APPENDIX D: PHOTOGRAPHS

APPENDIX D.1: PRELIMINARY FIELD WALK PHOTOS BY DRAINAGE AREA

Lower Gunpowder Falls Assessment
Appendix D.1: Preliminary Field Walk Photos by Drainage Area

Drainage Area 1: Photo 1

Drainage Area 1: Photo 2

Drainage Area 1: Photo 3

Drainage Area 1: Photo 4

Lower Gunpowder Falls Assessment
Appendix D.1: Preliminary Field Walk Photos by Drainage Area

Drainage Area 1: Photo 5

Drainage Area 1: Photo 6

Drainage Area 1: Photo 7

Drainage Area 1: Photo 8

Lower Gunpowder Falls Assessment
Appendix D.1: Preliminary Field Walk Photos by Drainage Area

Drainage Area 1: Photo 9

Drainage Area 1: Photo 10

Drainage Area 1: Photo 11

Drainage Area 1: Photo 12

Drainage Area 1: Photo 13

Drainage Area 1: Photo 14

Drainage Area 1: Photo 15

Drainage Area 2: Photo 1

Lower Gunpowder Falls Assessment
Appendix D.1: Preliminary Field Walk Photos by Drainage Area

Drainage Area 2: Photo 2

Drainage Area 2: Photo 3

Drainage Area 2: Photo 4

Drainage Area 2: Photo 5

Drainage Area 2: Photo 6

Drainage Area 2: Photo 7

Drainage Area 2: Photo 8

Drainage Area 2: Photo 9

Lower Gunpowder Falls Assessment
Appendix D.1: Preliminary Field Walk Photos by Drainage Area

Drainage Area 2: Photo 10

Drainage Area 2: Photo 11

Drainage Area 2: Photo 12

Drainage Area 2: Photo 13

Lower Gunpowder Falls Assessment
Appendix D.1: Preliminary Field Walk Photos by Drainage Area

Drainage Area 3: Photo 1

Drainage Area 3: Photo 2

Drainage Area 3: Photo 3

Drainage Area 3: Photo 4

Drainage Area 3: Photo 5

Drainage Area 3: Photo 6

Drainage Area 3: Photo 7

Drainage Area 3: Photo 8

Lower Gunpowder Falls Assessment
Appendix D.1: Preliminary Field Walk Photos by Drainage Area

Drainage Area 3: Photo 9

Drainage Area 4: Photo 1

Drainage Area 4: Photo 2

Drainage Area 4: Photo 3

Drainage Area 4: Photo 4

Drainage Area 4: Photo 5

Drainage Area 4: Photo 6

Drainage Area 4: Photo 7

Drainage Area 4: Photo 8

Drainage Area 4: Photo 9

Drainage Area 4: Photo 10

Drainage Area 4: Photo 11

Drainage Area 4: Photo 12

Drainage Area 4: Photo 13

Drainage Area 5: Photo 1

Drainage Area 5: Photo 2

Lower Gunpowder Falls Assessment
Appendix D.1: Preliminary Field Walk Photos by Drainage Area

Drainage Area 5: Photo 3

Drainage Area 5: Photo 4

Drainage Area 5: Photo 5

Drainage Area 5: Photo 6

Drainage Area 5: Photo 7

Drainage Area 5: Photo 8

Drainage Area 5: Photo 9

Drainage Area 5: Photo 10

Drainage Area 5: Photo 11

Drainage Area 5: Photo 12

Drainage Area 5: Photo 13

Drainage Area 5: Photo 14

Drainage Area 5: Photo 15

Drainage Area 5: Photo 16

Drainage Area 5: Photo 17

Drainage Area 6: Photo 1

Lower Gunpowder Falls Assessment
Appendix D.1: Preliminary Field Walk Photos by Drainage Area

