance

A regulated site must begin to comply with its Offv as of the date of its Final Construction Inspection and every year thereafter. Projects with Offv must use SRCs and/or pay ILF for each year of Offv compliance. Table 10 shows periods of Offv compliance that began in FY18, regardless of when ILF payment was received or when SRCs were certified and traded (e.g. for a multi-year compliance period or for a trade that occurred in one fiscal year for a compliance period that began in another).

Table 10. Offv Compliance in FY18

Offv Compliance Start Date	Offv (gallons)	SRCs Used	ILF Payment	Gallons of Offv met with ILF	Notes
10/4/17	1,622	-	$5,855.42	1,622	Renewed Offv Compliance
10/08/17	38,234	38,234	-	-	Renewed Offv Compliance
10/14/17	534	534	-	-	Renewed Offv Compliance
10/26/17	10,548	10,548	-	-	End of Construction
10/31/17	11,013	11,013	-	-	Renewed Offv Compliance
11/16/17	4,950	4,950	-	-	End of Construction
11/21/17	705	705	-	-	Renewed Offv Compliance
12/18/17	389	-	$1,404.29	389	End of Construction
10/20/17	903	903	-	-	End of Construction
12/27/17	1,825	1,825	-	-	End of Construction
01/09/18	380	380	-	-	Renewed Offv Compliance
01/23/18	3,708	3,708	-	-	End of

					Construction
02/10/18	4,177	4,177	-	-	Renewed Offv Compliance
02/13/18	639	639	-	-	End of Construction
02/22/18	1,050	1,050	-	-	End of Construction
02/22/18	19,219	19,219	-	-	End of Construction
03/22/18	3,077	3,077	-	-	Renewed Offv Compliance
03/29/18	1,859	1,859	-	-	End of Construction
04/04/18	24,505	24,505	-	-	Renewed Offv Compliance
04/11/18	8,229	8,229	-	-	Renewed Offv Compliance
04/25/18	9,909	9,909	-	-	End of Construction
05/05/18	218	218	-	-	Renewed Offv Compliance
05/31/18	438	438	-	-	End of Construction
06/05/18	12,671	12,671	-	-	Renewed Offv Compliance
06/15/18	6,403	6,403	-	-	Renewed Offv Compliance
06/26/18	249	-	$898.89	249	End of Construction
06/27/18	651	651	-	-	Renewed Offv Compliance
07/11/18	2,142	2,142	-	-	Renewed Offv Compliance
07/25/18	223	223	-	-	Renewed Offv Compliance
08/11/18	2,324	2,324	-	-	Renewed Offv Compliance
08/24/18	584	584	-	-	Renewed Offv Compliance
08/27/18	18,025	18,025	-	-	End of Construction
09/07/18	1,455	1,455	-	-	Renewed Offv Compliance
09/13/18	25,258	25,258	-	-	End of Construction
09/17/18	5,905	5,905	-	-	Renewed Offv

					Compliance
09/21/18	621	621	-	-	Renewed Offv Compliance
TOTAL	**224,642**	**222,382**	**$8,158.60**	**2,260**	

From program inception through the end of FY18, 80 projects that received SWMP approval from DOEE opted to comply with the requirement in part through Offv (approximately 13 percent of projects that have triggered the District's stormwater management regulations). As of the end of FY18, 36 of those projects had finished construction and begun complying with the Offv.

Table 11 provides a summary of additional information about how projects have complied with their most recent year of Offv compliance. DOEE has observed that ILF payment is made in very limited circumstances. Typically, ILF payment occurs when a project has a relatively small Offv. Self-generated SRCs are generated from green infrastructure at one project and used for Offv compliance for another project owned by the same entity.

Table 11. Type of Offv Used For the Most Recent Year of Offv Compliance (all projects built through the end of FY18)

Option used for Offv	Number of Projects	Percent of Projects	Offv from Approved Plan (gallons)	Percent of Offv from Approved Plan
ILF	2	5.7%	1,871	0.8%
Purchased SRCs	23	65.7%	104,880	47.5%
Self-generated SRCs	10	28.6%	113,844	51.6%

DOEE has found that many SRC sellers prefer larger transactions, which may include multiple years of Offv compliance. DOEE is also aware of several instances in which buyers and sellers have discussed or agreed to an initial sale that includes an option for future SRC sales. Buyers are able to purchase enough SRCs to meet many years of Offv compliance at a time, which may help to reduce administrative processing of applications. However, DOEE has observed that buyers typically purchase in one-year increments. The tables below summarize the number of years of Offv compliance achieved on applications to use SRCs that were submitted during FY18 as well as the amount of time between the SRC sale and the start of the Offv compliance period.

Eighty-one percent of projects that met Offv in FY18 opted to comply for a 1-year period, as shown in Table 12. Two projects chose to comply for a 2-year period, and 1 project chose to comply for a 3-year period. Projects are shown in this table if the start of their 1-year or multi-year compliance period occurred in FY18, even if the SRCs were purchased in a prior fiscal year.

