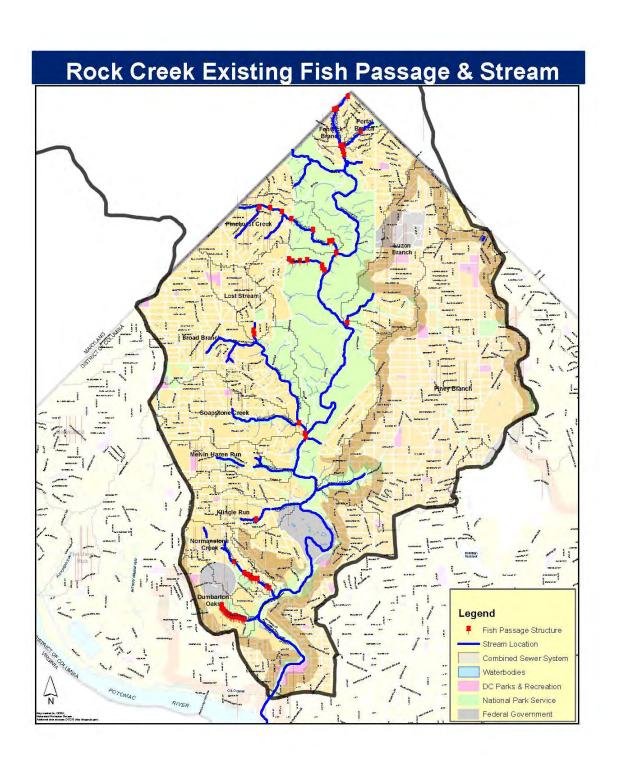
Appendix B: Stream Restoration Sites



SITE_LOCATION Park Between Willow Street NW and Maple Street NW

ADC_MAP_LOCATION 5408_H5
OWNERSHIP Public
APPROXIMATE_LENGTH (Feet) 252

DESCRIPTION_OF_EXISTING_CONDTIONS Stream valley park with no stream. Over-land drainage with piped

inflow and outflow at both ends of the park. 1st order ephemeral stream.

PROJECT_DESCRIPTION Daylight the stream and reintroduce ground water from bioretention and

rain gardens on private property, repair inflow and outflow pipes.

ESTIMATED_COST \$188,978.00

PROJECT_RANKING_EDUCATION Medium

PROJECT_RANKING_ENVIRONMENT High

PROJECT_RANKING_INSTALLATION High





SITE_LOCATION Lowell School - 1640 Kalmia Street NW

ADC_MAP_LOCATION 5408_D3

OWNERSHIP Private

APPROXIMATE_LENGTH (Feet) 1009

DESCRIPTION_OF_EXISTING_CONDTIONS Natural spring on school grounds. The school daylighted an

underground pipe to create a low flow stream. The school planted some trees along the spring, but there are still open areas and exposed

banks. Piped at 17th Street NW to Rock Creek.

PROJECT_DESCRIPTION Stream bank stabilization. Riparian forest buffer planting. Planting of

herbaceous emergents along stream banks. Daylighting of lower

portion of stream.

ESTIMATED_COST \$756,690.00

SITE_LOCATION Portal Branch - Between North Portal NW and South Portal NW

ADC_MAP_LOCATION 5408_D2
OWNERSHIP Public
APPROXIMATE_LENGTH (Feet) 2351

 ${\tt DESCRIPTION_OF_EXISTING_CONDTIONS} \quad {\tt Deeply incised stream from outfall where comes above ground to mouth}$

at Rock Creek. Several collapsed outfalls sending stormwater into

stream. Exposed sewer line adjacent to stream.

PROJECT_DESCRIPTION Bioretention & regenerative stormwater conveyances for outfalls.

Invasive removal and riparian buffer planting. Likely need for hardening banks, flow diversion to protect sewer infrastructure. Comprehensive

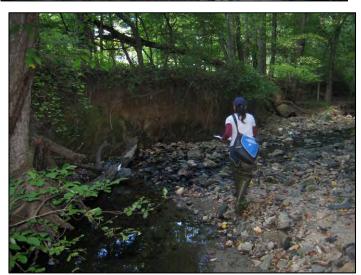
work for length of stream.