Drainage Area 6: Photo 2

Drainage Area 6: Photo 3

Drainage Area 6: Photo 4

Drainage Area 6: Photo 5

Drainage Area 6: Photo 6

Drainage Area 6: Photo 7

Drainage Area 6: Photo 8

Drainage Area 6: Photo 9

Drainage Area 6: Photo 10

Drainage Area 6: Photo 11

Drainage Area 6: Photo 12

Drainage Area 6: Photo 13

Drainage Area 6: Photo 14

Drainage Area 6: Photo 15

Drainage Area 7: Photo 1

Drainage Area 7: Photo 2

Drainage Area 7: Photo 3

Drainage Area 7: Photo 4

Drainage Area 7: Photo 5

Drainage Area 7: Photo 6

Drainage Area 7: Photo 7

Drainage Area 7: Photo 8

Drainage Area 7: Photo 9

Drainage Area 7: Photo 10

Lower Gunpowder Falls Assessment
Appendix D.1: Preliminary Field Walk Photos by Drainage Area

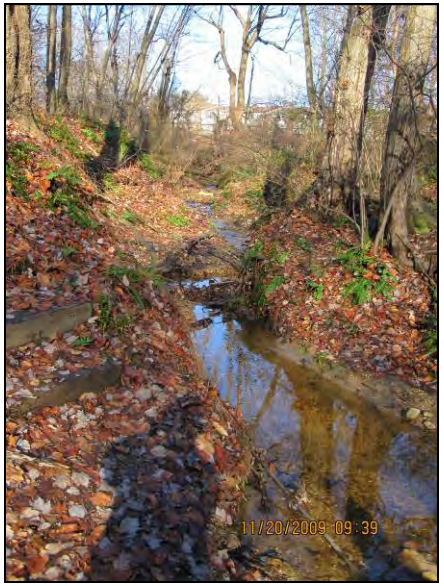
Drainage Area 7: Photo 11

Drainage Area 8: Photo 1

Drainage Area 8: Photo 2

Drainage Area 8: Photo 3

Lower Gunpowder Falls Assessment
Appendix D.1: Preliminary Field Walk Photos by Drainage Area



Drainage Area 8: Photo 4

Drainage Area 8: Photo 5

Drainage Area 8: Photo 6

Drainage Area 8: Photo 7

Lower Gunpowder Falls Assessment
Appendix D.1: Preliminary Field Walk Photos by Drainage Area

Drainage Area 8: Photo 8

Drainage Area 8: Photo 9

Drainage Area 8: Photo 10

Drainage Area 8: Photo 11

Lower Gunpowder Falls Assessment
Appendix D.1: Preliminary Field Walk Photos by Drainage Area

Drainage Area 8: Photo 12

Drainage Area 9: Photo 1

Drainage Area 9: Photo 2

Drainage Area 9: Photo 3

Drainage Area 9: Photo 4

Drainage Area 9: Photo 5

Drainage Area 9: Photo 6

Drainage Area 9: Photo 7

Lower Gunpowder Falls Assessment
Appendix D.1: Preliminary Field Walk Photos by Drainage Area

Drainage Area 9: Photo 8

Drainage Area 9: Photo 9

Drainage Area 9: Photo 10

Drainage Area 9: Photo 11

Drainage Area 10: Photo 1

Drainage Area 10: Photo 2

Drainage Area 10: Photo 3

Drainage Area 10: Photo 4

Lower Gunpowder Falls Assessment
Appendix D.1: Preliminary Field Walk Photos by Drainage Area