Table 12. Length of Offv Compliance Period achieved in FY18 Using Purchased SRCs

Number of Years of Compliance Achieved	Number of Sites	Offv (Annual)	Number of SRCs Used
1	14	90,094	90,094
2	2	7,024	14,048
3	1	380	1,140

DOEE has observed that SRC buyers do not typically purchase their SRCs more than a few months in advance of their required compliance date. Most purchases occur within one month of the required compliance date. For periods of Offv compliance beginning in FY18, Table 13 identifies how far in advance the SRC buyer made an SRC purchase.

If the buyer purchases enough SRCs for a multi-year compliance period, Table 13 identifies the length of time between the purchase and the start of the first year of the compliance period. For example, if a project has an Offv of 100 gallons and the owner purchases 300 SRCs to comply for 3 years, and the purchase occurs 30 days before the start of the compliance period, all 300 SRCs are counted as being purchased 21 to 30 days before the compliance period.

Table 13. Time between SRC Purchase and Offv Compliance Period for Periods Beginning in FY18

Time Period between SRC Sale and Start of Offv Compliance Period	Number of SRCs	Percent of SRCs
10 days or fewer	2,409	2.3%
11 to 20 days	18,025	17.1%
21 to 30 days	38,219	36.3%
31 to 40 days	1,825	1.7%
41 to 50 days	2,142	2.0%
51 to 60 days	18,534	17.6%
61 to 70 days	0	0%
71 to 80 days	0	0%
81 to 90 days	0	0%
91 to 100 days	6,343	6.0%
Over 100 days	17,785	16.9%

6. SRCs Used in FY 2018 – Spatial Distribution

An SRC certified in one location in the District can be used to comply with an Offv requirement in another sewershed or watershed. Figure 9 shows that 29.3 percent of the SRCs that were used in FY18 were generated by green infrastructure practices located in the MS4 and were used by projects to comply with Offv requirements in the CSS. 43.2 percent of the SRCs used in FY18 were both generated and used in the MS4. 18.4 percent were generated in the CSS and used in the MS4, and 9.1 percent were both generated and used in the CSS.

Figure 10 shows the watersheds in which the SRCs were generated and used. 8 percent of SRCs used in FY18 were generated and used in the Anacostia River watershed. 10.5 percent of SRCs used in FY18 were generated in the Anacostia River watershed and used in the Potomac River

watershed. 41 percent SRCs in FY18 were generated in the Potomac River watershed and used in the Anacostia River watershed. 37 percent of SRCs used in FY18 were generated and used in the Potomac River watershed. 0.5 percent of SRCs used in FY18 were generated in the Potomac River watershed and used in the Rock Creek watershed. 1.7 percent used in FY18 were generated in the Rock Creek watershed and used in the Anacostia River watershed. 0.1 percent of SRCs used in FY18 were generated in the Rock Creek watershed and used in the Potomac River watershed. 1 percent of SRCs used in FY18 were generated and used in the Rock Creek watershed. For more information on the SRCs used in FY18, see Table 14 on page 26 of this report.