ESTIMATED_COST \$2,351,120.00









Rock Creek Watershed Implementation Plan January 15, 2010

Dumbarton Run - Whitehaven Street NW to Rock Creek main stem

ADC_MAP_LOCATION

5527_K4&5528_A4

OWNERSHIP

Public

APPROXIMATE_LENGTH (Feet) 2717

DESCRIPTION_OF_EXISTING_CONDTIONS

Small first order stream with some incised banks at up stream end and greater erosion downstream of Lover's Lane NW. Many blockages to fish passage and hardened banks.

PROJECT_DESCRIPTION

Invasive removal and riparian buffer planting. Remove fish blockages and hardened banks. Close/repair pathways to reduce erosion and control stormwater. Comprehensive work for length of stream. Flow diversion to protect sewer infrastructure near mouth.

ESTIMATED_COST

\$2,716,710.00









Rock Creek Watershed Implementation Plan January 15, 2010

PROJECT_NUMBER RC_Stream_05
SITE_LOCATION Linnaean Playe

Linnaean Playground Park - Linnaean Road NW and Harrison Street NW

ADC_MAP_LOCATION 5407_K7

OWNERSHIP Public

APPROXIMATE_LENGTH (Feet) 1178

DESCRIPTION_OF_EXISTING_CONDTIONS First order stream with moderate erosion and many invasive plants.

Stream goes into a pipe at Linnaean Road NW. Some trash and fallen $\,$

trees.

PROJECT_DESCRIPTION Stream bank stabilization for length of stream. Install regenerative

stormwater conveyances and/or bioretention to slow/infiltrate

stormwater entering the stream valley.

ESTIMATED_COST \$883,500.00







Rock Creek Watershed Implementation Plan January 15, 2010

SITE_LOCATION Tregaron Park - Klingle Road NW and Cortland Place NW

ADC_MAP_LOCATION 5528_A2
OWNERSHIP Private
APPROXIMATE_LENGTH (Feet) 957

 ${\tt DESCRIPTION_OF_EXISTING_CONDTIONS} \quad \textbf{Wooded, manicured garden open to public with a small stream flowing}$

through the park. Stream piped in some locations and bare soil exposed in areas. Stream flows under lily pond. Stream leaves park at

Klingle Road where it is directed into a culvert.

PROJECT_DESCRIPTION Some stream bank stabilization and planting of herbaceous emergents.

Potential wetland where stream flows into culvert. Remove culvert at Klingle Road, daylight stream and put a bridge over restored stream.

ESTIMATED_COST \$718,065.00





Upper Klingle Run - Klingle Road NW and Cortland Place NW to

Connecticut Avenue NW

ADC_MAP_LOCATION 5528_A2&A1

OWNERSHIP Public
APPROXIMATE_LENGTH (Feet) 1192

SITE_LOCATION

 ${\tt DESCRIPTION_OF_EXISTING_CONDTIONS} \quad {\tt Deeply incised stream from outfall where comes above ground to mouth}$

at Rock Creek. Roadway adjacent to stream collapsing and closed.

Exposed sewer line at Connecticut Ave.

PROJECT_DESCRIPTION Remove roadway and replace with bioretention and stream restoration.

Likely need for hardening banks, flow diversion to protect sewer

infrastructure. Comprehensive work for length of stream.

ESTIMATED_COST \$1,192,390.00









Rock Creek Watershed Implementation Plan January 15, 2010

Lower Klingle Run - Connecticut Avenue Bridge NW to Rock Creek

ADC_MAP_LOCATION 5528_A1&B1

OWNERSHIP Public
APPROXIMATE_LENGTH (Feet) 1725

 ${\tt DESCRIPTION_OF_EXISTING_CONDTIONS} \quad {\tt Deeply incised stream from outfall where comes above ground to mouth}$

at Rock Creek. Roadway adjacent to stream collapsing and closed. Channelized stream near mouth. Several roadways overly wide or

unneeded at mouth of stream.

PROJECT_DESCRIPTION Remove roadway and replace with bioretention and stream restoration. Remove roadways at lower end of stream and make large bioretention

cell. Comprehensive work for length of stream.

ESTIMATED_COST \$1,725,360.00









Rock Creek Watershed Implementation Plan January 15, 2010

PROJECT_NUMBER RC_Stream_09
SITE_LOCATION Upper Norman

Upper Normanstone Run - 34th Street NW and Garfield Street NW to 30th

Street NW and Normanstone Dr

ADC_MAP_LOCATION 5527_K2&K3

OWNERSHIP Public
APPROXIMATE_LENGTH (Feet) 2913

DESCRIPTION_OF_EXISTING_CONDTIONS First order stream behind single family homes. Aqua discoloration at

first outfall. Orange discoloration from second outfall. Stream in fair condition with points of erosion until Normanstone Drive. At this point -

hardened banks, downcutting.