Drainage Area 10: Photo 5

Drainage Area 11: Photo 1

Drainage Area 11: Photo 2

Drainage Area 11: Photo 3

Drainage Area 11: Photo 4

Drainage Area 11: Photo 5

Drainage Area 11: Photo 6

Drainage Area 11: Photo 7

Drainage Area 11: Photo 8

Drainage Area 11: Photo 9

Drainage Area 11: Photo 10

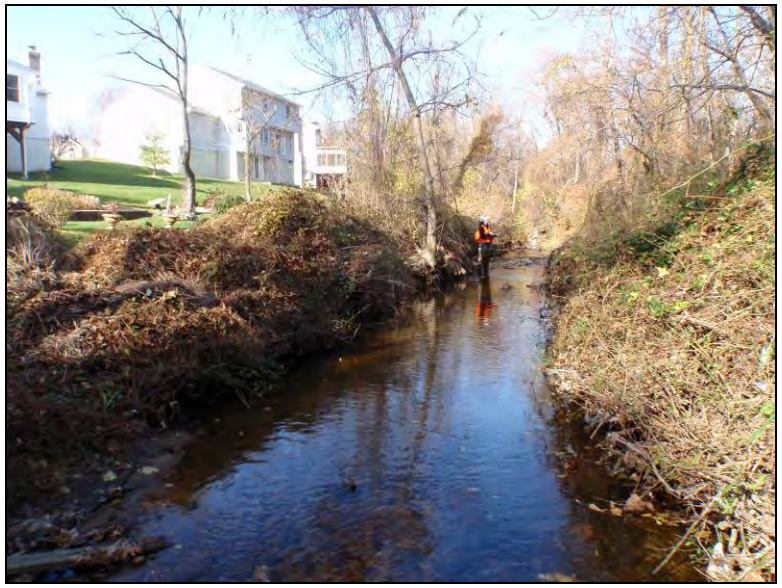
Drainage Area 11: Photo 11

Drainage Area 11: Photo 12

Drainage Area 11: Photo 13

Drainage Area 11: Photo 14

Drainage Area 11: Photo 15



Drainage Area 11: Photo 16

Drainage Area 11: Photo 17

Drainage Area 12: Photo 1

Drainage Area 12: Photo 2

Lower Gunpowder Falls Assessment
Appendix D.1: Preliminary Field Walk Photos by Drainage Area

Drainage Area 12: Photo 3

Drainage Area 12: Photo 4

Drainage Area 13: Photo 1

Drainage Area 13: Photo 2

Drainage Area 13: Photo 3

Drainage Area 13: Photo 4

Drainage Area 13: Photo 5

Drainage Area 13: Photo 6

Lower Gunpowder Falls Assessment
Appendix D.1: Preliminary Field Walk Photos by Drainage Area

Drainage Area 13: Photo 7

Drainage Area 13: Photo 8

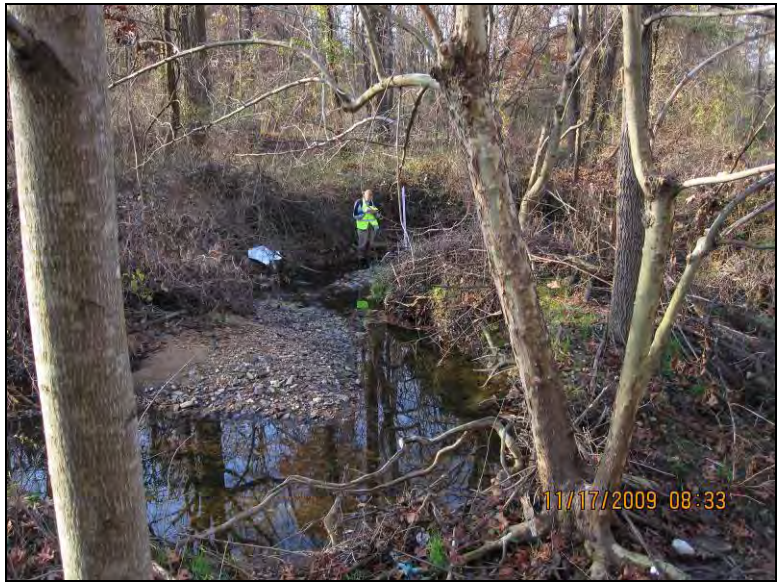
Drainage Area 13: Photo 9

Drainage Area 14: Photo 1

Lower Gunpowder Falls Assessment
Appendix D.1: Preliminary Field Walk Photos by Drainage Area