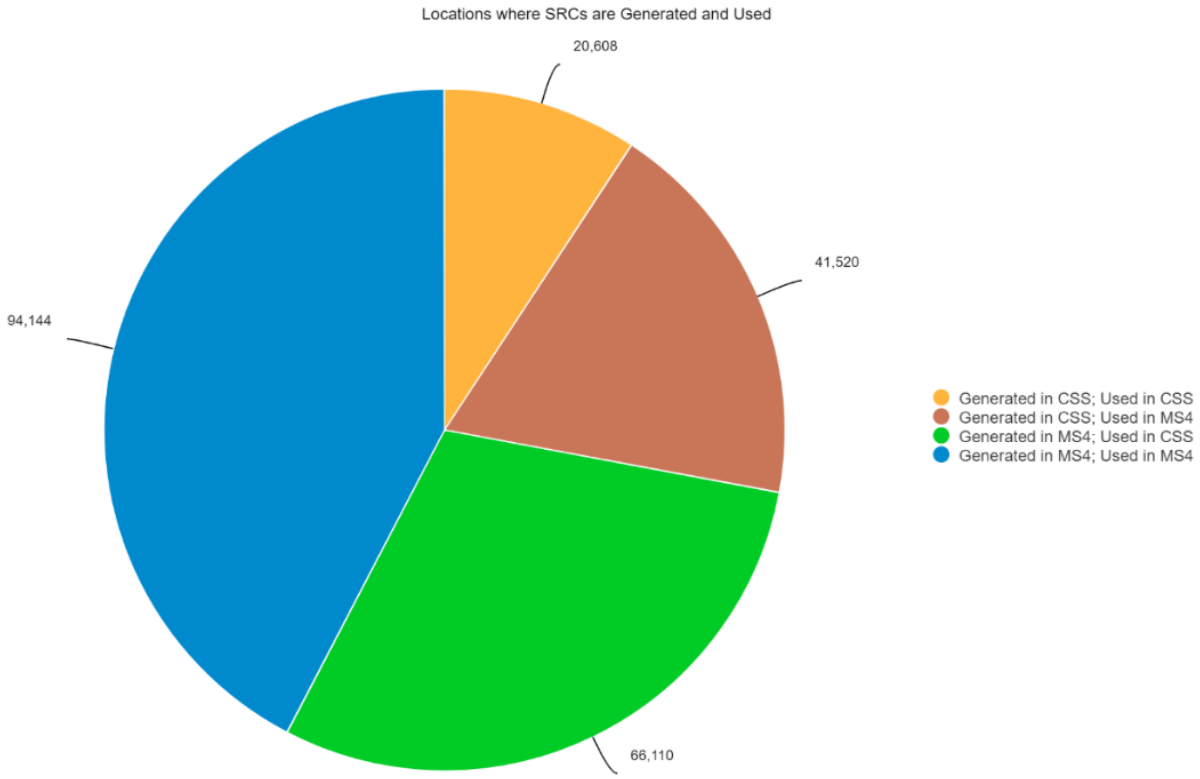

Figure 9. SRCs Used in FY18 – Spatial Distribution by Sewershed

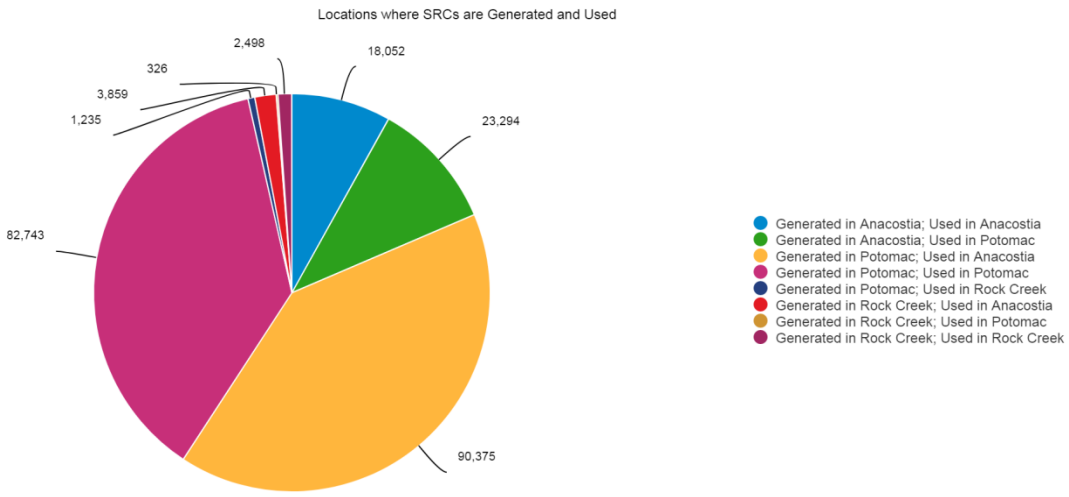

Figure 10. SRCs Used in FY18 – Spatial Distribution by Watershed

7. SRCs Used in FY18 – Temporal Distribution

DOEE certifies up to three years' worth of SRCs at a time and SRCs may be banked indefinitely. As discussed above, DOEE tracks the SRC retention year, which represents the year during which the green infrastructure practice achieves retention. This is distinguished from the certification date that is based on DOEE approval of the application to certify SRCs. A project's first SRC retention year is based on the date DOEE receives a complete application. The second and third retention years covered by the application begin on the anniversaries of the date DOEE received the complete application.

Offv compliance is also tracked on an annual basis, which DOEE refers to as the SRC usage year. A regulated site with an Offv must begin to comply with its Offv as of the date of its Final Construction Inspection. Figures 11 through 15 show on the extent to which the SRC retention year overlaps with the regulated sites' SRC usage year for FY18. The SRC retention year is shown in green and the SRC usage year is shown in blue.

Figure 15 shows that 69 percent of the SRCs used in FY18 were generated and used contemporaneously. This means the SRC usage year began within one year of the start of the SRC retention year. This has increased from 57 percent in FY17.

When the retention year for SRCs concludes before the year of Offv compliance for which they were used, it means that the stormwater retention of the green infrastructure represented by these SRCs occurred in full prior to beginning the period for which it was needed by a regulated site. Thirteen percent of the SRCs used in FY18 were generated 1 year prior to use, meaning that the SRC usage year began within one year after the conclusion of the SRC retention year. Ten percent of the SRCs used in FY18 were generated 2 years prior to use, meaning that the SRC usage year began within two years after the conclusion of the SRC retention year. The combined percentage of credits generated prior to use decreased from 43 percent in FY17 to 23 percent in FY18.

Eight percent of SRCs were used 1 year prior to generation, which indicates that the SRC usage year concluded within one year prior to the start of the SRC retention year. FY18 is the first fiscal year in which this scenario has occurred. The ability for this to occur is limited by the maximum 3-year period of SRC certification, and can only occur with a maintenance contract or plan for the period of SRC certification.