PROJECT_DESCRIPTION Investigate discoloration. Correct point erosion with soft bank

stabilization & flow deflection. Comprehensive stream restoration downstream of point where Normanstone Run flows next to

Normanstone Drive.

ESTIMATED_COST \$2,913,000.00
PROJECT_RANKING_EDUCATION Medium
PROJECT_RANKING_ENVIRONMENT High
PROJECT_RANKING_INSTALLATION High









Rock Creek Watershed Implementation Plan January 15, 2010

Lower Normanstone Run - 30th Street NW and Normanstone Dr to Rock

Creek

ADC_MAP_LOCATION 5528_A3

OWNERSHIP Public

APPROXIMATE_LENGTH (Feet) 1921

SITE_LOCATION

DESCRIPTION_OF_EXISTING_CONDTIONS First order stream adjacent to Normanstone Dr. Bridge culverts,

hardened banks, downcutting have heavily impacted stream. Stream piped under Rock Creek Dr. Emerges as free flowing stream w/heavy

erosion to Rock Creek. Sewage smell. No flow at mouth.

PROJECT_DESCRIPTION Comprehensive stream restoration downstream of point where

Normanstone Run flows next to Normanstone Dr. Invasive removal and buffer planting. Need for hardening banks, flow diversion to protect

sewer infrastructure. Correct sewer infrastructure.

ESTIMATED_COST \$1,920,940.00
PROJECT_RANKING_EDUCATION Medium
PROJECT_RANKING_ENVIRONMENT High
PROJECT_RANKING_INSTALLATION High









Rock Creek Watershed Implementation Plan January 15, 2010

PROJECT_NUMBER RC_Stream_11 SITE_LOCATION St. Albans School - 3000 Wisconsin Ave NW

ADC_MAP_LOCATION 5527_J2&K2 **OWNERSHIP** Private 580 APPROXIMATE_LENGTH (Feet)

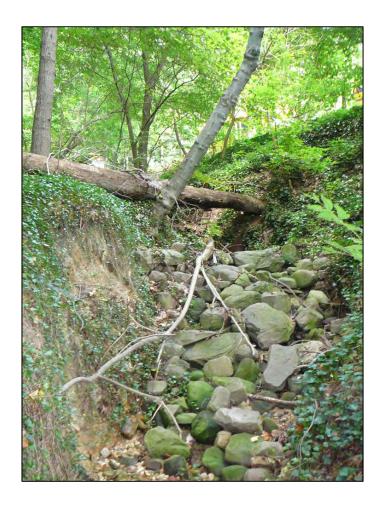
DESCRIPTION_OF_EXISTING_CONDTIONS Large wooded area with existing stream valley. Likely that stream has

been piped.

PROJECT_DESCRIPTION Daylight first order stream in stream valley. Augment flow of stream

with additional base flow from water infiltrated by coastal plain outfalls and bioretention for runoff from parking lot and campus roadways.

\$434,812.00 ESTIMATED_COST





SITE_LOCATION Upper Melvin Hazen Run - Reno Road NW to Connecticut Avenue NW

ADC_MAP_LOCATION 5407_K10
OWNERSHIP Public
APPROXIMATE_LENGTH (Feet) 1686

DESCRIPTION_OF_EXISTING_CONDTIONS Wooded stream valley west of Connecticut Avenue NW. Stream is

severely down cut with active erosion. Steep, unstable stream banks. Stream is piped to flow under Connecticut Avenue. Pipe is clogged and

has created a wetland area.

PROJECT_DESCRIPTION Bioretention & regenerative stormwater conveyances for outfalls.

Invasive removal and riparian buffer planting. Likely need for hardening banks. Comprehensive work for length of stream. Engineer lower

area as a palustrine wetland and plant it.