Drainage Area 14: Photo 2

Drainage Area 14: Photo 3



Drainage Area 14: Photo 4

Drainage Area 15: Photo 1

Drainage Area 15: Photo 2

Drainage Area 15: Photo 3

Drainage Area 15: Photo 4

Drainage Area 15: Photo 5

Drainage Area 15: Photo 6

Drainage Area 15: Photo 7

Drainage Area 15: Photo 8

Drainage Area 15: Photo 9

Lower Gunpowder Falls Assessment
Appendix D.1: Preliminary Field Walk Photos by Drainage Area

Drainage Area 15: Photo 10

Drainage Area 15: Photo 11

Drainage Area 16: Photo 1

Drainage Area 16: Photo 2

Lower Gunpowder Falls Assessment
Appendix D.1: Preliminary Field Walk Photos by Drainage Area

Drainage Area 16: Photo 3

Drainage Area 16: Photo 4

Drainage Area 16: Photo 5

Drainage Area 16: Photo 6

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Drainage Area 16: Photo 7

Drainage Area 16: Photo 8

Drainage Area 16: Photo 9

Drainage Area 16: Photo 10

Lower Gunpowder Falls Assessment
Appendix D.1: Preliminary Field Walk Photos by Drainage Area

Drainage Area 16: Photo 11

Drainage Area 16: Photo 12

Drainage Area 16: Photo 13

Drainage Area 17: Photo 1

Lower Gunpowder Falls Assessment
Appendix D.1: Preliminary Field Walk Photos by Drainage Area

Drainage Area 17: Photo 2

Drainage Area 18: Photo 1

Drainage Area 18: Photo 2

Drainage Area 18: Photo 3

Drainage Area 18: Photo 4

Drainage Area 18: Photo 5

Drainage Area 18: Photo 6

Drainage Area 18: Photo 7

Drainage Area 18: Photo 8

Drainage Area 18: Photo 9

Drainage Area 18: Photo 10

Drainage Area 18: Photo 11

Lower Gunpowder Falls Assessment
Appendix D.1: Preliminary Field Walk Photos by Drainage Area

Drainage Area 18: Photo 12

Drainage Area 18: Photo 13

Drainage Area 18: Photo 14

Drainage Area 19: Photo 1

Drainage Area 19: Photo 2

Drainage Area 19: Photo 3

Drainage Area 19: Photo 4

Drainage Area 19: Photo 5

Drainage Area 19: Photo 6

Drainage Area 19: Photo 7

Drainage Area 19: Photo 8

Drainage Area 19: Photo 9

Drainage Area 19: Photo 10

Drainage Area 19: Photo 11

Drainage Area 19: Photo 12

Drainage Area 20: Photo 1

Lower Gunpowder Falls Assessment
Appendix D.1: Preliminary Field Walk Photos by Drainage Area

Drainage Area 20: Photo 2

Drainage Area 20: Photo 3

Drainage Area 20: Photo 4

Drainage Area 20: Photo 5

Drainage Area 20: Photo 6

Drainage Area 20: Photo 7

Drainage Area 20: Photo 8

Drainage Area 20: Photo 9

Drainage Area 20: Photo 10

Drainage Area 20: Photo 11

APPENDIX D.2: DETAILED ASSESSMENT REACH PHOTOGRAPHS

Lower Gunpowder Falls Assessment
Appendix D.2: Detailed Assessment Reach Photographs
Drainage Area 1: Whiffle Tree

Photo 1

Photo 2

Photo 3

Photo 4

Lower Gunpowder Assessment
Appendix D2: Detailed Assessment Reach Photographs
Drainage Area 4: Lincolnshire