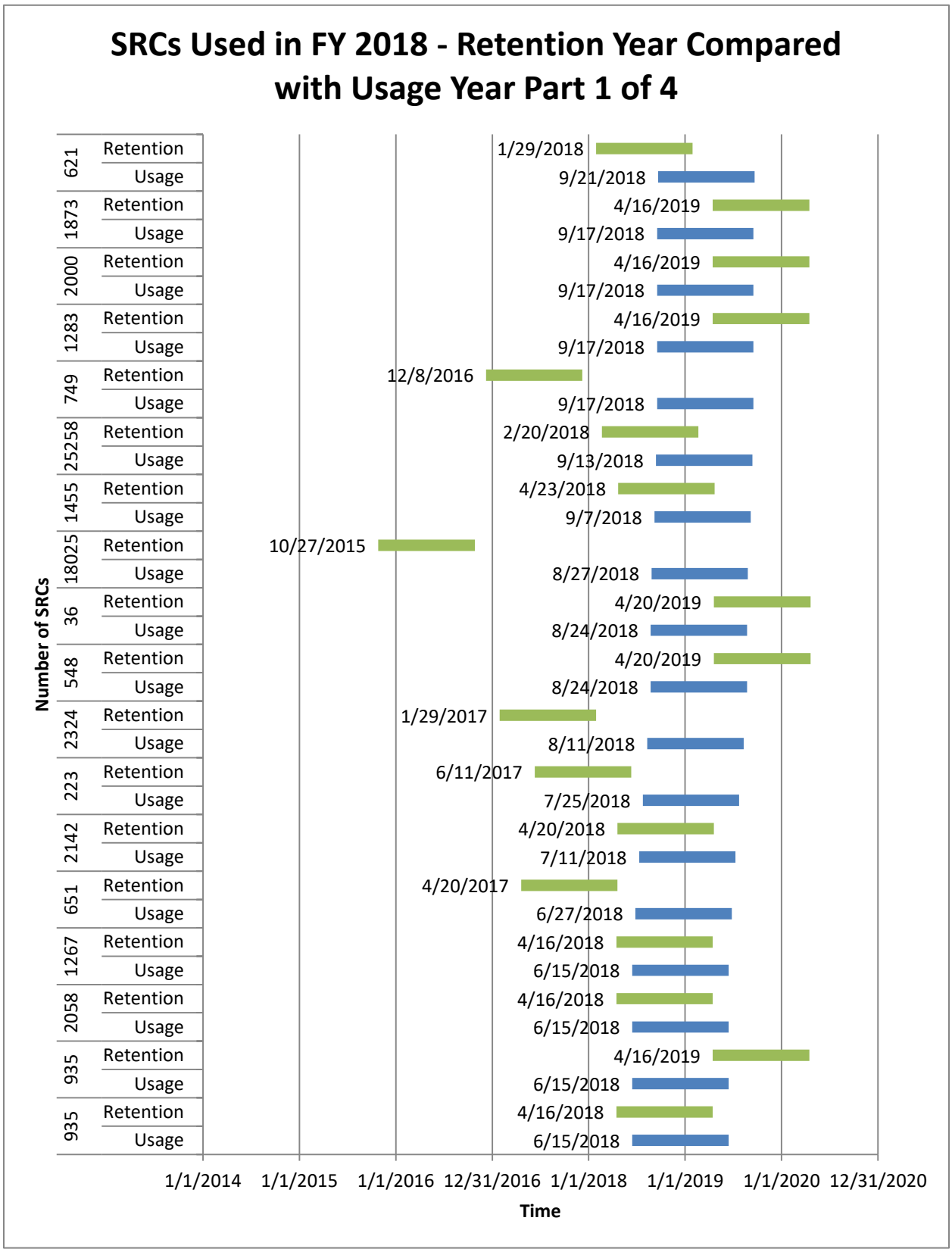

Figure 11. Temporal Distribution of SRCs Used in FY18

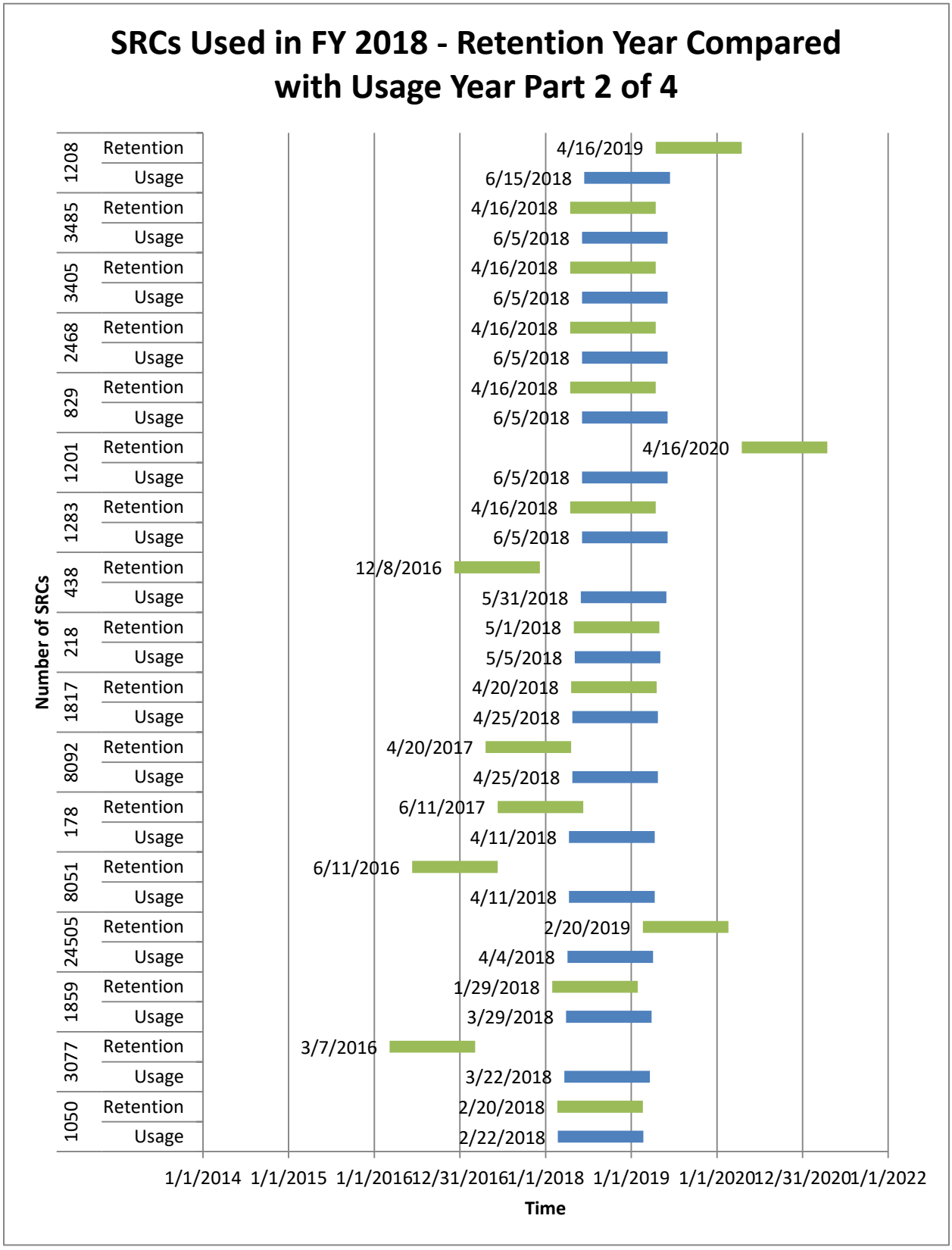

Figure 12. Temporal Distribution of SRCs Used in FY18

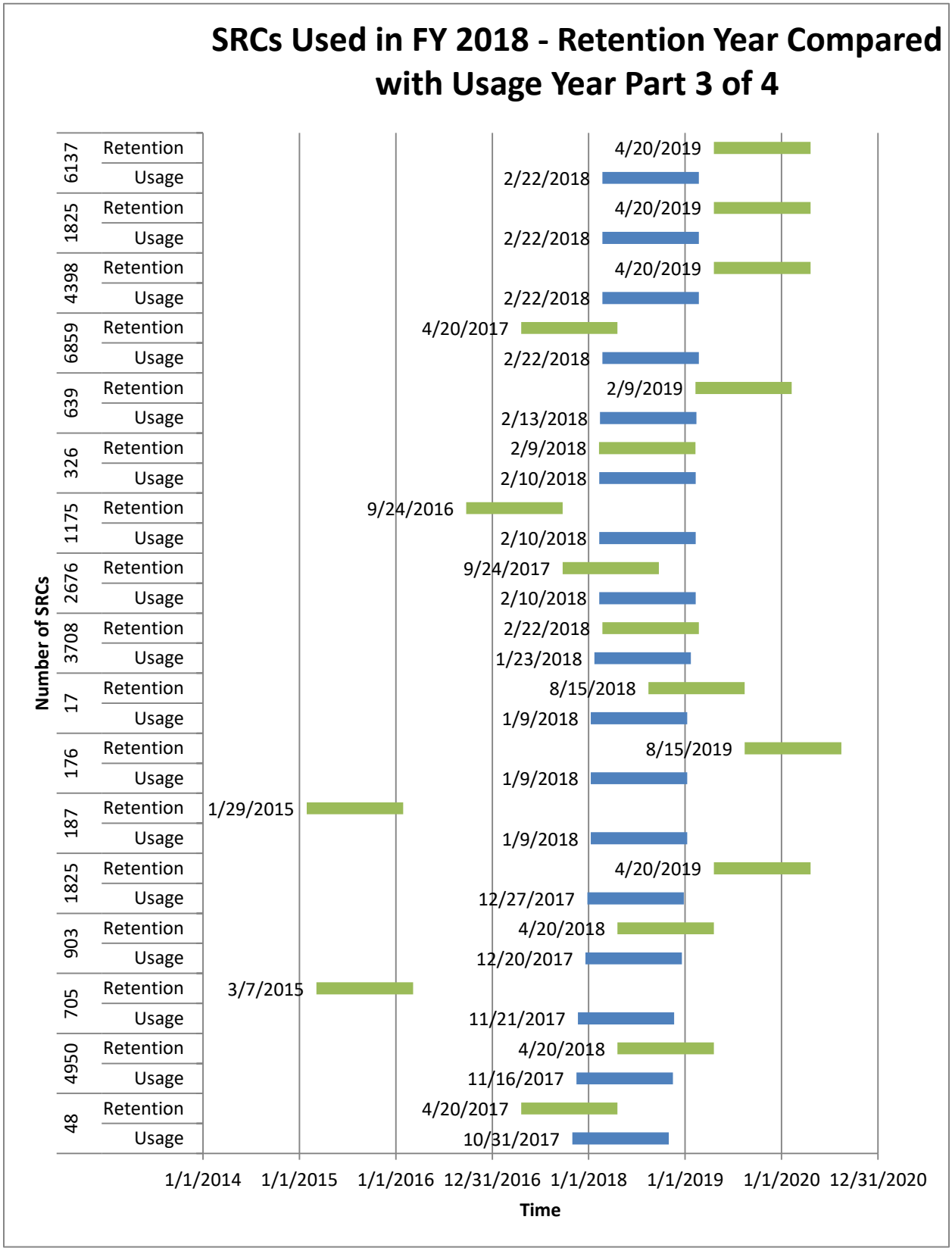

Figure 13. Temporal Distribution of SRCs Used in FY18

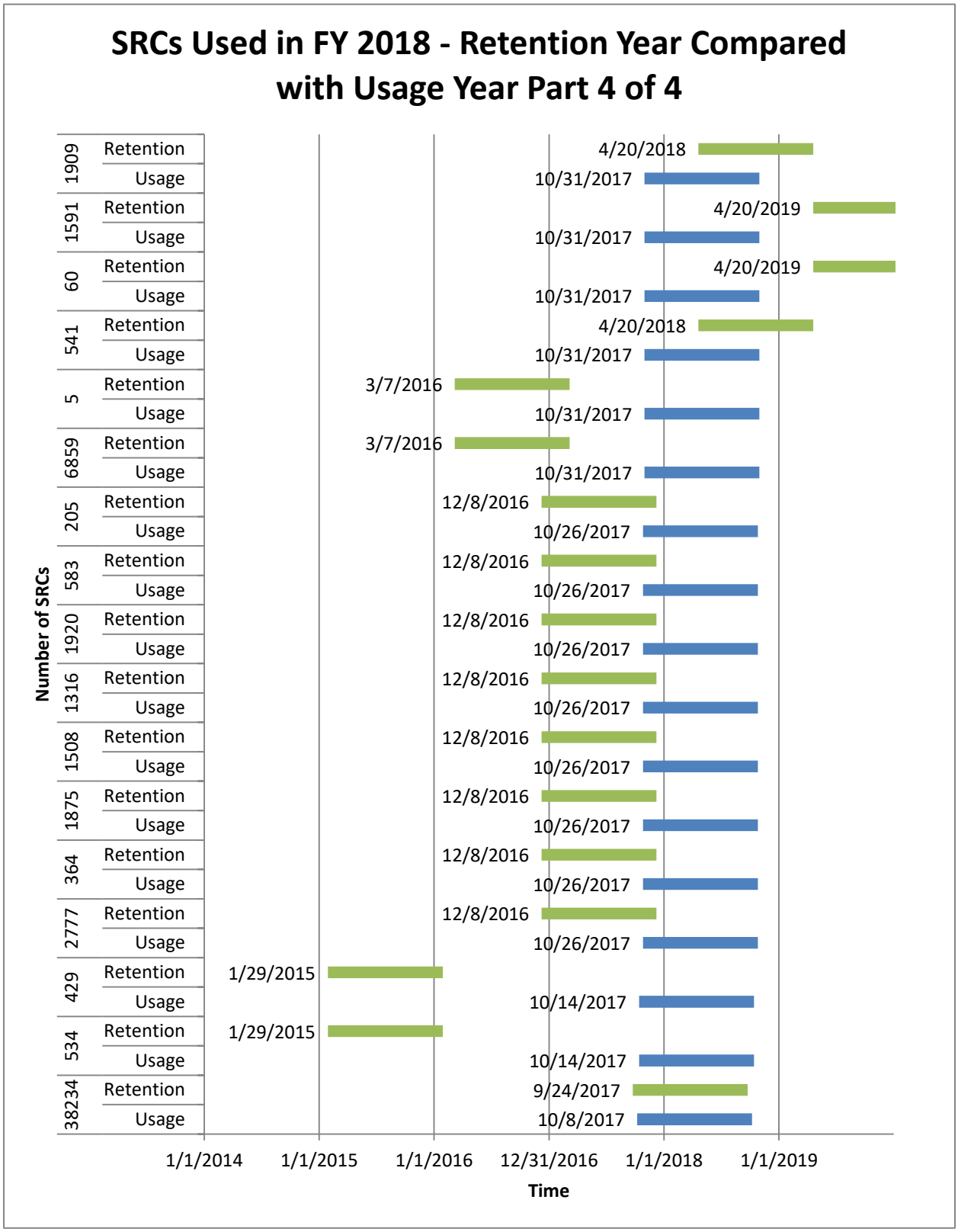

Figure 14. Temporal Distribution of SRCs Used in FY18