ESTIMATED_COST \$1,685,760.00
PROJECT_RANKING_EDUCATION Medium
PROJECT_RANKING_ENVIRONMENT High
PROJECT_RANKING_INSTALLATION High









Rock Creek Watershed Implementation Plan January 15, 2010

PROJECT_NUMBER RC_Stream_13
SITE_LOCATION Lower Melvin Hazen Run - Connecticut Avenue NW to Rock Creek

ADC_MAP_LOCATION 5408_A10&B10

OWNERSHIP Public
APPROXIMATE_LENGTH (Feet) 3165

 ${\tt DESCRIPTION_OF_EXISTING_CONDTIONS} \quad \textbf{Stream emerges from a pipe east of Connecticut Avenue. Stream banks}$

stable until close to Rock Creek where downcutting is occurring. Paths

along creek unstable and eroding into creek.

PROJECT_DESCRIPTION Flow deflection and bank stabilization for lower reaches of Melvin Hazen

Run. Reroute pathways to discourage dogs and people from walking in $% \left\{ 1,2,\ldots ,n\right\}$

stream area.

ESTIMATED_COST \$3,165,380.00
PROJECT_RANKING_EDUCATION Medium
PROJECT_RANKING_ENVIRONMENT Medium
PROJECT_RANKING_INSTALLATION High









Rock Creek Watershed Implementation Plan January 15, 2010

PROJECT_NUMBER SITE_LOCATION

RC_Stream_14

Upper Broad Branch - Outfall at Broad Branch Road NW to Grant Road

NW

ADC_MAP_LOCATION

5408_A7&A8

OWNERSHIP

Public

2102

APPROXIMATE_LENGTH (Feet)

DESCRIPTION_OF_EXISTING_CONDTIONS

Stream emerges from pipe at Ivory Coast ambassador's residence. Stream down to bedrock for length. Soft banks with erosion on upper end. Hardened banks on roadside for lower reaches. Collapsing in

some locations.

PROJECT_DESCRIPTION

Bioretention & regenerative stormwater conveyances for outfalls. Invasive removal and riparian buffer planting. Likely need for hardening banks, flow diversion to protect sewer infrastructure. Comprehensive

work for length of stream.

ESTIMATED_COST PROJECT_RANKING_EDUCATION PROJECT_RANKING_ENVIRONMENT PROJECT_RANKING_INSTALLATION

\$1,576,418.00 Medium High Medium









Rock Creek Watershed Implementation Plan January 15, 2010

PROJECT_NUMBER RC_Stream_15
SITE_LOCATION Lower Broad Branch - Grant Road NW to Rock Creek

ADC_MAP_LOCATION 5408_B8&B9

OWNERSHIP Public
APPROXIMATE_LENGTH (Feet) 4368

DESCRIPTION_OF_EXISTING_CONDTIONS Stream down to bedrock for length. Soft banks with erosion on wooded side opposite roadway. Hardened banks on roadside for lower reaches.

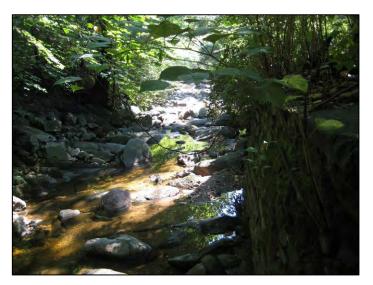
Collapsing in some locations.

PROJECT_DESCRIPTION Bioretention & regenerative stormwater conveyances for outfalls.

Invasive removal and riparian buffer planting. Likely need for hardening banks, flow diversion to protect sewer infrastructure. Comprehensive

work for length of stream.

ESTIMATED_COST \$3,276,098.00
PROJECT_RANKING_EDUCATION Medium
PROJECT_RANKING_ENVIRONMENT High
PROJECT_RANKING_INSTALLATION Medium









Rock Creek Watershed Implementation Plan January 15, 2010

SITE_LOCATION Tributary to Broad Branch - Military Road NW and 31st Street NW to

Broad Branch Road NW

ADC_MAP_LOCATION 5408_A7
OWNERSHIP Public
APPROXIMATE_LENGTH (Feet) 1208

DESCRIPTION_OF_EXISTING_CONDTIONS First order stream emerging from outfall of Military Road NW. Stream

downcutting - some exposed sewer lines creating fish passage

blockages.

PROJECT_DESCRIPTION Soft bank stabilization, grade control and flow diversion structures to

stabilize stream banks. Regenerative stormwater conveyance for

Ingleside retirement home.