Photo 1

Photo 2

Photo 3

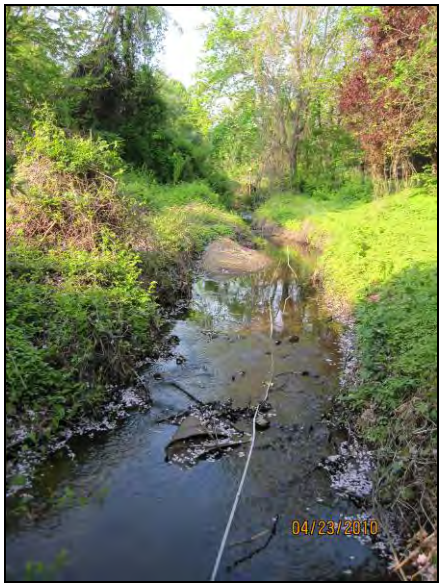


Photo 4

Lower Gunpowder Assessment
Appendix D2: Detailed Assessment Reach Photographs
Drainage Area 5: Hinesleigh Court

Photo 1

Photo 2

Photo 3

Photo 4

Lower Gunpowder Assessment
Appendix D2: Detailed Assessment Reach Photographs
Drainage Area 5: Seven Oaks Simms

Photo 1

Photo 2

Photo 3

Photo 4

Lower Gunpowder Assessment
Appendix D2: Detailed Assessment Reach Photographs
Drainage Area 5: Seven Oaks Simms

Photo 5

Photo 6

Lower Gunpowder Assessment
Appendix D2: Detailed Assessment Reach Photographs
Drainage Area 7: Upstream Simms

Photo 1

Photo 2

Photo 3

Photo 4

Lower Gunpowder Assessment
Appendix D2: Detailed Assessment Reach Photographs
Drainage Area 7: Upstream Simms

Photo 5

Photo 6

Photo 7

Photo 8

Lower Gunpowder Assessment
Appendix D2: Detailed Assessment Reach Photographs
Drainage Area 8: Seven Courts

Photo 1

Photo 2

Photo 3

Photo 4

Lower Gunpowder Assessment
Appendix D2: Detailed Assessment Reach Photographs
Drainage Area 9: Birchbrook

Photo 1

Photo 2

Photo 3

Photo 4

Lower Gunpowder Assessment
Appendix D2: Detailed Assessment Reach Photographs
Drainage Area 10: Weis Plaza

Photo 1

Photo 2

Photo 3

Photo 4

Lower Gunpowder Assessment
Appendix D2: Detailed Assessment Reach Photographs
Drainage Area 10: Weis Plaza

Photo 5

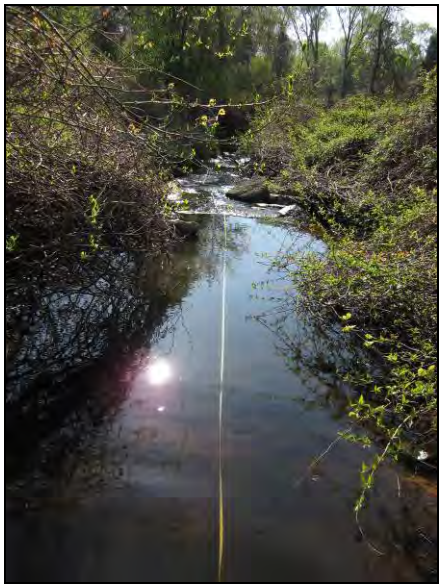


Photo 6

Photo 7

Photo 8

Lower Gunpowder Assessment
Appendix D2: Detailed Assessment Reach Photographs
Drainage Area 11: Cedar Chip

Photo 1

Photo 2

Photo 3

Photo 4

Lower Gunpowder Assessment
Appendix D2: Detailed Assessment Reach Photographs
Drainage Area 11: Cedar Chip

Photo 5

Photo 6

Photo 7

Photo 8

Lower Gunpowder Assessment
Appendix D2: Detailed Assessment Reach Photographs
Drainage Area 13: Pinedale

Photo 1

Photo 2

Photo 3

Photo 4

Lower Gunpowder Assessment
Appendix D2: Detailed Assessment Reach Photographs
Drainage Area 13: Pinedale

Photo 5

Photo 6

Photo 7

Lower Gunpowder Assessment
Appendix D2: Detailed Assessment Reach Photographs
Drainage Area 15: Oak White