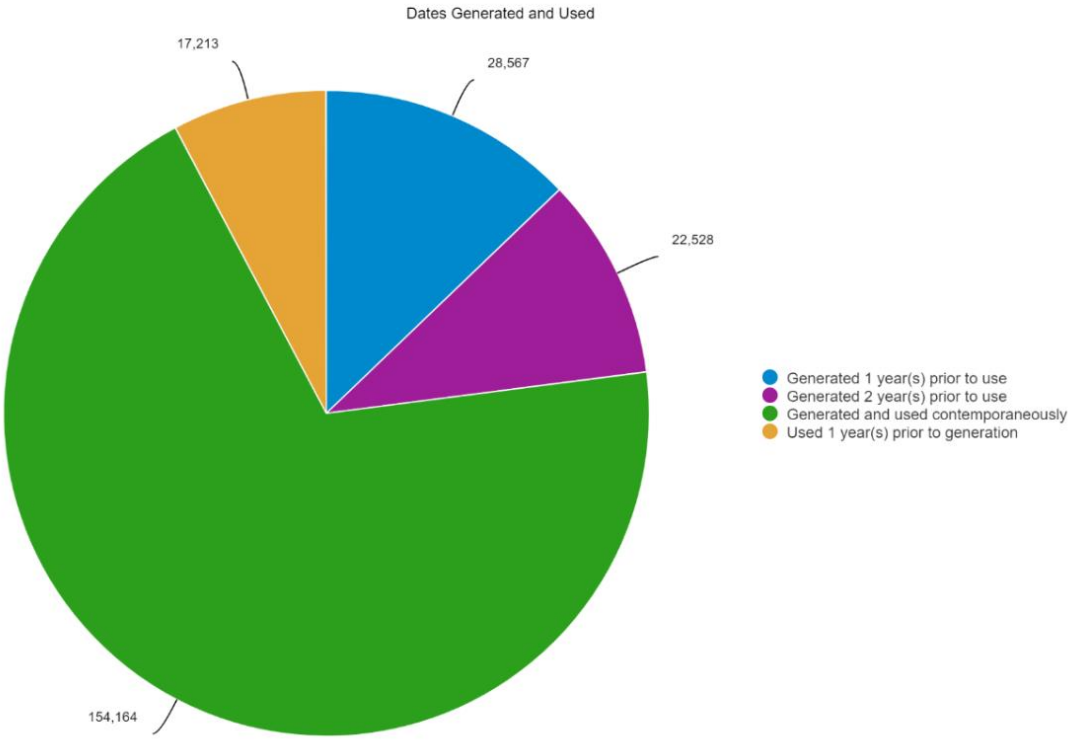

Figure 15. Summary of Temporal Distribution of SRCs Used in FY18

To provide further information, Table 14 also includes the sewershed and watershed where the SRCs were certified and the sewershed and watershed where the SRCs were used.

Table 14. SRCs Used in FY18

Number of SRCs	Retention Date	Certification Watershed	Certification Sewershed	Use Date	Use Watershed	Use Sewershed