ESTIMATED_COST \$1,208,370.00
PROJECT_RANKING_EDUCATION Medium
PROJECT_RANKING_ENVIRONMENT High
PROJECT_RANKING_INSTALLATION High





Soapstone Creek - Connecticut Avenue NW and Albemarle Street NW to

Broad Branch

ADC_MAP_LOCATION 5407_K9&5408_A9&B9

OWNERSHIP Public
APPROXIMATE_LENGTH (Feet) 4532

SITE_LOCATION

 ${\tt DESCRIPTION_OF_EXISTING_CONDTIONS} \quad \textbf{Wooded stream valley east of Connecticut Avenue NW near Van Ness.}$

Most densely developed area with a lot of stormwater. Stream is severely down cut with active erosion. Steep, unstable stream banks.

Sewage smell at outfall.

PROJECT_DESCRIPTION Bioretention & regenerative stormwater conveyances for outfalls. Likely

need for some hardening of banks & flow deflection devices to protect sewer infrastructure. Comprehensive work for length of stream.

Correct sewage leaks.

ESTIMATED_COST \$4,532,300.00









Rock Creek Watershed Implementation Plan January 15, 2010

PROJECT_NUMBER RC_Stream_18
SITE_LOCATION Piney Branch -

Piney Branch - North of Piney Branch Parkway NW from 16th Street NW

to Rock Creek

ADC_MAP_LOCATION 5528_C1&D1

OWNERSHIP Public
APPROXIMATE_LENGTH (Feet) 2944

 ${\tt DESCRIPTION_OF_EXISTING_CONDTIONS} \quad \textbf{Stream emerges from pipe near intersection with 17th Street \& Parkway}.$

Stream down to bedrock for length. Predominantly hardened banks on roadside for length of stream. Collapsing in some locations. Outfall

poured concrete pad for 100 yards.

PROJECT_DESCRIPTION Bioretention & regenerative stormwater conveyances for outfalls into

stream. Invasive removal and riparian buffer planting. Willow stakes in hardened banks, harden banks & flow diversion for soft banks.

Comprehensive work for length of stream.

ESTIMATED_COST \$2,943,810.00









Rock Creek Watershed Implementation Plan January 15, 2010

SITE_LOCATION Rock Creek main stem - Boundary Bridge to Wise Road NW

ADC_MAP_LOCATION 5408_B3C3&D3

OWNERSHIP Public
APPROXIMATE_LENGTH (Feet) 4750

 ${\tt DESCRIPTION_OF_EXISTING_CONDTIONS} \quad \textbf{Forested stream valley with 2-lane road adjacent to stream for length of the property of the prope$

stream segment. Stream has mix of hardened bank structures and soft

banks. Soft banks often show downcutting. Storm and sewer

infrastructure present in stream valley.

PROJECT_DESCRIPTION Comprehensive stream restoration with a mix of hard and soft structures

and flow diversion devices to protect infrastructure. Planting of stream

banks with deep rooted vegetation.

ESTIMATED_COST \$3,562,628.00









Rock Creek Watershed Implementation Plan January 15, 2010

Unnamed tributary to Rock Creek - Oregon Avenue NW and Daniel Lane

NW to Rock Creek

ADC_MAP_LOCATION 5408_B3&C3

OWNERSHIP Public
APPROXIMATE_LENGTH (Feet) 1837

SITE_LOCATION

 ${\tt DESCRIPTION_OF_EXISTING_CONDTIONS} \quad \textbf{Stormwater from Oregon Avenue and neighboring roadways drains into}$

stream valley near Daniel Lane NW. Unnamed stream is highly incised

and actively undercutting.

PROJECT_DESCRIPTION Install regenerative stormwater conveyance at outfall from Oregon

Avenue east of Daniel Lane NW. Comprehensive stream restoration for

rest of stream valley.

ESTIMATED_COST \$1,377,518.00
PROJECT_RANKING_EDUCATION Medium
PROJECT_RANKING_ENVIRONMENT High
PROJECT_RANKING_INSTALLATION High









Rock Creek Watershed Implementation Plan January 15, 2010

PROJECT_NUMBER SITE_LOCATION

RC Stream 21

Bingham Run - Bingham Road NW from Oregon Avenue NW to Rock

Creek

ADC_MAP_LOCATION

5408B5&C5

OWNERSHIP

Public

APPROXIMATE_LENGTH (Feet)

2550

APPROXIMATE_LIENGTH (Feet)

DESCRIPTION_OF_EXISTING_CONDTIONS

Stormwater from Nebraska Avenue, Oregon Avenue and neighboring area drains into Bingham Run at outfall at Bingham Drive NW. Bingham Run is highly incised and actively undercutting with several blockages

to fish passage.