Photo 1

Photo 2

Photo 3

Photo 4

Lower Gunpowder Assessment
Appendix D2: Detailed Assessment Reach Photographs
Drainage Area 16: Cedarbrooke

Photo 1

Photo 2

Photo 3

Photo 4

Lower Gunpowder Assessment
Appendix D2: Detailed Assessment Reach Photographs
Drainage Area 16: Cedarbrooke

Photo 5

Photo 6

Photo 7

Photo 8

Lower Gunpowder Assessment
Appendix D2: Detailed Assessment Reach Photographs
Drainage Area 18: Hallbrook

Photo 1

Photo 2

Photo 3

Photo 4

APPENDIX D.3: STORMWATER MANAGEMENT AND OUTFALL PHOTOGRAPHS BY DRAINAGE AREA

Lower Gunpowder Assessment
Appendix D.3: Stormwater Management Photographs
Drainage Area 1

Detention Pond 811 - Overview

Outfall 10 – Buried Outfall

Outfall 11 – From Underground SWM Facility

Outfall 12 - Overview

Lower Gunpowder Assessment
Appendix D3: Stormwater Management Photographs
Drainage Area 2

Detention Pond 755 - Overview

Detention Pond 889 - Overview

Detention Pond 888 - Overview

Extended Detention Pond 1838 - Overview

Lower Gunpowder Assessment
Appendix D.3: Stormwater Management Photographs
Drainage Area 3

Extended Detention Pond 16434 - Overview

Extended Detention Pond 1635 - Overview

Lower Gunpowder Assessment
Appendix D.3: Stormwater Management Photographs
Drainage Area 4

Extended Detention Pond 524 - Overview

Extended Detention Pond 890 - Overview

Extended Detention Pond 525 – High Water Level

Outfall 13 – Buried Outfall

Lower Gunpowder Assessment
Appendix D.3: Stormwater Management Photographs
Drainage Area 5

Extended Detention Pond 1233 - Overview

Extended Detention Pond 1233 - Riser

Lower Gunpowder Assessment
Appendix D.3: Stormwater Management Photographs
Drainage Area 6

Detention Pond 1473 – Riser and Low Flow

Detention Pond 1473 – Online Stream with Facility

Lower Gunpowder Assessment
Appendix D.3: Stormwater Management Photographs
Drainage Area 7

Detention Pond 729 - Riser

Outfall 16 – Partially Buried

Detention Pond 729 – Inflow to Facility

Outfall 16 - Overview

Lower Gunpowder Assessment
Appendix D.3: Stormwater Management Photographs
Drainage Area 8

Detention Pond 215 - Riser

Detention Pond 215 - Inflow

Detention Pond 757 - Overview

Detention Pond 757 - Riser

Lower Gunpowder Assessment
Appendix D.3: Stormwater Management Photographs
Drainage Area 8

Extended Detention Pond 1003 - Overview

Extended Detention Pond 1003 – Riser

Extended Detention Pond 1786 - Overview

Extended Detention Pond 1786 – Riser

Lower Gunpowder Assessment
Appendix D.3: Stormwater Management Photographs
Drainage Area 8

Extended Detention Pond 2209 - Overview

Extended Detention Pond 2209 – Riser

Extended Detention Pond 2180 - Riser

Outfall 18 – Partially Buried

Lower Gunpowder Assessment
Appendix D.3: Stormwater Management Photographs
Drainage Area 9

Outfall 17

Outfall 17 – Disconnected End section

Lower Gunpowder Assessment
Appendix D.3: Stormwater Management Photographs
Drainage Area 10

Extended Detention Pond 1744 - Overview

Extended Detention Pond 1744 - Overview

Lower Gunpowder Assessment
Appendix D.3: Stormwater Management Photographs
Drainage Area 11

Extended Detention Pond 393 - Riser

Extended Detention Pond 393 - Overview

Detention Pond 631 - Overview

Detention Pond 631 – Riser

Lower Gunpowder Assessment
Appendix D.3: Stormwater Management Photographs
Drainage Area 11