38,234	09/24/17	Potomac	MS4	10/08/17	Anacostia	CSS
534	01/29/15	Rock Creek	CSS	10/14/17	Anacostia	CSS
10,548	12/08/16	Anacostia	CSS	10/26/17	Potomac	MS4
6,864	03/07/16	Potomac	MS4	10/31/17	Anacostia	CSS
48	04/20/17	Potomac	MS4	10/31/17	Anacostia	CSS
2,450	04/20/18	Potomac	MS4	10/31/17	Anacostia	CSS
1,651	04/20/19	Potomac	MS4	10/31/17	Anacostia	CSS
4,950	04/20/18	Potomac	MS4	11/16/17	Anacostia	CSS
705	03/07/15	Potomac	MS4	11/21/17	Anacostia	CSS
903	04/20/18	Potomac	MS4	12/20/17	Anacostia	CSS
1,825	04/20/19	Potomac	MS4	12/27/17	Potomac	MS4
187	01/29/15	Rock Creek	CSS	01/09/18	Anacostia	CSS
17	08/15/18	Rock Creek	CSS	01/09/18	Anacostia	CSS
176	08/15/19	Rock Creek	CSS	01/09/18	Anacostia	CSS
3,708	02/22/18	Anacostia	MS4	01/23/18	Anacostia	MS4
1,175	09/24/16	Potomac	MS4	02/10/18	Potomac	CSS