PROJECT_DESCRIPTION

Comprehensive stream restoration for stream involving a mixture of soft and hard structures to stabilize stream banks and protect infrastructure.

Remove barriers to fish passage.

ESTIMATED_COST

\$1,912,178.00

PROJECT_RANKING_EDUCATION
PROJECT_RANKING_ENVIRONMENT
PROJECT_RANKING_INSTALLATION

High High

High







PROJECT_NUMBER RC_Stream_22
SITE_LOCATION Upper Pinehur

Upper Pinehurst Branch - Western Avenue NW and Beech Street NW to

Oregon Avenue NW

ADC_MAP_LOCATION 5408A4&B4

OWNERSHIP Public
APPROXIMATE_LENGTH (Feet) 7423

DESCRIPTION_OF_EXISTING_CONDTIONS Deeply incised stream from outfall at Western Avenue NW where

stream comes above ground to Oregon Avenue. Narrow stream valley with adjacent roadways limits restoration potential. Some exposed

sewer infrastructure and blockages to fish passage.

PROJECT_DESCRIPTION Bioretention & regenerative stormwater conveyances for outfalls.

High

Invasive removal and riparian buffer planting. Likely need for hardening

banks, flow diversion to protect sewer & road infrastructure.

Comprehensive work for length of stream.

ESTIMATED_COST \$5,567,085.00

PROJECT_RANKING_EDUCATION Medium

PROJECT_RANKING_ENVIRONMENT High

PROJECT_RANKING_INSTALLATION









Rock Creek Watershed Implementation Plan January 15, 2010

PROJECT_NUMBER RC_Stream_23
SITE_LOCATION Lower Pinehurs

Lower Pinehurst Branch - Oregon Avenue NW to Rock Creek

ADC_MAP_LOCATION 5408B4&C5

OWNERSHIP Public
APPROXIMATE_LENGTH (Feet) 4075

 ${\tt DESCRIPTION_OF_EXISTING_CONDTIONS} \quad {\tt Deeply incised stream from Oregon\ Avenue\ Bridge\ to\ Rock\ Creek}.$

Undeveloped stream valley gives restoration potential however a lot of sewer infrastructure present. Some exposed sewer lines and blockages

to fish passage.

PROJECT_DESCRIPTION Bioretention & regenerative stormwater conveyances for outfalls.

Invasive removal and riparian buffer planting. Likely need for some hardening of banks, flow diversion to protect sewer infrastructure.

Comprehensive work for length of stream.

ESTIMATED_COST \$4,074,870.00









SITE_LOCATION Luzon Branch - 16th Street NW and Joyce Road NW to Rock Creek

ADC_MAP_LOCATION 5408_D6&D7

OWNERSHIP Public
APPROXIMATE LENGTH (Feet) 2646

DESCRIPTION_OF_EXISTING_CONDTIONS Stream at bedrock from where comes above ground at Joyce Road NW

and 16th Street NW to mouth at Rock Creek. Mix of soft banks with erosion and hardened banks protecting roadway infrastructure. Need

for buffer. Several outfalls into stream.

PROJECT_DESCRIPTION Bioretention & regenerative stormwater conveyances for outfalls.

Invasive removal and riparian buffer planting. Reengineer hardened banks, flow diversion to protect roadway & sewer infrastructure.

Comprehensive work for length of stream.

ESTIMATED_COST \$2,645,500.00









Rock Creek Watershed Implementation Plan January 15, 2010

SITE_LOCATION Rock Creek main stem - Wise Road NW to Old Military Road NW

ADC_MAP_LOCATION 5408_C4toC7

OWNERSHIP Public
APPROXIMATE_LENGTH (Feet) 11362

 ${\tt DESCRIPTION_OF_EXISTING_CONDTIONS} \quad \textbf{Forested stream valley with 2-lane road adjacent to stream for length of the property of the prope$

stream segment. Stream has mix of hardened bank structures and soft

banks. Soft banks often show downcutting. Storm and sewer

infrastructure present in stream valley.

PROJECT_DESCRIPTION Comprehensive stream restoration with a mix of hard and soft structures

and flow diversion devices to protect infrastructure. Planting of stream

banks with deep rooted vegetation.