Outfall 14 - Buried

Outfall 15 - Erosion

Lower Gunpowder Assessment
Appendix D.3: Stormwater Management Photographs
Drainage Area 12

Outfall 1 - Stable

Outfall 3 – Stable

Outfall 2 - Stable

Outfall 4 - Stable

Lower Gunpowder Assessment
Appendix D.3: Stormwater Management Photographs
Drainage Area 13

Detention Pond 439 - Riser

Outfall 6

Outfall 5 – Disconnected Joints

Outfall 7 - Buried

Lower Gunpowder Assessment
Appendix D.3: Stormwater Management Photographs
Drainage Area 15

Detention Pond 955 - Overview

Detention Pont 955 – Buried Low Flow Orifice

Extended Detention Pond 1210 – Overview

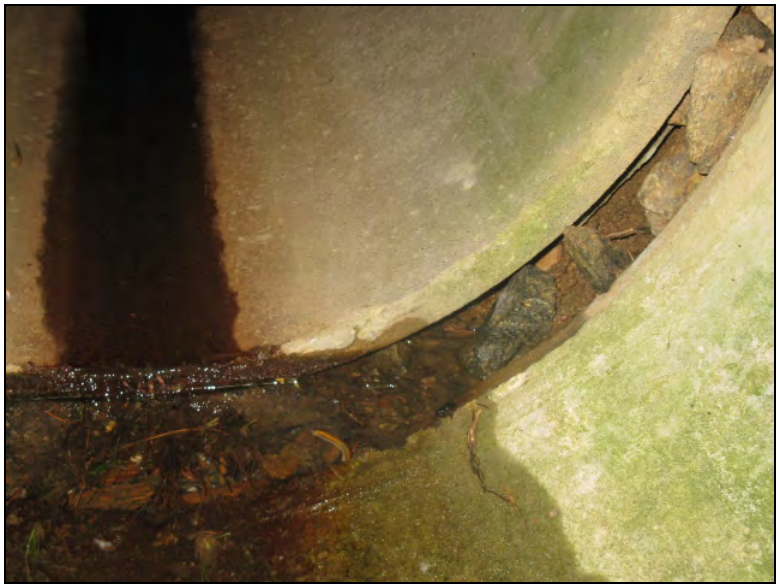
Extended Detention Pond 1210 – Riser

Lower Gunpowder Assessment
Appendix D.3: Stormwater Management Photographs
Drainage Area 15

Detention Pond 1842 – Overview

Outfall 8 – Downstream Erosion from Outfall

Outfall 20



Outfall 20 – Disconnected End section

Lower Gunpowder Assessment
Appendix D.3: Stormwater Management Photographs
Drainage Area 16

Extended Detention Pond 757C - Overview

Extended Detention Pond 757C - Riser

Outfall O – Erosion from Outfall

Lower Gunpowder Assessment
Appendix D.3: Stormwater Management Photographs
Drainage Area 17

Detention Pond 734 – Overview

Detention Pond 734 – Low Flow Orifice

Lower Gunpowder Assessment
Appendix D.3: Stormwater Management Photographs
Drainage Area 18

Infiltration Basin 806B – Buried Inflow

Infiltration Basin 806B – Overview

Outfall 21

Lower Gunpowder Assessment
Appendix D.3: Stormwater Management Photographs
Drainage Area 19

Detention Pond 806A - Overview

Detention Pond 806A – Spillway

Detention Pond 954 – Overview

Detention Pond 954 – Buried Low Flow

Lower Gunpowder Assessment
Appendix D.3: Stormwater Management Photographs
Drainage Area 19

Outfall 22 - Buried

Outfall 22 – Potential Enhancement Location

Lower Gunpowder Assessment
Appendix D.3: Stormwater Management Photographs
Drainage Area 20

Infiltration Basin 806C - Overview

Infiltration Basin 806C – Disconnected Joint