2,676	09/24/17	Potomac	MS4	02/10/18	Potomac	CSS
326	02/09/18	Rock Creek	CSS	02/10/18	Potomac	CSS
639	02/09/19	Rock Creek	CSS	02/13/18	Rock Creek	MS4
1,050	02/20/18	Potomac	MS4	02/22/18	Potomac	MS4
6,859	04/20/17	Potomac	MS4	02/22/18	Anacostia	MS4
12,360	04/20/19	Potomac	MS4	02/22/18	Anacostia	MS4
3,077	03/07/16	Potomac	MS4	03/22/18	Anacostia	CSS
1,859	01/29/18	Rock Creek	CSS	03/29/18	Rock Creek	CSS
24,505	02/20/19	Potomac	MS4	04/04/18	Potomac	MS4
8,051	06/11/16	Potomac	MS4	04/11/18	Potomac	MS4
178	06/11/17	Potomac	MS4	04/11/18	Potomac	MS4
8,092	04/20/17	Potomac	MS4	04/25/18	Anacostia	MS4
1,817	04/20/18	Potomac	MS4	04/25/18	Anacostia	MS4
438	10/08/16	Anacostia	CSS	05/01/18	Potomac	CSS
218	05/01/18	Anacostia	MS4	05/05/18	Anacostia	MS4
11,470	04/16/18	Anacostia	CSS	06/05/18	Anacostia	CSS
1,201	04/16/20	Anacostia	CSS	06/05/18	Anacostia	CSS
4,260	04/16/18	Anacostia	CSS	06/15/18	Potomac	MS4
2,143	04/16/19	Anacostia	CSS	06/15/18	Potomac	MS4
651	04/20/17	Potomac	MS4	06/27/18	Rock Creek	CSS
2,142	04/20/18	Potomac	MS4	07/11/18	Anacostia	CSS
223	06/11/17	Potomac	MS4	07/25/18	Anacostia	MS4
2,324	01/29/17	Rock Creek	CSS	08/11/18	Anacostia	CSS
584	04/20/19	Potomac	MS4	08/24/18	Rock Creek	CSS
18,025	10/27/15	Potomac	CSS	08/27/18	Potomac	MS4
1,455	04/23/18	Anacostia	CSS	09/07/18	Anacostia	CSS
25,258	02/20/18	Potomac	MS4	09/13/18	Potomac	MS4
749	12/08/16	Anacostia	CSS	09/17/18	Potomac	MS4
5,156	04/16/19	Anacostia	CSS	09/17/18	Potomac	MS4
621	01/29/18	Rock Creek	CSS	09/21/18	Anacostia	CSS

8. FY19 Goals

DOEE continues to enhance the SRC program to encourage more green infrastructure construction in the MS4. To do this, DOEE is focusing on increasing the demand by regulated developers for SRCs from the MS4 and increasing the number of properties in the MS4 that are partnering with SRC aggregators on SRC projects. Specific actions that DOEE is pursuing include the following:

- Continuing to find new ways to actively encourage regulated developers, particularly those working in the CSS, to purchase SRCs from the MS4 to meet their stormwater management performance requirements:
    - Improving developers' awareness of the SRC program earlier in the planning process, including through efforts to identify project decision-makers and provide

them with information about the SRC program while design choices are still ongoing.
    - Partnering with other District agencies involved in the permitting process when appropriate to encourage the use of SRCs.
    - Updating program guidance documents to communicate to developers the benefits of off-site compliance and to address perceived risks regarding the use of SRCs.
    - Updating program procedures related to off-site compliance.
- Expanding the resources that help SRC aggregators partner with property owners to construct green infrastructure:
    - Expanding use of the list of property owners who are interested in green infrastructure. The list is publicly accessible and can help SRC aggregators find project partners.
    - Improving communication of the benefits of green infrastructure to encourage property owners to partner on SRC projects.
    - Improving guidance on the process to generate SRCs, including the permitting process for green infrastructure projects.
    - Continuing to evaluate SRC program incentives to encourage more construction of green infrastructure in the MS4.
- Expanding the resources that are available to SRC generators:
    - Improving access to geographic information system (GIS) data and analysis tools.
    - Creating new guidance documents, including clarifying the permitting processes.

More Information

The SRC Program is managed by the Water Resource Protection and Mitigation Branch in DOEE's Regulatory Review Division. Please visit doee.dc.gov/src for more information. Additional questions may be directed to Matthew Espie at src.trading@dc.gov or (202) 715-7644.