ESTIMATED_COST \$8,521,402.00







SITE_LOCATION Rock Creek main stem - Old Military Road NW to Broad Branch Road

ADC_MAP_LOCATION 5408_D7toC9

OWNERSHIP Public
APPROXIMATE_LENGTH (Feet) 8947

DESCRIPTION_OF_EXISTING_CONDTIONS Forested stream valley with 2-lane road adjacent to stream for length of

stream segment. Stream has mix of hardened bank structures and soft

banks. Soft banks often show downcutting. Storm and sewer

infrastructure present in stream valley.

PROJECT_DESCRIPTION Comprehensive stream restoration with a mix of hard and soft structures

and flow diversion devices to protect infrastructure. Planting of stream

banks with deep rooted vegetation.

ESTIMATED_COST \$6,710,168.00

Upper Fenwick Branch - MD border at East-West Hwy to Portal Branch

ADC_MAP_LOCATION 5408_D1&C2

OWNERSHIP Public
APPROXIMATE_LENGTH (Feet) 3880

SITE_LOCATION

DESCRIPTION_OF_EXISTING_CONDTIONS Deeply incised stream from outfall at East-West Hwy where stream

comes above ground to Portal Branch. Moderate protected stream valley but large amounts of stormwater from MD limit restoration. Exposed sewer infrastructure and blockages to fish passage.

PROJECT_DESCRIPTION Bioretention & regenerative stormwater conveyances for outfalls.

Invasive removal and riparian buffer planting. Likely need for hardening

banks, flow diversion to protect sewer & road infrastructure.

Comprehensive work for length of stream.

ESTIMATED_COST \$3,880,430.00
PROJECT_RANKING_EDUCATION Medium
PROJECT_RANKING_ENVIRONMENT High
PROJECT_RANKING_INSTALLATION High









Rock Creek Watershed Implementation Plan January 15, 2010

PROJECT_NUMBER RC_Stream_28
SITE_LOCATION Fenwick Branc

Fenwick Branch at Kalmia Road NW

ADC_MAP_LOCATION 5408_D3
OWNERSHIP Public
APPROXIMATE_LENGTH (Feet) 507

 ${\tt DESCRIPTION_OF_EXISTING_CONDTIONS} \quad \textbf{Sediment from upstream Fenwick Branch settling north of Kalmia Street}$

Bridge. Culvert under bridge undersized and clogged. Sediment in

stream on top of clay base layer.

PROJECT_DESCRIPTION Redesign culvert under bridge to properly size it for flow. Potentially

create wetland area upstream of bridge if won't create flooding problem. If so, remove sediment and use in upstream regenerative stormwater

conveyances.

ESTIMATED_COST \$379,935.00









Rock Creek Watershed Implementation Plan January 15, 2010

SITE_LOCATION Lower Fenwick Branch - Portal Branch to Rock Creek main stem

ADC_MAP_LOCATION 5408_D3
OWNERSHIP Public
APPROXIMATE_LENGTH (Feet) 1137

 ${\tt DESCRIPTION_OF_EXISTING_CONDTIONS} \quad {\tt Deeply incised stream with no current stabilization measures in place}.$

Stream valley is wide but large amounts of stormwater from MD may

limit restoration. Kalmia Bridge culvert blocks fish passage.

PROJECT_DESCRIPTION Bioretention & regenerative stormwater conveyances for outfalls.

Invasive removal and riparian buffer planting. Likely need for hardening

banks, flow diversion to protect sewer & road infrastructure.

Comprehensive work for length of stream.

ESTIMATED_COST \$852,915.00







SITE_LOCATION Blagden Run - Mathewson Drive NW and Blagden Avenue NW to Rock

Creek

ADC_MAP_LOCATION 5408_C10

OWNERSHIP Public

APPROXIMATE_LENGTH (Feet) 974

DESCRIPTION_OF_EXISTING_CONDTIONS Stream emerges from outfall south of Mathewson Drive and follows

Blagden Avenue to Rock Creek. Bank closest to Blagden Ave is hardened, other bank soft. Stream incised in locations. Barrier to fish

passage at mouth of Blagden Run.

PROJECT_DESCRIPTION Mixture of hard and soft stabilization practices. Remove barrier to fish

passage at mouth of stream.

ESTIMATED_COST \$730,455.00









SITE_LOCATION Rock Creek main stem - Broad Branch Road to Klingle Run

ADC_MAP_LOCATION 5408_C9&B10

OWNERSHIP Public
APPROXIMATE_LENGTH (Feet) 5624

 ${\tt DESCRIPTION_OF_EXISTING_CONDTIONS} \quad \textbf{Forested stream valley with 2-lane road adjacent to stream for length of the property of the prope$

stream segment. Stream has mix of hardened bank structures and soft banks. Soft banks sometimes show downcutting. Storm and sewer

infrastructure present in stream valley.

PROJECT_DESCRIPTION Predominantly installation of soft structures and planting of stream

banks with deep rooted vegetation. Some bank hardening and flow

diversion devices to protect infrastructure.

ESTIMATED_COST \$4,217,678.00









Rock Creek Watershed Implementation Plan January 15, 2010

PROJECT_NUMBER RC_Stream_32
SITE_LOCATION Rock Creek ma

Rock Creek main stem - Klingle Run to Dumbarton

ADC_MAP_LOCATION 5528_CltoA4

OWNERSHIP Public
APPROXIMATE_LENGTH (Feet) 11235

 ${\tt DESCRIPTION_OF_EXISTING_CONDTIONS} \quad \textbf{Forested stream valley with 2-lane road that becomes 4 lane parkway}$

adjacent to stream for length of stream segment. Stream predominantly hardened bank structures on road side. Storm and sewer infrastructure

present in stream valley.

PROJECT_DESCRIPTION Predominantly installation of soft structures and planting of stream

banks with deep rooted vegetation opposite road side. Restoration of bank hardening and flow diversion devices to protect infrastructure.

Plant willow stakes in hardened structures.

ESTIMATED_COST \$8,425,920.00

PROJECT_RANKING_EDUCATION High
PROJECT_RANKING_INSTALLATION High









Rock Creek Watershed Implementation Plan January 15, 2010

SITE_LOCATION NPS land adjacent to Broad Branch Road - Broad Branch Road NW from

36th Street NW to 27th Street NW

ADC_MAP_LOCATION 5408_A7
OWNERSHIP Public
APPROXIMATE_LENGTH (Feet) 3609

DESCRIPTION_OF_EXISTING_CONDTIONS Stream valley park with a small first order stream that goes into a pipe at

36th Street. Stream valley intact with no stream. Stream valley mix of

DDOT/NPS lands that are primarily forested.

PROJECT_DESCRIPTION Daylight the stream and reintroduce ground water from bioretention

from roadways to increase baseflow.

ESTIMATED_COST \$2,706,652.00

PROJECT_NUMBER
SITE_LOCATION

RC_Stream_34

Rock Creek main stem - Dumbarton Run to Pennsylvania Avenue NW

ADC_MAP_LOCATION

5528_A4&B5

OWNERSHIP

Public

Fublic

APPROXIMATE_LENGTH (Feet)

6337

DESCRIPTION_OF_EXISTING_CONDTIONS

Forested stream valley with 4 lane parkway adjacent to stream for length of stream segment. Stream predominantly hardened bank structures on road side. Storm and sewer infrastructure present in stream valley.

PROJECT_DESCRIPTION

Predominantly installation of soft structures and planting of stream banks with deep rooted vegetation opposite road side. Restoration of bank hardening and flow diversion devices to protect infrastructure. Plant willow stakes in hardened structures.

ESTIMATED_COST

\$4,752,548.00

PROJECT_RANKING_EDUCATION
PROJECT_RANKING_ENVIRONMENT
PROJECT_RANKING_INSTALLATION

High High

High









Rock Creek Watershed Implementation Plan January 15, 2010

SITE_LOCATION Rock Creek main stem - Pennsylvania Avenue NW to the Potomac River

ADC_MAP_LOCATION 5528_A6
OWNERSHIP Public
APPROXIMATE_LENGTH (Feet) 2198

DESCRIPTION_OF_EXISTING_CONDTIONS Stream valley predominantly grass with 4 lane parkway adjacent to

stream for length of stream segment. Stream predominantly hardened bank structures on both sides. Storm and sewer infrastructure present

in stream valley.

PROJECT_DESCRIPTION Predominantly restoration of hardened banks and flow diversion devices

to protect infrastructure. Plant willow stakes in hardened structures and $% \left(1\right) =\left(1\right) \left(1\right)$

reforest grass areas.

ESTIMATED_COST \$1,648,560.00





